AP - 010

ANNUAL MONITORING REPORT

YEAR(S):

2004/2005

Neal Goates
Site Manager
Risk Management & Remediation
Threadneedle Building
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ConocoPhillips

March 18, 2005

Mr. Wayne Price
Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Dr.
Santa Fe, NM 87504

RE: ANNUAL MONITORING, OPERATION AND MAINTENANCE REPORT MARCH 2004 THROUGH FEBRUARY 2005
ConocoPhillips Line NM1-1
Hobbs, Lea County, New Mexico

Dear Mr. Price:

Pursuant to requirements set forth in Discharge Permit GW-349 for the Line NM1-1 remediation site, please find one copy of the above referenced report for your review and concurrence. This report presents an annual summary of all site activities performed from March 2004 through February 2005 relating to the operation, maintenance and monitoring of the remediation system, quarterly groundwater monitoring, sampling and analyses, and disposal of accumulated wastes.

If you have any questions or comments, please contact either myself at the above listed number or Greg W. Pope with Maxim Technologies at (432) 686-8081.

Sincerely,

Neal Goates 3/17/05

Neal Goates
Site Manager
Risk Management and Remediation
ConocoPhillips

cc: w/ attachment

Chris Williams, NMOCD, Hobbs, NM
Greg Pope, Maxim, Midland, TX

AP010

ANNUAL MONITORING, OPERATION AND MAINTENANCE REPORT

MARCH 2004 THROUGH FEBRUARY 2005

CONOCOPHILLIPS
LINE NM1-1 (AP-10)

HOBBS, LEA COUNTY, NEW MEXICO

Prepared for:

ConocoPhillips

Prepared By:

MAXIM Technologies
A DIVISION OF TETRA TECH INC.
1703 W. Industrial Avenue
Midland, Texas 79701

March 18, 2005

MAXIM TECHNOLOGIES
A DIVISION OF TETRA TECH, INC.

1703 W. Industrial Ave.
Midland, Texas 79701
(432) 686-8081

March 18, 2005

Mr. Wayne Price
Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Dr.
Santa Fe, NM 87504

RE: ANNUAL MONITORING, OPERATION AND MAINTENANCE REPORT
MARCH 2004 THROUGH FEBRUARY 2005
ConocoPhillips Line NM1-1 (AP-10)
Hobbs, Lea County, New Mexico

INTRODUCTION

On behalf of ConocoPhillips, formerly Phillips Pipe Line Company, Maxim Technologies (Maxim) is submitting the following annual status report for the Line NM1-1 remediation site (Site). The Site is located in Lea County, New Mexico (Sec 9, T19S, R38E; Figure 1), approximately one mile south of the city of Hobbs. This report has been prepared in accordance with New Mexico Oil Conservation Division's (NMOCD) Discharge Permit GW-349 issued to ConocoPhillips on October 10, 2002 for the Site, and is a summary of the following activities performed from March 2004 through February 2005:

- Groundwater Monitoring and Sampling
- Groundwater Extraction, Treatment and Re-injection
- Treated Groundwater Effluent Sampling
- Free Petroleum Hydrocarbon Gauging, Recovery and Disposal
- Remediation System Operation and Maintenance

During this time period, no new groundwater monitoring wells or remediation wells were installed at the Site, and no system, process or facility modifications were performed which would alter the system design parameters. A new 525-gallon polyethylene crude oil storage tank with secondary containment was installed at the Site on June 9, 2004 for containing crude oil removed by the oil-water separator (OWS). This new tank was installed outside and immediately south of the main remediation building at the Site, and is enclosed by security

fencing and a locking gate. All Site activities were performed according to the conditions described in Discharge Permit GW-349.

This report also presents four quarters of groundwater monitoring data collected in April, July and October 2004, and January 2005.

BACKGROUND

Project activities commenced at the Site in 1999 following the discovery of a release of crude oil from gathering line NM1-1. Assessment and remediation activities have been conducted at the Site to define and address the crude oil impacts including the installation of a comprehensive soil and groundwater remediation system. The remediation system installation consists of a crude oil recovery system, a groundwater extraction, treatment and re-injection system, and an enhanced-bioremediation system consisting of bio-venting and nutrient injection. Figure 1 illustrates the locations of the pipeline release excavation, the existing pipeline corridors, the Site monitoring and remediation wells, and the remediation system buildings and crude oil storage tank.

Higgins and Associates, L.L.C. of Centennial, Colorado (H&A) performed the installation of the remediation system, initial startup procedures, system operation and maintenance, and required Site monitoring activities until September 2003. On September 24, 2003, Maxim assumed operation and maintenance of the system, and has continued the required Site monitoring activities.

HEALTH AND SAFETY

Maxim required safety and health procedures that were appropriate for the level of environmental hazard known to exist at the Site. Procedures used complied with ConocoPhillips' "Contractors Health and Safety Standard" (revised 2004). Modified Level D Personal Protective Equipment (PPE) was adequate for the Site activities. Personnel were equipped with respirators and organic vapor cartridges in the event of a sudden release of noxious fumes from the Site. Prior to commencement of work, a Site Specific Health and Safety Plan (HASP) was prepared by Maxim. The HASP was reviewed and signed by all personnel working at the Site. Safety procedures were reviewed during tailgate safety meetings conducted prior to the start of work each day.

GROUNDWATER MONITORING AND SAMPLING

Quarterly groundwater monitoring and sampling activities were conducted at the Site on April 19 and 20, July 20 and 21, October 25 and 26, 2004, and January 24 and 25, 2005. Accessible monitoring, recovery and remediation wells were measured for groundwater elevations prior to the sampling events. Prior to the January 2005 monitoring event, all remediation systems at the Site were shut down for 10 days (January 14-24, 2005) per NMOCD approval. Wells containing free oil were not sampled. During the April and July 2004 sampling events, wells IW-2, IW-3, IW-4, IW-5, IW-7 and SVE-1 were sampled. Wells MW-13 and IW-6 were not sampled during these two events due to low groundwater levels. During the October 2004 and January 2005 sampling events, wells MW-13, IW-2, IW-3, IW-4, IW-5, IW-6, IW-7 and SVE-1 were sampled. The groundwater samples were collected into appropriate sample containers, placed in a cooler packed with ice, and shipped under chain-of-custody to an approved laboratory for analysis of total petroleum hydrocarbons (TPH), both diesel range organics (DRO) and gasoline range organics (GRO) by Method 8015B modified; benzene, toluene, ethylbenzene, and total xylenes (BTEX) by Method 8021B; and for chloride by Method 300.0A. Samples collected in April 2004 were also analyzed for New Mexico Water Quality Control Commission (WQCC) metals by Methods 6010B/7470A/300.0A, polynuclear aromatic hydrocarbons (PAHs) by Method 8270C, and total dissolved solids (TDS) by Method 160.1 per NMOCD Discharge Permit GW-349 requirements.

Groundwater elevation measurements are summarized in Table 1. Potentiometric surface maps for each of the four sampling events are included as Figures 2a, 2b, 2c, and 2d. Groundwater flow direction was south-southeast at a gradient of 0.0018 feet per foot (ft/ft) during the April 2004 sampling event. Groundwater levels showed an overall decrease at the Site up to this time, which may reflect regional conditions due to previous low rainfall amounts in the area. However, as a response to greater than normal rainfall through selected months of 2004, groundwater levels increased at the Site during the next 3 sampling events. According to the National Weather Service (NOAA, 2004), rainfall in the Hobbs area was 2.96 inches in April 2004 (379% above normal), 2.34 inches in June 2004 (115% above normal), 4.78 inches in September 2004 (153% above normal), and 3.44 inches in November 2004 (395% above normal). During the July 2004 sampling event, groundwater levels rose slightly and the groundwater flow direction was south-southeast at a gradient of 0.0019 ft/ft. During the next 2 sampling events, groundwater level increases were more pronounced and the groundwater flow direction demonstrated a shift to a more southerly direction with a gradient of 0.0027 ft/ft

in October 2004 and 0.0033 ft/ft in January 2005. Hydrographs prepared for selected Site wells are included in Appendix A.

Groundwater analytical results are presented in Tables 2a, 2b, 2c, and 2d, and figures depicting the groundwater analytical results for the four quarterly sampling events are included as Figures 3a, 3b, 3c, and 3d. The laboratory analytical data is included in Appendix B. Analytical results from the groundwater monitoring events show that the lateral extent of the dissolved phase plume remains defined. However, as a possible response to the groundwater table increases seen during the October 2004 and January 2005 events, some lateral dispersion of the dissolved phase components may be occurring, indicated by the increase in BTEX constituents reported in wells MW-13 and SVE-1 during these events. Results of the WQCC metals analysis reported dissolved metals at naturally occurring background concentrations. Analysis for TDS reported concentrations ranging from 572 to 717 milligrams per liter (mg/L). No detectable concentrations of PAH were reported in any of the groundwater samples.

GROUNDWATER EXTRACTION, TREATMENT AND RE-INJECTION

A summary of the groundwater extraction, treatment and effluent discharge volumes for each of the remediation wells and the air stripper tower is presented in Table 3. These data show an overall totalizer accuracy of >90% between the amounts of groundwater extracted, treated and re-injected by the system. The groundwater system was shut down in April and May 2004 for repairs and installation of a new 525-gallon crude oil storage tank for the OWS. Calcium carbonate scaling has caused numerous malfunctions in the well totalizers and fouling problems in the system. In-stream injection of a sequestering agent to reduce the scaling may be necessary to increase system uptime and efficiency.

Groundwater production from recovery wells EW-1 and EW-2 has continued to be lower than originally predicted. Previously, H&A conducted multiple slug tests and geotechnical testing of soil samples to establish design parameters for the system, and performed a groundwater model stimulation showing a total groundwater extraction rate of 40 gallons per minute (gpm) used in conjunction with eight injection wells taking an estimated 5 gpm per well was necessary to adequately control the groundwater gradient and provide capture and treatment of the dissolved hydrocarbons and floating crude oil. This stimulation, using the MODFLOW model, assumed a groundwater extraction rate of 25 gpm from EW-1 and 15 gpm from EW-2 was the best fit for drawdown, radius of influence and efficiency (H&A, 2000). The final system design

determined that six injection wells would be adequate to maintain hydraulic control. As stated in the 2003 Annual Report for the Site (H&A, 2003): "The lower recovery rates may be attributed to dewatering more permeable channels, the infiltration of free oil into the permeable channel pathways, and fine grained soils in the saturated zone which were not evident due to sample quality associated with the air rotary drilling method required at the site". Over the duration of time that the groundwater system has operated, the recovery rates from wells EW-1 and EW-2 have ranged from less than 1 gpm to a maximum of 10.4 gpm. The recent increase in groundwater levels has increased the amount of recovery at the Site. However, the recovery rates still do not approached the rates determined as necessary for hydraulic control.

GROUNDWATER EFFLUENT SAMPLING

Results of the monthly groundwater effluent discharge sampling are presented in Tables 4a and 4b, and the laboratory analytical data is included in Appendix B. The samples were collected from the groundwater effluent discharge stream into appropriate sample containers, placed in a cooler packed with ice, and shipped under chain-of-custody to an approved laboratory for analysis of BTEX by Method 8021B, and chloride by Method 300.0A. No detectable concentrations of BTEX were reported in the effluent discharge samples. All effluent samples were reported with concentrations of chloride below the NMOCD standard for groundwater of 250 mg/L.

FREE PETROLEUM HYDROCARBON GAUGING

Free-phase petroleum hydrocarbons were measured in selected wells during each of the four monitoring events. The pneumatic pumps were removed from the recovery wells prior to measuring hydrocarbon thickness, and then reinstalled. Isopleth maps depicting liquid phase hydrocarbon (LPH) thickness for April, July and October 2004, and January 2005 are included as Figures 4a, 4b, 4c and 4d, respectively, and LPH measurements are summarized in Table 1.

LPH thickness measured during the April 2004 monitoring event was consistent compared to previous data with the LPH plume generally ranging in thickness from approximately 3 to 4 feet. A slight thinning of the LPH plume was observed during the July 2004 event where measurements ranging from approximately 1.5 feet to <4 feet were observed in the affected wells. During the October 2004 event, LPH thickness decreased in all the affected wells with

one well (MW-3) showing no measurable LPH and three wells (MW-4, -5, and SVE-5) exhibiting an LPH thickness of <0.05 feet. The decreased LPH plume thickness may be a response to the heightened groundwater table rising above the established hydrocarbon smear zone and/or local recharge into the upper aquifer depressing the LPH plume. During the January 2005 sampling event, LPH thickness in the affected wells exhibited a variable response with six of the wells (MW-1, -4, -5, -6, -7, and SVE-5) showing similar to slight increases or decreases in measured LPH thickness. Notable differences were observed in two wells, with MW-3 showing an increase from no measurable LPH in October 2004 to 1.71 feet in January 2005, and MW-8, which decreased from 2.77 feet to 1.91 feet between the two events. Similar response is expected to occur in the effected wells until the groundwater table stabilizes and the LPH plume reestablishes itself. Depiction of these responses to LPH plume thickness vs. groundwater level is shown on the hydrographs in Appendix A.

FREE PETROLEUM HYDROCARBON RECOVERY

The pneumatic recovery system consists of Durham Geo F.A.P. Plus pumps installed in wells MW-1, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, SVE-2, EW-1 and EW-2, which pumps crude oil from the wells through petroleum rated hoses contained in PVC piping to a bermed 140-barrel aboveground storage tank (AST) located adjacent to the recovery system compound (Figure 1). Additional crude oil is collected from the OWS into a 525-gallon AST. From April 20, 2002 to February 28, 2005, the system has recovered approximately 841 barrels of crude oil. The recovered crude oil is transported to ConocoPhillips' Gaines Pump Station where it is added to the main crude oil pipeline. From initial abatement activities and ongoing product removal activities, approximately 1,141 barrels of crude oil have been recovered up to February 28, 2005.

On three separate occasions, Key Energy Services, Inc. hauled recovered groundwater to Sundance Services' Eunice, New Mexico facility for disposal: June 9, 2004, 65 barrels; July 1, 2004, 135 barrels; July 27, 2004, 35 barrels. Documentation for the recovered groundwater disposal activities is included in Appendix C. The influx of recovered groundwater by the oil recovery system may be attributed to the increased groundwater levels and corresponding decreased LPH thickness in the recovery wells. Efforts to closely monitor the groundwater level fluctuations and adjust the pump skimmer depths accordingly are currently being enacted.

SYSTEM OPERATION AND MAINTENANCE

The remediation system equipment operation and maintenance schedule was performed according to manufacture recommendations and included periodic oil and oil filter changes, air filter replacement, motor bearing lubrication and air/oil separator maintenance on the Sullivan/Palatek 20D air compressor; periodic checking of the motor bearings on the Roton soil vapor extraction (SVE) blower; replacement of fuses and indicator bulbs on the system control panel as needed; monitoring and replacement/repair of gauges, fittings, air regulators and hoses on the pneumatic pumps and wellhead assemblies; monitoring and periodic leak checking on the bio-venting and nutrient injection wellheads; and routine monitoring of all system fittings, hoses, sight glasses, gauges, valves, seals, lines, bearings, control switches and solenoids. The operation and maintenance schedule also included recording the system gauge, timer and totalizer readings into a table for monitoring of system functions over time.

Maintenance of the nutrient injection system required replacement of the nitrous oxide tanks as needed and monitoring of the nutrient uptake volumes. The SVE system was routinely monitored for vacuum readings at the blower intake manifold, well inlet header and SVE wellheads; blower exhaust stack flow rate, temperature, and effluent concentrations of volatile organic compounds (VOC) and nitrous oxide; and volume of oil recovered in the condensate separator. Oil recovered by the SVE condensate separator was transferred to the OWS and ultimately accumulated into a storage tank for disposal. The groundwater extraction, treatment and re-injection system maintenance included periodic checking of the OWS for sediment accumulation; monitoring the air stripper tower for vacuum, iron and bio-fouling, exhaust stack flow rate and effluent VOC concentrations; and replacement of the air stripper tower bag filters as needed.

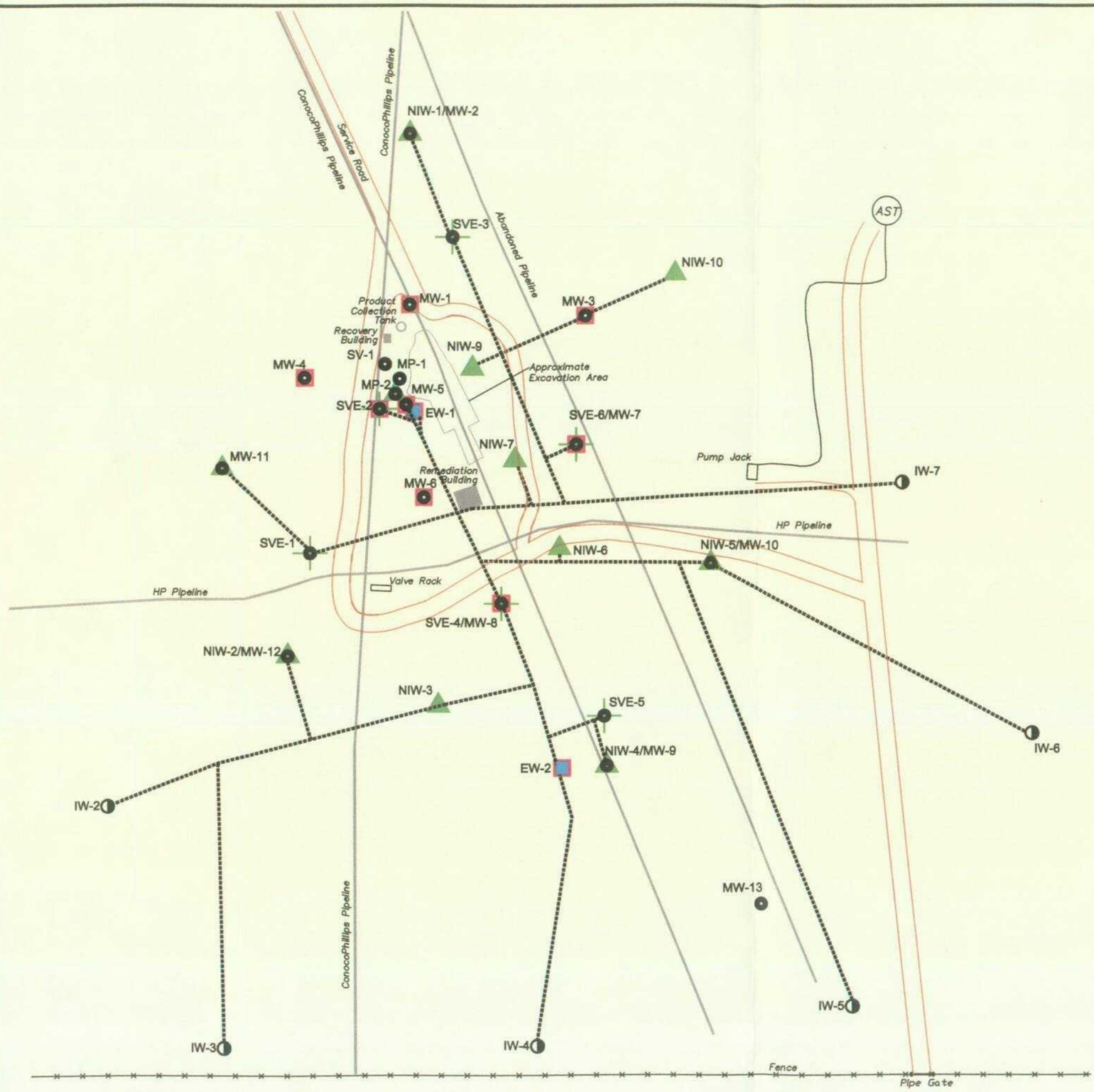
The OWS and the bag filter units remove suspended solids from the groundwater process stream. Suspended solids from recovery wells EW-1 and EW-2 has been minimal. The OWS was emptied on April 19 and August 24, 2004. No appreciable amount of sediment was observed during either cleaning of the OWS. The groundwater air stripping tower bag filters were removed and replaced approximately every two weeks. Typically, petroleum hydrocarbon staining was observed on the influent bag filter, and very slight iron staining was observed on the effluent bag filter. Iron or bio-fowling of the air stripper has not been observed since project startup, and chemical treatment for sequestering these constituents has not been initiated to date.

CONCLUSIONS

Based on the data presented in this report, the following conclusions can be determined:

- Analytical results from the groundwater monitoring events show that the lateral extent of the dissolved phase plume remains defined. However, as a possible response to the groundwater table increases seen during the October 2004 and January 2005 events, some lateral dispersion of the dissolved phase components may be occurring, indicated by the increase in BTEX constituents reported in wells MW-13 and SVE-1 during these events.
- Groundwater elevation increases were observed at the Site during the last three monitoring events as a response to greater than normal rainfall amounts in selected months of 2004. Groundwater gradient and flow direction have also shown a response to the increase in groundwater recharge.
- A corresponding decrease in the LPH plume thickness was observed in the Site recovery wells during the last three monitoring events. The decreased LPH plume thickness may be a response to the heightened groundwater table rising above the established hydrocarbon smear zone and/or local recharge into the upper aquifer depressing the LPH plume.
- The bio-venting and nutrient injection systems are operating according to design parameters. However, the system is inefficient at plume reduction compared to the physical recovery of oil by the crude oil skimmer system.
- Groundwater production from recovery wells EW-1 and EW-2 has continued to be lower than originally predicted. The groundwater extraction system design model stimulation determined that a groundwater extraction rate of 25 gpm from EW-1 and 15 gpm from EW-2 used in conjunction with six injection wells receiving an estimated 5 gpm per well was necessary to adequately control the groundwater gradient and provide capture and treatment of the dissolved hydrocarbons and LPH. During the time that the groundwater system has operated, the recovery rates from wells EW-1 and EW-2 have ranged from <1 gpm to a maximum of 10.4 gpm. The recent increase in groundwater levels has increased the amount of groundwater extraction at the Site. However, the recovery rates have still not achieved the rates determined as necessary for hydraulic control.

FIGURES



LEGEND

- MW-1 — Existing Monitor Well Location & Designation
- NIW-1 — Nutrient Injection Well Location & Designation
- SVE-1 — Soil Vapor Extraction Location & Designation
- EW-1 — Groundwater Extraction Well Location & Designation
- MW-3 — Product Recovery Well Location & Designation
- IW-7 — Groundwater Injection Well Location & Designation
- Alignment of Conveyance Piping Corridor

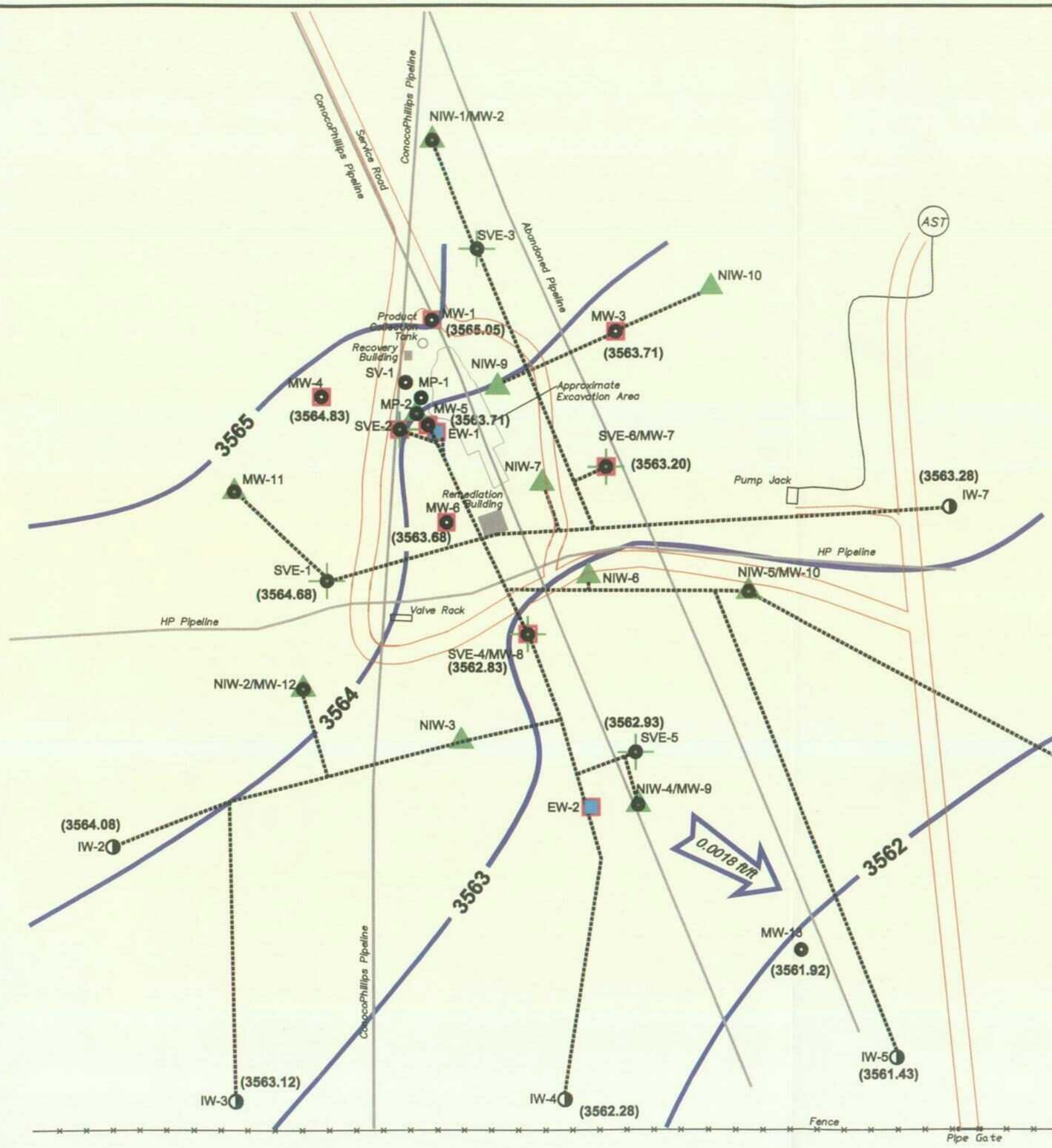
N

0 120 240

Scale (ft)

FIGURE 1 : SITE MAP

ConocoPhillips	MAXIM TECHNOLOGIES INC®
LINE NM 1-1	DATA COLLECTED : MAR. 03, 2005
LOCATION : HOBBS, LEA COUNTY NEW MEXICO Sec 9 T19S R38E	PROJECT NO : 5640002 MODIFIED BY : GWP DATE MODIFIED : 03/03/2005
	ACAD File : NM1-1.Fig1SiteMap2005.dwg



LEGEND

- MW-1 — Existing Monitor Well Location & Designation
- NIW-1 — Nutrient Injection Well Location & Designation
- SVE-1 — Soil Vapor Extraction Location & Designation
- EW-1 — Groundwater Extraction Well Location & Designation
- MW-3 — Product Recovery Well Location & Designation
- IW-7 — Groundwater Injection Well Location & Designation
- Alignment of Conveyance Piping Corridor
- —3563— Groundwater Elevation Contour
- (3563.20) Groundwater Elevation (feet above mean sea level)
- ft/ft = feet per foot

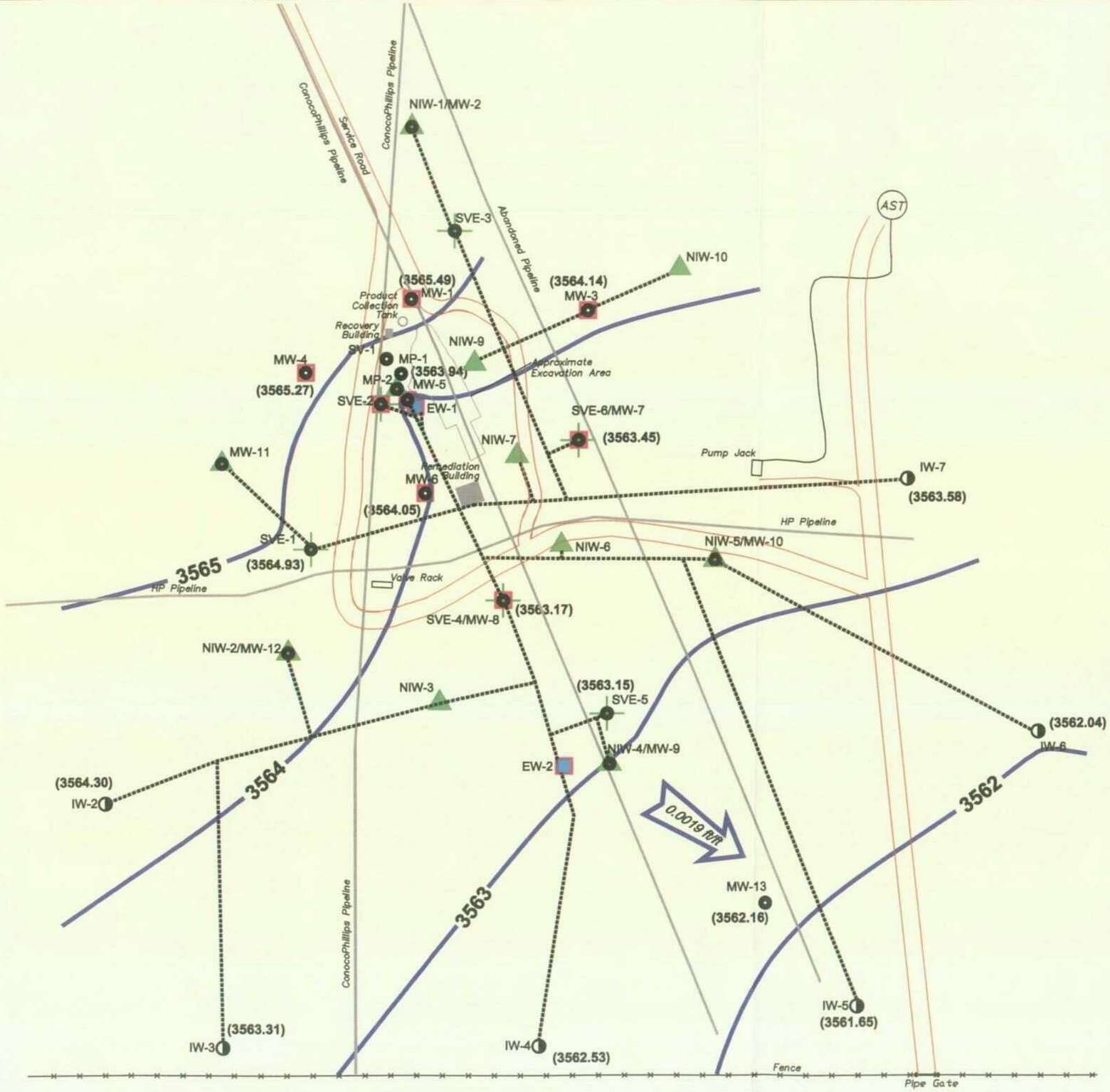
N

0 120 240

Scale (ft)

FIGURE 2a : GROUNDWATER CONTOUR MAP
APRIL 2004

ConocoPhillips	MAXIM TECHNOLOGIES INC
LINE NM 1-1	DATA COLLECTED : APR. 19, 2004
LOCATION : HOBBS, LEA COUNTY NEW MEXICO Sec 9 T19S R38E	PROJECT NO : 4640030 MODIFIED BY : GWP DATE MODIFIED : 05/13/2004
	ACAD File : NM1-1.GW Contour.Apr04.dwg



LEGEND

- MW-1 — Existing Monitor Well Location & Designation
- NIW-1 — Nutrient Injection Well Location & Designation
- SVE-1 — Soil Vapor Extraction Location & Designation
- EW-1 — Groundwater Extraction Well Location & Designation
- MW-3 — Product Recovery Well Location & Designation
- IW-7 — Groundwater Injection Well Location & Designation
- Alignment of Conveyance Piping Corridor
- —3563— Groundwater Elevation Contour
- (3563.58) Groundwater Elevation (feet above mean sea level)
- ft/ft = feet per foot

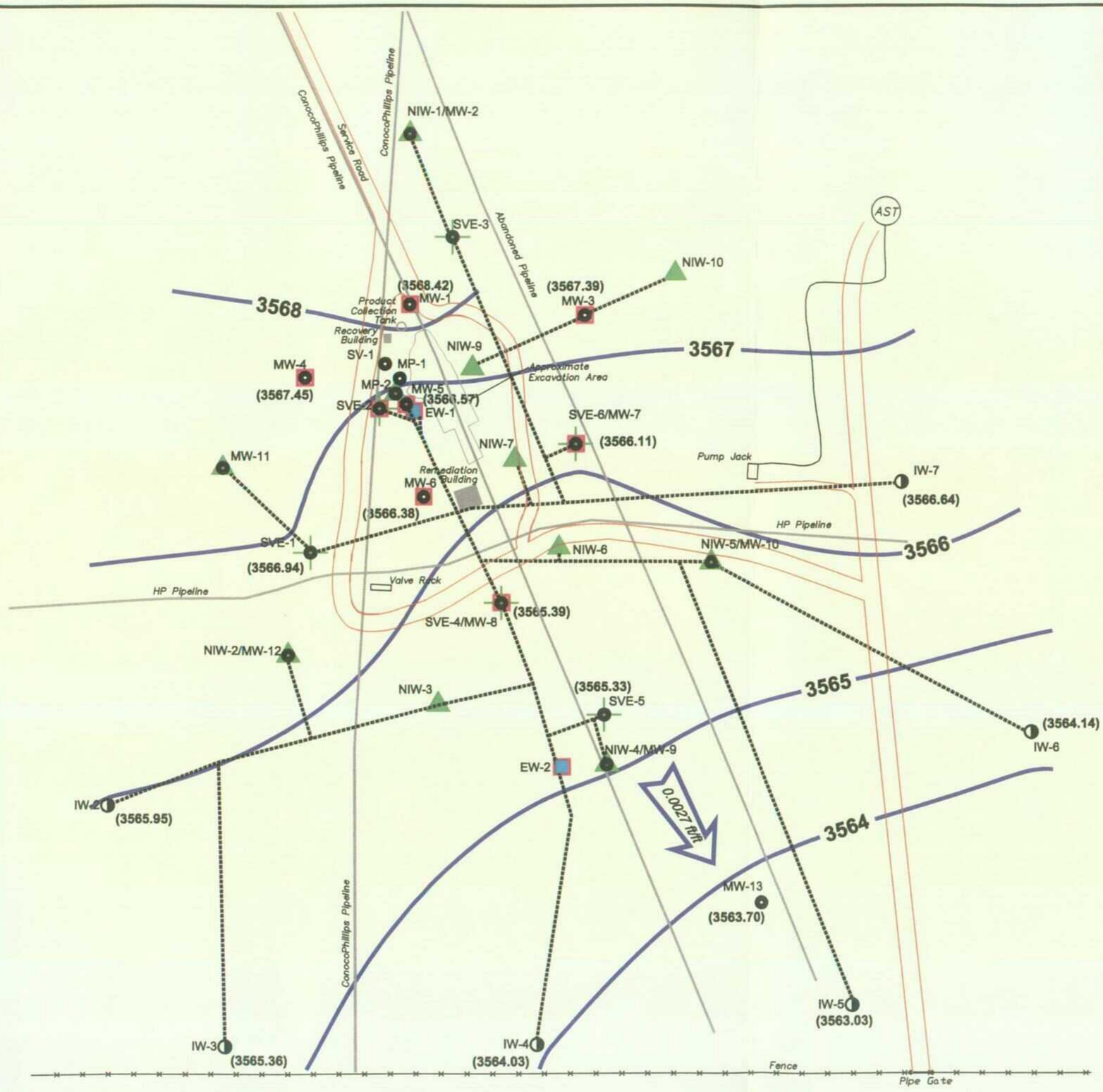
N

0 120 240

Scale (ft)

FIGURE 2b : GROUNDWATER CONTOUR MAP
JULY 2004

ConocoPhillips	MAXIM TECHNOLOGIES INC®
LINE NM 1-1	DATA COLLECTED : JUL. 20, 2004
LOCATION : HOBBS, LEA COUNTY NEW MEXICO Sec 9 T19S R38E	PROJECT NO : 5640002 MODIFIED BY : GWP DATE MODIFIED : 03/03/2005
	ACAD File : NM1-1.GW Contour.Jul04.dwg



LEGEND

- MW-1 — Existing Monitor Well Location & Designation
- NIW-1 — Nutrient Injection Well Location & Designation
- SVE-1 — Soil Vapor Extraction Location & Designation
- EW-1 — Groundwater Extraction Well Location & Designation
- MW-3 — Product Recovery Well Location & Designation
- IW-7 — Groundwater Injection Well Location & Designation
- Alignment of Conveyance Piping Corridor
- 3565 — Groundwater Elevation Contour
- (3566.64) — Groundwater Elevation (feet above mean sea level)
- ft/ft = feet per foot

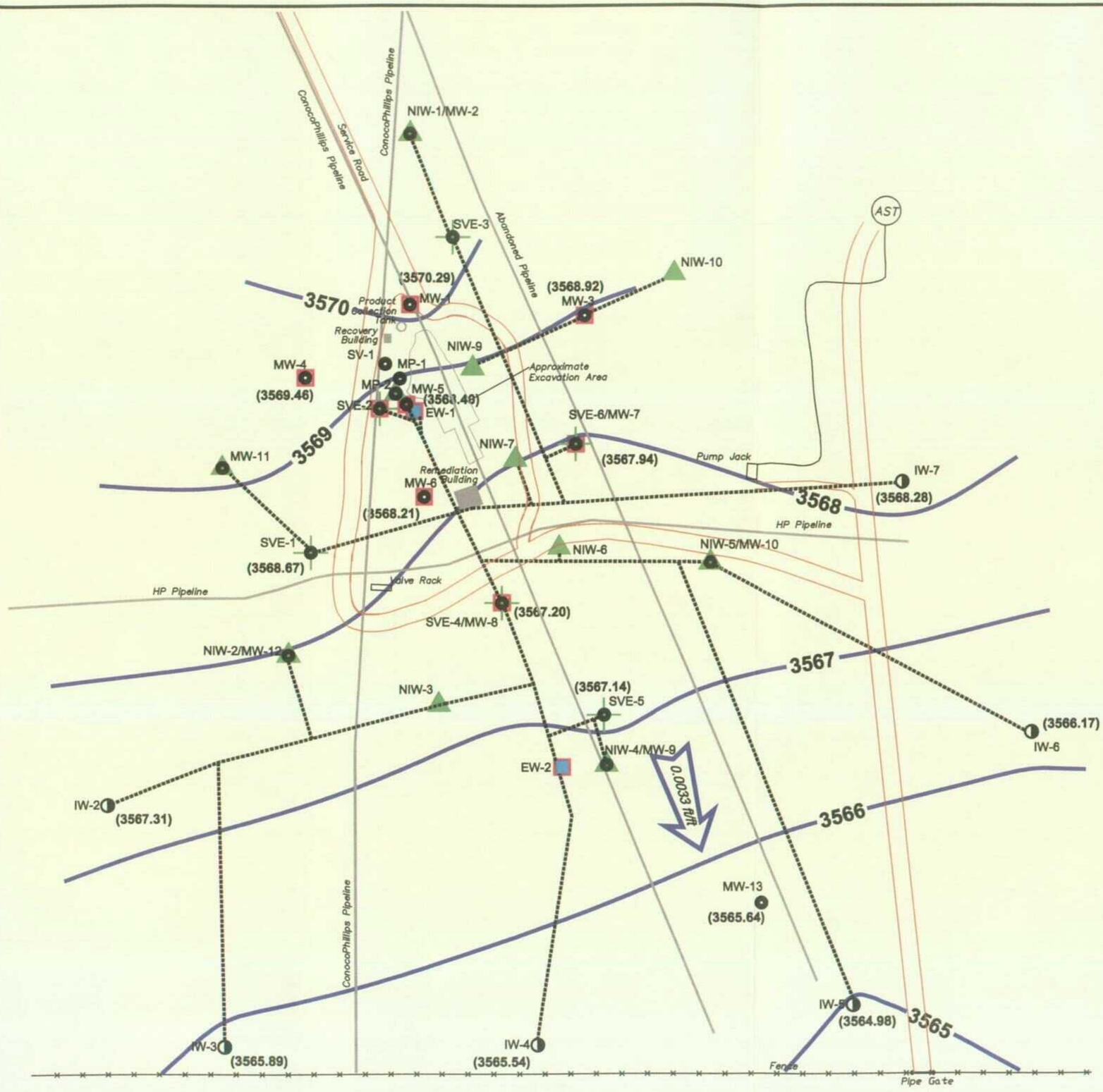
N

0 120 240

Scale (ft)

FIGURE 2c : GROUNDWATER CONTOUR MAP
OCTOBER 2004

ConocoPhillips	MAXIM TECHNOLOGIES INC®
LINE NM 1-1	DATA COLLECTED : OCT 25, 2004
LOCATION : HOBBS, LEA COUNTY NEW MEXICO Sec 9 T19S R38E	PROJECT NO : 5640002 MODIFIED BY : GWP DATE MODIFIED : 03/04/2005
	ACAD File : NM1-1.GW Contour.Oct04.dwg



LEGEND

- MW-1 — Existing Monitor Well Location & Designation
- NIW-1 — Nutrient Injection Well Location & Designation
- SVE-1 — Soil Vapor Extraction Location & Designation
- EW-1 — Groundwater Extraction Well Location & Designation
- MW-3 — Product Recovery Well Location & Designation
- IW-7 — Groundwater Injection Well Location & Designation
- Alignment of Conveyance Piping Corridor
- —3565— Groundwater Elevation Contour
- (3568.28) Groundwater Elevation (feet above mean sea level)
- ft/ft = feet per foot

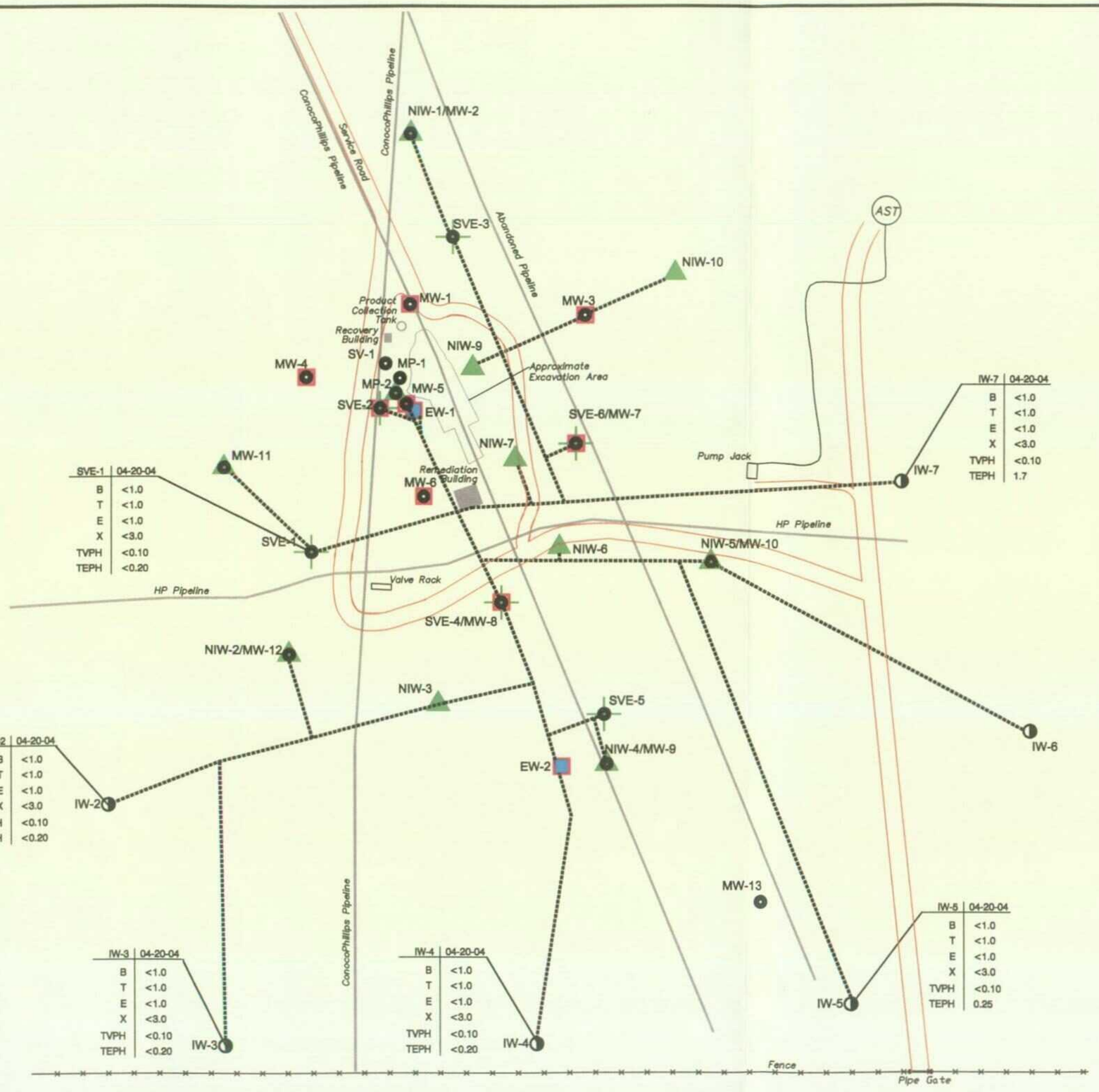
N

0 120 240

Scale (ft)

FIGURE 2d : GROUNDWATER CONTOUR MAP
JANUARY 2005

ConocoPhillips	MAXIM TECHNOLOGIES INC®
LINE NM 1-1	DATA COLLECTED : JAN 24, 2005
LOCATION : HOBBS, LEA COUNTY NEW MEXICO Sec 9 T19S R38E	PROJECT NO : 5640002 MODIFIED BY : GWP DATE MODIFIED : 03/04/2005
	ACAD File : NM1-1.GW Contour.Jan05.dwg



SVE-1	04-20-04
B	<1.0
T	<1.0
E	<1.0
X	<3.0
TVPH	<0.10
TEPH	<0.20

IW-7	04-20-04
B	<1.0
T	<1.0
E	<1.0
X	<3.0
TVPH	<0.10
TEPH	1.7

IW-2	04-20-04
B	<1.0
T	<1.0
E	<1.0
X	<3.0
TVPH	<0.10
TEPH	<0.20

IW-3	04-20-04
B	<1.0
T	<1.0
E	<1.0
X	<3.0
TVPH	<0.10
TEPH	<0.20

IW-4	04-20-04
B	<1.0
T	<1.0
E	<1.0
X	<3.0
TVPH	<0.10
TEPH	<0.20

IW-5	04-20-04
B	<1.0
T	<1.0
E	<1.0
X	<3.0
TVPH	<0.10
TEPH	0.25

LEGEND

- MW-1 — Existing Monitor Well Location & Designation
- NIW-1 — Nutrient Injection Well Location & Designation
- SVE-1 — Soil Vapor Extraction Location & Designation
- EW-1 — Groundwater Extraction Well Location & Designation
- MW-3 — Product Recovery Well Location & Designation
- IW-7 — Groundwater Injection Well Location & Designation
- Alignment of Conveyance Piping Corridor

ANALYTICAL DATA

Well Number		Sample Date
(µg/L)	B	Benzene
	T	Toluene
	E	Ethylbenzene
	X	Xylenes (Total)
(mg/L)	TVPH	Total Volatile Petroleum Hydrocarbons (TPH-GRO)
	TEPH	Total Extractable Petroleum Hydrocarbons (TPH-DRO)

µg/L = micrograms per liter
mg/L = milligrams per liter

N

0 120 240
Scale (ft)

FIGURE 3a: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS APRIL 2004

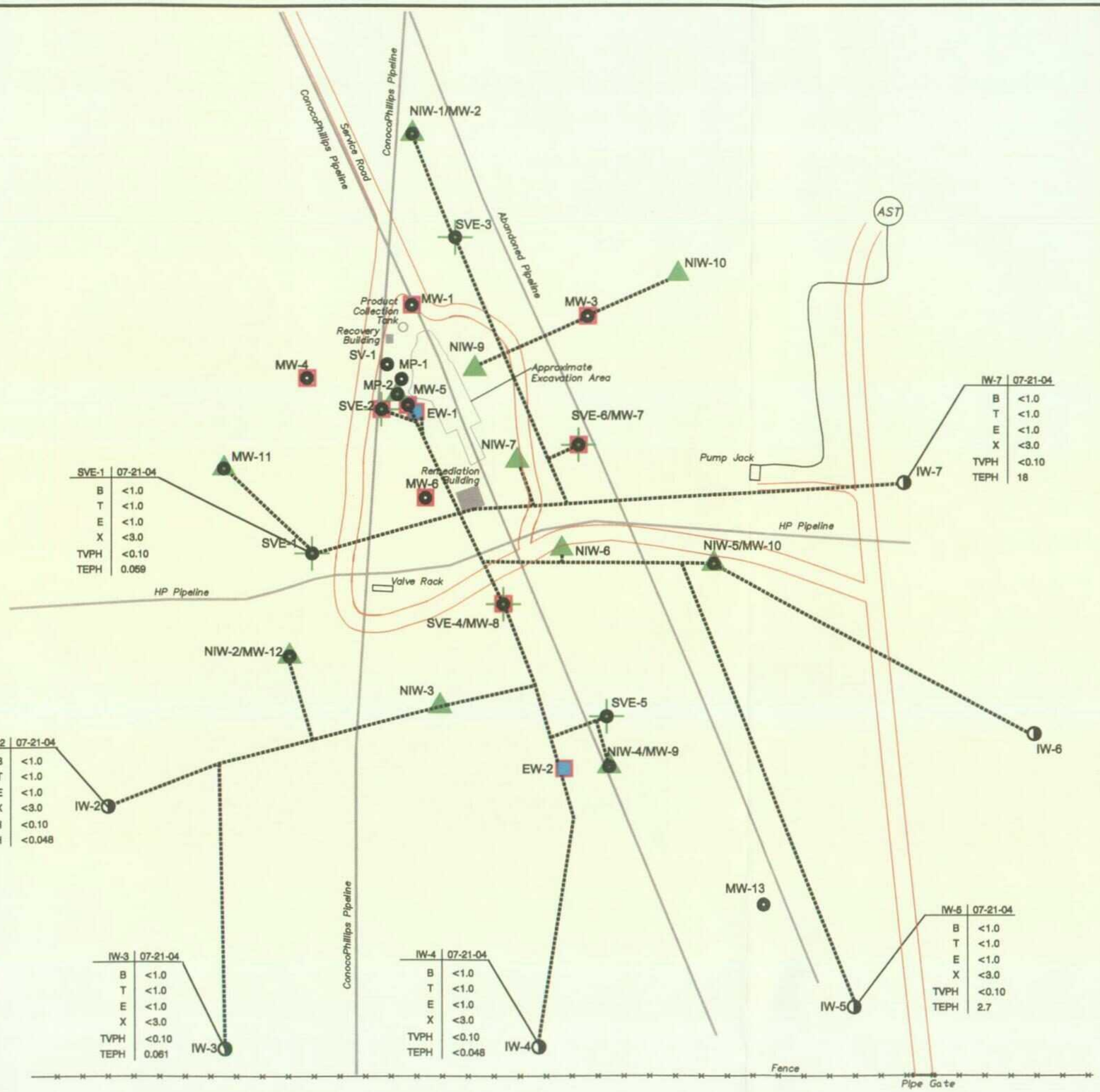
ConocoPhillips | MAXIM TECHNOLOGIES INC®

LINE NM 1-1 | DATA COLLECTED : APR. 20, 2004

LOCATION : HOBBS, LEA COUNTY NEW MEXICO Sec 9 T19S R38E

PROJECT NO : 4640030
MODIFIED BY : GWP
DATE MODIFIED : 05/20/2004

ACAD File : NM1-1.GW Results.Apr04.dwg



SVE-1	07-21-04
B	<1.0
T	<1.0
E	<1.0
X	<3.0
TVPH	<0.10
TEPH	0.059

IW-7	07-21-04
B	<1.0
T	<1.0
E	<1.0
X	<3.0
TVPH	<0.10
TEPH	18

IW-2	07-21-04
B	<1.0
T	<1.0
E	<1.0
X	<3.0
TVPH	<0.10
TEPH	<0.048

IW-3	07-21-04
B	<1.0
T	<1.0
E	<1.0
X	<3.0
TVPH	<0.10
TEPH	0.061

IW-4	07-21-04
B	<1.0
T	<1.0
E	<1.0
X	<3.0
TVPH	<0.10
TEPH	<0.048

IW-5	07-21-04
B	<1.0
T	<1.0
E	<1.0
X	<3.0
TVPH	<0.10
TEPH	2.7

LEGEND

- MW-1 — Existing Monitor Well Location & Designation
- NIW-1 — Nutrient Injection Well Location & Designation
- SVE-1 — Soil Vapor Extraction Location & Designation
- EW-1 — Groundwater Extraction Well Location & Designation
- MW-3 — Product Recovery Well Location & Designation
- IW-7 — Groundwater Injection Well Location & Designation
- Alignment of Conveyance Piping Corridor

ANALYTICAL DATA

Well Number		Sample Date
(µg/L)	B	Benzene
	T	Toluene
	E	Ethylbenzene
	X	Xylenes (Total)
(mg/L)	TVPH	Total Volatile Petroleum Hydrocarbons (TPH-GRO)
	TEPH	Total Extractable Petroleum Hydrocarbons (TPH-DRO)

µg/L = micrograms per liter
mg/L = milligrams per liter

N

0 120 240
Scale (ft)

FIGURE 3b: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS JULY 2004

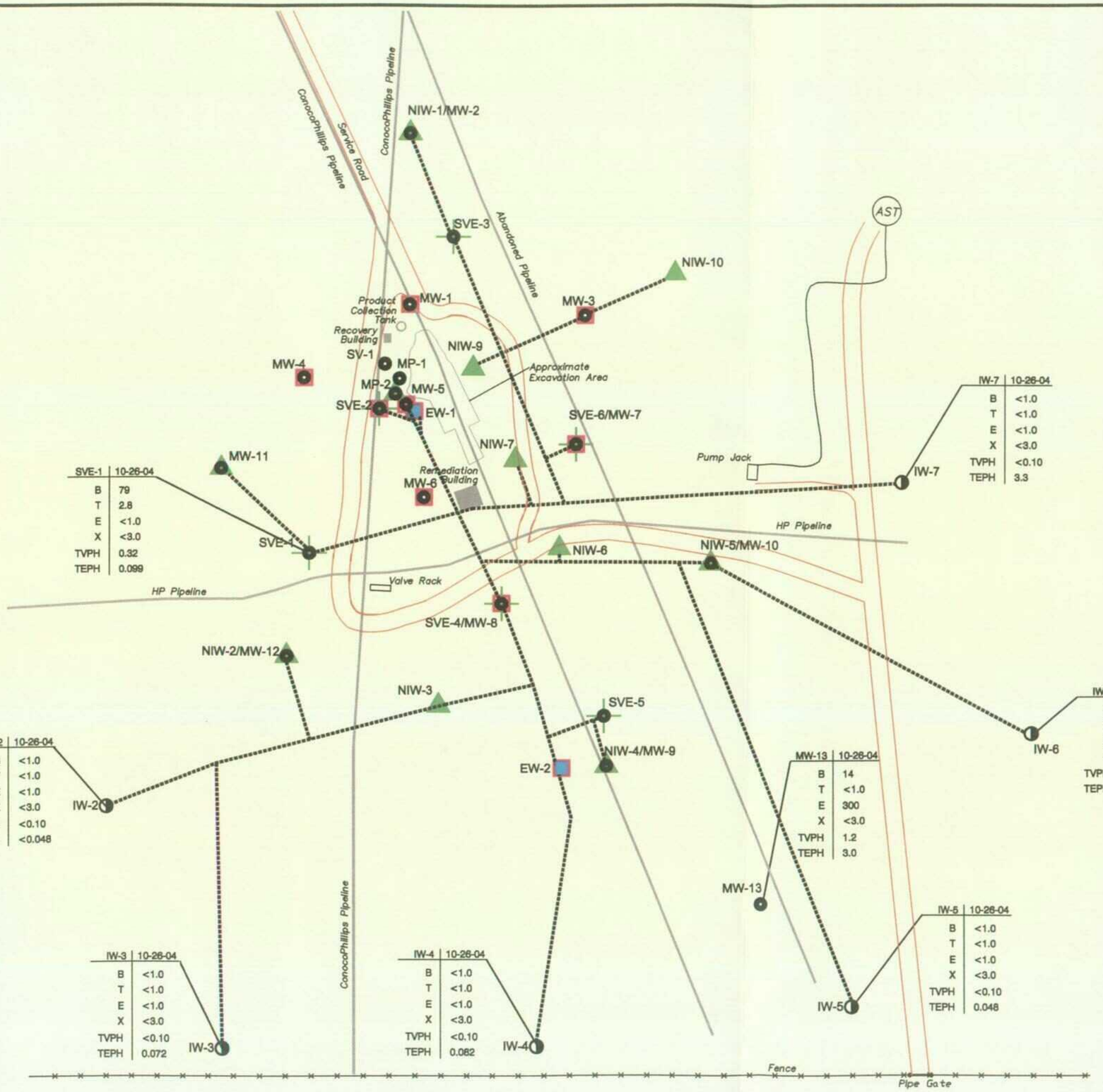
ConocoPhillips | MAXIM TECHNOLOGIES INC®

LINE NM 1-1 | DATA COLLECTED : JUL. 21, 2004

LOCATION : HOBBS, LEA COUNTY NEW MEXICO Sec 9 T19S R38E

PROJECT NO : 5640002
MODIFIED BY : GWP
DATE MODIFIED : 03/03/2005

ACAD File : NM1-1.GW Results.Jul04.dwg



SVE-1	10-26-04
B	79
T	2.8
E	<1.0
X	<3.0
TVPH	0.32
TEPH	0.099

IW-7	10-26-04
B	<1.0
T	<1.0
E	<1.0
X	<3.0
TVPH	<0.10
TEPH	3.3

IW-2	10-26-04
B	<1.0
T	<1.0
E	<1.0
X	<3.0
TVPH	<0.10
TEPH	<0.048

IW-3	10-26-04
B	<1.0
T	<1.0
E	<1.0
X	<3.0
TVPH	<0.10
TEPH	0.072

IW-4	10-26-04
B	<1.0
T	<1.0
E	<1.0
X	<3.0
TVPH	<0.10
TEPH	0.082

MW-13	10-26-04
B	14
T	<1.0
E	300
X	<3.0
TVPH	1.2
TEPH	3.0

IW-5	10-26-04
B	<1.0
T	<1.0
E	<1.0
X	<3.0
TVPH	<0.10
TEPH	0.048

IW-6	10-26-04
B	<1.0
T	<1.0
E	<1.0
X	<3.0
TVPH	<0.10
TEPH	1.4

LEGEND

- MW-1 — Existing Monitor Well Location & Designation
- NIW-1 — Nutrient Injection Well Location & Designation
- SVE-1 — Soil Vapor Extraction Location & Designation
- EW-1 — Groundwater Extraction Well Location & Designation
- MW-3 — Product Recovery Well Location & Designation
- IW-7 — Groundwater Injection Well Location & Designation
- Alignment of Conveyance Piping Corridor

ANALYTICAL DATA

Well Number		Sample Date
(µg/L)	B	Benzene
	T	Toluene
	E	Ethylbenzene
	X	Xylenes (Total)
(mg/L)	TVPH	Total Volatile Petroleum Hydrocarbons (TPH-GRO)
	TEPH	Total Extractable Petroleum Hydrocarbons (TPH-DRO)

µg/L = micrograms per liter
mg/L = milligrams per liter

N

0 120 240
Scale (ft)

FIGURE 3c: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS OCTOBER 2004

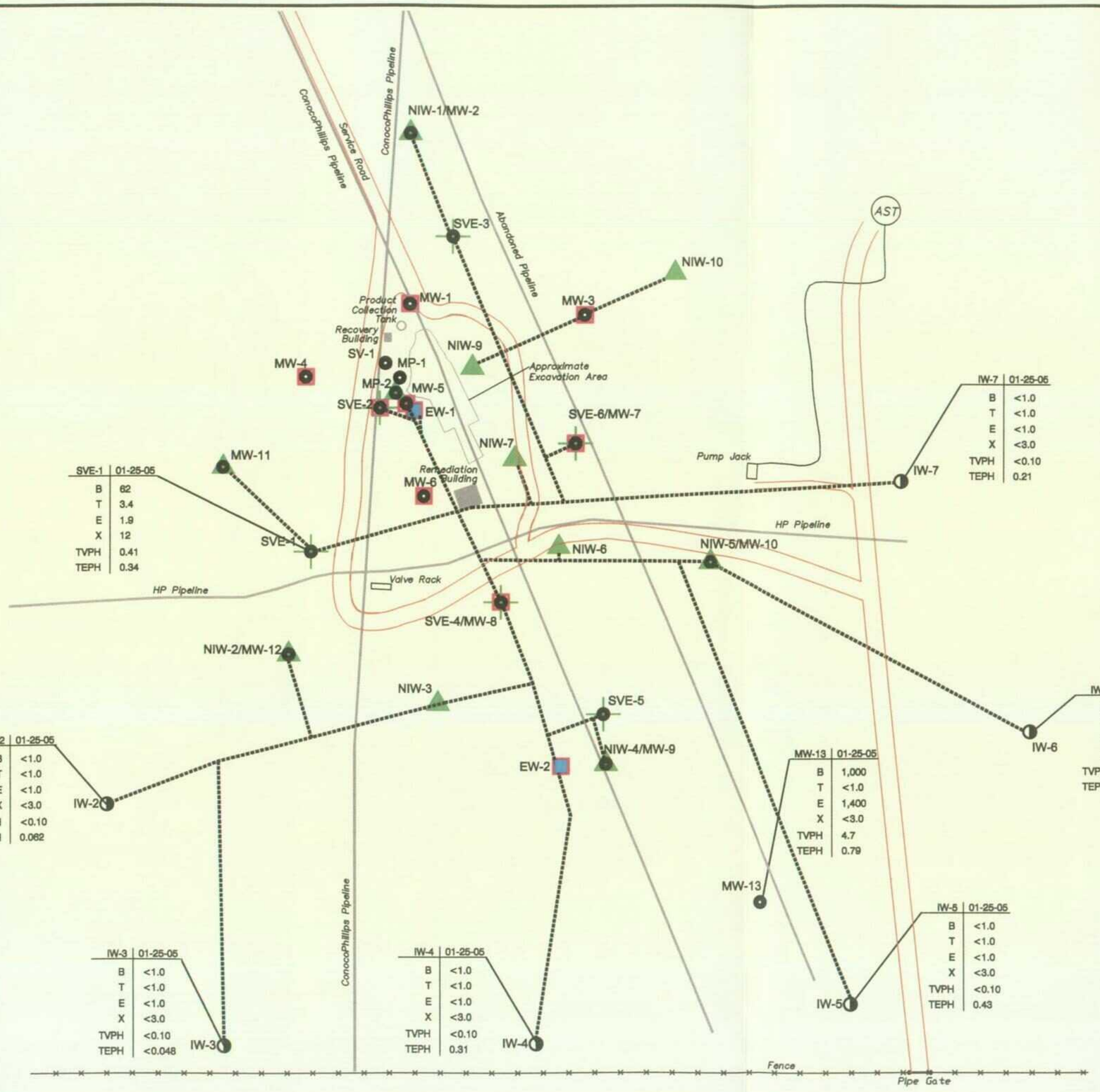
ConocoPhillips | MAXIM TECHNOLOGIES INC

LINE NM 1-1 | DATA COLLECTED : OCT. 26, 2004

LOCATION : HOBBS, LEA COUNTY NEW MEXICO Sec 9 T19S R38E

PROJECT NO : 5640002
MODIFIED BY : GWP
DATE MODIFIED : 03/03/2005

ACAD File : NM1-1.GW Results.Oct04.dwg



LEGEND

- MW-1 — Existing Monitor Well Location & Designation
- NIW-1 — Nutrient Injection Well Location & Designation
- SVE-1 — Soil Vapor Extraction Location & Designation
- EW-1 — Groundwater Extraction Well Location & Designation
- MW-3 — Product Recovery Well Location & Designation
- IW-7 — Groundwater Injection Well Location & Designation
- Alignment of Conveyance Piping Corridor

ANALYTICAL DATA

Well Number		Sample Date
(µg/L)	B	Benzene
	T	Toluene
	E	Ethylbenzene
	X	Xylenes (Total)
(mg/L)	TVPH	Total Volatile Petroleum Hydrocarbons (TPH-GRO)
	TEPH	Total Extractable Petroleum Hydrocarbons (TPH-DRO)

µg/L = micrograms per liter
mg/L = milligrams per liter

0 120 240
Scale (ft)

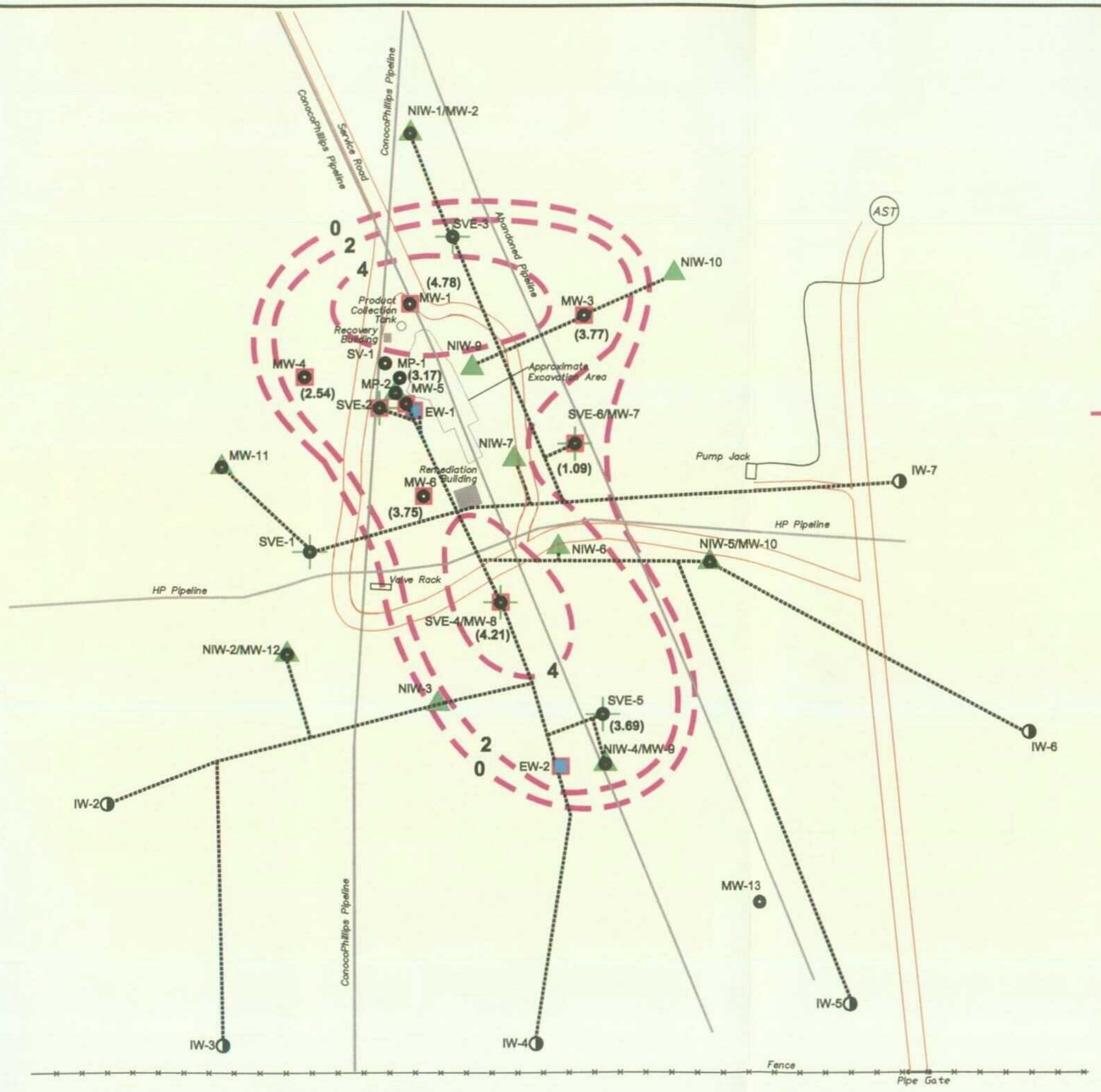
FIGURE 3d: SUMMARY OF GROUNDWATER ANALYTICAL RESULTS JANUARY 2005

ConocoPhillips | MAXIM TECHNOLOGIES INC®

LINE NM 1-1 | DATA COLLECTED : JAN. 25, 2005

LOCATION : HOBBS, LEA COUNTY NEW MEXICO Sec 9 T19S R38E | PROJECT NO : 5640002 MODIFIED BY : GWP DATE MODIFIED : 03/03/2005

ACAD File : NM1-1.GW Results.Jan05.dwg



LEGEND

- MW-1 — Existing Monitor Well Location & Designation
- NIW-1 — Nutrient Injection Well Location & Designation
- SVE-1 — Soil Vapor Extraction Location & Designation
- EW-1 — Groundwater Extraction Well Location & Designation
- MW-3 — Product Recovery Well Location & Designation
- IW-7 — Groundwater Injection Well Location & Designation
- Alignment of Conveyance Piping Corridor
- 4 — LPH Thickness Contour
- (4.78) — LPH Thickness (feet)

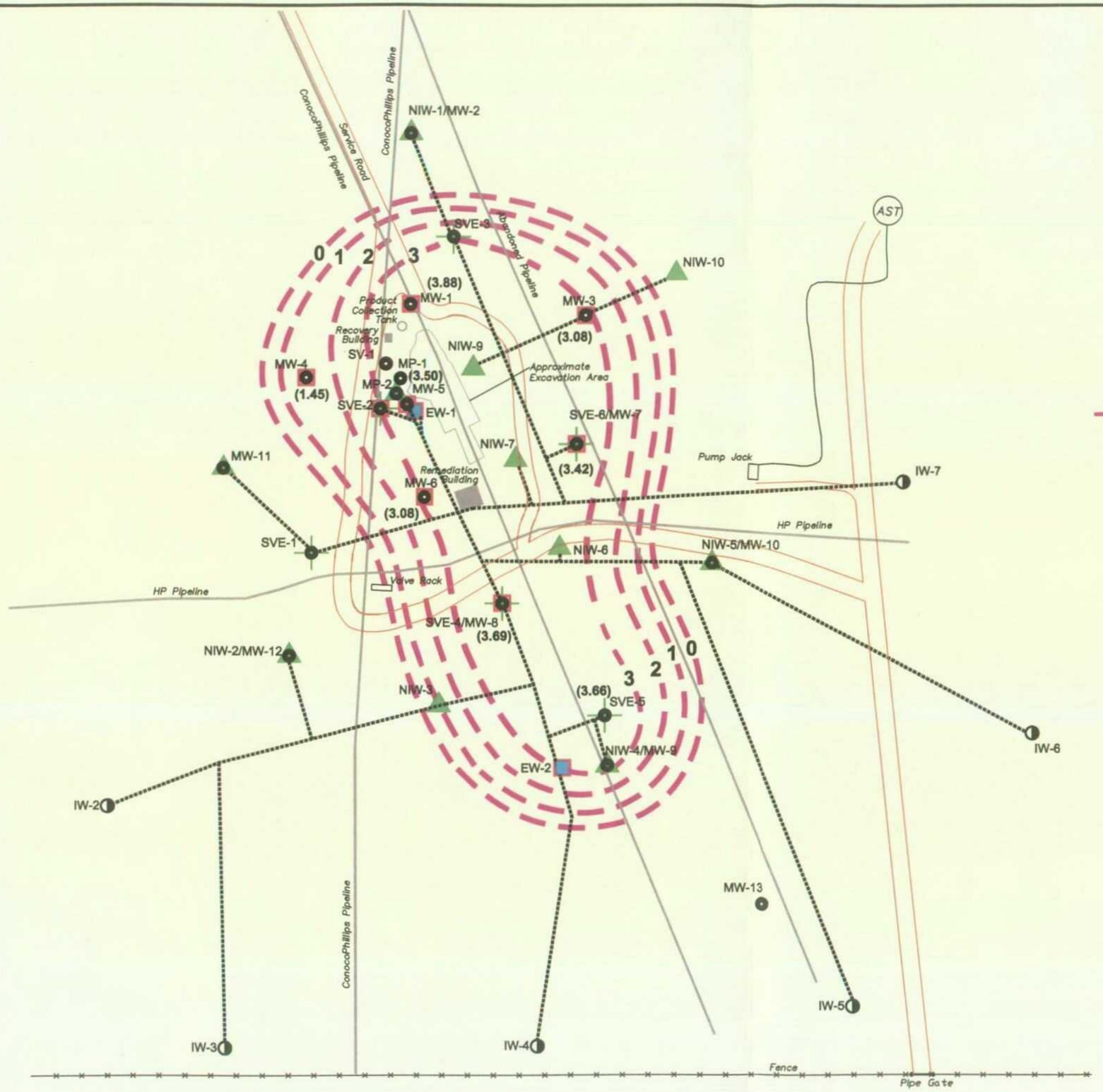
N

0 120 240

Scale (ft)

FIGURE 4a : LIQUID PHASE HYDROCARBON (LPH) THICKNESS CONTOUR MAP APRIL 2004

ConocoPhillips	MAXIM TECHNOLOGIES INC®
LINE NM 1-1	DATA COLLECTED : APR. 19, 2004
LOCATION : HOBBS, LEA COUNTY NEW MEXICO Sec 9 T19S R38E	PROJECT NO : 4640030 MODIFIED BY : GWP DATE MODIFIED : 05/12/2004
	ACAD File : NM1-1.LPH Contour.Apr04.dwg



LEGEND

- MW-1 — Existing Monitor Well Location & Designation
- NIW-1 — Nutrient Injection Well Location & Designation
- SVE-1 — Soil Vapor Extraction Location & Designation
- EW-1 — Groundwater Extraction Well Location & Designation
- MW-3 — Product Recovery Well Location & Designation
- IW-7 — Groundwater Injection Well Location & Designation
- Alignment of Conveyance Piping Corridor
- 3 — LPH Thickness Contour
- (3.88) — LPH Thickness (feet)

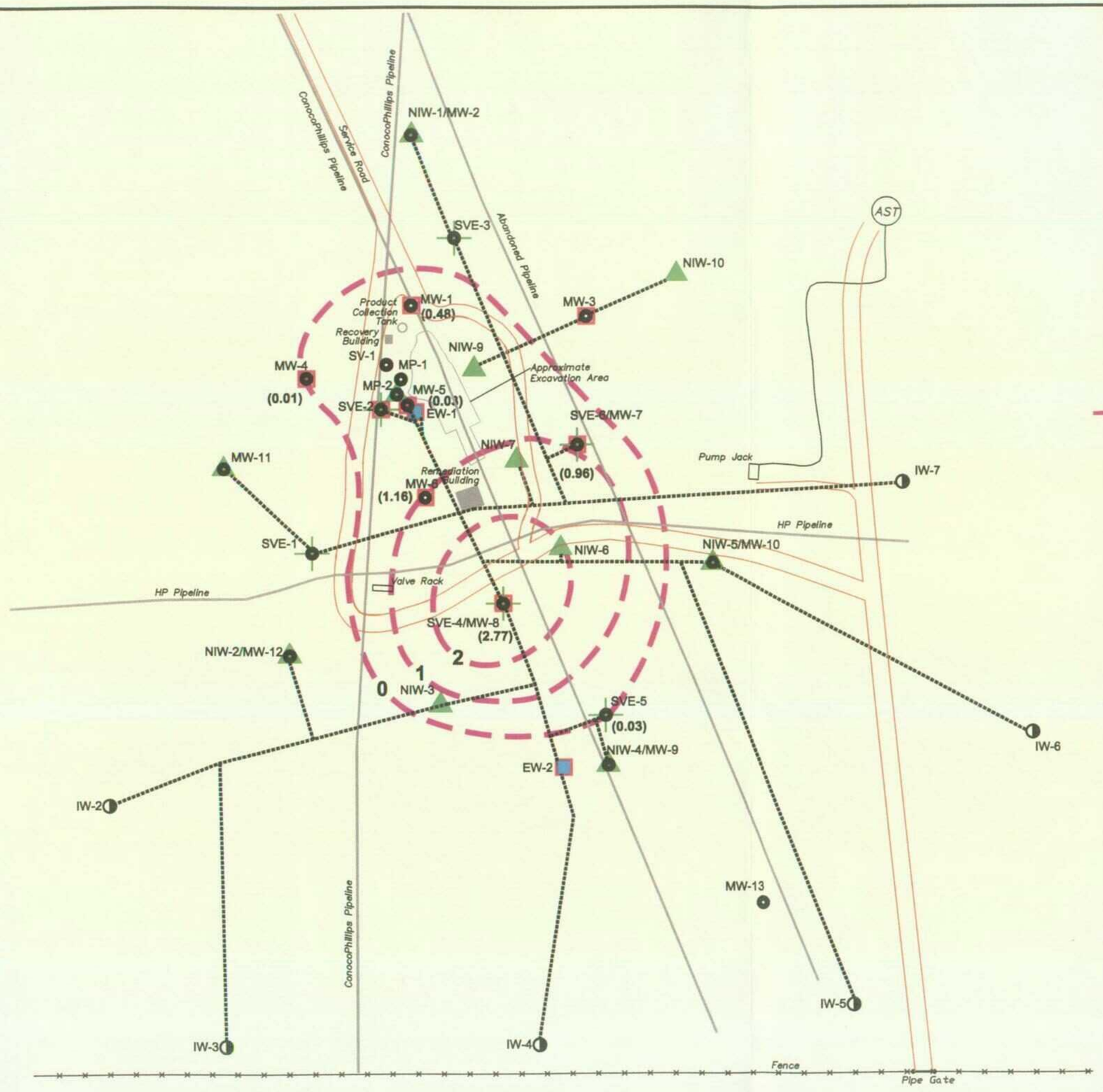
N

0 120 240

Scale (ft)

FIGURE 4b : LIQUID PHASE HYDROCARBON (LPH) THICKNESS CONTOUR MAP JULY 2004

ConocoPhillips	MAXIM TECHNOLOGIES INC®
LINE NM 1-1	DATA COLLECTED : JULY 20, 2004
LOCATION : HOBBS, LEA COUNTY NEW MEXICO Sec 9 T19S R38E	PROJECT NO : 5640002 MODIFIED BY : GWP DATE MODIFIED : 03/03/2005
	ACAD File : NM1-1.LPH Contour.Jul04.dwg



LEGEND

- MW-1 — Existing Monitor Well Location & Designation
- NIW-1 — Nutrient Injection Well Location & Designation
- SVE-1 — Soil Vapor Extraction Location & Designation
- EW-1 — Groundwater Extraction Well Location & Designation
- MW-3 — Product Recovery Well Location & Designation
- IW-7 — Groundwater Injection Well Location & Designation
- Alignment of Conveyance Piping Corridor
- 2 — LPH Thickness Contour
- (2.77) — LPH Thickness (feet)

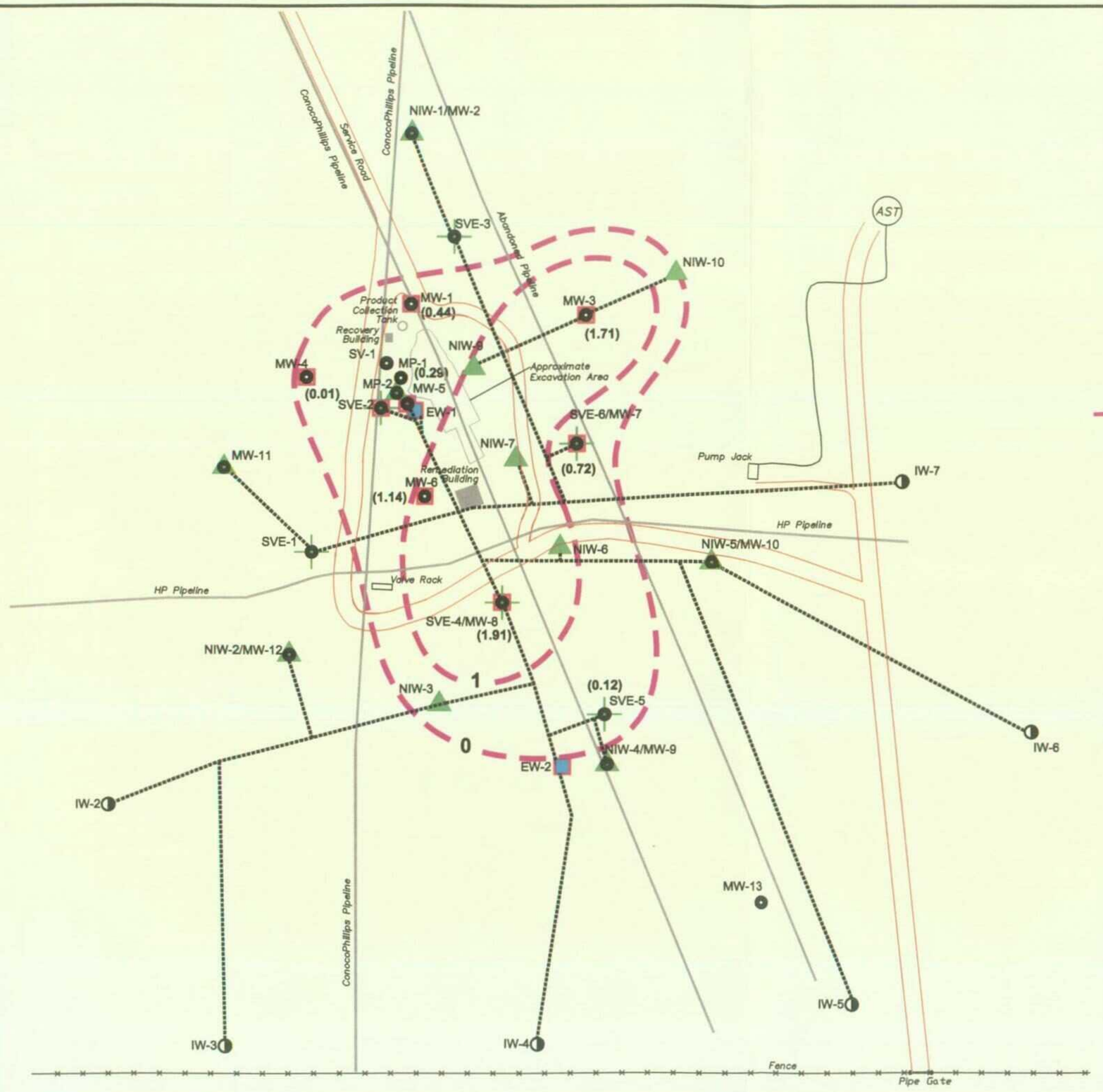
N

0 120 240

Scale (ft)

FIGURE 4c : LIQUID PHASE HYDROCARBON (LPH) THICKNESS CONTOUR MAP OCTOBER 2004

ConocoPhillips / MAXIM TECHNOLOGIES INC	
LINE NM 1-1	DATA COLLECTED : OCT 25, 2004
LOCATION : HOBBS, LEA COUNTY NEW MEXICO Sec 9 T19S R38E	PROJECT NO : 5640002 MODIFIED BY : GWP DATE MODIFIED : 03/15/2005
	ACAD File : NM1-1.LPH Contour.Oct04.dwg



LEGEND

- MW-1 — Existing Monitor Well Location & Designation
- NIW-1 — Nutrient Injection Well Location & Designation
- SVE-1 — Soil Vapor Extraction Location & Designation
- EW-1 — Groundwater Extraction Well Location & Designation
- MW-3 — Product Recovery Well Location & Designation
- IW-7 — Groundwater Injection Well Location & Designation
- Alignment of Conveyance Piping Corridor
- 1 — LPH Thickness Contour
- (1.91) — LPH Thickness (feet)

N

0 120 240

Scale (ft)

FIGURE 4d : LIQUID PHASE HYDROCARBON (LPH) THICKNESS CONTOUR MAP JANUARY 2005

ConocoPhillips	MAXIM TECHNOLOGIES INC®
LINE NM 1-1	DATA COLLECTED : JAN 24, 2005
LOCATION : HOBBS, LEA COUNTY NEW MEXICO Sec 9 T19S R38E	PROJECT NO : 5640002 MODIFIED BY : GWP DATE MODIFIED : 03/04/2005
	ACAD File : NM1-1.LPH Contour.Jan05.dwg

TABLES

Table 1
Water Level Measurements
ConocoPhillips
Line NM1-1
Hobbs, New Mexico
(all measurements in feet)

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
MW-1	02/27/01	3603.30	36.20	30.13	6.07	4.86	31.34	3571.96
	06/25/01	3603.30	35.23	34.92	0.31	0.25	34.98	3568.32
	09/25/01	3603.30	40.28	34.64	5.64	4.51	35.77	3567.53
	12/11/01	3603.30	40.72	34.96	5.76	4.61	36.11	3567.19
	11/05/02	3603.30	41.32	35.76	5.56	4.45	36.87	3566.43
	04/21/03	3603.30	41.52	36.33	5.19	4.15	37.37	3565.93
	06/23/03	3603.30	41.89	36.29	5.60	4.48	37.41	3565.89
	11/05/03	3603.30	41.83	36.50	5.33	4.26	37.57	3565.73
	01/19/04	3603.30	42.39	37.06	5.33	4.26	38.13	3565.17
	04/19/04	3603.30	42.07	37.29	4.78	3.82	38.25	3565.05
	07/20/04	3603.30	40.91	37.03	3.88	3.10	37.81	3565.49
	10/25/04	3603.30	35.26	34.78	0.48	0.38	34.88	3568.42
	01/24/05	3603.30	33.36	32.92	0.44	0.35	33.01	3570.29
MW-2 (NIW-1)	02/27/01	3601.57	32.16		0.00	0.00	32.16	3569.41
	06/25/01	3601.57	32.60		0.00	0.00	32.60	3568.97
	09/25/01	3601.57	33.12		0.00	0.00	33.12	3568.45
	12/11/01	3601.57	33.51		0.00	0.00	33.51	3568.06
	05/20/02	3601.57	33.75		0.00	0.00	33.75	3567.82
MW-3	02/27/01	3602.77	38.93	33.88	5.05	4.04	34.89	3567.88
	06/25/01	3602.77	39.44	35.23	4.21	3.37	36.07	3566.70
	09/25/01	3602.77	40.41	35.79	4.62	3.70	36.71	3566.06
	12/11/01	3602.77	40.83	36.12	4.71	3.77	37.06	3565.71
	11/05/02	3602.77	41.26	36.82	4.44	3.55	37.71	3565.06
	04/21/03	3602.77	41.52	37.14	4.38	3.50	38.02	3564.75
	06/23/03	3602.77	37.93	36.77	1.16	0.93	37.00	3565.77
	11/05/03	3602.77	42.31	38.01	4.30	3.44	38.87	3563.90
	01/19/04	3602.77	42.68	38.36	4.32	3.46	39.22	3563.55
	04/19/04	3602.77	42.08	38.31	3.77	3.02	39.06	3563.71
	07/20/04	3602.77	41.09	38.01	3.08	2.46	38.63	3564.14
	10/25/04	3602.77	35.38		0.00	0.00	35.38	3567.39
	01/24/05	3602.77	35.22	33.51	1.71	1.37	33.85	3568.92
MW-4	02/27/01	3601.70	36.13	32.41	3.72	2.98	33.15	3568.55
	06/25/01	3601.70	36.90	33.17	3.73	2.98	33.92	3567.78
	09/25/01	3601.70	37.38	33.63	3.75	3.00	34.38	3567.32
	12/11/01	3601.70	37.59	34.03	3.56	2.85	34.74	3566.96
	11/05/02	3601.70	38.51	34.82	3.69	2.95	35.56	3566.14
	04/21/03	3601.70	38.78	35.22	3.56	2.85	35.93	3565.77
	06/23/03	3601.70	38.73	35.34	3.39	2.71	36.02	3565.68
	11/05/03	3601.70	38.86	35.96	2.90	2.32	36.54	3565.16
	01/19/04	3601.70	38.99	36.32	2.67	2.14	36.85	3564.85
	04/19/04	3601.70	38.90	36.36	2.54	2.03	36.87	3564.83
	07/20/04	3601.70	37.59	36.14	1.45	1.16	36.43	3565.27
	10/25/04	3601.70	34.26	34.25	0.01	0.01	34.25	3567.45
	01/24/05	3601.70	32.25	32.24	0.01	0.01	32.24	3569.46
MW-5	02/27/01	3601.54	37.92	32.36	5.56	4.45	33.47	3568.07
	06/25/01	3601.54	38.21	32.95	5.26	4.21	34.00	3567.54
	09/25/01	3601.54	39.66	34.44	5.22	4.18	35.48	3566.06
	12/11/01	3601.54	38.94	33.84	5.10	4.08	34.86	3566.68
	11/05/02	3601.54	39.18	34.71	4.47	3.58	35.60	3565.94
	04/21/03	3601.54	39.98	35.34	4.64	3.71	36.27	3565.27
	06/23/03	3601.54	39.55	35.43	4.12	3.30	36.25	3565.29
	11/05/03	3601.54	39.35	35.88	3.47	2.78	36.57	3564.97
	01/19/04	3601.54	40.36	37.11	3.25	2.60	37.76	3563.78
	04/19/04	3601.54	40.37	37.20	3.17	2.54	37.83	3563.71
	07/20/04	3601.54	40.40	36.90	3.50	2.80	37.60	3563.94
	10/25/04	3601.54	34.99	34.96	0.03	0.02	34.97	3566.57
	01/24/05	3601.54	33.37	33.08	0.29	0.23	33.14	3568.40

Table 1
Water Level Measurements
ConocoPhillips
Line NM1-1
Hobbs, New Mexico
(all measurements in feet)

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
MW-6	02/27/01	3599.83	35.80	31.31	4.49	3.59	32.21	3567.62
	06/25/01	3599.83	33.12	33.02	0.10	0.08	33.04	3566.79
	09/25/01	3599.83	37.11	32.83	4.28	3.42	33.69	3566.14
	12/11/01	3599.83	37.34	33.18	4.16	3.33	34.01	3565.82
	11/05/02	3599.83	38.22	34.00	4.22	3.38	34.84	3564.99
	04/21/03	3599.83	38.23	34.30	3.93	3.14	35.09	3564.74
	11/05/03	3599.83	39.15	35.06	4.09	3.27	35.88	3563.95
	01/19/04	3599.83	39.48	35.36	4.12	3.30	36.18	3563.65
	04/19/04	3599.83	39.15	35.40	3.75	3.00	36.15	3563.68
	07/20/04	3599.83	38.24	35.16	3.08	2.46	35.78	3564.05
	10/25/04	3599.83	34.38	33.22	1.16	0.93	33.45	3566.38
	12/08/04	3599.83	33.33	32.08	1.25	1.00	32.33	3567.50
	01/24/05	3599.83	32.53	31.39	1.14	0.91	31.62	3568.21
	02/14/05	3599.83	32.61	31.56	1.05	0.84	31.77	3568.06
MW-7 (SVE-6)	02/27/01	3602.11	39.35	33.60	5.75	4.60	34.75	3567.36
	06/25/01	3602.11	40.34	34.69	5.65	4.52	35.82	3566.29
	09/25/01	3602.11	40.83	35.14	5.69	4.55	36.28	3565.83
	12/11/01	3602.11	41.23	35.49	5.74	4.59	36.64	3565.47
	11/05/02	3602.11	42.25	36.67	5.58	4.46	37.79	3564.32
	04/21/03	3602.11	42.41	36.98	5.43	4.34	38.07	3564.04
	06/23/03	3602.11	42.02	37.21	4.81	3.85	38.17	3563.94
	11/05/03	3602.11	41.49	38.10	3.39	2.71	38.78	3563.33
	01/19/04	3602.11	39.63	38.79	0.84	0.67	38.96	3563.15
	04/19/04	3602.11	39.78	38.69	1.09	0.87	38.91	3563.20
	07/20/04	3602.11	41.40	37.98	3.42	2.74	38.66	3563.45
	10/25/04	3602.11	36.77	35.81	0.96	0.77	36.00	3566.11
	01/24/05	3602.11	34.75	34.03	0.72	0.58	34.17	3567.94
MW-8 (SVE-4)	02/27/01	3598.87	34.36	31.17	3.19	2.55	31.81	3567.06
	06/25/01	3598.87	35.59	31.93	3.66	2.93	32.66	3566.21
	09/25/01	3598.87	36.18	32.33	3.85	3.08	33.10	3565.77
	12/11/01	3598.87	36.71	32.63	4.08	3.26	33.45	3565.42
	11/05/02	3598.87	38.34	33.86	4.48	3.58	34.76	3564.11
	04/21/03	3598.87	38.64	34.22	4.42	3.54	35.10	3563.77
	06/23/03	3598.87	37.21	34.31	2.90	2.32	34.89	3563.98
	11/05/03	3598.87	39.85	34.43	5.42	4.34	35.51	3563.36
	01/19/04	3598.87	40.16	35.13	5.03	4.02	36.14	3562.73
	04/19/04	3598.87	39.41	35.20	4.21	3.37	36.04	3562.83
	07/20/04	3598.87	38.65	34.96	3.69	2.95	35.70	3563.17
	10/25/04	3598.87	35.70	32.93	2.77	2.22	33.48	3565.39
	01/24/05	3598.87	33.20	31.29	1.91	1.53	31.67	3567.20
MW-9 (NIW-4)	02/27/01	3601.05	34.80		0.00	0.00	34.80	3566.25
	06/25/01	3601.05	35.78	35.11	0.67	0.54	35.24	3565.81
	09/25/01	3601.05	37.54	35.19	2.35	1.88	35.66	3565.39
	06/23/03	3601.05	38.80	34.55	4.25	3.40	35.40	3565.65
MW-10 (NIW-5)	02/27/01	3602.96	36.27		0.00	0.00	36.27	3566.69
	06/25/01	3602.96	36.69		0.00	0.00	36.69	3566.27
	09/25/01	3602.96	37.13		0.00	0.00	37.13	3565.83
	12/11/01	3602.96	37.49		0.00	0.00	37.49	3565.47
	05/20/02	3602.96	37.87		0.00	0.00	37.87	3565.09
MW-11	02/27/01	3600.67	32.13		0.00	0.00	32.13	3568.54
	06/25/01	3600.67	32.56		0.00	0.00	32.56	3568.11
	09/25/01	3600.67	32.99		0.00	0.00	32.99	3567.68
	12/11/01	3600.67	33.33		0.00	0.00	33.33	3567.34
	05/20/02	3600.67	33.83		0.00	0.00	33.83	3566.84
MW-12 (NIW-2)	02/27/01	3599.35	31.82		0.00	0.00	31.82	3567.53
	06/25/01	3599.35	32.23		0.00	0.00	32.23	3567.12

Table 1
Water Level Measurements
ConocoPhillips
Line NM1-1
Hobbs, New Mexico
(all measurements in feet)

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
MW-12 (NIW-2) cont.	09/25/01	3599.35	32.63		0.00	0.00	32.63	3566.72
	12/11/01	3599.35	32.94		0.00	0.00	32.94	3566.41
	05/20/02	3599.35	33.46		0.00	0.00	33.46	3565.89
MW-13	02/27/01	3601.67	36.44		0.00	0.00	36.44	3565.23
	06/25/01	3601.67	36.83		0.00	0.00	36.83	3564.84
	09/25/01	3601.67	37.23		0.00	0.00	37.23	3564.44
	12/11/01	3601.67	37.57		0.00	0.00	37.57	3564.10
	05/20/02	3601.67	38.04		0.00	0.00	38.04	3563.63
	08/28/02	3601.67	38.30		0.00	0.00	38.30	3563.37
	08/29/02	3601.67	38.30		0.00	0.00	38.30	3563.37
	11/07/02	3601.67	38.49		0.00	0.00	38.49	3563.18
	11/22/02	3601.67	38.45		0.00	0.00	38.45	3563.22
	11/29/02	3601.67	38.44		0.00	0.00	38.44	3563.23
	12/17/02	3601.67	38.37		0.00	0.00	38.37	3563.30
	12/18/02	3601.67	38.40		0.00	0.00	38.40	3563.27
	01/14/03	3601.67	38.39		0.00	0.00	38.39	3563.28
	02/24/03	3601.67	38.54		0.00	0.00	38.54	3563.13
	02/25/03	3601.67	38.52		0.00	0.00	38.52	3563.15
	03/04/03	3601.67	38.55		0.00	0.00	38.55	3563.12
	03/14/03	3601.67	38.57		0.00	0.00	38.57	3563.10
	04/07/03	3601.67	38.63		0.00	0.00	38.63	3563.04
	04/11/03	3601.67	38.63		0.00	0.00	38.63	3563.04
	04/23/03	3601.67	38.65		0.00	0.00	38.65	3563.02
	07/14/03	3601.67	38.95		0.00	0.00	38.95	3562.72
	10/15/03	3601.67	39.35		0.00	0.00	39.35	3562.32
	01/19/04	3601.67	39.37		0.00	0.00	39.37	3562.30
	04/19/04	3601.67	39.75		0.00	0.00	39.75	3561.92
	07/20/04	3601.67	39.51		0.00	0.00	39.51	3562.16
	10/25/04	3601.67	37.97		0.00	0.00	37.97	3563.70
	01/24/05	3601.67	36.03		0.00	0.00	36.03	3565.64
SV-1	02/27/01	3602.16	NM					
	06/25/01	3602.16	NM					
	09/25/01	3602.16	NM					
	12/11/01	3602.16	NM					
	10/25/04	3602.16	22.85		0.00	0.00	22.85	3579.31
	01/24/05	3602.16	22.85		0.00	0.00	22.85	3579.31
SVE-2 (SV-2)	02/27/01	3601.17	37.03	32.06	4.97	3.98	33.05	3568.12
	06/25/01	3601.17	37.28	32.67	4.61	3.69	33.59	3567.58
	09/25/01	3601.17	37.75	33.46	4.29	3.43	34.32	3566.85
	12/11/01	3601.17	37.69	33.74	3.95	3.16	34.53	3566.64
	11/05/02	3601.17	39.06	35.58	3.48	2.78	36.28	3564.89
	04/21/03	3601.17	39.33	35.65	3.68	2.94	36.39	3564.78
	11/05/03	3601.17	NM	35.02	interface probe unable to penetrate very viscous L.P.H.			
MP-1	02/27/01	3601.87	NM					
	06/25/01	3601.87	NM					
	09/25/01	3601.87	NM					
	12/11/01	3601.87	NM					
	10/25/04	3601.87	22.90		0.00	0.00	22.90	3578.97
	01/24/05	3601.87	22.91		0.00	0.00	22.91	3578.96
MP-2	02/27/01	3601.87	NM					
	06/25/01	3601.87	37.66	33.15	4.51	3.61	34.05	3567.82
	09/25/01	3601.87	NM					
	12/11/01	3601.87	NM					
IW-2	06/05/02	3597.87	32.94		0.00	0.00	32.94	3564.93
	06/07/02	3597.87	32.99		0.00	0.00	32.99	3564.88
	06/08/02	3597.87	32.96		0.00	0.00	32.96	3564.91
	08/28/02	3597.87	32.27		0.00	0.00	32.27	3565.60

Table 1
Water Level Measurements
ConocoPhillips
Line NM1-1
Hobbs, New Mexico
(all measurements in feet)

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
IW-2 cont.	08/29/02	3597.87	32.23		0.00	0.00	32.23	3565.64
	10/25/02	3597.87	32.46		0.00	0.00	32.46	3565.41
	11/06/02	3597.87	32.45		0.00	0.00	32.45	3565.42
	01/14/03	3597.87	32.41		0.00	0.00	32.41	3565.46
	02/26/03	3597.87	32.48		0.00	0.00	32.48	3565.39
	04/23/03	3597.87	32.49		0.00	0.00	32.49	3565.38
	06/23/03	3597.87	32.88		0.00	0.00	32.88	3564.99
	07/14/03	3597.87	32.95		0.00	0.00	32.95	3564.92
	10/15/03	3597.87	33.31		0.00	0.00	33.31	3564.56
	01/19/04	3597.87	33.65		0.00	0.00	33.65	3564.22
	04/19/04	3597.87	33.79		0.00	0.00	33.79	3564.08
	07/20/04	3597.87	33.57		0.00	0.00	33.57	3564.30
	10/25/04	3597.87	31.92		0.00	0.00	31.92	3565.95
	01/24/05	3597.87	30.56		0.00	0.00	30.56	3567.31
IW-3	06/05/02	3597.30	32.85		0.00	0.00	32.85	3564.45
	06/07/02	3597.30	32.89		0.00	0.00	32.89	3564.41
	06/08/02	3597.30	32.88		0.00	0.00	32.88	3564.42
	08/28/02	3597.30	33.02		0.00	0.00	33.02	3564.28
	08/29/02	3597.30	33.01		0.00	0.00	33.01	3564.29
	10/25/02	3597.30	33.20		0.00	0.00	33.20	3564.10
	11/06/02	3597.30	33.23		0.00	0.00	33.23	3564.07
	01/14/03	3597.30	33.20		0.00	0.00	33.20	3564.10
	02/26/03	3597.30	33.28		0.00	0.00	33.28	3564.02
	04/23/03	3597.30	33.28		0.00	0.00	33.28	3564.02
	06/23/03	3597.30	33.78		0.00	0.00	33.78	3563.52
	07/14/03	3597.30	33.85		0.00	0.00	33.85	3563.45
	10/15/03	3597.30	34.05		0.00	0.00	34.05	3563.25
	01/19/04	3597.30	34.34		0.00	0.00	34.34	3562.96
	04/19/04	3597.30	34.18		0.00	0.00	34.18	3563.12
	07/20/04	3597.30	33.99		0.00	0.00	33.99	3563.31
	10/25/04	3597.30	31.94		0.00	0.00	31.94	3565.36
	01/24/05	3597.30	31.41		0.00	0.00	31.41	3565.89
IW-4	06/05/02	3596.13	32.12		0.00	0.00	32.12	3564.01
	06/07/02	3596.13	32.14		0.00	0.00	32.14	3563.99
	06/08/02	3596.13	32.17		0.00	0.00	32.17	3563.96
	08/28/02	3596.13	32.45		0.00	0.00	32.45	3563.68
	08/29/02	3596.13	32.41		0.00	0.00	32.41	3563.72
	10/25/02	3596.13	32.62		0.00	0.00	32.62	3563.51
	11/06/02	3596.13	32.68		0.00	0.00	32.68	3563.45
	01/14/03	3596.13	32.63		0.00	0.00	32.63	3563.50
	02/26/03	3596.13	32.71		0.00	0.00	32.71	3563.42
	04/23/03	3596.13	32.74		0.00	0.00	32.74	3563.39
	06/23/03	3596.13	33.03		0.00	0.00	33.03	3563.10
	07/14/03	3596.13	32.45		0.00	0.00	32.45	3563.68
	10/15/03	3596.13	33.49		0.00	0.00	33.49	3562.64
	01/19/04	3596.13	33.79		0.00	0.00	33.79	3562.34
	04/19/04	3596.13	33.85		0.00	0.00	33.85	3562.28
	07/20/04	3596.13	33.60		0.00	0.00	33.60	3562.53
	10/25/04	3596.13	32.10		0.00	0.00	32.10	3564.03
	01/24/05	3596.13	30.59		0.00	0.00	30.59	3565.54
IW-5	06/05/02	3599.89	36.85		0.00	0.00	36.85	3563.04
	06/07/02	3599.89	36.83		0.00	0.00	36.83	3563.06
	06/08/02	3599.89	36.83		0.00	0.00	36.83	3563.06
	08/28/02	3599.89	37.01		0.00	0.00	37.01	3562.88
	08/29/02	3599.89	37.06		0.00	0.00	37.06	3562.83
	10/25/02	3599.89	37.22		0.00	0.00	37.22	3562.67
	11/06/02	3599.89	37.19		0.00	0.00	37.19	3562.70
	01/14/03	3599.89	37.15		0.00	0.00	37.15	3562.74
	02/26/03	3599.89	37.25		0.00	0.00	37.25	3562.64

Table 1
Water Level Measurements
ConocoPhillips
Line NM1-1
Hobbs, New Mexico
(all measurements in feet)

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
IW-5 cont.	04/23/03	3599.89	37.26		0.00	0.00	37.26	3562.63
	06/23/03	3599.89	37.60		0.00	0.00	37.60	3562.29
	07/14/03	3599.89	37.61		0.00	0.00	37.61	3562.28
	10/15/03	3599.89	36.94		0.00	0.00	36.94	3562.95
	01/19/04	3599.89	38.29		0.00	0.00	38.29	3561.60
	04/19/04	3599.89	38.46		0.00	0.00	38.46	3561.43
	07/20/04	3599.89	38.24		0.00	0.00	38.24	3561.65
	10/25/04	3599.89	36.86		0.00	0.00	36.86	3563.03
	01/24/05	3599.89	34.91		0.00	0.00	34.91	3564.98
IW-6	06/05/02	3599.71	36.45		0.00	0.00	36.45	3563.26
	06/07/02	3599.71	36.48		0.00	0.00	36.48	3563.23
	06/08/02	3599.71	36.48		0.00	0.00	36.48	3563.23
	08/28/02	3599.71	36.54		0.00	0.00	36.54	3563.17
	08/29/02	3599.71	36.52		0.00	0.00	36.52	3563.19
	10/25/02	3599.71	36.75		0.00	0.00	36.75	3562.96
	11/06/02	3599.71	36.68		0.00	0.00	36.68	3563.03
	01/14/03	3599.71	36.56		0.00	0.00	36.56	3563.15
	02/26/03	3599.71	36.50		0.00	0.00	36.50	3563.21
	04/23/03	3599.71	36.52		0.00	0.00	36.52	3563.19
	06/23/03	3599.71	37.15		0.00	0.00	37.15	3562.56
	07/14/03	3599.71	37.21		0.00	0.00	37.21	3562.50
	10/15/03	3599.71	36.74		0.00	0.00	36.74	3562.97
	01/19/04	3599.71	37.90		0.00	0.00	37.90	3561.81
	04/19/04	3599.71	37.93		0.00	0.00	37.93	3561.78
	07/20/04	3599.71	37.67		0.00	0.00	37.67	3562.04
	10/25/04	3599.71	35.57		0.00	0.00	35.57	3564.14
	01/24/05	3599.71	33.54		0.00	0.00	33.54	3566.17
IW-7	06/05/02	3600.64	35.70		0.00	0.00	35.70	3564.94
	06/07/02	3600.64	35.77		0.00	0.00	35.77	3564.87
	06/08/02	3600.64	35.81		0.00	0.00	35.81	3564.83
	08/28/02	3600.64	36.03		0.00	0.00	36.03	3564.61
	08/29/02	3600.64	36.07		0.00	0.00	36.07	3564.57
	10/25/02	3600.64	36.25		0.00	0.00	36.25	3564.39
	11/06/02	3600.64	35.94		0.00	0.00	35.94	3564.70
	01/14/03	3600.64	35.95		0.00	0.00	35.95	3564.69
	02/26/03	3600.64	35.42		0.00	0.00	35.42	3565.22
	04/23/03	3600.64	35.90		0.00	0.00	35.90	3564.74
	06/23/03	3600.64	36.66		0.00	0.00	36.66	3563.98
	07/14/03	3600.64	36.75		0.00	0.00	36.75	3563.89
	10/15/03	3600.64	36.86		0.00	0.00	36.86	3563.78
	01/19/04	3600.64	37.50		0.00	0.00	37.50	3563.14
	04/19/04	3600.64	37.36		0.00	0.00	37.36	3563.28
	07/20/04	3600.64	37.06		0.00	0.00	37.06	3563.58
	10/25/04	3600.64	34.00		0.00	0.00	34.00	3566.64
	01/24/05	3600.64	32.36		0.00	0.00	32.36	3568.28
SVE-1	08/28/02	3598.68	32.63		0.00	0.00	32.63	3566.05
	08/29/02	3598.68	32.60		0.00	0.00	32.60	3566.08
	10/25/02	3598.68	32.60		0.00	0.00	32.60	3566.08
	11/06/02	3598.68	32.80		0.00	0.00	32.80	3565.88
	11/22/02	3598.68	32.75		0.00	0.00	32.75	3565.93
	11/29/02	3598.68	32.73		0.00	0.00	32.73	3565.95
	12/18/02	3598.68	32.82		0.00	0.00	32.82	3565.86
	01/14/03	3598.68	32.61		0.00	0.00	32.61	3566.07
	02/24/03	3598.68	32.78		0.00	0.00	32.78	3565.90
	02/25/03	3598.68	32.79		0.00	0.00	32.79	3565.89
	02/26/03	3598.68	32.80		0.00	0.00	32.80	3565.88
	02/27/03	3598.68	32.80		0.00	0.00	32.80	3565.88
	02/28/03	3598.68	32.80		0.00	0.00	32.80	3565.88
	03/04/03	3598.68	32.78		0.00	0.00	32.78	3565.90

Table 1
Water Level Measurements
ConocoPhillips
Line NM1-1
Hobbs, New Mexico
(all measurements in feet)

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
SVE-1 cont.	03/14/03	3598.68	32.79		0.00	0.00	32.79	3565.89
	04/07/03	3598.68	32.90		0.00	0.00	32.90	3565.78
	04/11/03	3598.68	32.89		0.00	0.00	32.89	3565.79
	04/23/03	3598.68	32.91		0.00	0.00	32.91	3565.77
	06/23/03	3598.68	33.21		0.00	0.00	33.21	3565.47
	07/14/03	3598.68	33.31		0.00	0.00	33.31	3565.37
	10/15/03	3598.68	33.56		0.00	0.00	33.56	3565.12
	01/19/04	3598.68	34.04		0.00	0.00	34.04	3564.64
	04/19/04	3598.68	34.00		0.00	0.00	34.00	3564.68
	07/20/04	3598.68	33.75		0.00	0.00	33.75	3564.93
	10/25/04	3598.68	31.74		0.00	0.00	31.74	3566.94
	01/24/05	3598.68	30.01		0.00	0.00	30.01	3568.67
SVE-5	10/25/02	3600.54	38.82	35.92	2.90	2.32	36.50	3564.04
	11/07/02	3600.54	40.80	35.57	5.23	4.18	36.62	3563.92
	11/22/02	3600.54	dry	dry				
	12/18/02	when pumping from EW-2, SVE-5 may have no detection of water/free product during pumping intervals						
	12/18/02	conducted enhanced free product recovery via vacuum truck						
	02/26/03	3600.54	36.30	30.54	5.76	4.61	31.69	3568.85
	03/13/03	conducted enhanced free product recovery via vacuum truck						
	11/05/03	3600.54	40.58	36.54	4.04	3.23	37.35	3563.19
	01/19/04	3600.54	39.84	36.81	3.03	2.42	37.42	3563.12
	04/19/04	3600.54	40.56	36.87	3.69	2.95	37.61	3562.93
	07/20/04	3600.54	40.32	36.66	3.66	2.93	37.39	3563.15
	10/25/04	3600.54	35.23	35.20	0.03	0.02	35.21	3565.33
	01/24/05	3600.54	33.50	33.38	0.12	0.10	33.40	3567.14
EW-1	06/07/02	3598.57	34.33	30.73	3.60	2.88	31.45	3567.12
	08/26/02	developed well, conducted enhanced free product recovery via vacuum truck						
	11/22/02	3598.57	37.82	30.65	7.17	5.74	32.08	3566.49
	12/18/02	redeveloped well, conducted enhanced free product recovery via vacuum truck						
EW-2	09/19/02	3597.95	33.60		0.00	0.00	33.60	3564.35
	10/03/02	3597.95	33.61		0.00	0.00	33.61	3564.34
	10/23/02	3597.95	33.71		0.00	0.00	33.71	3564.24
	10/24/02	3597.95	33.73		0.00	0.00	33.73	3564.22
	10/25/02	3597.95	33.74		0.00	0.00	33.74	3564.21
	11/15/02	3597.95	33.83		0.00	0.00	33.83	3564.12
	11/29/02	3597.95	33.83		0.00	0.00	33.83	3564.12
	12/18/02	3597.95	33.65	33.60	0.05	0.04	33.61	3564.34
	12/18/02	redeveloped well, conducted enhanced free product recovery via vacuum truck						
	03/04/03	3597.95	33.65	31.23	2.42	1.94	31.71	3566.24
	03/13/03	redeveloped well, conducted enhanced free product recovery via vacuum truck						
	03/13/03	3597.95	33.80	33.59	0.21	0.17	33.63	3564.32
	04/07/03	3597.95	35.40	33.53	1.87	1.50	33.90	3564.05
	06/23/03	3597.95	33.62	29.02	4.60	3.68	29.94	3568.01
	06/23/03	re-adjusted free product pump						
	06/24/03	3597.95	33.51	33.50	0.01	0.01	33.50	3564.45

Notes:
L.P.H. = Liquid Phase Hydrocarbon
NM = Not Measured
Blank Fields Indicate No Data

Table 2c
Groundwater Analytical Data - Inorganics
ConocoPhillips
Line NM1-1
Hobbs, New Mexico

Well Number	Sample Date	Chloride (mg/L)	Total Hardness (mg/L)	Iron (µg/L)	Manganese (µg/L)
MW-2	07/16/99	28			
	10/20/99	180			
	01/13/00	200			
	04/06/00	190			
	08/01/00	180			
	11/15/00	170			
	03/06/01	160			
	06/26/01	170			
	09/25/01	150			
	12/12/01	151			
	05/20/02	137	590	3,090	98
MW-3	07/16/99	170			
	10/20/99	120			
	01/13/00	160			
	04/06/00	170			
MW-4	07/16/99	190			
MW-9	07/16/99	140			
	10/20/99	110			
	01/13/00	130			
	04/06/00	140			
	08/01/00	140			
	11/15/00	140			
	03/06/01	130			
MW-10	07/16/99	100			
	10/20/99	120			
	01/13/00	170			
	04/06/00	210			
	08/01/00	160			
	11/15/00	200			
	03/06/01	180			
	06/26/01	170			
	09/25/01	170			
	12/12/01	169			
	05/20/02	164	594	1,870	303
MW-11	10/20/99	120			
	01/13/00	140			
	04/06/00	120			
	08/01/00	110			
	11/15/00	110			
	03/06/01	100			
	06/26/01	110			
	09/25/01	150			
	12/12/01	100			
	05/20/02	96	1,280	3,430	51
MW-12	10/20/99	140			
	01/13/00	140			
	04/06/00	130			
	08/01/00	120			

Table 2c
Groundwater Analytical Data - Inorganics
ConocoPhillips
Line NM1-1
Hobbs, New Mexico

Well Number	Sample Date	Chloride (mg/L)	Total Hardness (mg/L)	Iron (µg/L)	Manganese (µg/L)
MW-12 cont.	11/15/00	120			
	03/06/01	91			
	06/26/01	120			
	09/25/01	110			
	12/12/01	109			
	05/20/02	100	845	11,700	106
MW-13	04/06/00	56			
	08/01/00	71			
	11/15/00	86			
	03/06/01	110			
	06/26/01	120			
	09/25/01	110			
	12/12/01	114			
	05/20/02	111	905	1,200	18
	08/29/02	106		5,720	
	01/15/03	113			
	04/23/03	406		351	
	07/14/03	125			
	10/16/03	120			
	10/26/04	120			
	01/25/05	130			
EW-1	07/16/03	172			
	10/16/03	147		220	
EW-2	07/16/03	160			
	10/16/03	164		220	
IW-2	08/29/02	86		6,550	
	01/14/03	132			
	04/23/03	152		89	
	07/14/03	171			
	10/15/03	103			
	01/20/04	97			
	04/20/04	99.4			
	07/21/04	121			
	10/26/04	146			
	01/25/05	158			
IW-3	08/29/02	82		8,280	
	01/14/03	94.6			
	04/23/03	115		1,470	
	07/14/03	161			
	10/15/03	99.1			
	01/20/04	89.3			
	04/20/04	91.5			
	07/21/04	148			
	10/26/04	90.2			
	01/25/05	158			
IW-4	08/29/02	99.5		2,450	
	01/14/03	111			
	04/23/03	153		221	

Table 2c
Groundwater Analytical Data - Inorganics
ConocoPhillips
Line NM1-1
Hobbs, New Mexico

Well Number	Sample Date	Chloride (mg/L)	Total Hardness (mg/L)	Iron (µg/L)	Manganese (µg/L)
IW-4 cont.	07/14/03	118			
	10/16/03	141			
	01/20/04	114			
	04/20/04	101			
	07/21/04	125			
	10/26/04	139			
	01/25/05	154			
IW-5	08/29/02	90		3,330	
	01/15/03	117			
	04/23/03	156		2,130	
	07/14/03	160			
	10/16/03	166			
	01/20/04	140			
	04/20/04	124			
	07/21/04	138			
	10/26/04	128			
	01/25/05	156			
IW-6	08/29/02	92		7,160	
	01/15/03	100			
	04/23/03	132		270	
	07/14/03	120			
	10/16/04	165			
	01/20/04	138			
	10/26/04	76.6			
	01/25/05	156			
IW-7	08/29/02	161		18,600	
	01/15/03	142			
	04/23/03	152		524	
	07/14/03	140			
	10/16/03	165			
	01/20/04	138			
	04/20/04	160			
	07/21/04	142			
	07/21/04 D	139			
	10/26/04	125			
	01/25/05	155			
	01/25/05 D	157			
SVE-1	08/29/02	96.5			
	01/14/03	122			
	04/23/03	123		2,270	
	07/14/03	117			
	10/16/03	113			
	01/20/04	105			
	04/20/04	109			
	07/21/04	103			
	10/26/04	52.7			
	01/25/05	73.9			

Notes:
mg/L = milligrams per liter
µg/L = micrograms per liter
Blank Fields Indicate No Data
D = Duplicate Sample

e 2d

Groundwater Data - WQCC and PAH Analyses

ConocoPhillips

Line NM1-1

Hobbs, New Mexico

WQCC Analytes (mg/L)	IW-2	IW-3	IW-4	IW-5	IW-7	IW-7D	SVE-1
Total Dissolved Solids	**572**	**586**	**580**	**640**	**717**	**710**	**614**
Fluoride	**1.2**	**1.2**	**1.1**	**1.2**	**1.1**	**1.2**	**1.3**
Aluminum	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	**0.21**
Arsenic	<0.010	<0.010	<0.010	**0.013**	<0.010	<0.010	<0.010
Barium	<0.20	<0.20	**0.26**	**0.23**	**0.28**	**0.27**	<0.20
Boron	<0.20	<0.20	<0.20	<0.20	**0.22**	**0.22**	**0.23**
Cadmium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Copper	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Iron	**0.10**	<0.10	<0.10	**0.60**	**0.17**	**0.16**	**0.11**
Lead	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Manganese	**0.020**	<0.015	<0.015	**0.30**	**0.098**	**0.097**	<0.015
Mercury	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Molybdenum	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Nickel	**0.11**	**0.073**	<0.040	**0.041**	<0.040	<0.040	<0.040
Selenium	**0.0069**	**0.0074**	**0.0058**	**0.0054**	**0.0092**	**0.0069**	**0.0086**
Silver	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc	<0.020	<0.020	**0.021**	<0.020	<0.020	<0.020	<0.020
Uranium (µg/L)	<500	<500	<500	<500	<500	<500	<500
PAH Analytes (µg/L)							
Acenaphthene	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5
Acenaphthylene	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5
Anthracene	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5
Benzo(a)anthracene	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5
Benzo(a)pyrene	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5
Benzo(b)fluoranthene	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5
Benzo(ghi)perylene	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5
Benzo(k)fluoranthene	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5
Chrysene	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5
Dibenz(a,h)anthracene	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5
Fluoranthene	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5
Fluorene	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5
Indeo(1,2,3-cd)pyrene	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5
Naphthalene	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5
Phenanthrene	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5
Pyrene	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5

Notes:

Samples collected on 04/20/04

mg/L = milligrams per liter

µg/L = micrograms per liter

WQCC = New Mexico Water Quality Control Commission

PAH = Polynuclear Aromatic Hydrocarbons (SW846 - 8270C)

D = Duplicate Sample

Table 3
Summary of Monthly Groundwater Recovery and Effluent Discharge Volumes
ConocoPhillips
Line NM1-1
Hobbs, New Mexico

Date	Recovery (gallons per month)		Groundwater Effluent Discharge (gallons per month)						
	EW-1	EW-2	Tower	IW-2	IW-3	IW-4	IW-5	IW-6	IW-7
Nov-02	760	30,220	31,000	4,110	20	70	2,100	30	20,660
Dec-02	4,740	7,860	12,600	6,620	0	150	580	380	4,660
Jan-03	0	0	0	0	0	0	0	0	0
Feb-03	7,380	4,520	11,900	6,310	0	610	370	290	4,230
Mar-03	9,600	0	9,600	1,550	350	2,300	1,260	1,350	1,730
Apr-03	13,370	9,960	17,200	630	3,160	6,740	4,100	1,610	630
May-03	3,360	9,860	13,900	0	2,520	6,220	4,020	1,180	0
Jun-03	19,400	25,030	46,500	4,030	6,840	24,100	5,740	2,890	440
Jul-03	9,190	36,920	50,600	0	0	44,640	1,410	90	60
Aug-03	10,660	39,920	53,600	0	0	50,930	1,950	460	50
Sep-03	15,888	33,239	52,069	3	6	3,100	18,119	17,884	8,022
Oct-03	12,552	21,287	40,708	0	0	0	12,910	15,989	9,723
Nov-03	264	25,633	35,372	0	0	0	19,006	10,003	3,183
Dec-03	237	21,373	28,658	0	0	0	13,709	9,571	3,239
Jan-04	197	8,466	24,743	0	0	0	8,562	6,993	6,457
Feb-04	107	3,297	17,605	0	0	0	4,712	0	11,773
Mar-04	4,717	680	5,763	0	0	0	411	1	4,986
Apr-04	0	0	0	0	0	0	0	0	0
May-04	0	0	0	0	0	0	0	0	0
Jun-04	5,498	1,840	8,308	382	1,628	5,083	200	43	2
Jul-04	3,252	7,227	11,348	214	1,527	8,006	237	63	0
Aug-04	1,596	17,898	40,618	10,578	9,741	16,633	1,056	639	258
Sep-04	1,673	13,265	14,919	257	1,199	11,866	179	174	150
Oct-04	2,489	18,305	20,794	1	1	17,684	95	278	533
Nov-04	0	36,428	21,957	614	162	26,189	22	308	723
Dec-04	102,574	27,350	117,203	3,135	2,658	84,691	11,419	5,107	10,192
Jan-05	36,607	10,132	47,797	8,990	0	24,290	4,799	5,941	3,508
Feb-05	39,081	11,390	53,753	6,997	0	24,589	3,342	3,764	13,042
Yearly Total Gallons =	**197,487**	**144,515**	**342,460**	**31,168**	**16,916**	**219,031**	**21,760**	**16,318**	**33,394**
System Total Gallons =	**305,192**	**422,100**	**788,515**	**54,421**	**29,812**	**357,891**	**120,308**	**85,038**	**108,251**

Table 4a
Groundwater Effluent Discharge
Analytical Data - Organics
ConocoPhillips
Line NM1-1
Hobbs, New Mexico

Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)
11/08/2002	<2.0	<2.0	<2.0	<6.0	<2.0	<2.0
11/15/2002	<2.0	<2.0	<2.0	<6.0	<0.1	
11/22/2002	<2.0	<2.0	<2.0	<6.0	<0.1	
11/29/2002	<1.0	<2.0	<2.0	<2.0		
12/09/2002	<2.0	<2.0	<2.0	<6.0		
12/19/2002	<2.0	<2.0	<2.0	<6.0		
02/24/2003	<2.0	<2.0	<2.0	<6.0	<0.1	
03/03/2003	<2.0	<2.0	<2.0	<6.0	<0.1	
04/07/2003	<2.0	<2.0	<2.0	<6.0		
04/24/2003	<2.0	<2.0	<2.0	<6.0	<1.0	<1.0
05/12/2003	<2.0	<2.0	<2.0	<6.0		
06/17/2003	<2.0	<2.0	<2.0	<6.0	<0.02	
07/14/2003	<2.0	<2.0	<2.0	<6.0	<2.0	<2.0
08/01/2003	<2.0	<2.0	<2.0	<6.0		
09/02/2003	<2.0	<2.0	<2.0	<6.0		
10/16/2003	<1.0	<1.0	<1.0	<3.0	<0.10	<0.048
11/25/2003	<1.0	<1.0	<1.0	<3.0		
12/30/2003	<1.0	<1.0	<1.0	<3.0		
01/29/2004	<1.0	<1.0	<1.0	<3.0		
03/11/2004	<1.0	<1.0	<1.0	<3.0		
06/30/2004	<1.0	<1.0	<1.0	<3.0		
07/29/2004	<1.0	<1.0	<1.0	<3.0		
08/24/2004	<1.0	<1.0	<1.0	<3.0		
10/05/2004*	<1.0	<1.0	<1.0	<3.0		
10/27/2004	<1.0	<1.0	<1.0	<3.0		
11/22/2004	<1.0	<1.0	<1.0	<3.0		
12/29/2004	<1.0	<1.0	<1.0	<3.0		
01/27/2005	<1.0	<1.0	<1.0	<3.0		
02/21/2005	<1.0	<1.0	<1.0	<3.0		

Notes:
* Resample for September 2004 due to shipment breakage
µg/L = micrograms per liter
mg/L = milligrams per liter
TPH-GRO = Total Volatile Petroleum Hydrocarbons (TVPH)
TPH-DRO = Total Extractable Petroleum Hydrocarbons (TEPH)
Blank Fields Indicate No Data

Table 4b
Groundwater Effluent Discharge
Analytical Data - Inorganics
ConocoPhillips
Line NM1-1
Hobbs, New Mexico

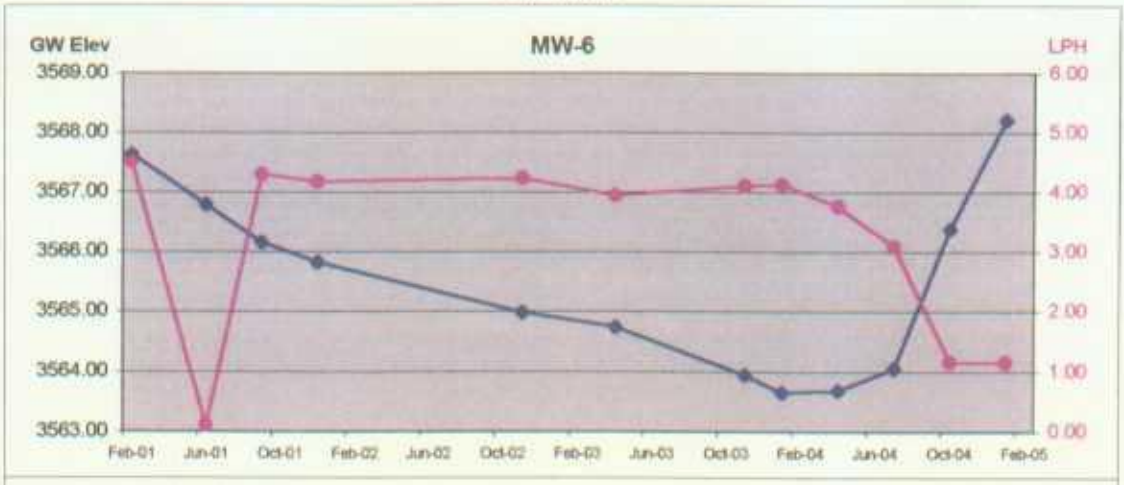
Date	Chloride (mg/L)	TDS (mg/L)	TSS (mg/L)	pH (SU)	Iron (mg/L)
11/08/2002	120	540	8	7 to 8 (1)	
11/15/2002	160			8.28 (2)	
11/22/2002	172	629	20	7 to 8 (1)	<0.01
11/29/2002				7 to 8 (1)	
12/19/2002	152			7 to 8 (1)	
12/27/2002	156			7 to 8 (1)	
02/24/2003	172			7 to 8 (1)	
03/03/2003	156			7 to 8 (1)	
04/07/2003	160			7 to 8 (1)	
04/24/2003		655	34	7.94 (2)	<0.01
05/12/2003	174			7 to 8 (1)	
06/17/2003	376	643	5	7.97 (2)	
06/23/2003	172				
07/14/2003	168	616	2	7.83 (2)	
08/01/2003	192				
10/16/2003	162	980	<10.0	7.8 (2)	<0.10
11/25/2003	153				
12/30/2003	140				
01/29/2004	138				
03/11/2004	157				
06/30/2004	147				
07/29/2004	150				
08/24/2004	164				
10/05/2004*	171				
10/27/2004	161				
11/22/2004	179				
12/29/2004	136				
01/27/2005	167				
02/21/2005	176				

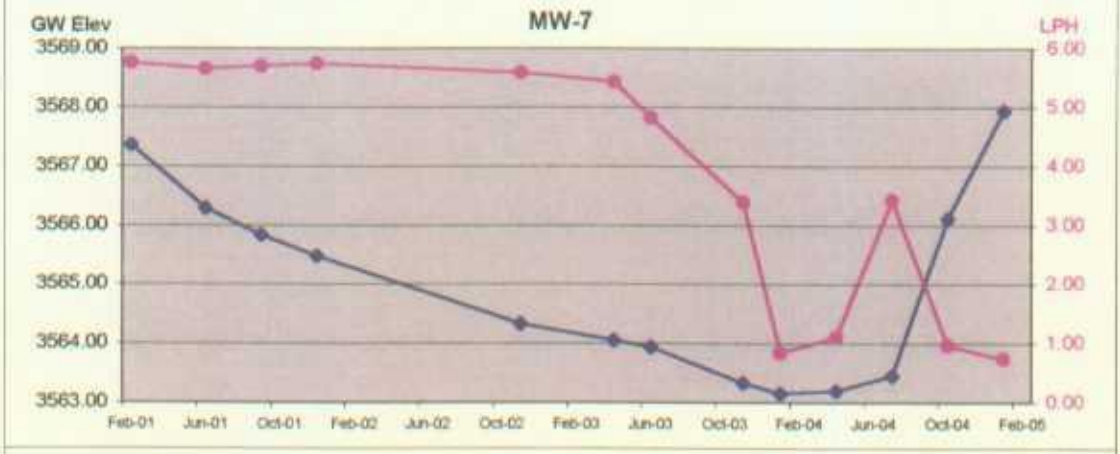
Notes:
(1) measured with field pH paper
(2) laboratory analysis data
* Resample for September 2004 due to shipment breakage
mg/L = milligrams per liter
SU = standard pH units
TDS = Total Dissolved Solids
TSS = Total Suspended Solids
Blank Fields Indicate No Data

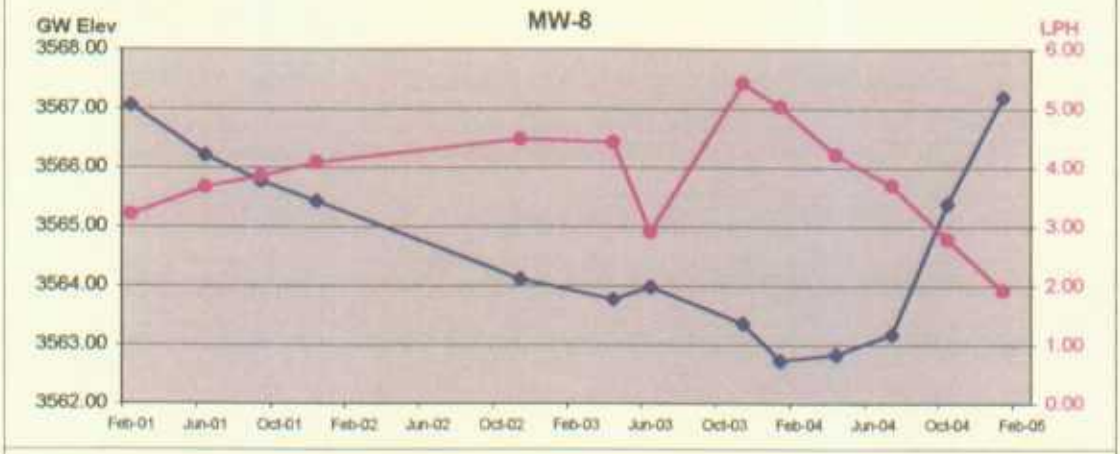
APPENDIX A
Hydrographs

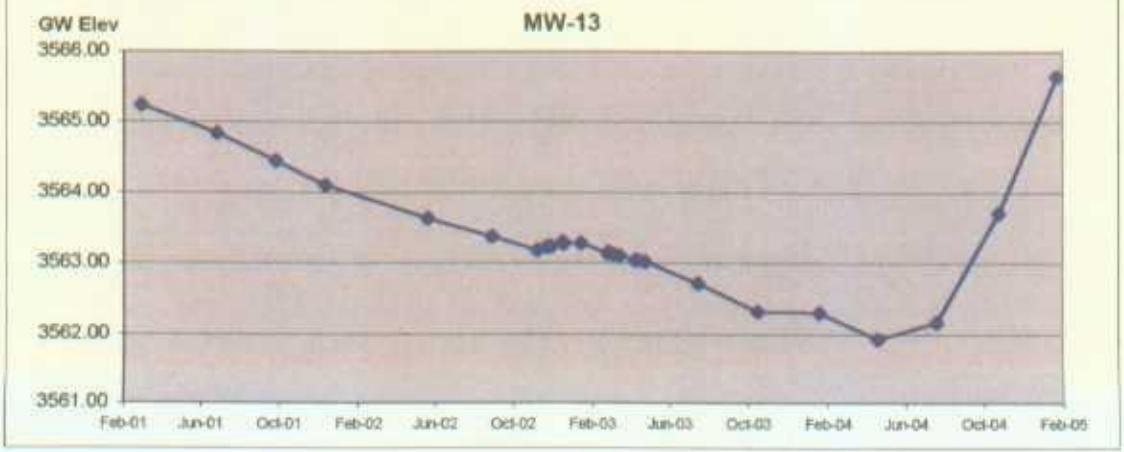
Hydrograph Charts
Line NM1-1

Hydrograph Charts
Line NM1-1





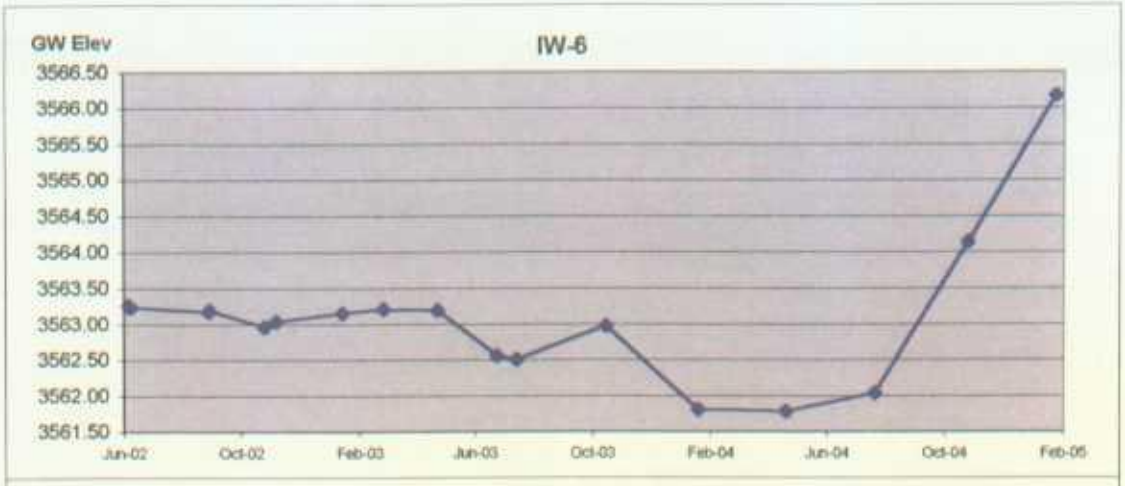




Hydrograph Charts
Line NM1-1

Hydrograph Charts

Line NM1-1



APPENDIX B
Laboratory Analytical Data

SEVERN TRENT STL

Certificate of Analysis

STL Austin • 14046 Summit Drive, Austin, TX 78728 • Tel 512 244 0855 • Fax 512 244 0160 • *www.stl-inc.com*

ANALYTICAL REPORT

PROJECT NO. HOBBS, NM

3374 Line NM1-1 Remediation

Lot #: I4D230189

Greg Pope

Maxim Technologies
1703 W Industrial Ave
Midland, TX 79701

SEVERN TRENT LABORATORIES, INC.

Carla M. Butler
Project Manager

May 13, 2004

American Council of Independent Laboratories
International Association of Environmental Testing Laboratories

Case Narrative

STL LOT NUMBER: **I4D230189**

This report contains the analytical results for the 17 samples received under chain of custody by Severn Trent Laboratories (STL) on April 23, 2004. These samples are associated with your 3374 Line NM1-1 Remediation project.

All samples were received in good condition and within temperature requirements with the exception of the liter collection for SVE-1 8270 analysis. A replacement liter was received April 28, 2004. An aliquot of the filtered metals collections was shipped to STL St. Louis, 13715 Rider Trail North, Earth City, MO for the dissolved uranium analysis.

All applicable quality control procedures met method-specified acceptance criteria except where noted in the case narrative or flagged on the result pages.

If you have any questions, please feel free to call me at (512) 244-0855.

EXECUTIVE SUMMARY - Detection Highlights

I4D230189

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
IW-2 04/20/04 10:15 001				
Total Dissolved Solids	572	40.0	mg/L	MCAWW 160.1
Chloride	99.4	20.0	mg/L	MCAWW 300.0A
Fluoride	1.2	1.0	mg/L	MCAWW 300.0A
IW-2-DIS 04/20/04 10:15 002				
Iron - DISSOLVED	0.10	0.10	mg/L	SW846 6010B
Manganese - DISSOLVED	0.020	0.015	mg/L	SW846 6010B
Nickel - DISSOLVED	0.11	0.040	mg/L	SW846 6010B
Selenium - DISSOLVED	0.0069	0.0050	mg/L	SW846 6010B
SVE-1 04/20/04 11:15 003				
Total Dissolved Solids	614	40.0	mg/L	MCAWW 160.1
Chloride	109	20.0	mg/L	MCAWW 300.0A
Fluoride	1.3	1.0	mg/L	MCAWW 300.0A
SVE-1-DIS 04/20/04 11:15 004				
Aluminum - DISSOLVED	0.21	0.20	mg/L	SW846 6010B
Boron - DISSOLVED	0.23	0.20	mg/L	SW846 6010B
Iron - DISSOLVED	0.11	0.10	mg/L	SW846 6010B
Selenium - DISSOLVED	0.0086	0.0050	mg/L	SW846 6010B
IW-3 04/20/04 12:00 006				
Total Dissolved Solids	586	40.0	mg/L	MCAWW 160.1
Chloride	91.5	20.0	mg/L	MCAWW 300.0A
Fluoride	1.2	1.0	mg/L	MCAWW 300.0A
IW-3-DIS 04/20/04 12:00 007				
Nickel - DISSOLVED	0.073	0.040	mg/L	SW846 6010B
Selenium - DISSOLVED	0.0074	0.0050	mg/L	SW846 6010B
IW-4 04/20/04 13:45 008				
Total Dissolved Solids	580	40.0	mg/L	MCAWW 160.1
Chloride	101	20.0	mg/L	MCAWW 300.0A

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

I4D230189

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
IW-4 04/20/04 13:45 008				
Fluoride	1.1	1.0	mg/L	MCAWW 300.0A
IW-4-DIS 04/20/04 13:45 009				
Barium - DISSOLVED	0.26	0.20	mg/L	SW846 6010B
Selenium - DISSOLVED	0.0058	0.0050	mg/L	SW846 6010B
Zinc - DISSOLVED	0.021	0.020	mg/L	SW846 6010B
IW-5 04/20/04 14:30 010				
Diesel Range Organics	0.25	0.20	mg/L	SW846 8015B
Total Dissolved Solids	640	40.0	mg/L	MCAWW 160.1
Chloride	124	20.0	mg/L	MCAWW 300.0A
Fluoride	1.2	1.0	mg/L	MCAWW 300.0A
IW-5-DIS 04/20/04 14:30 011				
Arsenic - DISSOLVED	0.013	0.010	mg/L	SW846 6010B
Barium - DISSOLVED	0.23	0.20	mg/L	SW846 6010B
Iron - DISSOLVED	0.60	0.10	mg/L	SW846 6010B
Manganese - DISSOLVED	0.30	0.015	mg/L	SW846 6010B
Nickel - DISSOLVED	0.041	0.040	mg/L	SW846 6010B
Selenium - DISSOLVED	0.0054	0.0050	mg/L	SW846 6010B
IW-7 04/20/04 15:30 012				
Diesel Range Organics	1.7	0.20	mg/L	SW846 8015B
Total Dissolved Solids	717	40.0	mg/L	MCAWW 160.1
Chloride	160	20.0	mg/L	MCAWW 300.0A
Fluoride	1.1	1.0	mg/L	MCAWW 300.0A
IW-7-DIS 04/20/04 15:30 013				
Barium - DISSOLVED	0.28	0.20	mg/L	SW846 6010B
Boron - DISSOLVED	0.22	0.20	mg/L	SW846 6010B
Iron - DISSOLVED	0.17	0.10	mg/L	SW846 6010B
Manganese - DISSOLVED	0.098	0.015	mg/L	SW846 6010B
Selenium - DISSOLVED	0.0092	0.0050	mg/L	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

I4D230189

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
IW-7D 04/20/04 15:45 014				
Diesel Range Organics	1.7	0.20	mg/L	SW846 8015B
Total Dissolved Solids	710	40.0	mg/L	MCAWW 160.1
Chloride	161	20.0	mg/L	MCAWW 300.0A
Fluoride	1.2	1.0	mg/L	MCAWW 300.0A
IW-7D-DIS 04/20/04 15:45 015				
Barium - DISSOLVED	0.27	0.20	mg/L	SW846 6010B
Boron - DISSOLVED	0.22	0.20	mg/L	SW846 6010B
Iron - DISSOLVED	0.16	0.10	mg/L	SW846 6010B
Manganese - DISSOLVED	0.097	0.015	mg/L	SW846 6010B
Selenium - DISSOLVED	0.0069	0.0050	mg/L	SW846 6010B

PREPARATION METHODS SUMMARY

I4D230189

PREPARATION DESCRIPTION	PREPARATION METHOD	ANALYTICAL METHOD
Acid Digestion for Total Metals	SW846 3010A	SW846 6010B
Acid Digestion for Total Recoverable Metals	SW846 3005A	SW846 6010B
Chloride	MCAWW 300.0A	MCAWW 300.0A
Continuous Liquid-Liquid Extraction	SW846 3520	SW846 8015B
Continuous Liquid-Liquid Extraction	SW846 3520C	SW846 8270C
Filterable Residue (TDS)	MCAWW 160.1	MCAWW 160.1
Fluoride	MCAWW 300.0A	MCAWW 300.0A
Mercury Sample Preparation	SW846 7470A	SW846 7470A
Purge and trap	SW846 5030B	SW846 8021B
PURGE AND TRAP	SW846 5030	SW846 8015B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

I4D230189

ANALYTICAL METHOD	ANALYST	ANALYST ID
MCAWW 160.1	Robert D. O'Keefe	38036
MCAWW 300.0A	David A. Tocher	800002
SW846 6010B	Hamid Davoudi	038010
SW846 6010B	Jeff Gross	063161
SW846 7470A	Jennifer Havalda	000029
SW846 8015B	Beth Driskill	008945
SW846 8015B	Scott Leslie	401008
SW846 8021B	Beth Driskill	008945
SW846 8270C	Mark Malloy	001515

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

I4D230189

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
GERHA	001	IW-2	04/20/04	10:15
GERHV	002	IW-2-DIS	04/20/04	10:15
GERH7	003	SVE-1	04/20/04	11:15
GERH8	004	SVE-1-DIS	04/20/04	11:15
GERJC	005	TRIP BLANK	04/22/04	11:30
GERVA	006	IW-3	04/20/04	12:00
GERVH	007	IW-3-DIS	04/20/04	12:00
GERVW	008	IW-4	04/20/04	13:45
GERV0	009	IW-4-DIS	04/20/04	13:45
GERV1	010	IW-5	04/20/04	14:30
GERV4	011	IW-5-DIS	04/20/04	14:30
GERV7	012	IW-7	04/20/04	15:30
GERV9	013	IW-7-DIS	04/20/04	15:30
GERWQ	014	IW-7D	04/20/04	15:45
GERW3	015	IW-7D-DIS	04/20/04	15:45
GERXE	016	TRIP BLANK 2	04/22/04	12:00
GE305	017	SVE-1	04/27/04	15:00

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

QC DATA ASSOCIATION SUMMARY

I4D230189

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	MCAWW 160.1		4118521	4118296
	WATER	MCAWW 300.0A		4128176	4128113
	WATER	MCAWW 300.0A		4128175	4128110
	WATER	SW846 8015B		4118334	4118174
	WATER	SW846 8015B		4124131	4124081
	WATER	SW846 7470A		4120180	4120053
	WATER	SW846 8270C		4117247	4117201
	WATER	SW846 8021B		4124128	4124080
002	WATER	SW846 6010B		4115149	4115060
	WATER	SW846 6010B		4120486	4120234
003	WATER	MCAWW 160.1		4118521	4118296
	WATER	MCAWW 300.0A		4128176	4128113
	WATER	MCAWW 300.0A		4128175	4128110
	WATER	SW846 8015B		4118334	4118174
	WATER	SW846 8015B		4124131	4124081
	WATER	SW846 7470A		4120180	4120053
	WATER	SW846 8021B		4124128	4124080
004	WATER	SW846 6010B		4115149	4115060
	WATER	SW846 6010B		4120486	4120234
005	WATER	SW846 8015B		4124131	4124081
	WATER	SW846 8021B		4124128	4124080
006	WATER	MCAWW 160.1		4118521	4118296
	WATER	MCAWW 300.0A		4128176	4128113
	WATER	MCAWW 300.0A		4128175	4128110
	WATER	SW846 8015B		4118334	4118174
	WATER	SW846 8015B		4124131	4124081
	WATER	SW846 7470A		4120180	4120053
	WATER	SW846 8270C		4117247	4117201
	WATER	SW846 8021B		4124128	4124080
007	WATER	SW846 6010B		4115149	4115060
	WATER	SW846 6010B		4120486	4120234
008	WATER	MCAWW 160.1		4118521	4118296
	WATER	MCAWW 300.0A		4128176	4128113
	WATER	MCAWW 300.0A		4128175	4128110
	WATER	SW846 8015B		4118334	4118174
	WATER	SW846 8015B		4124131	4124081

(Continued on next page)

QC DATA ASSOCIATION SUMMARY

I4D230189

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
008	WATER	SW846 7470A		4120180	4120053
	WATER	SW846 8270C		4117247	4117201
	WATER	SW846 8021B		4124128	4124080
009	WATER	SW846 6010B		4115149	4115060
	WATER	SW846 6010B		4120486	4120234
010	WATER	MCAWW 160.1		4118521	4118296
	WATER	MCAWW 300.0A		4128176	4128113
	WATER	MCAWW 300.0A		4128175	4128110
	WATER	SW846 8015B		4118334	4118174
	WATER	SW846 8015B		4124131	4124081
	WATER	SW846 7470A		4120180	4120053
	WATER	SW846 8270C		4117247	4117201
	WATER	SW846 8021B		4124128	4124080
011	WATER	SW846 6010B		4115149	4115060
	WATER	SW846 6010B		4120486	4120234
012	WATER	MCAWW 160.1		4118521	4118296
	WATER	MCAWW 300.0A		4128176	4128113
	WATER	MCAWW 300.0A		4128175	4128110
	WATER	SW846 8015B		4118334	4118174
	WATER	SW846 8015B		4124131	4124081
	WATER	SW846 7470A		4120180	4120053
	WATER	SW846 8270C		4117247	4117201
	WATER	SW846 8021B		4124128	4124080
013	WATER	SW846 6010B		4115149	4115060
	WATER	SW846 6010B		4120486	4120234
014	WATER	MCAWW 160.1		4118521	4118296
	WATER	MCAWW 300.0A		4128176	4128113
	WATER	MCAWW 300.0A		4128175	
	WATER	SW846 8015B		4118334	4118174
	WATER	SW846 8015B		4124131	4124081
	WATER	SW846 7470A		4120180	4120053
	WATER	SW846 8270C		4117247	4117201
	WATER	SW846 8021B		4124128	4124080
015	WATER	SW846 6010B		4115149	4115060
	WATER	SW846 6010B		4120486	4120234

(Continued on next page)

QC DATA ASSOCIATION SUMMARY

I4D230189

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
016	WATER	SW846 8015B		4124131	4124081
	WATER	SW846 8021B		4124128	4124080
017	WATER	SW846 8270C		4124275	

CONOCOPHILLIPS

Client Sample ID: IW-2

GC/MS Semivolatiles

Lot-Sample #...: I4D230189-001 **Work Order #...:** GERHA1AG **Matrix.....:** WATER
Date Sampled...: 04/20/04 10:15 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/26/04 **Analysis Date..:** 04/27/04
Prep Batch #...: 4117247 **Analysis Time..:** 20:27
Dilution Factor: 0.95

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	9.5	ug/L
Acenaphthylene	ND	9.5	ug/L
Anthracene	ND	9.5	ug/L
Benzo(a)anthracene	ND	9.5	ug/L
Benzo(a)pyrene	ND	9.5	ug/L
Benzo(b)fluoranthene	ND	9.5	ug/L
Benzo(ghi)perylene	ND	9.5	ug/L
Benzo(k)fluoranthene	ND	9.5	ug/L
Chrysene	ND	9.5	ug/L
Dibenz(a,h)anthracene	ND	9.5	ug/L
Fluoranthene	ND	9.5	ug/L
Fluorene	ND	9.5	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.5	ug/L
Naphthalene	ND	9.5	ug/L
Phenanthrene	ND	9.5	ug/L
Pyrene	ND	9.5	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	65	(28 - 120)
2-Fluorobiphenyl	72	(23 - 119)
Terphenyl-d14	93	(10 - 123)
2-Fluorophenol	56	(22 - 121)
Phenol-d5	59	(34 - 117)
2,4,6-Tribromophenol	69	(33 - 124)

CONOCOPHILLIPS

Client Sample ID: IW-2

GC Volatiles

Lot-Sample #...: I4D230189-001 **Work Order #...:** GERHA1AA **Matrix.....:** WATER
Date Sampled...: 04/20/04 10:15 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/30/04 **Analysis Date..:** 04/30/04
Prep Batch #...: 4124131 **Analysis Time..:** 14:34
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	105	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: IW-2

GC Volatiles

Lot-Sample #...: I4D230189-001 **Work Order #...:** GERHA1AD **Matrix.....:** WATER
Date Sampled...: 04/20/04 10:15 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/30/04 **Analysis Date..:** 04/30/04
Prep Batch #...: 4124128 **Analysis Time..:** 14:34
Dilution Factor: 1

Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	107	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	100	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: IW-2

GC Semivolatiles

Lot-Sample #...: I4D230189-001 **Work Order #...:** GERHA1AC **Matrix.....:** WATER
Date Sampled...: 04/20/04 10:15 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/27/04 **Analysis Date..:** 05/05/04
Prep Batch #...: 4118334 **Analysis Time..:** 11:01
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	ND	0.20	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	65	(53 - 139)
Dotriacontane	65	(45 - 141)

CONOCOPHILLIPS

Client Sample ID: IW-2

TOTAL Metals

Lot-Sample #...: I4D230189-001 **Matrix.....:** WATER
Date Sampled...: 04/20/04 10:15 **Date Received..:** 04/23/04 09:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4120180						
Mercury	ND	0.00020	mg/L	SW846 7470A	04/27-04/28/04	GERHA1AH
		Dilution Factor: 1		Analysis Time..: 16:53		

CONOCOPHILLIPS

Client Sample ID: IW-2

General Chemistry

Lot-Sample #...: I4D230189-001 Work Order #...: GERHA Matrix.....: WATER
Date Sampled...: 04/20/04 10:15 Date Received..: 04/23/04 09:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	99.4	20.0	mg/L	MCAWW 300.0A	05/06/04	4128176
	Dilution Factor: 20			Analysis Time..: 17:00		
Fluoride	1.2	1.0	mg/L	MCAWW 300.0A	05/06/04	4128175
	Dilution Factor: 1			Analysis Time..: 14:33		
Total Dissolved Solids	572	40.0	mg/L	MCAWW 160.1	04/27/04	4118521
	Dilution Factor: 1			Analysis Time..: 18:04		

CONOCOPHILLIPS

Client Sample ID: IW-2-DIS

DISSOLVED Metals

Lot-Sample #...: I4D230189-002 **Matrix.....:** WATER
Date Sampled...: 04/20/04 10:15 **Date Received..:** 04/23/04 09:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4115149						
Aluminum	ND	0.20	mg/L	SW846 6010B	04/24-04/28/04	GERHV1AA
		Dilution Factor: 1		Analysis Time..: 14:04		
Arsenic	ND	0.010	mg/L	SW846 6010B	04/24-04/28/04	GERHV1AC
		Dilution Factor: 1		Analysis Time..: 14:04		
Barium	ND	0.20	mg/L	SW846 6010B	04/24-04/28/04	GERHV1AD
		Dilution Factor: 1		Analysis Time..: 14:04		
Boron	ND	0.20	mg/L	SW846 6010B	04/24-04/28/04	GERHV1AE
		Dilution Factor: 1		Analysis Time..: 14:04		
Cadmium	ND	0.0020	mg/L	SW846 6010B	04/24-04/28/04	GERHV1AF
		Dilution Factor: 1		Analysis Time..: 14:04		
Chromium	ND	0.0050	mg/L	SW846 6010B	04/24-04/28/04	GERHV1AG
		Dilution Factor: 1		Analysis Time..: 14:04		
Cobalt	ND	0.050	mg/L	SW846 6010B	04/24-04/28/04	GERHV1AH
		Dilution Factor: 1		Analysis Time..: 14:04		
Copper	ND	0.025	mg/L	SW846 6010B	04/24-04/28/04	GERHV1AJ
		Dilution Factor: 1		Analysis Time..: 14:04		
Iron	**0.10**	**0.10**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERHV1AK**
		Dilution Factor: 1		Analysis Time..: 14:04		
Lead	ND	0.0030	mg/L	SW846 6010B	04/24-04/28/04	GERHV1AL
		Dilution Factor: 1		Analysis Time..: 17:35		
Manganese	**0.020**	**0.015**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERHV1AM**
		Dilution Factor: 1		Analysis Time..: 14:04		
Molybdenum	ND	0.040	mg/L	SW846 6010B	04/24-04/28/04	GERHV1AN
		Dilution Factor: 1		Analysis Time..: 14:04		
Nickel	**0.11**	**0.040**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERHV1AP**
		Dilution Factor: 1		Analysis Time..: 14:04		

(Continued on next page)

CONOCOPHILLIPS

Client Sample ID: IW-2-DIS

DISSOLVED Metals

Lot-Sample #...: I4D230189-002 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	**0.0069**	**0.0050**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERHV1AQ**
		Dilution Factor: 1		Analysis Time..: 14:04		
Silver	ND	0.0050	mg/L	SW846 6010B	04/24-04/28/04	GERHV1AR
		Dilution Factor: 1		Analysis Time..: 14:04		
Zinc	ND	0.020	mg/L	SW846 6010B	04/24-04/28/04	GERHV1AT
		Dilution Factor: 1		Analysis Time..: 14:04		
Prep Batch #...: 4120486						
Uranium	ND	500	ug/L	SW846 6010B	04/29-04/30/04	GERHV1CX
		Dilution Factor: 1		Analysis Time..: 00:00		

CONOCOPHILLIPS

Client Sample ID: SVE-1

GC Volatiles

Lot-Sample #...: I4D230189-003 **Work Order #...:** GERH71AA **Matrix.....:** WATER
Date Sampled...: 04/20/04 11:15 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/30/04 **Analysis Date..:** 04/30/04
Prep Batch #...: 4124131 **Analysis Time..:** 15:00
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	103	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: SVE-1

GC Volatiles

Lot-Sample #...: I4D230189-003 **Work Order #...:** GERH71AD **Matrix.....:** WATER
Date Sampled...: 04/20/04 11:15 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/30/04 **Analysis Date..:** 04/30/04
Prep Batch #...: 4124128 **Analysis Time..:** 15:00
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	106	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	98	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: SVE-1

GC Semivolatiles

Lot-Sample #...: I4D230189-003 **Work Order #...:** GERH71AC **Matrix.....:** WATER
Date Sampled...: 04/20/04 11:15 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/27/04 **Analysis Date..:** 05/05/04
Prep Batch #...: 4118334 **Analysis Time..:** 12:50
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	ND	0.20	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	72	(53 - 139)
Dotriacontane	70	(45 - 141)

CONOCOPHILLIPS

Client Sample ID: SVE-1

TOTAL Metals

Lot-Sample #...: I4D230189-003 **Matrix.....:** WATER
Date Sampled...: 04/20/04 11:15 **Date Received..:** 04/23/04 09:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4120180						
Mercury	ND	0.00020	mg/L	SW846 7470A	04/27-04/28/04	GERH71AH
		Dilution Factor: 1		Analysis Time..: 16:54		

CONOCOPHILLIPS

Client Sample ID: SVE-1

General Chemistry

Lot-Sample #...: I4D230189-003 **Work Order #...:** GERH7 **Matrix.....:** WATER
Date Sampled...: 04/20/04 11:15 **Date Received..:** 04/23/04 09:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	109	20.0	mg/L	MCAWW 300.0A	05/06/04	4128176
		Dilution Factor: 20		Analysis Time..: 17:40		
Fluoride	1.3	1.0	mg/L	MCAWW 300.0A	05/06/04	4128175
		Dilution Factor: 1		Analysis Time..: 15:13		
Total Dissolved Solids	614	40.0	mg/L	MCAWW 160.1	04/27/04	4118521
		Dilution Factor: 1		Analysis Time..: 18:06		

CONOCOPHILLIPS

Client Sample ID: SVE-1-DIS

DISSOLVED Metals

Lot-Sample #...: I4D230189-004 **Matrix.....:** WATER
Date Sampled...: 04/20/04 11:15 **Date Received..:** 04/23/04 09:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4115149						
Aluminum	**0.21**	**0.20**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERH81AA**
		Dilution Factor: 1		Analysis Time..: 14:29		
Arsenic	ND	0.010	mg/L	SW846 6010B	04/24-04/28/04	GERH81AC
		Dilution Factor: 1		Analysis Time..: 14:29		
Barium	ND	0.20	mg/L	SW846 6010B	04/24-04/28/04	GERH81AD
		Dilution Factor: 1		Analysis Time..: 14:29		
Boron	**0.23**	**0.20**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERH81AE**
		Dilution Factor: 1		Analysis Time..: 14:29		
Cadmium	ND	0.0020	mg/L	SW846 6010B	04/24-04/28/04	GERH81AF
		Dilution Factor: 1		Analysis Time..: 14:29		
Chromium	ND	0.0050	mg/L	SW846 6010B	04/24-04/28/04	GERH81AG
		Dilution Factor: 1		Analysis Time..: 14:29		
Cobalt	ND	0.050	mg/L	SW846 6010B	04/24-04/28/04	GERH81AH
		Dilution Factor: 1		Analysis Time..: 14:29		
Copper	ND	0.025	mg/L	SW846 6010B	04/24-04/28/04	GERH81AJ
		Dilution Factor: 1		Analysis Time..: 14:29		
Iron	**0.11**	**0.10**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERH81AK**
		Dilution Factor: 1		Analysis Time..: 14:29		
Lead	ND	0.0030	mg/L	SW846 6010B	04/24-04/28/04	GERH81AL
		Dilution Factor: 1		Analysis Time..: 18:00		
Manganese	ND	0.015	mg/L	SW846 6010B	04/24-04/28/04	GERH81AM
		Dilution Factor: 1		Analysis Time..: 14:29		
Molybdenum	ND	0.040	mg/L	SW846 6010B	04/24-04/28/04	GERH81AN
		Dilution Factor: 1		Analysis Time..: 14:29		
Nickel	ND	0.040	mg/L	SW846 6010B	04/24-04/28/04	GERH81AP
		Dilution Factor: 1		Analysis Time..: 14:29		

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CONOCOPHILLIPS

Client Sample ID: SVE-1-DIS

DISSOLVED Metals

Lot-Sample #...: I4D230189-004 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	**0.0086**	**0.0050**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERH81AQ**
		Dilution Factor: 1		Analysis Time..: 14:29		
Silver	ND	0.0050	mg/L	SW846 6010B	04/24-04/28/04	GERH81AR
		Dilution Factor: 1		Analysis Time..: 14:29		
Zinc	ND	0.020	mg/L	SW846 6010B	04/24-04/28/04	GERH81AT
		Dilution Factor: 1		Analysis Time..: 14:29		
Prep Batch #...: 4120486						
Uranium	ND	500	ug/L	SW846 6010B	04/29-04/30/04	GERH81AU
		Dilution Factor: 1		Analysis Time..: 00:00		

CONOCOPHILLIPS

Client Sample ID: TRIP BLANK

GC Volatiles

Lot-Sample #...: I4D230189-005 **Work Order #...:** GERJC1AA **Matrix.....:** WATER
Date Sampled...: 04/22/04 11:30 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/30/04 **Analysis Date..:** 04/30/04
Prep Batch #...: 4124131 **Analysis Time..:** 12:25
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	104	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: TRIP BLANK

GC Volatiles

Lot-Sample #...: I4D230189-005 **Work Order #...:** GERJC1AC **Matrix.....:** WATER
Date Sampled...: 04/22/04 11:30 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/30/04 **Analysis Date..:** 04/30/04
Prep Batch #...: 4124128 **Analysis Time..:** 12:25
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	108	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	99	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: IW-3

GC/MS Semivolatiles

Lot-Sample #...: I4D230189-006 **Work Order #...:** GERVA1AG **Matrix.....:** WATER
Date Sampled...: 04/20/04 12:00 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/26/04 **Analysis Date..:** 04/27/04
Prep Batch #...: 4117247 **Analysis Time..:** 21:59
Dilution Factor: 0.95

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	9.5	ug/L
Acenaphthylene	ND	9.5	ug/L
Anthracene	ND	9.5	ug/L
Benzo(a)anthracene	ND	9.5	ug/L
Benzo(a)pyrene	ND	9.5	ug/L
Benzo(b)fluoranthene	ND	9.5	ug/L
Benzo(ghi)perylene	ND	9.5	ug/L
Benzo(k)fluoranthene	ND	9.5	ug/L
Chrysene	ND	9.5	ug/L
Dibenz(a,h)anthracene	ND	9.5	ug/L
Fluoranthene	ND	9.5	ug/L
Fluorene	ND	9.5	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.5	ug/L
Naphthalene	ND	9.5	ug/L
Phenanthrene	ND	9.5	ug/L
Pyrene	ND	9.5	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	77	(28 - 120)
2-Fluorobiphenyl	85	(23 - 119)
Terphenyl-d14	95	(10 - 123)
2-Fluorophenol	65	(22 - 121)
Phenol-d5	67	(34 - 117)
2,4,6-Tribromophenol	81	(33 - 124)

CONOCOPHILLIPS

Client Sample ID: IW-3

GC Volatiles

Lot-Sample #...: I4D230189-006 **Work Order #...:** GERVA1AA **Matrix.....:** WATER
Date Sampled...: 04/20/04 12:00 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/30/04 **Analysis Date..:** 04/30/04
Prep Batch #...: 4124131 **Analysis Time..:** 15:26
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	103	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: IW-3

GC Volatiles

Lot-Sample #...: I4D230189-006 **Work Order #...:** GERVA1AD **Matrix.....:** WATER
Date Sampled...: 04/20/04 12:00 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/30/04 **Analysis Date..:** 04/30/04
Prep Batch #...: 4124128 **Analysis Time..:** 15:26
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	107	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	98	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: IW-3

GC Semivolatiles

Lot-Sample #...: I4D230189-006 **Work Order #...:** GERVA1AC **Matrix.....:** WATER
Date Sampled...: 04/20/04 12:00 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/27/04 **Analysis Date..:** 05/05/04
Prep Batch #...: 4118334 **Analysis Time..:** 13:26
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	ND	0.20	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	62	(53 - 139)
Dotriacontane	77	(45 - 141)

CONOCOPHILLIPS

Client Sample ID: IW-3

TOTAL Metals

Lot-Sample #...: I4D230189-006 **Matrix.....:** WATER
Date Sampled...: 04/20/04 12:00 **Date Received..:** 04/23/04 09:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4120180						
Mercury	ND	0.00020	mg/L	SW846 7470A	04/27-04/28/04	GERVA1AH
		Dilution Factor: 1		Analysis Time..: 16:56		

CONOCOPHILLIPS

Client Sample ID: IW-3

General Chemistry

Lot-Sample #...: I4D230189-006 **Work Order #...:** GERVA **Matrix.....:** WATER
Date Sampled...: 04/20/04 12:00 **Date Received..:** 04/23/04 09:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	91.5	20.0	mg/L	MCAWW 300.0A	05/06/04	4128176
		Dilution Factor: 20		Analysis Time..: 17:54		
Fluoride	1.2	1.0	mg/L	MCAWW 300.0A	05/06/04	4128175
		Dilution Factor: 1		Analysis Time..: 15:27		
Total Dissolved Solids	586	40.0	mg/L	MCAWW 160.1	04/27/04	4118521
		Dilution Factor: 1		Analysis Time..: 18:08		

CONOCOPHILLIPS

Client Sample ID: IW-3-DIS

DISSOLVED Metals

Lot-Sample #...: I4D230189-007 **Matrix.....:** WATER
Date Sampled...: 04/20/04 12:00 **Date Received..:** 04/23/04 09:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4115149						
Aluminum	ND	0.20	mg/L	SW846 6010B	04/24-04/28/04	GERVH1AA
		Dilution Factor: 1		Analysis Time..: 14:34		
Arsenic	ND	0.010	mg/L	SW846 6010B	04/24-04/28/04	GERVH1AC
		Dilution Factor: 1		Analysis Time..: 14:34		
Barium	ND	0.20	mg/L	SW846 6010B	04/24-04/28/04	GERVH1AD
		Dilution Factor: 1		Analysis Time..: 14:34		
Boron	ND	0.20	mg/L	SW846 6010B	04/24-04/28/04	GERVH1AE
		Dilution Factor: 1		Analysis Time..: 14:34		
Cadmium	ND	0.0020	mg/L	SW846 6010B	04/24-04/28/04	GERVH1AF
		Dilution Factor: 1		Analysis Time..: 14:34		
Chromium	ND	0.0050	mg/L	SW846 6010B	04/24-04/28/04	GERVH1AG
		Dilution Factor: 1		Analysis Time..: 14:34		
Cobalt	ND	0.050	mg/L	SW846 6010B	04/24-04/28/04	GERVH1AH
		Dilution Factor: 1		Analysis Time..: 14:34		
Copper	ND	0.025	mg/L	SW846 6010B	04/24-04/28/04	GERVH1AJ
		Dilution Factor: 1		Analysis Time..: 14:34		
Iron	ND	0.10	mg/L	SW846 6010B	04/24-04/28/04	GERVH1AK
		Dilution Factor: 1		Analysis Time..: 14:34		
Lead	ND	0.0030	mg/L	SW846 6010B	04/24-04/28/04	GERVH1AL
		Dilution Factor: 1		Analysis Time..: 18:05		
Manganese	ND	0.015	mg/L	SW846 6010B	04/24-04/28/04	GERVH1AM
		Dilution Factor: 1		Analysis Time..: 14:34		
Molybdenum	ND	0.040	mg/L	SW846 6010B	04/24-04/28/04	GERVH1AN
		Dilution Factor: 1		Analysis Time..: 14:34		
Nickel	**0.073**	**0.040**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERVH1AP**
		Dilution Factor: 1		Analysis Time..: 14:34		

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CONOCOPHILLIPS

Client Sample ID: IW-3-DIS

DISSOLVED Metals

Lot-Sample #...: I4D230189-007 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	**0.0074**	**0.0050**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERVH1AQ**
		Dilution Factor: 1		Analysis Time..: 14:34		
Silver	ND	0.0050	mg/L	SW846 6010B	04/24-04/28/04	GERVH1AR
		Dilution Factor: 1		Analysis Time..: 14:34		
Zinc	ND	0.020	mg/L	SW846 6010B	04/24-04/28/04	GERVH1AT
		Dilution Factor: 1		Analysis Time..: 14:34		
Prep Batch #...: 4120486						
Uranium	ND	500	ug/L	SW846 6010B	04/29-04/30/04	GERVH1AU
		Dilution Factor: 1		Analysis Time..: 00:00		

CONOCOPHILLIPS

Client Sample ID: IW-4

GC/MS Semivolatiles

Lot-Sample #...: I4D230189-008 **Work Order #...:** GERVW1AG **Matrix.....:** WATER
Date Sampled...: 04/20/04 13:45 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/26/04 **Analysis Date..:** 04/27/04
Prep Batch #...: 4117247 **Analysis Time..:** 22:30
Dilution Factor: 0.95

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	9.5	ug/L
Acenaphthylene	ND	9.5	ug/L
Anthracene	ND	9.5	ug/L
Benzo(a)anthracene	ND	9.5	ug/L
Benzo(a)pyrene	ND	9.5	ug/L
Benzo(b)fluoranthene	ND	9.5	ug/L
Benzo(ghi)perylene	ND	9.5	ug/L
Benzo(k)fluoranthene	ND	9.5	ug/L
Chrysene	ND	9.5	ug/L
Dibenz(a,h)anthracene	ND	9.5	ug/L
Fluoranthene	ND	9.5	ug/L
Fluorene	ND	9.5	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.5	ug/L
Naphthalene	ND	9.5	ug/L
Phenanthrene	ND	9.5	ug/L
Pyrene	ND	9.5	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	75	(28 - 120)
2-Fluorobiphenyl	82	(23 - 119)
Terphenyl-d14	93	(10 - 123)
2-Fluorophenol	65	(22 - 121)
Phenol-d5	70	(34 - 117)
2,4,6-Tribromophenol	80	(33 - 124)

CONOCOPHILLIPS

Client Sample ID: IW-4

GC Volatiles

Lot-Sample #...: I4D230189-008 **Work Order #...:** GERVW1AA **Matrix.....:** WATER
Date Sampled...: 04/20/04 13:45 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/30/04 **Analysis Date..:** 04/30/04
Prep Batch #...: 4124131 **Analysis Time..:** 15:51
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	104	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: IW-4

GC Volatiles

Lot-Sample #...: I4D230189-008 **Work Order #...:** GERVW1AD **Matrix.....:** WATER
Date Sampled...: 04/20/04 13:45 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/30/04 **Analysis Date..:** 04/30/04
Prep Batch #...: 4124128 **Analysis Time..:** 15:51
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	106	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	99	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: IW-4

GC Semivolatiles

Lot-Sample #...: I4D230189-008 **Work Order #...:** GERVW1AC **Matrix.....:** WATER
Date Sampled...: 04/20/04 13:45 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/27/04 **Analysis Date..:** 05/05/04
Prep Batch #...: 4118334 **Analysis Time..:** 14:03
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	ND	0.20	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	62	(53 - 139)
Dotriacontane	70	(45 - 141)

CONOCOPHILLIPS

Client Sample ID: IW-4

TOTAL Metals

Lot-Sample #...: I4D230189-008 **Matrix.....:** WATER
Date Sampled...: 04/20/04 13:45 **Date Received..:** 04/23/04 09:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4120180						
Mercury	ND	0.00020	mg/L	SW846 7470A	04/27-04/28/04	GERVW1AH
		Dilution Factor: 1		Analysis Time..: 16:58		

CONOCOPHILLIPS

Client Sample ID: IW-4

General Chemistry

Lot-Sample #...: I4D230189-008 **Work Order #...:** GERVW **Matrix.....:** WATER
Date Sampled...: 04/20/04 13:45 **Date Received..:** 04/23/04 09:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	101	20.0	mg/L	MCAWW 300.0A	05/06/04	4128176
		Dilution Factor: 20		Analysis Time..: 18:07		
Fluoride	1.1	1.0	mg/L	MCAWW 300.0A	05/06/04	4128175
		Dilution Factor: 1		Analysis Time..: 15:40		
Total Dissolved Solids	580	40.0	mg/L	MCAWW 160.1	04/27/04	4118521
		Dilution Factor: 1		Analysis Time..: 18:10		

CONOCOPHILLIPS

Client Sample ID: IW-4-DIS

DISSOLVED Metals

Lot-Sample #...: I4D230189-009 **Matrix.....:** WATER
Date Sampled...: 04/20/04 13:45 **Date Received..:** 04/23/04 09:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4115149						
Aluminum	ND	0.20	mg/L	SW846 6010B	04/24-04/28/04	GERV01AA
		Dilution Factor: 1		Analysis Time..: 15:17		
Arsenic	ND	0.010	mg/L	SW846 6010B	04/24-04/28/04	GERV01AC
		Dilution Factor: 1		Analysis Time..: 15:17		
Barium	**0.26**	**0.20**	**mg/L**	**SW846 6010B**	**04/24-05/04/04**	**GERV01AD**
		Dilution Factor: 1		Analysis Time..: 11:02		
Boron	ND	0.20	mg/L	SW846 6010B	04/24-04/28/04	GERV01AE
		Dilution Factor: 1		Analysis Time..: 15:17		
Cadmium	ND	0.0020	mg/L	SW846 6010B	04/24-04/28/04	GERV01AF
		Dilution Factor: 1		Analysis Time..: 15:17		
Chromium	ND	0.0050	mg/L	SW846 6010B	04/24-04/28/04	GERV01AG
		Dilution Factor: 1		Analysis Time..: 15:17		
Cobalt	ND	0.050	mg/L	SW846 6010B	04/24-04/28/04	GERV01AH
		Dilution Factor: 1		Analysis Time..: 15:17		
Copper	ND	0.025	mg/L	SW846 6010B	04/24-04/28/04	GERV01AJ
		Dilution Factor: 1		Analysis Time..: 15:17		
Iron	ND	0.10	mg/L	SW846 6010B	04/24-04/28/04	GERV01AK
		Dilution Factor: 1		Analysis Time..: 15:17		
Lead	ND	0.0030	mg/L	SW846 6010B	04/24-05/04/04	GERV01AL
		Dilution Factor: 1		Analysis Time..: 11:02		
Manganese	ND	0.015	mg/L	SW846 6010B	04/24-04/28/04	GERV01AM
		Dilution Factor: 1		Analysis Time..: 15:17		
Molybdenum	ND	0.040	mg/L	SW846 6010B	04/24-04/28/04	GERV01AN
		Dilution Factor: 1		Analysis Time..: 15:17		
Nickel	ND	0.040	mg/L	SW846 6010B	04/24-04/28/04	GERV01AP
		Dilution Factor: 1		Analysis Time..: 15:17		

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CONOCOPHILLIPS

Client Sample ID: IW-4-DIS

DISSOLVED Metals

Lot-Sample #...: I4D230189-009 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	**0.0058**	**0.0050**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERV01AQ**
		Dilution Factor: 1		Analysis Time..: 15:17		
Silver	ND	0.0050	mg/L	SW846 6010B	04/24-04/28/04	GERV01AR
		Dilution Factor: 1		Analysis Time..: 15:17		
Zinc	**0.021**	**0.020**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERV01AT**
		Dilution Factor: 1		Analysis Time..: 15:17		
Prep Batch #...: 4120486						
Uranium	ND	500	ug/L	SW846 6010B	04/29-04/30/04	GERV01AU
		Dilution Factor: 1		Analysis Time..: 00:00		

CONOCOPHILLIPS

Client Sample ID: IW-5

GC/MS Semivolatiles

Lot-Sample #...: I4D230189-010 **Work Order #...:** GERV11AG **Matrix.....:** WATER
Date Sampled...: 04/20/04 14:30 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/26/04 **Analysis Date..:** 04/28/04
Prep Batch #...: 4117247 **Analysis Time..:** 15:21
Dilution Factor: 0.95
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	9.5	ug/L
Acenaphthylene	ND	9.5	ug/L
Anthracene	ND	9.5	ug/L
Benzo(a)anthracene	ND	9.5	ug/L
Benzo(a)pyrene	ND	9.5	ug/L
Benzo(b)fluoranthene	ND	9.5	ug/L
Benzo(ghi)perylene	ND	9.5	ug/L
Benzo(k)fluoranthene	ND	9.5	ug/L
Chrysene	ND	9.5	ug/L
Dibenz(a,h)anthracene	ND	9.5	ug/L
Fluoranthene	ND	9.5	ug/L
Fluorene	ND	9.5	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.5	ug/L
Naphthalene	ND	9.5	ug/L
Phenanthrene	ND	9.5	ug/L
Pyrene	ND	9.5	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	77	(28 - 120)
2-Fluorobiphenyl	91	(23 - 119)
Terphenyl-d14	91	(10 - 123)
2-Fluorophenol	67	(22 - 121)
Phenol-d5	73	(34 - 117)
2,4,6-Tribromophenol	96	(33 - 124)

CONOCOPHILLIPS

Client Sample ID: IW-5

GC Volatiles

Lot-Sample #...: I4D230189-010 **Work Order #...:** GERV11AA **Matrix.....:** WATER
Date Sampled...: 04/20/04 14:30 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/30/04 **Analysis Date..:** 04/30/04
Prep Batch #...: 4124131 **Analysis Time..:** 17:34
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	103	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: IW-5

GC Volatiles

Lot-Sample #...: I4D230189-010 **Work Order #...:** GERV11AD **Matrix.....:** WATER
Date Sampled...: 04/20/04 14:30 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/30/04 **Analysis Date..:** 04/30/04
Prep Batch #...: 4124128 **Analysis Time..:** 17:34
Dilution Factor: 1

Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	106	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	98	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: IW-5

GC Semivolatiles

Lot-Sample #...: I4D230189-010	**Work Order #...:** GERV11AC	**Matrix.....:** WATER	
Date Sampled...: 04/20/04 14:30	**Date Received..:** 04/23/04 09:00		
Prep Date.....: 04/27/04	**Analysis Date..:** 05/05/04		
Prep Batch #...: 4118334	**Analysis Time..:** 14:40		
Dilution Factor: 1			
	Method.....: SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	**0.25**	**0.20**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	86	(53 - 139)
Dotriacontane	87	(45 - 141)

CONOCOPHILLIPS

Client Sample ID: IW-5

TOTAL Metals

Lot-Sample #...: I4D230189-010 **Matrix.....:** WATER
Date Sampled...: 04/20/04 14:30 **Date Received..:** 04/23/04 09:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4120180						
Mercury	ND	0.00020	mg/L	SW846 7470A	04/27-04/28/04	GERV11AH
		Dilution Factor: 1		Analysis Time..: 17:00		

CONOCOPHILLIPS

Client Sample ID: IW-5

General Chemistry

Lot-Sample #...: I4D230189-010 Work Order #...: GERV1 Matrix.....: WATER
Date Sampled...: 04/20/04 14:30 Date Received..: 04/23/04 09:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	124	20.0	mg/L	MCAWW 300.0A	05/06/04	4128176
		Dilution Factor: 20		Analysis Time..: 18:20		
Fluoride	1.2	1.0	mg/L	MCAWW 300.0A	05/06/04	4128175
		Dilution Factor: 1		Analysis Time..: 15:53		
Total Dissolved Solids	640	40.0	mg/L	MCAWW 160.1	04/27/04	4118521
		Dilution Factor: 1		Analysis Time..: 18:12		

CONOCOPHILLIPS

Client Sample ID: IW-5-DIS

DISSOLVED Metals

Lot-Sample #...: I4D230189-011 **Matrix.....:** WATER
Date Sampled...: 04/20/04 14:30 **Date Received..:** 04/23/04 09:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4115149						
Aluminum	ND	0.20	mg/L	SW846 6010B	04/24-04/28/04	GERV41AA
		Dilution Factor: 1		Analysis Time..: 15:24		
Arsenic	**0.013**	**0.010**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERV41AC**
		Dilution Factor: 1		Analysis Time..: 15:24		
Barium	**0.23**	**0.20**	**mg/L**	**SW846 6010B**	**04/24-05/04/04**	**GERV41AD**
		Dilution Factor: 1		Analysis Time..: 11:07		
Boron	ND	0.20	mg/L	SW846 6010B	04/24-04/28/04	GERV41AE
		Dilution Factor: 1		Analysis Time..: 15:24		
Cadmium	ND	0.0020	mg/L	SW846 6010B	04/24-04/28/04	GERV41AF
		Dilution Factor: 1		Analysis Time..: 15:24		
Chromium	ND	0.0050	mg/L	SW846 6010B	04/24-04/28/04	GERV41AG
		Dilution Factor: 1		Analysis Time..: 15:24		
Cobalt	ND	0.050	mg/L	SW846 6010B	04/24-04/28/04	GERV41AH
		Dilution Factor: 1		Analysis Time..: 15:24		
Copper	ND	0.025	mg/L	SW846 6010B	04/24-04/28/04	GERV41AJ
		Dilution Factor: 1		Analysis Time..: 15:24		
Iron	**0.60**	**0.10**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERV41AK**
		Dilution Factor: 1		Analysis Time..: 15:24		
Lead	ND	0.0030	mg/L	SW846 6010B	04/24-05/04/04	GERV41AL
		Dilution Factor: 1		Analysis Time..: 11:07		
Manganese	**0.30**	**0.015**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERV41AM**
		Dilution Factor: 1		Analysis Time..: 15:24		
Molybdenum	ND	0.040	mg/L	SW846 6010B	04/24-04/28/04	GERV41AN
		Dilution Factor: 1		Analysis Time..: 15:24		
Nickel	**0.041**	**0.040**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERV41AP**
		Dilution Factor: 1		Analysis Time..: 15:24		

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CONOCOPHILLIPS

Client Sample ID: IW-5-DIS

DISSOLVED Metals

Lot-Sample #...: I4D230189-011 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	**0.0054**	**0.0050**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERV41AQ**
		Dilution Factor: 1		Analysis Time..: 15:24		
Silver	ND	0.0050	mg/L	SW846 6010B	04/24-04/28/04	GERV41AR
		Dilution Factor: 1		Analysis Time..: 15:24		
Zinc	ND	0.020	mg/L	SW846 6010B	04/24-04/28/04	GERV41AT
		Dilution Factor: 1		Analysis Time..: 15:24		
Prep Batch #...: 4120486						
Uranium	ND	500	ug/L	SW846 6010B	04/29-04/30/04	GERV41AU
		Dilution Factor: 1		Analysis Time..: 00:00		

CONOCOPHILLIPS

Client Sample ID: IW-7

GC/MS Semivolatiles

Lot-Sample #...: I4D230189-012 **Work Order #...:** GERV71AG **Matrix.....:** WATER
Date Sampled...: 04/20/04 15:30 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/26/04 **Analysis Date..:** 04/28/04
Prep Batch #...: 4117247 **Analysis Time..:** 15:52
Dilution Factor: 0.95
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	9.5	ug/L
Acenaphthylene	ND	9.5	ug/L
Anthracene	ND	9.5	ug/L
Benzo(a)anthracene	ND	9.5	ug/L
Benzo(a)pyrene	ND	9.5	ug/L
Benzo(b)fluoranthene	ND	9.5	ug/L
Benzo(ghi)perylene	ND	9.5	ug/L
Benzo(k)fluoranthene	ND	9.5	ug/L
Chrysene	ND	9.5	ug/L
Dibenz(a,h)anthracene	ND	9.5	ug/L
Fluoranthene	ND	9.5	ug/L
Fluorene	ND	9.5	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.5	ug/L
Naphthalene	ND	9.5	ug/L
Phenanthrene	ND	9.5	ug/L
Pyrene	ND	9.5	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	85	(28 - 120)
2-Fluorobiphenyl	91	(23 - 119)
Terphenyl-d14	89	(10 - 123)
2-Fluorophenol	75	(22 - 121)
Phenol-d5	80	(34 - 117)
2,4,6-Tribromophenol	101	(33 - 124)

CONOCOPHILLIPS

Client Sample ID: IW-7

GC Volatiles

Lot-Sample #...: I4D230189-012 **Work Order #...:** GERV71AA **Matrix.....:** WATER
Date Sampled...: 04/20/04 15:30 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/30/04 **Analysis Date..:** 04/30/04
Prep Batch #...: 4124131 **Analysis Time..:** 18:00
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	101	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: IW-7

GC Volatiles

Lot-Sample #...: I4D230189-012 **Work Order #...:** GERV71AD **Matrix.....:** WATER
Date Sampled...: 04/20/04 15:30 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/30/04 **Analysis Date..:** 04/30/04
Prep Batch #...: 4124128 **Analysis Time..:** 18:00
Dilution Factor: 1

Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	103	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	97	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: IW-7

GC Semivolatiles

Lot-Sample #...: I4D230189-012 **Work Order #...:** GERV71AC **Matrix.....:** WATER
Date Sampled...: 04/20/04 15:30 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/27/04 **Analysis Date..:** 05/05/04
Prep Batch #...: 4118334 **Analysis Time..:** 15:17
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	**1.7**	**0.20**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	113	(53 - 139)
Dotriacontane	101	(45 - 141)

CONOCOPHILLIPS

Client Sample ID: IW-7

TOTAL Metals

Lot-Sample #...: I4D230189-012 **Matrix.....:** WATER
Date Sampled...: 04/20/04 15:30 **Date Received..:** 04/23/04 09:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4120180						
Mercury	ND	0.00020	mg/L	SW846 7470A	04/27-04/28/04	GERV71AH
		Dilution Factor: 1		Analysis Time..: 17:02		

CONOCOPHILLIPS

Client Sample ID: IW-7

General Chemistry

Lot-Sample #...: I4D230189-012 Work Order #...: GERV7 Matrix.....: WATER
Date Sampled...: 04/20/04 15:30 Date Received..: 04/23/04 09:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	160	20.0	mg/L	MCAWW 300.0A	05/06/04	4128176
		Dilution Factor: 20		Analysis Time..: 18:34		
Fluoride	1.1	1.0	mg/L	MCAWW 300.0A	05/06/04	4128175
		Dilution Factor: 1		Analysis Time..: 16:07		
Total Dissolved Solids	717	40.0	mg/L	MCAWW 160.1	04/27/04	4118521
		Dilution Factor: 1		Analysis Time..: 18:14		

CONOCOPHILLIPS

Client Sample ID: IW-7-DIS

DISSOLVED Metals

Lot-Sample #...: I4D230189-013 **Matrix.....:** WATER
Date Sampled...: 04/20/04 15:30 **Date Received..:** 04/23/04 09:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4115149						
Aluminum	ND	0.20	mg/L	SW846 6010B	04/24-04/28/04	GERV91AA
		Dilution Factor: 1		Analysis Time..: 15:29		
Arsenic	ND	0.010	mg/L	SW846 6010B	04/24-04/28/04	GERV91AC
		Dilution Factor: 1		Analysis Time..: 15:29		
Barium	**0.28**	**0.20**	**mg/L**	**SW846 6010B**	**04/24-05/04/04**	**GERV91AD**
		Dilution Factor: 1		Analysis Time..: 11:12		
Boron	**0.22**	**0.20**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERV91AE**
		Dilution Factor: 1		Analysis Time..: 15:29		
Cadmium	ND	0.0020	mg/L	SW846 6010B	04/24-04/28/04	GERV91AF
		Dilution Factor: 1		Analysis Time..: 15:29		
Chromium	ND	0.0050	mg/L	SW846 6010B	04/24-04/28/04	GERV91AG
		Dilution Factor: 1		Analysis Time..: 15:29		
Cobalt	ND	0.050	mg/L	SW846 6010B	04/24-04/28/04	GERV91AH
		Dilution Factor: 1		Analysis Time..: 15:29		
Copper	ND	0.025	mg/L	SW846 6010B	04/24-04/28/04	GERV91AJ
		Dilution Factor: 1		Analysis Time..: 15:29		
Iron	**0.17**	**0.10**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERV91AK**
		Dilution Factor: 1		Analysis Time..: 15:29		
Lead	ND	0.0030	mg/L	SW846 6010B	04/24-05/04/04	GERV91AL
		Dilution Factor: 1		Analysis Time..: 11:12		
Manganese	**0.098**	**0.015**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERV91AM**
		Dilution Factor: 1		Analysis Time..: 15:29		
Molybdenum	ND	0.040	mg/L	SW846 6010B	04/24-04/28/04	GERV91AN
		Dilution Factor: 1		Analysis Time..: 15:29		
Nickel	ND	0.040	mg/L	SW846 6010B	04/24-04/28/04	GERV91AP
		Dilution Factor: 1		Analysis Time..: 15:29		

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CONOCOPHILLIPS

Client Sample ID: IW-7-DIS

DISSOLVED Metals

Lot-Sample #...: I4D230189-013 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	**0.0092**	**0.0050**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERV91AQ**
		Dilution Factor: 1		Analysis Time..: 15:29		
Silver	ND	0.0050	mg/L	SW846 6010B	04/24-04/28/04	GERV91AR
		Dilution Factor: 1		Analysis Time..: 15:29		
Zinc	ND	0.020	mg/L	SW846 6010B	04/24-04/28/04	GERV91AT
		Dilution Factor: 1		Analysis Time..: 15:29		
Prep Batch #...: 4120486						
Uranium	ND	500	ug/L	SW846 6010B	04/29-04/30/04	GERV91AU
		Dilution Factor: 1		Analysis Time..: 00:00		

CONOCOPHILLIPS

Client Sample ID: IW-7D

GC/MS Semivolatiles

Lot-Sample #...: I4D230189-014 **Work Order #...:** GERWQ1AG **Matrix.....:** WATER
Date Sampled...: 04/20/04 15:45 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/26/04 **Analysis Date..:** 04/28/04
Prep Batch #...: 4117247 **Analysis Time..:** 16:23
Dilution Factor: 0.95
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	9.5	ug/L
Acenaphthylene	ND	9.5	ug/L
Anthracene	ND	9.5	ug/L
Benzo(a)anthracene	ND	9.5	ug/L
Benzo(a)pyrene	ND	9.5	ug/L
Benzo(b)fluoranthene	ND	9.5	ug/L
Benzo(ghi)perylene	ND	9.5	ug/L
Benzo(k)fluoranthene	ND	9.5	ug/L
Chrysene	ND	9.5	ug/L
Dibenz(a,h)anthracene	ND	9.5	ug/L
Fluoranthene	ND	9.5	ug/L
Fluorene	ND	9.5	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.5	ug/L
Naphthalene	ND	9.5	ug/L
Phenanthrene	ND	9.5	ug/L
Pyrene	ND	9.5	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	77	(28 - 120)
2-Fluorobiphenyl	83	(23 - 119)
Terphenyl-d14	82	(10 - 123)
2-Fluorophenol	69	(22 - 121)
Phenol-d5	73	(34 - 117)
2,4,6-Tribromophenol	91	(33 - 124)

CONOCOPHILLIPS

Client Sample ID: IW-7D

GC Volatiles

Lot-Sample #...: I4D230189-014 **Work Order #...:** GERWQ1AA **Matrix.....:** WATER
Date Sampled...: 04/20/04 15:45 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/30/04 **Analysis Date..:** 04/30/04
Prep Batch #...: 4124131 **Analysis Time..:** 18:26
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	105	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: IW-7D

GC Volatiles

Lot-Sample #...: I4D230189-014 **Work Order #...:** GERWQ1AD **Matrix.....:** WATER
Date Sampled...: 04/20/04 15:45 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/30/04 **Analysis Date..:** 04/30/04
Prep Batch #...: 4124128 **Analysis Time..:** 18:26
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	104	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	96	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: IW-7D

GC Semivolatiles

Lot-Sample #...: I4D230189-014 **Work Order #...:** GERWQ1AC **Matrix.....:** WATER
Date Sampled...: 04/20/04 15:45 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/27/04 **Analysis Date..:** 05/05/04
Prep Batch #...: 4118334 **Analysis Time..:** 15:54
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	**1.7**	**0.20**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	122	(53 - 139)
Dotriacontane	109	(45 - 141)

CONOCOPHILLIPS

Client Sample ID: IW-7D

TOTAL Metals

Lot-Sample #...: I4D230189-014 **Matrix.....:** WATER
Date Sampled...: 04/20/04 15:45 **Date Received..:** 04/23/04 09:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4120180						
Mercury	ND	0.00020	mg/L	SW846 7470A	04/27-04/28/04	GERWQ1AH
		Dilution Factor: 1		Analysis Time..: 17:04		

CONOCOPHILLIPS

Client Sample ID: IW-7D

General Chemistry

Lot-Sample #...: I4D230189-014 **Work Order #...:** GERWQ **Matrix.....:** WATER
Date Sampled...: 04/20/04 15:45 **Date Received..:** 04/23/04 09:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	161	20.0	mg/L	MCAWW 300.0A	05/06/04	4128176
		Dilution Factor: 20		Analysis Time..: 18:47		
Fluoride	1.2	1.0	mg/L	MCAWW 300.0A	05/06-05/08/04	4128175
		Dilution Factor: 1		Analysis Time..: 12:32		
Total Dissolved Solids	710	40.0	mg/L	MCAWW 160.1	04/27/04	4118521
		Dilution Factor: 1		Analysis Time..: 18:16		

CONOCOPHILLIPS

Client Sample ID: IW-7D-DIS

DISSOLVED Metals

Lot-Sample #...: I4D230189-015 **Matrix.....:** WATER
Date Sampled...: 04/20/04 15:45 **Date Received..:** 04/23/04 09:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4115149						
Aluminum	ND	0.20	mg/L	SW846 6010B	04/24-04/28/04	GERW31AA
		Dilution Factor: 1		Analysis Time..: 15:34		
Arsenic	ND	0.010	mg/L	SW846 6010B	04/24-04/28/04	GERW31AC
		Dilution Factor: 1		Analysis Time..: 15:34		
Barium	**0.27**	**0.20**	**mg/L**	**SW846 6010B**	**04/24-05/04/04**	**GERW31AD**
		Dilution Factor: 1		Analysis Time..: 11:17		
Boron	**0.22**	**0.20**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERW31AE**
		Dilution Factor: 1		Analysis Time..: 15:34		
Cadmium	ND	0.0020	mg/L	SW846 6010B	04/24-04/28/04	GERW31AF
		Dilution Factor: 1		Analysis Time..: 15:34		
Chromium	ND	0.0050	mg/L	SW846 6010B	04/24-04/28/04	GERW31AG
		Dilution Factor: 1		Analysis Time..: 15:34		
Cobalt	ND	0.050	mg/L	SW846 6010B	04/24-04/28/04	GERW31AH
		Dilution Factor: 1		Analysis Time..: 15:34		
Copper	ND	0.025	mg/L	SW846 6010B	04/24-04/28/04	GERW31AJ
		Dilution Factor: 1		Analysis Time..: 15:34		
Iron	**0.16**	**0.10**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERW31AK**
		Dilution Factor: 1		Analysis Time..: 15:34		
Lead	ND	0.0030	mg/L	SW846 6010B	04/24-05/04/04	GERW31AL
		Dilution Factor: 1		Analysis Time..: 11:17		
Manganese	**0.097**	**0.015**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERW31AM**
		Dilution Factor: 1		Analysis Time..: 15:34		
Molybdenum	ND	0.040	mg/L	SW846 6010B	04/24-04/28/04	GERW31AN
		Dilution Factor: 1		Analysis Time..: 15:34		
Nickel	ND	0.040	mg/L	SW846 6010B	04/24-04/28/04	GERW31AP
		Dilution Factor: 1		Analysis Time..: 15:34		

(Continued on next page)

CONOCOPHILLIPS

Client Sample ID: IW-7D-DIS

DISSOLVED Metals

Lot-Sample #...: I4D230189-015 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	**0.0069**	**0.0050**	**mg/L**	**SW846 6010B**	**04/24-04/28/04**	**GERW31AQ**
		Dilution Factor: 1		Analysis Time..: 15:34		
Silver	ND	0.0050	mg/L	SW846 6010B	04/24-04/28/04	GERW31AR
		Dilution Factor: 1		Analysis Time..: 15:34		
Zinc	ND	0.020	mg/L	SW846 6010B	04/24-04/28/04	GERW31AT
		Dilution Factor: 1		Analysis Time..: 15:34		
Prep Batch #...: 4120486						
Uranium	ND	500	ug/L	SW846 6010B	04/29-04/30/04	GERW31AU
		Dilution Factor: 1		Analysis Time..: 00:00		

CONOCOPHILLIPS

Client Sample ID: TRIP BLANK 2

GC Volatiles

Lot-Sample #...: I4D230189-016 **Work Order #...:** GERXE1AA **Matrix.....:** WATER
Date Sampled...: 04/22/04 12:00 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/30/04 **Analysis Date..:** 04/30/04
Prep Batch #...: 4124131 **Analysis Time..:** 12:51
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	103	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: TRIP BLANK 2

GC Volatiles

Lot-Sample #...: I4D230189-016 **Work Order #...:** GERXE1AC **Matrix.....:** WATER
Date Sampled...: 04/22/04 12:00 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/30/04 **Analysis Date..:** 04/30/04
Prep Batch #...: 4124128 **Analysis Time..:** 12:51
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	105	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	96	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: SVE-1

GC/MS Semivolatiles

Lot-Sample #...: I4D230189-017 **Work Order #...:** GE3051AA **Matrix.....:** WATER
Date Sampled...: 04/27/04 15:00 **Date Received..:** 04/28/04 09:00
Prep Date.....: 05/03/04 **Analysis Date..:** 05/05/04
Prep Batch #...: 4124275 **Analysis Time..:** 16:57
Dilution Factor: 1
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	10	ug/L
Acenaphthylene	ND	10	ug/L
Anthracene	ND	10	ug/L
Benzo(a)anthracene	ND	10	ug/L
Benzo(a)pyrene	ND	10	ug/L
Benzo(b)fluoranthene	ND	10	ug/L
Benzo(ghi)perylene	ND	10	ug/L
Benzo(k)fluoranthene	ND	10	ug/L
Chrysene	ND	10	ug/L
Dibenz(a,h)anthracene	ND	10	ug/L
Fluoranthene	ND	10	ug/L
Fluorene	ND	10	ug/L
Indeno(1,2,3-cd)pyrene	ND	10	ug/L
Naphthalene	ND	10	ug/L
Phenanthrene	ND	10	ug/L
Pyrene	ND	10	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	87	(28 - 120)
2-Fluorobiphenyl	90	(23 - 119)
Terphenyl-d14	93	(10 - 123)
2-Fluorophenol	86	(22 - 121)
Phenol-d5	92	(34 - 117)
2,4,6-Tribromophenol	98	(33 - 124)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: I4D230189 **Work Order #...:** GEXVW1AA **Matrix.....:** WATER
MB Lot-Sample #: I4D260000-247

Prep Date.....: 04/26/04 **Analysis Time..:** 19:25
Analysis Date..: 04/27/04 **Prep Batch #...:** 4117247
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	10	ug/L	SW846 8270C
Acenaphthylene	ND	10	ug/L	SW846 8270C
Anthracene	ND	10	ug/L	SW846 8270C
Benzo(a)anthracene	ND	10	ug/L	SW846 8270C
Benzo(a)pyrene	ND	10	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	10	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	10	ug/L	SW846 8270C
Benzo(k)fluoranthene	ND	10	ug/L	SW846 8270C
Chrysene	ND	10	ug/L	SW846 8270C
Dibenz(a,h)anthracene	ND	10	ug/L	SW846 8270C
Fluoranthene	ND	10	ug/L	SW846 8270C
Fluorene	ND	10	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	SW846 8270C
Naphthalene	ND	10	ug/L	SW846 8270C
Phenanthrene	ND	10	ug/L	SW846 8270C
Pyrene	ND	10	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	84	(28 - 120)
2-Fluorobiphenyl	91	(23 - 119)
Terphenyl-d14	100	(10 - 123)
2-Fluorophenol	76	(22 - 121)
Phenol-d5	79	(34 - 117)
2,4,6-Tribromophenol	84	(33 - 124)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: I4D230189 **Work Order #...:** GFEEQ1AA **Matrix.....:** WATER
MB Lot-Sample #: I4E030000-275

Prep Date.....: 05/03/04 **Analysis Time..:** 15:24
Analysis Date..: 05/05/04 **Prep Batch #...:** 4124275
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	10	ug/L	SW846 8270C
Acenaphthylene	ND	10	ug/L	SW846 8270C
Anthracene	ND	10	ug/L	SW846 8270C
Benzo(a)anthracene	ND	10	ug/L	SW846 8270C
Benzo(a)pyrene	ND	10	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	10	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	10	ug/L	SW846 8270C
Benzo(k)fluoranthene	ND	10	ug/L	SW846 8270C
Chrysene	ND	10	ug/L	SW846 8270C
Dibenz(a,h)anthracene	ND	10	ug/L	SW846 8270C
Fluoranthene	ND	10	ug/L	SW846 8270C
Fluorene	ND	10	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	SW846 8270C
Naphthalene	ND	10	ug/L	SW846 8270C
Phenanthrene	ND	10	ug/L	SW846 8270C
Pyrene	ND	10	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	76	(28 - 120)
2-Fluorobiphenyl	80	(23 - 119)
Terphenyl-d14	85	(10 - 123)
2-Fluorophenol	76	(22 - 121)
Phenol-d5	81	(34 - 117)
2,4,6-Tribromophenol	91	(33 - 124)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: I4D230189 **Work Order #...:** GFD221AA **Matrix.....:** WATER
MB Lot-Sample #: I4E030000-131

Prep Date.....: 04/30/04 **Analysis Time..:** 11:49
Analysis Date..: 04/30/04 **Prep Batch #...:** 4124131
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Gasoline Range Organics	ND	0.10	mg/L	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO	103	(75 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: I4D230189 **Work Order #...:** GFD2W1AA **Matrix.....:** WATER
MB Lot-Sample #: I4E030000-128

Prep Date.....: 04/30/04 **Analysis Time..:** 11:49
Analysis Date..: 04/30/04 **Prep Batch #...:** 4124128
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8021B
Ethylbenzene	ND	1.0	ug/L	SW846 8021B
Toluene	ND	1.0	ug/L	SW846 8021B
Xylenes (total)	ND	3.0	ug/L	SW846 8021B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	106	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	97	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: I4D230189 **Work Order #...:** GE1P31AA **Matrix.....:** WATER
MB Lot-Sample #: I4D270000-334

Prep Date.....: 04/27/04 **Analysis Time..:** 09:48
Analysis Date..: 05/05/04 **Prep Batch #...:** 4118334
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Diesel Range Organics	ND	0.20	mg/L	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	60	(53 - 139)
Dotriacontane	60	(45 - 141)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: I4D230189 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: I4D290000-180 **Prep Batch #...:** 4120180						
Mercury	ND	0.00020	mg/L	SW846 7470A	04/27-04/28/04	GE5571AE
		Dilution Factor: 1				
		Analysis Time..: 16:30				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

DISSOLVED Metals

Client Lot #...: I4D230189 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: I4D240000-149 **Prep Batch #...:** 4115149						
Aluminum	ND	0.20	mg/L	SW846 6010B	04/24-04/28/04	GEWLL1AA
		Dilution Factor: 1				
		Analysis Time..: 13:53				
Arsenic	ND	0.010	mg/L	SW846 6010B	04/24-04/28/04	GEWLL1AC
		Dilution Factor: 1				
		Analysis Time..: 13:53				
Barium	ND	0.20	mg/L	SW846 6010B	04/24-04/28/04	GEWLL1AD
		Dilution Factor: 1				
		Analysis Time..: 13:53				
Boron	ND	0.20	mg/L	SW846 6010B	04/24-04/28/04	GEWLL1AE
		Dilution Factor: 1				
		Analysis Time..: 13:53				
Cadmium	ND	0.0020	mg/L	SW846 6010B	04/24-04/28/04	GEWLL1AF
		Dilution Factor: 1				
		Analysis Time..: 13:53				
Chromium	ND	0.0050	mg/L	SW846 6010B	04/24-04/28/04	GEWLL1AG
		Dilution Factor: 1				
		Analysis Time..: 13:53				
Cobalt	ND	0.050	mg/L	SW846 6010B	04/24-04/28/04	GEWLL1AH
		Dilution Factor: 1				
		Analysis Time..: 13:53				
Copper	ND	0.025	mg/L	SW846 6010B	04/24-04/28/04	GEWLL1AJ
		Dilution Factor: 1				
		Analysis Time..: 13:53				
Iron	ND	0.10	mg/L	SW846 6010B	04/24-04/28/04	GEWLL1AK
		Dilution Factor: 1				
		Analysis Time..: 13:53				
Lead	ND	0.0030	mg/L	SW846 6010B	04/24-04/28/04	GEWLL1AL
		Dilution Factor: 1				
		Analysis Time..: 17:25				
Manganese	ND	0.015	mg/L	SW846 6010B	04/24-04/28/04	GEWLL1AM
		Dilution Factor: 1				
		Analysis Time..: 13:53				

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METHOD BLANK REPORT

DISSOLVED Metals

Client Lot #...: I4D230189 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Molybdenum	ND	0.040	mg/L	SW846 6010B	04/24-04/28/04	GEWLL1AN
		Dilution Factor: 1				
		Analysis Time..: 13:53				
Nickel	ND	0.040	mg/L	SW846 6010B	04/24-04/28/04	GEWLL1AP
		Dilution Factor: 1				
		Analysis Time..: 13:53				
Selenium	ND	0.0050	mg/L	SW846 6010B	04/24-04/28/04	GEWLL1AQ
		Dilution Factor: 1				
		Analysis Time..: 13:53				
Silver	ND	0.0050	mg/L	SW846 6010B	04/24-04/28/04	GEWLL1AR
		Dilution Factor: 1				
		Analysis Time..: 13:53				
Zinc	ND	0.020	mg/L	SW846 6010B	04/24-04/28/04	GEWLL1AT
		Dilution Factor: 1				
		Analysis Time..: 13:53				

MB Lot-Sample #: F4D290000-486 **Prep Batch #...:** 4120486

Uranium	ND	500	ug/L	SW846 6010B	04/29-04/30/04	GE7P51AD
		Dilution Factor: 1				
		Analysis Time..: 18:20				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: I4D230189 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: GFQM61AA		MB Lot-Sample #:	I4E070000-176	
	ND	1.0	mg/L	MCAWW 300.0A	05/06/04	4128176
		Dilution Factor: 1				
		Analysis Time..: 14:07				
Fluoride		Work Order #: GFQM31AA		MB Lot-Sample #:	I4E070000-175	
	ND	1.0	mg/L	MCAWW 300.0A	05/06/04	4128175
		Dilution Factor: 1				
		Analysis Time..: 14:07				
Total Dissolved Solids		Work Order #: GE28A1AA		MB Lot-Sample #:	I4D270000-521	
	ND	40.0	mg/L	MCAWW 160.1	04/27/04	4118521
		Dilution Factor: 1				
		Analysis Time..: 18:00				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: I4D230189 **Work Order #...:** GEXVW1AC **Matrix.....:** WATER
LCS Lot-Sample#: I4D260000-247
Prep Date.....: 04/26/04 **Analysis Date..:** 04/27/04
Prep Batch #...: 4117247 **Analysis Time..:** 19:56
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Acenaphthene	**84**	**(69 - 108)**	**SW846 8270C**
Acenaphthylene	85	(66 - 107)	SW846 8270C
Anthracene	88	(63 - 110)	SW846 8270C
Benzo(a)anthracene	87	(68 - 109)	SW846 8270C
Benzo(a)pyrene	85	(65 - 114)	SW846 8270C
Benzo(b)fluoranthene	84	(58 - 115)	SW846 8270C
Benzo(ghi)perylene	89	(28 - 145)	SW846 8270C
Benzo(k)fluoranthene	93	(73 - 125)	SW846 8270C
Chrysene	90	(69 - 116)	SW846 8270C
Dibenz(a,h)anthracene	86	(36 - 144)	SW846 8270C
Fluoranthene	89	(70 - 115)	SW846 8270C
Fluorene	88	(66 - 117)	SW846 8270C
Indeno(1,2,3-cd)pyrene	86	(39 - 138)	SW846 8270C
Naphthalene	81	(67 - 105)	SW846 8270C
Phenanthrene	91	(68 - 113)	SW846 8270C
Pyrene	**89**	**(67 - 112)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	85	(28 - 120)
2-Fluorobiphenyl	94	(23 - 119)
Terphenyl-d14	95	(10 - 123)
2-Fluorophenol	72	(22 - 121)
Phenol-d5	81	(34 - 117)
2,4,6-Tribromophenol	95	(33 - 124)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: I4D230189 **Work Order #...:** GFEEQ1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: I4E030000-275 GFEEQ1AD-LCSD
Prep Date.....: 05/03/04 **Analysis Date..:** 05/05/04
Prep Batch #...: 4124275 **Analysis Time..:** 15:55
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	**92**	**(69 - 108)**			**SW846 8270C**
	94	**(69 - 108)**	**1.4**	**(0-20)**	**SW846 8270C**
Acenaphthylene	89	(66 - 107)			SW846 8270C
	89	(66 - 107)	0.63	(0-20)	SW846 8270C
Anthracene	89	(63 - 110)			SW846 8270C
	91	(63 - 110)	1.7	(0-20)	SW846 8270C
Benzo(a)anthracene	98	(68 - 109)			SW846 8270C
	100	(68 - 109)	1.4	(0-20)	SW846 8270C
Benzo(a)pyrene	90	(65 - 114)			SW846 8270C
	89	(65 - 114)	1.4	(0-20)	SW846 8270C
Benzo(b)fluoranthene	83	(58 - 115)			SW846 8270C
	87	(58 - 115)	4.0	(0-20)	SW846 8270C
Benzo(ghi)perylene	89	(28 - 145)			SW846 8270C
	92	(28 - 145)	3.3	(0-20)	SW846 8270C
Benzo(k)fluoranthene	99	(73 - 125)			SW846 8270C
	95	(73 - 125)	4.5	(0-20)	SW846 8270C
Chrysene	97	(69 - 116)			SW846 8270C
	99	(69 - 116)	1.6	(0-20)	SW846 8270C
Dibenz(a,h)anthracene	92	(36 - 144)			SW846 8270C
	91	(36 - 144)	1.7	(0-20)	SW846 8270C
Fluoranthene	92	(70 - 115)			SW846 8270C
	93	(70 - 115)	0.96	(0-20)	SW846 8270C
Fluorene	96	(66 - 117)			SW846 8270C
	96	(66 - 117)	0.32	(0-20)	SW846 8270C
Indeno(1,2,3-cd)pyrene	91	(39 - 138)			SW846 8270C
	90	(39 - 138)	1.3	(0-20)	SW846 8270C
Naphthalene	88	(67 - 105)			SW846 8270C
	88	(67 - 105)	0.24	(0-20)	SW846 8270C
Phenanthrene	91	(68 - 113)			SW846 8270C
	92	(68 - 113)	1.4	(0-20)	SW846 8270C
Pyrene	**95**	**(67 - 112)**			**SW846 8270C**
	96	**(67 - 112)**	**1.8**	**(0-20)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	93	(28 - 120)
	92	(28 - 120)
2-Fluorobiphenyl	98	(23 - 119)
	99	(23 - 119)
Terphenyl-d14	99	(10 - 123)

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: I4D230189 **Work Order #...:** GFEEQ1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: I4E030000-275 GFEEQ1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
	101	(10 - 123)
2-Fluorophenol	95	(22 - 121)
	92	(22 - 121)
Phenol-d5	98	(34 - 117)
	97	(34 - 117)
2,4,6-Tribromophenol	105	(33 - 124)
	105	(33 - 124)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4D230189 **Work Order #...:** GFD221AC **Matrix.....:** WATER
LCS Lot-Sample#: I4E030000-131
Prep Date.....: 04/30/04 **Analysis Date..:** 04/30/04
Prep Batch #...: 4124131 **Analysis Time..:** 11:08
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Gasoline Range Organics	**104**	**(85 - 115)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO	100	(81 - 123)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4D230189 **Work Order #...:** GFD2W1AC **Matrix.....:** WATER
LCS Lot-Sample#: I4E030000-128
Prep Date.....: 04/30/04 **Analysis Date..:** 04/30/04
Prep Batch #...: 4124128 **Analysis Time..:** 09:35
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	**96**	**(85 - 115)**	**SW846 8021B**
Ethylbenzene	**97**	**(85 - 115)**	**SW846 8021B**
Toluene	**104**	**(85 - 115)**	**SW846 8021B**
Xylenes (total)	**103**	**(85 - 115)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	109	(85 - 111)
a,a,a-Trifluorotoluene (TFT)	97	(84 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: I4D230189 **Work Order #...:** GE1P31AC **Matrix.....:** WATER
LCS Lot-Sample#: I4D270000-334
Prep Date.....: 04/27/04 **Analysis Date..:** 05/12/04
Prep Batch #...: 4118334 **Analysis Time..:** 17:17
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Diesel Range Organics	**61**	**(51 - 127)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	69	(28 - 131)
Dotriacontane	41	(37 - 139)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: I4D230189 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: I4D290000-180 **Prep Batch #...:** 4120180					
Mercury	92	(80 - 120)	SW846 7470A	04/27-04/28/04	GE5571AG
		Dilution Factor: 1		Analysis Time..: 16:35	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

DISSOLVED Metals

Client Lot #...: I4D230189 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: I4D240000-149 **Prep Batch #...:** 4115149					
Aluminum	102	(80 - 120)	SW846 6010B	04/24-04/28/04	GEWLL1AU
		Dilution Factor: 1	Analysis Time..: 13:58		
Arsenic	101	(80 - 120)	SW846 6010B	04/24-04/28/04	GEWLL1AV
		Dilution Factor: 1	Analysis Time..: 13:58		
Barium	92	(80 - 120)	SW846 6010B	04/24-04/28/04	GEWLL1AW
		Dilution Factor: 1	Analysis Time..: 13:58		
Boron	106	(80 - 120)	SW846 6010B	04/24-04/28/04	GEWLL1AX
		Dilution Factor: 1	Analysis Time..: 13:58		
Cadmium	99	(80 - 120)	SW846 6010B	04/24-04/28/04	GEWLL1A0
		Dilution Factor: 1	Analysis Time..: 13:58		
Chromium	95	(80 - 120)	SW846 6010B	04/24-04/28/04	GEWLL1A1
		Dilution Factor: 1	Analysis Time..: 13:58		
Cobalt	100	(80 - 120)	SW846 6010B	04/24-04/28/04	GEWLL1A2
		Dilution Factor: 1	Analysis Time..: 13:58		
Copper	102	(80 - 120)	SW846 6010B	04/24-04/28/04	GEWLL1A3
		Dilution Factor: 1	Analysis Time..: 13:58		
Iron	104	(80 - 120)	SW846 6010B	04/24-04/28/04	GEWLL1A4
		Dilution Factor: 1	Analysis Time..: 13:58		
Lead	98	(80 - 120)	SW846 6010B	04/24-04/28/04	GEWLL1A5
		Dilution Factor: 1	Analysis Time..: 17:30		
Manganese	103	(80 - 120)	SW846 6010B	04/24-04/28/04	GEWLL1A6
		Dilution Factor: 1	Analysis Time..: 13:58		
Molybdenum	99	(80 - 120)	SW846 6010B	04/24-04/28/04	GEWLL1A7
		Dilution Factor: 1	Analysis Time..: 13:58		
Nickel	103	(80 - 120)	SW846 6010B	04/24-04/28/04	GEWLL1A8
		Dilution Factor: 1	Analysis Time..: 13:58		
Selenium	112	(80 - 120)	SW846 6010B	04/24-04/28/04	GEWLL1A9
		Dilution Factor: 1	Analysis Time..: 13:58		

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

DISSOLVED Metals

Client Lot #...: I4D230189 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	99	(80 - 120)	SW846 6010B	04/24-04/28/04	GEWLL1CA
		Dilution Factor: 1	Analysis Time..: 13:58		
Zinc	101	(80 - 120)	SW846 6010B	04/24-04/28/04	GEWLL1CC
		Dilution Factor: 1	Analysis Time..: 13:58		

LCS Lot-Sample#: F4D290000-486 **Prep Batch #...:** 4120486

Uranium	103	(80 - 120)	SW846 6010B	04/29-04/30/04	GE7P51AM
		Dilution Factor: 1	Analysis Time..: 18:32		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I4D230189 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: GFQM61AC LCS Lot-Sample#: I4E070000-176			
	97	(85 - 106)	MCAWW 300.0A	05/06/04	4128176
		Dilution Factor: 1	Analysis Time..: 14:20		
Fluoride		Work Order #: GFQM31AC LCS Lot-Sample#: I4E070000-175			
	97	(92 - 107)	MCAWW 300.0A	05/06/04	4128175
		Dilution Factor: 1	Analysis Time..: 14:20		
Total Dissolved Solids		Work Order #: GE28A1AC LCS Lot-Sample#: I4D270000-521			
	102	(87 - 113)	MCAWW 160.1	04/27/04	4118521
		Dilution Factor: 1	Analysis Time..: 18:02		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: I4D230189 **Work Order #...:** GERHA1AK-MS **Matrix.....:** WATER
MS Lot-Sample #: I4D230189-001 GERHA1AL-MSD
Date Sampled...: 04/20/04 10:15 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/26/04 **Analysis Date..:** 04/27/04
Prep Batch #...: 4117247 **Analysis Time..:** 20:57
Dilution Factor: 0.95

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	**73**	**(69 - 108)**			**SW846 8270C**
	81	**(69 - 108)**	**9.6**	**(0-20)**	**SW846 8270C**
Acenaphthylene	73	(66 - 107)			SW846 8270C
	81	(66 - 107)	9.7	(0-20)	SW846 8270C
Anthracene	85	(63 - 110)			SW846 8270C
	87	(63 - 110)	2.4	(0-20)	SW846 8270C
Benzo(a)anthracene	84	(68 - 109)			SW846 8270C
	85	(68 - 109)	0.52	(0-20)	SW846 8270C
Benzo(a)pyrene	84	(65 - 114)			SW846 8270C
	85	(65 - 114)	0.90	(0-20)	SW846 8270C
Benzo(b)fluoranthene	80	(58 - 115)			SW846 8270C
	79	(58 - 115)	1.8	(0-20)	SW846 8270C
Benzo(ghi)perylene	87	(28 - 145)			SW846 8270C
	87	(28 - 145)	0.40	(0-20)	SW846 8270C
Benzo(k)fluoranthene	96	(73 - 125)			SW846 8270C
	97	(73 - 125)	1.1	(0-20)	SW846 8270C
Chrysene	87	(69 - 116)			SW846 8270C
	87	(69 - 116)	0.89	(0-20)	SW846 8270C
Dibenz(a,h)anthracene	85	(36 - 144)			SW846 8270C
	85	(36 - 144)	0.48	(0-20)	SW846 8270C
Fluoranthene	88	(70 - 115)			SW846 8270C
	89	(70 - 115)	1.8	(0-20)	SW846 8270C
Fluorene	79	(66 - 117)			SW846 8270C
	86	(66 - 117)	8.0	(0-20)	SW846 8270C
Indeno(1,2,3-cd)pyrene	85	(39 - 138)			SW846 8270C
	84	(39 - 138)	0.31	(0-20)	SW846 8270C
Naphthalene	71	(67 - 105)			SW846 8270C
	76	(67 - 105)	7.2	(0-20)	SW846 8270C
Phenanthrene	87	(68 - 113)			SW846 8270C
	90	(68 - 113)	3.5	(0-20)	SW846 8270C
Pyrene	**86**	**(67 - 112)**			**SW846 8270C**
	87	**(67 - 112)**	**1.6**	**(0-20)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	74	(28 - 120)
	80	(28 - 120)
2-Fluorobiphenyl	79	(23 - 119)
	88	(23 - 119)

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: I4D230189 **Work Order #...:** GERHA1AK-MS **Matrix.....:** WATER
MS Lot-Sample #: I4D230189-001 GERHA1AL-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	91	(10 - 123)
	92	(10 - 123)
2-Fluorophenol	63	(22 - 121)
	71	(22 - 121)
Phenol-d5	68	(34 - 117)
	77	(34 - 117)
2,4,6-Tribromophenol	90	(33 - 124)
	94	(33 - 124)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4D230189 **Work Order #...:** GER321AF-MS **Matrix.....:** WATER
MS Lot-Sample #: I4D230243-015 GER321AG-MSD
Date Sampled...: 04/22/04 10:30 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/30/04 **Analysis Date..:** 04/30/04
Prep Batch #...: 4124131 **Analysis Time..:** 18:51
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Gasoline Range Organics	**111**	**(79 - 124)**			**SW846 8015B**
	127 a,MSC	**(79 - 124)**	**11**	**(0-20)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO	101	(75 - 122)
	99	(75 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4D230189 **Work Order #...:** GER331AF-MS **Matrix.....:** WATER
MS Lot-Sample #: I4D230243-016 GER331AG-MSD
Date Sampled...: 04/21/04 11:15 **Date Received..:** 04/24/04 09:45
Prep Date.....: 04/30/04 **Analysis Date..:** 04/30/04
Prep Batch #...: 4124128 **Analysis Time..:** 23:09
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**113**	**(85 - 115)**			**SW846 8021B**
	132 a,MSC	**(85 - 115)**	**15**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**103**	**(85 - 115)**			**SW846 8021B**
	155	**(85 - 115)**	**27**	**(0-20)**	**SW846 8021B**
	Qualifiers: a,p,MSC				
Toluene	**122 a,MSC**	**(85 - 115)**			**SW846 8021B**
	147 a,MSC	**(85 - 115)**	**19**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**115**	**(85 - 115)**			**SW846 8021B**
	139 a,MSC	**(85 - 115)**	**16**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	108	(81 - 119)
	110	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	168 *	(73 - 135)
	219 *	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

p Relative percent difference (RPD) is outside stated control limits.

* Surrogate recovery is outside stated control limits.

Surrogates outside acceptance criteria due to coelution.

Surrogates outside acceptance criteria due to coelution.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: I4D230189 **Work Order #...:** GERHA1AM-MS **Matrix.....:** WATER
MS Lot-Sample #: I4D230189-001 GERHA1AN-MSD
Date Sampled...: 04/20/04 10:15 **Date Received..:** 04/23/04 09:00
Prep Date.....: 04/27/04 **Analysis Date..:** 05/05/04
Prep Batch #...: 4118334 **Analysis Time..:** 11:37
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Diesel Range Organics	**41**	**(40 - 126)**			**SW846 8015B**
	48	**(40 - 126)**	**16**	**(0-20)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	53	(53 - 139)
	57	(53 - 139)
Dotriacontane	63	(45 - 141)
	66	(45 - 141)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

DISSOLVED Metals

Client Lot #...: I4D230189 **Matrix.....:** WATER
Date Sampled...: 04/20/04 10:15 **Date Received..:** 04/23/04 09:00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: I4D230189-002 **Prep Batch #...:** 4115149							
Aluminum	105	(75 - 125)			SW846 6010B	04/24-04/28/04	GERHV1AV
	105	(75 - 125)	0.40	(0-20)	SW846 6010B	04/24-04/28/04	GERHV1AW
		Dilution Factor: 1					
		Analysis Time..: 14:19					
Arsenic	103	(75 - 125)			SW846 6010B	04/24-04/28/04	GERHV1AX
	101	(75 - 125)	1.3	(0-20)	SW846 6010B	04/24-04/28/04	GERHV1A0
		Dilution Factor: 1					
		Analysis Time..: 14:19					
Barium	95	(75 - 125)			SW846 6010B	04/24-04/28/04	GERHV1A1
	94	(75 - 125)	1.5	(0-20)	SW846 6010B	04/24-04/28/04	GERHV1A2
		Dilution Factor: 1					
		Analysis Time..: 14:19					
Boron	111	(75 - 125)			SW846 6010B	04/24-04/28/04	GERHV1A3
	109	(75 - 125)	1.3	(0-20)	SW846 6010B	04/24-04/28/04	GERHV1A4
		Dilution Factor: 1					
		Analysis Time..: 14:19					
Cadmium	101	(75 - 125)			SW846 6010B	04/24-04/28/04	GERHV1A5
	100	(75 - 125)	0.52	(0-20)	SW846 6010B	04/24-04/28/04	GERHV1A6
		Dilution Factor: 1					
		Analysis Time..: 14:19					
Chromium	96	(75 - 125)			SW846 6010B	04/24-04/28/04	GERHV1A7
	95	(75 - 125)	0.22	(0-20)	SW846 6010B	04/24-04/28/04	GERHV1A8
		Dilution Factor: 1					
		Analysis Time..: 14:19					
Cobalt	101	(75 - 125)			SW846 6010B	04/24-04/28/04	GERHV1A9
	100	(75 - 125)	0.80	(0-20)	SW846 6010B	04/24-04/28/04	GERHV1CA
		Dilution Factor: 1					
		Analysis Time..: 14:19					
Copper	107	(75 - 125)			SW846 6010B	04/24-04/28/04	GERHV1CC
	107	(75 - 125)	0.15	(0-20)	SW846 6010B	04/24-04/28/04	GERHV1CD
		Dilution Factor: 1					
		Analysis Time..: 14:19					

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MATRIX SPIKE SAMPLE EVALUATION REPORT

DISSOLVED Metals

Client Lot #...: I4D230189 **Matrix.....:** WATER
Date Sampled...: 04/20/04 10:15 **Date Received..:** 04/23/04 09:00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron	106	(75 - 125)			SW846 6010B	04/24-04/28/04	GERHV1CE
	105	(75 - 125)	0.36	(0-20)	SW846 6010B	04/24-04/28/04	GERHV1CF
		Dilution Factor: 1					
		Analysis Time..: 14:19					
Lead	101	(75 - 125)			SW846 6010B	04/24-04/28/04	GERHV1CG
	99	(75 - 125)	2.2	(0-20)	SW846 6010B	04/24-04/28/04	GERHV1CH
		Dilution Factor: 1					
		Analysis Time..: 17:50					
Manganese	104	(75 - 125)			SW846 6010B	04/24-04/28/04	GERHV1CJ
	104	(75 - 125)	0.51	(0-20)	SW846 6010B	04/24-04/28/04	GERHV1CK
		Dilution Factor: 1					
		Analysis Time..: 14:19					
Molybdenum	101	(75 - 125)			SW846 6010B	04/24-04/28/04	GERHV1CL
	101	(75 - 125)	0.32	(0-20)	SW846 6010B	04/24-04/28/04	GERHV1CM
		Dilution Factor: 1					
		Analysis Time..: 14:19					
Nickel	105	(75 - 125)			SW846 6010B	04/24-04/28/04	GERHV1CN
	103	(75 - 125)	1.5	(0-20)	SW846 6010B	04/24-04/28/04	GERHV1CP
		Dilution Factor: 1					
		Analysis Time..: 14:19					
Selenium	113	(75 - 125)			SW846 6010B	04/24-04/28/04	GERHV1CQ
	113	(75 - 125)	0.04	(0-20)	SW846 6010B	04/24-04/28/04	GERHV1CR
		Dilution Factor: 1					
		Analysis Time..: 14:19					
Silver	102	(75 - 125)			SW846 6010B	04/24-04/28/04	GERHV1CT
	102	(75 - 125)	0.03	(0-20)	SW846 6010B	04/24-04/28/04	GERHV1CU
		Dilution Factor: 1					
		Analysis Time..: 14:19					
Zinc	100	(75 - 125)			SW846 6010B	04/24-04/28/04	GERHV1CV
	99	(75 - 125)	0.67	(0-20)	SW846 6010B	04/24-04/28/04	GERHV1CW
		Dilution Factor: 1					
		Analysis Time..: 14:19					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I4D230189 **Matrix.....:** WATER
Date Sampled...: 04/20/04 10:15 **Date Received..:** 04/23/04 09:00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		WO#: GERHA1AR-MS/GERHA1AT-MSD				MS Lot-Sample #: I4D230189-001	
	89	(85 - 106)			MCAWW 300.0A	05/06/04	4128176
	93	(85 - 106)	1.5	(0-22)	MCAWW 300.0A	05/06/04	4128176
		Dilution Factor: 1					
		Analysis Time..: 17:14					
Fluoride		WO#: GERHA1AP-MS/GERHA1AQ-MSD				MS Lot-Sample #: I4D230189-001	
	96	(92 - 107)			MCAWW 300.0A	05/06/04	4128175
	97	(92 - 107)	0.24	(0-20)	MCAWW 300.0A	05/06/04	4128175
		Dilution Factor: 1					
		Analysis Time..: 14:47					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: I4D230189 **Work Order #...:** GEWFD-SMP GEWFD-DUP **Matrix.....:** WATER

Date Sampled...: 04/21/04 08:30 **Date Received..:** 04/23/04 09:00

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Dissolved Solids						SD Lot-Sample #: I4D240153-001		
	768	772	mg/L	0.52	(0-20)	MCAWW 160.1	04/27/04	4118521
			Dilution Factor: 1			Analysis Time..: 18:18		

Report Attachment

Note that if this report contains tests performed for the following methods, the associated method deviations are applicable.

EPA 410.1 COD: Laboratory uses different analytical wavelength as specified by instrument manufacturer.
EPA 340.2 Fluoride: Preliminary Bellack distillation not performed.
EPA 8151A: Laboratory utilizes alternate extraction solvent.
Iowa OA-1: Benzene, toluene, ethylbenzene and xylenes (BTEX) not analyzed along with Gasoline Range Organics if client does not require BTEX.
EPA TO-12: Samples are not analyzed in duplicate.
EPA TO-14A and TO-15: Zero humidified nitrogen is used in place of air for method blanks.

TRRP Reporting Requirements

If this package contains reports requiring TRRP (Texas Risk Reduction Program) reporting criteria, the following information applies.

The REPORTING LIMIT is equivalent to the TRRP acronym MQL (method quantitation limit).
The MDL is equivalent to the TRRP acronym SQL (sample quantitation limit).

SEVERN TRENT **STL**

CHAIN-OF-CUSTODY ADDENDUM

Lot No: I4023018S

RECEIVED BY: (RW)

DATE/TIME RECEIVED: 4/28/04 0900

UNPACKED DATE/TIME: 4/28/04 0940

CLIENT/PROJECT: Maxim

COC NUMBER:

QUOTE/PROFILE: 56072

add to I4023018S
+ email prep + chrome group

SAMPLES LOGGED IN: CC

LOG-IN REVIEWED: AT

Number of Shipping Containers Received with Chain of Custody: 1

VOC AIR / FILTER SAMPLES ☐ YES **SEE SECTIONS 1.0, 2.0, & 6.0**

1.0 CONTAINERS EXAMINED UPON RECEIPT: (RW)

Container Sealed: ☑ YES ☐ NO

Custody Seal Signed/Dated: ☑ YES ☐ NO

Custody Seal Present: ☑ YES ☐ NO

Containers checked for radioactivity: ☐ YES ☐ NO ☑ N/A

If seal not intact or Geiger counter reading >0.5 mR/hr, list air bill number of that container(s):

2.0 VOC CANISTERS EXAMINED UPON RECEIPT:

Canister Valves Closed: ☐ YES ☐ NO

Samples Received Match Chain: ☐ YES ☐ NO

Canister Valves Capped: ☐ YES ☐ NO

See Additional Comments (Section 5.0 and / or 7.0) ☐ YES ☐ NO

Packing Material Used: (circle)
None / Absorbent / Paper / Bubble Wrap

Chain-of-Custody form properly maintained: ☐ YES ☐ NO

Can Size: ☐ 6L ☐ 15L Other

3.0 SAMPLE TEMPERATURE UPON RECEIPT: (RW) **IR THERMOMETER #:** 7-4

The temperature of the container(s) is: *[acceptable tolerance 4°C ± 2°; (NC, WI: 1-4.4°C)]*

4°C										

If temperature is outside acceptable tolerance, Project Manager was notified (____PM). Date: Time:

Samples received do not require cooling

OK to analyze samples: ☑ YES ☐ NO

PRESERVATION OF SAMPLES REQUIRED: ☑ NA ☐ YES **VERIFIED BY:** (RW)

Base samples are>pH 12: ☐ YES ☐ NO

Acid preserved are<pH 2: ☐ YES ☐ NO

Cyanide samples checked for sulfides: ☐ YES

Sulfide samples appear to be preserved with zinc acetate: ☐ YES ☐ NO

Samples checked for chlorine per specification: ☐ YES

Free chlorine present: ☐ YES ☐ NO

If sample preservation is outside acceptable tolerance, Project Manager was notified (____PM)

Date: Time: ☐ see pH adjustment form

VOLATILE SAMPLES FILLED COMPLETELY, IF NOT, LIST ID AND HEADSPACE OF VOAs CONTAINING BUBBLES EXCEEDING 6MM IN DIAMETER:

Sample ID	mm Headspace

Sample ID	mm Headspace

4.0 CONDITION OF BOTTLES/CONTAINERS **VERIFIED BY:** _____

Samples received match COC:	☑ YES ☐ NO	Bottles received intact:	☑ YES ☐ NO
See additional discrepancies/comments section:	☐ YES ☑ NO	Samples received from USDA restricted area:	☐ YES ☑ NO
Chain-of-Custody form properly maintained:	☑ YES ☐ NO	VOA trip blanks included:	☐ YES ☐ NO ☑ N/A

5.0 ADDITIONAL DISCREPANCIES

Appears on COC		Appears on Label		
Sample ID	**Date/Time**	**Sample ID**	**Date/Time**	**Comments**

6.0 SHIPPING DOCUMENTATION:

Air/freight bill is available and attached to COC: ☑ YES ☐ NO Air bill #: _____

Hand-delivered Carrier: _____ Date: _____ Time: _____

7.0 OTHER COMMENTS:

_____

_____

_____

_____

_____

_____

CORRECTIVE ACTION:

Client's Name: _____ Informed verbally on: _____ By: _____

Client's Name: _____ Informed verbally on: _____ By: _____

Sample(s) processed "as is" comments: _____

_____

Samples(s) on hold until: _____ If released, notify: _____

REVIEW:

Project Management: CMB Date: 5-11-04

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE

SEVERN TRENT **STL**

CHAIN-OF-CUSTODY ADDENDUM

I4D230189
Lot No: ID230189

RECEIVED BY: _____

COC NUMBER: _____

DATE/TIME RECEIVED: 4-23-04 0900

QUOTE/PROFILE: 56072

UNPACKED DATE/TIME: 4-23-04 1050

CLIENT/PROJECT: Maxim

SAMPLES LOGGED IN: LOG-IN REVIEWED:

Number of Shipping Containers Received with Chain of Custody 2

CC

JM

VOC AIR / FILTER SAMPLES ☐ YES **SEE SECTIONS 1.0, 2.0, & 6.0**

1.0 CONTAINERS EXAMINED UPON RECEIPT: CC

Container Sealed: ☑ YES ☐ NO — Custody Seal Signed/Dated: ☐ YES ☑ NO

Custody Seal Present: ☑ YES ☐ NO — Containers checked for radioactivity: ☐ YES ☐ NO ☑ N/A

If seal not intact or Geiger counter reading >0.5 mR/hr, list air bill number of that container(s): _____

2.0 VOC CANISTERS EXAMINED UPON RECEIPT: _____

Canister Valves Closed: ☐ YES ☐ NO — Samples Received Match Chain: ☐ YES ☐ NO

Canister Valves Capped: ☐ YES ☐ NO — See Additional Comments (Section 5.0 and / or 7.0) ☐ YES ☐ NO

Packing Material Used: (circle) — Chain-of-Custody form properly maintained: ☐ YES ☐ NO

None / Absorbent / Paper / Bubble Wrap — Can Size: ☐ 6L ☐ 15L Other _____

3.0 SAMPLE TEMPERATURE UPON RECEIPT: CC **IR THERMOMETER #:** P5

The temperature of the container(s) is: *[acceptable tolerance 4°C ± 2°; (NC, WI: 1-4.4°C)]*

4°C	4°C									

If temperature is outside acceptable tolerance, Project Manager was notified (_____PM). Date: _____ Time: _____

Samples received do not require cooling _____ — OK to analyze samples: ☑ YES ☐ NO

PRESERVATION OF SAMPLES REQUIRED: ☐ NA ☑ YES **VERIFIED BY:** CC

Base samples are>pH 12: ☐ YES ☐ NO — Acid preserved are<pH 2: ☑ YES ☐ NO

Cyanide samples checked for sulfides: ☐ YES — Sulfide samples appear to be preserved with zinc acetate: ☐ YES ☐ NO

Samples checked for chlorine per specification: ☐ YES — Free chlorine present: ☐ YES ☐ NO

If sample preservation is outside acceptable tolerance, Project Manager was notified (_____PM)

Date: _____ Time: _____ ☐ see pH adjustment form

VOLATILE SAMPLES FILLED COMPLETELY, IF NOT, LIST ID AND HEADSPACE OF VOAs CONTAINING BUBBLES EXCEEDING 6MM IN DIAMETER:

Sample ID	mm Headspace

Sample ID	mm Headspace

4.0 CONDITION OF BOTTLES/CONTAINERS **VERIFIED BY:** _____

Samples received match COC:	☑ YES ☐ NO	Bottles received intact:	☐ YES ☑ NO
See additional discrepancies/comments section:	☐ YES ☑ NO	Samples received from USDA restricted area:	☐ YES ☑ NO
Chain-of-Custody form properly maintained:	☑ YES ☐ NO	VOA trip blanks included: 4 x 10 ml	☑ YES ☐ NO ☐ N/A

5.0 ADDITIONAL DISCREPANCIES

Appears on COC		Appears on Label		
Sample ID	**Date/Time**	**Sample ID**	**Date/Time**	**Comments**

6.0 SHIPPING DOCUMENTATION:

Air/freight bill is available and attached to COC: ☑ YES ☐ NO Air bill #: _____

Hand-delivered Carrier: _____ Date: _____ Time: _____

7.0 OTHER COMMENTS:

Received SUE-1 1X1L Broken; log for DRO, he will resample for 8270.

Make split from filtered metals HNO3 poly to send ~~+20~~ 125 mls to St. Louis for Diss. Metals cmb 4-23-04

Label unfiltered HNO3 poly for Total Hg.

CORRECTIVE ACTION:

Client's Name: G. Pope Informed verbally on: 4-23-04 By: CmB

Client's Name: _____ Informed verbally on: _____ By: _____

Sample(s) processed "as is" comments: _____

Samples(s) on hold until: _____ If released, notify: _____

REVIEW:

Project Management: CmB Date: 4-23-04

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE

C3

Chain of Custody Record

IW230189
IW230189
CHAIN OF CUSTODY NUMBER

$0010948-001

SEVERN TRENT **STL**
Severn Trent Laboratories, Inc.

023625

STL4149 (1202)

Client	Project Manager	Date
Maxim Technologies	Greg Pope	04/12/2004
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Location**
1703 W Industrial Ave	(432) 686-8081 / (000)	STL Austin
City / **State** / **Zip Code**	**Site Contact**	
Midland / TX / 79701	Greg Pope	
Project Number/Name	**Carrier/Waybill Number**	
3374 Line NM1-1 Remediation		

Contract/Purchase Order/Quote Number

CONTRACT / PURCHASE ORDER # : 3374MAX005 QUOTE: 56072

Page 1 of 4

Sample I.D. Number and Description	Date	Time	Sample Type	Containers: Volume	Containers: Type	Containers: No.	Preservative	Condition on Receipt/Comments	Analysis: GC 8021 BTEX	TPH GRO	TPH 8270 DRO	MS 8270C	ICL	TDS	ICP ICL	WQCC METALS	MERCURY	URANIUM
IW-2	4/20/04	1015	WATER	1L	AMBER	6	None	YC 4-23-04 CC			X	X	/					
IW-2		1015	WATER	40mL	VIAL	4	1:1 HCL	SEE ADD	X	X			/					
IW-2		1015	WATER	250mL	PLASTIC	1	None						X	X	X			
IW-2		1015	WATER	250mL	PLASTIC	2	Conc HNO3									X	X	X
SVE-1		1115	WATER	1L	AMBER	2	None	1x16 Broken			X	X						
SVE-1		1115	WATER	40mL	VIAL	4	1:1 HCL		X	X								
SVE-1		1115	WATER	250mL	PLASTIC	1	None						X	X	X			
SVE-1	4/20/04	1115	WATER	250mL	PLASTIC	2	Conc HNO3									X	X	X
			~~WATER~~	~~1L~~	~~AMBER~~	2	None				X	X						
			~~WATER~~	~~40mL~~	~~VIAL~~	4	1:1 HCL		X	X								
			~~WATER~~	~~250mL~~	~~PLASTIC~~	1	None						X	X	X			
			~~WATER~~	~~250mL~~	~~PLASTIC~~	2	Conc HNO3									X	X	X
TRIP BLANK 1	4/22/04	1130	WATER	40mL	VIAL	2	1:1 HCl		X	X								

Special Instructions: 8021 BTEX, 8270 PAH, 6010B 16 WQCC metals;Uranium by STL St Louis lab

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☑ Normal ☐ Rush ☐ Other ____

QC Level: ☑ I. ☐ II. ☐ III.

Project Specific Requirements (Specify): Hg (TOTAL) ONLY ON UNFILTERED POLY - GWP

	Date	Time
1. Relinquished By: Bill Dent	4/13/04	1030
2. Relinquished By:	4/22/04	1145
3. Relinquished By:		
1. Received By:	4/15/04	1130
2. Received By:	4-23-04	0800
3. Received By:		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

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Chain of Custody Record

CHAIN OF CUSTODY NUMBER
$@010948-002

SEVERN TRENT STL
Severn Trent Laboratories, Inc.

023626

STL4149 (1202)

Client	Project Manager	Date
Maxim Technologies	Greg Pope	04/12/2004
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Location**
1703 W Industrial Ave	(432) 686-8081 / (000)	STL Austin
City / **State** / **Zip Code**	**Site Contact**	
Midland / TX / 79701	Greg Pope	
Project Number/Name	**Carrier/Waybill Number**	
3374 Line NM1-1 Remediation		
Contract/Purchase Order/Quote Number		
CONTRACT / PURCHASE ORDER # : 3374MAX005	QUOTE: 56072	

Page 2 of 4

Sample I.D. Number and Description	Date	Time	Sample Type	Containers: Volume	Containers: Type	Containers: No.	Preservative	Condition on Receipt/Comments	Analysis: GC8021/L	TPH/GRO	TPHS/DRO	MS8270CL/L	ICCL/L	TDS	ICF/L	WQCMETS	MERCURY	URANIUM
IW-3	4/20/04	1200	WATER	1L	AMBER	2	None	4° 4-23-03 CC			X	X						
IW-3		1200	WATER	40mL	VIAL	4	1:1 HCL		X	X								
IW-3		1200	WATER	250mL	PLASTIC	1	None						X	X	X			
IW-3		1200	WATER	250mL	PLASTIC	2	Conc HNO3									X	X	X
IW-4		1345	WATER	1L	AMBER	2	None				X	X						
IW-4		1345	WATER	40mL	VIAL	4	1:1 HCL		X	X								
IW-4		1345	WATER	250mL	PLASTIC	1	None						X	X	X			
IW-4		1345	WATER	250mL	PLASTIC	2	Conc HNO3									X	X	X
IW-5		1430	WATER	1L	AMBER	2	None				X	X						
IW-5		1430	WATER	40mL	VIAL	4	1:1 HCL		X	X								
IW-5		1430	WATER	250mL	PLASTIC	1	None						X	X	X			
IW-5	4/20/04	1430	WATER	250mL	PLASTIC	2	Conc HNO3									X	X	X

Special Instructions: 8021 BTEX, 8270 PAH, 6010B 16 WQCC metals;Uranium by STL ST Louis lab

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☑ Normal ☐ Rush ☐ Other _____

QC Level: ☑ I. ☐ II. ☐ III.

Project Specific Requirements (Specify): Hg (TOTAL) ONLY FROM UNFILTERED POLY

	Relinquished By	Date	Time	Received By	Date	Time
1.	Bill [illegible]	4/13/04	1030	[illegible]	4/15/04	1130
2.	[illegible]	4/22/04	1200	[illegible]	4-23-04	0800
3.						

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

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C3

Chain of Custody Record

CHAIN OF CUSTODY NUMBER
$$010948-004

SEVERN TRENT STL
Severn Trent Laboratories, Inc.

023628

STL4149 (1202)

Client	Project Manager	Date
Maxim Technologies	Greg Pope	04/12/2004
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Location**
1703 W Industrial Ave	(432) 686-8081 / (000)	STL Austin
City / **State** / **Zip Code**	**Site Contact**	
Midland / TX / 79701	Greg Pope	
Project Number/Name	**Carrier/Waybill Number**	
3374 Line NM1-1 Remediation		
Contract/Purchase Order/Quote Number		
CONTRACT / PURCHASE ORDER # : 3374MAX005	QUOTE: 56072	

Page 1 of 1

Sample I.D. Number and Description	Date	Time	Sample Type	Containers: Volume	Containers: Type	Containers: No.	Preservative	Condition on Receipt/Comments	Analysis: GC 8021 BTEX	TPH GRO	TPH 8270 PAH	MS 8270C	ICCL	TDS	ICPL	WQCC METALS	MERCURY	URANIUM
IW-7	4/20/04	1530	WATER	1L	AMBER	2	None	4°c 4-23-04 cc			X	X						
IW-7		1530	WATER	40mL	VIAL	4	1:1 HCL		X	X								
IW-7		1530	WATER	250mL	PLASTIC	1	None						X	X	X			
IW-7		1530	WATER	250mL	PLASTIC	2	Conc HNO3									X	X	X
IW-7D		1545	WATER	1L	AMBER	2	None				X	X						
IW-7D		1545	WATER	40mL	VIAL	4	1:1 HCL		X	X								
IW-7D		1545	WATER	250mL	PLASTIC	1	None						X	X	X			
IW-7D	4/20/04	1545	WATER	250mL	PLASTIC	2	Conc HNO3									X	X	X
~~—~~			~~WATER~~	~~1L~~	~~AMBER~~	~~2~~	~~None~~				~~X~~	~~X~~						
~~—~~			~~WATER~~	~~40mL~~	~~VIAL~~	~~4~~	~~1:1 HCL~~		~~X~~	~~X~~								
~~—~~			~~WATER~~	~~250mL~~	~~PLASTIC~~	~~1~~	~~None~~						~~X~~	~~X~~	~~X~~			
~~—~~			~~WATER~~	~~250mL~~	~~PLASTIC~~	~~2~~	~~Conc HNO3~~									~~X~~	~~X~~	~~X~~
TRIP BLANK 2	4/22/04	1200	WATER	40mL	VIAL	4	1:1 HCL		X	X								

Special Instructions: 8021 BTEX, 8270 PAH, 6010B 16 WQCC metals;Uranium by STL ST Louis lab

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☑ Normal ☐ Rush ☐ Other _____

QC Level: ☑ I. ☐ II. ☐ III.

Project Specific Requirements (Specify): Hg (TOTAL) ONLY FROM UNFILTERED POLY

	Relinquished By	Date	Time	Received By	Date	Time
1.	Bill Dealin	4/13/04	1030		4/15/04	1130
2.		4/22/04	1200		4-23-04	0800
3.						

Comments

DISTRIBUTION: WHITE - Stays with the Sample: CANARY - Returned to Client with Report: PINK - Field Copy

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I4D23018

Chain of Custody Record

SEVERN TRENT **STL**

Severn Trent Laboratories, Inc.

027379

STL4149 (1202)

Client: MAXIM TECHNOLOGIES	Project Manager: GREG POPE	Date: 4/27/04	Page 1 of 1
Address: 1703. W. INDUSTRIAL	Telephone Number (Area Code)/Fax Number: (432) 686-8081 / 686-8085	Lab Location: STL-AUSTIN	Analysis
City: MIDLAND; State: TX; Zip Code: 79701	Site Contact: GREG POPE		
Project Number/Name: 3374 LINE NM1-1 REMEDIATION	Carrier/Waybill Number:		
Contract/Purchase Order/Quote Number: 3374MAX005			

Sample I.D. Number and Description	Date	Time	Sample Type	Containers: Volume	Containers: Type	Containers: No.	Preservative	Condition on Receipt/Comments	8270 - PAH
SVE-1	4/27/04	1500	WATER	1L	AMBER	2	NONE	4°C 4/28/04 (W) Good	X

Special Instructions:

Possible Hazard Identification: [x] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [x] Disposal By Lab [ ] Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: [x] Normal [ ] Rush [ ] Other _____

QC Level: [x] I. [ ] II. [ ] III.

Project Specific Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By	4/27/04	1530	1. Received By	4/28/04	0900
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments:

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

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SEVERN TRENT STL

STL Austin • 14046 Summit Drive, Austin, TX 78728 • Tel 512 244 0855 • Fax 512 244 0160 • www.stl-inc.com

Certificate of Analysis

ANALYTICAL REPORT

PROJECT NO. HOBBS, NM O&M

3374 Line NM1-1 Remediation

Lot #: I4G230289

Greg Pope

Maxim Technologies
1703 W Industrial Ave
Midland, TX 79701

SEVERN TRENT LABORATORIES, INC.

Carla M. Butler
Project Manager

August 12, 2004

American Council of Independent Laboratories
International Association of Environmental Testing Laboratories

.Case Narrative

STL LOT NUMBER: **I4G230289**

This report contains the analytical results for the nine samples received under chain of custody by Severn Trent Laboratories (STL) on July 23, 2004. These samples are associated with your **3374** Line NM1-1 Remediation project.

All samples were received in good condition and within temperature requirements.

Surrogate recoveries for the DRO analysis of samples 006, 007, and 008 were outside limits due to matrix interference. All other calibration and QC criteria were met.

All applicable quality control procedures met method-specified acceptance criteria except where noted in the case narrative or flagged on the result pages.

If you have any questions, please feel free to call me at (512) 244-0855.

EXECUTIVE SUMMARY - Detection Highlights

I4G230289

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SVE-1 07/21/04 08:55 001				
Diesel Range Organics	0.059	0.048	mg/L	SW846 8015B
Chloride	103	20.0	mg/L	MCAWW 300.0A
IW-2 07/21/04 09:30 002				
Chloride	121	20.0	mg/L	MCAWW 300.0A
IW-3 07/21/04 10:15 003				
Diesel Range Organics	0.061	0.048	mg/L	SW846 8015B
Chloride	148	20.0	mg/L	MCAWW 300.0A
IW-4 07/21/04 12:55 004				
Chloride	125	20.0	mg/L	MCAWW 300.0A
IW-5 07/21/04 13:30 006				
Diesel Range Organics	2.7	0.048	mg/L	SW846 8015B
Chloride	138	20.0	mg/L	MCAWW 300.0A
IW-7 07/21/04 14:30 007				
Diesel Range Organics	18	0.048	mg/L	SW846 8015B
Chloride	142	20.0	mg/L	MCAWW 300.0A
IW-7D 07/21/04 14:40 008				
Diesel Range Organics	6.8	0.095	mg/L	SW846 8015B
Chloride	139	20.0	mg/L	MCAWW 300.0A

PREPARATION METHODS SUMMARY

I4G230289

PREPARATION DESCRIPTION	PREPARATION METHOD	ANALYTICAL METHOD
Chloride	MCAWW 300.0A	MCAWW 300.0A
Continuous Liquid-Liquid Extraction	SW846 3520	SW846 8015B
Purge and trap	SW846 5030B	SW846 8021B
PURGE AND TRAP	SW846 5030	SW846 8015B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

I4G230289

ANALYTICAL METHOD	ANALYST	ANALYST ID
MCAWW 300.0A	David A. Tocher	800002
SW846 8015B	Beth Driskill	008945
SW846 8015B	Scott Leslie	401008
SW846 8021B	Beth Driskill	008945

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

I4G230289

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
GLPPF	001	SVE-1	07/21/04	08:55
GLPP1	002	IW-2	07/21/04	09:30
GLPP2	003	IW-3	07/21/04	10:15
GLPP6	004	IW-4	07/21/04	12:55
GLPQE	005	TRIP BLANK 1	07/22/04	14:30
GLPQ1	006	IW-5	07/21/04	13:30
GLPQ4	007	IW-7	07/21/04	14:30
GLPQ6	008	IW-7D	07/21/04	14:40
GLPQ7	009	TTRIP BLANK 2	07/22/04	14:50

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

QC DATA ASSOCIATION SUMMARY

I4G230289

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	MCAWW 300.0A		4209176	4209107
	WATER	SW846 8015B		4210642	4210368
	WATER	SW846 8015B		4210098	4210059
	WATER	SW846 8021B		4210097	4210058
002	WATER	MCAWW 300.0A		4209176	4209107
	WATER	SW846 8015B		4210642	4210368
	WATER	SW846 8015B		4210098	4210059
	WATER	SW846 8021B		4210097	4210058
003	WATER	MCAWW 300.0A		4209176	4209107
	WATER	SW846 8015B		4210642	4210368
	WATER	SW846 8015B		4210098	4210059
	WATER	SW846 8021B		4210097	4210058
004	WATER	MCAWW 300.0A		4209176	4209107
	WATER	SW846 8015B		4210642	4210368
	WATER	SW846 8015B		4210098	4210059
	WATER	SW846 8021B		4210097	4210058
005	WATER	SW846 8015B		4210098	4210059
	WATER	SW846 8021B		4210097	4210058
006	WATER	MCAWW 300.0A		4209176	4209107
	WATER	SW846 8015B		4210642	4210368
	WATER	SW846 8015B		4210098	4210059
	WATER	SW846 8021B		4210097	4210058
007	WATER	MCAWW 300.0A		4209176	4209107
	WATER	SW846 8015B		4210642	4210368
	WATER	SW846 8015B		4210098	4210059
	WATER	SW846 8021B		4210097	4210058
008	WATER	MCAWW 300.0A		4209176	4209107
	WATER	SW846 8015B		4210642	4210368
	WATER	SW846 8015B		4210098	4210059
	WATER	SW846 8021B		4210097	4210058
009	WATER	SW846 8015B		4210098	4210059
	WATER	SW846 8021B		4210097	4210058

CONOCOPHILLIPS

Client Sample ID: SVE-1

GC Volatiles

Lot-Sample #...: I4G230289-001 **Work Order #...:** GLPPF1AA **Matrix.....:** WATER
Date Sampled...: 07/21/04 08:55 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/27/04 **Analysis Date..:** 07/27/04
Prep Batch #...: 4210098 **Analysis Time..:** 12:16
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	85	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: SVE-1

GC Volatiles

Lot-Sample #...: I4G230289-001 **Work Order #...:** GLPPF1AD **Matrix.....:** WATER
Date Sampled...: 07/21/04 08:55 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/27/04 **Analysis Date..:** 07/27/04
Prep Batch #...: 4210097 **Analysis Time..:** 12:16
Dilution Factor: 1

Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	99	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	98	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: SVE-1

GC Semivolatiles

Lot-Sample #...: I4G230289-001 **Work Order #...:** GLPPF1AC **Matrix.....:** WATER
Date Sampled...: 07/21/04 08:55 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/28/04 **Analysis Date..:** 07/30/04
Prep Batch #...: 4210642 **Analysis Time..:** 16:31
Dilution Factor: 0.95
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	**0.059**	**0.048**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	102	(41 - 143)
Dotriacontane	138	(12 - 153)

CONOCOPHILLIPS

Client Sample ID: SVE-1

General Chemistry

Lot-Sample #...: I4G230289-001 Work Order #...: GLPPF Matrix.....: WATER
Date Sampled...: 07/21/04 08:55 Date Received..: 07/23/04 09:30

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	103	20.0	mg/L	MCAWW 300.0A	07/27/04	4209176

Dilution Factor: 20 Analysis Time..: 08:44

CONOCOPHILLIPS

Client Sample ID: IW-2

GC Volatiles

Lot-Sample #...: I4G230289-002 **Work Order #...:** GLPP11AA **Matrix.....:** WATER
Date Sampled...: 07/21/04 09:30 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/27/04 **Analysis Date..:** 07/27/04
Prep Batch #...: 4210098 **Analysis Time..:** 12:43
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	84	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: IW-2

GC Volatiles

Lot-Sample #...: I4G230289-002 **Work Order #...:** GLPP11AD **Matrix.....:** WATER
Date Sampled...: 07/21/04 09:30 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/27/04 **Analysis Date..:** 07/27/04
Prep Batch #...: 4210097 **Analysis Time..:** 12:43
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	99	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	98	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: IW-2

GC Semivolatiles

Lot-Sample #...: I4G230289-002 **Work Order #...:** GLPP11AC **Matrix.....:** WATER
Date Sampled...: 07/21/04 09:30 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/28/04 **Analysis Date..:** 07/30/04
Prep Batch #...: 4210642 **Analysis Time..:** 18:38
Dilution Factor: 0.95
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	ND	0.048	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	111	(41 - 143)
Dotriacontane	133	(12 - 153)

CONOCOPHILLIPS

Client Sample ID: IW-2

General Chemistry

Lot-Sample #...: I4G230289-002 **Work Order #...:** GLPP1 **Matrix.....:** WATER
Date Sampled...: 07/21/04 09:30 **Date Received..:** 07/23/04 09:30

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	121	20.0	mg/L	MCAWW 300.0A	07/27/04	4209176

Dilution Factor: 20 Analysis Time..: 09:24

CONOCOPHILLIPS

Client Sample ID: IW-3

GC Volatiles

Lot-Sample #...: I4G230289-003 **Work Order #...:** GLPP21AA **Matrix.....:** WATER
Date Sampled...: 07/21/04 10:15 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/27/04 **Analysis Date..:** 07/27/04
Prep Batch #...: 4210098 **Analysis Time..:** 13:11
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	85	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: IW-3

GC Volatiles

Lot-Sample #...: I4G230289-003 **Work Order #...:** GLPP21AD **Matrix.....:** WATER
Date Sampled...: 07/21/04 10:15 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/27/04 **Analysis Date..:** 07/27/04
Prep Batch #...: 4210097 **Analysis Time..:** 13:11
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	98	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	97	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: IW-3

GC Semivolatiles

Lot-Sample #...: I4G230289-003 **Work Order #...:** GLPP21AC **Matrix.....:** WATER
Date Sampled...: 07/21/04 10:15 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/28/04 **Analysis Date..:** 07/30/04
Prep Batch #...: 4210642 **Analysis Time..:** 19:20
Dilution Factor: 0.95
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	**0.061**	**0.048**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	113	(41 - 143)
Dotriacontane	141	(12 - 153)

CONOCOPHILLIPS

Client Sample ID: IW-3

General Chemistry

Lot-Sample #...: I4G230289-003 **Work Order #...:** GLPP2 **Matrix.....:** WATER
Date Sampled...: 07/21/04 10:15 **Date Received..:** 07/23/04 09:30

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	148	20.0	mg/L	MCAWW 300.0A	07/27/04	4209176

Dilution Factor: 20 Analysis Time..: 09:37

CONOCOPHILLIPS

Client Sample ID: IW-4

GC Volatiles

Lot-Sample #...: I4G230289-004 **Work Order #...:** GLPP61AA **Matrix.....:** WATER
Date Sampled...: 07/21/04 12:55 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/27/04 **Analysis Date..:** 07/27/04
Prep Batch #...: 4210098 **Analysis Time..:** 13:39
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	85	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: IW-4

GC Volatiles

Lot-Sample #...: I4G230289-004 **Work Order #...:** GLPP61AD **Matrix.....:** WATER
Date Sampled...: 07/21/04 12:55 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/27/04 **Analysis Date..:** 07/27/04
Prep Batch #...: 4210097 **Analysis Time..:** 13:39
Dilution Factor: 1

Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	99	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	99	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: IW-4

GC Semivolatiles

Lot-Sample #...: I4G230289-004 **Work Order #...:** GLPP61AC **Matrix.....:** WATER
Date Sampled...: 07/21/04 12:55 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/28/04 **Analysis Date..:** 07/30/04
Prep Batch #...: 4210642 **Analysis Time..:** 20:02
Dilution Factor: 0.95
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	ND	0.048	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	99	(41 - 143)
Dotriacontane	106	(12 - 153)

CONOCOPHILLIPS

Client Sample ID: IW-4

General Chemistry

Lot-Sample #...: I4G230289-004 **Work Order #...:** GLPP6 **Matrix.....:** WATER
Date Sampled...: 07/21/04 12:55 **Date Received..:** 07/23/04 09:30

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	125	20.0	mg/L	MCAWW 300.0A	07/27/04	4209176

Dilution Factor: 20 Analysis Time..: 09:50

CONOCOPHILLIPS

Client Sample ID: TRIP BLANK 1

GC Volatiles

Lot-Sample #...: I4G230289-005 **Work Order #...:** GLPQE1AA **Matrix.....:** WATER
Date Sampled...: 07/22/04 14:30 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/27/04 **Analysis Date..:** 07/27/04
Prep Batch #...: 4210098 **Analysis Time..:** 11:20
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	84	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: TRIP BLANK 1

GC Volatiles

Lot-Sample #...: I4G230289-005 **Work Order #...:** GLPQE1AC **Matrix.....:** WATER
Date Sampled...: 07/22/04 14:30 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/27/04 **Analysis Date..:** 07/27/04
Prep Batch #...: 4210097 **Analysis Time..:** 11:20
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	97	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	95	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: IW-5

GC Volatiles

Lot-Sample #...: I4G230289-006 **Work Order #...:** GLPQ11AA **Matrix.....:** WATER
Date Sampled...: 07/21/04 13:30 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/27/04 **Analysis Date..:** 07/27/04
Prep Batch #...: 4210098 **Analysis Time..:** 14:07
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	84	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: IW-5

GC Volatiles

Lot-Sample #...: I4G230289-006 **Work Order #...:** GLPQ11AD **Matrix.....:** WATER
Date Sampled...: 07/21/04 13:30 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/27/04 **Analysis Date..:** 07/27/04
Prep Batch #...: 4210097 **Analysis Time..:** 14:07
Dilution Factor: 1

Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	99	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	100	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: IW-5

GC Semivolatiles

Lot-Sample #...: I4G230289-006 Work Order #...: GLPQ11AC Matrix.....: WATER
Date Sampled...: 07/21/04 13:30 Date Received..: 07/23/04 09:30
Prep Date.....: 07/28/04 Analysis Date..: 07/30/04
Prep Batch #...: 4210642 Analysis Time..: 20:44
Dilution Factor: 0.95
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	2.7	0.048	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	175 *	(41 - 143)
Dotriacontane	191 *	(12 - 153)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CONOCOPHILLIPS

Client Sample ID: IW-5

General Chemistry

Lot-Sample #...: I4G230289-006 **Work Order #...:** GLPQ1 **Matrix.....:** WATER
Date Sampled...: 07/21/04 13:30 **Date Received..:** 07/23/04 09:30

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	138	20.0	mg/L	MCAWW 300.0A	07/27/04	4209176

Dilution Factor: 20 Analysis Time..: 10:03

CONOCOPHILLIPS

Client Sample ID: IW-7

GC Volatiles

Lot-Sample #...: I4G230289-007 **Work Order #...:** GLPQ41AA **Matrix.....:** WATER
Date Sampled...: 07/21/04 14:30 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/27/04 **Analysis Date..:** 07/27/04
Prep Batch #...: 4210098 **Analysis Time..:** 21:16
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	84	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: IW-7

GC Volatiles

Lot-Sample #...: I4G230289-007 Work Order #...: GLPQ41AD Matrix.....: WATER
Date Sampled...: 07/21/04 14:30 Date Received..: 07/23/04 09:30
Prep Date.....: 07/27/04 Analysis Date..: 07/27/04
Prep Batch #...: 4210097 Analysis Time..: 21:16
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	98	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	103	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: IW-7

GC Semivolatiles

Lot-Sample #...: I4G230289-007	**Work Order #...:** GLPQ41AC	**Matrix.....:** WATER	
Date Sampled...: 07/21/04 14:30	**Date Received..:** 07/23/04 09:30		
Prep Date.....: 07/28/04	**Analysis Date..:** 07/30/04		
Prep Batch #...: 4210642	**Analysis Time..:** 21:25		
Dilution Factor: 0.95			
	Method.....: SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	**18**	**0.048**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	446 *	(41 - 143)
Dotriacontane	476 *	(12 - 153)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CONOCOPHILLIPS

Client Sample ID: IW-7

General Chemistry

Lot-Sample #...: I4G230289-007 **Work Order #...:** GLPQ4 **Matrix.....:** WATER
Date Sampled...: 07/21/04 14:30 **Date Received..:** 07/23/04 09:30

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	142	20.0	mg/L	MCAWW 300.0A	07/27/04	4209176

Dilution Factor: 20 Analysis Time..: 10:16

CONOCOPHILLIPS

Client Sample ID: IW-7D

GC Volatiles

Lot-Sample #...: I4G230289-008 **Work Order #...:** GLPQ61AA **Matrix.....:** WATER
Date Sampled...: 07/21/04 14:40 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/27/04 **Analysis Date..:** 07/27/04
Prep Batch #...: 4210098 **Analysis Time..:** 16:31
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	84	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: IW-7D

GC Volatiles

Lot-Sample #...: I4G230289-008 **Work Order #...:** GLPQ61AD **Matrix.....:** WATER
Date Sampled...: 07/21/04 14:40 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/27/04 **Analysis Date..:** 07/27/04
Prep Batch #...: 4210097 **Analysis Time..:** 16:31
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	98	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	100	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: IW-7D

GC Semivolatiles

Lot-Sample #...: I4G230289-008 **Work Order #...:** GLPQ61AC **Matrix.....:** WATER
Date Sampled...: 07/21/04 14:40 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/28/04 **Analysis Date..:** 08/03/04
Prep Batch #...: 4210642 **Analysis Time..:** 10:58
Dilution Factor: 1.9
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	**6.8**	**0.095**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	279 *	(41 - 143)
Dotriacontane	252 *	(12 - 153)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CONOCOPHILLIPS

Client Sample ID: IW-7D

General Chemistry

Lot-Sample #...: I4G230289-008 **Work Order #...:** GLPQ6 **Matrix.....:** WATER
Date Sampled...: 07/21/04 14:40 **Date Received..:** 07/23/04 09:30

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	139	20.0	mg/L	MCAWW 300.0A	07/27/04	4209176

Dilution Factor: 20 Analysis Time..: 10:56

CONOCOPHILLIPS

Client Sample ID: TTRIP BLANK 2

GC Volatiles

Lot-Sample #...: I4G230289-009 **Work Order #...:** GLPQ71AA **Matrix.....:** WATER
Date Sampled...: 07/22/04 14:50 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/27/04 **Analysis Date..:** 07/27/04
Prep Batch #...: 4210098 **Analysis Time..:** 11:48
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	85	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: TTRIP BLANK 2

GC Volatiles

Lot-Sample #...: I4G230289-009 **Work Order #...:** GLPQ71AC **Matrix.....:** WATER
Date Sampled...: 07/22/04 14:50 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/27/04 **Analysis Date..:** 07/27/04
Prep Batch #...: 4210097 **Analysis Time..:** 11:48
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	97	(73 - 135)

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: I4G230289 **Work Order #...:** GL1C21AA **Matrix.....:** WATER
MB Lot-Sample #: I4G280000-098

Prep Date.....: 07/27/04 **Analysis Time..:** 10:41
Analysis Date..: 07/27/04 **Prep Batch #...:** 4210098
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Gasoline Range Organics	ND	0.10	mg/L	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO	84	(75 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: I4G230289 **Work Order #...:** GL1C11AA **Matrix.....:** WATER
MB Lot-Sample #: I4G280000-097

Prep Date.....: 07/27/04 **Analysis Time..:** 10:41
Analysis Date..: 07/27/04 **Prep Batch #...:** 4210097
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8021B
Ethylbenzene	ND	1.0	ug/L	SW846 8021B
Toluene	ND	1.0	ug/L	SW846 8021B
Xylenes (total)	ND	3.0	ug/L	SW846 8021B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	97	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	95	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: I4G230289 **Work Order #...:** GL3J81AA **Matrix.....:** WATER
MB Lot-Sample #: I4G280000-642

Prep Date.....: 07/28/04 **Analysis Time..:** 14:24
Analysis Date..: 07/30/04 **Prep Batch #...:** 4210642
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Diesel Range Organics	ND	0.050	mg/L	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	107	(41 - 143)
Dotriacontane	124	(12 - 153)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: I4G230289 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: GLW2A1AA		MB Lot-Sample #:	I4G270000-176	
	ND	1.0	mg/L	MCAWW 300.0A	07/27/04	4209176
		Dilution Factor: 1				
		Analysis Time..: 08:18				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4G230289 **Work Order #...:** GL1C21AC **Matrix.....:** WATER
LCS Lot-Sample#: I4G280000-098
Prep Date.....: 07/27/04 **Analysis Date..:** 07/27/04
Prep Batch #...: 4210098 **Analysis Time..:** 10:01
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Gasoline Range Organics	**96**	**(85 - 115)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO	90	(81 - 123)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4G230289 **Work Order #...:** GL1C11AC **Matrix.....:** WATER
LCS Lot-Sample#: I4G280000-097
Prep Date.....: 07/27/04 **Analysis Date..:** 07/27/04
Prep Batch #...: 4210097 **Analysis Time..:** 08:28
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	**105**	**(85 - 115)**	**SW846 8021B**
Ethylbenzene	**105**	**(85 - 115)**	**SW846 8021B**
Toluene	**101**	**(85 - 115)**	**SW846 8021B**
Xylenes (total)	**106**	**(85 - 115)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(85 - 111)
a,a,a-Trifluorotoluene (TFT)	99	(84 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: I4G230289 **Work Order #...:** GL3J81AC **Matrix.....:** WATER
LCS Lot-Sample#: I4G280000-642
Prep Date.....: 07/28/04 **Analysis Date..:** 07/30/04
Prep Batch #...: 4210642 **Analysis Time..:** 15:06
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Diesel Range Organics	**90**	**(44 - 151)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	113	(41 - 143)
Dotriacontane	132	(12 - 153)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I4G230289 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: GLW2A1AC	LCS Lot-Sample#: I4G270000-176		
	95	(85 - 106)	MCAWW 300.0A	07/27/04	4209176
		Dilution Factor: 1	Analysis Time..: 08:31		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4G230289 **Work Order #...:** GLPP11AF-MS **Matrix.....:** WATER
MS Lot-Sample #: I4G230289-002 GLPP11AG-MSD
Date Sampled...: 07/21/04 09:30 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/27/04 **Analysis Date..:** 07/27/04
Prep Batch #...: 4210098 **Analysis Time..:** 22:40
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Gasoline Range Organics	**95**	**(79 - 124)**			**SW846 8015B**
	95	**(79 - 124)**	**0.23**	**(0-20)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO	86	(75 - 122)
	87	(75 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4G230289 **Work Order #...:** GLPPF1AH-MS **Matrix.....:** WATER
MS Lot-Sample #: I4G230289-001 GLPPF1AJ-MSD
Date Sampled...: 07/21/04 08:55 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/27/04 **Analysis Date..:** 07/27/04
Prep Batch #...: 4210097 **Analysis Time..:** 21:44
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**115**	**(85 - 115)**			**SW846 8021B**
	120 a	**(85 - 115)**	**3.9**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**113**	**(85 - 115)**			**SW846 8021B**
	119 a	**(85 - 115)**	**4.4**	**(0-20)**	**SW846 8021B**
Toluene	**108**	**(85 - 115)**			**SW846 8021B**
	113	**(85 - 115)**	**4.0**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**112**	**(85 - 115)**			**SW846 8021B**
	117 a	**(85 - 115)**	**4.1**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	101	(81 - 119)
	100	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	100	(73 - 135)
	100	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: I4G230289 **Work Order #...:** GLPPF1AK-MS **Matrix.....:** WATER
MS Lot-Sample #: I4G230289-001 GLPPF1AL-MSD
Date Sampled...: 07/21/04 08:55 **Date Received..:** 07/23/04 09:30
Prep Date.....: 07/28/04 **Analysis Date..:** 07/30/04
Prep Batch #...: 4210642 **Analysis Time..:** 17:13
Dilution Factor: 0.95

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Diesel Range Organics	**75**	**(44 - 151)**			**SW846 8015B**
	76	**(44 - 151)**	**1.6**	**(0-20)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	104	(41 - 143)
	104	(41 - 143)
Dotriacontane	131	(12 - 153)
	130	(12 - 153)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I4G230289 **Matrix.....:** WATER
Date Sampled...: 07/21/04 08:55 **Date Received..:** 07/23/04 09:30

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		WO#: GLPPF1AF-MS/GLPPF1AG-MSD				MS Lot-Sample #: I4G230289-001	
	97	(85 - 106)			MCAWW 300.0A	07/27/04	4209176
	99	(85 - 106)	0.98	(0-22)	MCAWW 300.0A	07/27/04	4209176

Dilution Factor: 20
Analysis Time..: 08:57

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Report Attachment

Note that if this report contains tests performed for the following methods, the associated method deviations are applicable.

EPA 410.4, COD: Laboratory uses different analytical wavelength as specified by instrument manufacturer.
EPA 340.2, Fluoride: Preliminary Bellack distillation not performed.
EPA 624: The laboratory uses a different desorb time and purge volume than stated in the method.
EPA 8151A: Laboratory utilizes alternate extraction solvent.
Iowa OA1: Benzene, toluene, ethylbenzene and xylenes (BTEX) are not analyzed along with the Gasoline Range Organics if client does not require BTEX.
EPA TO-12: Samples not analyzed in duplicate.
EPA TO-14A and TO-15: Zero humidified nitrogen is used in place of air for method blanks.

TRRP Reporting Requirements

If this package contains reports requiring TRRP (Texas Risk Reduction Program) reporting criteria, the following information applies.

The REPORTING LIMIT is equivalent to the TRRP acronym MQL (method quantitation limit).
The MDL is equivalent to the TRRP acronym SQL (sample quantitation limit).

SEVERN TRENT **STL**

CHAIN-OF-CUSTODY ADDENDUM

Lot No: I4G230289

RECEIVED BY: LT

COC NUMBER:

DATE/TIME RECEIVED: LT 7-23-04/0930

QUOTE/PROFILE: 56072

UNPACKED DATE/TIME: 7-23-04/1100

CLIENT/PROJECT: Maxim

SAMPLES LOGGED IN: LT

LOG-IN REVIEWED: CC

Number of Shipping Containers Received with Chain of Custody 2

VOC AIR / FILTER SAMPLES ☐ YES **SEE SECTIONS 1.0, 2.0, & 6.0**

1.0 CONTAINERS EXAMINED UPON RECEIPT: LT

Container Sealed: ☑ YES ☐ NO

Custody Seal Signed/Dated: ☑ YES ☐ NO

Custody Seal Present: ☑ YES ☐ NO

Containers checked for radioactivity: ☐ YES ☐ NO ☑ N/A

If seal not intact or Geiger counter reading >0.5 mR/hr, list air bill number of that container(s):

2.0 VOC CANISTERS EXAMINED UPON RECEIPT:

Canister Valves Closed: ☐ YES ☐ NO

Samples Received Match Chain: ☐ YES ☐ NO

Canister Valves Capped: ☐ YES ☐ NO

Other Equipment Received: ☐ YES ☐ NO

Valve Cap Tightened Properly: ☐ YES ☐ NO

See Additional Comments (Section 5.0 and / or 7.0) ☐ YES ☐ NO

Packing Material Used: (circle)

Chain-of-Custody form properly maintained: ☐ YES ☐ NO

None / Absorbent / Paper / Bubble Wrap

Can Size: ☐ 6L ☐ 15L Other

3.0 SAMPLE TEMPERATURE UPON RECEIPT BY: LT **IR THERMOMETER #:** P-5

Temperature of the container(s):

Circle selection: TB = Temp. Blank and/or SC = Sample Container *[acceptable tolerance 4°C ± 2°; (NC, WI: 1-4.4°C)]*

(TB) (SC) 4°	(TB) (SC) 4°	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC

If temperature is outside acceptable tolerance, Project Manager was notified (____PM). Date: Time:

Samples received do not require cooling

OK to analyze samples: ☐ YES ☐ NO

PRESERVATION OF SAMPLES REQUIRED: ☐ NA ☑ YES **VERIFIED BY:** LT

Base samples are>pH 12: ☐ YES ☐ NO

Acid preserved are<pH 2: ☑ YES ☐ NO

Cyanide samples checked for sulfides: ☐ YES

Sulfide samples appear to be preserved with zinc acetate: ☐ YES ☐ NO

Samples checked for chlorine per specification (N.C.) ☐ YES

Free chlorine present: ☐ YES ☐ NO

If sample preservation is outside acceptable tolerance, Project Manager was notified (____PM)

Date: Time: ☐ see pH adjustment form

VOLATILE SAMPLES FILLED COMPLETELY, IF NOT, LIST ID AND HEADSPACE OF VOA's CONTAINING BUBBLES EXCEEDING 6MM IN DIAMETER:

Sample ID	mm Headspace

Sample ID	mm Headspace

4.0 CONDITION OF BOTTLES/CONTAINERS VERIFIED BY: RT

Samples received match COC: ☑ YES ☐ NO Bottles received intact: ☑ YES ☐ NO

See additional discrepancies/comments section: ☑ YES ☐ NO Samples received from USDA restricted area: ☐ YES ☑ NO

Chain-of-Custody form properly maintained: ☑ YES ☐ NO VOA trip blanks included: 4x40mL ☑ YES ☐ NO ☐ N/A

5.0 ADDITIONAL DISCREPANCIES

Appears on COC		Appears on Label		
Sample ID	**Date/Time**	**Sample ID**	**Date/Time**	**Comments**

6.0 SHIPPING DOCUMENTATION:

Air/freight bill is available and attached to COC: ☑ YES ☐ NO Air bill #: _____

Hand-delivered Carrier: _____ Date: _____ Time: _____

7.0 OTHER COMMENTS:

IW-5 1/4L broken

only 1 cooler had custody seal

CORRECTIVE ACTION:

Client's Name: _____ Informed verbally on: _____ By: _____

Client's Name: _____ Informed verbally on: _____ By: _____

Sample(s) processed "as is" comments: _____

Samples(s) on hold until: _____ If released, notify: _____

REVIEW:

Project Management: CMB Date: 8-10-04

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE

hain of Custody ecord

I4G230289

CHAIN OF CUSTODY NUMBER

38025

SEVERN TRENT STL

Severn Trent Laboratories, Inc.

$0011365-001

L4149 (1202)

ient: xim Technologies	Project Manager: Greg Pope	Date: 07/13/2004	Page 1 of 5
ldress: 93 W Industrial Ave	Telephone Number (Area Code)/Fax Number: (432) 686-8081 / (000)	Lab Location: STL Austin	
ty: dland	State: TX	Zip Code: 79701	Site Contact: Greg Pope
oject Number/Name: 74 Line HM1-1 Remediation			Carrier/Waybill Number:
ntract/Purchase Order/Quote Number: NTRACT / PURCHASE ORDER # : 3374MAX006			QUOTE: 56072

Sample I.D. Number and Description	Date	Time	Sample Type	Containers: Volume	Containers: Type	Containers: No.	Preservative	Condition on Receipt/Comments	Analysis: GC 8021	Analysis: TPH DRO	Analysis: TPH GRO	Analysis: ICP Cl	Analysis: TDS	Analysis: TSS	Analysis: ALK	Analysis: MTBE 8021	Analysis: HEADSPACE
SVE-1	7-21-04	855	WATER	1L	AMBER	3	None	4oc/LT/7-23-04 Good			X						
SVE-1		855	WATER	40mL	VIAL	4	1:1 HCL		X	X							
SVE-1		855	WATER	250mL	PLASTIC	1	None					X					
IW-2		930	WATER	1L	AMBER	2	None				X						
IW-2		930	WATER	40mL	VIAL	4	1:1 HCL		X	X							
IW-2		930	WATER	250mL	PLASTIC	1	None					X					
IW-3		1015	WATER	1L	AMBER	2	None				X						
IW-3		1015	WATER	40mL	VIAL	4	1:1 HCL		X	X							
IW-3		1015	WATER	250mL	PLASTIC	1	None					X					
IW-4		1255	WATER	1L	AMBER	2	None				X						
IW-4		1255	WATER	40mL	VIAL	4	1:1 HCL		X	X							
IW-4	7-21-04	1255	WATER	250mL	PLASTIC	1	None					X					
TRIP BLANK 1	7-22-04	1430	WATER	40ML	VIAL	2	HCl		X	X							

ecial Instructions: TPH-GRO & DRO, 8021 BTEX, 6010B Fe + Mg & Ca for hardness

ssible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

rn Around Time Required: ☑ Normal ☐ Rush ☐ Other _____

QC Level: ☑ I. ☐ II. ☐ III.

Project Specific Requirements (Specify)

	Date	Time
Relinquished By: Bill Deal	7/15/04	1400
Relinquished By:	7/22/04	1435
Relinquished By:		

	Date	Time
1. Received By	7/16/04	1030
2. Received By	7-23-04	0930
3. Received By		

mments

TRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

hain of Custody ecord

CHAIN OF CUSTODY NUMBER
$0011364-001

SEVERN TRENT **STL**
Severn Trent Laboratories, Inc.

38030

L4149 (1202)

ient	Project Manager	Date	Page 1 of 5
xim Technologies	Greg Pope	07/13/2004	
idress	Telephone Number (Area Code)/Fax Number	Lab Location	
03 W Industrial Ave	(432) 686-8081 / (000)	STL Austin	
ly / State / Zip Code	Site Contact		Analysis
dland / TX / 79701	Greg Pope		
oject Number/Name	Carrier/Waybill Number		
~~23-8 Hobbs Jet Remediation~~ 3374 NM1-1			
ntract/Purchase Order/Quote Number			
NTRACT / PURCHASE ORDER # : ~~2373NA2001~~ 3374 MAX 006		QUOTE: ~~55401~~ 56072	

Sample I.D. Number and Description	Date	Time	Sample Type	Containers: Volume	Type	No.	Preservative	Condition on Receipt/Comments	GC8021	TPH VIL	TPH DRO	ICCL	DROINOFP	GROINOFP
IW-5	7-21-04	1330	WATER	1L	AMBER	2	None	4°/2T/ 7-23-04			X			
IW-5		1330	WATER	40mL	VIAL	4	1:1 HCL	See COC Add	X	X				
IW-5		1330	WATER	250mL	PLASTIC	1	None					X		
IW-7		1430	WATER	1L	AMBER	2	None				X			
IW-7		1430	WATER	40mL	VIAL	4	1:1 HCL		X	X				
IW-7		1430	WATER	250mL	PLASTIC	1	None					X		
IW-7D		1440	WATER	1L	AMBER	2	None				X			
IW-7D		1440	WATER	40mL	VIAL	4	1:1 HCL		X	X				
IW-7D	7-21-04	1440	WATER	250mL	PLASTIC	1	None					X		
TRIP BLANK 2	7-22-04	1450	WATER	~~40mL~~ 1L	~~AMBER/VIAL~~	2	~~None~~ HCl		X	X	X			
			~~WATER~~	~~40mL~~	~~VIAL~~	~~4~~	~~1:1 HCL~~		X	X				
			~~WATER~~	~~250mL~~	~~PLASTIC~~	~~1~~	~~None~~					X		
			~~WATER~~	~~1L~~	~~AMBER~~	~~2~~	~~None~~				X			
			~~WATER~~	~~40mL~~	~~VIAL~~	~~4~~	~~1:1 HCL~~		X	X				
			~~WATER~~	~~250mL~~	~~PLASTIC~~	~~1~~	~~None~~					X		

ecial Instructions: TPH-GRO & DRO, 8021 BTEX, & Chloride for waters; ~~GC fingerprint for product samples.~~

sible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

m Around Time Required: ☑ Normal ☐ Rush ☐ Other ____

QC Level: ☑ I. ☐ II. ☐ III.

Project Specific Requirements (Specify)

Relinquished By	Date	Time	1. Received By	Date	Time
Bill Hyde	7/15/04	1315		7/16/04	103
Relinquished By	Date	Time	2. Received By	Date	Time
	7/22/04	1455		7-23-04	0930
Relinquished By	Date	Time	3. Received By	Date	Time

mments

TRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

56/56

SEVERN TRENT STL

Certificate of Analysis

STL Austin • 14046 Summit Drive, Austin, TX 78728 • Tel 512 244 0855 • Fax 512 244 0160 • www.stl-inc.com

ANALYTICAL REPORT

PROJECT NO. HOBBS, NM O&M

3374 Line NM1-1 Remediation

Lot #: I4J280208

Greg Pope

Maxim Technologies
1703 W Industrial Ave
Midland, TX 79701

SEVERN TRENT LABORATORIES, INC.

Carla M. Butler
Project Manager

November 17, 2004

American Council of Independent Laboratories
International Association of Environmental Testing Laboratories

Case Narrative

STL LOT NUMBER: **I4J280208**

This report contains the analytical results for the 11 samples received under chain of custody by Severn Trent Laboratories (STL) on October 28, 2004. These samples are associated with your **3374** Line NM1-1 Remediation project.

All samples were received in good condition and within temperature requirements.

All applicable quality control procedures met method-specified acceptance criteria except where noted in the case narrative or flagged on the result pages.

If you have any questions, please feel free to call me at (512) 244-0855.

EXECUTIVE SUMMARY - Detection Highlights

I4J280208

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SVE-1 10/26/04 09:00 001				
Diesel Range Organics	0.099	0.048	mg/L	SW846 8015B
Gasoline Range Organics	0.32	0.10	mg/L	SW846 8015B
Benzene	79	1.0	ug/L	SW846 8021B
Toluene	2.8	1.0	ug/L	SW846 8021B
Chloride	52.7	20.0	mg/L	MCAWW 300.0A
IW-2 10/26/04 09:50 002				
Chloride	146	20.0	mg/L	MCAWW 300.0A
IW-3 10/26/04 10:30 004				
Diesel Range Organics	0.072	0.048	mg/L	SW846 8015B
Chloride	90.2	20.0	mg/L	MCAWW 300.0A
IW-4 10/26/04 11:00 005				
Diesel Range Organics	0.082	0.048	mg/L	SW846 8015B
Chloride	139	20.0	mg/L	MCAWW 300.0A
IW-5 10/26/04 11:30 006				
Diesel Range Organics	2.3	0.048	mg/L	SW846 8015B
Chloride	128	20.0	mg/L	MCAWW 300.0A
MW-13 10/26/04 12:00 009				
Diesel Range Organics	3.0	0.95	mg/L	SW846 8015B
Gasoline Range Organics	1.2	0.10	mg/L	SW846 8015B
Benzene	14	1.0	ug/L	SW846 8021B
Ethylbenzene	300	2.0	ug/L	SW846 8021B
Chloride	120	20.0	mg/L	MCAWW 300.0A
IW-6 10/26/04 14:15 010				
Diesel Range Organics	1.4	0.48	mg/L	SW846 8015B
Chloride	76.6	20.0	mg/L	MCAWW 300.0A
IW-7 10/26/04 14:45 011				
Diesel Range Organics	3.3	0.048	mg/L	SW846 8015B
Chloride	125	20.0	mg/L	MCAWW 300.0A

PREPARATION METHODS SUMMARY

I4J280208

PREPARATION DESCRIPTION	PREPARATION METHOD	ANALYTICAL METHOD
Chloride	MCAWW 300.0A	MCAWW 300.0A
Continuous Liquid-Liquid Extraction	SW846 3520	SW846 8015B
Purge and trap	SW846 5030B	SW846 8021B
PURGE AND TRAP	SW846 5030	SW846 8015B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

I4J280208

ANALYTICAL METHOD	ANALYST	ANALYST ID
MCAWW 300.0A	David A. Tocher	800002
SW846 8015B	Beth Driskill	008945
SW846 8015B	Scott Leslie	401008
SW846 8021B	Beth Driskill	008945
SW846 8021B	Joe Lanham	000039

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

I4J280208

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
GVN9W	001	SVE-1	10/26/04	09:00
GVPAE	002	IW-2	10/26/04	09:50
GVPAK	003	TRIP BLANK 1	10/27/04	14:00
GVPAQ	004	IW-3	10/26/04	10:30
GVPAX	005	IW-4	10/26/04	11:00
GVPA2	006	IW-5	10/26/04	11:30
GVPA4	007	TRIP BLANK 2	10/27/04	14:10
GVPA5	008	TRIP BLANK 3	10/27/04	14:20
GVPCA	009	MW-13	10/26/04	12:00
GVPCC	010	IW-6	10/26/04	14:15
GVPCE	011	IW-7	10/26/04	14:45

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

QC DATA ASSOCIATION SUMMARY

I4J280208

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	MCAWW 300.0A		4315454	4315244
	WATER	SW846 8015B		4305028	4305012
	WATER	SW846 8015B		4310414	4310244
	WATER	SW846 8021B		4310412	4310242
002	WATER	MCAWW 300.0A		4315454	4315244
	WATER	SW846 8015B		4305028	4305012
	WATER	SW846 8015B		4310414	4310244
	WATER	SW846 8021B		4310412	4310242
003	WATER	SW846 8021B		4313272	
004	WATER	MCAWW 300.0A		4315454	4315244
	WATER	SW846 8015B		4305028	4305012
	WATER	SW846 8015B		4310414	4310244
	WATER	SW846 8021B		4310412	4310242
005	WATER	MCAWW 300.0A		4315454	4315244
	WATER	SW846 8015B		4305028	4305012
	WATER	SW846 8015B		4310414	4310244
	WATER	SW846 8021B		4310412	4310242
006	WATER	MCAWW 300.0A		4315454	4315244
	WATER	SW846 8015B		4305028	4305012
	WATER	SW846 8015B		4310414	4310244
	WATER	SW846 8021B		4310412	4310242
007	WATER	SW846 8021B		4313272	
008	WATER	SW846 8015B		4310414	4310244
	WATER	SW846 8021B		4310412	4310242
009	WATER	MCAWW 300.0A		4315454	4315244
	WATER	SW846 8015B		4305028	4305012
	WATER	SW846 8015B		4310414	4310244
	WATER	SW846 8021B		4310412	4310242
	WATER	SW846 8021B		4315212	
010	WATER	MCAWW 300.0A		4315454	4315244
	WATER	SW846 8015B		4305028	4305012
	WATER	SW846 8015B		4310414	4310244
	WATER	SW846 8021B		4310412	4310242

(Continued on next page)

QC DATA ASSOCIATION SUMMARY

I4J280208

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
011	WATER	MCAWW 300.0A		4315454	4315244
	WATER	SW846 8015B		4305028	4305012
	WATER	SW846 8015B		4310414	4310244
	WATER	SW846 8021B		4310412	4310242

CONOCOPHILLIPS

Client Sample ID: SVE-1

GC Volatiles

Lot-Sample #...: I4J280208-001 **Work Order #...:** GVN9W1AA **Matrix.....:** WATER
Date Sampled...: 10/26/04 09:00 **Date Received..:** 10/28/04 08:00
Prep Date.....: 11/04/04 **Analysis Date..:** 11/04/04
Prep Batch #...: 4310414 **Analysis Time..:** 11:55
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	**0.32**	**0.10**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	114	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: SVE-1

GC Volatiles

Lot-Sample #...: I4J280208-001 **Work Order #...:** GVN9W1AD **Matrix.....:** WATER
Date Sampled...: 10/26/04 09:00 **Date Received..:** 10/28/04 08:00
Prep Date.....: 11/04/04 **Analysis Date..:** 11/04/04
Prep Batch #...: 4310412 **Analysis Time..:** 11:55
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	**79**	**1.0**	**ug/L**
Ethylbenzene	ND	1.0	ug/L
Toluene	**2.8**	**1.0**	**ug/L**
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	99	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	111	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: SVR-1

GC Semivolatiles

Lot-Sample #...: I4J280208-001 **Work Order #...:** GVN9W1AC **Matrix.....:** WATER
Date Sampled...: 10/26/04 09:00 **Date Received..:** 10/28/04 08:00
Prep Date.....: 10/30/04 **Analysis Date..:** 11/11/04
Prep Batch #...: 4305028 **Analysis Time..:** 10:24
Dilution Factor: 0.95
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	**0.099**	**0.048**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	120	(41 - 143)
Dotriacontane	75	(12 - 153)

CONOCOPHILLIPS

Client Sample ID: SVE-1

General Chemistry

Lot-Sample #...: I4J280208-001 **Work Order #...:** GVN9W **Matrix.....:** WATER
Date Sampled...: 10/26/04 09:00 **Date Received..:** 10/28/04 08:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	52.7	20.0	mg/L	MCAWW 300.0A	11/10/04	4315454

Dilution Factor: 20 Analysis Time..: 08:43

CONOCOPHILLIPS

Client Sample ID: IW-2

GC Volatiles

Lot-Sample #...: I4J280208-002 **Work Order #...:** GVPAE1AA **Matrix.....:** WATER
Date Sampled...: 10/26/04 09:50 **Date Received..:** 10/28/04 08:00
Prep Date.....: 11/04/04 **Analysis Date..:** 11/04/04
Prep Batch #...: 4310414 **Analysis Time..:** 12:23
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	113	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: IW-2

GC Volatiles

Lot-Sample #...: I4J280208-002 **Work Order #...:** GVPAE1AD **Matrix.....:** WATER
Date Sampled...: 10/26/04 09:50 **Date Received..:** 10/28/04 08:00
Prep Date.....: 11/04/04 **Analysis Date..:** 11/04/04
Prep Batch #...: 4310412 **Analysis Time..:** 12:23
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	96	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: IW-2

GC Semivolatiles

Lot-Sample #...: I4J280208-002 **Work Order #...:** GVPAE1AC **Matrix.....:** WATER
Date Sampled...: 10/26/04 09:50 **Date Received..:** 10/28/04 08:00
Prep Date.....: 10/30/04 **Analysis Date..:** 11/11/04
Prep Batch #...: 4305028 **Analysis Time..:** 12:27
Dilution Factor: 0.95
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	ND	0.048	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	124	(41 - 143)
Dotriacontane	81	(12 - 153)

CONOCOPHILLIPS

Client Sample ID: IW-2

General Chemistry

Lot-Sample #...: I4J280208-002 **Work Order #...:** GVPAE **Matrix.....:** WATER
Date Sampled...: 10/26/04 09:50 **Date Received..:** 10/28/04 08:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	146	20.0	mg/L	MCAWW 300.0A	11/10/04	4315454

Dilution Factor: 20 Analysis Time..: 08:56

CONOCOPHILLIPS

Client Sample ID: TRIP BLANK 1

GC Volatiles

Lot-Sample #...: I4J280208-003 **Work Order #...:** GVPAK1AA **Matrix.....:** WATER
Date Sampled...: 10/27/04 14:00 **Date Received..:** 10/28/04 08:00
Prep Date.....: 11/05/04 **Analysis Date..:** 11/05/04
Prep Batch #...: 4313272 **Analysis Time..:** 15:41
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	99	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	98	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: IW-3

GC Volatiles

Lot-Sample #...: I4J280208-004 **Work Order #...:** GVPAQ1AA **Matrix.....:** WATER
Date Sampled...: 10/26/04 10:30 **Date Received..:** 10/28/04 08:00
Prep Date.....: 11/04/04 **Analysis Date..:** 11/04/04
Prep Batch #...: 4310414 **Analysis Time..:** 12:51
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	112	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: IW-3

GC Volatiles

Lot-Sample #...: I4J280208-004 **Work Order #...:** GVPAQ1AD **Matrix.....:** WATER
Date Sampled...: 10/26/04 10:30 **Date Received..:** 10/28/04 08:00
Prep Date.....: 11/04/04 **Analysis Date..:** 11/04/04
Prep Batch #...: 4310412 **Analysis Time..:** 12:51
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	99	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	96	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: IW-3

GC Semivolatiles

Lot-Sample #...: I4J280208-004 **Work Order #...:** GVPAQ1AC **Matrix.....:** WATER
Date Sampled...: 10/26/04 10:30 **Date Received..:** 10/28/04 08:00
Prep Date.....: 10/30/04 **Analysis Date..:** 11/11/04
Prep Batch #...: 4305028 **Analysis Time..:** 13:07
Dilution Factor: 0.95
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	**0.072**	**0.048**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	113	(41 - 143)
Dotriacontane	101	(12 - 153)

CONOCOPHILLIPS

Client Sample ID: IW-3

General Chemistry

Lot-Sample #...: I4J280208-004 **Work Order #...:** GVPAQ **Matrix.....:** WATER
Date Sampled...: 10/26/04 10:30 **Date Received..:** 10/28/04 08:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	90.2	20.0	mg/L	MCAWW 300.0A	11/10/04	4315454

Dilution Factor: 20 Analysis Time..: 09:09

CONOCOPHILLIPS

Client Sample ID: IW-4

GC Volatiles

Lot-Sample #...: I4J280208-005 **Work Order #...:** GVPAX1AA **Matrix.....:** WATER
Date Sampled...: 10/26/04 11:00 **Date Received..:** 10/28/04 08:00
Prep Date.....: 11/04/04 **Analysis Date..:** 11/04/04
Prep Batch #...: 4310414 **Analysis Time..:** 13:19
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	112	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: IW-4

GC Volatiles

Lot-Sample #...: I4J280208-005 **Work Order #...:** GVPAX1AD **Matrix.....:** WATER
Date Sampled...: 10/26/04 11:00 **Date Received..:** 10/28/04 08:00
Prep Date.....: 11/04/04 **Analysis Date..:** 11/04/04
Prep Batch #...: 4310412 **Analysis Time..:** 13:19
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	97	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: IW-4

GC Semivolatiles

Lot-Sample #...: I4J280208-005 Work Order #...: GVPAX1AC Matrix.....: WATER
Date Sampled...: 10/26/04 11:00 Date Received..: 10/28/04 08:00
Prep Date.....: 10/30/04 Analysis Date..: 11/11/04
Prep Batch #...: 4305028 Analysis Time..: 13:49
Dilution Factor: 0.95
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	0.082	0.048	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	122	(41 - 143)
Dotriacontane	84	(12 - 153)

CONOCOPHILLIPS

Client Sample ID: IW-4

General Chemistry

Lot-Sample #...: I4J280208-005 Work Order #...: GVPAX Matrix.....: WATER
Date Sampled...: 10/26/04 11:00 Date Received..: 10/28/04 08:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	139	20.0	mg/L	MCAWW 300.0A	11/10/04	4315454

Dilution Factor: 20 Analysis Time..: 09:22

CONOCOPHILLIPS

Client Sample ID: IW-5

GC Volatiles

Lot-Sample #...: I4J280208-006 **Work Order #...:** GVPA21AA **Matrix.....:** WATER
Date Sampled...: 10/26/04 11:30 **Date Received..:** 10/28/04 08:00
Prep Date.....: 11/04/04 **Analysis Date..:** 11/04/04
Prep Batch #...: 4310414 **Analysis Time..:** 13:47
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	112	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: IW-5

GC Volatiles

Lot-Sample #...: I4J280208-006 **Work Order #...:** GVPA21AD **Matrix.....:** WATER
Date Sampled...: 10/26/04 11:30 **Date Received..:** 10/28/04 08:00
Prep Date.....: 11/04/04 **Analysis Date..:** 11/04/04
Prep Batch #...: 4310412 **Analysis Time..:** 13:47
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	102	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: IW-5

GC Semivolatiles

Lot-Sample #...: I4J280208-006 Work Order #...: GVPA21AC Matrix.....: WATER
Date Sampled...: 10/26/04 11:30 Date Received..: 10/28/04 08:00
Prep Date.....: 10/30/04 Analysis Date..: 11/11/04
Prep Batch #...: 4305028 Analysis Time..: 14:46
Dilution Factor: 0.95

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	2.3	0.048	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	136	(41 - 143)
Dotriacontane	140	(12 - 153)

CONOCOPHILLIPS

Client Sample ID: IW-5

General Chemistry

Lot-Sample #...: I4J280208-006 **Work Order #...:** GVPA2 **Matrix.....:** WATER
Date Sampled...: 10/26/04 11:30 **Date Received..:** 10/28/04 08:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	128	20.0	mg/L	MCAWW 300.0A	11/10/04	4315454

Dilution Factor: 20 Analysis Time..: 09:35

CONOCOPHILLIPS

Client Sample ID: TRIP BLANK 2

GC Volatiles

Lot-Sample #...: I4J280208-007 **Work Order #...:** GVPA41AA **Matrix.....:** WATER
Date Sampled...: 10/27/04 14:10 **Date Received..:** 10/28/04 08:00
Prep Date.....: 11/05/04 **Analysis Date..:** 11/05/04
Prep Batch #...: 4313272 **Analysis Time..:** 16:10
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	98	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: TRIP BLANK 3

GC Volatiles

Lot-Sample #...: I4J280208-008 **Work Order #...:** GVPA51AA **Matrix.....:** WATER
Date Sampled...: 10/27/04 14:20 **Date Received..:** 10/28/04 08:00
Prep Date.....: 11/04/04 **Analysis Date..:** 11/04/04
Prep Batch #...: 4310414 **Analysis Time..:** 14:16
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	113	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: TRIP BLANK 3

GC Volatiles

Lot-Sample #...: I4J280208-008 **Work Order #...:** GVPA51AC **Matrix.....:** WATER
Date Sampled...: 10/27/04 14:20 **Date Received..:** 10/28/04 08:00
Prep Date.....: 11/04/04 **Analysis Date..:** 11/04/04
Prep Batch #...: 4310412 **Analysis Time..:** 14:16
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	98	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	97	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: MW-13

GC Volatiles

Lot-Sample #...: I4J280208-009 **Work Order #...:** GVPCA1AA **Matrix.....:** WATER
Date Sampled...: 10/26/04 12:00 **Date Received..:** 10/28/04 08:00
Prep Date.....: 11/04/04 **Analysis Date..:** 11/04/04
Prep Batch #...: 4310414 **Analysis Time..:** 14:44
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	**1.2**	**0.10**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	118	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: MW-13

GC Volatiles

Lot-Sample #...: I4J280208-009 **Work Order #...:** GVPCA1AD **Matrix.....:** WATER
Date Sampled...: 10/26/04 12:00 **Date Received..:** 10/28/04 08:00
Prep Date.....: 11/04/04 **Analysis Date..:** 11/04/04
Prep Batch #...: 4310412 **Analysis Time..:** 14:44
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	**14**	**1.0**	**ug/L**
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	110	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	105	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: MW-13

GC Volatiles

Lot-Sample #...: I4J280208-009 **Work Order #...:** GVPCA2AD **Matrix.....:** WATER
Date Sampled...: 10/26/04 12:00 **Date Received..:** 10/28/04 08:00
Prep Date.....: 11/09/04 **Analysis Date..:** 11/09/04
Prep Batch #...: 4315212 **Analysis Time..:** 10:55
Dilution Factor: 2
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Ethylbenzene	300	2.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	97	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	104	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: MW-13

GC Semivolatiles

Lot-Sample #...:	I4J280208-009	**Work Order #...:**	GVPCA1AC
Date Sampled...:	10/26/04 12:00	**Date Received..:**	10/28/04 08:00
Prep Date.....:	10/30/04	**Analysis Date..:**	11/12/04
Prep Batch #...:	4305028	**Analysis Time..:**	13:13
Dilution Factor:	19		
		Method.....:	SW846 8015B
Matrix.....:	WATER		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	**3.0**	**0.95**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	NC,DIL	(41 - 143)
Dotriacontane	NC,DIL	(12 - 153)

NOTE(S):

NC The recovery and/or RPD were not calculated.

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

CONOCOPHILLIPS

Client Sample ID: MW-13

General Chemistry

Lot-Sample #...: I4J280208-009 **Work Order #...:** GVPCA **Matrix.....:** WATER
Date Sampled...: 10/26/04 12:00 **Date Received..:** 10/28/04 08:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	120	20.0	mg/L	MCAWW 300.0A	11/10/04	4315454

Dilution Factor: 20 Analysis Time..: 09:49

CONOCOPHILLIPS

Client Sample ID: IW-6

GC Volatiles

Lot-Sample #...: I4J280208-010 **Work Order #...:** GVPCC1AA **Matrix.....:** WATER
Date Sampled...: 10/26/04 14:15 **Date Received..:** 10/28/04 08:00
Prep Date.....: 11/04/04 **Analysis Date..:** 11/04/04
Prep Batch #...: 4310414 **Analysis Time..:** 15:12
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	112	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: IW-6

GC Volatiles

Lot-Sample #...: I4J280208-010 **Work Order #...:** GVPCC1AD **Matrix.....:** WATER
Date Sampled...: 10/26/04 14:15 **Date Received..:** 10/28/04 08:00
Prep Date.....: 11/04/04 **Analysis Date..:** 11/04/04
Prep Batch #...: 4310412 **Analysis Time..:** 15:12
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	97	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	100	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: IW-6

GC Semivolatiles

Lot-Sample #...: I4J280208-010	**Work Order #...:** GVPCC1AC	**Matrix.....:** WATER	
Date Sampled...: 10/26/04 14:15	**Date Received..:** 10/28/04 08:00		
Prep Date.....: 10/30/04	**Analysis Date..:** 11/11/04		
Prep Batch #...: 4305028	**Analysis Time..:** 23:40		
Dilution Factor: 9.5			
	Method.....: SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	**1.4**	**0.48**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	NC,DIL	(41 - 143)
Dotriacontane	NC,DIL	(12 - 153)

NOTE(S):

NC The recovery and/or RPD were not calculated.

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Raised reprting limits due to matrix affects.

CONOCOPHILLIPS

Client Sample ID: IW-6

General Chemistry

Lot-Sample #...: I4J280208-010 **Work Order #...:** GVPCC **Matrix.....:** WATER
Date Sampled...: 10/26/04 14:15 **Date Received..:** 10/28/04 08:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	76.6	20.0	mg/L	MCAWW 300.0A	11/10/04	4315454

Dilution Factor: 20 Analysis Time..: 10:02

CONOCOPHILLIPS

Client Sample ID: IW-7

GC Volatiles

Lot-Sample #...: I4J280208-011 **Work Order #...:** GVPCE1AA **Matrix.....:** WATER
Date Sampled...: 10/26/04 14:45 **Date Received..:** 10/28/04 08:00
Prep Date.....: 11/04/04 **Analysis Date..:** 11/04/04
Prep Batch #...: 4310414 **Analysis Time..:** 15:40
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	112	(75 - 122)

CONOCOPHILLIPS

Client Sample ID: IW-7

GC Volatiles

Lot-Sample #...: I4J280208-011 **Work Order #...:** GVPCE1AD **Matrix.....:** WATER
Date Sampled...: 10/26/04 14:45 **Date Received..:** 10/28/04 08:00
Prep Date.....: 11/04/04 **Analysis Date..:** 11/04/04
Prep Batch #...: 4310412 **Analysis Time..:** 15:40
Dilution Factor: 1

Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	99	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	95	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: IW-7

GC Semivolatiles

Lot-Sample #...: I4J280208-011 **Work Order #...: GVPCE1AC** **Matrix.....: WATER**
Date Sampled...: 10/26/04 14:45 **Date Received..: 10/28/04 08:00**
Prep Date.....: 10/30/04 **Analysis Date..: 11/11/04**
Prep Batch #...: 4305028 **Analysis Time..: 16:50**
Dilution Factor: 0.95

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	**3.3**	**0.048**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	131	(41 - 143)
Dotriacontane	137	(12 - 153)

CONOCOPHILLIPS

Client Sample ID: IW-7

General Chemistry

Lot-Sample #...: I4J280208-011 **Work Order #...:** GVPCE **Matrix.....:** WATER
Date Sampled...: 10/26/04 14:45 **Date Received..:** 10/28/04 08:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	125	20.0	mg/L	MCAWW 300.0A	11/10/04	4315454

Dilution Factor: 20 Analysis Time..: 10:15

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: I4J280208 **Work Order #...:** GWCTL1AA **Matrix.....:** WATER
MB Lot-Sample #: I4K050000-414

Prep Date.....: 11/04/04 **Analysis Time..:** 11:13
Analysis Date..: 11/04/04 **Prep Batch #...:** 4310414
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Gasoline Range Organics	ND	0.10	mg/L	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO	111	(75 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: I4J280208 **Work Order #...:** GWCR41AA **Matrix.....:** WATER
MB Lot-Sample #: I4K050000-412

Prep Date.....: 11/04/04 **Analysis Time..:** 11:13
Analysis Date..: 11/04/04 **Prep Batch #...:** 4310412
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8021B
Ethylbenzene	ND	1.0	ug/L	SW846 8021B
Toluene	ND	1.0	ug/L	SW846 8021B
Xylenes (total)	ND	3.0	ug/L	SW846 8021B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	98	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	91	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: I4J280208 **Work Order #...:** GWF761AA **Matrix.....:** WATER
MB Lot-Sample #: I4K080000-272

Prep Date.....: 11/05/04 **Analysis Time..:** 14:05
Analysis Date..: 11/05/04 **Prep Batch #...:** 4313272
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8021B
Ethylbenzene	ND	1.0	ug/L	SW846 8021B
Toluene	ND	1.0	ug/L	SW846 8021B
Xylenes (total)	ND	3.0	ug/L	SW846 8021B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	97	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: I4J280208 **Work Order #...:** GWLM61AA **Matrix.....:** WATER
MB Lot-Sample #: I4K100000-212

Prep Date.....: 11/09/04 **Analysis Time..:** 10:11
Analysis Date..: 11/09/04 **Prep Batch #...:** 4315212
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Ethylbenzene	ND	1.0	ug/L	SW846 8021B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	98	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	100	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: I4J280208 **Work Order #...:** GVX9W1AA **Matrix.....:** WATER
MB Lot-Sample #: I4J310000-028
Prep Date.....: 10/30/04 **Analysis Time..:** 05:38
Analysis Date..: 11/11/04 **Prep Batch #...:** 4305028
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Diesel Range Organics	ND	0.050	mg/L	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	113	(41 - 143)
Dotriacontane	74	(12 - 153)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: I4J280208 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: GWNDJ1AA		MB Lot-Sample #:	I4K100000-454	
	ND	1.0	mg/L	MCAWW 300.0A	11/10/04	4315454
		Dilution Factor: 1				
		Analysis Time..: 08:16				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4J280208 **Work Order #...:** GWCTL1AC **Matrix.....:** WATER
LCS Lot-Sample#: I4K050000-414
Prep Date.....: 11/04/04 **Analysis Date..:** 11/04/04
Prep Batch #...: 4310414 **Analysis Time..:** 10:30
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Gasoline Range Organics	**106**	**(85 - 115)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO	116	(81 - 123)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4J280208 **Work Order #...:** GWCR41AC **Matrix.....:** WATER
LCS Lot-Sample#: I4K050000-412
Prep Date.....: 11/04/04 **Analysis Date..:** 11/04/04
Prep Batch #...: 4310412 **Analysis Time..:** 09:19
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	**98**	**(85 - 115)**	**SW846 8021B**
Ethylbenzene	**98**	**(85 - 115)**	**SW846 8021B**
Toluene	**101**	**(85 - 115)**	**SW846 8021B**
Xylenes (total)	**99**	**(85 - 115)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	101	(85 - 111)
a,a,a-Trifluorotoluene (TFT)	100	(84 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4J280208 **Work Order #...:** GWF761AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: I4K080000-272 GWF761AD-LCSD
Prep Date.....: 11/05/04 **Analysis Date..:** 11/05/04
Prep Batch #...: 4313272 **Analysis Time..:** 10:25
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**94**	**(85 - 115)**			**SW846 8021B**
	94	**(85 - 115)**	**0.090**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**94**	**(85 - 115)**			**SW846 8021B**
	95	**(85 - 115)**	**1.0**	**(0-20)**	**SW846 8021B**
Toluene	**96**	**(85 - 115)**			**SW846 8021B**
	97	**(85 - 115)**	**1.1**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**95**	**(85 - 115)**			**SW846 8021B**
	97	**(85 - 115)**	**1.3**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	99	(85 - 111)
	100	(85 - 111)
a,a,a-Trifluorotoluene (TFT)	100	(84 - 114)
	99	(84 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4J280208 **Work Order #...:** GWLM61AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: I4K100000-212 GWLM61AD-LCSD
Prep Date.....: 11/09/04 **Analysis Date..:** 11/09/04
Prep Batch #...: 4315212 **Analysis Time..:** 09:10
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Ethylbenzene	**94**	**(85 - 115)**			**SW846 8021B**
	98	**(85 - 115)**	**4.7**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	102	(85 - 111)
	99	(85 - 111)
a,a,a-Trifluorotoluene (TFT)	100	(84 - 114)
	100	(84 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: I4J280208 **Work Order #...:** GVX9W1AC **Matrix.....:** WATER
LCS Lot-Sample#: I4J310000-028
Prep Date.....: 10/30/04 **Analysis Date..:** 11/11/04
Prep Batch #...: 4305028 **Analysis Time..:** 06:19
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Diesel Range Organics	**104**	**(44 - 151)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	109	(41 - 143)
Dotriacontane	82	(12 - 153)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I4J280208 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: GWNDJ1AC	LCS Lot-Sample#: I4K100000-454		
	93	(90 - 110)	MCAWW 300.0A	11/10/04	4315454
		Dilution Factor: 1	Analysis Time..: 08:29		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4J280208 **Work Order #...:** GVPAE1AF-MS **Matrix.....:** WATER
MS Lot-Sample #: I4J280208-002 GVPAE1AG-MSD
Date Sampled...: 10/26/04 09:50 **Date Received..:** 10/28/04 08:00
Prep Date.....: 11/04/04 **Analysis Date..:** 11/04/04
Prep Batch #...: 4310414 **Analysis Time..:** 23:42
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Gasoline Range Organics	**106**	**(79 - 124)**			**SW846 8015B**
	97	**(79 - 124)**	**9.0**	**(0-20)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO	115	(75 - 122)
	114	(75 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4J280208 **Work Order #...:** GVN9W1AH-MS **Matrix.....:** WATER
MS Lot-Sample #: I4J280208-001 GVN9W1AJ-MSD
Date Sampled...: 10/26/04 09:00 **Date Received..:** 10/28/04 08:00
Prep Date.....: 11/04/04 **Analysis Date..:** 11/04/04
Prep Batch #...: 4310412 **Analysis Time..:** 22:47
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**102**	**(85 - 115)**			**SW846 8021B**
	89	**(85 - 115)**	**2.7**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**105**	**(85 - 115)**			**SW846 8021B**
	107	**(85 - 115)**	**2.2**	**(0-20)**	**SW846 8021B**
Toluene	**107**	**(85 - 115)**			**SW846 8021B**
	108	**(85 - 115)**	**1.3**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**108**	**(85 - 115)**			**SW846 8021B**
	110	**(85 - 115)**	**2.0**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	102	(81 - 119)
	102	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	109	(73 - 135)
	108	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...:	I4J280208	**Work Order #...:**	GVN9W1AF-MS	**Matrix.....:**	WATER
MS Lot-Sample #:	I4J280208-001		GVN9W1AG-MSD		
Date Sampled...:	10/26/04 09:00	**Date Received..:**	10/28/04 08:00		
Prep Date.....:	10/30/04	**Analysis Date..:**	11/11/04		
Prep Batch #...:	4305028	**Analysis Time..:**	05:33		
Dilution Factor:	0.96				

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Diesel Range Organics	**98**	**(44 - 151)**			**SW846 8015B**
	86	**(44 - 151)**	**12**	**(0-20)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	112	(41 - 143)
	129	(41 - 143)
Dotriacontane	80	(12 - 153)
	74	(12 - 153)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I4J280208 **Matrix.....:** WATER
Date Sampled...: 10/27/04 08:00 **Date Received..:** 10/28/04 08:00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		WO#: GVN4L1C3-MS/GVN4L1C4-MSD				MS Lot-Sample #: I4J280187-001	
	90	(90 - 110)			MCAWW 300.0A	11/10/04	4315454
	83 N	(90 - 110)	2.4	(0-20)	MCAWW 300.0A	11/10/04	4315454
		Dilution Factor: 20					
		Analysis Time..: 11:08					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

Report Attachment

Note that if this report contains tests performed for the following methods, the associated method deviations are applicable.

EPA 410.4, COD: Laboratory uses different analytical wavelength as specified by instrument manufacturer.
EPA 340.2, Fluoride: Preliminary Bellack distillation not performed.
EPA 624: The laboratory uses a different desorb time and purge volume than stated in the method.
EPA 8151A: Laboratory utilizes alternate extraction solvent.
Iowa OA1: Benzene, toluene, ethylbenzene and xylenes (BTEX) are not analyzed along with the Gasoline Range Organics if client does not require BTEX.
EPA TO-12: Samples not analyzed in duplicate.
EPA TO-14A and TO-15: Zero humidified nitrogen is used in place of air for method blanks.

TRRP Reporting Requirements

If this package contains reports requiring TRRP (Texas Risk Reduction Program) reporting criteria, the following information applies.

The REPORTING LIMIT is equivalent to the TRRP acronym MQL (method quantitation limit).
The MDL is equivalent to the TRRP acronym SQL (sample quantitation limit).

SEVERN TRENT STL

CHAIN–OF–CUSTODY ADDENDUM

Lot No: I4J280208

RECEIVED BY: [signature]

COC NUMBER:

DATE/TIME RECEIVED: 10-28-04 0800

QUOTE/PROFILE: 56072

UNPACKED DATE/TIME: 10-28-04 1000

CLIENT/PROJECT: Maxim

SAMPLES LOGGED IN: LT

LOG-IN REVIEWED: [signature]

Number of Shipping Containers Received with Chain of Custody 1

VOC AIR / FILTER SAMPLES ☐ YES **SEE SECTIONS 1.0, 2.0, & 6.0**

1.0 CONTAINERS EXAMINED UPON RECEIPT: CC

Container Sealed: ☑ YES ☐ NO — Custody Seal Signed/Dated: ☐ YES ☐ NO

Custody Seal Present: ☑ YES ☐ NO — Containers checked for radioactivity: ☐ YES ☐ NO ☐ N/A

If seal not intact or Geiger counter reading >0.5 mR/hr, list air bill number of that container(s):

2.0 VOC CANISTERS EXAMINED UPON RECEIPT:

Canister Valves Closed: ☐ YES ☐ NO — Samples Received Match Chain: ☐ YES ☐ NO

Canister Valves Capped: ☐ YES ☐ NO — Other Equipment Received: ☐ YES ☐ NO

Valve Cap Tightened Properly: ☐ YES ☐ NO — See Additional Comments (Section 5.0 and / or 7.0) ☐ YES ☐ NO

Packing Material Used: (circle) — Chain-of-Custody form properly maintained: ☐ YES ☐ NO

None / Absorbent / Paper / Bubble Wrap — Can Size: ☐ 6L ☐ 15L Other

3.0 SAMPLE TEMPERATURE UPON RECEIPT BY: CC **IR THERMOMETER #:** 05

Temperature of the container(s):

Circle selection: TB = Temp. Blank and/or SC = Sample Container *[acceptable tolerance 4°C ± 2°; (NC, WI: 1-4.4°C)]*

TB (SC) 3°	TB (SC) 3°	TB (SC) 3°	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC

If temperature is outside acceptable tolerance, Project Manager was notified (_____PM). Date: _____ Time: _____

Samples received do not require cooling _____ OK to analyze samples: ☑ YES ☐ NO

PRESERVATION OF SAMPLES REQUIRED: ☐ NA ☑ YES **VERIFIED BY:** CC

Base samples are>pH 12: ☐ YES ☐ NO — Acid preserved are<pH 2: ☑ YES ☐ NO

Cyanide samples checked for sulfides: ☐ YES — Sulfide samples appear to be preserved with zinc acetate: ☐ YES ☐ NO

Samples checked for chlorine per specification (N.C.) ☐ YES — Free chlorine present: ☐ YES ☐ NO

If sample preservation is outside acceptable tolerance, Project Manager was notified (_____PM)

Date: _____ Time: _____ ☐ see pH adjustment form

VOLATILE SAMPLES FILLED COMPLETELY, IF NOT, LIST ID AND HEADSPACE OF VOA's CONTAINING BUBBLES EXCEEDING 6MM IN DIAMETER:

Sample ID	mm Headspace

Sample ID	mm Headspace

4.0 CONDITION OF BOTTLES/CONTAINERS VERIFIED BY: CL

Samples received match COC:	☒ YES ☐ NO	Bottles received intact:	☒ YES ☐ NO
See additional discrepancies/comments section:	☐ YES ☒ NO	Samples received from USDA restricted area:	☐ YES ☒ NO
Chain-of-Custody form properly maintained:	☒ YES ☐ NO	VOA trip blanks included: 6/40 ml	☒ YES ☐ NO ☐ N/A

5.0 ADDITIONAL DISCREPANCIES

Appears on COC		Appears on Label		
Sample ID	Date/Time	Sample ID	Date/Time	Comments

6.0 SHIPPING DOCUMENTATION:

Air/freight bill is available and attached to COC: ☒ YES ☐ NO Air bill #: _____

Hand-delivered Carrier: _____ Date: _____ Time: _____

7.0 OTHER COMMENTS:

_____

_____

_____

_____

_____

_____

CORRECTIVE ACTION:

Client's Name: _____ Informed verbally on: _____ By: _____

Client's Name: _____ Informed verbally on: _____ By: _____

Sample(s) processed "as is" comments: _____

_____

_____

_____

Samples(s) on hold until: _____ If released, notify: _____

REVIEW:

Project Management: CMB Date: 11-15-04

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE

3

Chain of Custody Record

I4J28020

CHAIN OF CUSTODY NUMBER

$0010541-001

SEVERN TRENT **STL**

Severn Trent Laboratories, Inc.

40610

STL4149 (1202)

Client	Project Manager	Date	Page 1 of 4
Maxim Technologies	Greg Pope	10/12/2004	
Address: 1703 W Industrial Ave	Telephone Number (Area Code)/Fax Number: (432) 686-8081 / (000)	Lab Location: STL Austin	
City: Midland; State: TX; Zip Code: 79701	Site Contact: Greg Pope		
Project Number/Name: 3374 MM1-1 Qtrly GWM	Carrier/Waybill Number: FedEx / 847303959633		
Contract/Purchase Order/Quote Number: CONTRACT / PURCHASE ORDER # : 3374MAX007		QUOTE: 56072	

Sample I.D. Number and Description	Date	Time	Sample Type	Volume	Type	No.	Preservative	Condition on Receipt/Comments	GC8021-L	TPHV-L	TPHS-DRO	ICCL-L
SVE-1	10-26-04	900	WATER	1L	AMBER	3	None	3° 10-28-04 CC			X	
SVE-1	↓	900	WATER	40mL	VIAL	4	1:1 HCL		X	X		
SVE-1		900	WATER	250mL	PLASTIC	1	None					X
IW-2		950	WATER	1L	AMBER	2	None				X	
IW-2		950	WATER	40mL	VIAL	4	1:1 HCL		X	X		
IW-2	10-26-04	950	WATER	250mL	PLASTIC	1	None					X
			WATER	1L	AMBER	2	None				X	
			WATER	40mL	VIAL	4	1:1 HCL		X	X		
			WATER	250mL	PLASTIC	1	None					X
			WATER	1L	AMBER	2	None				X	
			WATER	40mL	VIAL	4	1:1 HCL		X	X		
			WATER	250mL	PLASTIC	1	None					X
			WATER	1L	AMBER	2	None				X	
			WATER	40mL	VIAL	4	1:1 HCL		X	X		
			WATER	250mL	PLASTIC	1	None					X
TRIP BLANK 1	10-27-04	1400	WATER	40mL	VIAL	2	HCl		X			

Special Instructions: TPH-GRO & DRO, 8021 BTEX

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☒ Normal ☐ Rush ☐ Other____

QC Level: ☒ I. ☐ II. ☐ III.

Project Specific Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	10-15-04	1600	1. Received By: [signature]	10/16/04	1030
2. Relinquished By: [signature]	10/27/04	1405	2. Received By: [signature]	10-28-04	0800
3. Relinquished By			3. Received By		

Comments

65/6

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

3

Chain of Custody Record

CHAIN OF CUSTODY NUMBER
$0010541-002

SEVERN TRENT STL
Severn Trent Laboratories, Inc.

40611

STL4149 (1202)

Client	Project Manager	Date	Page 2 of 4
Maxim Technologies	Greg Pope	10/12/2004	
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Location**	**Analysis**
1703 W Industrial Ave	(432) 686-8081 / (000)	STL Austin	
City / **State** / **Zip Code**	**Site Contact**		
Midland / TX / 79701	Greg Pope		
Project Number/Name	**Carrier/Waybill Number**		
3374 MM1-1 Qtrly GWM	FEDEX / 847303959585		
Contract/Purchase Order/Quote Number			
CONTRACT / PURCHASE ORDER # : 3374MAI007		QUOTE: 56072	

Sample I.D. Number and Description	Date	Time	Sample Type	Containers: Volume	Containers: Type	Containers: No.	Preservative	Condition on Receipt/Comments	GC 8021 BTEX	TPH VOA	TPH SIDRO	ICCL LL
IW-3	10-26-04	1030	WATER	1L	AMBER	2	None	3°C 10-28-04CC			X	
IW-3		1030	WATER	40mL	VIAL	4	1:1 HCL		X	X		
IW-3		1030	WATER	250mL	PLASTIC	1	None				X	X
IW-4		1100	WATER	1L	AMBER	2	None				X	
IW-4		1100	WATER	40mL	VIAL	4	1:1 HCL		X	X		
IW-4		1100	WATER	250mL	PLASTIC	1	None				X	X
IW-5		1130	WATER	1L	AMBER	2	None				X	
IW-5		1130	WATER	40mL	VIAL	4	1:1 HCL		X	X		
IW-5	10-26-04	1130	WATER	250mL	PLASTIC	1	None				X	X
			WATER	1L	AMBER	2	None				X	
			WATER	40mL	VIAL	4	1:1 HCL		X	X		
			WATER	250mL	PLASTIC	1	None				X	X
			WATER	1L	AMBER	2	None				X	
			WATER	40mL	VIAL	4	1:1 HCL		X	X		
			WATER	250mL	PLASTIC	1	None				X	X
TRIP BLANK 2	10-27-04	1410	WATER	40mL	VIAL	2	HCl		X			

Special Instructions: TPH-GRO & DRO, 8021 BTEX

Possible Hazard Identification
[X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal
[ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months
(A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required
[X] Normal [ ] Rush [ ] Other _____

QC Level
[X] I. [ ] II. [ ] III.

Project Specific Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	10-15-04	1600	1. Received By	10/16/04	1030
2. Relinquished By	10/27/04	1415	2. Received By	10-28-04	0800
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

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Chain of Custody Record

CHAIN OF CUSTODY NUMBER
$0010541-003

SEVERN TRENT STL
Severn Trent Laboratories, Inc.

40612

STL4149 (1202)

Client	Project Manager	Date
Maxim Technologies	Greg Pope	10/12/2004
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Location**
1703 W Industrial Ave	(432) 686-8081 / (000)	STL Austin
City / **State** / **Zip Code**	**Site Contact**	
Midland / TX / 79701	Greg Pope	
Project Number/Name	**Carrier/Waybill Number**	
3374 NM1-1 Qtrly GWM	FEDEX / 847303959600	
Contract/Purchase Order/Quote Number		
CONTRACT / PURCHASE ORDER # : 3374MAI007		QUOTE: 56072

Page 3 of 4

Sample I.D. Number and Description	Date	Time	Sample Type	Containers: Volume	Containers: Type	Containers: No.	Preservative	Condition on Receipt/Comments	Analysis: GC8021L	Analysis: TPHVIL	Analysis: TPHSIDRO	Analysis: ICCLIL
TRIP BLANK 3	10-27-04	1420	WATER	40mL	VIAL	2	1:1 HCL	SP 10-28-04 CC	X	X		
MW-13	10-26-04	1200		1L	AMB	2	NONE				X	
MW-13		1200		40mL	VIAL	4	HCl		X	X		
MW-13	GWP	1200		250mL	POLY	1	NONE					X
IW-6		1445		1L	AMB	2	NONE				X	
IW-6		1445		40mL	VIAL	4	HCl		X	X		
IW-6		1445		250mL	POLY	1	NONE					X
IW-7		1445		1L	AMB	2	NONE				X	
IW-7		1445		40mL	VIAL	4	HCl		X	X		
IW-7	10-26-04	1445	WATER	250mL	POLY	1	NONE					X

Special Instructions: TPH-GRO & DRO, 8021 BTEX

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: [X] Normal [ ] Rush [ ] Other ____

QC Level: [X] I. [ ] II. [ ] III.

Project Specific Requirements (Specify):

	Date	Time
1. Relinquished By	10-15-04	1600
2. Relinquished By	10/27/04	1430
3. Relinquished By		
1. Received By	10/16/04	1030
2. Received By	10-28-04	0800
3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample: CANARY - Returned to Client with Report: PINK - Field Copy

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SEVERN TRENT STL

Certificate of Analysis

STL Austin • 14046 Summit Drive, Austin, TX 78728 • Tel 512 244 0855 • Fax 512 244 0160 • www.stl-inc.com

ANALYTICAL REPORT

PROJECT NO. HOBBS, NM 1Q'05

3374 Line NM1-1 Remediation

Lot #: I5A260154

Greg Pope

Maxim Technologies
1703 W Industrial Ave
Midland, TX 79701

SEVERN TRENT LABORATORIES, INC.

Carla M. Butler
Project Manager

February 10, 2005

American Council of Independent Laboratories
International Association of Environmental Testing Laboratories

Case Narrative

STL LOT NUMBER: **I5A260154**

This report contains the analytical results for the **12** samples received under chain of custody by Severn Trent Laboratories (STL) on January 26, 2005. These samples are associated with your **3374** Line NM1-1 Remediation project.

All samples were received in good condition and within temperature requirements.

All applicable quality control procedures met method-specified acceptance criteria except where noted in the case narrative or flagged on the result pages.

This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (512) 244-0855.

Affected Samples:
I5A260154 (1):
I5A260154 (2):
I5A260154 (3):
I5A260154 (4):
I5A260154 (5):
Affected Methods:
8021B
Details:
An MS/MSD was prepped for this batch, however preceding the MS/MSD an over-ranged sample caused a CCV immediately after to be out of control. An LCS/LCSD was included in the batch.
Corrective Action:
NCM was written and an LCS/LCSD was included in the batch.

EXECUTIVE SUMMARY - Detection Highlights

I5A260154

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SVE-1 01/25/05 09:25 001				
Diesel Range Organics	0.34	0.048	mg/L	SW846 8015B
Gasoline Range Organics	0.41	0.10	mg/L	SW846 8015B
Benzene	62	1.0	ug/L	SW846 8021B
Ethylbenzene	1.9	1.0	ug/L	SW846 8021B
Toluene	3.4	1.0	ug/L	SW846 8021B
Xylenes (total)	12	3.0	ug/L	SW846 8021B
Chloride	73.9	20.0	mg/L	MCAWW 300.0A
IW-2 01/25/05 10:15 002				
Diesel Range Organics	0.062	0.048	mg/L	SW846 8015B
Chloride	158	20.0	mg/L	MCAWW 300.0A
IW-3 01/25/05 10:30 003				
Chloride	158	20.0	mg/L	MCAWW 300.0A
IW-4 01/25/05 10:55 004				
Diesel Range Organics	0.31	0.048	mg/L	SW846 8015B
Chloride	154	20.0	mg/L	MCAWW 300.0A
IW-5 01/25/05 11:30 005				
Diesel Range Organics	0.43	0.048	mg/L	SW846 8015B
Chloride	156	20.0	mg/L	MCAWW 300.0A
MW-13 01/25/05 11:55 006				
Diesel Range Organics	0.79	0.048	mg/L	SW846 8015B
Gasoline Range Organics	4.7	1.0	mg/L	SW846 8015B
Benzene	1000	10	ug/L	SW846 8021B
Ethylbenzene	1400	10	ug/L	SW846 8021B
Chloride	130	20.0	mg/L	MCAWW 300.0A
IW-6 01/25/05 13:10 007				
Diesel Range Organics	0.76	0.048	mg/L	SW846 8015B
Chloride	156	20.0	mg/L	MCAWW 300.0A

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

I5A260154

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
IW-7 01/25/05 13:40 008				
Diesel Range Organics	0.21	0.048	mg/L	SW846 8015B
Chloride	155	20.0	mg/L	MCAWW 300.0A
IW-8 01/25/05 13:50 009				
Diesel Range Organics	0.49	0.049	mg/L	SW846 8015B
Chloride	157	20.0	mg/L	MCAWW 300.0A

PREPARATION METHODS SUMMARY

I5A260154

PREPARATION DESCRIPTION	PREPARATION METHOD	ANALYTICAL METHOD
Chloride	MCAWW 300.0A	MCAWW 300.0A
Continuous Liquid-Liquid Extraction	SW846 3520	SW846 8015B
Purge and trap	SW846 5030B	SW846 8021B
PURGE AND TRAP	SW846 5030	SW846 8015B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

I5A260154

ANALYTICAL METHOD	ANALYST	ANALYST ID
MCAWW 300.0A	David A. Tocher	800002
SW846 8015B	Joe Lanham	000039
SW846 8015B	Scott Leslie	401008
SW846 8021B	Joe Lanham	000039

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

I5A260154

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
G2725	001	SVE-1	01/25/05	09:25
G273H	002	IW-2	01/25/05	10:15
G273J	003	IW-3	01/25/05	10:30
G273K	004	IW-4	01/25/05	10:55
G273L	005	IW-5	01/25/05	11:30
G273P	006	MW-13	01/25/05	11:55
G273Q	007	IW-6	01/25/05	13:10
G273R	008	IW-7	01/25/05	13:40
G273T	009	IW-8	01/25/05	13:50
G273W	010	TRIP BLANK 1	01/25/05	14:45
G273X	011	TRIP BLANK 2	01/25/05	14:55
G2731	012	TRIP BLANK 3	01/25/05	15:05

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

QC DATA ASSOCIATION SUMMARY

I5A260154

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	MCAWW 300.0A		5029036	5029015
	WATER	SW846 8015B		5027061	5027045
	WATER	SW846 8015B		5035357	5035221
	WATER	SW846 8021B		5035380	5038090
002	WATER	MCAWW 300.0A		5029036	5029015
	WATER	SW846 8015B		5027061	5027045
	WATER	SW846 8015B		5035357	5035221
	WATER	SW846 8021B		5035380	5038090
003	WATER	MCAWW 300.0A		5029036	5029015
	WATER	SW846 8015B		5027061	5027045
	WATER	SW846 8015B		5035357	5035221
	WATER	SW846 8021B		5035380	5038090
004	WATER	MCAWW 300.0A		5029036	5029015
	WATER	SW846 8015B		5027061	5027045
	WATER	SW846 8015B		5035357	5035221
	WATER	SW846 8021B		5035380	5038090
005	WATER	MCAWW 300.0A		5029036	5029015
	WATER	SW846 8015B		5027061	5027045
	WATER	SW846 8015B		5035357	5035221
	WATER	SW846 8021B		5035380	5038090
006	WATER	MCAWW 300.0A		5029036	5029015
	WATER	SW846 8015B		5027061	5027045
	WATER	SW846 8015B		5040353	5040195
	WATER	SW846 8021B		5040356	5040201
007	WATER	MCAWW 300.0A		5029036	5029015
	WATER	SW846 8015B		5027061	5027045
	WATER	SW846 8015B		5035357	5035221
	WATER	SW846 8021B		5038184	5038117
008	WATER	MCAWW 300.0A		5029036	5029015
	WATER	SW846 8015B		5027061	5027045
	WATER	SW846 8015B		5035357	5035221
	WATER	SW846 8021B		5038184	5038117
009	WATER	MCAWW 300.0A		5029036	5029015
	WATER	SW846 8015B		5027061	5027045
	WATER	SW846 8015B		5035357	5035221

(Continued on next page)

QC DATA ASSOCIATION SUMMARY

I5A260154

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
009	WATER	SW846 8021B		5038184	5038117
010	WATER	SW846 8015B		5035357	5035221
	WATER	SW846 8021B		5038184	5038117
011	WATER	SW846 8015B		5035357	5035221
	WATER	SW846 8021B		5038184	5038117
012	WATER	SW846 8015B		5035357	5035221
	WATER	SW846 8021B		5038184	5038117

ConocoPhillips

Client Sample ID: SVE-1

GC Volatiles

Lot-Sample #...: I5A260154-001 **Work Order #...:** G27251AA **Matrix.....:** WATER
Date Sampled...: 01/25/05 09:25 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/02/05 **Analysis Date..:** 02/02/05
Prep Batch #...: 5035357 **Analysis Time..:** 17:46
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	**0.41**	**0.10**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	97	(75 - 122)

ConocoPhillips

Client Sample ID: SVE-1

GC Volatiles

Lot-Sample #...: I5A260154-001 **Work Order #...:** G27251AD **Matrix.....:** WATER
Date Sampled...: 01/25/05 09:25 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/02/05 **Analysis Date..:** 02/02/05
Prep Batch #...: 5035380 **Analysis Time..:** 17:46
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	**62**	**1.0**	**ug/L**
Ethylbenzene	**1.9**	**1.0**	**ug/L**
Toluene	**3.4**	**1.0**	**ug/L**
Xylenes (total)	**12**	**3.0**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	101	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	108	(73 - 135)

ConocoPhillips

Client Sample ID: SVE-1

GC Semivolatiles

Lot-Sample #...: I5A260154-001	**Work Order #...:** G27251AC	**Matrix.....:** WATER	
Date Sampled...: 01/25/05 09:25	**Date Received..:** 01/26/05 08:00		
Prep Date.....: 01/26/05	**Analysis Date..:** 01/28/05		
Prep Batch #...: 5027061	**Analysis Time..:** 22:59		
Dilution Factor: 0.95			
	Method.....: SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	**0.34**	**0.048**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	82	(41 - 143)
Dotriacontane	91	(12 - 153)

ConocoPhillips

Client Sample ID: SVE-1

General Chemistry

Lot-Sample #...: I5A260154-001 **Work Order #...: G2725** **Matrix.....: WATER**
Date Sampled...: 01/25/05 09:25 **Date Received..: 01/26/05 08:00**

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	73.9	20.0	mg/L	MCAWW 300.0A	01/28/05	5029036

Dilution Factor: 20 Analysis Time..: 09:10

ConocoPhillips

Client Sample ID: IW-2

GC Volatiles

Lot-Sample #...: I5A260154-002 **Work Order #...:** G273H1AA **Matrix.....:** WATER
Date Sampled...: 01/25/05 10:15 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/02/05 **Analysis Date..:** 02/02/05
Prep Batch #...: 5035357 **Analysis Time..:** 18:14
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	94	(75 - 122)

ConocoPhillips

Client Sample ID: IW-2

GC Volatiles

Lot-Sample #...: I5A260154-002 **Work Order #...:** G273H1AD **Matrix.....:** WATER
Date Sampled...: 01/25/05 10:15 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/02/05 **Analysis Date..:** 02/02/05
Prep Batch #...: 5035380 **Analysis Time..:** 18:14
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	99	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	92	(73 - 135)

ConocoPhillips

Client Sample ID: IW-2

GC Semivolatiles

Lot-Sample #...: I5A260154-002	**Work Order #...:** G273H1AC	**Matrix.....:** WATER	
Date Sampled...: 01/25/05 10:15	**Date Received..:** 01/26/05 08:00		
Prep Date.....: 01/26/05	**Analysis Date..:** 01/29/05		
Prep Batch #...: 5027061	**Analysis Time..:** 01:05		
Dilution Factor: 0.95			
	Method.....: SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	**0.062**	**0.048**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	71	(41 - 143)
Dotriacontane	95	(12 - 153)

ConocoPhillips

Client Sample ID: IW-2

General Chemistry

Lot-Sample #...: I5A260154-002 **Work Order #...:** G273H **Matrix.....:** WATER
Date Sampled...: 01/25/05 10:15 **Date Received..:** 01/26/05 08:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	158	20.0	mg/L	MCAWW 300.0A	01/28/05	5029036

Dilution Factor: 20 Analysis Time..: 09:49

ConocoPhillips

Client Sample ID: IW-3

GC Volatiles

Lot-Sample #...: I5A260154-003 **Work Order #...:** G273J1AA **Matrix.....:** WATER
Date Sampled...: 01/25/05 10:30 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/02/05 **Analysis Date..:** 02/02/05
Prep Batch #...: 5035357 **Analysis Time..:** 18:49
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	92	(75 - 122)

ConocoPhillips

Client Sample ID: IW-3

GC Volatiles

Lot-Sample #...: I5A260154-003 **Work Order #...:** G273J1AD **Matrix.....:** WATER
Date Sampled...: 01/25/05 10:30 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/02/05 **Analysis Date..:** 02/02/05
Prep Batch #...: 5035380 **Analysis Time..:** 18:49
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	99	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	91	(73 - 135)

ConocoPhillips

Client Sample ID: IW-3

GC Semivolatiles

Lot-Sample #...: I5A260154-003 **Work Order #...:** G273J1AC **Matrix.....:** WATER
Date Sampled...: 01/25/05 10:30 **Date Received..:** 01/26/05 08:00
Prep Date.....: 01/26/05 **Analysis Date..:** 01/29/05
Prep Batch #...: 5027061 **Analysis Time..:** 01:48
Dilution Factor: 0.96
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	ND	0.048	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	65	(41 - 143)
Dotriacontane	79	(12 - 153)

ConocoPhillips

Client Sample ID: IW-3

General Chemistry

Lot-Sample #...: I5A260154-003 Work Order #...: G273J Matrix.....: WATER
Date Sampled...: 01/25/05 10:30 Date Received..: 01/26/05 08:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	158	20.0	mg/L	MCAWW 300.0A	01/28/05	5029036

Dilution Factor: 20 Analysis Time..: 10:02

ConocoPhillips

Client Sample ID: IW-4

GC Volatiles

Lot-Sample #...: I5A260154-004 **Work Order #...:** G273K1AA **Matrix.....:** WATER
Date Sampled...: 01/25/05 10:55 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/02/05 **Analysis Date..:** 02/02/05
Prep Batch #...: 5035357 **Analysis Time..:** 19:17
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	95	(75 - 122)

ConocoPhillips

Client Sample ID: IW-4

GC Volatiles

Lot-Sample #...: I5A260154-004 **Work Order #...:** G273K1AD **Matrix.....:** WATER
Date Sampled...: 01/25/05 10:55 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/02/05 **Analysis Date..:** 02/02/05
Prep Batch #...: 5035380 **Analysis Time..:** 19:17
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	101	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	93	(73 - 135)

ConocoPhillips

Client Sample ID: IW-4

GC Semivolatiles

Lot-Sample #...: I5A260154-004 **Work Order #...:** G273K1AC **Matrix.....:** WATER
Date Sampled...: 01/25/05 10:55 **Date Received..:** 01/26/05 08:00
Prep Date.....: 01/26/05 **Analysis Date..:** 01/29/05
Prep Batch #...: 5027061 **Analysis Time..:** 02:30
Dilution Factor: 0.96
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	**0.31**	**0.048**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	85	(41 - 143)
Dotriacontane	109	(12 - 153)

ConocoPhillips

Client Sample ID: IW-4

General Chemistry

Lot-Sample #...: I5A260154-004 **Work Order #...:** G273K **Matrix.....:** WATER
Date Sampled...: 01/25/05 10:55 **Date Received..:** 01/26/05 08:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	154	20.0	mg/L	MCAWW 300.0A	01/28/05	5029036

Dilution Factor: 20 Analysis Time..: 10:16

ConocoPhillips

Client Sample ID: IW-5

GC Volatiles

Lot-Sample #...: I5A260154-005 **Work Order #...:** G273L1AA **Matrix.....:** WATER
Date Sampled...: 01/25/05 11:30 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/02/05 **Analysis Date..:** 02/02/05
Prep Batch #...: 5035357 **Analysis Time..:** 19:45
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	95	(75 - 122)

ConocoPhillips

Client Sample ID: IW-5

GC Volatiles

Lot-Sample #...: I5A260154-005 **Work Order #...:** G273L1AD **Matrix.....:** WATER
Date Sampled...: 01/25/05 11:30 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/02/05 **Analysis Date..:** 02/02/05
Prep Batch #...: 5035380 **Analysis Time..:** 19:45
Dilution Factor: 1

Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	101	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	93	(73 - 135)

ConocoPhillips

Client Sample ID: IW-5

GC Semivolatiles

Lot-Sample #...: I5A260154-005	**Work Order #...:** G273L1AC	**Matrix.....:** WATER	
Date Sampled...: 01/25/05 11:30	**Date Received..:** 01/26/05 08:00		
Prep Date.....: 01/26/05	**Analysis Date..:** 01/29/05		
Prep Batch #...: 5027061	**Analysis Time..:** 03:12		
Dilution Factor: 0.96			
	Method.....: SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	**0.43**	**0.048**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	88	(41 - 143)
Dotriacontane	115	(12 - 153)

ConocoPhillips

Client Sample ID: IW-5

General Chemistry

Lot-Sample #...: I5A260154-005 **Work Order #...:** G273L **Matrix.....:** WATER
Date Sampled...: 01/25/05 11:30 **Date Received..:** 01/26/05 08:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	156	20.0	mg/L	MCAWW 300.0A	01/28/05	5029036

Dilution Factor: 20 Analysis Time..: 10:29

ConocoPhillips

Client Sample ID: MW-13

GC Volatiles

Lot-Sample #...: I5A260154-006	**Work Order #...:** G273P2AA	**Matrix.....:** WATER	
Date Sampled...: 01/25/05 11:55	**Date Received..:** 01/26/05 08:00		
Prep Date.....: 02/08/05	**Analysis Date..:** 02/08/05		
Prep Batch #...: 5040353	**Analysis Time..:** 17:49		
Dilution Factor: 10			
	Method.....: SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	**4.7**	**1.0**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	97	(75 - 122)

ConocoPhillips

Client Sample ID: MW-13

GC Volatiles

Lot-Sample #...: I5A260154-006 **Work Order #...:** G273P2AD **Matrix.....:** WATER
Date Sampled...: 01/25/05 11:55 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/08/05 **Analysis Date..:** 02/08/05
Prep Batch #...: 5040356 **Analysis Time..:** 17:49
Dilution Factor: 10
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	**1000**	**10**	**ug/L**
Ethylbenzene	**1400**	**10**	**ug/L**
Toluene	ND	10	ug/L
Xylenes (total)	ND	30	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	108	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	91	(73 - 135)

ConocoPhillips

Client Sample ID: MW-13

GC Semivolatiles

Lot-Sample #...:	I5A260154-006	**Work Order #...:** G273P1AC	**Matrix.....:** WATER
Date Sampled...:	01/25/05 11:55	**Date Received..:** 01/26/05 08:00	
Prep Date.....:	01/26/05	**Analysis Date..:** 01/29/05	
Prep Batch #...:	5027061	**Analysis Time..:** 03:53	
Dilution Factor:	0.95		
		Method.....: SW846 8015B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	**0.79**	**0.048**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	91	(41 - 143)
Dotriacontane	95	(12 - 153)

ConocoPhillips

Client Sample ID: MW-13

General Chemistry

Lot-Sample #...: I5A260154-006 **Work Order #...:** G273P **Matrix.....:** WATER
Date Sampled...: 01/25/05 11:55 **Date Received..:** 01/26/05 08:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	130	20.0	mg/L	MCAWW 300.0A	01/28/05	5029036

Dilution Factor: 20 Analysis Time..: 10:42

ConocoPhillips

Client Sample ID: IW-6

GC Volatiles

Lot-Sample #...: I5A260154-007 **Work Order #...:** G273Q1AA **Matrix.....:** WATER
Date Sampled...: 01/25/05 13:10 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/02/05 **Analysis Date..:** 02/02/05
Prep Batch #...: 5035357 **Analysis Time..:** 21:39
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	94	(75 - 122)

ConocoPhillips

Client Sample ID: IW-6

GC Volatiles

Lot-Sample #...: I5A260154-007 **Work Order #...:** G273Q1AD **Matrix.....:** WATER
Date Sampled...: 01/25/05 13:10 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/04/05 **Analysis Date..:** 02/04/05
Prep Batch #...: 5038184 **Analysis Time..:** 13:19
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	90	(73 - 135)

ConocoPhillips

Client Sample ID: IW-6

GC Semivolatiles

Lot-Sample #...: I5A260154-007 **Work Order #...:** G273Q1AC **Matrix.....:** WATER
Date Sampled...: 01/25/05 13:10 **Date Received..:** 01/26/05 08:00
Prep Date.....: 01/26/05 **Analysis Date..:** 01/29/05
Prep Batch #...: 5027061 **Analysis Time..:** 04:35
Dilution Factor: 0.95
Method.....: *SW846 8015B*

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	**0.76**	**0.048**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	99	(41 - 143)
Dotriacontane	141	(12 - 153)

ConocoPhillips

Client Sample ID: IW-6

General Chemistry

Lot-Sample #...: I5A260154-007 **Work Order #...:** G273Q **Matrix.....:** WATER
Date Sampled...: 01/25/05 13:10 **Date Received..:** 01/26/05 08:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	156	20.0	mg/L	MCAWW 300.0A	01/28/05	5029036

Dilution Factor: 20 Analysis Time..: 11:21

ConocoPhillips

Client Sample ID: IW-7

GC Volatiles

Lot-Sample #...: I5A260154-008 **Work Order #...:** G273R1AA **Matrix.....:** WATER
Date Sampled...: 01/25/05 13:40 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/02/05 **Analysis Date..:** 02/02/05
Prep Batch #...: 5035357 **Analysis Time..:** 22:07
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	93	(75 - 122)

ConocoPhillips

Client Sample ID: IW-7

GC Volatiles

Lot-Sample #...: I5A260154-008 **Work Order #...:** G273R1AD **Matrix.....:** WATER
Date Sampled...: 01/25/05 13:40 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/04/05 **Analysis Date..:** 02/04/05
Prep Batch #...: 5038184 **Analysis Time..:** 13:47
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	91	(73 - 135)

ConocoPhillips

Client Sample ID: IW-7

GC Semivolatiles

Lot-Sample #...: I5A260154-008 Work Order #...: G273R1AC Matrix.....: WATER
Date Sampled...: 01/25/05 13:40 Date Received..: 01/26/05 08:00
Prep Date.....: 01/26/05 Analysis Date..: 01/29/05
Prep Batch #...: 5027061 Analysis Time..: 05:17
Dilution Factor: 0.96
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	0.21	0.048	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	64	(41 - 143)
Dotriacontane	83	(12 - 153)

ConocoPhillips

Client Sample ID: IW-7

General Chemistry

Lot-Sample #...: I5A260154-008 **Work Order #...:** G273R **Matrix.....:** WATER
Date Sampled...: 01/25/05 13:40 **Date Received..:** 01/26/05 08:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	155	20.0	mg/L	MCAWW 300.0A	01/28/05	5029036

Dilution Factor: 20 Analysis Time..: 11:35

ConocoPhillips

Client Sample ID: IW-8

GC Volatiles

Lot-Sample #...: I5A260154-009 **Work Order #...:** G273T1AA **Matrix.....:** WATER
Date Sampled...: 01/25/05 13:50 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/02/05 **Analysis Date..:** 02/02/05
Prep Batch #...: 5035357 **Analysis Time..:** 22:36
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	94	(75 - 122)

ConocoPhillips

Client Sample ID: IW-8

GC Volatiles

Lot-Sample #...: I5A260154-009 **Work Order #...:** G273T1AD **Matrix.....:** WATER
Date Sampled...: 01/25/05 13:50 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/04/05 **Analysis Date..:** 02/04/05
Prep Batch #...: 5038184 **Analysis Time..:** 14:16
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	99	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	92	(73 - 135)

ConocoPhillips

Client Sample ID: IW-8

GC Semivolatiles

Lot-Sample #...: I5A260154-009	**Work Order #...:** G273T1AC	**Matrix.....:** WATER	
Date Sampled...: 01/25/05 13:50	**Date Received..:** 01/26/05 08:00		
Prep Date.....: 01/26/05	**Analysis Date..:** 01/29/05		
Prep Batch #...: 5027061	**Analysis Time..:** 05:59		
Dilution Factor: 0.98			
	Method.....: SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	**0.49**	**0.049**	**mg/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	91	(41 - 143)
Dotriacontane	116	(12 - 153)

ConocoPhillips

Client Sample ID: IW-8

General Chemistry

Lot-Sample #...: I5A260154-009 **Work Order #...:** G273T **Matrix.....:** WATER
Date Sampled...: 01/25/05 13:50 **Date Received..:** 01/26/05 08:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	157	20.0	mg/L	MCAWW 300.0A	01/28/05	5029036

Dilution Factor: 20 Analysis Time..: 11:48

ConocoPhillips

Client Sample ID: TRIP BLANK 1

GC Volatiles

Lot-Sample #...: I5A260154-010 **Work Order #...:** G273W1AA **Matrix.....:** WATER
Date Sampled...: 01/25/05 14:45 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/02/05 **Analysis Date..:** 02/02/05
Prep Batch #...: 5035357 **Analysis Time..:** 23:04
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	93	(75 - 122)

ConocoPhillips

Client Sample ID: TRIP BLANK 1

GC Volatiles

Lot-Sample #...: I5A260154-010 **Work Order #...:** G273W1AC **Matrix.....:** WATER
Date Sampled...: 01/25/05 14:45 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/04/05 **Analysis Date..:** 02/04/05
Prep Batch #...: 5038184 **Analysis Time..:** 14:45
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	93	(73 - 135)

ConocoPhillips

Client Sample ID: TRIP BLANK 2

GC Volatiles

Lot-Sample #...: I5A260154-011 **Work Order #...:** G273X1AA **Matrix.....:** WATER
Date Sampled...: 01/25/05 14:55 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/02/05 **Analysis Date..:** 02/02/05
Prep Batch #...: 5035357 **Analysis Time..:** 23:32
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	93	(75 - 122)

ConocoPhillips

Client Sample ID: TRIP BLANK 2

GC Volatiles

Lot-Sample #...: I5A260154-011 **Work Order #...:** G273X1AC **Matrix.....:** WATER
Date Sampled...: 01/25/05 14:55 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/04/05 **Analysis Date..:** 02/04/05
Prep Batch #...: 5038184 **Analysis Time..:** 15:14
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	101	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	94	(73 - 135)

ConocoPhillips

Client Sample ID: TRIP BLANK 3

GC Volatiles

Lot-Sample #...: I5A260154-012 **Work Order #...:** G27311AA **Matrix.....:** WATER
Date Sampled...: 01/25/05 15:05 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/02/05 **Analysis Date..:** 02/03/05
Prep Batch #...: 5035357 **Analysis Time..:** 00:01
Dilution Factor: 1
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	0.10	mg/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	93	(75 - 122)

ConocoPhillips

Client Sample ID: TRIP BLANK 3

GC Volatiles

Lot-Sample #...: I5A260154-012 **Work Order #...:** G27311AC **Matrix.....:** WATER
Date Sampled...: 01/25/05 15:05 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/04/05 **Analysis Date..:** 02/04/05
Prep Batch #...: 5038184 **Analysis Time..:** 15:42
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	94	(73 - 135)

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: I5A260154 **Work Order #...:** G3TNJ1AA **Matrix.....:** WATER
MB Lot-Sample #: I5B040000-357

Prep Date.....: 02/02/05 **Analysis Time..:** 16:44
Analysis Date..: 02/02/05 **Prep Batch #...:** 5035357
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Gasoline Range Organics	ND	0.10	mg/L	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO	94	(75 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: I5A260154 **Work Order #...:** G339V1AA **Matrix.....:** WATER
MB Lot-Sample #: I5B090000-353

Prep Date.....: 02/08/05 **Analysis Time..:** 11:40
Analysis Date..: 02/08/05 **Prep Batch #...:** 5040353
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Gasoline Range Organics	ND	0.10	mg/L	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO	93	(75 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: I5A260154 **Work Order #...:** G3TRQ1AA **Matrix.....:** WATER
MB Lot-Sample #: I5B040000-380
Prep Date.....: 02/02/05 **Analysis Time..:** 10:46
Analysis Date..: 02/02/05 **Prep Batch #...:** 5035380
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8021B
Ethylbenzene	ND	1.0	ug/L	SW846 8021B
Toluene	ND	1.0	ug/L	SW846 8021B
Xylenes (total)	ND	3.0	ug/L	SW846 8021B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	95	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: I5A260154 **Work Order #...:** G3W8C1AA **Matrix.....:** WATER
MB Lot-Sample #: I5B070000-184

Prep Date.....: 02/04/05 **Analysis Time..:** 10:48
Analysis Date..: 02/04/05 **Prep Batch #...:** 5038184
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8021B
Ethylbenzene	ND	1.0	ug/L	SW846 8021B
Toluene	ND	1.0	ug/L	SW846 8021B
Xylenes (total)	ND	3.0	ug/L	SW846 8021B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	95	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: I5A260154 **Work Order #...:** G33981AA **Matrix.....:** WATER
MB Lot-Sample #: I5B090000-356
Prep Date.....: 02/08/05 **Analysis Time..:** 11:40
Analysis Date..: 02/08/05 **Prep Batch #...:** 5040356
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8021B
Ethylbenzene	ND	1.0	ug/L	SW846 8021B
Toluene	ND	1.0	ug/L	SW846 8021B
Xylenes (total)	ND	3.0	ug/L	SW846 8021B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	91	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: I5A260154 **Work Order #...:** G29V51AA **Matrix.....:** WATER
MB Lot-Sample #: I5A270000-061

Prep Date.....: 01/26/05 **Analysis Time..:** 21:35
Analysis Date..: 01/28/05 **Prep Batch #...:** 5027061
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Diesel Range Organics	ND	0.050	mg/L	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	71	(41 - 143)
Dotriacontane	86	(12 - 153)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: I5A260154 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: G3F1F1AA		MB Lot-Sample #:	I5A290000-036	
	ND	1.0	mg/L	MCAWW 300.0A	01/28/05	5029036
		Dilution Factor: 1				
		Analysis Time..: 08:43				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I5A260154 **Work Order #...:** G3TNJ1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: I5B040000-357 G3TNJ1AD-LCSD
Prep Date.....: 02/02/05 **Analysis Date..:** 02/02/05
Prep Batch #...: 5035357 **Analysis Time..:** 16:15
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Gasoline Range Organics	**96**	**(85 - 115)**			**SW846 8015B**
	90	**(85 - 115)**	**6.5**	**(0-20)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	98	(81 - 123)
	96	(81 - 123)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I5A260154 **Work Order #...:** G339V1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: I5B090000-353 G339V1AD-LCSD
Prep Date.....: 02/08/05 **Analysis Date..:** 02/08/05
Prep Batch #...: 5040353 **Analysis Time..:** 11:11
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Gasoline Range Organics	**90**	**(85 - 115)**			**SW846 8015B**
	90	**(85 - 115)**	**0.35**	**(0-20)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	96	(81 - 123)
	96	(81 - 123)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I5A260154 **Work Order #...:** G3TRQ1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: I5B040000-380 G3TRQ1AD-LCSD
Prep Date.....: 02/02/05 **Analysis Date..:** 02/02/05
Prep Batch #...: 5035380 **Analysis Time..:** 09:49
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**94**	**(85 - 115)**			**SW846 8021B**
	101	**(85 - 115)**	**6.7**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**109**	**(85 - 115)**			**SW846 8021B**
	110	**(85 - 115)**	**1.3**	**(0-20)**	**SW846 8021B**
Toluene	**102**	**(85 - 115)**			**SW846 8021B**
	105	**(85 - 115)**	**3.3**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**111**	**(85 - 115)**			**SW846 8021B**
	111	**(85 - 115)**	**0.33**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	103	(85 - 111)
	102	(85 - 111)
a,a,a-Trifluorotoluene (TFT)	96	(84 - 114)
	98	(84 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I5A260154 **Work Order #...:** G3W8C1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: I5B070000-184 G3W8C1AD-LCSD
Prep Date.....: 02/04/05 **Analysis Date..:** 02/04/05
Prep Batch #...: 5038184 **Analysis Time..:** 09:51
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**95**	**(85 - 115)**			**SW846 8021B**
	93	**(85 - 115)**	**2.4**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**106**	**(85 - 115)**			**SW846 8021B**
	102	**(85 - 115)**	**4.0**	**(0-20)**	**SW846 8021B**
Toluene	**104**	**(85 - 115)**			**SW846 8021B**
	97	**(85 - 115)**	**7.0**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**109**	**(85 - 115)**			**SW846 8021B**
	103	**(85 - 115)**	**5.6**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	104	(85 - 111)
	102	(85 - 111)
a,a,a-Trifluorotoluene **(TFT)**	95	(84 - 114)
	99	(84 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I5A260154 **Work Order #...:** G33981AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: I5B090000-356 G33981AD-LCSD
Prep Date.....: 02/08/05 **Analysis Date..:** 02/08/05
Prep Batch #...: 5040356 **Analysis Time..:** 12:09
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**102**	**(85 - 115)**			**SW846 8021B**
	102	**(85 - 115)**	**0.56**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**103**	**(85 - 115)**			**SW846 8021B**
	101	**(85 - 115)**	**1.8**	**(0-20)**	**SW846 8021B**
Toluene	**100**	**(85 - 115)**			**SW846 8021B**
	99	**(85 - 115)**	**0.73**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**104**	**(85 - 115)**			**SW846 8021B**
	102	**(85 - 115)**	**1.8**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	104	(85 - 111)
	102	(85 - 111)
a,a,a-Trifluorotoluene (TFT)	97	(84 - 114)
	97	(84 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: I5A260154 **Work Order #...:** G29V51AC **Matrix.....:** WATER
LCS Lot-Sample#: I5A270000-061
Prep Date.....: 01/26/05 **Analysis Date..:** 01/28/05
Prep Batch #...: 5027061 **Analysis Time..:** 22:17
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Diesel Range Organics	**91**	**(44 - 151)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	91	(41 - 143)
Dotriacontane	91	(12 - 153)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I5A260154 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: G3F1F1AC	LCS Lot-Sample#: I5A290000-036		
	103	(90 - 110)	MCAWW 300.0A	01/28/05	5029036
		Dilution Factor: 1	Analysis Time..: 08:57		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I5A260154 **Work Order #...:** G27251AL-MS **Matrix.....:** WATER
MS Lot-Sample #: I5A260154-001 G27251AM-MSD
Date Sampled...: 01/25/05 09:25 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/02/05 **Analysis Date..:** 02/03/05
Prep Batch #...: 5035357 **Analysis Time..:** 00:29
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Gasoline Range Organics	**92**	**(79 - 124)**			**SW846 8015B**
	93	**(79 - 124)**	**0.71**	**(0-20)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO	98	(75 - 122)
	98	(75 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...:	I5A260154	**Work Order #...:**	G3DLK1AK-MS	**Matrix.....:**	WATER
MS Lot-Sample #:	I5A280109-001		G3DLK1AL-MSD		
Date Sampled...:	01/26/05 08:30	**Date Received..:**	01/28/05 08:00		
Prep Date.....:	02/08/05	**Analysis Date..:**	02/09/05		
Prep Batch #...:	5040353	**Analysis Time..:**	09:38		
Dilution Factor:	1				

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Gasoline Range Organics	**139 a**	**(79 - 124)**			**SW846 8015B**
	106 p	**(79 - 124)**	**27**	**(0-20)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO	97	(75 - 122)
	95	(75 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I5A260154 **Work Order #...:** G273H1AG-MS **Matrix.....:** WATER
MS Lot-Sample #: I5A260154-002 G273H1AH-MSD
Date Sampled...: 01/25/05 10:15 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/02/05 **Analysis Date..:** 02/03/05
Prep Batch #...: 5035380 **Analysis Time..:** 01:26
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**108**	**(85 - 115)**			**SW846 8021B**
	115	**(85 - 115)**	**6.7**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**120 a**	**(85 - 115)**			**SW846 8021B**
	128 a	**(85 - 115)**	**6.6**	**(0-20)**	**SW846 8021B**
Toluene	**112**	**(85 - 115)**			**SW846 8021B**
	120 a	**(85 - 115)**	**6.6**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**121 a**	**(85 - 115)**			**SW846 8021B**
	130 a	**(85 - 115)**	**6.7**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	104	(81 - 119)
	103	(81 - 119)
,a,a-Trifluorotoluene (TFT)	92	(73 - 135)
	95	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I5A260154 **Work Order #...:** G273Q1AG-MS **Matrix.....:** WATER
MS Lot-Sample #: I5A260154-007 G273Q1AH-MSD
Date Sampled...: 01/25/05 13:10 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/04/05 **Analysis Date..:** 02/04/05
Prep Batch #...: 5038184 **Analysis Time..:** 17:22
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**118 a**	**(85 - 115)**			**SW846 8021B**
	126 a	**(85 - 115)**	**6.0**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**133 a**	**(85 - 115)**			**SW846 8021B**
	138 a	**(85 - 115)**	**3.0**	**(0-20)**	**SW846 8021B**
Toluene	**125 a**	**(85 - 115)**			**SW846 8021B**
	129 a	**(85 - 115)**	**3.2**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**135 a**	**(85 - 115)**			**SW846 8021B**
	138 a	**(85 - 115)**	**2.5**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	103	(81 - 119)
	101	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	99	(73 - 135)
	100	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I5A260154 **Work Order #...:** G3DMA1AF-MS **Matrix.....:** WATER
MS Lot-Sample #: I5A280109-002 G3DMA1AG-MSD
Date Sampled...: 01/26/05 09:15 **Date Received..:** 01/28/05 08:00
Prep Date.....: 02/08/05 **Analysis Date..:** 02/09/05
Prep Batch #...: 5040356 **Analysis Time..:** 11:17
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**118 a**	**(85 - 115)**			**SW846 8021B**
	126 a	**(85 - 115)**	**6.7**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**122 a**	**(85 - 115)**			**SW846 8021B**
	129 a	**(85 - 115)**	**4.9**	**(0-20)**	**SW846 8021B**
Toluene	**115**	**(85 - 115)**			**SW846 8021B**
	122 a	**(85 - 115)**	**5.9**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**127 a**	**(85 - 115)**			**SW846 8021B**
	132 a	**(85 - 115)**	**4.2**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	103	(81 - 119)
	103	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	95	(73 - 135)
	97	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: I5A260154 **Work Order #...:** G27251AG-MS **Matrix.....:** WATER
MS Lot-Sample #: I5A260154-001 G27251AH-MSD
Date Sampled...: 01/25/05 09:25 **Date Received..:** 01/26/05 08:00
Prep Date.....: 01/26/05 **Analysis Date..:** 01/28/05
Prep Batch #...: 5027061 **Analysis Time..:** 23:42
Dilution Factor: 0.95

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Diesel Range Organics	**91**	**(44 - 151)**			**SW846 8015B**
	80	**(44 - 151)**	**8.8**	**(0-20)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	98	(41 - 143)
	99	(41 - 143)
Dotriacontane	99	(12 - 153)
	100	(12 - 153)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I5A260154 **Matrix.....:** WATER
Date Sampled...: 01/25/05 09:25 **Date Received..:** 01/26/05 08:00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		WO#: G27251AJ-MS/G27251AK-MSD				MS Lot-Sample #: I5A260154-001	
	107	(90 - 110)			MCAWW 300.0A	01/28/05	5029036
	110	(90 - 110)	1.4	(0-20)	MCAWW 300.0A	01/28/05	5029036
		Dilution Factor: 20					
		Analysis Time..: 09:23					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Report Attachment

Note that if this report contains tests performed for the following methods, the associated method deviations are applicable.

EPA 410.4, COD: Laboratory uses different analytical wavelength as specified by instrument manufacturer.
EPA 340.2, Fluoride: Preliminary Bellack distillation not performed.
EPA 624: The laboratory uses a different desorb time and purge volume than stated in the method.
EPA 8151A: Laboratory utilizes alternate extraction solvent.
Iowa OA1: Benzene, toluene, ethylbenzene and xylenes (BTEX) are not analyzed along with the Gasoline Range Organics if client does not require BTEX.
EPA TO-12: Samples not analyzed in duplicate.
EPA TO-14A and TO-15: Zero humidified nitrogen is used in place of air for method blanks.

TRRP Reporting Requirements

If this package contains reports requiring TRRP (Texas Risk Reduction Program) reporting criteria, the following information applies.

The REPORTING LIMIT is equivalent to the TRRP acronym MQL (method quantitation limit).
The MDL is equivalent to the TRRP acronym SQL (sample quantitation limit).

SEVERN TRENT STL

CHAIN–OF–CUSTODY ADDENDUM

Lot No: ISA260154

RECEIVED BY: [signature]

COC NUMBER: _____

DATE/TIME RECEIVED: 1-26-05 0900

QUOTE/PROFILE: 62511

UNPACKED DATE/TIME: 1-26-05 0930

CLIENT/PROJECT: Maxim

SAMPLES LOGGED IN: AT

LOG-IN REVIEWED: BG

Number of Shipping Containers Received with Chain of Custody 3

VOC AIR / FILTER SAMPLES ☐ YES **SEE SECTIONS 1.0, 2.0, & 6.0**

1.0 CONTAINERS EXAMINED UPON RECEIPT: CC

Container Sealed: ☑ YES ☐ NO

Custody Seal Signed/Dated: ☐ ~~YES~~ ☐ NO

Custody Seal Present: ☑ YES ☐ NO

Containers checked for radioactivity: ☐ YES ☐ NO ☑ ~~N/A~~

If seal not intact or Geiger counter reading >0.5 mR/hr, list air bill number of that container(s): _____

2.0 VOC CANISTERS EXAMINED UPON RECEIPT: _____

Canister Valves Closed:	☐ YES ☐ NO	Samples Received Match Chain:	☐ YES ☐ NO
Canister Valves Capped:	☐ YES ☐ NO	Other Equipment Received:	☐ YES ☐ NO
Valve Cap Tightened Properly:	☐ YES ☐ NO	See Additional Comments (Section 5.0 and / or 7.0)	☐ YES ☐ NO
Packing Material Used: (circle)		Chain-of-Custody form properly maintained:	☐ YES ☐ NO
None / Absorbent / Paper / Bubble Wrap		Can Size: ☐ 6L ☐ 15L Other _____	

3.0 SAMPLE TEMPERATURE UPON RECEIPT BY: CC **IR THERMOMETER #:** 84

Temperature of the container(s):

Circle selection: TB = Temp. Blank and/or SC = Sample Container *[acceptable tolerance 4°C ± 2°; (NC, WI: 1-4.4°C)]*

(TB)	(TB)	(TB)	TB	TB	TB	TB	TB	TB	TB
SC 2°C	SC 2°C	SC 2°C	SC	SC	SC	SC	SC	SC	SC

If temperature is outside acceptable tolerance, Project Manager was notified (_____PM). Date: _____ Time: _____

Samples received do not require cooling _____ OK to analyze samples: ☑ YES ☐ NO

PRESERVATION OF SAMPLES REQUIRED: ☐ NA ☑ ~~YES~~ **VERIFIED BY:** CC

Base samples are>pH 12:	☐ YES ☐ NO	Acid preserved are<pH 2:	☑ YES ☐ NO
Cyanide samples checked for sulfides:	☐ YES	Sulfide samples appear to be preserved with zinc acetate:	☐ YES ☐ NO
Samples checked for chlorine per specification (N.C.)	☐ YES	Free chlorine present:	☐ YES ☐ NO

If sample preservation is outside acceptable tolerance, Project Manager was notified (_____PM)

Date: _____ Time: _____ ☐ see pH adjustment form

VOLATILE SAMPLES FILLED COMPLETELY, IF NOT, LIST ID AND HEADSPACE OF VOA's CONTAINING BUBBLES EXCEEDING 6MM IN DIAMETER:

Sample ID	mm Headspace

Sample ID	mm Headspace

4.0 CONDITION OF BOTTLES/CONTAINERS VERIFIED BY: CC

Samples received match COC: ☑ YES ☐ NO Bottles received intact: ☐ YES ☑ NO

See additional discrepancies/comments section: ☑ YES ☐ NO Samples received from USDA restricted area: ☐ YES ☑ NO

Chain-of-Custody form properly maintained: ☑ YES ☐ NO VOA trip blanks included: 6/40ml ☑ YES ☐ NO ☐ N/A

5.0 ADDITIONAL DISCREPANCIES

Appears on COC		Appears on Label		
Sample ID	Date/Time	Sample ID	Date/Time	Comments

6.0 SHIPPING DOCUMENTATION:

Air/freight bill is available and attached to COC: ☑ YES ☐ NO Air bill #: _____

Hand-delivered Carrier: _____ Date: _____ Time: _____

7.0 OTHER COMMENTS:

Sample IW-6 1X1L Received Broken

CORRECTIVE ACTION:

Client's Name: _____ Informed verbally on: _____ By: _____

Client's Name: _____ Informed verbally on: _____ By: _____

Sample(s) processed "as is" comments: _____

Samples(s) on hold until: _____ If released, notify: _____

REVIEW:

Project Management: CMB Date: 2-11-05

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE

3

Chain of Custody Record

ISA2L0154

CHAIN OF CUSTODY NUMBER

S0012144-001

SEVERN TRENT **STL** Severn Trent Laboratories, Inc.

110

STL4149 (1202)

Client	Project Manager	Date
Maxim Technologies	Greg Pope	01/17/2005
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Location**
1703 W Industrial Ave	(432) 686-8081 / (000)	STL Austin
City / State / Zip Code	**Site Contact**	
Midland / TX / 79701	Greg Pope	
Project Number/Name	**Carrier/Waybill Number**	
3374 Line MH1-1 Remediation	FEDEX	
Contract/Purchase Order/Quote Number		
CONTRACT / PURCHASE ORDER # : 3374MAX007		QUOTE: 62511

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Sample I.D. Number and Description	Date	Time	Sample Type	Containers Volume	Containers Type	Containers No.	Preservative	Condition on Receipt/Comments	GC8021	TPHV	TPHS-DRO	ICCL
SVE-1	1-25-05	925	WATER	1L	AMBER	3	None	2° 1-26-05 -cc			X	
SVE-1		925	WATER	40mL	VIAL	4	1:1 HCL	SEE ADD	X	X		
SVE-1		925	WATER	250mL	PLASTIC	1	None					X
IW-2		1015	WATER	1L	AMBER	2	None				X	
IW-2		1015	WATER	40mL	VIAL	4	1:1 HCL		X	X		
IW-2		1015	WATER	250mL	PLASTIC	1	None					X
IW-3		1030	WATER	1L	AMBER	2	None				X	
IW-3		1030	WATER	40mL	VIAL	4	1:1 HCL		X	X		
IW-3	1-25-05	1030	WATER	250mL	PLASTIC	1	None					X
			~~WATER~~	~~1L~~	~~AMBER~~	~~2~~	~~None~~				~~X~~	
			~~WATER~~	~~40mL~~	~~VIAL~~	~~4~~	~~1:1 HCL~~		~~X~~	~~X~~		
			~~WATER~~	~~250mL~~	~~PLASTIC~~	~~1~~	~~None~~					~~X~~
			~~WATER~~	~~1L~~	~~AMBER~~	~~2~~	~~None~~				~~X~~	
			~~WATER~~	~~40mL~~	~~VIAL~~	~~4~~	~~1:1 HCL~~		~~X~~	~~X~~		
			~~WATER~~	~~250mL~~	~~PLASTIC~~	~~1~~	~~None~~					~~X~~
TRIP BLANK 1	1-25-05	1445	WATER	40mL	VOA	2	Hcl		X	X		

Special Instructions: TPH-GRO & DRO, 8021 BTEX; 300 chloride

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☑ Normal ☐ Rush ☐ Other ____

QC Level: ☑ I. ☐ II. ☐ III.

Project Specific Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Bill Jul[illegible]	1/17/05	1445	1. Received By: [signature]	1/18/05	1030
2. Relinquished By: [signature]	1/25/05	1450	2. Received By: [signature]	1-26-05	0800
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

76/78

Chain of Custody Record

CHAIN OF CUSTODY NUMBER
$0012144-002

SEVERN TRENT STL
Severn Trent Laboratories, Inc.

4111

STL4149 (1202)

Client	Project Manager	Date
Marin Technologies	Greg Pope	01/17/2005
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Location**
1703 W Industrial Ave	(432) 686-8081 / (000)	STL Austin
City / **State** / **Zip Code**	**Site Contact**	
Midland / TX / 79701	Greg Pope	
Project Number/Name	**Carrier/Waybill Number**	
3374 Line MM1-1 Remediation	FEDEX	
Contract/Purchase Order/Quote Number		
CONTRACT / PURCHASE ORDER # : 3374MAR007	QUOTE: 62511	

Page 1 of 1

Sample I.D. Number and Description	Date	Time	Sample Type	Containers: Volume	Containers: Type	Containers: No.	Preservative	Condition on Receipt/Comments	Analysis: GC8021	Analysis: TPH-DRO	Analysis: TPH-GRO	Analysis: ICCL
IW-4	1-25-05	1055	WATER	1L	AMBER	2	None	2 @ 1-26-05 cc		X		
IW-4		1055	WATER	40mL	VIAL	4	1:1 HCL	SEE ABOVE	X			
IW-4		1055	WATER	250mL	PLASTIC	1	None				X	
IW-5		1130	WATER	1L	AMBER	2	None			X		
IW-5		1130	WATER	40mL	VIAL	4	1:1 HCL		X			
IW-5		1130	WATER	250mL	PLASTIC	1	None				X	
MW-13		1155	WATER	1L	AMBER	2	None			X		
MW-13		1155	WATER	40mL	VIAL	4	1:1 HCL		X			
MW-13	1-25-05	1155	WATER	250mL	PLASTIC	1	None				X	
			WATER	1L	AMBER	2	None			X		
			WATER	40mL	VIAL	4	1:1 HCL		X			
			WATER	250mL	PLASTIC	1	None				X	
			WATER	1L	AMBER	2	None			X		
			WATER	40mL	VIAL	4	1:1 HCL		X			
			WATER	250mL	PLASTIC	1	None				X	
TRIP BLANK 2	1-25-05	1455	WATER	40mL	VOA	2	HCl		X			

Special Instructions: TPH-GRO & DRO, 8021 BTEX; 300 chloride

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: [X] Normal [ ] Rush [ ] Other _____

QC Level: [X] I. [ ] II. [ ] III.

Project Specific Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Bill Senkin	1/17/05	1445	1. Received By:	1/18/05	1030
2. Relinquished By:	1/25/05	1500	2. Received By:	1-26-05	0800
3. Relinquished By:			3. Received By:		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

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Chain of Custody Record

CHAIN OF CUSTODY NUMBER
$0012144-003

SEVERN TRENT STL
Severn Trent Laboratories, Inc.

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STL4149 (1202)

Client	Project Manager	Date
Nexin Technologies	Greg Pope	01/17/2005
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Location**
1703 W Industrial Ave	(432) 686-8081 / (000)	STL Austin
City / **State** / **Zip Code**	**Site Contact**	
Midland / TX / 79701	Greg Pope	
Project Number/Name	**Carrier/Waybill Number**	
3374 Line NM1-1 Remediation	FEDEX	
Contract/Purchase Order/Quote Number		
CONTRACT / PURCHASE ORDER # : 3374NAI007		QUOTE: 62511

Page 3 of 4

Sample I.D. Number and Description	Date	Time	Sample Type	Containers: Volume	Containers: Type	Containers: No.	Preservative	Condition on Receipt/Comments	Analysis: GC 8021	TPH VIL	TPH DRO	ICCL IL
~~TRIP BLANK 1~~			~~WATER~~	~~40ml~~	~~VIAL~~	2	1:1 HCl		X	X		
IW-6	1-25-05	1310	WATER	1 L.	AMBER	2	NONE	2° 1-26-05-04			X	
IW-6		1310		40ML	VOA	4	HCl	SEE BOD	X	X		
IW-6		1310		250ML	POLY	1	NONE					X
IW-7		1340		1L	AMBER	2	NONE				X	
IW-7		1340		40ML	VOA	4	HCl		X	X		
IW-7		1340		250ML	POLY	1	NONE					X
IW-8		1350		1L	AMBER	2	NONE				X	
IW-8		1350		40ML	VOA	4	HCl		X	X		
IW-8		1350		250ML	POLY	1	NONE					X
TRIP BLANK 3	1-25-05	1505	WATER	40ML	VOA	2	HCl		X	X		

Special Instructions: TPH-GRO & DRO, 8021 BTEX; 300 chloride

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☑ Normal ☐ Rush ☐ Other ____

QC Level: ☑ I. ☐ II. ☐ III.

Project Specific Requirements (Specify)

	Date	Time
1. Relinquished By: Bill Seals	1/17/05	1445
2. Relinquished By:	1/25/05	1510
3. Relinquished By:		

	Date	Time
1. Received By:	1/18/05	1030
2. Received By:	1-26-05	0800
3. Received By:		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

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SEVERN TRENT STL

Certificate of Analysis

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ANALYTICAL REPORT

PROJECT NO. HOBBS, NM

3374 NM1-1 Qtrly GWM

Lot #: I4C150187

Greg Pope

Maxim Technologies
1703 W Industrial Ave
Midland, TX 79701

SEVERN TRENT LABORATORIES, INC.

Carla M. Butler
Project Manager

March 29, 2004

American Council of Independent Laboratories
International Association of Environmental Testing Laboratories

Case Narrative

STL LOT NUMBER: **I4C150187**

This report contains the analytical results for the sample received under chain of custody by Severn Trent Laboratories (STL) on March 13, 2004. This sample is associated with your 3374 NM1-1 Qtrly GWM project.

All samples were received in good condition and within temperature requirements.

All applicable quality control procedures met method-specified acceptance criteria except where noted in the case narrative or flagged on the result pages.

If you have any questions, please feel free to call me at (512) 244-0855.

EXECUTIVE SUMMARY - Detection Highlights

I4C150187

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
DISCHARGE 03/11/04 16:15 001				
Chloride	157	20.0	mg/L	MCAWW 300.0A

ANALYTICAL METHODS SUMMARY

I4C150187

PARAMETER	ANALYTICAL METHOD
Chloride	MCAWW 300.0A
Volatiles by GC	SW846 8021B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

I4C150187

ANALYTICAL METHOD	ANALYST	ANALYST ID
MCAWW 300.0A	David A. Tocher	800002
SW846 8021B	Joe Lanham	000039

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

I4C150187

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
GA91H	001	DISCHARGE	03/11/04	16:15

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

QC DATA ASSOCIATION SUMMARY

I4C150187

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	MCAWW 300.0A		4076335	4076169
	WATER	SW846 8021B		4082375	4082193

CONOCOPHILLIPS

Client Sample ID: DISCHARGE

GC Volatiles

Lot-Sample #...: I4C150187-001 **Work Order #...:** GA91H1AA **Matrix.....:** WATER
Date Sampled...: 03/11/04 16:15 **Date Received..:** 03/13/04
Prep Date.....: 03/21/04 **Analysis Date..:** 03/21/04
Prep Batch #...: 4082375
Dilution Factor: 1 **Method.....:** SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	97	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	104	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: DISCHARGE

General Chemistry

Lot-Sample #...: I4C150187-001 **Work Order #...:** GA91H **Matrix.....:** WATER
Date Sampled...: 03/11/04 16:15 **Date Received..:** 03/13/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	157	20.0	mg/L	MCAWW 300.0A	03/16/04	4076335

Dilution Factor: 20

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: I4C150187 **Work Order #...:** GCNP11AA **Matrix.....:** WATER
MB Lot-Sample #: I4C220000-375

Prep Date.....: 03/21/04
Analysis Date..: 03/21/04 **Prep Batch #...:** 4082375
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8021B
Ethylbenzene	ND	1.0	ug/L	SW846 8021B
Toluene	ND	1.0	ug/L	SW846 8021B
Xylenes (total)	ND	3.0	ug/L	SW846 8021B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	94	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	96	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: I4C150187 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: GCCCR1AA		MB Lot-Sample #:	I4C160000-335	
	ND	1.0	mg/L	MCAWW 300.0A	03/16/04	4076335
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4C150187 **Work Order #...:** GCNP11AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: I4C220000-375 GCNP11AD-LCSD
Prep Date.....: 03/21/04 **Analysis Date..:** 03/21/04
Prep Batch #...: 4082375
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**109**	**(85 - 115)**			**SW846 8021B**
	108	**(85 - 115)**	**0.79**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**106**	**(85 - 115)**			**SW846 8021B**
	110	**(85 - 115)**	**3.1**	**(0-20)**	**SW846 8021B**
Toluene	**98**	**(85 - 115)**			**SW846 8021B**
	99	**(85 - 115)**	**1.6**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**100**	**(85 - 115)**			**SW846 8021B**
	102	**(85 - 115)**	**2.0**	**(0-20)**	**SW846 8021B**
Methyl tert-butyl ether	**98**	**(85 - 115)**			**SW846 8021B**
	97	**(85 - 115)**	**0.99**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	96	(85 - 111)
	100	(85 - 111)
a,a,a-Trifluorotoluene **(TFT)**	95	(84 - 114)
	94	(84 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I4C150187 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: GCCCR1AC LCS Lot-Sample#: I4C160000-335			
	92	(85 - 106)	MCAWW 300.0A	03/16/04	4076335
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4C150187 **Work Order #...:** GA91H1AD-MS **Matrix.....:** WATER
MS Lot-Sample #: I4C150187-001 GA91H1AE-MSD
Date Sampled...: 03/11/04 16:15 **Date Received..:** 03/13/04
Prep Date.....: 03/21/04 **Analysis Date..:** 03/22/04
Prep Batch #...: 4082375
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**125 a,MSC**	**(85 - 115)**			**SW846 8021B**
	117 a,MSC	**(85 - 115)**	**6.1**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**121 a,MSC**	**(85 - 115)**			**SW846 8021B**
	113	**(85 - 115)**	**7.2**	**(0-20)**	**SW846 8021B**
Toluene	**118 a,MSC**	**(85 - 115)**			**SW846 8021B**
	109	**(85 - 115)**	**8.0**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**340 a,MSC**	**(85 - 115)**			**SW846 8021B**
	340 a,MSC	**(85 - 115)**	**0.0**	**(0-20)**	**SW846 8021B**
Methyl tert-butyl ether	**123 a,MSC**	**(85 - 115)**			**SW846 8021B**
	123 a,MSC	**(85 - 115)**	**0.0**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	92	(81 - 119)
	94	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	102	(73 - 135)
	102	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I4C150187 **Matrix.....:** WATER
Date Sampled...: 03/05/04 **Date Received..:** 03/10/04

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		WO#: GA3931A0-MS/GA3931A1-MSD				MS Lot-Sample #: I4C110286-001	
	94	(85 - 106)			MCAWW 300.0A	03/16/04	4076335
	94	(85 - 106)	0.10	(0-22)	MCAWW 300.0A	03/16/04	4076335
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Report Attachment

Note that if this report contains tests performed for the following methods, the associated method deviations are applicable.

EPA 410.1 COD: Laboratory uses different analytical wavelength as specified by instrument manufacturer.
EPA 340.2 Fluoride: Preliminary Bellack distillation not performed.
EPA 8151A: Laboratory utilizes alternate extraction solvent.
Iowa OA-1: Benzene, toluene, ethylbenzene and xylenes (BTEX) not analyzed along with Gasoline Range Organics if client does not require BTEX.
EPA TO-12: Samples are not analyzed in duplicate.
EPA TO-14A and TO-15: Zero humidified nitrogen is used in place of air for method blanks.

SEVERN TRENT STL

CHAIN-OF-CUSTODY ADDENDUM

Lot No: I4C150187

RECEIVED BY: DW

COC NUMBER: _____

DATE/TIME RECEIVED: 3/13/04 1000

QUOTE/PROFILE: 56072 ?

UNPACKED DATE/TIME: 3/13/04 1015

CLIENT/PROJECT: Maxim

SAMPLES LOGGED IN: DW

LOG-IN REVIEWED: CC

Number of Shipping Containers Received with Chain of Custody 1

VOC AIR / FILTER SAMPLES ☐ YES **SEE SECTIONS 1.0, 2.0, & 6.0**

1.0 CONTAINERS EXAMINED UPON RECEIPT: DW

Container Sealed: ☑ YES ☐ NO — Custody Seal Signed/Dated: ☐ YES ☐ NO

Custody Seal Present: ☑ YES ☐ NO — Containers checked for radioactivity: ☐ YES ☐ NO ☐ N/A

If seal not intact or Geiger counter reading >0.5 mR/hr, list air bill number of that container(s): _____

2.0 VOC CANISTERS EXAMINED UPON RECEIPT: _____

Canister Valves Closed: ☐ YES ☐ NO — Samples Received Match Chain: ☐ YES ☐ NO

Canister Valves Capped: ☐ YES ☐ NO — See Additional Comments (Section 5.0 and / or 7.0) ☐ YES ☐ NO

Packing Material Used: (circle) — Chain-of-Custody form properly maintained: ☐ YES ☐ NO

None / Absorbent / Paper / Bubble Wrap — Can Size: ☐ 6L ☐ 15L Other _____

3.0 SAMPLE TEMPERATURE UPON RECEIPT: AW **IR THERMOMETER #:** A-5

The temperature of the container(s) is: *[acceptable tolerance 4°C ± 2°; (NC, WI: 1-4.4°C)]*

3°C										

If temperature is outside acceptable tolerance, Project Manager was notified (_____PM). Date: _____ Time: _____

Samples received do not require cooling _____ OK to analyze samples: ☐ YES ☐ NO

PRESERVATION OF SAMPLES REQUIRED: ☐ NA ☑ YES **VERIFIED BY:** DW

Base samples are>pH 12: ☐ YES ☐ NO — Acid preserved are<pH 2: ☑ YES ☐ NO

Cyanide samples checked for sulfides: ☐ YES — Sulfide samples appear to be preserved with zinc acetate: ☐ YES ☐ NO

Samples checked for chlorine per specification: ☐ YES — Free chlorine present: ☐ YES ☐ NO

If sample preservation is outside acceptable tolerance, Project Manager was notified (_____PM)

Date: _____ Time: _____ ☐ see pH adjustment form

VOLATILE SAMPLES FILLED COMPLETELY, IF NOT, LIST ID AND HEADSPACE OF VOAs CONTAINING BUBBLES EXCEEDING 6MM IN DIAMETER:

Sample ID	mm Headspace

Sample ID	mm Headspace

4.0 CONDITION OF BOTTLES/CONTAINERS **VERIFIED BY:** (AU)

Samples received match COC: ☑ YES ☐ NO Bottles received intact: ☑ YES ☐ NO

See additional discrepancies/comments section: ☐ YES ☑ NO Samples received from USDA restricted area: ☐ YES ☑ NO

Chain-of-Custody form properly maintained: ☑ YES ☐ NO VOA trip blanks included: ☐ YES ☐ NO ☑ N/A

5.0 ADDITIONAL DISCREPANCIES

Appears on COC		Appears on Label		
Sample ID	Date/Time	Sample ID	Date/Time	Comments

6.0 SHIPPING DOCUMENTATION:

Air/freight bill is available and attached to COC: ☑ YES ☐ NO Air bill #: _____

Hand-delivered Carrier: _____ Date: _____ Time: _____

7.0 OTHER COMMENTS:

_____

_____

_____

_____

_____

_____

CORRECTIVE ACTION:

Client's Name: _____ Informed verbally on: _____ By: _____

Client's Name: _____ Informed verbally on: _____ By: _____

Sample(s) processed "as is" comments: _____

_____

Samples(s) on hold until: _____ If released, notify: _____

REVIEW:

Project Management: CMB Date: 3-30-04

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE

Chain of Custody Record

CHAIN OF CUSTODY NUMBER
S0010445-006

I #C150187

SEVERN TRENT STL
Severn Trent Laboratories, Inc.

4241

STL4149 (1202)

Client	Project Manager	Date	Page
Maxim Technologies	Greg Pope	~~12/12/2003~~ GWP 3/12/04	Page 1 of 1

Address	Telephone Number (Area Code)/Fax Number	Lab Location
1703 W Industrial Ave	(432) 686-8081 / (000)	STL Austin

City	State	Zip Code	Site Contact
Midland	TX	79701	Greg Pope

Project Number/Name	Carrier/Waybill Number
~~3373 E HOBBS JCT INVESTIGATION~~ GWP 3374 NMI-1 QTRLY GWM	FEDEX 841196123704

Contract/Purchase Order/Quote Number
CONTRACT / PURCHASE ORDER # : ~~3373MAX003~~ GWP 3374MAX002 QUOTE: ~~55401~~ GWP 56072

Analysis

Sample I.D. Number and Description	Date	Time	Sample Type	Containers Volume	Containers Type	Containers No.	Preservative	Condition on Receipt/Comments	GC8021!L	TPHV!GRO	TPHS!DRO	ICCL!L	GC8021BS	ICCL!S
			~~SOLID~~	~~60mL~~	~~CLEAR GL~~	~~2~~	~~None~~			~~X~~			~~X~~	
~~.~~			~~SOLID~~	~~120mL~~	~~CLEAR GL~~	~~1~~	~~None~~				~~X~~			~~X~~
~~.~~			~~SOLID~~	~~60mL~~	~~CLEAR GL~~	~~2~~	~~None~~			~~X~~			~~X~~	
~~.~~			~~SOLID~~	~~120mL~~	~~CLEAR GL~~	~~1~~	~~None~~				~~X~~			~~X~~
~~.~~ GWP			~~SOLID~~	~~60mL~~	~~CLEAR GL~~	~~2~~	~~None~~			~~X~~			~~X~~	
~~.~~			~~SOLID~~	~~120mL~~	~~CLEAR GL~~	~~1~~	~~None~~				~~X~~			~~X~~
~~.~~			~~SOLID~~	~~60mL~~	~~CLEAR GL~~	~~2~~	~~None~~			~~X~~			~~X~~	
~~.~~			~~SOLID~~	~~120mL~~	~~CLEAR GL~~	~~1~~	~~None~~				~~X~~			~~X~~
DISCHARGE	3-11-04	1615	WATER	40mL	VIAL	3	HCl		X					
DISCHARGE	3-11-04	1615	WATER	250mL	PLASTIC	1	NONE					X		

Special Instructions: ~~TPH GRO & DRO,~~ GWP 8021 BTEX, CHLORIDE ONLY

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☑ Disposal By Lab ☐ Archive For ______ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required
☑ Normal ☐ Rush ☐ Other ______

QC Level
☐ I. ☐ II. ☐ III.

Project Specific Requirements (Specify)

Relinquished By	Date	Time	Received By	Date	Time
1. Relinquished By: [signature]	12/15/03	9:00	1. Received By: [signature]	12/16/03	11:00
2. Relinquished By: [signature]	3/12/04	13:30	2. Received By: [signature]	3/13/04	1000
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample. CANARY - Returned to Client with Report. PINK - Field Copy

SEVERN TRENT STL

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Certificate of Analysis

ANALYTICAL REPORT

PROJECT NO. HOBBS, NM O&M

3374 Line NM1-1 Remediation

Lot #: I4G020125

Greg Pope

Maxim Technologies
1703 W Industrial Ave
Midland, TX 79701

SEVERN TRENT LABORATORIES, INC.

Carla M. Butler
Project Manager

July 16, 2004

American Council of Independent Laboratories
International Association of Environmental Testing Laboratories

Case Narrative

STL LOT NUMBER: **I4G020125**

This report contains the analytical results for the two samples received under chain of custody by Severn Trent Laboratories (STL) on July 2, 2004. These samples are associated with your 3374 Line NM1-1 Remediation project.

All samples were received in good condition and within temperature requirements.

All applicable quality control procedures met method-specified acceptance criteria except where noted in the case narrative or flagged on the result pages.

If you have any questions, please feel free to call me at (512) 244-0855.

EXECUTIVE SUMMARY - Detection Highlights

I4G020125

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
DISCHARE 06/30/04 17:00 001				
Chloride	147	20.0	mg/L	MCAWW 300.0A

PREPARATION METHODS SUMMARY

I4G020125

PREPARATION DESCRIPTION	PREPARATION METHOD	ANALYTICAL METHOD
Chloride	MCAWW 300.0A	MCAWW 300.0A
Purge and trap	SW846 5030B	SW846 8021B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

I4G020125

ANALYTICAL METHOD	ANALYST	ANALYST ID
MCAWW 300.0A	David A. Tocher	800002
SW846 8021B	Beth Driskill	008945

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

I4G020125

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
GKE9W	001	DISCHARE	06/30/04	17:00
GKFAF	002	TRIP BLANK	06/30/04	17:05

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

QC DATA ASSOCIATION SUMMARY

I4G020125

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	MCAWW 300.0A		4197087	4197064
	WATER	SW846 8021B		4189103	4189081
002	WATER	SW846 8021B		4189103	4189081

CONOCOPHILLIPS

Client Sample ID: DISCHARE

GC Volatiles

Lot-Sample #...: I4G020125-001 **Work Order #...:** GKE9W1AA **Matrix.....:** WATER
Date Sampled...: 06/30/04 17:00 **Date Received..:** 07/02/04 09:10
Prep Date.....: 07/06/04 **Analysis Date..:** 07/06/04
Prep Batch #...: 4189103 **Analysis Time..:** 19:08
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	103	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	101	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: DISCHARE

General Chemistry

Lot-Sample #...: I4G020125-001 Work Order #...: GKE9W Matrix.....: WATER
Date Sampled...: 06/30/04 17:00 Date Received..: 07/02/04 09:10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	147	20.0	mg/L	MCAWW 300.0A	07/14/04	4197087

Dilution Factor: 20 Analysis Time..: 11:13

CONOCOPHILLIPS

Client Sample ID: TRIP BLANK

GC Volatiles

Lot-Sample #...: I4G020125-002 **Work Order #...:** GKFAF1AA **Matrix.....:** WATER
Date Sampled...: 06/30/04 17:05 **Date Received..:** 07/02/04 09:10
Prep Date.....: 07/06/04 **Analysis Date..:** 07/06/04
Prep Batch #...: 4189103 **Analysis Time..:** 18:12
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	104	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	99	(73 - 135)

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: I4G020125 **Work Order #...:** GKK2K1AA **Matrix.....:** WATER
MB Lot-Sample #: I4G070000-103

Prep Date.....: 07/06/04 **Analysis Time..:** 11:25
Analysis Date..: 07/06/04 **Prep Batch #...:** 4189103
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8021B
Ethylbenzene	ND	1.0	ug/L	SW846 8021B
Toluene	ND	1.0	ug/L	SW846 8021B
Xylenes (total)	ND	3.0	ug/L	SW846 8021B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	100	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: I4G020125 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: GK4NG1AA		MB Lot-Sample #:	I4G150000-087	
	ND	1.0	mg/L	MCAWW 300.0A	07/14/04	4197087
		Dilution Factor: 1				
		Analysis Time..: 08:08				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4G020125 **Work Order #...:** GKK2K1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: I4G070000-103 GKK2K1AD-LCSD
Prep Date.....: 07/06/04 **Analysis Date..:** 07/06/04
Prep Batch #...: 4189103 **Analysis Time..:** 09:35
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**110**	**(85 - 115)**			**SW846 8021B**
	105	**(85 - 115)**	**4.2**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**110**	**(85 - 115)**			**SW846 8021B**
	107	**(85 - 115)**	**2.8**	**(0-20)**	**SW846 8021B**
Toluene	**103**	**(85 - 115)**			**SW846 8021B**
	101	**(85 - 115)**	**2.1**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**110**	**(85 - 115)**			**SW846 8021B**
	106	**(85 - 115)**	**3.7**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	106	(85 - 111)
	107	(85 - 111)
a,a,a-Trifluorotoluene (TFT)	102	(84 - 114)
	101	(84 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I4G020125 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: GK4NG1AC	LCS Lot-Sample#: I4G150000-087		
	96	(85 - 106)	MCAWW 300.0A	07/14/04	4197087
		Dilution Factor: 1	Analysis Time..: 08:22		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4G020125 **Work Order #...:** GKE9W1AD-MS **Matrix.....:** WATER
MS Lot-Sample #: I4G020125-001 GKE9W1AE-MSD
Date Sampled...: 06/30/04 17:00 **Date Received..:** 07/02/04 09:10
Prep Date.....: 07/06/04 **Analysis Date..:** 07/06/04
Prep Batch #...: 4189103 **Analysis Time..:** 22:26
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**72 a**	**(85 - 115)**			**SW846 8021B**
	94 p	**(85 - 115)**	**26**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**72 a**	**(85 - 115)**			**SW846 8021B**
	93 p	**(85 - 115)**	**24**	**(0-20)**	**SW846 8021B**
Toluene	**68 a**	**(85 - 115)**			**SW846 8021B**
	88 p	**(85 - 115)**	**26**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**72 a**	**(85 - 115)**			**SW846 8021B**
	93 p	**(85 - 115)**	**25**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	108	(81 - 119)
	105	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	100	(73 - 135)
	101	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I4G020125 **Matrix.....:** WATER
Date Sampled...: 07/01/04 10:37 **Date Received..:** 07/02/04 09:10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		WO#: GKFA31CE-MS/GKFA31CF-MSD				MS Lot-Sample #: I4G020128-002	
	92	(85 - 106)			MCAWW 300.0A	07/14/04	4197087
	93	(85 - 106)	1.0	(0-22)	MCAWW 300.0A	07/14/04	4197087

Dilution Factor: 1
Analysis Time..: 11:39

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Report Attachment

Note that if this report contains tests performed for the following methods, the associated method deviations are applicable.

EPA 410.1 COD: Laboratory uses different analytical wavelength as specified by instrument manufacturer.
EPA 340.2 Fluoride: Preliminary Bellack distillation not performed.
EPA 8151A: Laboratory utilizes alternate extraction solvent.
Iowa OA-1: Benzene, toluene, ethylbenzene and xylenes (BTEX) not analyzed along with Gasoline Range Organics if client does not require BTEX.
EPA TO-12: Samples are not analyzed in duplicate.
EPA TO-14A and TO-15: Zero humidified nitrogen is used in place of air for method blanks.

TRRP Reporting Requirements

If this package contains reports requiring TRRP (Texas Risk Reduction Program) reporting criteria, the following information applies.

The REPORTING LIMIT is equivalent to the TRRP acronym MQL (method quantitation limit).
The MDL is equivalent to the TRRP acronym SQL (sample quantitation limit).

SEVERN TRENT **STL**

CHAIN-OF-CUSTODY ADDENDUM

Lot No: J46020125

RECEIVED BY: LT

COC NUMBER:

DATE/TIME RECEIVED: 7-2-04 / 0910

QUOTE/PROFILE: 56072

UNPACKED DATE/TIME: 7-2-04 / 0930

CLIENT/PROJECT: Maxim

SAMPLES LOGGED IN: CC

LOG-IN REVIEWED: LT

Number of Shipping Containers Received with Chain of Custody 1

VOC AIR / FILTER SAMPLES ☐ YES **SEE SECTIONS 1.0, 2.0, & 6.0**

1.0 CONTAINERS EXAMINED UPON RECEIPT: LT

Container Sealed: ☑ YES ☐ NO Custody Seal Signed/Dated: ☑ YES ☐ NO

Custody Seal Present: ☑ YES ☐ NO Containers checked for radioactivity: ☐ YES ☐ NO ☑ N/A

If seal not intact or Geiger counter reading >0.5 mR/hr, list air bill number of that container(s):

2.0 VOC CANISTERS EXAMINED UPON RECEIPT:

Canister Valves Closed: ☐ YES ☐ NO Samples Received Match Chain: ☐ YES ☐ NO

Canister Valves Capped: ☐ YES ☐ NO Other Equipment Received: ☐ YES ☐ NO

Valve Cap Tightened Properly: ☐ YES ☐ NO See Additional Comments (Section 5.0 and / or 7.0) ☐ YES ☐ NO

Packing Material Used: (circle) Chain-of-Custody form properly maintained: ☐ YES ☐ NO

None / Absorbent / Paper / Bubble Wrap Can Size: ☐ 6L ☐ 15L Other

3.0 SAMPLE TEMPERATURE UPON RECEIPT BY: LT **IR THERMOMETER #:** P-5

Temperature of the container(s):

Circle selection: TB = Temp. Blank and/or SC = Sample Container *[acceptable tolerance 4°C ± 2°; (NC, WI: 1-4.4°C)]*

TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
(SC) 2.0c	SC	SC	SC	SC	SC	SC	SC	SC	SC

If temperature is outside acceptable tolerance, Project Manager was notified (_____PM). Date: _____ Time: _____

Samples received do not require cooling _____ OK to analyze samples: ☐ YES ☐ NO

PRESERVATION OF SAMPLES REQUIRED: ☐ NA ☑ YES **VERIFIED BY:** LT

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☑ YES ☐ NO

Cyanide samples checked for sulfides: ☐ YES Sulfide samples appear to be preserved with zinc acetate: ☐ YES ☐ NO

Samples checked for chlorine per specification (N.C.) ☐ YES Free chlorine present: ☐ YES ☐ NO

If sample preservation is outside acceptable tolerance, Project Manager was notified (_____PM)

Date: _____ Time: _____ ☐ see pH adjustment form

VOLATILE SAMPLES FILLED COMPLETELY, IF NOT, LIST ID AND HEADSPACE OF VOA's CONTAINING BUBBLES EXCEEDING 6MM IN DIAMETER:

Sample ID	mm Headspace

Sample ID	mm Headspace

4.0 CONDITION OF BOTTLES/CONTAINERS **VERIFIED BY:** LT

Samples received match COC: ☑ YES ☐ NO Bottles received intact: ☑ YES ☐ NO

See additional discrepancies/comments section: ☐ YES ☑ NO Samples received from USDA restricted area: ☐ YES ☑ NO

Chain-of-Custody form properly maintained: ☐ YES ☑ NO VOA trip blanks included: 2x40mL ☑ YES ☐ NO ☐ N/A

5.0 ADDITIONAL DISCREPANCIES

Appears on COC		Appears on Label		
Sample ID	**Date/Time**	**Sample ID**	**Date/Time**	**Comments**

6.0 SHIPPING DOCUMENTATION:

Air/freight bill is available and attached to COC: ☑ YES ☐ NO Air bill #: _____

Hand-delivered Carrier: _____ Date: _____ Time: _____

7.0 OTHER COMMENTS:

_____

_____

_____

_____

_____

_____

CORRECTIVE ACTION:

Client's Name: _____ Informed verbally on: _____ By: _____

Client's Name: _____ Informed verbally on: _____ By: _____

Sample(s) processed "as is" comments: _____

_____

_____

_____

Samples(s) on hold until: _____ If released, notify: _____

REVIEW:

Project Management: CMB Date: 7-2-04

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE

I460201735

Chain of Custody Record

CHAIN OF CUSTODY NUMBER
$0010947-001

SEVERN TRENT **STL**
Severn Trent Laboratories, Inc.

023629

STL4149 (1202)

Client	Project Manager	Date
Maxim Technologies	Greg Pope	04/12/2004
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Location**
1703 W Industrial Ave	(432) 686-8081 / (000)	STL Austin
City / **State** / **Zip Code**	**Site Contact**	
Midland / TX / 79701	Greg Pope	
Project Number/Name	**Carrier/Waybill Number**	
3374 Line NM1-1 Remediation		

Contract/Purchase Order/Quote Number
CONTRACT / PURCHASE ORDER # : 3374MAX005 QUOTE: 56072

Page 1 of 1

Sample I.D. Number and Description	Date	Time	Sample Type	Containers: Volume	Containers: Type	Containers: No.	Preservative	Condition on Receipt/Comments	Analysis: GC 8021 BTEX	Analysis: IC Cl
DISCHARGE	6-30-04	1700	WATER	40mL	VIAL	4	1:1 HCL	2° RT 7-2-04 Good	X	
DISCHARGE	6-30-04	1700	WATER	250mL	PLASTIC	1	None	↓		X
TRIP BLANK	6-30-04	1705	WATER	40mL	VIAL	2	1:1 HCL	↓	X	

Special Instructions: 8021 BTEX; Chloride

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required
☑ Normal ☐ Rush ☐ Other _____

QC Level
☑ I. ☐ II. ☐ III.

Project Specific Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	6-12-04	1600	1. Received By	6/30/04	1730
2. Relinquished By			2. Received By	7-2-04	0910
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

20/20

SEVERN TRENT STL

Certificate of Analysis

STL Austin • 14046 Summit Drive, Austin, TX 78728 • Tel 512 244 0855 • Fax 512 244 0160 • www.stl-inc.com

ANALYTICAL REPORT

PROJECT NO. HOBBS, NM O&M

3374 Line NM1-1 Remediation

Lot #: I4H030124

Greg Pope

Maxim Technologies
1703 W Industrial Ave
Midland, TX 79701

SEVERN TRENT LABORATORIES, INC.

Carla M. Butler
Project Manager

August 9, 2004

American Council of Independent Laboratories
International Association of Environmental Testing Laboratories

Case Narrative

STL LOT NUMBER: **I4H030124**

This report contains the analytical results for the two samples received under chain of custody by Severn Trent Laboratories (STL) on August 3, 2004. These samples are associated with your 3374 Line NM1-1 Remediation project.

All samples were received in good condition and within temperature requirements.

All applicable quality control procedures met method-specified acceptance criteria except where noted in the case narrative or flagged on the result pages.

If you have any questions, please feel free to call me at (512) 244-0855.

EXECUTIVE SUMMARY - Detection Highlights

I4H030124

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
DISCHARGE 07/29/04 18:25 001				
Chloride	150	20.0	mg/L	MCAWW 300.0A

PREPARATION METHODS SUMMARY

I4H030124

PREPARATION DESCRIPTION	PREPARATION METHOD	ANALYTICAL METHOD
Chloride	MCAWW 300.0A	MCAWW 300.0A
Purge and trap	SW846 5030B	SW846 8021B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

I4H030124

ANALYTICAL METHOD	ANALYST	ANALYST ID
MCAWW 300.0A	David A. Tocher	800002
SW846 8021B	Beth Driskill	008945

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

I4H030124

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
GMCXQ	001	DISCHARGE	07/29/04	18:25
GMCXW	002	TRIP BLANK	07/29/04	18:30

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
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- Results noted as "ND" were not detected at or above the stated limit.
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- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

QC DATA ASSOCIATION SUMMARY

I4H030124

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	MCAWW 300.0A		4217325	4219248
	WATER	SW846 8021B		4219135	4219068
002	WATER	SW846 8021B		4219135	4219068

CONOCOPHILLIPS

Client Sample ID: DISCHARGE

GC Volatiles

Lot-Sample #...: I4H030124-001 **Work Order #...:** GMCXQ1AA **Matrix.....:** WATER
Date Sampled...: 07/29/04 18:25 **Date Received..:** 08/03/04 08:50
Prep Date.....: 08/05/04 **Analysis Date..:** 08/05/04
Prep Batch #...: 4219135 **Analysis Time..:** 20:49
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	99	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	98	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: DISCHARGE

General Chemistry

Lot-Sample #...: I4H030124-001 **Work Order #...:** GMCXQ **Matrix.....:** WATER
Date Sampled...: 07/29/04 18:25 **Date Received..:** 08/03/04 08:50

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	150	20.0	mg/L	MCAWW 300.0A	08/04/04	4217325

Dilution Factor: 20 Analysis Time..: 12:10

CONOCOPHILLIPS

Client Sample ID: TRIP BLANK

GC Volatiles

Lot-Sample #...: I4H030124-002 **Work Order #...:** GMCXW1AA **Matrix.....:** WATER
Date Sampled...: 07/29/04 18:30 **Date Received..:** 08/03/04 08:50
Prep Date.....: 08/05/04 **Analysis Date..:** 08/05/04
Prep Batch #...: 4219135 **Analysis Time..:** 20:20
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	97	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	97	(73 - 135)

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: I4H030124 **Work Order #...:** GMK821AA **Matrix.....:** WATER
MB Lot-Sample #: I4H060000-135

Prep Date.....: 08/05/04 **Analysis Time..:** 13:09
Analysis Date..: 08/05/04 **Prep Batch #...:** 4219135
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8021B
Ethylbenzene	ND	1.0	ug/L	SW846 8021B
Toluene	ND	1.0	ug/L	SW846 8021B
Xylenes (total)	ND	3.0	ug/L	SW846 8021B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	97	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	99	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: I4H030124 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: GMF4E1AA		MB Lot-Sample #:	I4H040000-325	
	ND	1.0	mg/L	MCAWW 300.0A	08/04/04	4217325
		Dilution Factor: 1				
		Analysis Time..: 09:31				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4H030124 **Work Order #...:** GMK821AC **Matrix.....:** WATER
LCS Lot-Sample#: I4H060000-135
Prep Date.....: 08/05/04 **Analysis Date..:** 08/05/04
Prep Batch #...: 4219135 **Analysis Time..:** 12:02
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	**103**	**(85 - 115)**	**SW846 8021B**
Ethylbenzene	**104**	**(85 - 115)**	**SW846 8021B**
Toluene	**99**	**(85 - 115)**	**SW846 8021B**
Xylenes (total)	**105**	**(85 - 115)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	102	(85 - 111)
a,a,a-Trifluorotoluene (TFT)	101	(84 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I4H030124 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: GMF4E1AC	LCS Lot-Sample#: I4H040000-325		
	91	(85 - 106)	MCAWW 300.0A	08/04/04	4217325
		Dilution Factor: 1	Analysis Time..: 09:45		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4H030124 **Work Order #...:** GMHNE1AD-MS **Matrix.....:** WATER
MS Lot-Sample #: I4H050123-001 GMHNE1AE-MSD
Date Sampled...: 08/03/04 16:15 **Date Received..:** 08/05/04 09:00
Prep Date.....: 08/05/04 **Analysis Date..:** 08/05/04
Prep Batch #...: 4219135 **Analysis Time..:** 22:17
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**117 a**	**(85 - 115)**			**SW846 8021B**
	110	**(85 - 115)**	**6.4**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**117 a**	**(85 - 115)**			**SW846 8021B**
	110	**(85 - 115)**	**6.0**	**(0-20)**	**SW846 8021B**
Toluene	**111**	**(85 - 115)**			**SW846 8021B**
	104	**(85 - 115)**	**6.2**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**116 a**	**(85 - 115)**			**SW846 8021B**
	109	**(85 - 115)**	**5.9**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	101	(81 - 119)
	101	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	99	(73 - 135)
	100	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I4H030124 **Matrix.....:** WATER
Date Sampled...: 07/29/04 18:25 **Date Received..:** 08/03/04 08:50

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		WO#: GMCXQ1AD-MS/GMCXQ1AE-MSD				MS Lot-Sample #: I4H030124-001	
	93	(85 - 106)			MCAWW 300.0A	08/04/04	4217325
	90	(85 - 106)	0.90	(0-22)	MCAWW 300.0A	08/04/04	4217325
		Dilution Factor: 1					
		Analysis Time..: 12:23					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Report Attachment

Note that if this report contains tests performed for the following methods, the associated method deviations are applicable.

EPA 410.4, COD: Laboratory uses different analytical wavelength as specified by instrument manufacturer.
EPA 340.2, Fluoride: Preliminary Bellack distillation not performed.
EPA 624: The laboratory uses a different desorb time and purge volume than stated in the method.
EPA 8151A: Laboratory utilizes alternate extraction solvent.
Iowa OA1: Benzene, toluene, ethylbenzene and xylenes (BTEX) are not analyzed along with the Gasoline Range Organics if client does not require BTEX.
EPA TO-12: Samples not analyzed in duplicate.
EPA TO-14A and TO-15: Zero humidified nitrogen is used in place of air for method blanks.

TRRP Reporting Requirements

If this package contains reports requiring TRRP (Texas Risk Reduction Program) reporting criteria, the following information applies.

The REPORTING LIMIT is equivalent to the TRRP acronym MQL (method quantitation limit).
The MDL is equivalent to the TRRP acronym SQL (sample quantitation limit).

SEVERN TRENT **STL**

CHAIN-OF-CUSTODY ADDENDUM

Lot No: I4H030124

RECEIVED BY: [signature]

COC NUMBER: 38194

DATE/TIME RECEIVED: 8-3-04 0850

QUOTE/PROFILE: 56072

UNPACKED DATE/TIME: 8-3-04 0910

CLIENT/PROJECT: Maxim

SAMPLES LOGGED IN: cc

LOG-IN REVIEWED: [signature]

Number of Shipping Containers Received with Chain of Custody: 1

VOC AIR / FILTER SAMPLES ☐ YES **SEE SECTIONS 1.0, 2.0, & 6.0**

1.0 CONTAINERS EXAMINED UPON RECEIPT: cc

Container Sealed: ☑ YES ☐ NO

Custody Seal Signed/Dated: ☑ YES ☐ NO

Custody Seal Present: ☑ YES ☐ NO

Containers checked for radioactivity: ☐ YES ☐ NO ☑ N/A

If seal not intact or Geiger counter reading >0.5 mR/hr, list air bill number of that container(s): _____

2.0 VOC CANISTERS EXAMINED UPON RECEIPT: _____

Canister Valves Closed: ☐ YES ☐ NO

Samples Received Match Chain: ☐ YES ☐ NO

Canister Valves Capped: ☐ YES ☐ NO

Other Equipment Received: ☐ YES ☐ NO

Valve Cap Tightened Properly: ☐ YES ☐ NO

See Additional Comments (Section 5.0 and / or 7.0) ☐ YES ☐ NO

Packing Material Used: (circle)

None / Absorbent / Paper / Bubble Wrap

Chain-of-Custody form properly maintained: ☐ YES ☐ NO

Can Size: ☐ 6L ☐ 15L Other _____

3.0 SAMPLE TEMPERATURE UPON RECEIPT BY: cc **IR THERMOMETER #:** 04

Temperature of the container(s):

Circle selection: TB = Temp. Blank and/or SC = Sample Container *[acceptable tolerance 4°C ± 2°; (NC, WI: 1-4.4°C)]*

TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
SC 3°C	SC	SC	SC	SC	SC	SC	SC	SC	SC

If temperature is outside acceptable tolerance, Project Manager was notified (_____PM). Date: _____ Time: _____

Samples received do not require cooling _____

OK to analyze samples: ☑ YES ☐ NO

PRESERVATION OF SAMPLES REQUIRED: ☐ NA ☑ YES **VERIFIED BY:** cc

Base samples are>pH 12: ☐ YES ☐ NO

Acid preserved are<pH 2: ☑ YES ☐ NO

Cyanide samples checked for sulfides: ☐ YES

Sulfide samples appear to be preserved with zinc acetate: ☐ YES ☐ NO

Samples checked for chlorine per specification (N.C.) ☐ YES

Free chlorine present: ☐ YES ☐ NO

If sample preservation is outside acceptable tolerance, Project Manager was notified (_____PM)

Date: _____ Time: _____ ☐ see pH adjustment form

VOLATILE SAMPLES FILLED COMPLETELY, IF NOT, LIST ID AND HEADSPACE OF VOA's CONTAINING BUBBLES EXCEEDING 6MM IN DIAMETER:

Sample ID	mm Headspace

Sample ID	mm Headspace

4.0 CONDITION OF BOTTLES/CONTAINERS **VERIFIED BY:** CO

Samples received match COC: ☒ YES ☐ NO Bottles received intact: ☒ YES ☐ NO

See additional discrepancies/comments section: ☐ YES ☒ NO Samples received from USDA restricted area: ☐ YES ☒ NO

Chain-of-Custody form properly maintained: ☒ YES ☐ NO VOA trip blanks included: 2x40 ☒ YES ☐ NO ☐ N/A

5.0 ADDITIONAL DISCREPANCIES

Appears on COC		Appears on Label		
Sample ID	**Date/Time**	**Sample ID**	**Date/Time**	**Comments**

6.0 SHIPPING DOCUMENTATION:

Air/freight bill is available and attached to COC: ☒ YES ☐ NO Air bill #: _____

Hand-delivered Carrier: _____ Date: _____ Time: _____

7.0 OTHER COMMENTS:

_____

_____

_____

_____

_____

_____

CORRECTIVE ACTION:

Client's Name: _____ Informed verbally on: _____ By: _____

Client's Name: _____ Informed verbally on: _____ By: _____

Sample(s) processed "as is" comments: _____

_____

_____

_____

Samples(s) on hold until: _____ If released, notify: _____

REVIEW:

Project Management: CMB Date: 8-4-04

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE

[redacted]

Chain of Custody Record

I4H030[redacted]4

CHAIN OF CUSTODY NUMBER
$0010947-001

SEVERN TRENT **STL**
Severn Trent Laboratories, Inc.

38194

L4149 (1202)

Client	Project Manager	Date	Page 1 of 1
xin Technologies	Greg Pope	07/20/2004	
Address	Telephone Number (Area Code)/Fax Number	Lab Location	Analysis
03 W Industrial Ave	(432) 686-8081 / (000)	STL Austin	
City / State / Zip Code	Site Contact		
dland / TX / 79701	Greg Pope		
Project Number/Name	Carrier/Waybill Number		
74 Line HH1-1 Remediation			
Contract/Purchase Order/Quote Number			
NTRACT / PURCHASE ORDER # : 3374HAX006		QUOTE: 56072	

Sample I.D. Number and Description	Date	Time	Sample Type	Containers: Volume	Containers: Type	Containers: No.	Preservative	Condition on Receipt/Comments	GC/MS 8021 BTEX	IC Chloride
. DISCHARGE	7.29.04	1825	WATER	40mL	VIAL	4	1:1 HCl	3° 8-3-04 CL	X	
. DISCHARGE	7.29.04	1825	WATER	250mL	PLASTIC	1	None			X
TRIP BLANK	7.29.04	1830	WATER	40mL	VIAL	2	1:1 HCl		X	

Special Instructions: 8021 BTEX; Chloride

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☑ Normal ☐ Rush ☐ Other _____

QC Level: ☑ I. ☐ II. ☐ III.

Project Specific Requirements (Specify)

Relinquished By	Date	Time	Received By	Date	Time
	7-20-04	1450	1.	7/21/04	1030
	8/2/04	1345	2.	8-3-04	0850
			3.		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

20/20

SEVERN TRENT STL

STL Austin • 14046 Summit Drive, Austin, TX 78728 • Tel 512 244 0855 • Fax 512 244 0160 • www.stl-inc.com

Certificate of Analysis

ANALYTICAL REPORT

PROJECT NO. HOBBS, NM O&M

3374 Line NM1-1 Remediation

Lot #: I4H260270

Greg Pope

Maxim Technologies
1703 W Industrial Ave
Midland, TX 79701

SEVERN TRENT LABORATORIES, INC.

Carla Butler

Carla M. Butler
Project Manager

September 3, 2004

American Council of Independent Laboratories
International Association of Environmental Testing Laboratories

.Case Narrative

STL LOT NUMBER: **I4H260270**

This report contains the analytical results for the two samples received under chain of custody by Severn Trent Laboratories (STL) on August 26, 2004. These samples are associated with your **3374** Line NM1-1 Remediation project.

All samples were received in good condition. After notification that the samples were 10° C at receipt, Mr. Greg Pope instructed the laboratory to proceed with analysis.

All applicable quality control procedures met method-specified acceptance criteria except where noted in the case narrative or flagged on the result pages.

If you have any questions, please feel free to call me at (512) 244-0855.

EXECUTIVE SUMMARY - Detection Highlights

I4H260270

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
DISCHARGE 08/24/04 14:40 001				
Chloride	164	20.0	mg/L	MCAWW 300.0A

PREPARATION METHODS SUMMARY

I4H260270

PREPARATION DESCRIPTION	PREPARATION METHOD	ANALYTICAL METHOD
Chloride	MCAWW 300.0A	MCAWW 300.0A
Purge and trap	SW846 5030B	SW846 8021B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

I4H260270

ANALYTICAL METHOD	ANALYST	ANALYST ID
MCAWW 300.0A	David A. Tocher	800002
SW846 8021B	Beth Driskill	008945

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

I4H260270

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
GN1JV	001	DISCHARGE	08/24/04	14:40
GN1J4	002	TRIP BLANK	08/24/04	14:50

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

QC DATA ASSOCIATION SUMMARY

I4H260270

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	MCAWW 300.0A		4245136	4245071
	WATER	SW846 8021B		4243124	4243076
002	WATER	SW846 8021B		4243124	4243076

CONOCOPHILLIPS

Client Sample ID: DISCHARGE

GC Volatiles

Lot-Sample #...: I4H260270-001 **Work Order #...:** GN1JV1AA **Matrix.....:** WATER
Date Sampled...: 08/24/04 14:40 **Date Received..:** 08/26/04 08:15
Prep Date.....: 08/27/04 **Analysis Date..:** 08/27/04
Prep Batch #...: 4243124 **Analysis Time..:** 22:05
Dilution Factor: 1

Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	102	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: DISCHARGE

General Chemistry

Lot-Sample #...: I4H260270-001 **Work Order #...:** GN1JV **Matrix.....:** WATER
Date Sampled...: 08/24/04 14:40 **Date Received..:** 08/26/04 08:15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	164	20.0	mg/L	MCAWW 300.0A	08/31/04	4245136

Dilution Factor: 20 Analysis Time..: 12:28

CONOCOPHILLIPS

Client Sample ID: TRIP BLANK

GC Volatiles

Lot-Sample #...: I4H260270-002 **Work Order #...:** GN1J41AA **Matrix.....:** WATER
Date Sampled...: 08/24/04 14:50 **Date Received..:** 08/26/04 08:15
Prep Date.....: 08/27/04 **Analysis Date..:** 08/28/04
Prep Batch #...: 4243124 **Analysis Time..:** 00:59
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	99	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	98	(73 - 135)

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: I4H260270 **Work Order #...:** GN7DG1AA **Matrix.....:** WATER
MB Lot-Sample #: I4H300000-124

Prep Date.....: 08/27/04 **Analysis Time..:** 12:55
Analysis Date..: 08/27/04 **Prep Batch #...:** 4243124
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8021B
Ethylbenzene	ND	1.0	ug/L	SW846 8021B
Toluene	ND	1.0	ug/L	SW846 8021B
Xylenes (total)	ND	3.0	ug/L	SW846 8021B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	113	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	79	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: I4H260270 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: GPCK41AA		MB Lot-Sample #:	I4I010000-136	
	ND	1.0	mg/L	MCAWW 300.0A	08/31/04	4245136
		Dilution Factor: 1				
		Analysis Time..: 08:31				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4H260270 **Work Order #...:** GN7DG1AC **Matrix.....:** WATER
LCS Lot-Sample#: I4H300000-124
Prep Date.....: 08/27/04 **Analysis Date..:** 08/27/04
Prep Batch #...: 4243124 **Analysis Time..:** 11:50
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	**113**	**(85 - 115)**	**SW846 8021B**
Ethylbenzene	**106**	**(85 - 115)**	**SW846 8021B**
Toluene	**105**	**(85 - 115)**	**SW846 8021B**
Xylenes (total)	**110**	**(85 - 115)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(85 - 111)
a,a,a-Trifluorotoluene (TFT)	102	(84 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I4H260270 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: GPCK41AC	LCS Lot-Sample#: I4I010000-136		
	105	(85 - 106)	MCAWW 300.0A	08/31/04	4245136
		Dilution Factor: 1	Analysis Time..: 08:44		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4H260270 **Work Order #...:** GN1JV1AD-MS **Matrix.....:** WATER
MS Lot-Sample #: I4H260270-001 GN1JV1AE-MSD
Date Sampled...: 08/24/04 14:40 **Date Received..:** 08/26/04 08:15
Prep Date.....: 08/27/04 **Analysis Date..:** 08/28/04
Prep Batch #...: 4243124 **Analysis Time..:** 01:29
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	135 a	(85 - 115)			SW846 8021B
	139 a	(85 - 115)	2.9	(0-20)	SW846 8021B
Ethylbenzene	126 a	(85 - 115)			SW846 8021B
	132 a	(85 - 115)	4.5	(0-20)	SW846 8021B
Toluene	126 a	(85 - 115)			SW846 8021B
	131 a	(85 - 115)	4.2	(0-20)	SW846 8021B
Xylenes (total)	130 a	(85 - 115)			SW846 8021B
	137 a	(85 - 115)	5.3	(0-20)	SW846 8021B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	101	(81 - 119)
	100	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	103	(73 - 135)
	103	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I4H260270 **Matrix.....:** WATER
Date Sampled...: 08/26/04 07:48 **Date Received..:** 08/27/04 08:15

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		WO#: GN4061AE-MS/GN4061AF-MSD				MS Lot-Sample #: I4H270270-001	
	103	(85 - 106)			MCAWW 300.0A	08/31/04	4245136
	102	(85 - 106)	0.28	(0-22)	MCAWW 300.0A	08/31/04	4245136
		Dilution Factor: 1					
		Analysis Time..: 09:23					
Chloride		WO#: GN9TM1CT-MS/GN9TM1CU-MSD				MS Lot-Sample #: I4H310196-001	
	117 N	(85 - 106)			MCAWW 300.0A	08/31/04	4245136
	112 N	(85 - 106)	1.8	(0-22)	MCAWW 300.0A	08/31/04	4245136
		Dilution Factor: 1					
		Analysis Time..: 15:19					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

Report Attachment

Note that if this report contains tests performed for the following methods, the associated method deviations are applicable.

EPA 410.4, COD: Laboratory uses different analytical wavelength as specified by instrument manufacturer.
EPA 340.2, Fluoride: Preliminary Bellack distillation not performed.
EPA 624: The laboratory uses a different desorb time and purge volume than stated in the method.
EPA 8151A: Laboratory utilizes alternate extraction solvent.
Iowa OA1: Benzene, toluene, ethylbenzene and xylenes (BTEX) are not analyzed along with the Gasoline Range Organics if client does not require BTEX.
EPA TO-12: Samples not analyzed in duplicate.
EPA TO-14A and TO-15: Zero humidified nitrogen is used in place of air for method blanks.

TRRP Reporting Requirements

If this package contains reports requiring TRRP (Texas Risk Reduction Program) reporting criteria, the following information applies.

The REPORTING LIMIT is equivalent to the TRRP acronym MQL (method quantitation limit).
The MDL is equivalent to the TRRP acronym SQL (sample quantitation limit).

SEVERN TRENT **STL**

CHAIN-OF-CUSTODY ADDENDUM

Lot No: I4H260270

RECEIVED BY: (PM)

COC NUMBER:

DATE/TIME RECEIVED: 8/26/04 0815

QUOTE/PROFILE: 56077

UNPACKED DATE/TIME: 8/26/04 0950

CLIENT/PROJECT: MAXIM

SAMPLES LOGGED IN: BJ

LOG-IN REVIEWED:

Number of Shipping Containers Received with Chain of Custody: 1

VOC AIR / FILTER SAMPLES ☐ YES **SEE SECTIONS 1.0, 2.0, & 6.0**

1.0 CONTAINERS EXAMINED UPON RECEIPT: (PM)

Container Sealed: ☑ YES ☐ NO

Custody Seal Signed/Dated: ☑ YES ☐ NO

Custody Seal Present: ☑ YES ☐ NO

Containers checked for radioactivity: ☐ YES ☐ NO ☑ N/A

If seal not intact or Geiger counter reading >0.5 mR/hr, list air bill number of that container(s):

2.0 VOC CANISTERS EXAMINED UPON RECEIPT:

Canister Valves Closed:	☐ YES ☐ NO	Samples Received Match Chain:	☐ YES ☐ NO
Canister Valves Capped:	☐ YES ☐ NO	Other Equipment Received:	☐ YES ☐ NO
Valve Cap Tightened Properly:	☐ YES ☐ NO	See Additional Comments (Section 5.0 and / or 7.0)	☐ YES ☐ NO
Packing Material Used: (circle)		Chain-of-Custody form properly maintained:	☐ YES ☐ NO
None / Absorbent / Paper / Bubble Wrap		Can Size: ☐ 6L ☐ 15L Other	

3.0 SAMPLE TEMPERATURE UPON RECEIPT BY: (BJ) **IR THERMOMETER #:** Pm5

Temperature of the container(s):

Circle selection: TB = Temp. Blank and/or SC = Sample Container *[acceptable tolerance 4°C ± 2°; (NC, WI: 1-4.4°C)]*

~~TB~~ SC 10c	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC

If temperature is outside acceptable tolerance, Project Manager was notified (____PM). Date: Time:

Samples received do not require cooling

OK to analyze samples: ☑ YES ☐ NO 8-26-04

PRESERVATION OF SAMPLES REQUIRED: ☐ NA ☑ YES **VERIFIED BY:** (PM)

Base samples are>pH 12:	☐ YES ☐ NO	Acid preserved are<pH 2:	☑ YES ☐ NO
Cyanide samples checked for sulfides:	☐ YES	Sulfide samples appear to be preserved with zinc acetate:	☐ YES ☐ NO
Samples checked for chlorine per specification (N.C.)	☐ YES	Free chlorine present:	☐ YES ☐ NO

If sample preservation is outside acceptable tolerance, Project Manager was notified (____PM)

Date: Time: ☐ see pH adjustment form

VOLATILE SAMPLES FILLED COMPLETELY, IF NOT, LIST ID AND HEADSPACE OF VOA's CONTAINING BUBBLES EXCEEDING 6MM IN DIAMETER:

Sample ID	mm Headspace

Sample ID	mm Headspace

4.0 CONDITION OF BOTTLES/CONTAINERS **VERIFIED BY:** (RW)

Samples received match COC:	☑ YES	☐ NO	Bottles received intact:	☑ YES	☐ NO
See additional discrepancies/comments section:	☑ YES	☐ NO	Samples received from USDA restricted area:	☐ YES	☑ NO
Chain-of-Custody form properly maintained:	☑ YES	☐ NO	VOA trip blanks included: 2 TB	☑ YES	☐ NO ☐ N/A

5.0 ADDITIONAL DISCREPANCIES

Appears on COC		Appears on Label		
Sample ID	Date/Time	Sample ID	Date/Time	Comments

6.0 SHIPPING DOCUMENTATION:

Air/freight bill is available and attached to COC: ☑ YES ☐ NO Air bill #: _____

Hand-delivered Carrier: _____ Date: _____ Time: _____

7.0 OTHER COMMENTS:

One small bag of @8/26/04 melted water in cooler; no ice remaining.

CORRECTIVE ACTION:

Client's Name: Greg Pope Informed verbally on: 8-26-04 By: CmB

Client's Name: _____ Informed verbally on: _____ By: _____

Sample(s) processed "as is" comments: proceed despite temp

Samples(s) on hold until: _____ If released, notify: _____

REVIEW:

Project Management: CmB Date: 8-26-04

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE

:3

Chain of Custody Record

I44260 0

CHAIN OF CUSTODY NUMBER

$8010947-001

SEVERN TRENT **STL** Severn Trent Laboratories, Inc.

478

STL4149 (1202)

Client	Project Manager	Date	Page 1 of 1
Maxim Technologies	Greg Pope	08/13/2004	
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Location**	**Analysis**
1703 W Industrial Ave	(432) 686-8081 / (000)	STL Austin	

City	State	Zip Code	Site Contact
Midland	TX	79701	Greg Pope

Project Number/Name	Carrier/Waybill Number
3374 Line MM1-1 Remediation	FEDEX / 847303965570

Contract/Purchase Order/Quote Number
CONTRACT / PURCHASE ORDER # : 3374MAX005 QUOTE: 56072

Sample I.D. Number and Description	Date	Time	Sample Type	Containers Volume	Containers Type	Containers No.	Preservative	Condition on Receipt/Comments	GC 8021 L	ICCL | L
DISCHARGE	8-24-04	1440	WATER	40mL	VIAL	4	1:1 HCL	10°c 8/26/04	X	
DISCHARGE	8-24-04	1440	WATER	250mL	PLASTIC	1	None	1 BE COC A&I		X
TRIP BLANK	8-24-04	1450	WATER	40mL	VIAL	2	1:1 HCL	↓	X	

Special Instructions: 8021 BTEX; Chloride

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☑ Normal ☐ Rush ☐ Other ____

QC Level: ☑ I. ☐ II. ☐ III.

Project Specific Requirements (Specify)

Relinquished By	Date	Time	Received By	Date	Time
1. [signature]	8-13-04	1355	1. [signature]	8/14/04	1030
2. [signature]	8-24-04	1500	2. [signature]	8/26/04	0815
3.			3.		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

SEVERN TRENT STL

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Certificate of Analysis

ANALYTICAL REPORT

PROJECT NO. HOBBS, NM O&M

3374 Line NM1-1 Remediation

Lot #: I4J070198

Greg Pope

Maxim Technologies
1703 W Industrial Ave
Midland, TX 79701

SEVERN TRENT LABORATORIES, INC.

Carla M. Butler
Project Manager

October 18, 2004

American Council of Independent Laboratories
International Association of Environmental Testing Laboratories

Case Narrative

STL LOT NUMBER: **I4J070198**

This report contains the analytical results for the two samples received under chain of custody by Severn Trent Laboratories (STL) on October 7, 2004. These samples are associated with your 3374 Line NM1-1 Remediation project.

All samples were received in good condition and within temperature requirements.

All applicable quality control procedures met method-specified acceptance criteria except where noted in the case narrative or flagged on the result pages.

If you have any questions, please feel free to call me at (512) 244-0855.

EXECUTIVE SUMMARY - Detection Highlights

I4J070198

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
DISCHARGE 10/05/04 12:45 001				
Chloride	171	20.0	mg/L	MCAWW 300.0A

PREPARATION METHODS SUMMARY

I4J070198

PREPARATION DESCRIPTION	PREPARATION METHOD	ANALYTICAL METHOD
Chloride	MCAWW 300.0A	MCAWW 300.0A
Purge and trap	SW846 5030B	SW846 8021B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

I4J070198

ANALYTICAL METHOD	ANALYST	ANALYST ID
MCAWW 300.0A	David A. Tocher	800002
SW846 8021B	Joe Lanham	000039

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

I4J070198

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
GR2V1	001	DISCHARGE	10/05/04	12:45
GR2V9	002	TRIP BLANK	10/05/04	12:50

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

QC DATA ASSOCIATION SUMMARY

I4J070198

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	MCAWW 300.0A		4290059	4290020
	WATER	SW846 8021B		4285340	4285243
002	WATER	SW846 8021B		4285340	4285243

CONOCOPHILLIPS

Client Sample ID: DISCHARGE

GC Volatiles

Lot-Sample #...: I4J070198-001 **Work Order #...:** GR2V11AA **Matrix.....:** WATER
Date Sampled...: 10/05/04 12:45 **Date Received..:** 10/07/04 08:25
Prep Date.....: 10/09/04 **Analysis Date..:** 10/09/04
Prep Batch #...: 4285340 **Analysis Time..:** 23:57
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	97	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	91	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: DISCHARGE

General Chemistry

Lot-Sample #...: I4J070198-001 **Work Order #...: GR2V1** **Matrix.....: WATER**
Date Sampled...: 10/05/04 12:45 **Date Received..: 10/07/04 08:25**

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	171	20.0	mg/L	MCAWW 300.0A	10/15/04	4290059

Dilution Factor: 20 Analysis Time..: 14:00

CONOCOPHILLIPS

Client Sample ID: TRIP BLANK

GC Volatiles

Lot-Sample #...: I4J070198-002 **Work Order #...: GR2V91AA** **Matrix.....: WATER**
Date Sampled...: 10/05/04 12:50 **Date Received..: 10/07/04 08:25**
Prep Date.....: 10/09/04 **Analysis Date..: 10/10/04**
Prep Batch #...: 4285340 **Analysis Time..: 00:26**
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	96	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	89	(73 - 135)

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: I4J070198 Work Order #...: GTA2W1AA Matrix.....: WATER
MB Lot-Sample #: I4J110000-340

Prep Date.....: 10/09/04 Analysis Time..: 13:32
Analysis Date..: 10/09/04 Prep Batch #...: 4285340
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8021B
Ethylbenzene	ND	1.0	ug/L	SW846 8021B
Toluene	ND	1.0	ug/L	SW846 8021B
Xylenes (total)	ND	3.0	ug/L	SW846 8021B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	95	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	92	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: I4J070198 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: GTTCP1AA		MB Lot-Sample #:	I4J160000-059	
	ND	1.0	mg/L	MCAWW 300.0A	10/15/04	4290059
		Dilution Factor: 1				
		Analysis Time..: 08:17				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4J070198 Work Order #...: GTA2W1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: I4J110000-340 GTA2W1AD-LCSD
Prep Date.....: 10/09/04 Analysis Date..: 10/09/04
Prep Batch #...: 4285340 Analysis Time..: 11:01
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	97	(85 - 115)			SW846 8021B
	97	(85 - 115)	0.13	(0-20)	SW846 8021B
Ethylbenzene	90	(85 - 115)			SW846 8021B
	90	(85 - 115)	0.17	(0-20)	SW846 8021B
Toluene	89	(85 - 115)			SW846 8021B
	89	(85 - 115)	0.040	(0-20)	SW846 8021B
Xylenes (total)	94	(85 - 115)			SW846 8021B
	93	(85 - 115)	1.0	(0-20)	SW846 8021B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	96	(85 - 111)
	95	(85 - 111)
a,a,a-Trifluorotoluene (TFT)	94	(84 - 114)
	91	(84 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I4J070198 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: GTTCP1AC	LCS Lot-Sample#: I4J160000-059		
	103	(85 - 106)	MCAWW 300.0A	10/15/04	4290059
		Dilution Factor: 1	Analysis Time..: 08:30		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4J070198 **Work Order #...:** GR6RM1AC-MS **Matrix.....:** WATER
MS Lot-Sample #: I4J080230-001 GR6RM1AD-MSD
Date Sampled...: 10/07/04 09:30 **Date Received..:** 10/08/04 08:30
Prep Date.....: 10/09/04 **Analysis Date..:** 10/10/04
Prep Batch #...: 4285340 **Analysis Time..:** 10:23
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**0.74 a**	**(85 - 115)**			**SW846 8021B**
	0.0 a	**(85 - 115)**	**0.0**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**107**	**(85 - 115)**			**SW846 8021B**
	105	**(85 - 115)**	**2.0**	**(0-20)**	**SW846 8021B**
Toluene	**72 a**	**(85 - 115)**			**SW846 8021B**
	67 a	**(85 - 115)**	**6.7**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**125 a**	**(85 - 115)**			**SW846 8021B**
	121 a	**(85 - 115)**	**3.5**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	102	(81 - 119)
	99	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	62 *	(73 - 135)
	61 *	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

* Surrogate recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I4J070198 **Matrix.....:** WATER
Date Sampled...: 09/28/04 **Date Received..:** 10/09/04 08:45

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		WO#: GTDAL1A8-MS/GTDAL1A9-MSD			MS Lot-Sample #: I4J120115-001		
	102	(85 - 106)			MCAWW 300.0A	10/15/04	4290059
	99	(85 - 106)	1.8	(0-22)	MCAWW 300.0A	10/15/04	4290059

Dilution Factor: 1
Analysis Time..: 11:22

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Report Attachment

Note that if this report contains tests performed for the following methods, the associated method deviations are applicable.

EPA 410.4, COD: Laboratory uses different analytical wavelength as specified by instrument manufacturer.
EPA 340.2, Fluoride: Preliminary Bellack distillation not performed.
EPA 624: The laboratory uses a different desorb time and purge volume than stated in the method.
EPA 8151A: Laboratory utilizes alternate extraction solvent.
Iowa OA1: Benzene, toluene, ethylbenzene and xylenes (BTEX) are not analyzed along with the Gasoline Range Organics if client does not require BTEX.
EPA TO-12: Samples not analyzed in duplicate.
EPA TO-14A and TO-15: Zero humidified nitrogen is used in place of air for method blanks.

TRRP Reporting Requirements

If this package contains reports requiring TRRP (Texas Risk Reduction Program) reporting criteria, the following information applies.

The REPORTING LIMIT is equivalent to the TRRP acronym MQL (method quantitation limit).
The MDL is equivalent to the TRRP acronym SQL (sample quantitation limit).

SEVERN TRENT **STL**

CHAIN–OF–CUSTODY ADDENDUM

Lot No: I4J072198

RECEIVED BY: LT

COC NUMBER:

DATE/TIME RECEIVED: 10-7-04 / 0825

QUOTE/PROFILE: 56072

UNPACKED DATE/TIME: 10-7-04 / 1045

CLIENT/PROJECT: Maxim Tech

SAMPLES LOGGED IN: LT

LOG-IN REVIEWED: BG

Number of Shipping Containers Received with Chain of Custody 1

VOC AIR / FILTER SAMPLES ☐ YES **SEE SECTIONS 1.0, 2.0, & 6.0**

1.0 CONTAINERS EXAMINED UPON RECEIPT: LT

Container Sealed: ☑ YES ☐ NO

Custody Seal Signed/Dated: ☑ YES ☐ NO

Custody Seal Present: ☑ YES ☐ NO

Containers checked for radioactivity: ☐ YES ☐ NO ☑ N/A

If seal not intact or Geiger counter reading >0.5 mR/hr, list air bill number of that container(s): _____

2.0 VOC CANISTERS EXAMINED UPON RECEIPT: _____

Canister Valves Closed: ☐ YES ☐ NO

Canister Valves Capped: ☐ YES ☐ NO

Valve Cap Tightened Properly: ☐ YES ☐ NO

Packing Material Used: (circle)
None / Absorbent / Paper / Bubble Wrap

Samples Received Match Chain: ☐ YES ☐ NO

Other Equipment Received: ☐ YES ☐ NO

See Additional Comments (Section 5.0 and / or 7.0) ☐ YES ☐ NO

Chain-of-Custody form properly maintained: ☐ YES ☐ NO

Can Size: ☐ 6L ☐ 15L Other _____

3.0 SAMPLE TEMPERATURE UPON RECEIPT BY: LT **IR THERMOMETER #:** 8-4

Temperature of the container(s):

Circle selection: TB = Temp. Blank and/or SC = Sample Container *[acceptable tolerance 4°C ± 2°; (NC, WI: 1-4.4°C)]*

TB (SC) 4°	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC

If temperature is outside acceptable tolerance, Project Manager was notified (_____PM). Date: _____ Time: _____

Samples received do not require cooling _____

OK to analyze samples: ☐ YES ☐ NO

PRESERVATION OF SAMPLES REQUIRED: ☐ NA ☑ YES **VERIFIED BY:** LT

Base samples are>pH 12: ☐ YES ☐ NO

Acid preserved are<pH 2: ☑ YES ☐ NO

Cyanide samples checked for sulfides: ☐ YES

Sulfide samples appear to be preserved with zinc acetate: ☐ YES ☐ NO

Samples checked for chlorine per specification (N.C.) ☐ YES

Free chlorine present: ☐ YES ☐ NO

If sample preservation is outside acceptable tolerance, Project Manager was notified (_____PM)

Date: _____ Time: _____ ☐ see pH adjustment form

VOLATILE SAMPLES FILLED COMPLETELY, IF NOT, LIST ID AND HEADSPACE OF VOA's CONTAINING BUBBLES EXCEEDING 6MM IN DIAMETER:

Sample ID	mm Headspace

Sample ID	mm Headspace

4.0 CONDITION OF BOTTLES/CONTAINERS VERIFIED BY: LT

Samples received match COC: ☑ YES ☐ NO Bottles received intact: ☑ YES ☐ NO
See additional discrepancies/comments section: ☐ YES ☑ NO Samples received from USDA restricted area: ☐ YES ☑ NO
Chain-of-Custody form properly maintained: ☑ YES ☐ NO VOA trip blanks included: 2 x 40mL ☑ YES ☐ NO ☐ N/A

5.0 ADDITIONAL DISCREPANCIES

Appears on COC		Appears on Label		
Sample ID	Date/Time	Sample ID	Date/Time	Comments

6.0 SHIPPING DOCUMENTATION:
Air/freight bill is available and attached to COC: ☑ YES ☐ NO Air bill #: _____
Hand-delivered Carrier: _____ Date: _____ Time: _____

7.0 OTHER COMMENTS:

CORRECTIVE ACTION:
Client's Name: _____ Informed verbally on: _____ By: _____
Client's Name: _____ Informed verbally on: _____ By: _____
Sample(s) processed "as is" comments: _____

Samples(s) on hold until: _____ If released, notify: _____

REVIEW:
Project Management: CMB Date: 10-19-04

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE

C3

Chain of Custody Record

I4J070[illegible]

CHAIN OF CUSTODY NUMBER

$0010947-001

SEVERN TRENT **STL**

Severn Trent Laboratories, Inc.

091038

STL4149 (1202)

Client	Project Manager	Date
Nazin Technologies	Greg Pope	09/13/2004
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Location**
1703 W Industrial Ave	(432) 686-8081 / (000)	STL Austin
City / **State** / **Zip Code**	**Site Contact**	
Midland / TX / 79701	Greg Pope	
Project Number/Name	**Carrier/Waybill Number**	
3374 Line NM1-1 Remediation	FEDEX / 847303962846	
Contract/Purchase Order/Quote Number		
CONTRACT / PURCHASE ORDER # : 3374NAI005		QUOTE: 56072

Page 1 of 1

Sample I.D. Number and Description	Date	Time	Sample Type	Containers: Volume	Containers: Type	Containers: No.	Preservative	Condition on Receipt/Comments	Analysis: GC8021	Analysis: ICCL
· DISCHARGE	10-4-04	1245	WATER	40mL	VIAL	4	1:1 HCL	4°C/ICE / 10-7-04	X	
· DISCHARGE	10-5-04	1245	WATER	250mL	PLASTIC	1	None	Good		X
TRIP BLANK	10-5-04	1250	WATER	40mL	VIAL	2	1:1 HCL	↓	X	

Special Instructions: 8021 BTEX; Chloride

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☑ Normal ☐ Rush ☐ Other _____

QC Level: ☑ I. ☐ II. ☐ III.

Project Specific Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: Bill Senk	9/14/04	1130	1. Received By:	9/15/04	1030
2. Relinquished By:	10/5/04	1300	2. Received By:	10-7-04	0825
3. Relinquished By:			3. Received By:		

Comments:

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

20/20

SEVERN TRENT STL

Certificate of Analysis

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ANALYTICAL REPORT

PROJECT NO. HOBBS, NM O&M

3374 Line NM1-1 Remediation

Lot #: I4J290259

Greg Pope

Maxim Technologies
1703 W Industrial Ave
Midland, TX 79701

SEVERN TRENT LABORATORIES, INC.

Carla Butler

Carla M. Butler
Project Manager

November 11, 2004

American Council of Independent Laboratories
International Association of Environmental Testing Laboratories

Case Narrative

STL LOT NUMBER: **I4J290259**

This report contains the analytical results for the two samples received under chain of custody by Severn Trent Laboratories (STL) on October 29, 2004. These samples are associated with your 3374 Line NM1-1 Remediation project.

All samples were received in good condition and within temperature requirements.

In lieu of a Matrix Spike/Matrix Spike Duplicate, a duplicate Laboratory Control Sample was prepared to provide precision measurements for the 8021 analysis.

All applicable quality control procedures met method-specified acceptance criteria except where noted in the case narrative or flagged on the result pages.

If you have any questions, please feel free to call me at (512) 244-0855.

EXECUTIVE SUMMARY - Detection Highlights

I4J290259

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
DISCHARGE 10/27/04 17:20 001				
Chloride	161	20.0	mg/L	MCAWW 300.0A

PREPARATION METHODS SUMMARY

I4J290259

PREPARATION DESCRIPTION	PREPARATION METHOD	ANALYTICAL METHOD
Chloride	MCAWW 300.0A	MCAWW 300.0A
Purge and trap	SW846 5030B	SW846 8021B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

I4J290259

ANALYTICAL METHOD	ANALYST	ANALYST ID
MCAWW 300.0A	David A. Tocher	800002
SW846 8021B	Joe Lanham	000039

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

I4J290259

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
GVT43	001	DISCHARGE	10/27/04	17:20
GVT46	002	TRIP BLANK	10/27/04	17:30

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

QC DATA ASSOCIATION SUMMARY

I4J290259

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	MCAWW 300.0A		4315454	4315244
	WATER	SW846 8021B		4315212	
002	WATER	SW846 8021B		4315212	

CONOCOPHILLIPS

Client Sample ID: DISCHARGE

GC Volatiles

Lot-Sample #...: I4J290259-001	**Work Order #...:** GVT431AA	**Matrix.....:** WATER	
Date Sampled...: 10/27/04 17:20	**Date Received..:** 10/29/04 08:20		
Prep Date.....: 11/09/04	**Analysis Date..:** 11/09/04		
Prep Batch #...: 4315212	**Analysis Time..:** 18:18		
Dilution Factor: 1			
	Method.....: SW846 8021B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	105	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	96	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: DISCHARGE

General Chemistry

Lot-Sample #...: I4J290259-001 Work Order #...: GVT43 Matrix.....: WATER
Date Sampled...: 10/27/04 17:20 Date Received..: 10/29/04 08:20

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	161	20.0	mg/L	MCAWW 300.0A	11/10/04	4315454

Dilution Factor: 20 Analysis Time..: 12:40

CONOCOPHILLIPS

Client Sample ID: TRIP BLANK

GC Volatiles

Lot-Sample #...: I4J290259-002 **Work Order #...:** GVT461AA **Matrix.....:** WATER
Date Sampled...: 10/27/04 17:30 **Date Received..:** 10/29/04 08:20
Prep Date.....: 11/09/04 **Analysis Date..:** 11/09/04
Prep Batch #...: 4315212 **Analysis Time..:** 12:10
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	99	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	99	(73 - 135)

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: I4J290259 **Work Order #...:** GWLM61AA **Matrix.....:** WATER
MB Lot-Sample #: I4K100000-212

Prep Date.....: 11/09/04 **Analysis Time..:** 10:11
Analysis Date..: 11/09/04 **Prep Batch #...:** 4315212
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8021B
Ethylbenzene	ND	1.0	ug/L	SW846 8021B
Toluene	ND	1.0	ug/L	SW846 8021B
Xylenes (total)	ND	3.0	ug/L	SW846 8021B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	98	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	100	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: I4J290259 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: GWNDJ1AA		MB Lot-Sample #:	I4K100000-454	
	ND	1.0	mg/L	MCAWW 300.0A	11/10/04	4315454
		Dilution Factor: 1				
		Analysis Time..: 08:16				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4J290259 **Work Order #...:** GWLM61AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: I4K100000-212 GWLM61AD-LCSD
Prep Date.....: 11/09/04 **Analysis Date..:** 11/09/04
Prep Batch #...: 4315212 **Analysis Time..:** 09:10
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**92**	**(85 - 115)**			**SW846 8021B**
	97	**(85 - 115)**	**4.9**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**94**	**(85 - 115)**			**SW846 8021B**
	98	**(85 - 115)**	**4.7**	**(0-20)**	**SW846 8021B**
Toluene	**92**	**(85 - 115)**			**SW846 8021B**
	97	**(85 - 115)**	**5.1**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**99**	**(85 - 115)**			**SW846 8021B**
	103	**(85 - 115)**	**4.4**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	102	(85 - 111)
	99	(85 - 111)
a,a,a-Trifluorotoluene (TFT)	100	(84 - 114)
	100	(84 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I4J290259 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: GWNDJ1AC	LCS Lot-Sample#: I4K100000-454		
	93	(90 - 110)	MCAWW 300.0A	11/10/04	4315454
		Dilution Factor: 1	Analysis Time..: 08:29		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I4J290259 **Matrix.....:** WATER
Date Sampled...: 10/27/04 08:00 **Date Received..:** 10/28/04 08:00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		WO#: GVN4L1C3-MS/GVN4L1C4-MSD				MS Lot-Sample #: I4J280187-001	
	90	(90 - 110)			MCAWW 300.0A	11/10/04	4315454
	83 N	(90 - 110)	2.4	(0-20)	MCAWW 300.0A	11/10/04	4315454
		Dilution Factor: 20					
		Analysis Time..: 11:08					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

Report Attachment

Note that if this report contains tests performed for the following methods, the associated method deviations are applicable.

EPA 410.4, COD: Laboratory uses different analytical wavelength as specified by instrument manufacturer.
EPA 340.2, Fluoride: Preliminary Bellack distillation not performed.
EPA 624: The laboratory uses a different desorb time and purge volume than stated in the method.
EPA 8151A: Laboratory utilizes alternate extraction solvent.
Iowa OA1: Benzene, toluene, ethylbenzene and xylenes (BTEX) are not analyzed along with the Gasoline Range Organics if client does not require BTEX.
EPA TO-12: Samples not analyzed in duplicate.
EPA TO-14A and TO-15: Zero humidified nitrogen is used in place of air for method

TRRP Reporting Requirements

If this package contains reports requiring TRRP (Texas Risk Reduction Program) reporting criteria, the following information applies.

The REPORTING LIMIT is equivalent to the TRRP acronym MQL (method quantitation limit).
The MDL is equivalent to the TRRP acronym SQL (sample quantitation limit).

SEVERN TRENT **STL**

CHAIN-OF-CUSTODY ADDENDUM

Lot No: I4J290259

RECEIVED BY: LT

COC NUMBER: _____

DATE/TIME RECEIVED: 10-29-04/0820

QUOTE/PROFILE: S6072

UNPACKED DATE/TIME: 10-29-04/1005

CLIENT/PROJECT: Marin

SAMPLES LOGGED IN: BJ LOG-IN REVIEWED: LT

Number of Shipping Containers Received with Chain of Custody 1

VOC AIR / FILTER SAMPLES ☐ YES **SEE SECTIONS 1.0, 2.0, & 6.0**

1.0 CONTAINERS EXAMINED UPON RECEIPT: LT

Container Sealed: ☑ YES ☐ NO Custody Seal Signed/Dated: ☑ YES ☐ NO

Custody Seal Present: ☑ YES ☐ NO Containers checked for radioactivity: ☐ YES ☐ NO ☑ N/A

If seal not intact or Geiger counter reading >0.5 mR/hr, list air bill number of that container(s): _____

2.0 VOC CANISTERS EXAMINED UPON RECEIPT: _____

Canister Valves Closed: ☐ YES ☐ NO Samples Received Match Chain: ☐ YES ☐ NO

Canister Valves Capped: ☐ YES ☐ NO Other Equipment Received: ☐ YES ☐ NO

Valve Cap Tightened Properly: ☐ YES ☐ NO See Additional Comments (Section 5.0 and / or 7.0) ☐ YES ☐ NO

Packing Material Used: (circle) Chain-of-Custody form properly maintained: ☐ YES ☐ NO

None / Absorbent / Paper / Bubble Wrap Can Size: ☐ 6L ☐ 15L Other _____

3.0 SAMPLE TEMPERATURE UPON RECEIPT BY: LT **IR THERMOMETER #:** P-5

Temperature of the container(s):

Circle selection: TB = Temp. Blank and/or SC = Sample Container *[acceptable tolerance 4°C ± 2°; (NC, WI: 1-4.4°C)]*

TB (SC) 4°C	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC

If temperature is outside acceptable tolerance, Project Manager was notified (_____PM). Date: _____ Time: _____

Samples received do not require cooling _____ OK to analyze samples: ☐ YES ☐ NO

PRESERVATION OF SAMPLES REQUIRED: ☐ NA ☑ YES **VERIFIED BY:** LT

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☑ YES ☐ NO

Cyanide samples checked for sulfides: ☐ YES Sulfide samples appear to be preserved with zinc acetate: ☐ YES ☐ NO

Samples checked for chlorine per specification (N.C.) ☐ YES Free chlorine present: ☐ YES ☐ NO

If sample preservation is outside acceptable tolerance, Project Manager was notified (_____PM)

Date: _____ Time: _____ ☐ see pH adjustment form

VOLATILE SAMPLES FILLED COMPLETELY, IF NOT, LIST ID AND HEADSPACE OF VOA's CONTAINING BUBBLES EXCEEDING 6MM IN DIAMETER:

Sample ID	mm Headspace

Sample ID	mm Headspace

4.0 CONDITION OF BOTTLES/CONTAINERS VERIFIED BY: LT

Samples received match COC: ☑ YES ☐ NO Bottles received intact: ☑ YES ☐ NO

See additional discrepancies/comments section: ☐ YES ☑ NO Samples received from USDA restricted area: ☐ YES ☑ NO

Chain-of-Custody form properly maintained: ☑ YES ☐ NO VOA trip blanks included: 2x40mL ☑ YES ☐ NO ☐ N/A

5.0 ADDITIONAL DISCREPANCIES

Appears on COC		Appears on Label		
Sample ID	Date/Time	Sample ID	Date/Time	Comments

6.0 SHIPPING DOCUMENTATION:

Air/freight bill is available and attached to COC: ☑ YES ☐ NO Air bill #: _____

Hand-delivered Carrier: _____ Date: _____ Time: _____

7.0 OTHER COMMENTS:

_____

_____

_____

_____

_____

_____

CORRECTIVE ACTION:

Client's Name: _____ Informed verbally on: _____ By: _____

Client's Name: _____ Informed verbally on: _____ By: _____

Sample(s) processed "as is" comments: _____

_____

_____

_____

Samples(s) on hold until: _____ If released, notify: _____

REVIEW:

Project Management: CMD Date: 11-18-04

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE

C3

Chain of Custody Record

I45290259
CHAIN OF CUSTODY NUMBER
$8010947-001

SEVERN TRENT **STL**
Severn Trent Laboratories, Inc.

40656

STL4149 (1202)

Client	Project Manager	Date	Page 1 of 1
Maxim Technologies	Greg Pope	10/13/2004	
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Location**	**Analysis**
1703 W Industrial Ave	(432) 686-8081 / (000)	STL Austin	
City / **State** / **Zip Code**	**Site Contact**		
Midland / TX / 79701	Greg Pope		
Project Number/Name	**Carrier/Waybill Number**		
3374 Line NM1-1 Remediation	FEDEX / 847303959563		
Contract/Purchase Order/Quote Number			
CONTRACT / PURCHASE ORDER # : 3374MAX007		QUOTE: 56072	

Sample I.D. Number and Description	Date	Time	Sample Type	Containers: Volume	Containers: Type	Containers: No.	Preservative	Condition on Receipt/Comments	GC8021 BTEX	ICCL Chloride
DISCHARGE	10/28/04	1720	WATER	40mL	VIAL	4	1:1 HCL	4°C/RT/ 10-29-04	X	
DISCHARGE	"	1720	WATER	250mL	PLASTIC	1	None	1 Good		X
TRIP BLANK	10/28/04	1730	WATER	40mL	VIAL	2	1:1 HCL	U	X	

Special Instructions: 8021 BTEX; Chloride

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required
☒ Normal ☐ Rush ☐ Other _____

QC Level
☒ I. ☐ II. ☐ III.

Project Specific Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	10-14-04	1400	1. Received By	10/16/04	1030
2. Relinquished By	10/28/04	1600	2. Received By	10-29-04	0820
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

19/19

SEVERN TRENT STL

Certificate of Analysis

STL Austin • 14046 Summit Drive, Austin, TX 78728 • Tel 512 244 0855 • Fax 512 244 0160 • www.stl-inc.com

ANALYTICAL REPORT

PROJECT NO. HOBBS, NM O&M

3374 Line NM1-1 Remediation

Lot #: I4K240119

Greg Pope

Maxim Technologies
1703 W Industrial Ave
Midland, TX 79701

SEVERN TRENT LABORATORIES, INC.

Carla M. Butler
Project Manager

December 6, 2004

American Council of Independent Laboratories
International Association of Environmental Testing Laboratories

Case Narrative

STL LOT NUMBER: **I4K240119**

This report contains the analytical results for the two samples received under chain of custody by Severn Trent Laboratories (STL) on November 24, 2004. These samples are associated with your **3374** Line NM1-1 Remediation project.

All samples were received in good condition and within temperature requirements.

All applicable quality control procedures met method-specified acceptance criteria except where noted in the case narrative or flagged on the result pages.

If you have any questions, please feel free to call me at (512) 244-0855.

EXECUTIVE SUMMARY - Detection Highlights

I4K240119

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
DISCHARGE 11/22/04 16:25 001				
Chloride	179	20.0	mg/L	MCAWW 300.0A

PREPARATION METHODS SUMMARY

I4K240119

PREPARATION DESCRIPTION	PREPARATION METHOD	ANALYTICAL METHOD
Chloride	MCAWW 300.0A	MCAWW 300.0A
Purge and trap	SW846 5030B	SW846 8021B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

I4K240119

ANALYTICAL METHOD	ANALYST	ANALYST ID
MCAWW 300.0A	David A. Tocher	800002
SW846 8021B	Todd Plybon	000059

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

I4K240119

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
GXQH2	001	DISCHARGE	11/22/04	16:25
GXQH3	002	TRIP BLANK	11/22/04	16:30

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

QC DATA ASSOCIATION SUMMARY

I4K240119

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	MCAWW 300.0A		4337173	4337122
	WATER	SW846 8021B		4341274	4341135
002	WATER	SW846 8021B		4341274	4341135

CONOCOPHILLIPS

Client Sample ID: DISCHARGE

GC Volatiles

Lot-Sample #...: I4K240119-001 **Work Order #...:** GXQH21AA **Matrix.....:** WATER
Date Sampled...: 11/22/04 16:25 **Date Received..:** 11/24/04 08:25
Prep Date.....: 12/03/04 **Analysis Date..:** 12/03/04
Prep Batch #...: 4341274 **Analysis Time..:** 14:06
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	90	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: DISCHARGE

General Chemistry

Lot-Sample #...: I4K240119-001 **Work Order #...:** GXQH2 **Matrix.....:** WATER
Date Sampled...: 11/22/04 16:25 **Date Received..:** 11/24/04 08:25

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	179	20.0	mg/L	MCAWW 300.0A	12/01/04	4337173

Dilution Factor: 20 Analysis Time..: 13:36

CONOCOPHILLIPS

Client Sample ID: TRIP BLANK

GC Volatiles

Lot-Sample #...: I4K240119-002 **Work Order #...:** GXQH31AA **Matrix.....:** WATER
Date Sampled...: 11/22/04 16:30 **Date Received..:** 11/24/04 08:25
Prep Date.....: 12/03/04 **Analysis Date..:** 12/03/04
Prep Batch #...: 4341274 **Analysis Time..:** 14:37
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	91	(73 - 135)

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: I4K240119 **Work Order #...:** G0C4D1AA **Matrix.....:** WATER
MB Lot-Sample #: I4L060000-274

Prep Date.....: 12/03/04 **Analysis Time..:** 11:33
Analysis Date..: 12/03/04 **Prep Batch #...:** 4341274
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8021B
Ethylbenzene	ND	1.0	ug/L	SW846 8021B
Toluene	ND	1.0	ug/L	SW846 8021B
Xylenes (total)	ND	3.0	ug/L	SW846 8021B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	91	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: I4K240119 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: GX4L21AA		MB Lot-Sample #:	I4L020000-173	
	ND	1.0	mg/L	MCAWW 300.0A	12/01/04	4337173
		Dilution Factor: 1				
		Analysis Time..: 08:06				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4K240119 **Work Order #...:** G0C4D1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: I4L060000-274 G0C4D1AD-LCSD
Prep Date.....: 12/03/04 **Analysis Date..:** 12/03/04
Prep Batch #...: 4341274 **Analysis Time..:** 10:31
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**87**	**(85 - 115)**			**SW846 8021B**
	89	**(85 - 115)**	**1.4**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**88**	**(85 - 115)**			**SW846 8021B**
	89	**(85 - 115)**	**1.3**	**(0-20)**	**SW846 8021B**
Toluene	**87**	**(85 - 115)**			**SW846 8021B**
	88	**(85 - 115)**	**1.4**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**92**	**(85 - 115)**			**SW846 8021B**
	93	**(85 - 115)**	**0.81**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene **(TFT)**	91	(84 - 114)
	90	(84 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I4K240119 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: GX4L21AC	LCS Lot-Sample#: I4L020000-173		
	98	(90 - 110)	MCAWW 300.0A	12/01/04	4337173

Dilution Factor: 1 Analysis Time..: 08:20

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4K240119 **Work Order #...:** GXMLF1AD-MS **Matrix.....:** WATER
MS Lot-Sample #: I4K230132-001 GXMLF1AE-MSD
Date Sampled...: 11/22/04 08:00 **Date Received..:** 11/23/04 10:05
Prep Date.....: 12/03/04 **Analysis Date..:** 12/03/04
Prep Batch #...: 4341274 **Analysis Time..:** 16:09
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**93**	**(85 - 115)**			**SW846 8021B**
	90	**(85 - 115)**	**2.2**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**90**	**(85 - 115)**			**SW846 8021B**
	89	**(85 - 115)**	**2.0**	**(0-20)**	**SW846 8021B**
Toluene	**90**	**(85 - 115)**			**SW846 8021B**
	89	**(85 - 115)**	**2.0**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**93**	**(85 - 115)**			**SW846 8021B**
	92	**(85 - 115)**	**2.0**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	91	(73 - 135)
	91	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I4K240119 **Matrix.....:** WATER
Date Sampled...: 11/11/04 08:53 **Date Received..:** 11/17/04 10:45

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		WO#: GW7KJ1AG-MS/GW7KJ1AH-MSD				MS Lot-Sample #: I4K170347-036	
	103	(90 - 110)			MCAWW 300.0A	12/01/04	4337173
	102	(90 - 110)	0.55	(0-20)	MCAWW 300.0A	12/01/04	4337173
		Dilution Factor: 1					
		Analysis Time..: 09:39					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Report Attachment

Note that if this report contains tests performed for the following methods, the associated method deviations are applicable.

EPA 410.4, COD: Laboratory uses different analytical wavelength as specified by instrument manufacturer.
EPA 340.2, Fluoride: Preliminary Bellack distillation not performed.
EPA 624: The laboratory uses a different desorb time and purge volume than stated in the method.
EPA 8151A: Laboratory utilizes alternate extraction sólvent.
Iowa OA1: Benzene, toluene, ethylbenzene and xylenes (BTEX) are not analyzed along with the Gasoline Range Organics if client does not require BTEX.
EPA TO-12: Samples not analyzed in duplicate.
EPA TO-14A and TO-15: Zero humidified nitrogen is used in place of air for method blanks.

TRRP Reporting Requirements

If this package contains reports requiring TRRP (Texas Risk Reduction Program) reporting criteria, the following information applies.

The REPORTING LIMIT is equivalent to the TRRP acronym MQL (method quantitation limit).
The MDL is equivalent to the TRRP acronym SQL (sample quantitation limit).

SEVERN TRENT STL

CHAIN-OF-CUSTODY ADDENDUM

Lot No: I4K240119

RECEIVED BY: LT

COC NUMBER: _____

DATE/TIME RECEIVED: 11-24-04/0825

QUOTE/PROFILE: 56072

UNPACKED DATE/TIME: 11-24-04/0920

CLIENT/PROJECT: Maxim

SAMPLES LOGGED IN: LT

LOG-IN REVIEWED: BJ

Number of Shipping Containers Received with Chain of Custody 1

VOC AIR / FILTER SAMPLES ☐ YES **SEE SECTIONS 1.0, 2.0, & 6.0**

1.0 CONTAINERS EXAMINED UPON RECEIPT: LT

Container Sealed: ☑ YES ☐ NO Custody Seal Signed/Dated: ☑ YES ☐ NO

Custody Seal Present: ☑ YES ☐ NO Containers checked for radioactivity: ☐ YES ☐ NO ☑ N/A

If seal not intact or Geiger counter reading >0.5 mR/hr, list air bill number of that container(s): _____

2.0 VOC CANISTERS EXAMINED UPON RECEIPT: _____

Canister Valves Closed: ☐ YES ☐ NO Samples Received Match Chain: ☐ YES ☐ NO

Canister Valves Capped: ☐ YES ☐ NO Other Equipment Received: ☐ YES ☐ NO

Valve Cap Tightened Properly: ☐ YES ☐ NO See Additional Comments (Section 5.0 and / or 7.0) ☐ YES ☐ NO

Packing Material Used: (circle) Chain-of-Custody form properly maintained: ☐ YES ☐ NO

None / Absorbent / Paper / Bubble Wrap Can Size: ☐ 6L ☐ 15L Other _____

3.0 SAMPLE TEMPERATURE UPON RECEIPT BY: LT **IR THERMOMETER #:** P-5

Temperature of the container(s):

Circle selection: TB = Temp. Blank and/or SC = Sample Container *[acceptable tolerance 4°C ± 2°; (NC, WI: 1-4.4°C)]*

TB (SC) 2nd	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC

If temperature is outside acceptable tolerance, Project Manager was notified (_____PM). Date: _____ Time: _____

Samples received do not require cooling _____ OK to analyze samples: ☐ YES ☐ NO

PRESERVATION OF SAMPLES REQUIRED: ☐ NA ☑ YES **VERIFIED BY:** LT

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☑ YES ☐ NO

Cyanide samples checked for sulfides: ☐ YES Sulfide samples appear to be preserved with zinc acetate: ☐ YES ☐ NO

Samples checked for chlorine per specification (N.C.) ☐ YES Free chlorine present: ☐ YES ☐ NO

If sample preservation is outside acceptable tolerance, Project Manager was notified (_____PM)

Date: _____ Time: _____ ☐ see pH adjustment form

VOLATILE SAMPLES FILLED COMPLETELY, IF NOT, LIST ID AND HEADSPACE OF VOA's CONTAINING BUBBLES EXCEEDING 6MM IN DIAMETER:

Sample ID	mm Headspace

Sample ID	mm Headspace

4.0 CONDITION OF BOTTLES/CONTAINERS VERIFIED BY: LT

Samples received match COC: ☑ YES ☐ NO Bottles received intact: ☑ YES ☐ NO

See additional discrepancies/comments section: ☐ YES ☑ NO Samples received from USDA restricted area: ☐ YES ☑ NO

Chain-of-Custody form properly maintained: ☑ YES ☐ NO VOA trip blanks included: ☐ YES ☐ NO ☑ N/A

5.0 ADDITIONAL DISCREPANCIES

Appears on COC		Appears on Label		
Sample ID	Date/Time	Sample ID	Date/Time	Comments

6.0 SHIPPING DOCUMENTATION:

Air/freight bill is available and attached to COC: ☑ YES ☐ NO Air bill #: _____

Hand-delivered Carrier: _____ Date: _____ Time: _____

7.0 OTHER COMMENTS:

CORRECTIVE ACTION:

Client's Name: _____ Informed verbally on: _____ By: _____

Client's Name: _____ Informed verbally on: _____ By: _____

Sample(s) processed "as is" comments: _____

Samples(s) on hold until: _____ If released, notify: _____

REVIEW:

Project Management: CMB Date: 11-29-04

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE

Chain of Custody Record

I4K240119

CHAIN OF CUSTODY NUMBER

$1010947-001

SEVERN TRENT STL

Severn Trent Laboratories, Inc.

42629

STL4149 (1202)

Client	Project Manager	Date	Page 1 of 1
Maxim Technologies	Greg Pope	11/15/2004	
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Location**	**Analysis**
1703 W Industrial Ave	(432) 686-8081 / (000)	STL Austin	
City / **State** / **Zip Code**	**Site Contact**		
Midland / TX / 79701	Greg Pope		
Project Number/Name	**Carrier/Waybill Number**		
3374 Line MM1-1 Remediation			
Contract/Purchase Order/Quote Number			
CONTRACT / PURCHASE ORDER # : 3374MAX007		QUOTE: 56072	

Sample I.D. Number and Description	Date	Time	Sample Type	Containers: Volume	Containers: Type	Containers: No.	Preservative	Condition on Receipt/Comments	GC/MS 8021 BTEX	ICCL Chloride
DISCHARGE	11-22-04	1625	WATER	40mL	VIAL	4	1:1 HCL	2°C/ICE/11-25-04	X	
DISCHARGE	↓	1625	WATER	250mL	PLASTIC	1	None	Good		X
TRIP BLANK	11-22-04	1630	WATER	40mL	VIAL	2	1:1 HCL	↓	X	

Special Instructions: 8021 BTEX: Chloride

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☒ Normal ☐ Rush ☐ Other _____

QC Level: ☒ I. ☐ II. ☐ III.

Project Specific Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: Bill Faulk	11/15/04	1305	1. Received By:	11/16/04	1030
2. Relinquished By:	11/23/04	1530	2. Received By:	11-24-04	0825
3. Relinquished By:	Date	Time	3. Received By:	Date	Time

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

20/20

SEVERN TRENT STL

Certificate of Analysis

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ANALYTICAL REPORT

PROJECT NO. HOBBS, NM O&M

3374 Line NM1-1 Remediation

Lot #: I4L300133

Greg Pope

Maxim Technologies
1703 W Industrial Ave
Midland, TX 79701

SEVERN TRENT LABORATORIES, INC.

Carla M. Butler
Project Manager

January 10, 2005

American Council of Independent Laboratories
International Association of Environmental Testing Laboratories

Case Narrative

STL LOT NUMBER: **I4L300133**

This report contains the analytical results for the **two** samples received under chain of custody by Severn Trent Laboratories (STL) on December 30, 2004. These samples are associated with your **3374** Line NM1-1 Remediation project.

All samples were received in good condition and within temperature requirements.

All applicable quality control procedures met method-specified acceptance criteria except where noted in the case narrative or flagged on the result pages.

If you have any questions, please feel free to call me at (512) 244-0855.

EXECUTIVE SUMMARY - Detection Highlights

I4L300133

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
DISCHARGE 12/29/04 12:30 001				
Chloride	136	50.0	mg/L	MCAWW 300.0A

PREPARATION METHODS SUMMARY

I4L300133

PREPARATION DESCRIPTION	PREPARATION METHOD	ANALYTICAL METHOD
Chloride	MCAWW 300.0A	MCAWW 300.0A
Purge and trap	SW846 5030B	SW846 8021B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

I4L300133

ANALYTICAL METHOD	ANALYST	ANALYST ID
MCAWW 300.0A	David A. Tocher	800002
SW846 8021B	Joe Lanham	000039

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

I4L300133

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
G102W	001	DISCHARGE	12/29/04	12:30
G1021	002	TRIP BLANK	12/29/04	12:40

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

QC DATA ASSOCIATION SUMMARY

I4L300133

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	MCAWW 300.0A		5005106	5005062
	WATER	SW846 8021B		5007142	5007086
002	WATER	SW846 8021B		5007142	5007086

CONOCOPHILLIPS

Client Sample ID: DISCHARGE

GC Volatiles

Lot-Sample #...: I4L300133-001 **Work Order #...:** G102W1AA **Matrix.....:** WATER
Date Sampled...: 12/29/04 12:30 **Date Received..:** 12/30/04 08:00
Prep Date.....: 01/06/05 **Analysis Date..:** 01/07/05
Prep Batch #...: 5007142 **Analysis Time..:** 01:07
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	106	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	95	(73 - 135)

CONOCOPHILLIPS

Client Sample ID: DISCHARGE

General Chemistry

Lot-Sample #...: I4L300133-001 **Work Order #...: G102W** **Matrix.....: WATER**
Date Sampled...: 12/29/04 12:30 **Date Received..: 12/30/04 08:00**

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	136	50.0	mg/L	MCAWW 300.0A	01/04/05	5005106

Dilution Factor: 50 Analysis Time..: 14:49

CONOCOPHILLIPS

Client Sample ID: TRIP BLANK

GC Volatiles

Lot-Sample #...: I4L300133-002 **Work Order #...:** G10211AA **Matrix.....:** WATER
Date Sampled...: 12/29/04 12:40 **Date Received..:** 12/30/04 08:00
Prep Date.....: 01/06/05 **Analysis Date..:** 01/07/05
Prep Batch #...: 5007142 **Analysis Time..:** 01:37
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	109	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	95	(73 - 135)

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: I4L300133 **Work Order #...:** G18PE1AA **Matrix.....:** WATER
MB Lot-Sample #: I5A070000-142

Prep Date.....: 01/06/05 **Analysis Time..:** 17:25
Analysis Date..: 01/06/05 **Prep Batch #...:** 5007142
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8021B
Ethylbenzene	ND	1.0	ug/L	SW846 8021B
Toluene	ND	1.0	ug/L	SW846 8021B
Xylenes (total)	ND	3.0	ug/L	SW846 8021B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	103	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	96	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: I4L300133 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: G149Q1AA		MB Lot-Sample #:	I5A050000-106	
	ND	1.0	mg/L	MCAWW 300.0A	01/04/05	5005106
		Dilution Factor: 1				
		Analysis Time..: 08:27				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4L300133 **Work Order #...:** G18PE1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: I5A070000-142 G18PE1AD-LCSD
Prep Date.....: 01/06/05 **Analysis Date..:** 01/06/05
Prep Batch #...: 5007142 **Analysis Time..:** 16:11
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**107**	**(85 - 115)**			**SW846 8021B**
	106	**(85 - 115)**	**1.2**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**110**	**(85 - 115)**			**SW846 8021B**
	109	**(85 - 115)**	**1.1**	**(0-20)**	**SW846 8021B**
Toluene	**108**	**(85 - 115)**			**SW846 8021B**
	107	**(85 - 115)**	**0.56**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**114**	**(85 - 115)**			**SW846 8021B**
	113	**(85 - 115)**	**0.79**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	106	(85 - 111)
	106	(85 - 111)
a,a,a-Trifluorotoluene (TFT)	99	(84 - 114)
	98	(84 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I4L300133 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: G149Q1AC LCS Lot-Sample#: I5A050000-106			
	101	(90 - 110)	MCAWW 300.0A	01/04/05	5005106

Dilution Factor: 1 Analysis Time..: 08:40

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I4L300133 **Work Order #...:** G1XGR1AE-MS **Matrix.....:** WATER
MS Lot-Sample #: I4L290171-003 G1XGR1AF-MSD
Date Sampled...: 12/28/04 15:05 **Date Received..:** 12/29/04 10:45
Prep Date.....: 01/06/05 **Analysis Date..:** 01/07/05
Prep Batch #...: 5007142 **Analysis Time..:** 00:05
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**123 a**	**(85 - 115)**			**SW846 8021B**
	123 a	**(85 - 115)**	**0.03**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**133 a**	**(85 - 115)**			**SW846 8021B**
	135 a	**(85 - 115)**	**1.5**	**(0-20)**	**SW846 8021B**
Toluene	**127 a**	**(85 - 115)**			**SW846 8021B**
	131 a	**(85 - 115)**	**2.9**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**141 a**	**(85 - 115)**			**SW846 8021B**
	143 a	**(85 - 115)**	**1.6**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	109	(81 - 119)
	108	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	95	(73 - 135)
	95	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I4L300133 **Matrix.....:** WATER
Date Sampled...: 12/22/04 10:40 **Date Received..:** 12/27/04 08:30

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		WO#: G1M341AJ-MS/G1M341AK-MSD				MS Lot-Sample #: I4L220166-008	
	95	(90 - 110)			MCAWW 300.0A	01/04/05	5005106
	95	(90 - 110)	0.42	(0-20)	MCAWW 300.0A	01/04/05	5005106
		Dilution Factor: 20					
		Analysis Time..: 11:05					
Chloride		WO#: G1REX1AK-MS/G1REX1AL-MSD				MS Lot-Sample #: I4L270110-008	
	98	(90 - 110)			MCAWW 300.0A	01/04/05	5005106
	96	(90 - 110)	1.1	(0-20)	MCAWW 300.0A	01/04/05	5005106
		Dilution Factor: 20					
		Analysis Time..: 13:04					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Report Attachment

Note that if this report contains tests performed for the following methods, the associated method deviations are applicable.

EPA 410.4, COD: Laboratory uses different analytical wavelength as specified by instrument manufacturer.
EPA 340.2, Fluoride: Preliminary Bellack distillation not performed.
EPA 624: The laboratory uses a different desorb time and purge volume than stated in the method.
EPA 8151A: Laboratory utilizes alternate extraction solvent.
Iowa OA1: Benzene, toluene, ethylbenzene and xylenes (BTEX) are not analyzed along with the Gasoline Range Organics if client does not require BTEX.
EPA TO-12: Samples not analyzed in duplicate.
EPA TO-14A and TO-15: Zero humidified nitrogen is used in place of air for method blanks.

TRRP Reporting Requirements

If this package contains reports requiring TRRP (Texas Risk Reduction Program) reporting criteria, the following information applies.

The REPORTING LIMIT is equivalent to the TRRP acronym MQL (method quantitation limit).
The MDL is equivalent to the TRRP acronym SQL (sample quantitation limit).

SEVERN TRENT STL

CHAIN–OF–CUSTODY ADDENDUM

Lot No: I4J300133

RECEIVED BY:

COC NUMBER: 43410

DATE/TIME RECEIVED: 12-30-04 0800

QUOTE/PROFILE: 56072

UNPACKED DATE/TIME: 12-30-04 1010

CLIENT/PROJECT: Maxim

SAMPLES LOGGED IN: CC

LOG-IN REVIEWED:

Number of Shipping Containers Received with Chain of Custody)

VOC AIR / FILTER SAMPLES ☐ YES **SEE SECTIONS 1.0, 2.0, & 6.0**

1.0 CONTAINERS EXAMINED UPON RECEIPT: CC

Container Sealed: ☒ YES ☐ NO

Custody Seal Signed/Dated: ☒ YES ☐ NO

Custody Seal Present: ☒ YES ☐ NO

Containers checked for radioactivity: ☐ YES ☐ NO ☒ N/A

If seal not intact or Geiger counter reading >0.5 mR/hr, list air bill number of that container(s):

2.0 VOC CANISTERS EXAMINED UPON RECEIPT:

Canister Valves Closed: ☐ YES ☐ NO

Canister Valves Capped: ☐ YES ☐ NO

Valve Cap Tightened Properly: ☐ YES ☐ NO

Packing Material Used: (circle)

None / Absorbent / Paper / Bubble Wrap

Samples Received Match Chain: ☐ YES ☐ NO

Other Equipment Received: ☐ YES ☐ NO

See Additional Comments (Section 5.0 and / or 7.0) ☐ YES ☐ NO

Chain-of-Custody form properly maintained: ☐ YES ☐ NO

Can Size: ☐ 6L ☐ 15L Other

3.0 SAMPLE TEMPERATURE UPON RECEIPT BY: CC **IR THERMOMETER #:** 05

Temperature of the container(s):

Circle selection: TB = Temp. Blank and/or SC = Sample Container *[acceptable tolerance 4°C ± 2°; (NC, WI: 1-4.4°C)]*

TB 2°C	SC	SC	SC	SC	SC	SC	SC	SC	SC

If temperature is outside acceptable tolerance, Project Manager was notified (_____PM). Date: _____ Time: _____

Samples received do not require cooling _____ OK to analyze samples: ☒ YES ☐ NO

PRESERVATION OF SAMPLES REQUIRED: ☐ NA ☒ YES **VERIFIED BY:** CC

Base samples are>pH 12: ☐ YES ☐ NO

Acid preserved are<pH 2: ☒ YES ☐ NO

Cyanide samples checked for sulfides: ☐ YES

Sulfide samples appear to be preserved with zinc acetate: ☐ YES ☐ NO

Samples checked for chlorine per specification (N.C.) ☐ YES

Free chlorine present: ☐ YES ☐ NO

If sample preservation is outside acceptable tolerance, Project Manager was notified (_____PM)

Date: _____ Time: _____ ☐ see pH adjustment form

VOLATILE SAMPLES FILLED COMPLETELY, IF NOT, LIST ID AND HEADSPACE OF VOA's CONTAINING BUBBLES EXCEEDING 6MM IN DIAMETER:

Sample ID	mm Headspace	Sample ID	mm Headspace

CONDITION OF BOTTLES/CONTAINERS VERIFIED BY: CC

Samples received match COC: ☑ YES ☐ NO Bottles received intact: ☑ YES ☐ NO

See additional discrepancies/comments section: ☐ YES ☑ NO Samples received from USDA restricted area: ☐ YES ☑ NO

Chain-of-Custody form properly maintained: ☑ YES ☐ NO VOA trip blanks included: 2x40ml ☑ YES ☐ NO ☐ N/A ec

5.0 ADDITIONAL DISCREPANCIES

Appears on COC		Appears on Label		
Sample ID	Date/Time	Sample ID	Date/Time	Comments

6.0 SHIPPING DOCUMENTATION:

Air/freight bill is available and attached to COC: ☑ YES ☐ NO Air bill #: _____

Hand-delivered Carrier: _____ Date: _____ Time: _____

7.0 OTHER COMMENTS:

_____

_____

_____

_____

_____

_____

CORRECTIVE ACTION:

Client's Name: _____ Informed verbally on: _____ By: _____

Client's Name: _____ Informed verbally on: _____ By: _____

Sample(s) processed "as is" comments: _____

_____

_____

_____

Samples(s) on hold until: _____ If released, notify: _____

REVIEW:

Project Management: CMB Date: 1-10-05

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE

[redacted]

Chain of Custody Record

I4L300133

CHAIN OF CUSTODY NUMBER
38018947-001

SEVERN TRENT **STL**
Severn Trent Laboratories, Inc.

[redacted]410

STL4149 (1202)

Client	Project Manager	Date
Maxim Technologies	Greg Pope	12/08/2004
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Location**
1703 W Industrial Ave	(432) 686-8081 / (000)	STL Austin
City / **State** / **Zip Code**	**Site Contact**	
Midland / TX / 79701	Greg Pope	
Project Number/Name	**Carrier/Waybill Number**	
3374 Line MM1-1 Remediation		
Contract/Purchase Order/Quote Number		
CONTRACT / PURCHASE ORDER # : 3374MAX007		QUOTE: 56072

Page 1 of 1

Sample I.D. Number and Description	Date	Time	Sample Type	Containers: Volume	Containers: Type	Containers: No.	Preservative	Condition on Receipt/Comments	Analysis: GC 8021	Analysis: ICCL
DISCHARGE	12.29.04	1230	WATER	40mL	VIAL	4	1:1 HCL	2°c 12-30-04 CC	X	
DISCHARGE	12.29.04	1230	WATER	250mL	PLASTIC	1	None			X
TRIP BLANK	12.29.04	1240	WATER	40mL	VIAL	2	1:1 HCL		X	

Special Instructions: 8021 BTEX; Chloride

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required
☑ Normal ☐ Rush ☐ Other _____

QC Level
☑ I. ☐ II. ☐ III.

Project Specific Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Bill Seals	12/13/04	1400	1. Received By:	12/14/04	1030
2. Relinquished By:	12/29/04	1245	2. Received By:	12-30-04	0800
3. Relinquished By:			3. Received By:		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

20/20

SEVERN TRENT STL

Certificate of Analysis

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ANALYTICAL REPORT

PROJECT NO. HOBBS, NM O&M

3374 Line NM1-1 Remediation

Lot #: I5A280132

Greg Pope

Maxim Technologies
1703 W Industrial Ave
Midland, TX 79701

SEVERN TRENT LABORATORIES, INC.

Carla M. Butler
Project Manager

February 9, 2005

American Council of Independent Laboratories
International Association of Environmental Testing Laboratories

Case Narrative

STL LOT NUMBER: **I5A280132**

This report contains the analytical results for the **two** samples received under chain of custody by Severn Trent Laboratories (STL) on January 28, 2005. These samples are associated with your **3374** Line NM1-1 Remediation project.

All samples were received in good condition and within temperature requirements.

All applicable quality control procedures met method-specified acceptance criteria except where noted in the case narrative or flagged on the result pages.

If you have any questions, please feel free to call me at (512) 244-0855.

EXECUTIVE SUMMARY - Detection Highlights

I5A280132

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
DISCHARGE 01/27/05 10:45 001				
Chloride	167	20.0	mg/L	MCAWW 300.0A

PREPARATION METHODS SUMMARY

I5A280132

PREPARATION DESCRIPTION	PREPARATION METHOD	ANALYTICAL METHOD
Chloride	MCAWW 300.0A	MCAWW 300.0A
Purge and trap	SW846 5030B	SW846 8021B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

I5A280132

ANALYTICAL METHOD	ANALYST	ANALYST ID
MCAWW 300.0A	David A. Tocher	800002
SW846 8021B	Joe Lanham	000039

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

I5A280132

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
G3DR1	001	DISCHARGE	01/27/05	10:45
G3DR4	002	TRIP BLANK	01/27/05	10:50

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

QC DATA ASSOCIATION SUMMARY

I5A280132

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	MCAWW 300.0A		5033274	5033214
	WATER	SW846 8021B		5038184	5038117
002	WATER	SW846 8021B		5038184	5038117

ConocoPhillips

Client Sample ID: DISCHARGE

GC Volatiles

Lot-Sample #...: I5A280132-001 **Work Order #...:** G3DR11AA **Matrix.....:** WATER
Date Sampled...: 01/27/05 10:45 **Date Received..:** 01/28/05 08:00
Prep Date.....: 02/04/05 **Analysis Date..:** 02/04/05
Prep Batch #...: 5038184 **Analysis Time..:** 19:13
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	89	(73 - 135)

ConocoPhillips

Client Sample ID: DISCHARGE

General Chemistry

Lot-Sample #...: I5A280132-001 **Work Order #...:** G3DR1 **Matrix.....:** WATER
Date Sampled...: 01/27/05 10:45 **Date Received..:** 01/28/05 08:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	167	20.0	mg/L	MCAWW 300.0A	02/02/05	5033274

Dilution Factor: 20 Analysis Time..: 14:42

ConocoPhillips

Client Sample ID: TRIP BLANK

GC Volatiles

Lot-Sample #...: I5A280132-002 **Work Order #...:** G3DR41AA **Matrix.....:** WATER
Date Sampled...: 01/27/05 10:50 **Date Received..:** 01/28/05 08:00
Prep Date.....: 02/04/05 **Analysis Date..:** 02/04/05
Prep Batch #...: 5038184 **Analysis Time..:** 19:42
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	99	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	89	(73 - 135)

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: I5A280132 **Work Order #...:** G3W8C1AA **Matrix.....:** WATER
MB Lot-Sample #: I5B070000-184

Prep Date.....: 02/04/05 **Analysis Time..:** 10:48
Analysis Date..: 02/04/05 **Prep Batch #...:** 5038184
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8021B
Ethylbenzene	ND	1.0	ug/L	SW846 8021B
Toluene	ND	1.0	ug/L	SW846 8021B
Xylenes (total)	ND	3.0	ug/L	SW846 8021B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	95	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: I5A280132 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: G3L6D1AA		MB Lot-Sample #:	I5B020000-274	
	ND	1.0	mg/L	MCAWW 300.0A	02/02/05	5033274
		Dilution Factor: 1				
		Analysis Time..: 08:32				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I5A280132 **Work Order #...:** G3W8C1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: I5B070000-184 G3W8C1AD-LCSD
Prep Date.....: 02/04/05 **Analysis Date..:** 02/04/05
Prep Batch #...: 5038184 **Analysis Time..:** 09:51
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**95**	**(85 - 115)**			**SW846 8021B**
	93	**(85 - 115)**	**2.4**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**106**	**(85 - 115)**			**SW846 8021B**
	102	**(85 - 115)**	**4.0**	**(0-20)**	**SW846 8021B**
Toluene	**104**	**(85 - 115)**			**SW846 8021B**
	97	**(85 - 115)**	**7.0**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**109**	**(85 - 115)**			**SW846 8021B**
	103	**(85 - 115)**	**5.6**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	104	(85 - 111)
	102	(85 - 111)
a,a,a-Trifluorotoluene (TFT)	95	(84 - 114)
	99	(84 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I5A280132 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: G3L6D1AC	LCS Lot-Sample#: I5B020000-274		
	103	(90 - 110)	MCAWW 300.0A	02/02/05	5033274
		Dilution Factor: 1	Analysis Time..: 08:45		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I5A280132 **Work Order #...:** G273Q1AG-MS **Matrix.....:** WATER
MS Lot-Sample #: I5A260154-007 G273Q1AH-MSD
Date Sampled...: 01/25/05 13:10 **Date Received..:** 01/26/05 08:00
Prep Date.....: 02/04/05 **Analysis Date..:** 02/04/05
Prep Batch #...: 5038184 **Analysis Time..:** 17:22
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**118 a**	**(85 - 115)**			**SW846 8021B**
	126 a	**(85 - 115)**	**6.0**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**133 a**	**(85 - 115)**			**SW846 8021B**
	138 a	**(85 - 115)**	**3.0**	**(0-20)**	**SW846 8021B**
Toluene	**125 a**	**(85 - 115)**			**SW846 8021B**
	129 a	**(85 - 115)**	**3.2**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**135 a**	**(85 - 115)**			**SW846 8021B**
	138 a	**(85 - 115)**	**2.5**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	103	(81 - 119)
	101	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	99	(73 - 135)
	100	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I5A280132 **Matrix.....:** WATER
Date Sampled...: 01/26/05 08:30 **Date Received..:** 01/28/05 08:00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		WO#: G3DLK1AH-MS/G3DLK1AJ-MSD				MS Lot-Sample #: I5A280109-001	
	113 N	(90 - 110)			MCAWW 300.0A	02/02/05	5033274
	112 N	(90 - 110)	0.34	(0-20)	MCAWW 300.0A	02/02/05	5033274
		Dilution Factor: 100					
		Analysis Time..: 09:11					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

Report Attachment

Note that if this report contains tests performed for the following methods, the associated method deviations are applicable.

EPA 410.4, COD: Laboratory uses different analytical wavelength as specified by instrument manufacturer.
EPA 340.2, Fluoride: Preliminary Bellack distillation not performed.
EPA 624: The laboratory uses a different desorb time and purge volume than stated in the method.
EPA 8151A: Laboratory utilizes alternate extraction solvent.
Iowa OA1: Benzene, toluene, ethylbenzene and xylenes (BTEX) are not analyzed along with the Gasoline Range Organics if client does not require BTEX.
EPA TO-12: Samples not analyzed in duplicate.
EPA TO-14A and TO-15: Zero humidified nitrogen is used in place of air for method blanks.

TRRP Reporting Requirements

If this package contains reports requiring TRRP (Texas Risk Reduction Program) reporting criteria, the following information applies.

The REPORTING LIMIT is equivalent to the TRRP acronym MQL (method quantitation limit).
The MDL is equivalent to the TRRP acronym SQL (sample quantitation limit).

SEVERN TRENT STL

CHAIN-OF-CUSTODY ADDENDUM

Lot No: I5A280132

RECEIVED BY: LT

COC NUMBER:

DATE/TIME RECEIVED: 1-28-05/0800

QUOTE/PROFILE: 56072

UNPACKED DATE/TIME: 1-28-05/0910

CLIENT/PROJECT: ~~Discharge~~ Maxim

SAMPLES LOGGED IN: LT

LOG-IN REVIEWED: B

Number of Shipping Containers Received with Chain of Custody: 1

VOC AIR / FILTER SAMPLES ☐ YES **SEE SECTIONS 1.0, 2.0, & 6.0**

1.0 CONTAINERS EXAMINED UPON RECEIPT: LT

Container Sealed: ☑ YES ☐ NO

Custody Seal Signed/Dated: ☑ YES ☐ NO

Custody Seal Present: ☑ YES ☐ NO

Containers checked for radioactivity: ☐ YES ☐ NO ☑ N/A

If seal not intact or Geiger counter reading >0.5 mR/hr, list air bill number of that container(s):

2.0 VOC CANISTERS EXAMINED UPON RECEIPT:

Canister Valves Closed: ☐ YES ☐ NO

Samples Received Match Chain: ☐ YES ☐ NO

Canister Valves Capped: ☐ YES ☐ NO

Other Equipment Received: ☐ YES ☐ NO

Valve Cap Tightened Properly: ☐ YES ☐ NO

See Additional Comments (Section 5.0 and / or 7.0) ☐ YES ☐ NO

Packing Material Used: (circle)

None / Absorbent / Paper / Bubble Wrap

Chain-of-Custody form properly maintained: ☐ YES ☐ NO

Can Size: ☐ 6L ☐ 15L Other

3.0 SAMPLE TEMPERATURE UPON RECEIPT BY: LT **IR THERMOMETER #:** D-5

Temperature of the container(s):

Circle selection: TB = Temp. Blank and/or SC = Sample Container *[acceptable tolerance 4°C ± 2°; (NC, WI: 1-4.4°C)]*

TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
(SC) 2e	SC	SC	SC	SC	SC	SC	SC	SC	SC

If temperature is outside acceptable tolerance, Project Manager was notified (____PM). Date: Time:

Samples received do not require cooling

OK to analyze samples: ☐ YES ☐ NO

PRESERVATION OF SAMPLES REQUIRED: ☐ NA ☑ YES **VERIFIED BY:** LT

Base samples are>pH 12: ☐ YES ☐ NO

Acid preserved are<pH 2: ☑ YES ☐ NO

Cyanide samples checked for sulfides: ☐ YES

Sulfide samples appear to be preserved with zinc acetate: ☐ YES ☐ NO

Samples checked for chlorine per specification (N.C.) ☐ YES

Free chlorine present: ☐ YES ☐ NO

If sample preservation is outside acceptable tolerance, Project Manager was notified (____PM)

Date: Time: ☐ see pH adjustment form

VOLATILE SAMPLES FILLED COMPLETELY, IF NOT, LIST ID AND HEADSPACE OF VOA's CONTAINING BUBBLES EXCEEDING 6MM IN DIAMETER:

Sample ID	mm Headspace

Sample ID	mm Headspace

4.0 CONDITION OF BOTTLES/CONTAINERS VERIFIED BY: AT

Samples received match COC: ☑ YES ☐ NO Bottles received intact: ☑ YES ☐ NO

See additional discrepancies/comments section: ☐ YES ☑ NO Samples received from USDA restricted area: ☐ YES ☑ NO

Chain-of-Custody form properly maintained: ☑ YES ☐ NO VOA trip blanks included: 2x40mL ☑ YES ☐ NO ☐ N/A

5.0 ADDITIONAL DISCREPANCIES

Appears on COC		Appears on Label		
Sample ID	Date/Time	Sample ID	Date/Time	Comments

6.0 SHIPPING DOCUMENTATION:

If freight bill is available and attached to COC: ☑ YES ☐ NO Air bill #: _____

Hand-delivered Carrier: _____ Date: _____ Time: _____

7.0 OTHER COMMENTS:

_____

_____

_____

_____

_____

_____

CORRECTIVE ACTION:

Client's Name: _____ Informed verbally on: _____ By: _____

Client's Name: _____ Informed verbally on: _____ By: _____

Sample(s) processed "as is" comments: _____

_____

_____

_____

Samples(s) on hold until: _____ If released, notify: _____

REVIEW:

Project Management: CB Date: 2-8-05

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE

C3

Chain of Custody Record

ISA280132

CHAIN OF CUSTODY NUMBER

$0010947-001

SEVERN TRENT STL

Severn Trent Laboratories, Inc.

006

STL4149 (1202)

Client	Project Manager	Date	Page 1 of 1
Nazin Technologies	Greg Pope	01/11/2005	
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Location**	**Analysis**
1703 W Industrial Ave	(432) 686-8081 / (000)	STL Austin	
City / **State** / **Zip Code**	**Site Contact**		
Midland / TX / 79701	Greg Pope		
Project Number/Name	**Carrier/Waybill Number**		
3374 Line NM1-1 Remediation	FEDEX		
Contract/Purchase Order/Quote Number			
CONTRACT / PURCHASE ORDER # : 3374NAZ007		QUOTE: 56072	

Sample I.D. Number and Description	Date	Time	Sample Type	Containers: Volume	Containers: Type	Containers: No.	Preservative	Condition on Receipt/Comments	GC/MS 8021 BTEX	IC Cl
DISCHARGE	1-27-05	1045	WATER	40mL	VIAL	4	1:1 HCL	2°C/RT 1-28-05	X	
DISCHARGE	"	1045	WATER	250mL	PLASTIC	1	None	Good		X
TRIP BLANK	1-27-05	1050	WATER	40mL	VIAL	2	1:1 HCL		X	

Special Instructions: 8021 BTEX; Chloride

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required
☒ Normal ☐ Rush ☐ Other _____

QC Level
☒ I. ☐ II. ☐ III.

Project Specific Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	1-12-04	1530	1. Received By	1-13-05	1030
2. Relinquished By	1-27-05	1225	2. Received By	1-28-05	0800
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

20/20

STL

Certificate of Analysis

STL Austin • 14046 Summit Drive, Austin, TX 78728 • Tel 512 244 0855 • Fax 512 244 0160 • www.stl-inc.com

ANALYTICAL REPORT

PROJECT NO. HOBBS, NM O&M

3374 Line NM1-1 Remediation

Lot #: I5B230193

Greg Pope

Maxim Technologies
1703 W Industrial Ave
Midland, TX 79701

SEVERN TRENT LABORATORIES, INC.

Carla M. Butler
Project Manager

March 8, 2005

American Council of Independent Laboratories
International Association of Environmental Testing Laboratories

Case Narrative

STL LOT NUMBER: **I5B230193**

This report contains the analytical results for the **two** samples received under chain of custody by Severn Trent Laboratories (STL) on February 23, 2005. These samples are associated with your **3374** Line NM1-1 Remediation project.

All samples were received in good condition and within temperature requirements.

All applicable quality control procedures met method-specified acceptance criteria except where noted in the case narrative or flagged on the result pages.

If you have any questions, please feel free to call me at (512) 244-0855.

EXECUTIVE SUMMARY - Detection Highlights

I5B230193

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
DISCHARGE 02/21/05 13:10 001				
Chloride	176	20.0	mg/L	MCAWW 300.0A

PREPARATION METHODS SUMMARY

I5B230193

PREPARATION DESCRIPTION	PREPARATION METHOD	ANALYTICAL METHOD
Chloride	MCAWW 300.0A	MCAWW 300.0A
Purge and trap	SW846 5030B	SW846 8021B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

I5B230193

ANALYTICAL METHOD	ANALYST	ANALYST ID
MCAWW 300.0A	David A. Tocher	800002
SW846 8021B	Kai Allen	402013

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

I5B230193

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
G40VA	001	DISCHARGE	02/21/05	13:10
G40VD	002	TRIP BLANK	02/21/05	13:30

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

QC DATA ASSOCIATION SUMMARY

I5B230193

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	MCAWW 300.0A		5061195	5061123
	WATER	SW846 8021B		5061246	5061163
002	WATER	SW846 8021B		5061246	5061163

ConocoPhillips

Client Sample ID: DISCHARGE

GC Volatiles

Lot-Sample #...: I5B230193-001 **Work Order #...:** G40VA1AA **Matrix.....:** WATER
Date Sampled...: 02/21/05 13:10 **Date Received..:** 02/23/05 08:00
Prep Date.....: 03/01/05 **Analysis Date..:** 03/01/05
Prep Batch #...: 5061246 **Analysis Time..:** 14:07
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	101	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	96	(73 - 135)

ConocoPhillips

Client Sample ID: DISCHARGE

General Chemistry

Lot-Sample #...: I5B230193-001 **Work Order #...: G40VA** **Matrix.....: WATER**
Date Sampled...: 02/21/05 13:10 **Date Received..: 02/23/05 08:00**

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	176	20.0	mg/L	MCAWW 300.0A	03/01/05	5061195

Dilution Factor: 20 Analysis Time..: 11:57

ConocoPhillips

Client Sample ID: TRIP BLANK

GC Volatiles

Lot-Sample #...: I5B230193-002 **Work Order #...:** G40VD1AA **Matrix.....:** WATER
Date Sampled...: 02/21/05 13:30 **Date Received..:** 02/23/05 08:00
Prep Date.....: 03/01/05 **Analysis Date..:** 03/01/05
Prep Batch #...: 5061246 **Analysis Time..:** 14:36
Dilution Factor: 1
Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	101	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	96	(73 - 135)

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: I5B230193 **Work Order #...:** G5DCW1AA **Matrix.....:** WATER
MB Lot-Sample #: I5C020000-246

Prep Date.....: 03/01/05 **Analysis Time..:** 10:35
Analysis Date..: 03/01/05 **Prep Batch #...:** 5061246
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8021B
Ethylbenzene	ND	1.0	ug/L	SW846 8021B
Toluene	ND	1.0	ug/L	SW846 8021B
Xylenes (total)	ND	3.0	ug/L	SW846 8021B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	96	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: I5B230193 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: G5C5R1AA		MB Lot-Sample #:	I5C020000-195	
	ND	1.0	mg/L	MCAWW 300.0A	03/01/05	5061195
		Dilution Factor: 1				
		Analysis Time..: 08:13				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I5B230193 **Work Order #...:** G5DCW1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: I5C020000-246 G5DCW1AD-LCSD
Prep Date.....: 03/01/05 **Analysis Date..:** 03/01/05
Prep Batch #...: 5061246 **Analysis Time..:** 09:38
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**104**	**(85 - 115)**			**SW846 8021B**
	106	**(85 - 115)**	**2.1**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**109**	**(85 - 115)**			**SW846 8021B**
	102	**(85 - 115)**	**6.7**	**(0-20)**	**SW846 8021B**
Toluene	**105**	**(85 - 115)**			**SW846 8021B**
	102	**(85 - 115)**	**2.6**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**109**	**(85 - 115)**			**SW846 8021B**
	103	**(85 - 115)**	**5.9**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	106	(85 - 111)
	103	(85 - 111)
a,a,a-Trifluorotoluene **(TFT)**	96	(84 - 114)
	100	(84 - 114)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I5B230193 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: G5C5R1AC LCS Lot-Sample#: I5C020000-195			
	100	(90 - 110)	MCAWW 300.0A	03/01/05	5061195
		Dilution Factor: 1	Analysis Time..: 08:26		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I5B230193 Work Order #...: G40VA1AD-MS Matrix.....: WATER
MS Lot-Sample #: I5B230193-001 G40VA1AR-MSD
Date Sampled...: 02/21/05 13:10 Date Received..: 02/23/05 08:00
Prep Date.....: 03/01/05 Analysis Date..: 03/01/05
Prep Batch #...: 5061246 Analysis Time..: 15:34
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**135 a**	**(85 - 115)**			**SW846 8021B**
	136 a	**(85 - 115)**	**1.2**	**(0-20)**	**SW846 8021B**
Ethylbenzene	**131 a**	**(85 - 115)**			**SW846 8021B**
	133 a	**(85 - 115)**	**1.7**	**(0-20)**	**SW846 8021B**
Toluene	**130 a**	**(85 - 115)**			**SW846 8021B**
	131 a	**(85 - 115)**	**0.63**	**(0-20)**	**SW846 8021B**
Xylenes (total)	**130 a**	**(85 - 115)**			**SW846 8021B**
	132 a	**(85 - 115)**	**1.6**	**(0-20)**	**SW846 8021B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	105	(81 - 119)
	105	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	102	(73 - 135)
	101	(73 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I5B230193 **Matrix.....:** WATER
Date Sampled...: 02/22/05 08:00 **Date Received..:** 02/23/05 08:00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		WO#: G40TA1DC-MS/G40TA1DD-MSD				MS Lot-Sample #: I5B230184-002	
	98	(90 - 110)			MCAWW 300.0A	03/01/05	5061195
	99	(90 - 110)	0.42	(0-20)	MCAWW 300.0A	03/01/05	5061195
		Dilution Factor: 5					
		Analysis Time..: 09:06					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Report Attachment

Note that if this report contains tests performed for the following methods, the associated method deviations are applicable.

EPA 410.4, COD: Laboratory uses different analytical wavelength as specified by instrument manufacturer.
EPA 340.2, Fluoride: Preliminary Bellack distillation not performed.
EPA 624: The laboratory uses a different desorb time and purge volume than stated in the method.
EPA 8151A: Laboratory utilizes alternate extraction solvent.
Iowa OA1: Benzene, toluene, ethylbenzene and xylenes (BTEX) are not analyzed along with the Gasoline Range Organics if client does not require BTEX.
EPA TO-12: Samples not analyzed in duplicate.
EPA TO-14A and TO-15: Zero humidified nitrogen is used in place of air for method blanks.

TRRP Reporting Requirements

If this package contains reports requiring TRRP (Texas Risk Reduction Program) reporting criteria, the following information applies.

The REPORTING LIMIT is equivalent to the TRRP acronym MQL (method quantitation limit).
The MDL is equivalent to the TRRP acronym SQL (sample quantitation limit).

SEVERN TRENT **STL**

CHAIN–OF–CUSTODY ADDENDUM

Lot No: I5B230193

RECEIVED BY: LT

COC NUMBER:

DATE/TIME RECEIVED: 2-23-05/0800

QUOTE/PROFILE: 56072

UNPACKED DATE/TIME: 2-23-05/0915

CLIENT/PROJECT: Maxim

SAMPLES LOGGED IN: LT

LOG-IN REVIEWED: CC

Number of Shipping Containers Received with Chain of Custody: 1

VOC AIR / FILTER SAMPLES ☐ YES **SEE SECTIONS 1.0, 2.0, & 6.0**

1.0 CONTAINERS EXAMINED UPON RECEIPT: LT

Container Sealed: ☑ YES ☐ NO

Custody Seal Signed/Dated: ☑ YES ☐ NO

Custody Seal Present: ☑ YES ☐ NO

Containers checked for radioactivity: ☐ YES ☐ NO ☑ N/A

If seal not intact or Geiger counter reading >0.5 mR/hr, list air bill number of that container(s):

2.0 VOC CANISTERS EXAMINED UPON RECEIPT:

Canister Valves Closed: ☐ YES ☐ NO

Canister Valves Capped: ☐ YES ☐ NO

Valve Cap Tightened Properly: ☐ YES ☐ NO

Packing Material Used: (circle)
None / Absorbent / Paper / Bubble Wrap

Samples Received Match Chain: ☐ YES ☐ NO

Other Equipment Received: ☐ YES ☐ NO

See Additional Comments (Section 5.0 and / or 7.0) ☐ YES ☐ NO

Chain-of-Custody form properly maintained: ☐ YES ☐ NO

Can Size: ☐ 6L ☐ 15L Other

3.0 SAMPLE TEMPERATURE UPON RECEIPT BY: LT **IR THERMOMETER #:** P5

Temperature of the container(s):

Circle selection: TB = Temp. Blank and/or SC = Sample Container *[acceptable tolerance 4°C ± 2°; (NC, WI: 1-4.4°C)]*

TB 2.5 2.3 (SC) 2.6 pc	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC	TB SC

If temperature is outside acceptable tolerance, Project Manager was notified (_____PM). Date: _____ Time: _____

Samples received do not require cooling _____ OK to analyze samples: ☐ YES ☐ NO

PRESERVATION OF SAMPLES REQUIRED: ☐ NA ☑ YES **VERIFIED BY:** LT

Base samples are>pH 12: ☐ YES ☐ NO

Acid preserved are<pH 2: ☑ YES ☐ NO

Cyanide samples checked for sulfides: ☐ YES

Sulfide samples appear to be preserved with zinc acetate: ☐ YES ☐ NO

Samples checked for chlorine per specification (N.C.) ☐ YES

Free chlorine present: ☐ YES ☐ NO

If sample preservation is outside acceptable tolerance, Project Manager was notified (_____PM)

Date: _____ Time: _____ ☐ see pH adjustment form

VOLATILE SAMPLES FILLED COMPLETELY, IF NOT, LIST ID AND HEADSPACE OF VOA's CONTAINING BUBBLES EXCEEDING 6MM IN DIAMETER:

Sample ID	mm Headspace

Sample ID	mm Headspace

4.0 CONDITION OF BOTTLES/CONTAINERS VERIFIED BY: AOT

Samples received match COC: ☑ YES ☐ NO Bottles received intact: ☑ YES ☐ NO

See additional discrepancies/comments section: ☐ YES ☑ NO Samples received from USDA restricted area: ☐ YES ☑ NO

Chain-of-Custody form properly maintained: ☑ YES ☐ NO VOA trip blanks included: 2x40mL ☑ YES ☐ NO ☐ N/A

5.0 ADDITIONAL DISCREPANCIES

Appears on COC		Appears on Label		
Sample ID	Date/Time	Sample ID	Date/Time	Comments

6.0 SHIPPING DOCUMENTATION:

Air/freight bill is available and attached to COC; ☑ YES ☐ NO Air bill #: _____

Hand-delivered Carrier: _____ Date: _____ Time: _____

7.0 OTHER COMMENTS:

_____

_____

_____

_____

_____

_____

CORRECTIVE ACTION:

Client's Name: _____ Informed verbally on: _____ By: _____

Client's Name: _____ Informed verbally on: _____ By: _____

Sample(s) processed "as is" comments: _____

_____

_____

_____

Samples(s) on hold until: _____ If released, notify: _____

REVIEW:

Project Management: CMB Date: 3-7-05

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE

Chain of Custody Record

I5B230113

CHAIN OF CUSTODY NUMBER
$0010947-001

SEVERN TRENT **STL**
Severn Trent Laboratories, Inc.

44871

STL4149 (1202)

Client	Project Manager	Date	Page 1 of 1
Marin Technologies	Greg Pope	02/14/2005	
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Location**	**Analysis**
1703 N Industrial Ave	(432) 686-8681 / (000)	STL Austin	
City / **State** / **Zip Code**	**Site Contact**		GC8021 (BTEX) / ICCL (Chloride)
Midland / TX / 79701	Greg Pope		
Project Number/Name	**Carrier/Waybill Number**		
3374 Line HM1-1 Remediation	FEDEX / 849300075249		
Contract/Purchase Order/Quote Number			
CONTRACT / PURCHASE ORDER # : 3374MAI007		QUOTE: 56072	

Sample I.D. Number and Description	Date	Time	Sample Type	Containers: Volume	Containers: Type	Containers: No.	Preservative	Condition on Receipt/Comments	GC8021 (BTEX)	ICCL (Chloride)
1. DISCHARGE	2.21.05	1310	WATER	40mL	VIAL	4	1:1 HCl	10°C/ET/2-23-05 Good	X	
2. DISCHARGE	2.21.05	1310	WATER	250mL	PLASTIC	1	None	↓		X
TRIP BLANK	2.21.05	1330	WATER	40mL	VIAL	2	1:1 HCl		X	

Special Instructions: 8021 BTEX; Chloride

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required
☑ Normal ☐ Rush ☐ Other _____

QC Level
☑ I. ☐ II. ☐ III.

Project Specific Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	2/21/05	1645	1. Received By	2-23-05	0800
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

20/20

APPENDIX C

Documentation of Disposal Activities

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-117 A
Revised June 10, 2003

Submit 5 Copies to
Appropriate District Office

PERMIT NO. H-27265

TANK CLEANING, SEDIMENT OIL REMOVAL, TRANSPORTATION OF MISCELLANEOUS HYDROCARBONS AND DISPOSAL PERMIT

Operator or Owner Maxim Technologies, Inc. (for ConocoPhillips, Inc.) Address 1703 W. Industrial Ave., Midland, TX 79701

Lease or Facility Name East Hobbs Junction ConocoPhillips Remediation Site Location Sec8, T19S, R38E
U.L. - Sec. - Twp. - Rge.

OPERATION TO BE PERFORMED:

☐ Tank Cleaning ☐ Sediment Oil Removal ☒ Transportation of Miscellaneous Hydrocarbons

Operator or Owner Representative authorizing work Greg W. Pope

Date Work to be Performed June 9, 2004

TANK CLEANING DATA Tank Number _____ Volume _____

Tank Type _____ Volume Below Load Line _____

SEDIMENT OIL OR MISCELLANEOUS HYDROCARBON DATA

Sediment Oil from: ☐ Pit ☐ Cellar ☐ Other

MISCELLANEOUS OIL

Tank Bottoms From: ☐ Pipeline Station ☐ Crude Terminal ☐ Refinery ☐ Other*

Catchings From: ☐ Gasoline Plant ☐ Gathering Lines ☐ Salt Water Disposal System ☒ Other*

☐ Pipeline Break Oil or Spill

*Other (Explain) Remediation System Groundwater and Crude Oil Recovery Tank

VOLUME AND DESTINATION: Estimated Volume 140 Bbls. Field test volume of good oil _____ Bbls.
(Not required prior to Division approval)

Destination (Name and Location of treating plant or other facility) Sundance Services, Eunice, NM

DESTRUCTION OF SEDIMENT OIL BY: ☐ Burning ☐ Pit Disposal ☐ Use on Roads or firewalls ☐ Other

(Explain) _____

Location of Destruction _____

Justification of Destruction _____

CERTIFICATION: (APPLICATION MAY BE MADE BY EITHER OF THE FOLLOWING)
I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Owner ConocoPhillips, Inc.	Transporter Key Energy Services
By Greg W. Pope (Maxim Technologies, Inc.)	Address 418 S. Grimes, Hobbs, NM 88240
Title Project Manager	Signature
E-mail Address gwpope57@aol.com	E-mail Address
Date June 3, 2004	Title / Date

OIL CONSERVATION DIVISION

Approved By Linda Williams Title Mgmt Analyst Date 6/4/04

A COPY OF THIS FORM MUST BE ON LOCATION DURING TANK CLEANING, REMOVAL OF SEDIMENT OIL OR MISCELLANEOUS HYDROCARBONS, AND MUST BE PRESENTED WITH TANK BOTTOMS, SEDIMENT OIL OR MISCELLANEOUS HYDROCARBONS AT THE TREATING PLANT TO WHICH IT IS DELIVERED.

DISTRIBUTION BY OCD	
	Santa Fe
	File
	Operator
	Transporter (2)

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-117 A
Revised June 10, 2003

Submit 5 Copies to
Appropriate District Office

PERMIT NO: H-27415 ~~H-27351~~

TANK CLEANING, SEDIMENT OIL REMOVAL, TRANSPORTATION OF MISCELLANEOUS HYDROCARBONS AND DISPOSAL PERMIT

Operator or Owner Maxim Technologies (for ConocoPhillips, Inc.) Address 1703 W. Industrial Ave., Midland, TX 79701

Lease or Facility Name NM1-1 ConocoPhillips Remediation Site Location Sec 9, T19S, R38E
U.L. - Sec. - Twp. - Rge.

OPERATION TO BE PERFORMED:

☐ Tank Cleaning ☐ Sediment Oil Removal ☒ Transportation of Miscellaneous Hydrocarbons

Operator or Owner Representative authorizing work Greg W. Pope

Date Work to be Performed July 1, 2004 Corrected Permit for 140 bbl Disposal Instead of 200 bbls Originally Permitted

TANK CLEANING DATA Tank Number _____ Volume _____

Tank Type _____ Volume Below Load Line _____

SEDIMENT OIL OR MISCELLANEOUS HYDROCARBON DATA

Sediment Oil from: ☐ Pit ☐ Cellar ☐ Other

MISCELLANEOUS OIL

Tank Bottoms From: ☐ Pipeline Station ☐ Crude Terminal ☐ Refinery ☐ Other*

Catchings From: ☐ Gasoline Plant ☐ Gathering Lines ☐ Salt Water Disposal System ☒ Other*

☐ Pipeline Break Oil or Spill

*Other (Explain) Remediation System Groundwater and Crude Oil Recovery Tank

VOLUME AND DESTINATION: Estimated Volume 140 Bbls. Field test volume of good oil _____ Bbls.
(Not required prior to Division approval)

Destination (Name and Location of treating plant or other facility) Sundance Services, Eunice, NM

DESTRUCTION OF SEDIMENT OIL BY: ☐ Burning ☐ Pit Disposal ☐ Use on Roads or firewalls ☐ Other

(Explain) _____

Location of Destruction _____

Justification of Destruction _____

CERTIFICATION: (APPLICATION MAY BE MADE BY EITHER OF THE FOLLOWING)

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Owner ConocoPhillips, Inc.	Transporter Key Energy Services	
By Greg W. Pope (Maxim Technologies, Inc.)	Address 418 S. Grimes, Hobbs, NM 88240	
Title Project Manager	Signature	
E-mail Address gwpope57@aol.com	E-mail Address	
Date July 23, 2004	Title	Date

OIL CONSERVATION DIVISION

Approved By Linda Williams Title Mgmt. Analyst Date 7-26-04

A COPY OF THIS FORM MUST BE ON LOCATION DURING TANK CLEANING, REMOVAL OF SEDIMENT OIL OR MISCELLANEOUS HYDROCARBONS, AND MUST BE PRESENTED WITH TANK BOTTOMS, SEDIMENT OIL OR MISCELLANEOUS HYDROCARBONS AT THE TREATING PLANT TO WHICH IT IS DELIVERED.

DISTRIBUTION BY OCD	
✓	Santa Fe
	File
	Operator
	Transporter (2)

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-117 A
Revised June 10, 2003

Submit 5 Copies to
Appropriate District Office

PERMIT NO. H-27446

TANK CLEANING, SEDIMENT OIL REMOVAL, TRANSPORTATION OF MISCELLANEOUS HYDROCARBONS AND DISPOSAL PERMIT

Operator or Owner Maxim Technologies (for ConocoPhillips, Inc.) Address 1703 W. Industrial Ave., Midland, TX 79701

Lease or Facility Name NM1-1 ConocoPhillips Remediation Site Location Sec 9, T19S, R38E
U.L. - Sec. - Twp. - Rge.

OPERATION TO BE PERFORMED:

☐ Tank Cleaning ☐ Sediment Oil Removal ☒ Transportation of Miscellaneous Hydrocarbons

Operator or Owner Representative authorizing work Greg W. Pope

Date Work to be Performed July 27, 2004

TANK CLEANING DATA Tank Number _____ Volume _____

Tank Type _____ Volume Below Load Line _____

SEDIMENT OIL OR MISCELLANEOUS HYDROCARBON DATA

Sediment Oil from: ☐ Pit ☐ Cellar ☐ Other

MISCELLANEOUS OIL

Tank Bottoms From: ☐ Pipeline Station ☐ Crude Terminal ☐ Refinery ☐ Other*

Catchings From: ☐ Gasoline Plant ☐ Gathering Lines ☐ Salt Water Disposal System ☒ Other*

☐ Pipeline Break Oil or Spill

*Other (Explain) Remediation System Groundwater and Crude Oil Recovery Tank

VOLUME AND DESTINATION: Estimated Volume 60 Bbls. Field test volume of good oil _____ Bbls.
(Not required prior to Division approval)

Destination (Name and Location of treating plant or other facility) Sundance Services, Eunice, NM

DESTRUCTION OF SEDIMENT OIL BY: ☐ Burning ☐ Pit Disposal ☐ Use on Roads or firewalls ☐ Other

(Explain) _____

Location of Destruction _____

Justification of Destruction _____

CERTIFICATION: (APPLICATION MAY BE MADE BY EITHER OF THE FOLLOWING)
I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Owner ConocoPhillips, Inc.	Transporter Key Energy Services
By Greg W. Pope (Maxim Technologies, Inc.)	Address 418 S. Grimes, Hobbs, NM 88240
Title Project Manager	Signature
E-mail Address gwpope57@aol.com	E-mail Address
Date July 23, 2004	Title / Date

OIL CONSERVATION DIVISION

Approved By Linda Williams Title Mgmt. Analyst Date 9/26/04

A COPY OF THIS FORM MUST BE ON LOCATION DURING TANK CLEANING, REMOVAL OF SEDIMENT OIL OR MISCELLANEOUS HYDROCARBONS, AND MUST BE PRESENTED WITH TANK BOTTOMS, SEDIMENT OIL OR MISCELLANEOUS HYDROCARBONS AT THE TREATING PLANT TO WHICH IT IS DELIVERED.

DISTRIBUTION BY OCD	
✓	Santa Fe
	File
	Operator
	Transporter (2)