1R - 240

REPORTS

DATE:

2003-2000

1R240

LinkEnergy

Link Energy Limited Partnership
P.O. Box 4666
Houston, Texas 77210-4666
www.linkenergy.com

October 20, 2003

Mr. William Olson
New Mexico Oil Conservation Division
Environmental Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Change in Responsible Party
Link Energy - Lea Station Facility
Lea County, New Mexico

Dear Mr. Olson:

Effective September 1, 2003, Link Energy (formerly Eott Energy) has taken over operations and maintanance (O&M) of the remediation system and groundwater monitoring activities at the above-referenced site from Shell Pipeline. In the future, the annual groundwater monitoring and remediation reports will be prepared by one of our consultants, reviewed by Link Energy, and submitted to the New Mexico Oil Conservation Division (NMOCD) on our behalf.

If you have any questions, please feel free to contact me at (713) 993-5047.

Sincerely,

Wm. R. Von Drehle

William R. Von Drehle
Director - Environmental Services
Link Energy

File: c/jeff files/NMOCD-LeaNotif1

1R240

Shell Oil Products US
HSE Science & Engineering
7750 N. MacArthur Blvd.
Suite 120, PMB 319
Irving, Texas 75063
Tel (972) 247-1700
Fax (972) 247-7075
Email seburkey@shellopus.com

Confidential

Mr. William Olsen
Environmental Geologist
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

March 5, 2003

Re: 2002 Annual Groundwater Monitoring Reports
Denton and Lea Pump Stations
Lea County, New Mexico

Dear Mr. Olsen:

Attached are the 2002 Annual Groundwater Monitoring Reports for the Shell's former pump station sites in Lea County, New Mexico. Shell will continue to conduct groundwater monitoring and PSH abatement activities at the site in 2003.

As of November 1, 2002, I have assumed management of this project for Shell Pipeline Company LP. Please direct all further correspondence on this site to the address above. Thank you for your continuing assistance with this project.

If you have any questions or comments, please do not hesitate to call me at (972) 247-1700.

Respectfully,
Shell Oil Products US

Scott E. Burkey
Environmental Specialist

Cc: Mr. Jeffrey Kindley, Enercon Services, Inc.

ENERCON SERVICES, INC.
An Employee Owned Company

2775 Villa Creek, Suite 120
Dallas, TX 75234
(972) 484-3854
Fax: (972) 484-8835

March 12, 2002

Mr. William C. Olson
State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 Pacheco
Santa Fe, New Mexico 87505

Re: 2001 Annual Reports
Equilon Pipeline Company
Denton and Lea Pump Stations
Lea County, New Mexico

Dear Mr. Olson:

Attached is the 2001 Annual Groundwater Monitoring Reports for Equilon's former pump station sites in Lea County, New Mexico. As indicated in the reports, the dissolved and PSH plumes appear to be stable. Equilon will continue PSH recovery and quarterly groundwater monitoring activities at the sites in 2002. Should you have any questions concerning this report, please contact Mr. Kyle Landreneau at (281) 353-2069.

Sincerely

Bennett C Howell III

Bennett C. Howell, III, P. E.
Senior Engineer

Cc: Kyle Landreneau

240

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

February 19, 2001

William Olson
State of New Mexico Oil Conservation Division
Environmental Bureau
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Re: Annual Monitoring Report, Lea Station, Lea County, New Mexico

Dear Mr. Olson

Enclosed is the 2000 Annual Groundwater Monitoring Report for the Lea Station project. Please note my new mailing address in the footer of this letter. Should you have any questions concerning this project please contact me at 281-353-2069

Sincerely
EQUIVA SERVICES LLC

Kyle Landreneau
Environmental Geologist
SHE/Science & Engineering

OIL CONSERVATION DIV.
01 MAR -2 PM 1:48

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

Cc: Mr. Chris Williams
Oil Conservation Division
New Mexico Energy, Minerals & Natural Resources Department
1625 North French Drive
Hobbs, New Mexico 88240

PMB 284, 40 FM 1960 West
Houston, Texas 77090
Phone 281-353-2069 Facsimile 281-825-0024

ENERCON SERVICES, INC.
An Employee Owned Company

2775 Villa Creek, Suite 120
Dallas, TX 75234
(972) 484-3854
Fax: (972) 484-8835

February 8, 2001

Mr. Kyle Landreneau
Equiva Services LLC
PMB 174
269 Cypress Wood
Spring, Texas 77388

RE: 2000 ANNUAL GROUNDWATER MONITORING REPORT
LEA STATION
LEA COUNTY, NEW MEXICO

ENERCON PROJECT # EV-379

Dear Mr. Landreneau:

Enercon Services, Inc. has completed the 2000 Annual Groundwater Monitoring and Sampling operations at the above referenced site. The sampling and monitoring program consists of quarterly monitoring events and regular maintenance of the site Soil Vapor Extraction (SVE) system.

This report contains results from all four of the quarterly monitoring events and includes the collection of groundwater elevation measurements from thirteen monitoring and two recovery wells. Groundwater samples were collected from select monitoring wells not containing phase-separated hydrocarbons (PSH). Outlined in this report are the gauging, purging, and sampling operations conducted on January 13, April 29, July 12, and October 3, 2000, and PSH recovery data since November, 1997.

Field Operations

The SVE system was in operation during the entire year of 2000. Minor repairs were made to the system during June and July in order to remove debris from the motor and increase efficiency. On October 16, 2000, an effluent air sample was collected and submitted to Trace Analysis, Inc. (Trace) for analysis of Benzene, Toluene, Ethylbenzene, and Xylenes using EPA Method 8021B. The analytical results were non-detectable for concentrations of BTEX. Air sample analytical results are presented in Appendix C.

In November 1999, EOTT Energy Corporation (EOTT) had a release of oil from a failed pump located in the vicinity of monitor wells MW-2 and MW-12. The spill flowed downhill, encompassed MW-9 and the outer fringes of MW-4. The soils in the vicinity of monitor wells MW-4, MW-9, and MW-10 were excavated to a depth of 8 to 10 feet below ground level (bgl) in November and December 1999 by Environmental Plus, Inc. (EPI) of Eunice, New Mexico. The soils were shredded, treated with fertilizer and placed back into the excavated hole between August and October 2000.

As a result of the excavations at the site, monitor well MW-9 was damaged during backfilling of the site. As of this report, the monitor well has not been repaired.

Groundwater Gradient and PSH Thickness

Monitoring wells were gauged in order to determine the depth to the groundwater table and the thickness of any PSH. Except for minor fluctuations, relative groundwater levels have decreased steadily throughout the year. The PSH thickness increased in monitor well MW-2, while decreasing to below detection in MW-1 and MW-11 between October 28, 1999, and October 3, 2000. A summary of the groundwater elevations and PSH thickness is presented in Appendix B, Table 1. The apparent groundwater flow direction was towards the southeast, which is consistent throughout the year and with previous historical data. Groundwater Gradient Maps for the quarterly sampling events are included in Appendix A as Figures 1 through 4.

PSH Recovery

Recovery of PSH on site is accomplished by absorbent booms and hand bailing. Approximately 169 gallons of PSH have been recovered to date. Between November 23, 1999, and October 3, 2000, 26 gallons were recovered. A summary of PSH recovery is presented in Appendix B, Table 1.

Groundwater Sampling

Monitor wells were sampled in accordance with our 2000 proposal for sampling and as previously approved by OCD. Monitor wells MW-4, MW-5, MW-6, MW-7, MW-9, and MW-10 were sampled and analyzed quarterly for Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) using EPA Method 8021B. Annual sampling of monitor wells MW-3, MW-8, MW-11, MW-12, and MW-13 were performed on April 28, 2000, and submitted for analysis of BTEX. During the January 13, 2000, monitoring event, MW-4, MW-5, MW-6, MW-7, MW-9, and MW-10 were also sampled for Poly-Aromatic Hydrocarbons (PAH) using EPA Method 8310. All wells were purged a minimum of 3 well volumes, or until bailed dry, and samples obtained using dedicated, disposable sample bailers. Samples were then placed on ice and shipped either to Southern Petroleum Laboratories in Houston, Texas, or Trace Analysis Laboratories (Trace) in Lubbock, Texas for analysis.

Groundwater Analytical Results

Dissolved BTEX concentrations have remained relatively stable or decreased across the site with minor fluctuations of 0.01 to 0.02 parts per million (ppm). A notable exception is MW-3, which has experienced a two-fold increase in BTEX concentrations. Also, downgradient monitor well MW-7 has had detectable amounts of BTEX since July, 2000. This is the first time BTEX has been detected in the well since its installation on February 16, 1993. Downgradient monitor wells MW-9 and MW-10 had a spike of detectable amounts of BTEX in January, April and July 2000, respectively. This correlates with the EOTT release in the vicinity of the wells in November 1999. By the fourth quarter of 2000, BTEX concentrations were not detectable in the two wells. Over the course of the year, monitor well MW-12 experienced a decrease in BTEX concentrations, while

MW-5, MW-6 and MW-8 BTEX concentrations decreased to below detection limits. The PAH concentrations increased from non-detectable to detectable amounts in monitor wells MW-5 and MW-6, while the remainder of the wells tested were below detection limits. Summaries of groundwater analytical results are presented in Appendix B, Table 2. A Dissolved BTEX Map for the October 3 and 6, 2000 sampling events is presented in Appendix A as Figure 5. A dissolved PAH Map for the January 13, 2000 sampling event is presented in Appendix C as Figure 6. Laboratory analytical and chain-of-custodies are included in Appendix C.

Enercon appreciates the opportunity to provide you with our professional consulting services. If you have any questions or concerns, please do not hesitate to contact Jeffrey Kindley at (915) 570-8726 or Charles D. Harlan at (972) 484-3854.

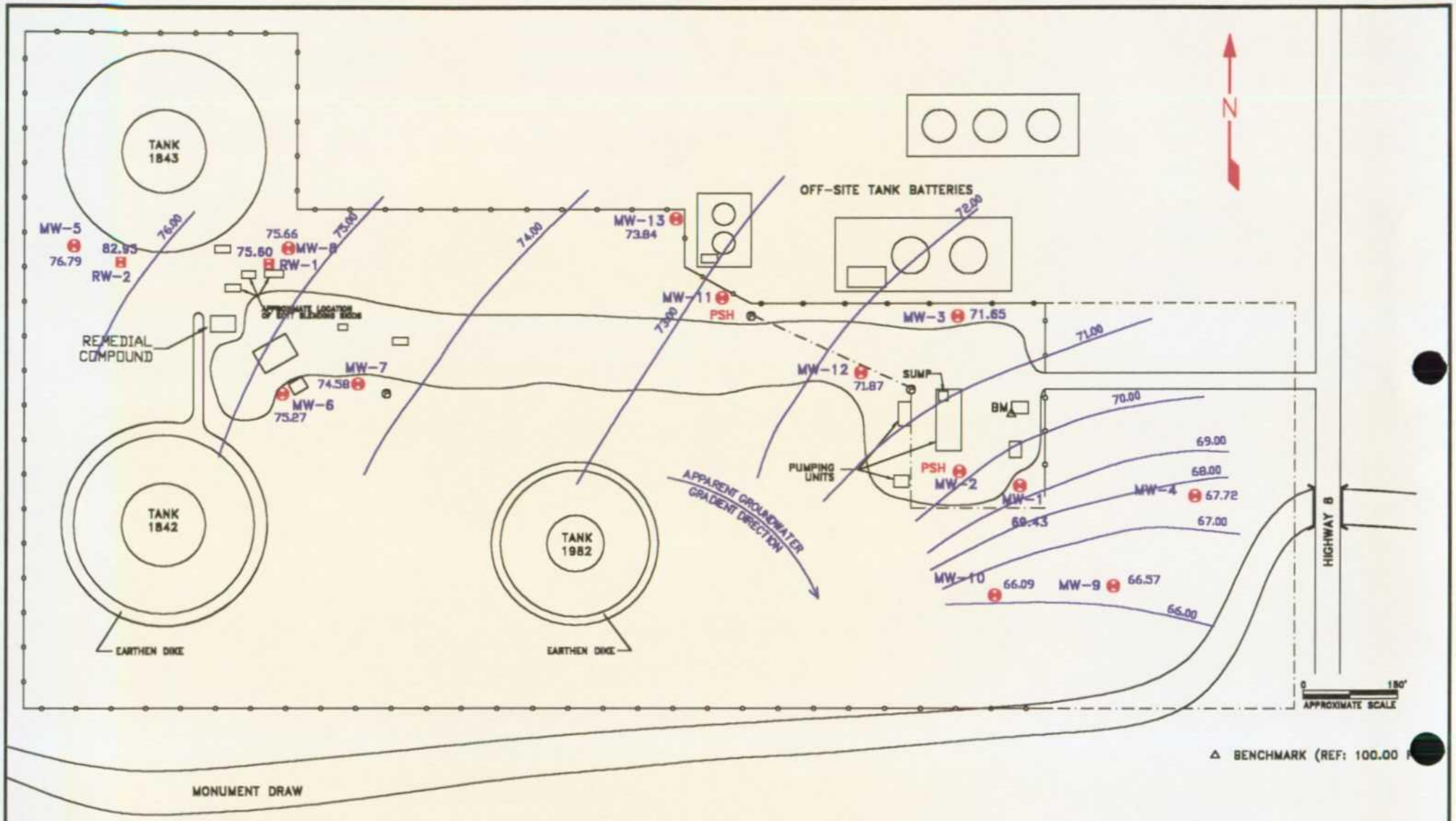
Sincerely,
Enercon Services, Inc.

Jeffrey Kindley, P.G.
Sr. Project Manager-Midland

Charles D. Harlan, C.P.G.
Manager, Environmental Services - Dallas

APPENDIX A

FIGURES 1, 2, 3, 4 - GROUNDWATER GRADIENT MAPS
FIGURE 5 - DISSOLVED BTEX CONCENTRATION MAPS
FIGURE 6 - DISSOLVED PAH CONCENTRATION MAP



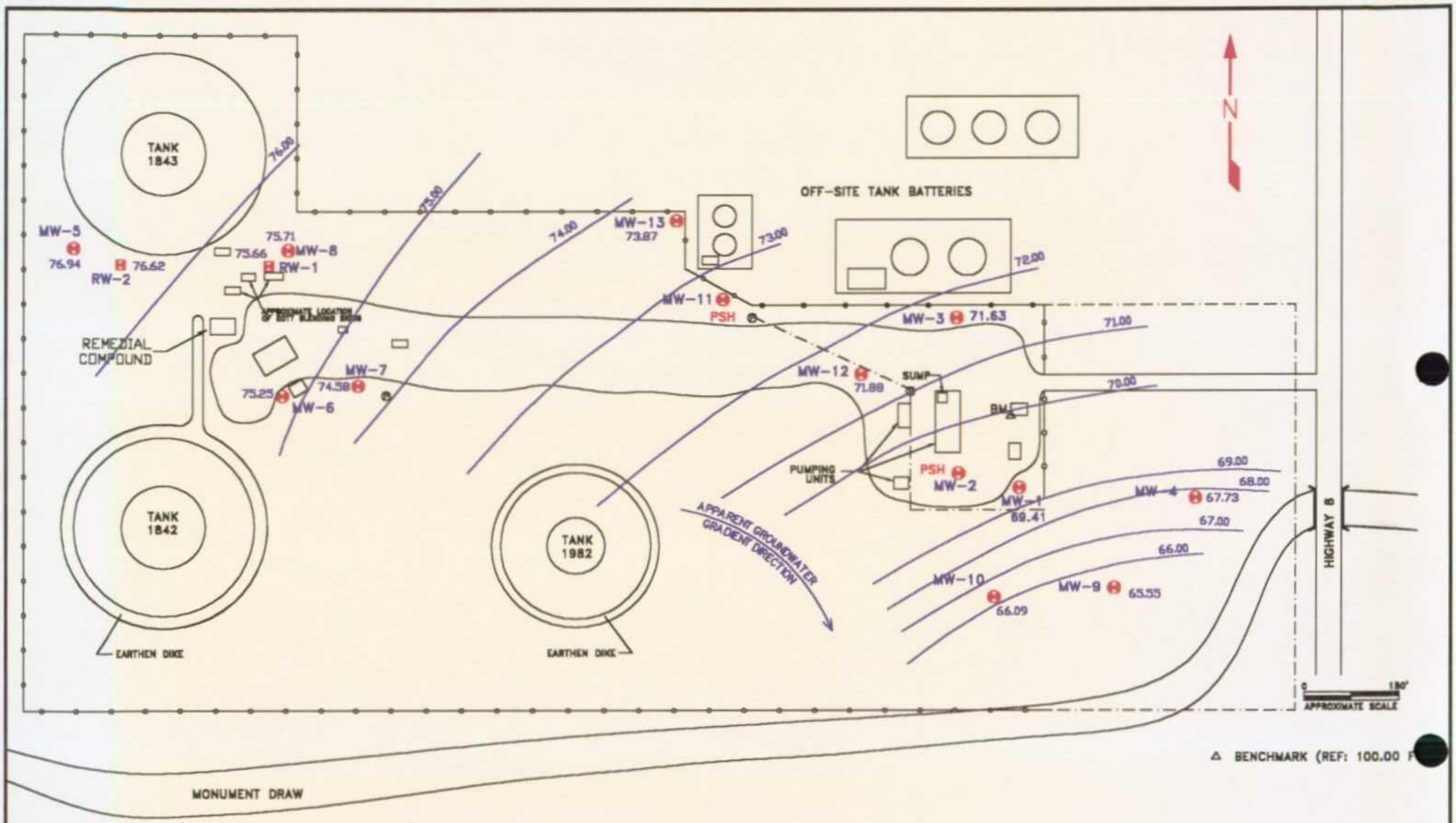
GROUNDWATER GRADIENT MAP

CONTOUR INTERVAL = 1.00 FOOT
MW-2, MW-11, AND RW-2 NOT USED IN DETERMINING GROUNDWATER GRADIENT

LEA STATION
SHELL PIPELINE COMPANY
LEA COUNTY, NEW MEXICO

DATE:	SCALE:
JANUARY, 2000	SEE ABOVE
PROJECT NUMBER: EV-379	FIGURE NUMBER: 1

ENERCON SERVICES, INC.
2775 VILLA CREEK
SUITE 120
DALLAS, TEXAS 75234

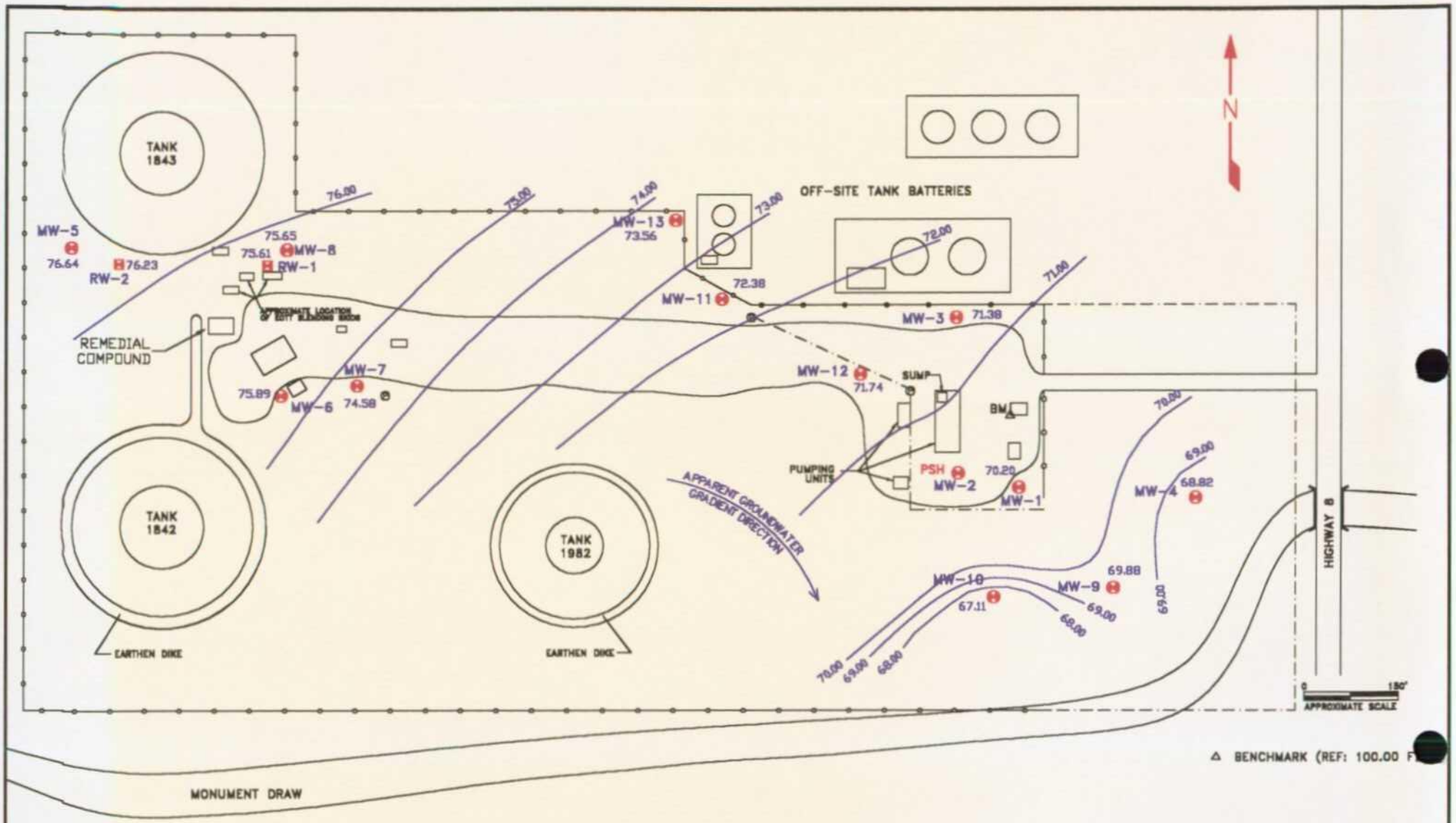


GROUNDWATER GRADIENT MAP

CONTOUR INTERVAL = 1.00 FOOT
MW-2 AND MW-11 NOT USED IN DETERMINING GROUNDWATER GRADIENT

LEA STATION SHELL PIPELINE COMPANY LEA COUNTY, NEW MEXICO	
DATE: APRIL, 2000	SCALE: SEE ABOVE
PROJECT NUMBER: EV-378	FIGURE NUMBER: 2

ENERCON SERVICES, INC.
2775 VILLA CREEK
SUITE 120
DALLAS, TEXAS 75234



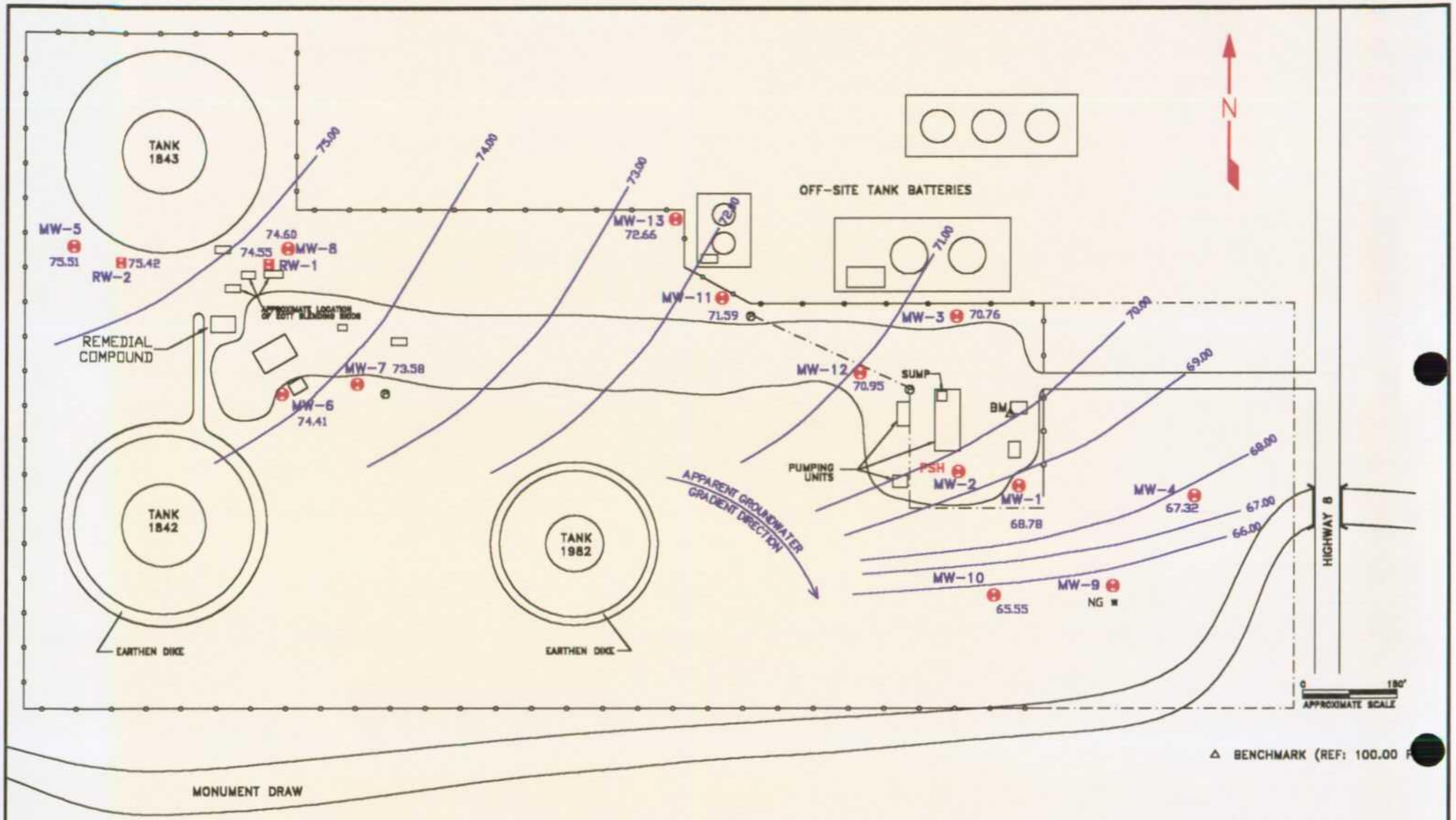
GROUNDWATER GRADIENT MAP

CONTOUR INTERVAL = 1.00 FOOT
MW-2 NOT USED IN DETERMINING GROUNDWATER GRADIENT

LEA STATION
SHELL PIPELINE COMPANY
LEA COUNTY, NEW MEXICO

DATE:	SCALE:
JULY, 2000	SEE ABOVE
PROJECT NUMBER: EV-378	FIGURE NUMBER: 3

ENERCON SERVICES, INC.
2775 VILLA CREEK
SUITE 120
DALLAS, TEXAS 75234



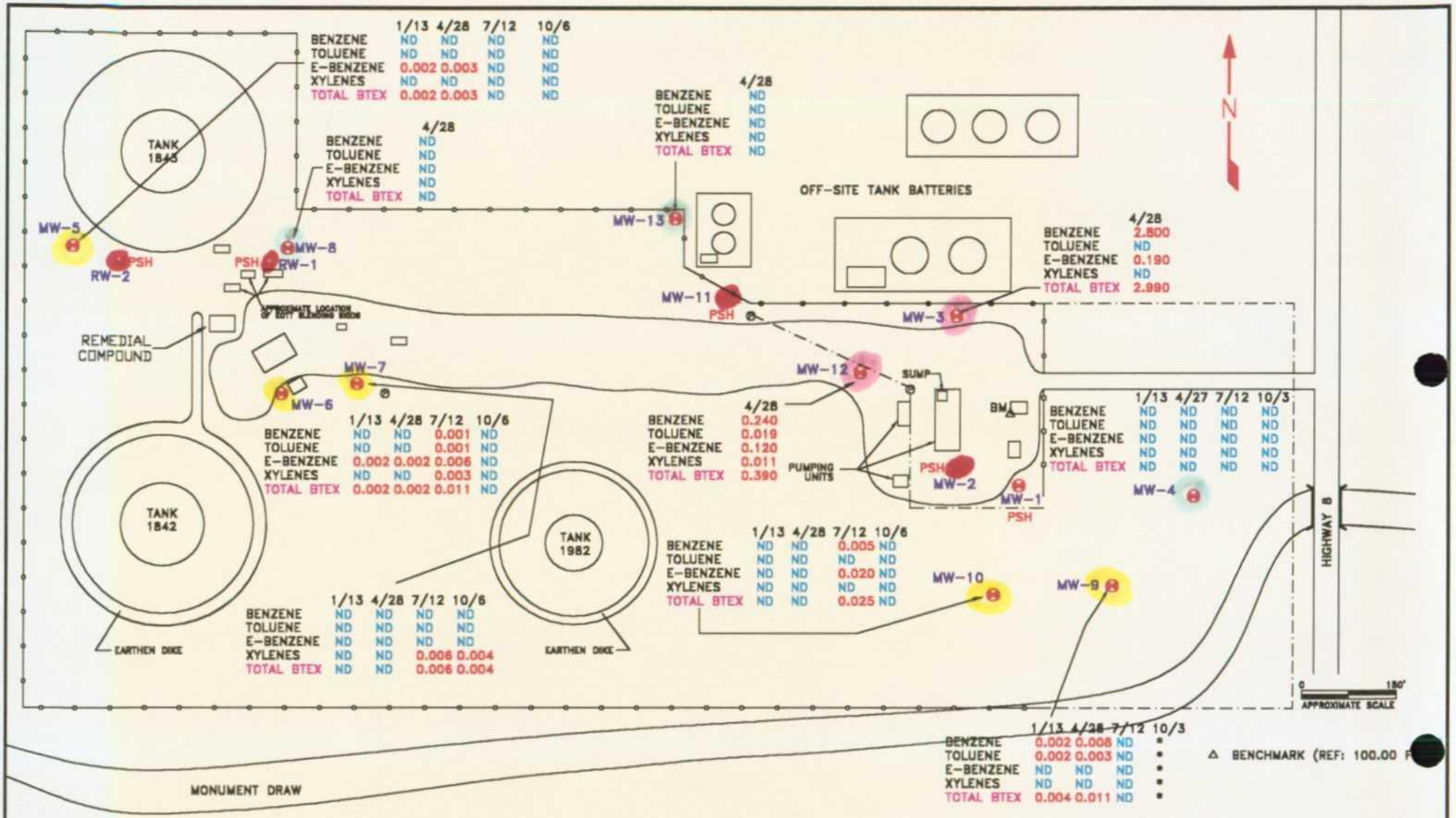
LEA STATION
SHELL PIPELINE COMPANY
LEA COUNTY, NEW MEXICO

DATE:	SCALE:
OCTOBER, 2000	SEE ABOVE
PROJECT NUMBER: EV-378	FIGURE NUMBER: 4

ENERCON SERVICES, INC.
2775 VILLA CREEK
SUITE 120
DALLAS, TEXAS 75234

GROUNDWATER GRADIENT MAP

CONTOUR INTERVAL = 1.00 FOOT
MW-2 AND MW-9 NOT USED IN DETERMINING GROUNDWATER GRADIENT
* MW-9 DAMAGED DURING BACKFILL OPERATIONS



DISSOLVED BTEX CONCENTRATION MAP

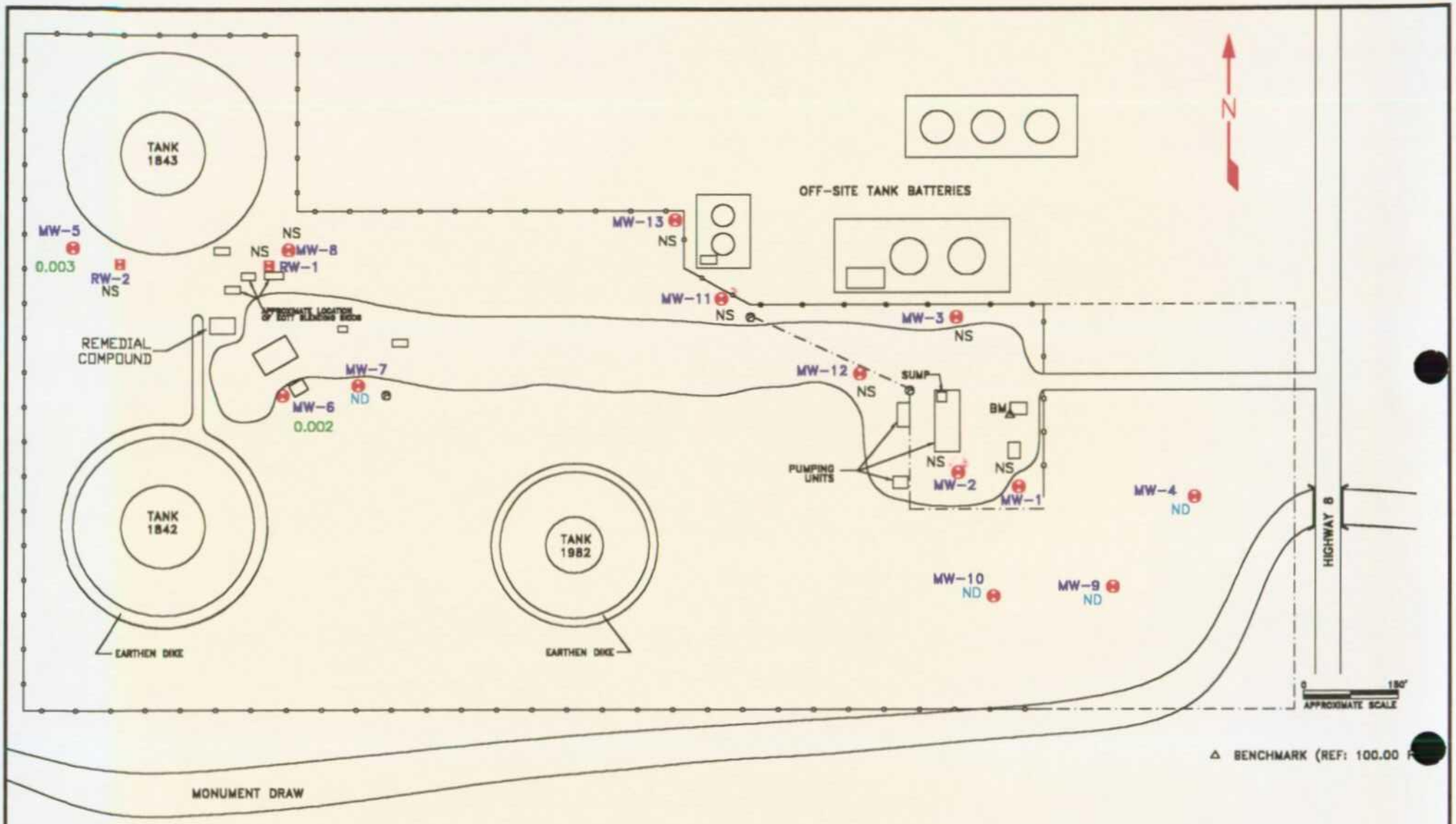
SAMPLES OBTAINED DURING 2000
CONCENTRATIONS IN mg/L (ppm)

NS – NOT SAMPLED
ND – NONE DETECTED
PSH – PSH FOUND IN WELL, NOT SAMPLED
• – MW-9 DAMAGED DURING BACKFILL OPERATIONS NO SAMPLES OBTAINED

LEA STATION
SHELL PIPELINE COMPANY
LEA COUNTY, NEW MEXICO

DATE:	SCALE:
OCT, 2000	SEE ABOVE
PROJECT NUMBER: EV-378	FIGURE NUMBER: 5

ENERCON SERVICES, INC.
2775 VILLA CREEK
SUITE 120
DALLAS, TEXAS 75234



△ BENCHMARK (REF: 100.00 F

PAH CONCENTRATION MAP

SAMPLES OBTAINED ON 1/13/00

CONCENTRATIONS IN mg/L (ppm) TOTAL NAPTHLENES.
ALL SAMPLES NON-DETECTABLE FOR BENZO(A)PYRENE.

NS – NOT SAMPLED
ND – NONE DETECTED
PSH – PSH FOUND IN WELL, NOT SAMPLED
0.000 – PAH DETECTED, CONCENTRATION LESS THAN 0.001 PPM

LEA STATION
SHELL PIPELINE COMPANY
LEA COUNTY, NEW MEXICO

DATE:	SCALE:
JANUARY, 2000	SEE ABOVE
PROJECT NUMBER: EV-379	FIGURE NUMBER: 6

ENERCON SERVICES, INC.
2775 VILLA CREEK
SUITE 120
DALLAS, TEXAS 75234

APPENDIX B

TABLES

TABLE 1
LEA STATION
RELATIVE GROUNDWATER ELEVATIONS, PHASE SEPARATED HYDROCARBON THICKNESSES AND MANUAL PHASE-SEPARATED HYDROCARBON RECOVERY

Monitor Well	Date Gauged	Relative Ground Surface Elevation (feet)	Relative Top of Casing Elevation (feet)*	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)**	Phase Separated Hydrocarbon Thickness (feet)	PSH Recovery (gallons)	PSH Cumulative Recovery (gallons)	Type of Recovery
MW-1	11/08/97	98.88	100.73		31.73	69.00	0.00	0.10	12.96	Absorptive Boom/Hand Bail
	01/22/98			31.65	31.84	69.06	0.19		12.96	
	02/18/98			31.52	31.60	69.20	0.08		12.96	
	04/02/98			31.51	31.74	69.20	0.23	2.50	15.46	Absorptive Boom/Hand Bail
	05/05/98			31.31	31.37	69.41	0.06	2.50	17.96	Absorptive Boom/Hand Bail
	07/07/98			32.30	32.64	68.40	0.34	3.00	20.96	Absorptive Boom/Hand Bail
	10/02/98			31.81	32.25	68.88	0.44	2.00	22.96	Absorptive Boom/Hand Bail
	01/14/99			32.02	32.20	68.69	0.18	1.50	24.46	Absorptive Boom/Hand Bail
	04/15/99			31.57	31.98	69.12	0.41		24.46	
	07/13/99			31.10	31.55	69.59	0.45	1.50	25.96	Absorptive Boom/Hand Bail
	08/11/99			31.48	32.00	69.20	0.52	1.50	27.46	Absorptive Boom/Hand Bail
	09/22/99			31.68	31.90	69.03	0.22	0.25	27.71	Absorptive Boom/Hand Bail
	10/28/99			31.16	31.26	69.56	0.10	1.75	29.46	Absorptive Boom/Hand Bail
	11/23/99			31.16	31.26	69.56	0.10	0.25	29.71	Absorptive Boom
	12/17/99				31.29	69.44	0.00	0.25	29.96	Absorptive Boom
	01/13/00				31.30	69.43	0.00	0.25	30.21	Absorptive Boom
	02/15/00				31.33	69.40	0.00	0.25	29.46	Absorptive Boom
	03/31/00				31.41	69.32	0.00	0.25	30.46	Absorptive Boom
	04/27/00				31.32	69.41	0.00		30.46	Absorptive Boom
	05/31/00				31.73	69.00	0.00	0.25	30.71	Absorptive Boom
	06/30/00				31.47	69.26	0.00		30.71	Absorptive Boom
	07/13/00				30.53	70.20	0.00	0.25	30.96	Absorptive Boom
	08/30/00				31.40	69.33	0.00		30.96	Absorptive Boom
	09/21/00				31.82	68.91	0.00		30.96	Absorptive Boom
	10/03/00				31.95	68.78	0.00		30.96	Absorptive Boom

TABLE 1
LEA STATION
RELATIVE GROUNDWATER ELEVATIONS, PHASE SEPARATED HYDROCARBON THICKNESSES
AND MANUAL PHASE-SEPARATED HYDROCARBON RECOVERY

Monitor Well	Date Gauged	Relative Ground Surface Elevation (feet)	Relative Top of Casing Elevation (feet)*	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)**	Phase Separated Hydrocarbon Thickness (feet)	PSH Recovery (gallons)	PSH Cumulative Recovery (gallons)	Type of Recovery
MW-2	11/08/97	100.78	102.37		31.56	70.81	0.00	0.05	10.25	Absorptive Boom/Hand Bail
	01/22/98			33.34	34.37	68.93	1.03	0.50	10.75	Absorptive Boom/Hand Bail
	02/18/98			33.15	34.14	69.12	0.99	0.50	11.25	Absorptive Boom/Hand Bail
	04/02/98			33.51	34.72	68.74	1.21	2.00	13.25	Absorptive Boom/Hand Bail
	05/05/98			33.26	34.28	69.01	1.02	2.00	15.25	Absorptive Boom/Hand Bail
	07/07/98			34.62	36.44	67.57	1.82	3.00	18.25	Absorptive Boom/Hand Bail
	10/02/98			31.81	33.13	70.43	1.32	2.00	20.25	Absorptive Boom/Hand Bail
	01/14/99			32.83	34.23	69.40	1.40		20.25	Absorptive Boom/Hand Bail
	04/15/99			32.36	34.20	69.83	1.84		20.25	
	07/13/99			31.88	34.30	70.25	2.42	4.00	24.25	Hand Bail
	08/11/99			32.27	34.70	69.86	2.43	3.50	27.75	Hand Bail
	09/22/99			32.32	34.14	69.87	1.82	2.50	30.25	Hand Bail
	10/28/99			31.98	33.30	70.26	1.32	2.00	32.25	Hand Bail
	11/23/99			31.93	33.28	70.31	1.35	2.00	34.25	Absorptive Boom/Hand Bail
	12/17/99			32.26	32.94	70.04	0.68	1.25	35.50	Absorptive Boom/Hand Bail
	01/13/00			32.31	33.20	69.97	0.89	1.50	37.00	Absorptive Boom/Hand Bail
	02/15/00			32.30	33.30	69.97	1.00	0.50	37.50	Absorptive Boom/Hand Bail
	03/31/00			32.28	33.73	69.95	1.45	1.00	38.50	Absorptive Boom/Hand Bail
	04/27/00			32.01	33.31	70.23	1.30	1.50	40.00	Absorptive Boom/Hand Bail
	05/31/00			32.49	34.48	69.68	1.99	3.00	43.00	Absorptive Boom/Hand Bail
	06/30/00			32.58	33.79	69.67	1.21	2.00	45.00	Absorptive Boom/Hand Bail
	07/13/00			32.61	33.69	69.65	1.08	1.50	46.50	Absorptive Boom/Hand Bail
	08/30/00			32.27	34.03	69.92	1.76	1.50	48.00	Hand Bail
	09/21/00			32.60	34.86	69.54	2.26	3.00	51.00	Hand Bail
	10/03/00			32.80	34.12	69.44	1.32	1.50	52.50	Hand Bail

TABLE 1
LEA STATION
RELATIVE GROUNDWATER ELEVATIONS, PHASE SEPARATED HYDROCARBON THICKNESSES AND MANUAL PHASE-SEPARATED HYDROCARBON RECOVERY

Monitor Well	Date Gauged	Relative Ground Surface Elevation (feet)	Relative Top of Casing Elevation (feet)*	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)**	Phase Separated Hydrocarbon Thickness (feet)	PSH Recovery (gallons)	PSH Cumulative Recovery (gallons)	Type of Recovery
MW-3	11/08/97	101.79	103.61			103.61	0.00			No PSH
	01/22/98				32.21	71.40	0.00			
	02/18/98				32.08	71.53	0.00			
	04/02/98				32.00	71.61	0.00			
	05/05/98				31.98	71.63	0.00			
	07/07/98				32.70	70.91	0.00			
	10/02/98				33.06	70.55	0.00			
	01/14/99			32.58	32.65	71.02	0.07	0.50	0.50	Absorptive Boom
	04/15/99			32.36	32.56	71.23	0.20	0.50	1.00	Absorptive Boom
	07/13/99			31.94	32.19	71.65	0.25	0.50	1.50	Absorptive Boom
	08/11/99			32.26	32.54	71.32	0.28	0.50	2.00	Absorptive Boom
	09/22/99			32.49	32.61	71.11	0.12	0.25	2.25	Absorptive Boom
	10/28/99			32.10	32.12	71.51	0.02	0.25	2.50	Absorptive Boom
	11/23/99				31.92	71.69	0.00	0.25	2.75	Absorptive Boom
	12/17/99				31.94	71.67	0.00	0.25	3.00	Absorptive Boom
	01/13/00				31.96	71.65	0.00	0.25	3.25	Absorptive Boom
	02/15/00				32.00	71.61	0.00	0.25	2.00	Absorptive Boom
	03/31/00				32.10	71.51	0.00		3.25	Absorptive Boom
	04/27/00				31.98	71.63	0.00	0.25	3.50	PSH droplets present during purge
	05/31/00				32.43	71.18	0.00		3.50	Absorptive Boom
	06/30/00				32.65	70.96	0.00	0.25	3.75	Absorptive Boom
	07/13/00				32.23	71.38	0.00		3.75	Absorptive Boom
	08/30/00				32.49	71.12	0.00		3.75	Absorptive Boom
	09/21/00				32.83	70.78	0.00	0.25	4.00	Absorptive Boom
	10/03/00				32.85	70.76	0.00		4.00	Absorptive Boom

TABLE 1
LEA STATION
RELATIVE GROUNDWATER ELEVATIONS, PHASE SEPARATED HYDROCARBON THICKNESSES AND MANUAL PHASE-SEPARATED HYDROCARBON RECOVERY

Monitor Well	Date Gauged	Relative Ground Surface Elevation (feet)	Relative Top of Casing Elevation (feet)*	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)**	Phase Separated Hydrocarbon Thickness (feet)	PSH Recovery (gallons)	PSH Cumulative Recovery (gallons)	Type of Recovery
MW-4	11/08/97	93.80	96.08	Not Guaged	Not Gauged	Not Guaged	Not Guaged			No PSH
	01/22/98				28.68	67.40	0.00			
	02/18/98			Not Guaged	Not Gauged	Not Guaged	Not Guaged			
	04/02/98				28.52	67.56	0.00			
	05/05/98				28.51	67.57	0.00			
	07/07/98				29.05	67.03	0.00			
	10/02/98				29.42	66.66	0.00			
	01/14/99				29.05	67.03	0.00			
	04/15/99				28.85	67.23	0.00			
	07/13/99				27.93	68.15	0.00			
	08/11/99				28.40	67.68	0.00			
	09/22/99				27.61	68.47	0.00			
	10/28/99				28.18	67.90	0.00			
	11/23/99				28.20	67.88	0.00			
	12/17/99				28.29	67.79	0.00			
	01/13/00				28.36	67.72	0.00			
	02/15/00				28.43	67.65	0.00			
	03/31/00				28.46	67.62	0.00			
	04/27/00				28.35	67.73	0.00			
	05/31/00				28.65	67.43	0.00			
	06/30/00				27.40	68.68	0.00			
	07/13/00				26.26	69.82	0.00			
	08/30/00				28.00	68.08	0.00			
	09/21/00				28.59	67.49	0.00			
	10/03/00				28.76	67.32	0.00			

TABLE 1
LEA STATION
RELATIVE GROUNDWATER ELEVATIONS, PHASE SEPARATED HYDROCARBON THICKNESSES AND MANUAL PHASE-SEPARATED HYDROCARBON RECOVERY

Monitor Well	Date Gauged	Relative Ground Surface Elevation (feet)	Relative Top of Casing Elevation (feet)*	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)**	Phase Separated Hydrocarbon Thickness (feet)	PSH Recovery (gallons)	PSH Cumulative Recovery (gallons)	Type of Recovery
MW-5	11/08/97	107.08	109.21	Not Guaged	Not Gauged	Not Guaged	Not Guaged		8.70	
	01/22/98			32.68	32.81	76.52	0.13	1.00	9.70	Absorptive Boom
	02/18/98				32.50	76.71	0.00	0.30	10.00	Sheen, Absorptive Boom
	04/02/98				32.24	76.97	0.00	0.10	10.10	Absorptive Boom
	05/05/98				32.19	77.02	0.00	0.10	10.20	Absorptive Boom
	07/07/98				33.10	76.11	0.00	0.25	10.45	Absorptive Boom
	10/02/98				33.57	75.64	0.00	0.25	10.70	Absorptive Boom
	01/14/99				32.85	76.36	0.00	0.25	10.95	Absorptive Boom
	04/15/99				32.59	76.62	0.00	0.25	11.20	Absorptive Boom
	07/13/99				32.26	76.95	0.00		11.20	Absorptive Boom
	08/11/99				32.71	76.50	0.00	0.25	11.45	Absorptive Boom
	09/22/99				32.74	76.47	0.00		11.45	Absorptive Boom
	10/28/99				32.41	76.80	0.00	0.25	11.70	Absorptive Boom
	11/23/99				32.40	76.81	0.00		11.70	Absorptive Boom
	12/17/99				32.39	76.82	0.00	0.25	11.95	Absorptive Boom
	01/13/00				32.42	76.79	0.00		11.95	Absorptive Boom
	02/15/00				32.38	76.83	0.00	0.25	10.20	Absorptive Boom
	03/31/00				32.37	76.84	0.00		11.95	Absorptive Boom
	04/27/00				32.27	76.94	0.00		11.95	PSH droplets present during purge
	05/31/00				32.80	76.41	0.00	0.25	12.20	Absorptive Boom
	06/30/00				32.96	76.25	0.00		12.20	Absorptive Boom
	07/13/00				32.57	76.64	0.00		12.20	Absorptive Boom
	08/30/00				33.04	76.17	0.00	0.25	12.45	Absorptive Boom
	09/21/00				33.40	75.81	0.00		12.45	Absorptive Boom
	10/03/00				33.50	75.71	0.00		12.45	Absorptive Boom

TABLE 1
LEA STATION
RELATIVE GROUNDWATER ELEVATIONS, PHASE SEPARATED HYDROCARBON THICKNESSES AND MANUAL PHASE-SEPARATED HYDROCARBON RECOVERY

Monitor Well	Date Gauged	Relative Ground Surface Elevation (feet)	Relative Top of Casing Elevation (feet)*	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)**	Phase Separated Hydrocarbon Thickness (feet)	PSH Recovery (gallons)	PSH Cumulative Recovery (gallons)	Type of Recovery
MW-6	11/08/97	103.66	106.26	Not Guaged	Not Gauged	Not Guaged	Not Guaged			No PSH
	01/22/98				31.28	74.98	0.00			
	02/18/98				31.11	75.15	0.00			
	04/02/98				31.00	75.26	0.00			
	05/05/98				30.95	75.31	0.00			
	07/07/98				31.65	74.61	0.00			
	10/02/98				32.00	74.26	0.00			
	01/14/99				31.52	74.74	0.00			
	04/15/99				31.30	74.96	0.00			
	07/13/99				30.53	75.73	0.00			
	08/11/99				31.05	75.21	0.00			
	09/22/99				30.21	76.05	0.00			
	10/28/99				30.63	75.63	0.00			
	11/23/99				30.84	75.42	0.00			
	12/17/99				30.92	75.34	0.00			
	01/13/00				30.99	75.27	0.00			
	02/15/00				31.01	75.25	0.00			
	03/31/00				31.06	75.20	0.00			
	04/27/00				31.01	75.25	0.00			
	05/31/00				32.13	74.13	0.00			
	06/30/00				31.24	75.02	0.00			
	07/13/00				30.37	75.89	0.00			
	08/30/00				31.18	75.08	0.00			
	09/21/00				31.68	74.58	0.00			
	10/03/00				31.85	74.41	0.00			

TABLE 1
LEA STATION
RELATIVE GROUNDWATER ELEVATIONS, PHASE SEPARATED HYDROCARBON THICKNESSES AND MANUAL PHASE-SEPARATED HYDROCARBON RECOVERY

Monitor Well	Date Gauged	Relative Ground Surface Elevation (feet)	Relative Top of Casing Elevation (feet)*	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)**	Phase Separated Hydrocarbon Thickness (feet)	PSH Recovery (gallons)	PSH Cumulative Recovery (gallons)	Type of Recovery
MW-7	11/08/97	104.34	106.27	Not Guaged	Not Gauged	Not Guaged	Not Guaged			No PSH
	01/22/98				31.97	74.30	0.00			
	02/18/98				31.78	74.49	0.00			
	04/02/98				31.66	74.61	0.00			
	05/05/98				31.61	74.66	0.00			
	07/07/98				32.40	73.87	0.00			
	10/02/98				32.75	73.52	0.00			
	01/14/99				32.21	74.06	0.00			
	04/15/99				32.00	74.27	0.00			
	07/13/99				31.50	74.77	0.00			
	08/11/99				31.95	74.32	0.00			
	09/22/99				31.85	74.42	0.00			
	10/28/99				31.55	74.72	0.00			
	11/23/99				31.62	74.65	0.00			
	12/17/99				31.67	74.60	0.00			
	01/13/00				31.69	74.58	0.00			
	02/15/00				31.70	74.57	0.00			
	03/31/00				31.74	74.53	0.00			
	04/27/00				31.69	74.58	0.00			
	05/31/00				32.13	74.14	0.00			
	06/30/00				32.25	74.02	0.00			
	07/13/00				31.69	74.58	0.00			
	08/30/00				32.12	74.15	0.00			
	09/21/00				32.55	73.72	0.00			
	10/03/00				32.69	73.58	0.00			

TABLE 1
LEA STATION
RELATIVE GROUNDWATER ELEVATIONS, PHASE SEPARATED HYDROCARBON THICKNESSES AND MANUAL PHASE-SEPARATED HYDROCARBON RECOVERY

Monitor Well	Date Gauged	Relative Ground Surface Elevation (feet)	Relative Top of Casing Elevation (feet)*	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)**	Phase Separated Hydrocarbon Thickness (feet)	PSH Recovery (gallons)	PSH Cumulative Recovery (gallons)	Type of Recovery
MW-8	11/08/97	105.52	107.44		32.16	75.28	0.00		34.67	Absorptive Boom
	01/22/98				31.56	75.88	0.00	1.00	35.67	Absorptive Boom
	02/18/98				32.68	74.76	0.00	0.10	35.77	Absorptive Boom
	04/02/98		108.23		32.54	75.69	0.00	0.10	35.87	Absorptive Boom, Connected to SVE
	05/05/98				32.49	75.74	0.00	0.10	35.97	Absorptive Boom
	07/07/98				33.37	74.86	0.00	0.10	36.07	Absorptive Boom
	10/02/98				32.75	75.48	0.00	0.10	36.17	Absorptive Boom
	01/14/99				32.21	76.02	0.00		36.17	Absorptive Boom
	04/15/99				32.00	76.23	0.00		36.17	SVE System Activated
	07/13/99				31.50	76.73	0.00		36.17	SVE System
	08/11/99				31.95	76.28	0.00		36.17	SVE System
	09/22/99				31.85	76.38	0.00		36.17	SVE System
	10/28/99				31.55	76.68	0.00		36.17	SVE System
	11/23/99				31.62	76.61	0.00		36.17	SVE System
	12/17/99				31.65	76.58	0.00		36.17	SVE System
	01/13/00				32.57	75.66	0.00		36.17	SVE System
	02/15/00				31.51	76.72	0.00		36.17	SVE System
	03/31/00				32.60	75.63	0.00		36.17	SVE System
	04/27/00				32.52	75.71	0.00		36.17	PSH droplets present during purge
	05/31/00				33.02	75.21	0.00		36.17	SVE System down repaired on June2
	06/30/00				33.10	75.13	0.00		36.17	SVE System down will repair
	07/13/00				32.58	75.65	0.00		36.17	SVE System repaired July 13
	08/30/00				33.10	75.13	0.00		36.17	SVE System
	09/21/00				33.50	74.73	0.00		36.17	SVE System
	10/03/00				33.63	74.60	0.00		36.17	SVE System

TABLE 1
LEA STATION
RELATIVE GROUNDWATER ELEVATIONS, PHASE SEPARATED HYDROCARBON THICKNESSES AND MANUAL PHASE-SEPARATED HYDROCARBON RECOVERY

Monitor Well	Date Gauged	Relative Ground Surface Elevation (feet)	Relative Top of Casing Elevation (feet)*	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)**	Phase Separated Hydrocarbon Thickness (feet)	PSH Recovery (gallons)	PSH Cumulative Recovery (gallons)	Type of Recovery
MW-9	11/08/97	93.76	97.21	Not Guaged	Not Gauged	Not Guaged	Not Guaged			No PSH
	01/22/98				30.78	66.43	0.00			
	02/18/98			Not Guaged	Not Guaged	Not Guaged	Not Guaged			
	04/02/98				30.59	66.62	0.00			
	05/05/98				30.57	66.64	0.00			
	07/07/98				31.33	65.88	0.00			
	10/02/98				31.70	65.51	0.00			
	01/14/99				31.28	65.93	0.00			
	04/15/99				30.93	66.28	0.00			
	07/13/99				30.38	66.83	0.00			
	08/11/99				30.89	66.32	0.00			
	09/22/99				30.06	67.15	0.00			
	10/28/99				30.42	66.79	0.00			
	11/23/99				30.58	66.63	0.00			
	12/17/99				30.62	66.59	0.00			
	01/13/00				30.64	66.57	0.00			
	02/15/00				30.69	66.43	0.00			
	03/31/00				30.75	66.46	0.00			
	04/27/00				30.66	66.55	0.00			
	05/31/00				31.06	66.15	0.00			
	06/30/00				27.43	69.78	0.00			
	07/13/00				27.33	69.88	0.00			
	08/30/00									Well damaged not able to access
	09/21/00									Well damaged not able to access
	10/03/00									Well damaged not able to access

TABLE 1
LEA STATION
RELATIVE GROUNDWATER ELEVATIONS, PHASE SEPARATED HYDROCARBON THICKNESSES AND MANUAL PHASE-SEPARATED HYDROCARBON RECOVERY

Monitor Well	Date Gauged	Relative Ground Surface Elevation (feet)	Relative Top of Casing Elevation (feet)*	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)**	Phase Separated Hydrocarbon Thickness (feet)	PSH Recovery (gallons)	PSH Cumulative Recovery (gallons)	Type of Recovery
MW-10	11/08/97	99.63	102.51	Not Guaged	Not Gauged	Not Guaged	Not Guaged			No PSH
	01/22/98				36.46	66.05	0.00			
	02/18/98			Not Guaged	Not Guaged	Not Guaged	Not Guaged			
	04/02/98				36.25	66.26	0.00			
	05/05/98				36.27	66.24	0.00			
	07/07/98				35.89	66.62	0.00			
	10/02/98				37.40	65.11	0.00			
	01/14/99				37.04	65.47	0.00			
	04/15/99				36.76	65.75	0.00			
	07/13/99				36.28	66.23	0.00			
	08/11/99				36.70	65.81	0.00			
	09/22/99				36.86	65.65	0.00			
	10/28/99				36.35	66.16	0.00			
	11/23/99				36.39	66.12	0.00			
	12/17/99				36.42	66.09	0.00			
	01/13/00				36.42	66.09	0.00			
	02/15/00				36.44	66.07	0.00			
	03/31/00				36.47	66.04	0.00			
	04/27/00				36.42	66.09	0.00			PSH droplets present during purge
	05/31/00				36.90	65.61	0.00			
	06/30/00				36.51	66.00	0.00			
	07/13/00				35.40	67.11	0.00			
	08/30/00				36.34	66.17	0.00			
	09/21/00				36.81	65.70	0.00			
	10/03/00				36.96	65.55	0.00			

TABLE 1
LEA STATION
RELATIVE GROUNDWATER ELEVATIONS, PHASE SEPARATED HYDROCARBON THICKNESSES AND MANUAL PHASE-SEPARATED HYDROCARBON RECOVERY

Monitor Well	Date Gauged	Relative Ground Surface Elevation (feet)	Relative Top of Casing Elevation (feet)*	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)**	Phase Separated Hydrocarbon Thickness (feet)	PSH Recovery (gallons)	PSH Cumulative Recovery (gallons)	Type of Recovery
MW-11	11/08/97	104.48	105.62		32.47	73.15	0.00		17.49	Absorptive Boom
	01/22/98				32.18	73.44	0.00		17.49	Absorptive Boom
	02/18/98			32.79	32.99	72.81	0.20	1.00	18.49	Absorptive Boom
	04/02/98			32.71	33.48	72.83	0.77	2.00	20.49	Absorptive Boom/Hand Bail
	05/05/98			32.56	33.71	72.95	1.15	2.50	22.99	Absorptive Boom/Hand Bail
	07/07/98			33.20	34.92	72.25	1.72	3.00	25.99	Absorptive Boom/Hand Bail
	10/02/98			33.00	33.75	72.55	0.75	1.50	27.49	Absorptive Boom/Hand Bail
	01/14/99			33.40	33.69	72.19	0.29		27.49	
	04/15/99			32.85	33.53	72.70	0.68		27.49	
	07/13/99			32.43	34.20	73.01	1.77	3.00	30.49	Hand Bail
	08/11/99			32.73	34.89	72.67	2.16	3.50	33.99	Hand Bail
	09/22/99			32.85	33.77	72.68	0.92	0.50	34.49	Absorptive Boom/Hand Bail
	10/28/99			32.78	33.27	72.79	0.49	0.25	34.74	Absorptive Boom/Hand Bail
	11/23/99			32.60	33.53	72.93	0.93	1.00	35.74	Absorptive Boom/Hand Bail
	12/17/99			32.70	33.26	72.86	0.56	1.00	36.74	Absorptive Boom/Hand Bail
	01/13/00			32.70	33.26	72.86	0.56	0.25	36.99	Absorptive Boom/Hand Bail
	02/15/00			32.73	33.55	72.81	0.82	0.50	37.49	Absorptive Boom/Hand Bail
	03/31/00			32.84	33.73	72.69	0.89	0.50	37.99	Absorptive Boom/Hand Bail
	04/27/00			32.52	33.35	73.02	0.83	0.50	38.49	Absorptive Boom/Hand Bail
	05/31/00			33.12	34.33	72.38	1.21	1.00	39.49	Absorptive Boom/Hand Bail
	06/30/00			33.51	33.81	72.08	0.30	0.25	39.74	Absorptive Boom/Hand Bail
	07/13/00				33.24	72.38	0.00	0.25	39.99	Absorptive Boom
	08/30/00				33.43	72.19	0.00	0.25	40.24	Absorptive Boom
	09/21/00				33.75	71.87	0.00	0.25	40.49	Absorptive Boom
	10/030/00				33.73	71.89	0.00	0.00	40.49	Absorptive Boom

TABLE 1
LEA STATION
RELATIVE GROUNDWATER ELEVATIONS, PHASE SEPARATED HYDROCARBON THICKNESSES
AND MANUAL PHASE-SEPARATED HYDROCARBON RECOVERY

Monitor Well	Date Gauged	Relative Ground Surface Elevation (feet)	Relative Top of Casing Elevation (feet)*	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)**	Phase Separated Hydrocarbon Thickness (feet)	PSH Recovery (gallons)	PSH Cumulative Recovery (gallons)	Type of Recovery
MW-12	11/08/97	Not Surveyed	103.90	Not Guaged	Not Gauged	Not Guaged	Not Guaged			No PSH
	01/22/98				32.62	71.28	0.00			
	02/18/98				32.48	71.42	0.00			
	04/02/98				32.25	71.65	0.00			
	05/05/98				32.42	71.48	0.00			
	07/07/98				33.33	70.57	0.00			
	10/02/98				33.34	70.56	0.00			
	01/14/99				32.68	71.22	0.00			
	04/15/99				32.42	71.48	0.00			
	07/13/99				32.29	71.61	0.00			
	08/11/99				32.62	71.28	0.00			
	09/22/99				32.50	71.40	0.00			
	10/28/99				32.06	71.84	0.00			
	11/23/99				32.04	71.86	0.00			
	12/17/99				30.05	73.85	0.00			
	01/13/00				32.03	71.87	0.00			
	02/15/00				32.05	71.85	0.00			
	03/31/00				32.06	71.84	0.00			
	04/27/00				32.02	71.88	0.00			
	05/31/00				32.66	71.24	0.00			
	06/30/00				32.66	71.24	0.00			
	07/13/00				32.16	71.74	0.00			
	08/30/00				32.48	71.42	0.00			
	09/21/00				32.85	71.05	0.00			
	10/03/00				32.95	70.95	0.00			

TABLE 1
LEA STATION
RELATIVE GROUNDWATER ELEVATIONS, PHASE SEPARATED HYDROCARBON THICKNESSES AND MANUAL PHASE-SEPARATED HYDROCARBON RECOVERY

Monitor Well	Date Gauged	Relative Ground Surface Elevation (feet)	Relative Top of Casing Elevation (feet)*	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)**	Phase Separated Hydrocarbon Thickness (feet)	PSH Recovery (gallons)	PSH Cumulative Recovery (gallons)	Type of Recovery
MW-13	11/08/97	Not Surveyed	103.89	Not Guaged	Not Gauged	Not Guaged	Not Guaged			No PSH
	01/22/98				30.25	73.64	0.00			
	02/18/98				30.11	73.78	0.00			
	04/02/98				29.99	73.90	0.00			
	05/05/98				29.99	73.90	0.00			
	07/07/98				30.99	72.90	0.00			
	10/02/98				31.27	72.62	0.00			
	01/14/99				30.60	73.29	0.00			
	04/15/99				30.35	73.54	0.00			
	07/13/99				30.21	73.68	0.00			
	08/11/99				30.58	73.31	0.00			
	09/22/99				30.37	73.52	0.00			
	10/28/99				30.10	73.79	0.00			
	11/23/99				30.06	73.83	0.00			
	12/17/99				28.58	75.31	0.00			
	01/13/00				30.05	73.84	0.00			
	02/15/00				30.03	73.86	0.00			
	03/31/00				30.06	73.83	0.00			
	04/27/00				30.02	73.87	0.00			
	05/31/00				30.66	73.23	0.00			
	06/30/00				30.76	73.13	0.00			
	07/13/00				30.33	73.56	0.00			
	08/30/00				30.80	73.09	0.00			
	09/21/00				31.14	72.75	0.00			
	10/03/00				31.23	72.66	0.00			

TABLE 1
LEA STATION
RELATIVE GROUNDWATER ELEVATIONS, PHASE SEPARATED HYDROCARBON THICKNESSES AND MANUAL PHASE-SEPARATED HYDROCARBON RECOVERY

Monitor Well	Date Gauged	Relative Ground Surface Elevation (feet)	Relative Top of Casing Elevation (feet)*	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)**	Phase Separated Hydrocarbon Thickness (feet)	PSH Recovery (gallons)	PSH Cumulative Recovery (gallons)	Type of Recovery
RW-1	11/08/97	Not Surveyed	106.40	Not Guaged	Not Gauged	Not Guaged	Not Guaged			SVE System
	01/22/98				27.37	79.03	0.00			SVE System
	02/18/98				30.87	75.53	0.00			SVE System
	04/02/98				30.78	75.62	0.00			
	05/05/98				30.68	75.72	0.00			
	07/07/98			31.54	31.82	74.83	0.28			
	10/02/98			31.85	32.01	74.53	0.16			
	01/14/99			31.18	31.20	75.22	0.02			
	04/15/99			31.05	31.07	75.35	0.02			SVE System Activated
	07/13/99				30.16	76.24	0.00			SVE System
	08/11/99				31.09	75.31	0.00			SVE System
	09/22/99				29.73	76.67	0.00			SVE System
	10/28/99				30.69	75.71	0.00			SVE System
	11/23/99				30.72	75.68	0.00			SVE System
	12/17/99				28.58	77.82	0.00			SVE System
	01/13/00				30.80	75.60	0.00			SVE System
	02/15/00				28.03	78.37	0.00			SVE System
	03/31/00				30.82	75.58	0.00			SVE System
	04/27/00				30.74	75.66	0.00			SVE System
	05/31/00				31.22	75.18	0.00			SVE System down/Repaired on June 2
	06/30/00				31.30	75.10	0.00			SVE System down will repair
	07/13/00				30.79	75.61	0.00			SVE System repaired July 13
	08/30/00				30.69	75.71	0.00			SVE System
	09/21/00				31.72	74.68	0.00			SVE System
	10/03/00				31.85	74.55	0.00			SVE System

TABLE 1
LEA STATION
RELATIVE GROUNDWATER ELEVATIONS, PHASE SEPARATED HYDROCARBON THICKNESSES AND MANUAL PHASE-SEPARATED HYDROCARBON RECOVERY

Monitor Well	Date Gauged	Relative Ground Surface Elevation (feet)	Relative Top of Casing Elevation (feet)*	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)**	Phase Separated Hydrocarbon Thickness (feet)	PSH Recovery (gallons)	PSH Cumulative Recovery (gallons)	Type of Recovery
RW-2	11/08/97	Not Surveyed	106.65	Not Guaged	Not Gauged	Not Guaged	Not Guaged			SVE System
	01/22/98			29.60	29.80	77.03	0.20			SVE System
	02/18/98				30.12	76.53	0.00			SVE System
	04/02/98			30.02	30.11	76.62	0.09			
	05/05/98			30.08	30.11	76.57	0.03			
	07/07/98			30.85	31.10	75.78	0.25			
	10/02/98			31.49	31.52	75.16	0.03			
	01/14/99			30.62	30.75	76.02	0.13			
	04/15/99			30.34	30.55	76.29	0.21			SVE System Activated
	07/13/99				29.70	76.95	0.00			SVE System
	08/11/99			28.54	28.55	78.11	0.01			SVE System
	09/22/99			30.47	30.48	76.18	0.01			SVE System
	10/28/99			30.10	30.11	76.55	0.01			SVE System
	11/23/99				28.82	77.83	0.00			SVE System
	12/17/99				30.10	76.55	0.00			SVE System
	01/13/00				23.72	82.93	0.00			SVE System
	02/15/00				30.09	76.56	0.00			SVE System
	03/31/00				30.12	76.53	0.00			SVE System
	04/27/00			30.03	30.04	76.62	0.01			SVE System
	05/31/00			30.50	30.51	76.15	0.01			SVE System down/Repaired on June 2
	06/30/00			30.41	30.50	76.23	0.09			SVE Sytsem down placed boom in well
	07/13/00				30.42	76.23	0.00			SVE System repaired July 13
	08/30/00				31.31	75.34	0.00			SVE Systerm
	09/21/00			31.09	31.11	75.56	0.02			SVE System
	10/03/00			31.23	31.25	75.42	0.02			SVE System

* Measured from a relative datum (benckmark = 100 feet).

** Correction Equation for Phase-Separated Hydrocarbons: Corrected Groundwater Elevation = Top of Casing Elevation - [Depth to Water Below Top of Casing - (SG)(PSH Thickness)]. Specific Gravity (SG) = 0.9 for crude oil.

Note 1: Total recovery: #REF! gallons by manual means.

Note 2: The SVE System blower failed on 3/12/98. The system was reactivated on 4/15/99.

TABLE 2
LEA STATION
WATER SAMPLE ANALYTICAL RESULTS

Monitor Well	Date Sampled	BTEX					PAH				
		Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)	1-Methyl-napthlene (mg/L)	2-Methyl-napthlene (mg/L)	Napthlene (mg/L)	Total Napthlenes (mg/L)	Benzo(a) pyrene (mg/L)
MW-3	2/16/93	2.500	0.010	0.370	0.640	3.520					
	10/17/95	2.000	ND	0.120	0.120	2.240					
	10/2/96	1.900	ND	0.320	ND	2.220					
	4/10/97	1.000	ND	0.290	ND	1.290					
	10/9/97	1.500	ND	0.280	0.028	1.808					
	5/5/98	1.200	ND	0.130	0.012	1.342					
	4/15/99	PSH	PSH	PSH	PSH	PSH					
	4/28/00	2.800	ND	0.190	ND	2.990					
MW-4	2/16/93	ND	ND	ND	ND	ND					
	10/17/95	ND	ND	ND	ND	ND					
	2/7/96	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/3/96	ND	ND	ND	ND	ND					
	7/18/96	ND	ND	ND	ND	ND					
	10/2/96	ND	ND	ND	ND	ND					
	1/22/97	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/10/97	ND	ND	ND	ND	ND					
	7/16/97	ND	ND	ND	ND	ND					
	10/9/97	ND	ND	ND	ND	ND					
	1/22/98	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/5/98	ND	ND	ND	ND	ND					
	7/8/98	ND	ND	ND	ND	ND					
	10/2/98	ND	ND	ND	ND	ND					
	1/14/99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/15/99	ND	ND	ND	ND	ND					
	7/13/99	ND	ND	ND	ND	ND					
	10/13/99	ND	ND	ND	ND	ND					
	1/13/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/29/00	ND	ND	ND	ND	ND					
	7/12/00	ND	ND	ND	ND	ND					
	10/3/00	ND	ND	ND	ND	ND					

TABLE 2
LEA STATION
WATER SAMPLE ANALYTICAL RESULTS

Monitor Well	Date Sampled	BTEX					PAH				
		Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)	1-Methyl-napthlene (mg/L)	2-Methyl-napthlene (mg/L)	Napthlene (mg/L)	Total Napthlenes (mg/L)	Benzo(a) pyrene (mg/L)
MW-5	2/16/93	ND	ND	0.002	0.004	0.006					
	10/17/95	PSH	PSH	PSH	PSH	PSH					
	2/7/96	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH
	4/3/96	PSH	PSH	PSH	PSH	PSH					
	7/18/96	PSH	PSH	PSH	PSH	PSH					
	10/2/96	0.002	ND	0.010	0.006	0.018					
	1/22/97	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH
	4/10/97	0.001	ND	0.012	0.005	0.018					
	7/16/97	0.001	ND	0.010	0.011	0.022					
	10/9/97	0.001	ND	0.006	0.001	0.008					
	1/22/98	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH
	5/5/98	0.002	ND	0.010	0.008	0.020					
	7/8/98	ND	ND	0.003	0.002	0.005					
	10/2/98	ND	ND	0.002	0.003	0.005					
	1/14/99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/15/99	ND	ND	0.007	0.004	0.011					
	7/13/99	ND	ND	0.010	0.015	0.025					
	10/13/99	ND	ND	0.005	0.002	0.007					
	1/13/00	ND	ND	0.002	ND	0.002	0.002	0.001	ND	0.003	ND
	4/28/00	ND	ND	0.003	ND	0.003					
	7/12/00	ND	ND	ND	ND	ND					
	10/6/00	ND	ND	ND	ND	ND					

TABLE 2
LEA STATION
WATER SAMPLE ANALYTICAL RESULTS

Monitor Well	Date Sampled	BTEX					PAH				
		Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)	1-Methyl-napthlene (mg/L)	2-Methyl-napthlene (mg/L)	Napthlene (mg/L)	Total Napthlenes (mg/L)	Benzo(a) pyrene (mg/L)
MW-6	2/16/93	0.002	0.001	ND	0.091	0.094					
	10/17/95	ND	0.002	0.021	0.021	0.044					
	2/7/96	ND	ND	0.002	0.009	0.011	ND	ND	ND	ND	ND
	4/3/96	ND	ND	0.004	0.004	0.008					
	7/18/96	ND	0.003	ND	ND	0.003					
	10/2/96	ND	ND	ND	ND	ND					
	1/22/97	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/10/97	ND	ND	ND	ND	ND					
	7/16/97	0.001	0.001	0.001	ND	0.003					
	10/9/97	ND	0.002	0.005	0.006	0.013					
	1/22/98	0.007	ND	ND	ND	0.007	0.004	0.002	0.006	0.012	ND
	5/5/98	0.001	ND	0.001	0.010	0.012					
	7/8/98	ND	ND	ND	ND	ND					
	10/2/98	ND	ND	ND	ND	ND					
	1/14/99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/15/99	ND	ND	ND	ND	ND					
	7/13/99	ND	ND	0.008	0.005	0.013					
	10/13/99	ND	ND	0.004	0.006	0.010					
	1/13/00	ND	ND	0.002	ND	0.002	0.002	ND	ND	0.002	ND
	4/28/00	ND	ND	0.002	ND	0.002					
	7/12/00	0.001	0.001	0.006	0.003	0.011					
	10/6/00	ND	ND	ND	ND	ND					

TABLE 2
LEA STATION
WATER SAMPLE ANALYTICAL RESULTS

Monitor Well	Date Sampled	BTEX					PAH				
		Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)	1-Methyl-napthlene (mg/L)	2-Methyl-napthlene (mg/L)	Napthlene (mg/L)	Total Napthlenes (mg/L)	Benzo(a) pyrene (mg/L)
MW-7	2/16/93	ND	ND	ND	ND	ND					
	10/17/95	ND	ND	ND	ND	ND					
	2/7/96	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/3/96	ND	ND	ND	ND	ND					
	7/18/96	ND	ND	ND	ND	ND					
	10/2/96	ND	ND	ND	ND	ND					
	1/22/97	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/10/97	ND	ND	ND	ND	ND					
	7/16/97	ND	ND	ND	ND	ND					
	10/9/97	ND	ND	ND	ND	ND					
	1/22/98	ND	ND	ND	ND	ND	ND	0.001	ND	0.001	ND
	5/5/98	ND	ND	ND	ND	ND					
	7/8/98	ND	ND	ND	ND	ND					
	10/2/98	ND	ND	ND	ND	ND					
	1/14/99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/15/99	ND	ND	ND	ND	ND					
	7/13/99	ND	ND	ND	ND	ND					
	10/13/99	ND	ND	ND	ND	ND					
	1/13/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/29/00	ND	ND	ND	ND	ND					
	7/12/00	ND	ND	ND	0.006	0.006					
	10/6/00	ND	ND	ND	0.004	0.004					
MW-8	9/30/93	PSH	PSH	PSH	PSH	PSH					
	10/17/95	PSH	PSH	PSH	PSH	PSH					
	2/7/96	PSH	PSH	PSH	PSH	PSH					
	4/3/96	PSH	PSH	PSH	PSH	PSH					
	7/18/96	PSH	PSH	PSH	PSH	PSH					
	10/2/96	0.003	0.007	0.082	0.052	0.144					
	1/22/97	PSH	PSH	PSH	PSH	PSH					
	4/10/97	ND	0.001	0.054	0.016	0.071					
	5/5/98	ND	ND	0.002	0.004	0.006					
	4/15/99	0.002	ND	ND	0.001	0.003					
	4/28/00	ND	ND	ND	ND	ND					

TABLE 2
LEA STATION
WATER SAMPLE ANALYTICAL RESULTS

Monitor Well	Date Sampled	BTEX					PAH				
		Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)	1-Methyl-napthlene (mg/L)	2-Methyl-napthlene (mg/L)	Napthlene (mg/L)	Total Napthlenes (mg/L)	Benzo(a) pyrene (mg/L)
MW-9	9/30/93	ND	ND	ND	ND	ND					
	10/17/95	ND	ND	ND	ND	ND					
	2/7/96	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/3/96	ND	ND	ND	ND	ND					
	7/18/96	ND	ND	ND	0.003	0.003					
	10/2/96	ND	ND	ND	ND	ND					
	1/22/97	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/10/97	ND	ND	ND	ND	ND					
	7/16/97	ND	ND	ND	ND	ND					
	10/9/97	ND	ND	ND	ND	ND					
	1/22/98	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/5/98	ND	ND	ND	ND	ND					
	7/8/98	ND	ND	ND	ND	ND					
	10/2/98	ND	ND	ND	ND	ND					
	1/14/99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/15/99	ND	ND	ND	ND	ND					
	7/13/99	ND	ND	ND	ND	ND					
	10/13/99	ND	ND	ND	ND	ND					
	1/13/00	0.002	0.002	ND	ND	0.004	ND	ND	ND	ND	ND
	4/28/00	0.008	0.003	ND	ND	0.011					
	7/12/00	ND	ND	ND	ND	ND					

TABLE 2
LEA STATION
WATER SAMPLE ANALYTICAL RESULTS

Monitor Well	Date Sampled	BTEX					PAH				
		Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)	1-Methyl-napthlene (mg/L)	2-Methyl-napthlene (mg/L)	Napthlene (mg/L)	Total Napthlenes (mg/L)	Benzo(a) pyrene (mg/L)
MW-10	9/30/93	ND	ND	0.009	0.001	0.010					
	10/17/95	ND	0.003	ND	ND	0.003					
	2/7/96	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/3/96	0.001	ND	ND	0.002	0.003					
	7/18/96	ND	0.002	ND	ND	0.002					
	10/2/96	ND	ND	ND	0.007	0.007					
	1/22/97	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/10/97	ND	0.001	ND	ND	0.001					
	7/16/97	0.002	ND	ND	0.005	0.007					
	10/9/97	ND	ND	ND	ND	ND					
	1/22/98	ND	ND	ND	ND	ND	ND	0.001	ND	0.001	ND
	5/5/98	0.002	ND	ND	0.003	0.005					
	7/8/98	ND	ND	ND	ND	ND					
	10/2/98	ND	ND	ND	0.003	0.003					
	1/14/99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/15/99	0.001	ND	ND	0.009	0.010					
	7/13/99	ND	ND	ND	ND	ND					
	10/13/99	ND	ND	ND	ND	ND					
	1/13/00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/28/00	ND	ND	ND	ND	ND					
	7/12/00	ND	0.005	ND	0.020	0.025					
	10/6/00	ND	ND	ND	ND	ND					

TABLE 2
LEA STATION
WATER SAMPLE ANALYTICAL RESULTS

Monitor Well	Date Sampled	BTEX					PAH				
		Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)	1-Methyl-napthlene (mg/L)	2-Methyl-napthlene (mg/L)	Napthlene (mg/L)	Total Napthlenes (mg/L)	Benzo(a) pyrene (mg/L)
MW-11	9/30/93	PSH	PSH	PSH	PSH	PSH					
	10/17/95	PSH	PSH	PSH	PSH	PSH					
	2/7/96	PSH	PSH	PSH	PSH	PSH					
	4/3/96	PSH	PSH	PSH	PSH	PSH					
	7/18/96	PSH	PSH	PSH	PSH	PSH					
	10/2/96	PSH	PSH	PSH	PSH	PSH					
	1/22/97	PSH	PSH	PSH	PSH	PSH					
	4/10/97	PSH	PSH	PSH	PSH	PSH					
	5/5/98	PSH	PSH	PSH	PSH	PSH					
	4/15/99	PSH	PSH	PSH	PSH	PSH					
	4/28/00	PSH	PSH	PSH	PSH	PSH					
MW-12	2/10/95	0.590	0.009	0.043	0.067	0.709					
	7/19/95	0.580	0.130	0.076	0.032	0.818					
	10/17/95	1.400	0.440	0.300	0.163	2.303					
	10/2/96	0.680	0.180	0.280	0.100	1.240					
	4/10/97	0.840	0.250	0.230	0.075	1.395					
	10/9/97	0.780	0.230	0.100	0.047	1.157					
	5/5/98	0.930	0.370	0.390	0.130	1.820					
	4/15/99	0.770	0.070	0.280	0.058	1.178					
	4/28/00	0.240	0.019	0.120	0.011	0.390					
MW-13	2/10/95	ND	ND	ND	ND	ND					
	7/19/95	ND	ND	ND	ND	ND					
	10/17/95	ND	ND	ND	ND	ND					
	10/2/96	ND	ND	ND	ND	ND					
	4/10/97	ND	ND	ND	ND	ND					
	10/9/97	ND	ND	ND	ND	ND					
	5/5/98	ND	ND	ND	ND	ND					
	4/15/99	ND	ND	ND	ND	ND					
	4/28/00	ND	ND	ND	ND	ND					

ND = None Detected NS = Not Sampled PSH = PSH present in the well, not sampled

APPENDIX C

LABORATORY ANALYSIS

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

May 16, 2000

Mr. Jeff Kindley
ENERCON SERVICES, INC.
306 West Mall Suite #1312
Midland, TX 79710-1363

The following report contains analytical results for the sample(s) received at Southern Petroleum Laboratories (SPL) on April 29, 2000. The sample(s) was assigned to Certificate of Analysis No. (s) 0004510 and analyzed for all parameters as listed on the chain of custody.

Any data flags or quality control exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

If you have any questions or comments pertaining to this data report, please do not hesitate to contact me. Please reference the above Certificate of Analysis No. during any inquiries.

Again, SPL is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Southern Petroleum Laboratories

Gina Tatosian
Senior Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Southern Petroleum Laboratories, Inc.

Certificate of Analysis Number: 00-04-510

Approved for Release by:

Gina Tatosian Senior Project Manager Date 5-17-00

Joel Grice
Laboratory Director

Ted Yen
Quality Assurance Officer

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0004510-10

Enercon Services, Inc.
306 West Wall Suite #1312
Midland, TX 79710-1363
ATTN: Jeff Kindley

DATE: 05/16/00

PROJECT: Lea Station
SITE: Lea County,NM
SAMPLED BY: Enercon Service
SAMPLE ID: MW-3

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 04/28/00 12:45:00
DATE RECEIVED: 04/29/00

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	2800	10 P	ug/L
TOLUENE	ND	5.0 P	ug/L
ETHYLBENZENE	190	5.0 P	ug/L
TOTAL XYLENE	ND	5.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	2990		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	143MI
4-Bromofluorobenzene	107

Method 8020A ***
Analyzed by: LJ
Date: 05/11/00

(P) - Practical Quantitation Limit ND - Not detected.
MI - Matrix interference.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0004510-01

Enercon Services, Inc.
306 West Wall Suite #1312
Midland, TX 79710-1363
ATTN: Jeff Kindley

DATE: 05/16/00

PROJECT: Lea Station
SITE: Lea County,NM
SAMPLED BY: Enercon Service
SAMPLE ID: MW-4

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 04/28/00 13:35:00
DATE RECEIVED: 04/29/00

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	100
4-Bromofluorobenzene	97

Method 8020A ***
Analyzed by: LJ
Date: 05/05/00

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0004510-08

Enercon Services, Inc.
306 West Wall Suite #1312
Midland, TX 79710-1363
ATTN: Jeff Kindley

DATE: 05/16/00

PROJECT: Lea Station
SITE: Lea County,NM
SAMPLED BY: Enercon Service
SAMPLE ID: MW-5

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 04/28/00 11:56:00
DATE RECEIVED: 04/29/00

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	2.9	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	2.9		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	103
4-Bromofluorobenzene	110

Method 8020A ***
Analyzed by: LJ
Date: 05/10/00

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0004510-06

Enercon Services, Inc.
306 West Wall Suite #1312
Midland, TX 79710-1363
ATTN: Jeff Kindley

DATE: 05/16/00

PROJECT: Lea Station
SITE: Lea County,NM
SAMPLED BY: Enercon Service
SAMPLE ID: MW-6

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 04/28/00 11:47:00
DATE RECEIVED: 04/29/00

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	2.2	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	2.2		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	103
4-Bromofluorobenzene	117

Method 8020A ***
Analyzed by: LJ
Date: 05/10/00

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0004510-05

Enercon Services, Inc.
306 West Wall Suite #1312
Midland, TX 79710-1363
ATTN: Jeff Kindley

DATE: 05/16/00

PROJECT: Lea Station
SITE: Lea County,NM
SAMPLED BY: Enercon Service
SAMPLE ID: MW-7

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 04/28/00 11:37:00
DATE RECEIVED: 04/29/00

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	97
4-Bromofluorobenzene	90

Method 8020A ***
Analyzed by: LJ
Date: 05/09/00

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0004510-09

Enercon Services, Inc.
306 West Wall Suite #1312
Midland, TX 79710-1363
ATTN: Jeff Kindley

DATE: 05/16/00

PROJECT: Lea Station
SITE: Lea County,NM
SAMPLED BY: Enercon Service
SAMPLE ID: MW-8

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 04/28/00 13:10:00
DATE RECEIVED: 04/29/00

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	103
4-Bromofluorobenzene	113

Method 8020A ***
Analyzed by: LJ
Date: 05/11/00

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0004510-02

Enercon Services, Inc.
306 West Wall Suite #1312
Midland, TX 79710-1363
ATTN: Jeff Kindley

DATE: 05/16/00

PROJECT: Lea Station
SITE: Lea County,NM
SAMPLED BY: Enercon Service
SAMPLE ID: MW-9

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 04/28/00 13:30:00
DATE RECEIVED: 04/29/00

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	8.0	1.0 P	ug/L
TOLUENE	3.0	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	11		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	90
4-Bromofluorobenzene	83

Method 8020A ***
Analyzed by: LJ
Date: 05/05/00

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0004510-03

Enercon Services, Inc.
306 West Wall Suite #1312
Midland, TX 79710-1363
ATTN: Jeff Kindley

DATE: 05/16/00

PROJECT: Lea Station
SITE: Lea County,NM
SAMPLED BY: Enercon Service
SAMPLE ID: MW-10

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 04/28/00 13:30:00
DATE RECEIVED: 04/29/00

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	100
4-Bromofluorobenzene	100

Method 8020A ***
Analyzed by: LJ
Date: 05/09/00

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0004510-07

Enercon Services, Inc.
306 West Wall Suite #1312
Midland, TX 79710-1363
ATTN: Jeff Kindley

DATE: 05/16/00

PROJECT: Lea Station
SITE: Lea County,NM
SAMPLED BY: Enercon Service
SAMPLE ID: MW-12

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 04/28/00 12:30:00
DATE RECEIVED: 04/29/00

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	240	1.0 P	ug/L
TOLUENE	19	1.0 P	ug/L
ETHYLBENZENE	120	1.0 P	ug/L
TOTAL XYLENE	11	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	390		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	147MI
4-Bromofluorobenzene	103

Method 8020A ***
Analyzed by: LJ
Date: 05/11/00

(P) - Practical Quantitation Limit MI - Matrix interference.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0004510-04

Enercon Services, Inc.
306 West Wall Suite #1312
Midland, TX 79710-1363
ATTN: Jeff Kindley

DATE: 05/16/00

PROJECT: Lea Station
SITE: Lea County,NM
SAMPLED BY: Enercon Service
SAMPLE ID: MW-13

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 04/28/00 13:15:00
DATE RECEIVED: 04/29/00

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	100
4-Bromofluorobenzene	93

Method 8020A ***
Analyzed by: LJ
Date: 05/05/00

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0004510-11

Enercon Services, Inc.
306 West Wall Suite #1312
Midland, TX 79710-1363
ATTN: Jeff Kindley

DATE: 05/16/00

PROJECT: Lea Station
SITE: Lea County,NM
SAMPLED BY: Provided By SPL
SAMPLE ID: Trip Blank

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 04/28/00
DATE RECEIVED: 04/29/00

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	103
4-Bromofluorobenzene	110

Method 8020A ***
Analyzed by: LJ
Date: 05/10/00

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

QUALITY CONTROL

DOCUMENTATION

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020

Matrix: Aqueous
Units: ug/L

Batch Id: HP_N000504212810

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Benzene	ND	50	51	102	61 - 119
Toluene	ND	50	50	100	65 - 125
EthylBenzene	ND	50	46	92.0	70 - 118
O Xylene	ND	50	48	96.0	72 - 117
M & P Xylene	ND	100	98	98.0	72 - 116

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
BENZENE	ND	20	19	95.0	20	100	5.13	21	32 - 164
TOLUENE	ND	20	18	90.0	18	90.0	0	20	38 - 159
ETHYLBENZENE	ND	20	17	85.0	17	85.0	0	19	52 - 142
O XYLENE	ND	20	18	90.0	18	90.0	0	18	53 - 143
M & P XYLENE	ND	40	35	87.5	36	90.0	2.82	17	53 - 144

Analyst: LJ
Sequence Date: 05/04/00
SPL ID of sample spiked: 0004510-01A
Sample File ID: N_E1103.TX0
Method Blank File ID:
Blank Spike File ID: N_E1099.TX0
Matrix Spike File ID: N_E1100.TX0
Matrix Spike Duplicate File ID: N_E1101.TX0

* = Values outside QC Range due to Matrix Interference (except RPD)
« = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical Data (1st Q '97)
(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID): 0004510-01A 0004510-02A 0004510-04A

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL BATCH QUALITY CONTROL REPORT **

METHOD 8020

Matrix: Aqueous

Batch Id: HP_N000508212820

Units: ug/L

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Benzene	ND	50	49	98.0	61 - 119
Toluene	ND	50	48	96.0	65 - 125
EthylBenzene	ND	50	44	88.0	70 - 118
O Xylene	ND	50	45	90.0	72 - 117
M & P Xylene	ND	100	95	95.0	72 - 116

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
BENZENE	ND	20	20	100	21	105	4.88	21	32 - 164
TOLUENE	ND	20	19	95.0	20	100	5.13	20	38 - 159
ETHYLBENZENE	ND	20	18	90.0	19	95.0	5.41	19	52 - 142
O XYLENE	ND	20	18	90.0	18	90.0	0	18	53 - 143
M & P XYLENE	ND	40	38	95.0	40	100	5.13	17	53 - 144

Analyst: DL

Sequence Date: 05/08/00

SPL ID of sample spiked: 0005077-08A

Sample File ID: N_E2013.TX0

Method Blank File ID:

Blank Spike File ID: N_E2003.TX0

Matrix Spike File ID: N_E2021.TX0

Matrix Spike Duplicate File ID: N_E2022.TX0

* = Values outside QC Range due to Matrix Interference (except RPD)

« = Data outside Method Specification limits.

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery = [(<1> - <2>) / <3>] x 100

LCS % Recovery = (<1> / <3>) x 100

Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100

(**) = Source: SPL-Houston Historical Data (1st Q '97)

(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID): 0004510-03A 0004510-05A

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL BATCH QUALITY CONTROL REPORT **

METHOD 8020

Matrix: Aqueous

Batch Id: HP_N000510152310

Units: ug/L

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Benzene	ND	50	50	100	61 - 119
Toluene	ND	50	49	98.0	65 - 125
EthylBenzene	ND	50	49	98.0	70 - 118
O Xylene	ND	50	48	96.0	72 - 117
M & P Xylene	ND	100	98	98.0	72 - 116

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
BENZENE	ND	20	23	115	21	105	9.09	21	32 - 164
TOLUENE	ND	20	25	125	24	120	4.08	20	38 - 159
ETHYLBENZENE	2.2	20	24	109	23	104	4.69	19	52 - 142
O XYLENE	ND	20	22	110	23	115	4.44	18	53 - 143
M & P XYLENE	ND	40	44	110	43	108	1.83	17	53 - 144

Analyst: LJ

Sequence Date: 05/10/00

SPL ID of sample spiked: 0004510-06A

Sample File ID: N_E2057.TX0

Method Blank File ID:

Blank Spike File ID: N_E2051.TX0

Matrix Spike File ID: N_E2052.TX0

Matrix Spike Duplicate File ID: N_E2053.TX0

* = Values outside QC Range due to Matrix Interference (except RPD)

« = Data outside Method Specification limits.

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery = [(<1> - <2>) / <3>] x 100

LCS % Recovery = (<1> / <3>) x 100

Relative Percent Difference = |(<4> - <5>| / [(<4> + <5>) x 0.5] x 100

(**) = Source: SPL-Houston Historical Data (1st Q '97)

(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID): 0004510-07A 0004510-09A 0004510-10A 0004510-11A
0004510-06A 0004510-08A 0004510-10A

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 0004510

098713.

page 1 of 2

Client Name: ENERCON SERVICES

Address/Phone: 2775 VILLA CREEK #120

Client Contact: RANDALL LANTZ 972/484-3854

Project Name: LEA STATION

Project Number: EV-379

Project Location: LEA COUNTY, NM

Invoice To:

SAMPLE ID	DATE	TIME	comp	grab	matrix (W=water S=soil SL=sludge O=other:)	bottle (P=plastic A=amber glass G=glass V=vial)	size (1=1 liter 4=4oz 40=vial 8=8oz 16=16oz)	pres. (1=HCl 2=HNO3 3=H2SO4 O=other:)	Number of Containers	Requested Analysis: BTEX 8020
MW-4	4/28/00	135		X	W	V	40	1	3	✓
MW-9		130								✓
MW-10		130								✓
MW-13		115								✓
MW-7		1137								✓
MW-6		1147								✓
MW-12		1230								✓
MW-5		1156								✓
MW-8		110								✓
MW-3		1245								✓

Client/Consultant Remarks: REPORT BTEX ONLY

Laboratory remarks:

Intact? ☑ Y ☐ N

Temp: 5°C

Requested TAT

24hr ☐ 72hr ☐

48hr ☐ Standard ☒

Other ☐ _____

Special Reporting Requirements: Fax Results ☐ Raw Data ☐ Standard QC ☐ Level 3 QC ☐ Level 4 QC ☐

Special Detection Limits (specify):

PM review (initial): EB 5/2/00 CMT 5/3/00

1. Relinquished by Sampler:	date 4/28/00	time 255	2. Received by:
3. Relinquished by:	date	time	4. Received by:
5. Relinquished by:	date	time	6. Received by Laboratory: 4/29/00 1000

☐ 8880 Interchange Drive, Houston, TX 77054 (713) 660-0901

☐ 500 Ambassador Caffery Parkway, Scott, LA 70583 (318) 237-4775

☐ 459-Hughes Drive, Traverse City, MI 49684 (616) 947-5777

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 0004510

097418

page 2 of 2

Client Name: ENERCON SERVICES

Address/Phone: 2775 VILLA CREEK, DALLAS, TX

Client Contact: RANDALL LANTZ 972/484-3854

Project Name: LEA STATION

Project Number: EV-379

Project Location:

Invoice To:

SAMPLE ID	DATE	TIME	comp	grab	matrix (W=water S=soil SL=sludge O=other:)	bottle (P=plastic A=amber glass G=glass V=vial)	size (1=1 liter 4=4oz 40=vial 8=8oz 16=16oz)	pres. (1=HCl 2=HNO3 3=H2SO4 O=other:)	Number of Containers	Requested Analysis: BTEX 8020
TRIP BLANK					W	V	40	1	2	

Client/Consultant Remarks: REPORT BTEX ONLY

Laboratory remarks:

Intact? ☐ Y ☐ N

Temp: 5c

Requested TAT

24hr ☐ 72hr ☐

48hr ☐ Standard ☒

Other ☐ _____

Special Reporting Requirements: Fax Results ☐ Raw Data ☐ Standard QC ☐ Level 3 QC ☐ Level 4 QC ☐

Special Detection Limits (specify):

PM review (initial): 5/2/00

	date	time	
1. Relinquished by Sampler:	4/28/00	2:55	2. Received by: 5/2/00
3. Relinquished by:	date	time	4. Received by:
5. Relinquished by:	date	time	6. Received by Laboratory: 4/29/00 1000

☐ 8880 Interchange Drive, Houston, TX 77054 (713) 660-0901

☐ 500 Ambassador Caffery Parkway, Scott, LA 70583 (318) 237-4775

☐ 459-Hughes Drive, Traverse City, MI 49684 (616) 947-5777

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

May 3, 2000

Mr. Randall Lantz
ENERCON SERVICES, INC.
2775 Villa Creek, Ste. 120
Dallas, TX 75234

The following report contains analytical results for the sample(s) received at Southern Petroleum Laboratories (SPL) on April 15, 2000. The sample(s) was assigned to Certificate of Analysis No. (s) 0001315 and analyzed for all parameters as listed on the chain of custody.

Any data flags or quality control exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

If you have any questions or comments pertaining to this data report, please do not hesitate to contact me. Please reference the above Certificate of Analysis No. during any inquiries.

Again, SPL is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Southern Petroleum Laboratories

Gina Tatosian
Senior Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Southern Petroleum Laboratories, Inc.

Certificate of Analysis Number: 00-01-315

Approved for Release by:

Gina Tatosian, Senior Project Manager — 5-2-2000 Date

Joel Grice
Laboratory Director

Ted Yen
Quality Assurance Officer

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0001315-01

Enercon Services, Inc.
2775 Villa Creek, Ste. 120
Dallas, TX 75234
ATTN: Randall Lantz

DATE: 05/03/00

PROJECT: EV-379 Lea Station
SITE: Lea County, NM
SAMPLED BY: Enercon Services
SAMPLE ID: MW-4

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 01/13/00 12:10:00
DATE RECEIVED: 01/15/00

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	93
4-Bromofluorobenzene	100

Method 8020A ***
Analyzed by: DR
Date: 01/20/00

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0001315-01

Enercon Services, Inc.
2775 Villa Creek, Ste. 120
Dallas, TX 75234
ATTN: Randall Lantz

05/03/00

PROJECT: EV-379 Lea Station
SITE: Lea County, NM
SAMPLED BY: Enercon Services
SAMPLE ID: MW-4

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 01/13/00 12:10:00
DATE RECEIVED: 01/15/00

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Naphthalene	ND	0.1	ug/L
Benzo (a) pyrene	ND	0.1	ug/L
1-Methylnaphthalene	ND	0.1	ug/L
2-Methylnaphthalene	ND	0.1	ug/L

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1-Fluoronaphthalene	0.50 ug/L	48	30	140
Phenanthrene d-10	0.50 ug/L	52	35	140

ANALYZED BY: KA DATE/TIME: 01/27/00 03:36:09
EXTRACTED BY: KL DATE/TIME: 01/16/00 12:00:00
METHOD: 8310 Polynuclear Aromatic Hydrocarbons
NOTES: * - Practical Quantitation Limit ND - Not Detected
NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0001315-02

Enercon Services, Inc.
2775 Villa Creek, Ste. 120
Dallas, TX 75234
ATTN: Randall Lantz

DATE: 05/03/00

PROJECT: EV-379 Lea Station
SITE: Lea County, NM
SAMPLED BY: Enercon Services
SAMPLE ID: MW-5

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 01/13/00 13:55:00
DATE RECEIVED: 01/15/00

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	2.4	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	2.4		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	93
4-Bromofluorobenzene	113

Method 8020A ***
Analyzed by: DR
Date: 01/20/00

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0001315-02

Enercon Services, Inc.
2775 Villa Creek, Ste. 120
Dallas, TX 75234
ATTN: Randall Lantz

05/03/00

PROJECT: EV-379 Lea Station
SITE: Lea County, NM
SAMPLED BY: Enercon Services
SAMPLE ID: MW-5

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 01/13/00 13:55:00
DATE RECEIVED: 01/15/00

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Naphthalene	ND	0.5	ug/L
Benzo (a) pyrene	ND	0.5	ug/L
1-Methylnaphthalene	2	0.5	ug/L
2-Methylnaphthalene	0.6	0.5	ug/L

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1-Fluoronaphthalene	0.50 ug/L	78	30	140
Phenanthrene d-10	0.50 ug/L	46	35	140

ANALYZED BY: KA DATE/TIME: 01/28/00 07:01:29
EXTRACTED BY: KL DATE/TIME: 01/16/00 12:00:00
METHOD: 8310 Polynuclear Aromatic Hydrocarbons
NOTES: * - Practical Quantitation Limit ND - Not Detected
NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0001315-03

Enercon Services, Inc.
2775 Villa Creek, Ste. 120
Dallas, TX 75234
ATTN: Randall Lantz

DATE: 05/03/00

PROJECT: EV-379 Lea Station
SITE: Lea County, NM
SAMPLED BY: Enercon Services
SAMPLE ID: MW-6

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 01/13/00 13:35:00
DATE RECEIVED: 01/15/00

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	1.5	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	1.5		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	90
4-Bromofluorobenzene	117

Method 8020A ***
Analyzed by: DR
Date: 01/20/00

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0001315-03

Enercon Services, Inc.
2775 Villa Creek, Ste. 120
Dallas, TX 75234
ATTN: Randall Lantz

05/03/00

PROJECT: EV-379 Lea Station
SITE: Lea County, NM
SAMPLED BY: Enercon Services
SAMPLE ID: MW-6

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 01/13/00 13:35:00
DATE RECEIVED: 01/15/00

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Naphthalene	ND	0.1	ug/L
Benzo (a) pyrene	ND	0.1	ug/L
1-Methylnaphthalene	2	0.1	ug/L
2-Methylnaphthalene	ND	0.1	ug/L

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1-Fluoronaphthalene	0.50 ug/L	62	30	140
Phenanthrene d-10	0.50 ug/L	74	35	140

ANALYZED BY: KA DATE/TIME: 01/27/00 04:15:13
EXTRACTED BY: KL DATE/TIME: 01/16/00 12:00:00
METHOD: 8310 Polynuclear Aromatic Hydrocarbons
NOTES: * - Practical Quantitation Limit ND - Not Detected
NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0001315-04

Enercon Services, Inc.
2775 Villa Creek, Ste. 120
Dallas, TX 75234
ATTN: Randall Lantz

DATE: 05/03/00

PROJECT: EV-379 Lea Station
SITE: Lea County, NM
SAMPLED BY: Enercon Services
SAMPLE ID: MW-7

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 01/13/00 13:15:00
DATE RECEIVED: 01/15/00

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	90
4-Bromofluorobenzene	110

Method 8020A ***
Analyzed by: DR
Date: 01/20/00

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0001315-04

Enercon Services, Inc.
2775 Villa Creek, Ste. 120
Dallas, TX 75234
ATTN: Randall Lantz

05/03/00

PROJECT: EV-379 Lea Station
SITE: Lea County, NM
SAMPLED BY: Enercon Services
SAMPLE ID: MW-7

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 01/13/00 13:15:00
DATE RECEIVED: 01/15/00

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Naphthalene	ND	0.1	ug/L
Benzo (a) pyrene	ND	0.1	ug/L
1-Methylnaphthalene	ND	0.1	ug/L
2-Methylnaphthalene	ND	0.1	ug/L

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1-Fluoronaphthalene	0.50 ug/L	56	30	140
Phenanthrene d-10	0.50 ug/L	88	35	140

ANALYZED BY: KA DATE/TIME: 01/27/00 04:54:18
EXTRACTED BY: KL DATE/TIME: 01/16/00 12:00:00
METHOD: 8310 Polynuclear Aromatic Hydrocarbons
NOTES: * - Practical Quantitation Limit ND - Not Detected
NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0001315-05

Enercon Services, Inc.
2775 Villa Creek, Ste. 120
Dallas, TX 75234
ATTN: Randall Lantz

DATE: 05/03/00

PROJECT: EV-379 Lea Station
SITE: Lea County, NM
SAMPLED BY: Enercon Services
SAMPLE ID: MW-9

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 01/13/00 12:35:00
DATE RECEIVED: 01/15/00

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	2.2	1.0 P	ug/L
TOLUENE	1.5	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	3.7		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	90
4-Bromofluorobenzene	100

Method 8020A ***
Analyzed by: DR
Date: 01/20/00

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0001315-05

Enercon Services, Inc.
2775 Villa Creek, Ste. 120
Dallas, TX 75234
ATTN: Randall Lantz

05/03/00

PROJECT: EV-379 Lea Station
SITE: Lea County, NM
SAMPLED BY: Enercon Services
SAMPLE ID: MW-9

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 01/13/00 12:35:00
DATE RECEIVED: 01/15/00

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Naphthalene	ND	0.1	ug/L
Benzo (a) pyrene	ND	0.1	ug/L
1-Methylnaphthalene	ND	0.1	ug/L
2-Methylnaphthalene	ND	0.1	ug/L

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1-Fluoronaphthalene	0.50 ug/L	60	30	140
Phenanthrene d-10	0.50 ug/L	55	35	140

ANALYZED BY: KA DATE/TIME: 01/27/00 06:51:33
EXTRACTED BY: KL DATE/TIME: 01/16/00 12:00:00
METHOD: 8310 Polynuclear Aromatic Hydrocarbons
NOTES: * - Practical Quantitation Limit ND - Not Detected
NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0001315-06

Enercon Services, Inc.
2775 Villa Creek, Ste. 120
Dallas, TX 75234
ATTN: Randall Lantz

DATE: 05/03/00

PROJECT: EV-379 Lea Station
SITE: Lea County, NM
SAMPLED BY: Enercon Services
SAMPLE ID: MW-10

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 01/13/00 12:55:00
DATE RECEIVED: 01/15/00

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	90
4-Bromofluorobenzene	100

Method 8020A ***
Analyzed by: DR
Date: 01/20/00

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0001315-06

Enercon Services, Inc.
2775 Villa Creek, Ste. 120
Dallas, TX 75234
ATTN: Randall Lantz

05/03/00

PROJECT: EV-379 Lea Station
SITE: Lea County, NM
SAMPLED BY: Enercon Services
SAMPLE ID: MW-10

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 01/13/00 12:55:00
DATE RECEIVED: 01/15/00

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Naphthalene	ND	0.1	ug/L
Benzo (a) pyrene	ND	0.1	ug/L
1-Methylnaphthalene	ND	0.1	ug/L
2-Methylnaphthalene	ND	0.1	ug/L

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1-Fluoronaphthalene	0.50 ug/L	34	30	140
Phenanthrene d-10	0.50 ug/L	82	35	140

ANALYZED BY: KA DATE/TIME: 01/27/00 07:30:37
EXTRACTED BY: KL DATE/TIME: 01/16/00 12:00:00
METHOD: 8310 Polynuclear Aromatic Hydrocarbons
NOTES: * - Practical Quantitation Limit ND - Not Detected
NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-0001315-07

Enercon Services, Inc.
2775 Villa Creek, Ste. 120
Dallas, TX 75234
ATTN: Randall Lantz

DATE: 05/03/00

PROJECT: EV-379 Lea Station
SITE: Lea County, NM
SAMPLED BY: Provided by SPL
SAMPLE ID: Trip Blank 12/28/99

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 01/13/00
DATE RECEIVED: 01/15/00

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	93
4-Bromofluorobenzene	100

Method 8020A ***
Analyzed by: DR
Date: 01/20/00

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

QUALITY CONTROL

DOCUMENTATION

** SPL BATCH QUALITY CONTROL REPORT **

METHOD 8020

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Matrix: Aqueous

Batch Id: HP_S000120135300

Units: ug/L

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
MTBE	ND	50	53	106	72 - 128
Benzene	ND	50	51	102	61 - 119
Toluene	ND	50	51	102	65 - 125
EthylBenzene	ND	50	51	102	70 - 118
O Xylene	ND	50	51	102	72 - 117
M & P Xylene	ND	100	100	100	72 - 116

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
MTBE	ND	20	22	110	22	110	0	20	39 - 150
BENZENE	ND	20	21	105	20	100	4.88	21	32 - 164
TOLUENE	ND	20	21	105	20	100	4.88	20	38 - 159
ETHYLBENZENE	ND	20	20	100	20	100	0	19	52 - 142
O XYLENE	ND	20	20	100	20	100	0	18	53 - 143
M & P XYLENE	ND	40	41	102	39	97.5	4.51	17	53 - 144

Analyst: DR

Sequence Date: 01/20/00

SPL ID of sample spiked: 0001315-04A

Sample File ID: S_A3060.TX0

Method Blank File ID:

Blank Spike File ID: S_A3052.TX0

Matrix Spike File ID: S_A3054.TX0

Matrix Spike Duplicate File ID: S_A3055.TX0

* = Values outside QC Range due to Matrix Interference (except RPD)

« = Data outside Method Specification limits.

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery = [(<1> - <2>) / <3>] x 100

LCS % Recovery = (<1> / <3>) x 100

Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100

(**) = Source: SPL-Houston Historical Data (1st Q '97)

(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID): 0001315-01A 0001315-06A 0001315-05A 0001315-03A 0001315-02A 0001318-22A 0001315-04A 0001343-02A 0001315-07A

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL BATCH QUALITY CONTROL REPORT ** PAGE
Method 8310 ***

Matrix: Aqueous
Units: ug/L

Batch Id: 2000117003500

BLANK SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(**) (Advisory) RPD Max.	QC Limits(**) (Advisory) Recovery Range
NAPHTHALENE	ND	0.50	0.35	70.0	0.35	70.0	0	30	1 - 122
ACENAPHTHYLENE	ND	0.50	0.35	70.0	0.47	94.0	29.3	30	1 - 124
ACENAPHTHENE	ND	0.50	0.36	72.0	0.37	74.0	2.74	30	1 - 124
FLUORENE	ND	0.50	0.36	72.0	0.37	74.0	2.74	30	1 - 142
PHENANTHRENE	ND	0.50	0.37	74.0	0.38	76.0	2.67	30	1 - 155
ANTHRACENE	ND	0.50	0.38	76.0	0.40	80.0	5.13	30	1 - 126
FLUORANTHENE	ND	0.50	0.38	76.0	0.39	78.0	2.60	30	14 - 123
PYRENE	ND	0.50	0.40	80.0	0.40	80.0	0	30	1 - 140
CHRYSENE	ND	0.50	0.45	90.0	0.46	92.0	2.20	30	1 - 199
BENZ (A) ANTHRACENE	ND	0.50	0.40	80.0	0.41	82.0	2.47	30	12 - 135
BENZO (B) FLUORANTHENE	ND	0.50	0.41	82.0	0.41	82.0	0	30	6 - 150
BENZO (K) FLUORANTHENE	ND	0.50	0.41	82.0	0.41	82.0	0	30	1 - 159
BENZO (A) PYRENE	ND	0.50	0.46	92.0	0.45	90.0	2.20	30	1 - 128
DIBENZO (A,H) ANTHRACENE	ND	0.50	0.40	80.0	0.40	80.0	0	30	1 - 110
BENZO (G,H,I) PERYLENE	ND	0.50	0.41	82.0	0.41	82.0	0	30	1 - 116
INDENO (1,2,3-CD) PYRENE	ND	0.50	0.41	82.0	0.41	82.0	0	30	1 - 116

Analyst: KA
Sequence Date: 01/17/00
Method Blank File ID:
Sample File ID:
Blank Spike File ID: 000117A\004-0401
Matrix Spike File ID:
Matrix Spike Duplicate File ID:

* = Values Outside QC Range. « = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL Temporary Limits

SAMPLES IN BATCH(SPL ID):

0001314-06B	0001314-07B	0001314-09B	0001314-14B
0001315-01B	0001315-03B	0001315-04B	0001315-05B
0001315-06B	0001314-10B	0001314-11B	0001314-12B
0001314-08B	0001315-02B	0001314-02B	0001314-03B
0001314-13B	0001314-01B	0001314-04B	0001314-05B

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

TraceAnalysis, Inc.

4725 Ripley Dr., Ste A
El Paso, Texas 79922-1028
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 400071505

Company Name: Equiva Services Inc
Phone #: (972) 570-8726
Address: (Street, City, Zip) 306 West Wall Suite 1312, Midland, Tx 79701
Fax #: (972) 684 - 7587
Contact Person: Jeffrey Kindley
Invoice to: (If different from above) Equiva Services. SHE Science + Engineering
Attn Kyle Landreneau 28510-C Tomball Parkway, Suite 406, Tomball, Tx 77375
Project #: EV-379
Project Name: Lea Station
Project Location: Lea County, New Mexico
Sampler Signature: Jeffrey Kindley

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	NaHSO4	H2SO4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
149778	MW-6	2	40ml	✓						✓					07/12/00	1250
79	MW-9	2	40ml	✓						✓					07/12/00	1615
80	MW-7	2	40ml	✓						✓					07/12/00	1310
81	MW-5	2	40ml	✓						✓					07/12/00	1219
82	MW-4	2	40ml	✓						✓					07/12/00	1640
83	MW-10	2	40ml	✓						✓					07/12/00	1505

ANALYSIS REQUEST
(Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC-MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	BTEX 8020 Method 8021			Turn Around Time if different from standard	Hold
															✓ BTEX				
															✓				
															✓				
															✓				
															✓				
															✓				

Relinquished by: Jeffrey Kindley Date: July 14, 2000 Time: 4:30PM
Received by: Helen Shelton Date: 7/14/00 Time: 4:30 PM

Relinquished by: Helen Shelton 7/14/00 6:45PM
Received by: Date: Time:

Relinquished by: Date: Time:
Received at Laboratory by: Vicki Crowley Date: 7-15-00 Time: 10:00 AM

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

12 samples - HS

ORIGINAL COPY

LAB USE ONLY
Intact Y N
Headspace Y / N
Temp 4 °
Log-In Review MS

REMARKS:
Normal Turnaround. 7/28/00
159 384 898 0
Carrier # Greyhound

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
4725 Ripley Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Equilon Pipeline Co.
Jeff Kindley
28569 Tomball Parkway #106
Tomball, Tx. 77375

Report Date: July 28, 2000

Order ID Number: A00071505

Project: EV-379
TA Job Code: Lea Station
Casualty Code: Lea County, New Mexico
Project Location: EV-379
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
149778	MW-6	Water	7/12/00	12:50	7/15/00
149779	MW-9	Water	7/12/00	14:15	7/15/00
149780	MW-7	Water	7/12/00	13:10	7/15/00
149781	MW-5	Water	7/12/00	12:15	7/15/00
149782	MW-4	Water	7/12/00	16:40	7/15/00
149783	MW-10	Water	7/12/00	15:05	7/15/00

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 9 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical and Quality Control Report

Sample: 149778 - MW-6

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC03869	Date Analyzed:	7/24/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB03343	Date Prepared:	7/24/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.001	mg/L	1	0.001
Toluene		0.001	mg/L	1	0.001
Ethylbenzene		0.006	mg/L	1	0.001
M,P,O-Xylene		0.003	mg/L	1	0.001
Total BTEX		0.012	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.089	mg/L	1	0.10	89	72 - 128
4-BFB		0.097	mg/L	1	0.10	97	72 - 128

Sample: 149779 - MW-9

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC03869	Date Analyzed:	7/24/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB03343	Date Prepared:	7/24/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.12	mg/L	1	0.10	120	72 - 128
4-BFB		0.112	mg/L	1	0.10	112	72 - 128

Sample: 149780 - MW-7

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC03937	Date Analyzed:	7/26/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB03411	Date Prepared:	7/26/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		0.006	mg/L	5	0.001
Total BTEX		0.006	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.482	mg/L	5	0.10	96	72 - 128
4-BFB		0.492	mg/L	5	0.10	98	72 - 128

Sample: 149781 - MW-5

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC03867	Date Analyzed:	7/24/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB03341	Date Prepared:	7/24/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.514	mg/L	1	0.10	102	72 - 128
4-BFB		0.505	mg/L	1	0.10	101	72 - 128

Sample: 149782 - MW-4

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC03867	Date Analyzed:	7/24/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB03341	Date Prepared:	7/24/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.11	mg/L	1	0.10	110	72 - 128
4-BFB		0.108	mg/L	1	0.10	108	72 - 128

Sample: 149783 - MW-10

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC03937	Date Analyzed:	7/26/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB03411	Date Prepared:	7/26/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		0.02	mg/L	5	0.001

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... *Continued* Sample: 149783 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Total BTEX		0.025	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.508	mg/L	5	0.10	101	72 - 128
4-BFB		0.497	mg/L	5	0.10	99	72 - 128

Quality Control Report
Method Blank

Sample: Method Blank QCBatch: QC03867

Param	Flag	Results	Units	Reporting Limit
M,P,O-Xylene		<0.001		0.001
Toluene		<0.001		0.001
Total BTEX		<0.001		0.001
Benzene		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
TFT		0.104	mg/l	0.10	104	72 - 128
4-BFB		0.104	mg/l	0.10	104	72 - 128

Sample: Method Blank QCBatch: QC03869

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
TFT		0.096	mg/L	0.10	96	72 - 128
4-BFB		0.082	mg/L	0.10	82	72 - 128

Sample: Method Blank QCBatch: QC03937

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
TFT		0.1	mg/L	0.10	100	72 - 128
4-BFB		0.102	mg/L	0.10	102	72 - 128

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Sample: LCS QC Batch: QC03867

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.111	mg/L	1	0.10	<0.001	111		80 - 120	20
Benzene		0.103	mg/L	1	0.10	<0.001	103		80 - 120	20
Toluene		0.105	mg/L	1	0.10	<0.001	105		80 - 120	20
M,P,O-Xylene		0.309	mg/L	1	0.30	<0.001	103		80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.104	mg/L	1	0.10	104	72 - 128
4-BFB		0.102	mg/L	1	0.10	102	72 - 128

Sample: LCSD QC Batch: QC03867

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.116	mg/L	1	0.10	<0.001	116	4	80 - 120	20
Benzene		0.106	mg/L	1	0.10	<0.001	106	3	80 - 120	20
Toluene		0.109	mg/L	1	0.10	<0.001	109	4	80 - 120	20
M,P,O-Xylene		0.319	mg/L	1	0.30	<0.001	106	3	80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.107	mg/L	1	0.10	107	72 - 128

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Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
4-BFB		0.104	mg/L	1	0.10	104	72 - 128

Sample: LCS QC Batch: QC03869

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.102	mg/L	1	0.10	<0.001	102		80 - 120	20
Benzene		0.095	mg/L	1	0.10	<0.001	95		80 - 120	20
Toluene		0.092	mg/L	1	0.10	<0.001	92		80 - 120	20
Ethylbenzene		0.093	mg/L	1	0.10	<0.001	93		80 - 120	20
M,P,O-Xylene		0.288	mg/L	1	0.30	<0.001	96		80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.096	mg/L	1	0.10	96	72 - 128
4-BFB		0.087	mg/L	1	0.10	87	72 - 128

Sample: LCSD QC Batch: QC03869

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.101	mg/L	1	0.10	<0.001	101	1	80 - 120	20
Benzene		0.092	mg/L	1	0.10	<0.001	92	3	80 - 120	20
Toluene		0.089	mg/L	1	0.10	<0.001	89	3	80 - 120	20
Ethylbenzene		0.09	mg/L	1	0.10	<0.001	90	3	80 - 120	20
M,P,O-Xylene		0.28	mg/L	1	0.30	<0.001	93	3	80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.094	mg/L	1	0.10	94	72 - 128
4-BFB		0.084	mg/L	1	0.10	84	72 - 128

Sample: LCS QC Batch: QC03937

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.09	mg/L	1	0.10	<0.001	90		80 - 120	20
Benzene		0.104	mg/L	1	0.10	<0.001	104		80 - 120	20
Toluene		0.105	mg/L	1	0.10	<0.001	105		80 - 120	20

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Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Ethylbenzene		0.094	mg/L	1	0.10	<0.001	94		80 - 120	20
M,P,O-Xylene		0.301	mg/L	1	0.30	<0.001	100		80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.095	mg/L	1	0.10	95	72 - 128
4-BFB		0.093	mg/L	1	0.10	93	72 - 128

Sample: LCSD QC Batch: QC03937

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.094	mg/L	1	0.10	<0.001	94	4	80 - 120	20
Benzene		0.11	mg/L	1	0.10	<0.001	110	6	80 - 120	20
Toluene		0.111	mg/L	1	0.10	<0.001	111	6	80 - 120	20
Ethylbenzene		0.101	mg/L	1	0.10	<0.001	101	7	80 - 120	20
M,P,O-Xylene		0.322	mg/L	1	0.30	<0.001	107	7	80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.098	mg/L	1	0.10	98	72 - 128
4-BFB		0.097	mg/L	1	0.10	97	72 - 128

Quality Control Report
Continuing Calibration Verification Standards

Sample: CCV (1) QC Batch: QC03867

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.087	87	80 - 120	7/24/00
Toluene		mg/L	0.10	0.087	87	80 - 120	7/24/00
Ethylbenzene		mg/L	0.10	0.086	86	80 - 120	7/24/00
M,P,O-Xylene		mg/L	0.30	0.245	81	80 - 120	7/24/00

Sample: CCV (2) QC Batch: QC03867

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.094	94	80 - 120	7/24/00
Toluene		mg/L	0.10	0.096	96	80 - 120	7/24/00
Ethylbenzene		mg/L	0.10	0.095	95	80 - 120	7/24/00
M,P,O-Xylene		mg/L	0.30	0.273	91	80 - 120	7/24/00

Sample: ICV (1) QC Batch: QC03867

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.113	113	80 - 120	7/24/00
Toluene		mg/L	0.10	0.115	115	80 - 120	7/24/00
Ethylbenzene		mg/L	0.10	0.113	113	80 - 120	7/24/00
M,P,O-Xylene		mg/L	0.30	0.336	112	80 - 120	7/24/00

Sample: CCV (1) QC Batch: QC03869

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.09	90	80 - 120	7/24/00
Toluene		mg/L	0.10	0.086	86	80 - 120	7/24/00
Ethylbenzene		mg/L	0.10	0.086	86	80 - 120	7/24/00
M,P,O-Xylene		mg/L	0.30	0.269	89	80 - 120	7/24/00

Sample: CCV (2) QC Batch: QC03869

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.084	84	80 - 120	7/24/00
Toluene		mg/L	0.10	0.08	80	80 - 120	7/24/00
Ethylbenzene		mg/L	0.10	0.081	81	80 - 120	7/24/00
M,P,O-Xylene		mg/L	0.30	0.253	84	80 - 120	7/24/00

Sample: ICV (1) QC Batch: QC03869

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.097	97	80 - 120	7/24/00
Toluene		mg/L	0.10	0.095	95	80 - 120	7/24/00

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ethylbenzene		mg/L	0.10	0.095	95	80 - 120	7/24/00
M,P,O-Xylene		mg/L	0.30	0.296	98	80 - 120	7/24/00

Sample: CCV (1) QC Batch: QC03937

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.102	102	80 - 120	7/26/00
Toluene		mg/L	0.10	0.102	102	80 - 120	7/26/00
Ethylbenzene		mg/L	0.10	0.092	92	80 - 120	7/26/00
M,P,O-Xylene		mg/L	0.30	0.293	97	80 - 120	7/26/00

Sample: CCV (2) QC Batch: QC03937

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.109	109	80 - 120	7/26/00
Toluene		mg/L	0.10	0.109	109	80 - 120	7/26/00
Ethylbenzene		mg/L	0.10	0.099	99	80 - 120	7/26/00
M,P,O-Xylene		mg/L	0.30	0.316	105	80 - 120	7/26/00

Sample: ICV (1) QC Batch: QC03937

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.11	110	80 - 120	7/26/00
Toluene		mg/L	0.10	0.111	111	80 - 120	7/26/00
Ethylbenzene		mg/L	0.10	0.101	101	80 - 120	7/26/00
M,P,O-Xylene		mg/L	0.30	0.324	108	80 - 120	7/26/00

TRACEANALYSIS, INC.

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4725 Ripley Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Equilon Pipeline Co.
Kyle Landreneau
PMB 174 269 CypressWood
Spring, Tx. 77388

Report Date: October 18, 2000

Order ID Number: A00100632

Project: EV-379
TA Job Code: Lea Station
Casualty Code: Lea County, New Mexico
Project Location: EV-379
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
155253	MW-4	Water	10/3/00	13:40	10/6/00
155254	MW-5	Water	10/3/00	11:40	10/6/00
155255	MW-6	Water	10/3/00	12:30	10/6/00
155256	MW-7	Water	10/3/00	12:55	10/6/00
155257	MW-10	Water	10/3/00	14:10	10/6/00

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 7 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical and Quality Control Report

Sample: 155253 - MW-4

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC05623	Date Analyzed:	10/12/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB04913	Date Prepared:	10/12/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.106	mg/L	1	0.10	106	72 - 128
4-BFB		0.123	mg/L	1	0.10	123	72 - 128

Sample: 155254 - MW-5

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC05670	Date Analyzed:	10/16/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB04957	Date Prepared:	10/16/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.569	mg/L	5	0.10	113	72 - 128
4-BFB		0.511	mg/L	5	0.10	102	72 - 128

Sample: 155255 - MW-6

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC05670	Date Analyzed:	10/16/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB04957	Date Prepared:	10/16/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.588	mg/L	5	0.10	117	72 - 128
4-BFB		0.541	mg/L	5	0.10	108	72 - 128

Sample: 155256 - MW-7

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC05623	Date Analyzed:	10/12/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB04913	Date Prepared:	10/12/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		0.004	mg/L	1	0.001
Total BTEX		0.004	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.122	mg/L	1	0.10	122	72 - 128
4-BFB	[1]	0.135	mg/L	1	0.10	135	72 - 128

Sample: 155257 - MW-10

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC05670	Date Analyzed:	10/16/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB04957	Date Prepared:	10/16/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.594	mg/L	5	0.10	118	72 - 128
4-BFB		0.525	mg/L	5	0.10	105	72 - 128

Quality Control Report
Method Blank

Sample: Method Blank QCBatch: QC05623

[1] Surrogate limits out of range due to matrix.

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
TFT		0.096	mg/L	0.10	96	72 - 128
4-BFB		0.116	mg/L	0.10	116	72 - 128

Sample: Method Blank QCBatch: QC05670

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
TFT		0.099	mg/L	0.10	99	72 - 128
4-BFB		0.088	mg/L	0.10	88	72 - 128

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Sample: LCS QC Batch: QC05623

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.102	mg/L	1	0.10	<0.001	102		80 - 120	20
Benzene		0.088	mg/L	1	0.10	<0.001	88		80 - 120	20
Toluene		0.088	mg/L	1	0.10	<0.001	88		80 - 120	20
Ethylbenzene		0.088	mg/L	1	0.10	<0.001	88		80 - 120	20
M,P,O-Xylene		0.268	mg/L	1	0.30	<0.001	89		80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.081	mg/L	1	0.10	81	72 - 128
4-BFB		0.099	mg/L	1	0.10	99	72 - 128

Sample: LCSD QC Batch: QC05623

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.106	mg/L	1	0.10	<0.001	106	4	80 - 120	20
Benzene		0.093	mg/L	1	0.10	<0.001	93	6	80 - 120	20
Toluene		0.092	mg/L	1	0.10	<0.001	92	4	80 - 120	20
Ethylbenzene		0.096	mg/L	1	0.10	<0.001	96	9	80 - 120	20
M,P,O-Xylene		0.288	mg/L	1	0.30	<0.001	96	7	80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.088	mg/L	1	0.10	88	72 - 128
4-BFB		0.105	mg/L	1	0.10	105	72 - 128

Sample: LCS QC Batch: QC05670

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.099	mg/L	1	0.10	<0.001	99		80 - 120	20
Benzene		0.092	mg/L	1	0.10	<0.001	92		80 - 120	20
Toluene		0.089	mg/L	1	0.10	<0.001	89		80 - 120	20
Ethylbenzene		0.09	mg/L	1	0.10	<0.001	90		80 - 120	20
M,P,O-Xylene		0.305	mg/L	1	0.30	<0.001	101		80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.1	mg/L	1	0.10	100	72 - 128
4-BFB		0.092	mg/L	1	0.10	92	72 - 128

Sample: LCSD QC Batch: QC05670

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.103	mg/L	1	0.10	<0.001	103	4	80 - 120	20
Benzene		0.096	mg/L	1	0.10	<0.001	96	4	80 - 120	20
Toluene		0.093	mg/L	1	0.10	<0.001	93	4	80 - 120	20

Continued ...

... Continued

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Ethylbenzene		0.093	mg/L	1	0.10	<0.001	93	3	80 - 120	20
M,P,O-Xylene		0.315	mg/L	1	0.30	<0.001	105	3	80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.1	mg/L	1	0.10	100	72 - 128
4-BFB		0.092	mg/L	1	0.10	92	72 - 128

Quality Control Report
Continuing Calibration Verification Standards

Sample: CCV (1)

QC Batch: QC05623

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.1	100	80 - 120	10/12/00
Toluene		mg/L	0.10	0.099	99	80 - 120	10/12/00
Ethylbenzene		mg/L	0.10	0.098	98	80 - 120	10/12/00
M,P,O-Xylene		mg/L	0.30	0.299	99	80 - 120	10/12/00

Sample: CCV (2)

QC Batch: QC05623

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.106	106	80 - 120	10/12/00
Toluene		mg/L	0.10	0.105	105	80 - 120	10/12/00
Ethylbenzene		mg/L	0.10	0.107	107	80 - 120	10/12/00
M,P,O-Xylene		mg/L	0.30	0.313	104	80 - 120	10/12/00

Sample: ICV (1)

QC Batch: QC05623

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.096	96	80 - 120	10/12/00
Toluene		mg/L	0.10	0.096	96	80 - 120	10/12/00
Ethylbenzene		*mg/L*	*0.10*	*0.1*	*100*	80 - 120	10/12/00
M,P,O-Xylene		mg/L	0.30	0.303	101	80 - 120	10/12/00

Sample: CCV (1) QC Batch: QC05670

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.113	113	80 - 120	10/16/00
Toluene		mg/L	0.10	0.109	109	80 - 120	10/16/00
Ethylbenzene		mg/L	0.10	0.109	109	80 - 120	10/16/00
M,P,O-Xylene		mg/L	0.30	0.364	121	80 - 120	10/16/00

Sample: CCV (2) QC Batch: QC05670

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.109	109	80 - 120	10/16/00
Toluene		mg/L	0.10	0.102	102	80 - 120	10/16/00
Ethylbenzene		mg/L	0.10	0.108	108	80 - 120	10/16/00
M,P,O-Xylene		mg/L	0.30	0.338	112	80 - 120	10/16/00

Sample: ICV (1) QC Batch: QC05670

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.097	97	80 - 120	10/16/00
Toluene		mg/L	0.10	0.094	94	80 - 120	10/16/00
Ethylbenzene		mg/L	0.10	0.096	96	80 - 120	10/16/00
M,P,O-Xylene		mg/L	0.30	0.325	108	80 - 120	10/16/00

TRACEANALYSIS, INC.
6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
4725 Ripley Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Equilon Pipeline Co.
Kyle Landreneau
PMB 174 269 CypressWood
Spring, Tx. 77388

Report Date: November 1, 2000

Order ID Number: A00101707

Project: EV-379
TA Job Code: Lea Station
Casualty Code: Lea County, New Mexico
Project Location: EV-379
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
156180	Effluent	Air	10/16/00	10:15	10/17/00

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 4 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical and Quality Control Report

Sample: 156180 - Effluent

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC06057	Date Analyzed:	10/30/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB05310	Date Prepared:	10/30/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		<1	mg/m3	1000	0.001
Toluene		<1	mg/m3	1000	0.001
Ethylbenzene		<1	mg/m3	1000	0.001
M,P,O-Xylene		<1	mg/m3	1000	0.001
Total BTEX		<1	mg/m3	1000	0.001

Sample: 156180 - Effluent

Analysis:	TVHC	Analytical Method:	8015	QC Batch:	QC06058	Date Analyzed:	10/30/00
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB05310	Date Prepared:	10/30/00

Param	Flag	Result	Units	Dilution	RDL
TVHC		<100	mg/m3	1	0.10

Quality Control Report
Method Blank

Sample: Method Blank QCBatch: QC06057

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/m3	0.001
Toluene		<0.001	mg/m3	0.001
Ethylbenzene		<0.001	mg/m3	0.001
M,P,O-Xylene		<0.001	mg/m3	0.001
Total BTEX		<0.001	mg/m3	0.001

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
TFT		0.095	mg/m3	0.10	95	72 - 128
4-BFB		0.091	mg/m3	0.10	91	72 - 128

Sample: Method Blank QCBatch: QC06058

Param	Flag	Results	Units	Reporting Limit
TVHC		<100	mg/m3	0.10

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Sample: LCS QC Batch: QC06057

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.102	mg/m3	1	0.10	<0.001	102		80 - 120	20
Benzene		0.104	mg/m3	1	0.10	<0.001	104		80 - 120	20
Toluene		0.1	mg/m3	1	0.10	<0.001	100		80 - 120	20
Ethylbenzene		0.094	mg/m3	1	0.10	<0.001	94		80 - 120	20
M,P,O-Xylene		0.271	mg/m3	1	0.30	<0.001	90		80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.1	mg/m3	1	0.10	100	72 - 128
4-BFB		0.092	mg/m3	1	0.10	92	72 - 128

Sample: LCSD QC Batch: QC06057

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.093	mg/m3	1	0.10	<0.001	93	9	80 - 120	20
Benzene		0.095	mg/m3	1	0.10	<0.001	95	9	80 - 120	20
Toluene		0.093	mg/m3	1	0.10	<0.001	93	7	80 - 120	20
Ethylbenzene		0.09	mg/m3	1	0.10	<0.001	90	4	80 120	20
M,P,O-Xylene		0.263	mg/m3	1	0.30	<0.001	87	3	80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.113	mg/m3	1	0.10	113	72 - 128
4-BFB		0.103	mg/m3	1	0.10	103	72 128

Quality Control Report
Continuing Calibration Verification Standards

Sample: CCV (1) QC Batch: QC06057

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/m3	0.10	0.098	98	80 - 120	10/30/00
Toluene		mg/m3	0.10	0.095	95	80 - 120	10/30/00
Ethylbenzene		mg/m3	0.10	0.092	92	80 - 120	10/30/00
M,P,O-Xylene		mg/m3	0.30	0.254	84	80 - 120	10/30/00

Sample: ICV (1) QC Batch: QC06057

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/m3	0.10	0.111	111	80 - 120	10/30/00
Toluene		mg/m3	0.10	0.109	109	80 - 120	10/30/00
Ethylbenzene		mg/m3	0.10	0.108	108	80 - 120	10/30/00
M,P,O-Xylene		mg/m3	0.30	0.329	109	80 - 120	10/30/00

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

TraceAnalysis, Inc.

4725 Ripley Dr., Ste A
El Paso, Texas 79922-1028
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #: [illegible]

Company Name: Equiva Services Inc.
Phone #: 915-570-8726
Address: (Street, City, Zip) 300 West Wall, Suite 1312, Midland, TX 79701
Fax #: (915)-684-7587
Contact Person: Jeff Kindley
Invoice to: (If different from above) EQUIVA SERVICES Attn: Kyle Landerman PMB 174 269 Cypresswood, Spring, Texas 77388
Project #: EV-379
Project Name: Lea Station, Lea County, New Mexico
Project Location: Lea County, New Mexico
Sampler Signature: Jeffrey Kindley

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	NaHSO4	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC-MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Turn Around Time if different from standard	Hold
[illegible]	Effluent	1				✓								✓	10/16/00	1015		✓															

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Jeffrey Kindley	October 16, 2000	1400	Helen Shelton	10/16/00	1400
Helen Shelton	10/16/00	10:00 AM			
			Received at Laboratory by: [signature]	10-17-00	10:00

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp
Log-in Review

REMARKS:
Normal Turnaround

Carrier # Greyhound 163 573 3946

Samples HS

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

February 1, 1999

To:

Michael Nash
Koch Industries
PO Box 2256
Wichita, KS 67201

Randall Ross
Texas Railroad Commission
110 S. Taylor St.
PO Box 2141
San Angelo, TX 76902-2141

Paul Newman
EOTT Energy Corporation
PO Box 4666
Houston, Texas 77210-4666

Joe Cress
Texas Railroad Commission
241 Pine Street, Suite 6-B
PO Box 1681
Abilene, TX 79604

William C. Olson
State Of New Mexico
Oil Conservation Division
2040 S. Pacheco St.
Santa Fe, NM 87504

Everett Wilson
Oklahoma Corporation Commission
Pollution Abatement Dept.
Jim Thorpe Building
2101 N. Lincoln
Oklahoma City, OK 73105

Leslie Savage
Texas Railroad Commission
Oil & Gas Division
PO Box 12967
Austin, Texas 78711-2967

Charlie Ross
Texas Railroad Commission
214 West Texas Avenue, Suite 600
Midland, Texas 79701-4610

Karl Thiel
Texas Railroad Commission
405 50th Street
Lubbock, Texas 79404-3633

Fred McNeel
Texas Railroad Commission
First Texas Building
901 Indiana Avenue, Suite 600
Wichita Falls, TX 76301-6798

As a result of the recent alliance between Shell, Texaco, and Star, many remediation projects have been reassigned. This letter is to inform you that I have been assigned to manage pipeline remediation activities at sites in Texas, Oklahoma, and New Mexico formally managed by Neal Stidham. The sites that I will manage are:

28569 Tomball Parkway # 106, Tomball TX 77375
Phone 281-576-1114 Facsimile 281-587 1517

EQUIVA SERVICES LLC
Shell, Taxaco & Saudi Aramco Working Together

Denton Station
Lea Station
Wheeler Station
Penwell Station
Dunes Injection
Healdton Station
Hamlin Station
E. Hamlin Pump Station
Standing Rock Station

I can be reached at the following Address

Kyle Landreneau
Equiva Services LLC
28569 Tomball Parkway #106
Tomball Texas 77375

Phone 281-252-6914
Fax 281-252-6917
Pager 800-307-0502

I appreciate your assistance in this matter.

Sincerely
EQUIVA SERVICES

Kyle Landreneau
Environmental Geologist

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

December 22, 1998

William Olson
State of New Mexico Oil Conservation Division
Environmental Bureau
2040 S. Pacheco St.
Santa Fe, New Mexico 87505

Re: Project Management Changes for New Mexico Environmental Projects

Dear Mr. Olson

I would like to take this opportunity to introduce. My name is Kyle Landreneau with Equiva Services LLC. Equiva services is the new Shell-Texaco-Saudi Refining Alliance company that provides environmental service to the two Alliance operating companies Equilon Enterprises and Motiva Enterprises. I am assuming environmental management duties for a number of sites previously handled by Neal Stidham. Neal has recently accepted a position with Equilon and will be working on other projects. I will be managing the Lea Station and Denton Station that were previously handled by Neal.

I am currently in transition for office space. After the New Year, I will be working out of a home office. The address listed below will remain my permanent mailing address but my phone numbers will be changing in the few weeks. I hope to travel to Santa Fe to meet with you after the New Year.

Sincerely
EQUIVA SERVICES LLC

Kyle Landreneau

Kyle Landreneau
SHE-Science & Engineering Mid-Continent
Environmental Geologist

28569 Tomball Parkway # 106, Tomball TX 77375
Phone 281-576-1114 Facsimile 281-587 1517

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

December 22, 1998

William Olson
State of New Mexico Oil Conservation Division
Environmental Bureau
2040 S. Pacheco St.
Santa Fe, New Mexico 87505

DEC 23

Re: Annual Monitoring Report, Lea Station, Lea County, New Mexico

Dear Mr. Olson

Enclosed is the 1998 Annual Groundwater Monitoring Report for the Lea Station project. Based on findings in the report, there may have been a new offsite release. We believe that a new release may have occurred north of wells MW-11 and MW-12. Also the SVE system has been down since March of 1998. We are currently evaluating whether repairing and restarting the SVE system would be beneficial to remediation at the site. Should you have any questions concerning this project please contact me 281-587-1114.

Sincerely
EQUIVA SERVICES LLC

Kyle Landreneau
SHE-Science & Engineering Mid-Continent
Environmental Geologist

28569 Tomball Parkway # 106, Tomball TX 77375
Phone 281-576-1114 Facsimile 281-587 1517

APPENDIX A

FIGURE 1 - GROUNDWATER GRADIENT
FIGURE 2 - DISSOLVED BTEX CONCENTRATION
FIGURE 3 - PAH CONCENTRATION MAPS
FIGURE 4 - PSH THICKNESS vs. TIME

ENERCON SERVICES, INC.
An Employee Owned Company

2775 Villa Creek, Suite 120
Dallas, TX 75234
(972) 484-3854
Fax: (972) 484-8835

December 4, 1998

Mr. Kyle Landreneau
Equivia Services
110 Cyprus Station Drive, Suite 255
Houston, TX 77090

RE: ANNUAL GROUNDWATER MONITORING REPORT
LEA STATION
LEA COUNTY, NEW MEXICO

ENERCON PROJECT # EV-379

Mr. Landreneau:

Enercon Services, Inc., has completed the 1998 Annual Groundwater Monitoring and Sampling operations at the above referenced site. The sampling and monitoring program consists of quarterly monitoring events and regular maintenance of the site Soil Vapor Extraction (SVE) system.

This report contains results from all four of the quarterly monitoring events and includes the collection of groundwater elevation measurements from thirteen monitoring and two recovery wells. Groundwater samples were collected from all monitoring wells not containing phase-separated hydrocarbons (PSH). Outlined in this report are the gauging, purging, and sampling operations conducted on January 22, April 2 and May 5, July 7, and October 2, 1998, and PSH recovery data since October 9, 1997.

Field Operations

MW-8 was connected to RW-1 with a 4" PVC jumper on February 18, 1998. Since the SVE system was aligned to RW-2 (as of January 22, 1998), an absorbent boom was left in MW-8. On March 12, 1998, the SVE blower was found to be cycling, thus drawing an insufficient vacuum when aligned to either well. Further investigation determined the blower motor windings were shorted. The SVE system was shutdown pending replacement of the blower motor.

Groundwater Gradient

Monitoring wells have been gauged in order to determine the depth to the groundwater table and the thickness of any PSH. A summary of the groundwater elevations and PSH thickness is presented in Appendix B, Table 1. The apparent groundwater flow direction was consistently noted to be from northwest to the southeast and is concurrent with historical data. A Groundwater Gradient Map was prepared from the gauging data obtained on October 2, 1998 is included in Appendix A, Figure 1.

PSH Recovery

Recovery of PSH on site is accomplished by absorbent booms and hand bailing. Approximately 116.84 gallons of PSH have been recovered to date. Between October 9, 1997 and October 2, 1998, 32.93 gallons were recovered. A summary of PSH recovery is presented in Appendix B, Tables 3.

All PSH impacted monitor wells have shown a significant increase in PSH levels since October 9, 1997, most notably MW-1, MW-2, and MW-11. PSH levels in RW-1 and RW-2 also have risen following loss of the SVE system. Graphical analysis of PSH thickness vs. time (Appendix A, Figure 4) shows that MW-11 does not follow the same trend of accumulation as MW-1, MW-2, RW-1, and RW-2. This could indicate a new release from an upstream source. Since the groundwater gradient is from northwest to southeast and MW-11 is on the northern border of the site, the release would be coming from an off-site location.

Groundwater Sampling

Monitor wells were sampled in accordance with our proposal for sampling during 1998. MW-4, MW-5, MW-6, MW-7, MW-9, and MW-10 were sampled quarterly for Benzene, Toluene, Ethyl-Benzene, and Total Xylenes (BTEX) using EPA Method 8020. During the January monitoring event MW-5 was not sampled due to accumulation of PSH. MW-3, MW-8, MW-12, and MW-13 were also sampled for BTEX during the April 2 monitoring event. Due to a delay by the shipping contractor, samples collected in April were not useable and all 10 wells were again sampled on May 5, 1998. MW-11, scheduled for sampling at that time, was not sampled due to PSH accumulation in the well. During the January 22 monitoring event, MW-4, MW-6, MW-7, MW-9, and MW-10 were also sampled for Poly-Aromatic Hydrocarbons (PAH) using EPA Method 8310. MW-5 was not sampled due to PSH accumulation. All wells were purged a minimum of 3 well volumes, or dry, and samples obtained using dedicated, disposable sample bailers. Samples were then placed on ice and shipped to Southern Petroleum Laboratories, Houston, for analysis.

Groundwater Analytical Results

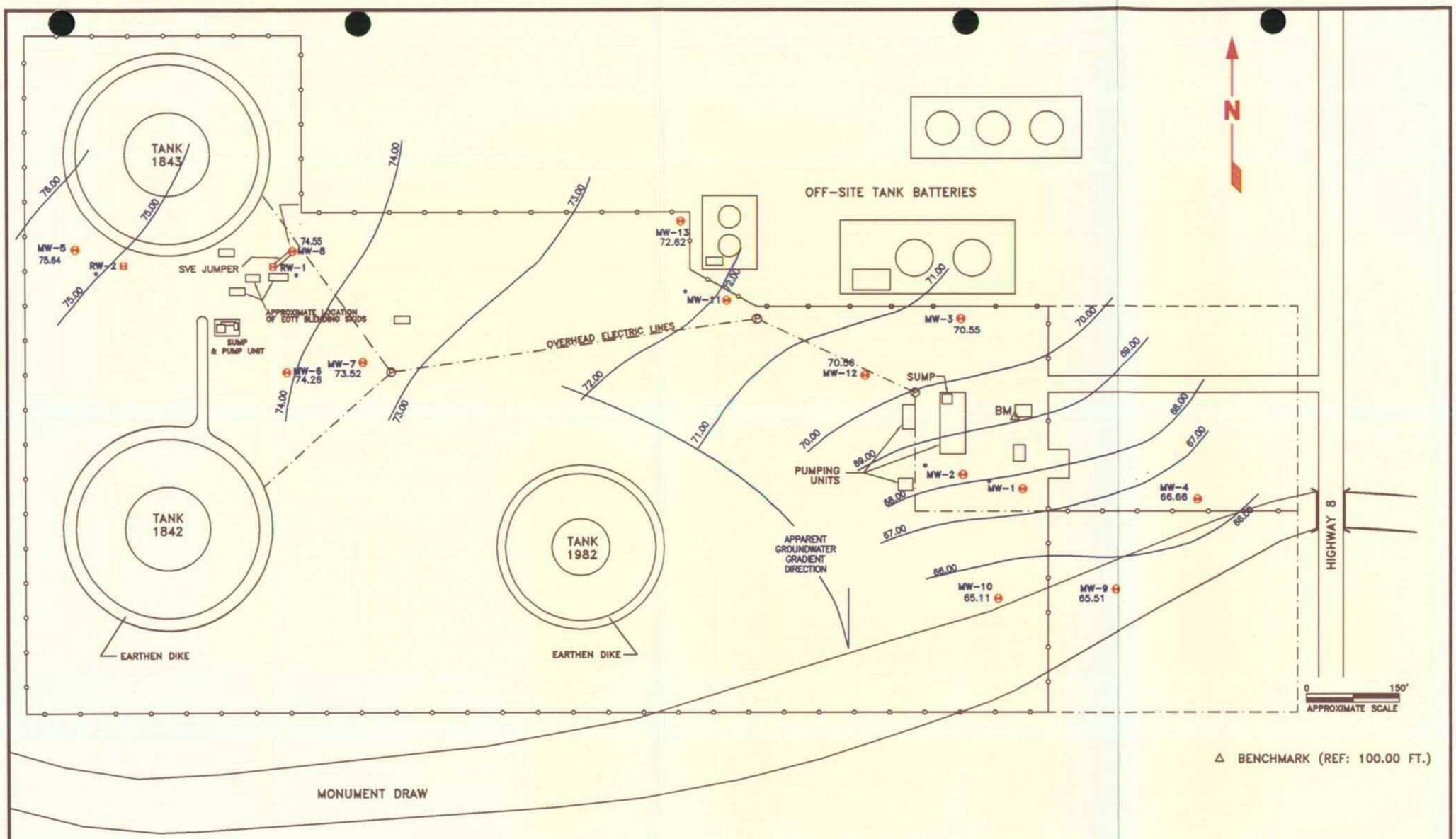
Dissolved BTEX concentrations have remained relatively stable across the site with minor fluctuations of 0.01 to 0.02 parts per million (ppm). Notable exceptions are MW-3, MW-8, and MW-12. MW-3 and MW-8 have shown significant decreases in dissolved BTEX concentrations over the past 18 months. MW-12 had a significant increase in dissolved BTEX concentrations between the 1997 and 1998 monitoring cycles. This could be associated with the increasing PSH levels in MW-11, located 30 feet to the north. MW-10 had intermittent BTEX detected in very low concentrations. PAH concentrations have generally had minor increases across the site. MW-4 and MW-9 continue to have no detectable concentrations of BTEX or PAH. MW-7 and MW-13 continue to have no detectable concentrations of BTEX, although MW-7 had a very slight concentration of PAH. Summaries of groundwater analytical results are presented in Appendix B, Tables 2 and 2a.

Enercon appreciates the opportunity to provide you with our professional consulting services. If you have any questions or concerns, please do not hesitate to contact us at (972) 484-3854.

Sincerely,
Enercon Services, Inc.

Randall N. Lantz
Environmental Geologist

Charles D. Harlan, C.P.G.
Manager, Environmental Services



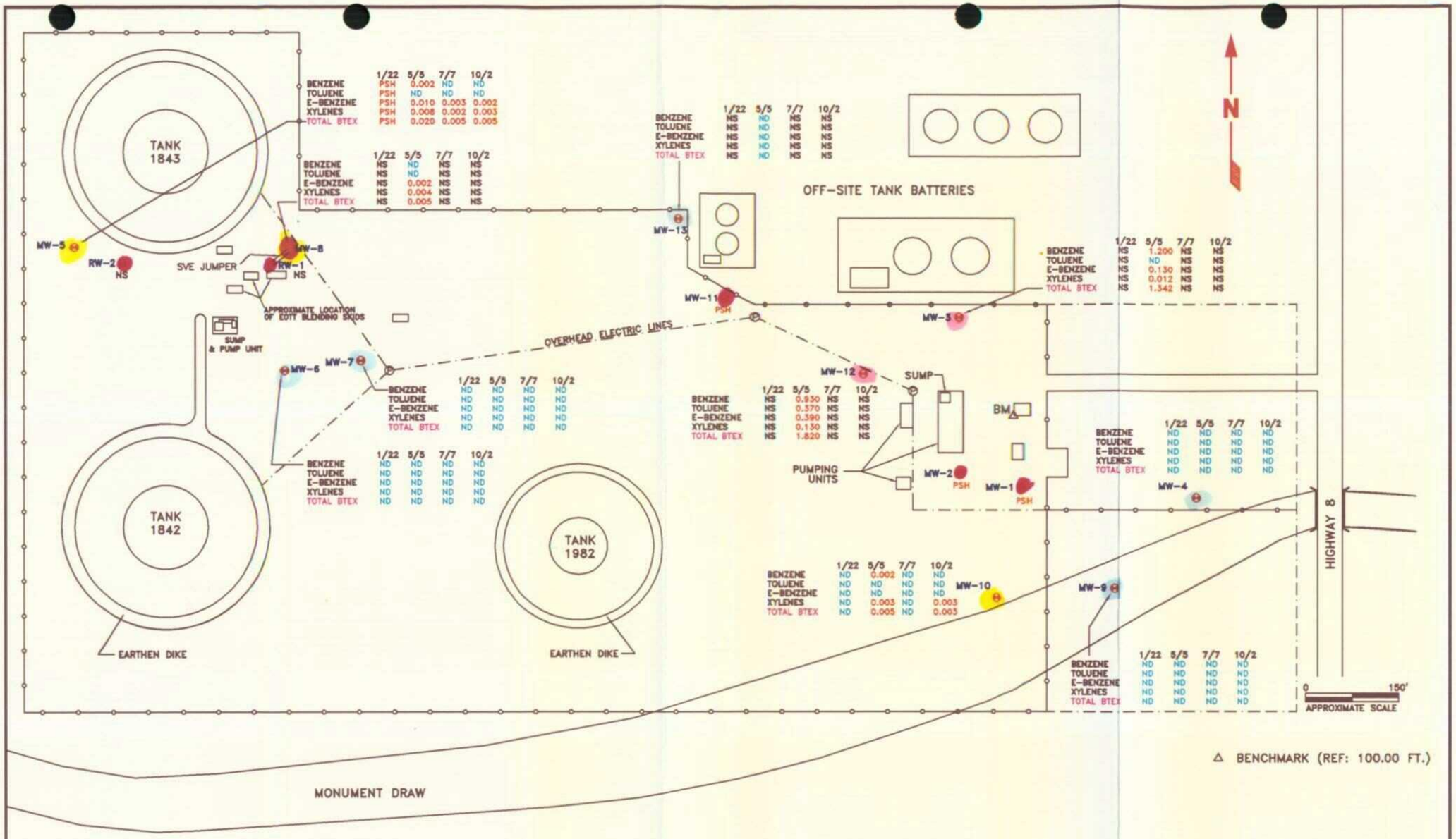
GROUNDWATER GRADIENT MAP

GROUNDWATER ELEVATIONS OBTAINED 10/2/98
CONTOUR INTERVAL = 1.00 FOOT
*MW-1, MW-2, MW-11, RW-1, AND RW-2 NOT USED IN DETERMINING GROUNDWATER GRADIENT

LEA STATION
SHELL PIPELINE COMPANY
LEA COUNTY, NEW MEXICO

DATE:	SCALE:
OCTOBER 1998	SEE ABOVE
PROJECT NUMBER: EV-379	FIGURE NUMBER: 1

ENERCON SERVICES, INC.
2775 VILLA CREEK
SUITE 120
DALLAS, TEXAS 75234



△ BENCHMARK (REF: 100.00 FT.)

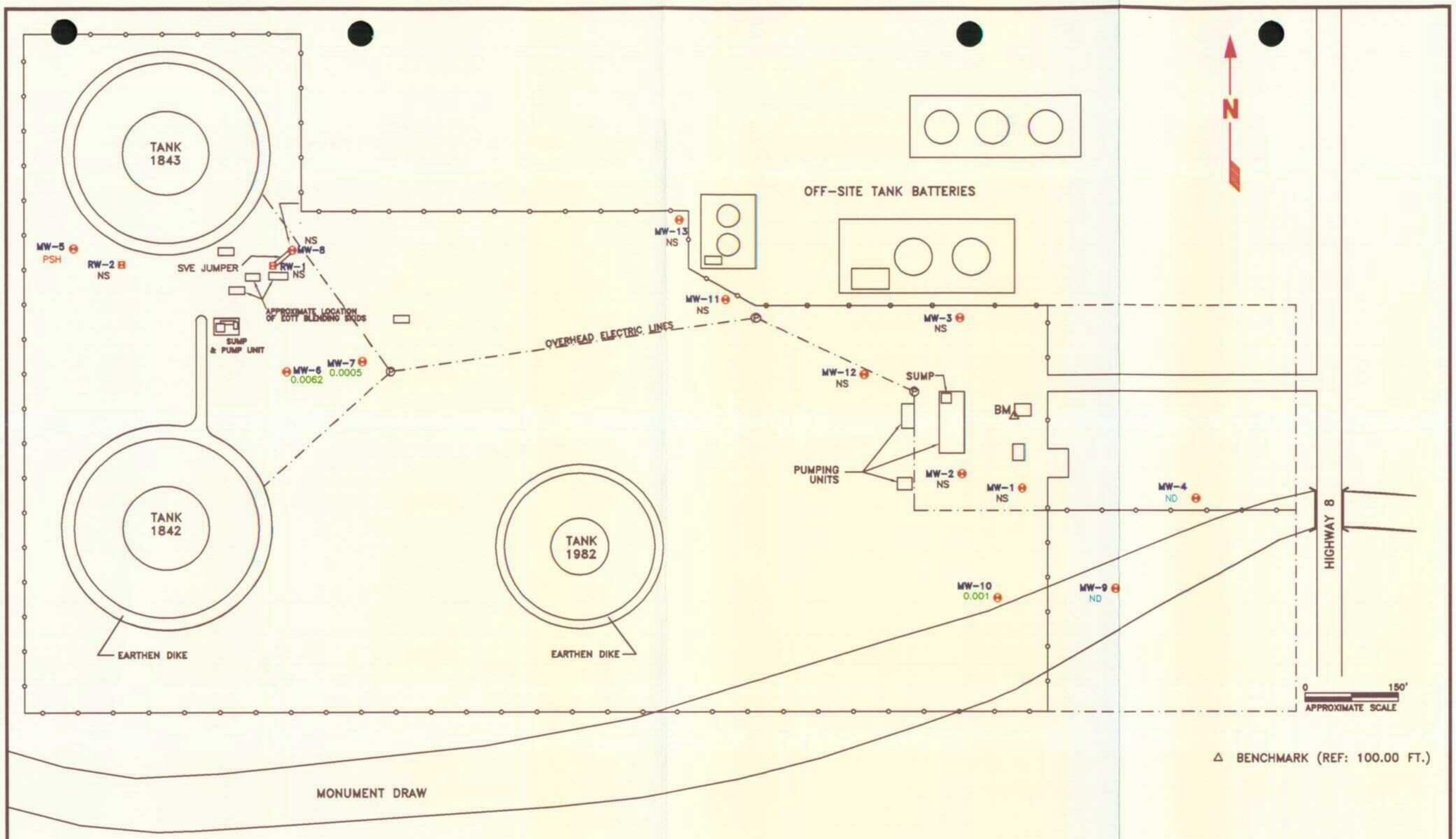
DISSOLVED BTEX CONCENTRATION MAP

SAMPLES OBTAINED DURING 1998
CONCENTRATIONS IN mg/L (ppm)
NS – NOT SAMPLED
ND – NONE DETECTED
PSH – PSH FOUND IN WELL, NOT SAMPLED

LEA STATION
SHELL PIPELINE COMPANY
LEA COUNTY, NEW MEXICO

DATE:	SCALE:
OCTOBER, 1998	SEE ABOVE
PROJECT NUMBER: EV-379	FIGURE NUMBER: 2

ENERCON SERVICES, INC.
2775 VILLA CREEK
SUITE 120
DALLAS, TEXAS 75234



△ BENCHMARK (REF: 100.00 FT.)

PAH CONCENTRATION MAP

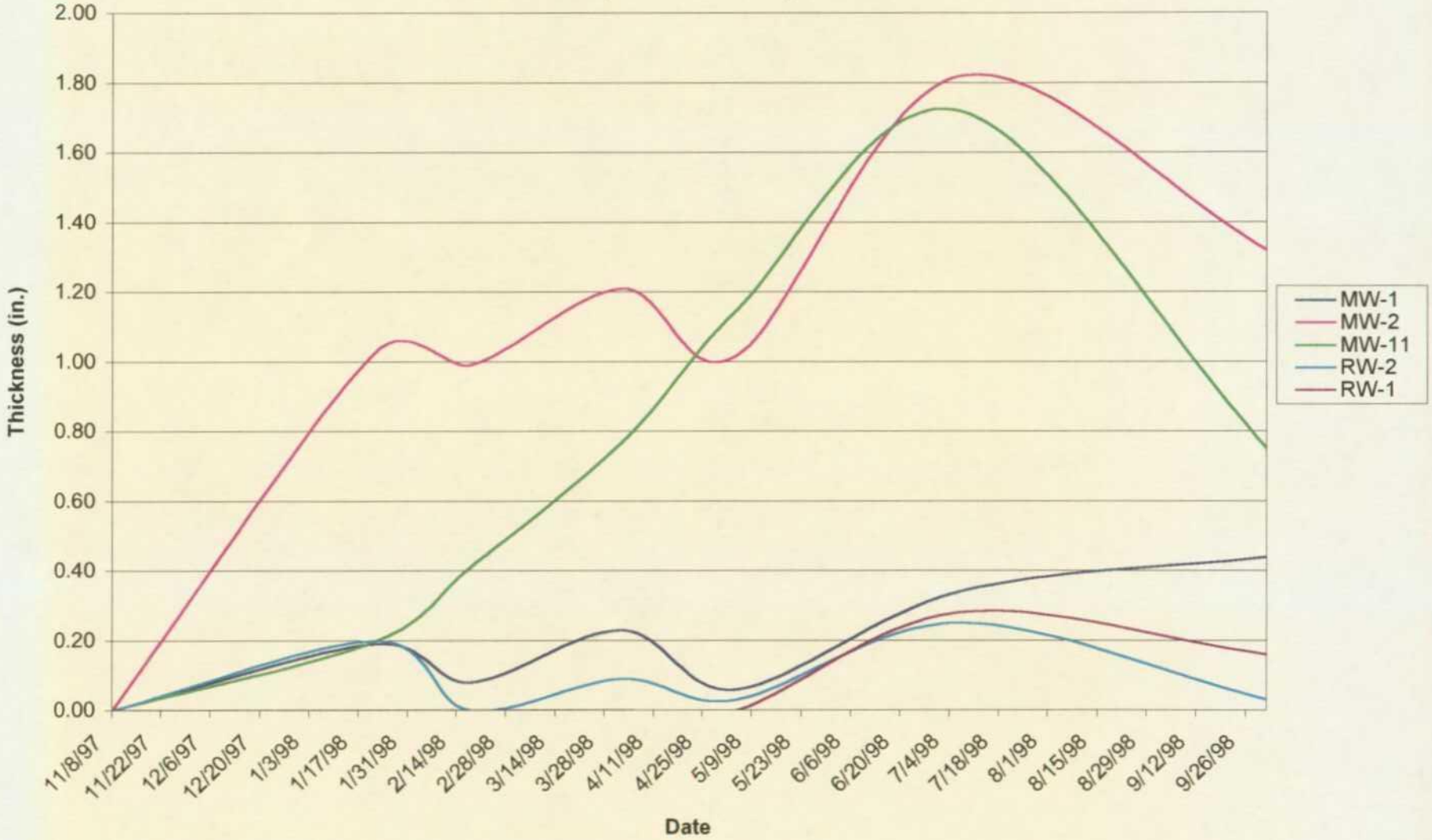
SAMPLES OBTAINED ON 1/22/98
CONCENTRATIONS IN mg/L (ppm)
NS – NOT SAMPLED
ND – NONE DETECTED
PSH – PSH FOUND IN WELL, NOT SAMPLED

LEA STATION
SHELL PIPELINE COMPANY
LEA COUNTY, NEW MEXICO

DATE:	SCALE:
JANUARY, 1998	SEE ABOVE
PROJECT NUMBER: EV-379	FIGURE NUMBER: 3

ENERCON SERVICES, INC.
2775 VILLA CREEK
SUITE 120
DALLAS, TEXAS 75234

FIGURE 4
PSH THICKNESS vs. TIME
LEA STATION, LEA COUNTY, NEW MEXICO



APPENDIX B

TABLES

TABLE 1
LEA STATION
SUMMARY OF RELATIVE GROUNDWATER LEVEL ELEVATIONS AND PHASE-SEPARATED HYDROCARBON THICKNESSES

Monitor Well	Date Gauged	Relative Ground Surface Elevation (feet)	Relative Top of Casing Elevation (feet)*	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)**	Phase-Separated Hydrocarbon Thickness (feet)***
MW-1	10/9/97	98.88	100.73	31.95	68.78	0.00
	11/8/97			31.73	69.00	Trace
	1/22/98			31.65	69.25	0.19
	2/18/98			31.52	69.28	0.08
	4/2/98			31.51	69.43	0.23
	5/5/98			31.31	69.47	0.06
	7/7/98			32.30	68.74	0.34
	10/2/98			32.25	68.88	0.44
MW-2	10/9/97	100.78	102.37	31.38	70.99	0.00
	11/8/97			31.56	70.81	Trace
	1/22/98			33.34	69.96	1.03
	2/18/98			33.15	70.11	0.99
	4/2/98			33.51	69.95	1.21
	5/5/98			33.26	70.03	1.02
	7/7/98			34.62	69.39	1.82
	10/2/98			33.13	70.43	1.32
MW-3	10/9/97	101.79	103.61	31.86	71.75	0.00
	11/8/97			NG	NG	NG
	1/22/98			32.21	71.40	0.00
	2/18/98			32.08	71.53	0.00
	4/2/98			32.00	71.61	0.00
	5/5/98			31.98	71.63	0.00
	7/7/98			32.70	70.91	0.00
	10/2/98			33.06	70.55	0.00
MW-4	10/9/97	93.80	96.08	28.94	67.14	0.00
	11/8/97			NG	NG	NG
	1/22/98			28.68	67.40	0.00
	2/18/98			NG	NG	NG
	4/2/98			28.52	67.56	0.00
	5/5/98			28.51	67.57	0.00
	7/7/98			29.05	67.03	0.00
	10/2/98			29.42	66.66	0.00
MW-5	10/9/97	107.08	109.21	32.45	76.76	Trace
	11/8/97			NG	NG	0.93
	1/22/98			32.81	76.52	0.13
	2/18/98			32.50	76.71	Trace
	4/2/98			32.24	76.97	0.00
	5/5/98			32.19	77.02	0.00
	7/7/98			33.10	76.11	0.00
	10/2/98			33.57	75.64	0.00
MW-6	10/9/97	103.66	106.26	31.15	75.11	0.00
	11/8/97			NG	NG	NG
	1/22/98			31.28	74.98	0.00
	2/18/98			31.11	75.15	0.00
	4/2/98			31.00	75.26	0.00
	5/5/98			30.95	75.31	0.00
	7/7/98			31.65	74.61	0.00
	10/2/98			32.00	74.26	0.00

TABLE 1
LEA STATION
SUMMARY OF RELATIVE GROUNDWATER LEVEL ELEVATIONS AND PHASE-SEPARATED HYDROCARBON THICKNESSES

Monitor Well	Date Gauged	Relative Ground Surface Elevation (feet)	Relative Top of Casing Elevation (feet)*	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)**	Phase-Separated Hydrocarbon Thickness (feet)***
MW-7	10/9/97	104.34	106.27	31.40	74.87	0.00
	11/8/97			NG	NG	NG
	1/22/98			31.97	74.30	0.00
	2/18/98			31.78	74.49	0.00
	4/2/98			31.66	74.61	0.00
	5/5/98			31.61	74.66	0.00
	7/7/98			32.40	73.87	0.00
	10/2/98			32.75	73.52	0.00
MW-8	10/9/97	105.52	107.44	32.34	75.10	Trace
	11/8/97			32.16	75.28	Trace
	1/22/98			31.56	75.88	Trace
	2/18/98		108.23	32.68	75.55	Trace
	4/2/98			32.54	75.69	0.00
	5/5/98			32.49	75.74	0.00
	7/7/98			33.37	74.89	0.03
	10/2/98			33.70	74.55	0.02
MW-9	10/9/97	93.76	97.21	30.19	67.02	0.00
	11/8/97			NG	NG	NG
	1/22/98			30.78	66.43	0.00
	2/18/98			NG	NG	NG
	4/2/98			30.59	66.62	0.00
	5/5/98			30.57	66.64	0.00
	7/7/98			31.33	65.88	0.00
	10/2/98			31.70	65.51	0.00
MW-10	10/9/97	99.63	102.51	34.72	67.79	0.00
	11/8/97			NG	NG	NG
	1/22/98			36.46	66.05	0.00
	2/18/98			NG	NG	NG
	4/2/98			36.25	66.26	0.00
	5/5/98			36.27	66.24	0.00
	7/7/98			35.89	66.62	0.00
	10/2/98			37.40	65.11	0.00
MW-11	10/9/97	104.48	105.62	32.47	73.15	0.00
	11/8/97			32.18	73.44	0.00
	1/22/98			32.99	72.81	0.20
	2/18/98			33.03	72.96	0.41
	4/2/98			33.48	72.83	0.77
	5/5/98			33.71	72.95	1.15
	7/7/98			34.92	72.25	1.72
	10/2/98			33.75	72.55	0.75
MW-12	10/9/97	NS	103.90	32.29	71.61	0.00
	11/8/97			NG	NG	NG
	1/22/98			32.62	71.28	0.00
	2/18/98			32.48	71.42	0.00
	4/2/98			32.25	71.65	0.00
	5/5/98			32.42	71.48	0.00
	7/7/98			33.33	70.57	0.00
	10/2/98			33.34	70.56	0.00

TABLE 1
LEA STATION
SUMMARY OF RELATIVE GROUNDWATER LEVEL ELEVATIONS AND PHASE-SEPARATED HYDROCARBON THICKNESSES

Monitor Well	Date Gauged	Relative Ground Surface Elevation (feet)	Relative Top of Casing Elevation (feet)*	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)**	Phase-Separated Hydrocarbon Thickness (feet)***
MW-13	10/9/97	NS	103.89	30.61	73.28	0.00
	11/8/97			NG	NG	NG
	1/22/98			30.25	73.64	0.00
	2/18/98			30.11	73.78	0.00
	4/2/98			29.99	73.90	0.00
	5/5/98			29.99	73.90	0.00
	7/7/98			30.99	72.90	0.00
	10/2/98			31.27	72.62	0.00
RW-1	10/9/97	NS	NS	NG	NG	NG
	11/8/97			NG	NG	NG
	1/22/98			27.37	NS	0.00
	2/18/98		+2.08'	30.87	NS	Trace
	4/2/98			30.78	NS	Trace
	5/5/98			30.68	NS	Trace
	7/7/98			31.82	NS	0.28
	10/2/98			32.01	NS	0.16
RW-2	10/9/97	NS	NS	NG	NG	NG
	11/8/97			NG	NG	NG
	1/22/98			29.80	NS	0.20
	2/18/98			30.12	NS	0.00
	4/2/98			30.11	NS	0.09
	5/5/98			30.11	NS	0.03
	7/7/98			31.10	NS	0.25
	10/2/98			31.52	NS	0.03

* Measured from a relative datum (benckmark = 100 feet).

** Correction Equation for Phase-Separated Hydrocarbons: Corrected Groundwater Elevation = Top of Casing Elevation - [Depth to Water Below Top of Casing - (SG)(PSH Thickness)]. Specific Gravity (SG) = 0.9 for crude oil.

NOTE: An SVE Jumper was installed on 2/18/98 between MW-8 and RW-1. Relative top of Casing Elevation (RTCE) for MW-8 was raised by 0.79'. RTCE for RW-1 was raised by 2.08'.

NG - Not Gauged NS - Not Surveyed

TABLE 2
LEA STATION
WATER SAMPLE ANALYTICAL RESULTS

Monitor Well	Date Sampled	BTEX				
		Benzene	Toluene	Ethyl-benzene	Xylenes	Total
MW-1	10/9/97	NS	NS	NS	NS	NS
	1/22/98	NS	NS	NS	NS	NS
	5/5/98	NS	NS	NS	NS	NS
	7/8/98	NS	NS	NS	NS	NS
	10/2/98	NS	NS	NS	NS	NS
MW-2	10/9/97	NS	NS	NS	NS	NS
	1/22/98	NS	NS	NS	NS	NS
	5/5/98	NS	NS	NS	NS	NS
	7/8/98	NS	NS	NS	NS	NS
	10/2/98	NS	NS	NS	NS	NS
MW-3	10/9/97	1.500	ND	0.280	0.028	1.808
	1/22/98	NS	NS	NS	NS	NS
	5/5/98	1.200	ND	0.130	0.012	1.342
	7/8/98	NS	NS	NS	NS	NS
	10/2/98	NS	NS	NS	NS	NS
MW-4	10/9/97	ND	ND	ND	ND	ND
	1/22/98	ND	ND	ND	ND	ND
	5/5/98	ND	ND	ND	ND	ND
	7/8/98	ND	ND	ND	ND	ND
	10/2/98	ND	ND	ND	ND	ND
MW-5	10/9/97	0.001	ND	0.006	0.001	0.008
	1/22/98	PSH	PSH	PSH	PSH	PSH
	5/5/98	0.002	ND	0.010	0.008	0.020
	7/8/98	ND	ND	0.003	0.002	0.005
	10/2/98	ND	ND	0.002	0.003	0.005
MW-6	10/9/97	ND	0.002	0.005	0.006	0.013
	1/22/98	0.007	ND	ND	ND	0.007
	5/5/98	0.001	ND	0.001	0.010	0.012
	7/8/98	ND	ND	ND	ND	ND
	10/2/98	ND	ND	ND	ND	ND
MW-7	10/9/97	ND	ND	ND	ND	ND
	1/22/98	ND	ND	ND	ND	ND
	5/5/98	ND	ND	ND	ND	ND
	7/8/98	ND	ND	ND	ND	ND
	10/2/98	ND	ND	ND	ND	ND
MW-8	10/9/97	NS	NS	NS	NS	NS
	1/22/98	NS	NS	NS	NS	NS
	5/5/98	ND	ND	0.002	0.004	0.005
	7/8/98	NS	NS	NS	NS	NS
	10/2/98	NS	NS	NS	NS	NS
MW-9	10/9/97	ND	ND	ND	ND	ND
	1/22/98	ND	ND	ND	ND	ND
	5/5/98	ND	ND	ND	ND	ND
	7/8/98	ND	ND	ND	ND	ND
	10/2/98	ND	ND	ND	ND	ND
MW-10	10/9/97	ND	ND	ND	ND	ND
	1/22/98	ND	ND	ND	ND	ND
	5/5/98	0.002	ND	ND	0.003	0.005
	7/8/98	ND	ND	ND	ND	ND
	10/2/98	ND	ND	ND	0.003	0.003

TABLE 2
LEA STATION
WATER SAMPLE ANALYTICAL RESULTS

Monitor Well	Date Sampled	BTEX				
		Benzene	Toluene	Ethyl-benzene	Xylenes	Total
MW-11	10/9/97	NS	NS	NS	NS	NS
	1/22/98	NS	NS	NS	NS	NS
	5/5/98	PSH	PSH	PSH	PSH	PSH
	7/8/98	NS	NS	NS	NS	NS
	10/2/98	NS	NS	NS	NS	NS
MW-12	10/9/97	0.780	0.230	0.100	0.047	1.157
	1/22/98	NS	NS	NS	NS	NS
	5/5/98	0.930	0.370	0.390	0.130	1.820
	7/8/98	NS	NS	NS	NS	NS
	10/2/98	NS	NS	NS	NS	NS
MW-13	10/9/97	NS	NS	NS	NS	NS
	1/22/98	NS	NS	NS	NS	NS
	5/5/98	ND	ND	ND	ND	ND
	7/8/98	NS	NS	NS	NS	NS
	10/2/98	NS	NS	NS	NS	NS
RW-1	10/9/97	NS	NS	NS	NS	NS
	1/22/98	NS	NS	NS	NS	NS
	5/5/98	NS	NS	NS	NS	NS
	7/8/98	NS	NS	NS	NS	NS
	10/2/98	NS	NS	NS	NS	NS
RW-2	10/9/97	NS	NS	NS	NS	NS
	1/22/98	NS	NS	NS	NS	NS
	5/5/98	NS	NS	NS	NS	NS
	7/8/98	NS	NS	NS	NS	NS
	10/2/98	NS	NS	NS	NS	NS

BTEX results listed in mg/l (parts per million; ppm) with method detection limits listed on the certificate of analysis.

10/9/97 analyses were conducted by Southern Petroleum Laboratories using EPA Method 8020A for MW-4, MW-6, MW-7, and MW-9,and EPA Method 8240 for samples collected from MW-3, MW-5, MW-10, and MW-12.

1998 analyses were conducted by Southern Petroleum Laboratories using EPA method 8020A.

NA - Not Analyzed ND - None Detected NS - Not Sampled PSH - PSH present in the well, not sampled

TABLE 2a
LEA STATION
WATER SAMPLE ANALYTICAL RESULTS

Monitor Well	Date Sampled	PAH			
		1-Methylnapthalene	2-Methylnapthalene	Benzo(a)pyrene	Naphthalene
MW-4	1/22/97	ND	ND	ND	ND
	1/22/98	ND	ND	ND	ND
MW-5	1/22/97	ND	ND	ND	ND
	1/22/98	PSH	PSH	PSH	PSH
MW-6	1/22/97	ND	ND	ND	ND
	1/22/98	0.004	0.002	ND	0.006
MW-7	1/22/97	ND	ND	ND	ND
	1/22/98	ND	0.001	ND	ND
MW-9	1/22/97	ND	ND	ND	ND
	1/22/98	ND	ND	ND	ND
MW-10	1/22/97	ND	ND	ND	ND
	1/22/98	ND	0.001	ND	ND

PAH Results listed in mg/l (parts per million, ppm)
1/22/98 analyses were conducted using EPA Method 8310 by Southern Petroleum Laboratory.
1/22/97 analyses were conducted using EPA Method 8310 by RECRA LabNet.
ND- None Detected PSH - PSH present in the well, not sampled.
NA-Not Analyzed

TABLE 3
LEA STATION
MANUAL PHASE-SEPARATED HYDROCARBON RECOVERY

Monitor Well	Date	PSH Thickness (feet)	PSH Recovery (gallons)	PSH Cumulative Recovery (gallons)	Type of Recovery
MW-1	10/9/97	0.00	0.21	12.85	Absortion Boom
	11/8/97	0.00	0.11	12.96	Absortion Boom
	1/22/98	0.19	0.00	12.96	Absortion Boom
	2/18/98	0.08	0.00	12.96	Absortion Boom
	4/2/98	0.23	2.50	15.46	Absortion Boom/Hand Bailed
	5/5/98	0.06	2.50	17.96	Absortion Boom/Hand Bailed
	7/7/98	0.34	2.98	20.94	Absortion Boom/Hand Bailed
	10/2/98	0.44	1.98	22.92	Absortion Boom/Hand Bailed
MW-2	10/9/97	0.00	0.11	10.20	Absortion Boom
	11/8/97	0.00	0.05	10.25	Absortion Boom
	1/22/98	1.03	0.50	10.75	Hand Bailed
	2/18/98	0.99	0.50	11.25	Hand Bailed
	4/2/98	1.21	1.98	13.23	Hand Bailed/Boom
	5/5/98	1.02	1.98	15.21	Hand Bailed/Boom
	7/7/98	1.82	2.98	18.19	Hand Bailed/Boom
	10/2/98	1.32	1.98	20.17	Hand Bailed/Boom
MW-5	10/9/97	0.00	0.00	8.70	Absortion Boom
	11/8/97	0.00	0.00	8.70	Absortion Boom
	1/22/98	0.13	0.98	9.68	Absortion Boom
	2/18/98	Trace	0.33	10.01	Absortion Boom
	4/2/98	0.00	0.10	10.11	Absortion Boom
	5/5/98	0.00	0.10	10.21	Absortion Boom
	7/7/98	0.00	0.00	10.21	Absortion Boom
	10/2/98	0.00	0.00	10.21	Absortion Boom
MW-8	10/9/97	Trace	0.00	34.67	Absortion Boom
	11/8/97	Trace	0.00	34.67	Absortion Boom
	1/22/98	Trace	0.98	35.65	Absortion Boom
	2/18/98	Trace	0.10	35.75	Absortion Boom
	4/2/98	0.00	0.10	35.85	Absortion Boom
	5/5/98	0.00	0.10	35.95	Absortion Boom
	7/7/98	0.03	0.10	36.05	Absortion Boom
	10/2/98	0.02	0.10	36.15	Absortion Boom
MW-11	10/9/97	0.00	0.00	17.49	Absortion Boom
	11/8/97	0.00	0.00	17.49	Absortion Boom
	1/22/98	0.20	0.00	17.49	Absortion Boom
	2/18/98	0.41	0.98	18.47	Absortion Boom
	4/2/98	0.77	1.98	20.45	Hand Bailed/Boom
	5/5/98	1.15	2.48	22.93	Hand Bailed/Boom
	7/7/98	1.72	2.98	25.91	Hand Bailed/Boom
	10/2/98	0.75	1.48	27.39	Hand Bailed/Boom

TABLE 3
LEA STATION
MANUAL PHASE-SEPARATED HYDROCARBON RECOVERY

Monitor Well	Date	PSH Thickness (feet)	PSH Recovery (gallons)	PSH Cumulative Recovery (gallons)	Type of Recovery
RW-1	10/9/97	SVE	SVE	SVE	SVE
	11/8/97	SVE	SVE	SVE	SVE
	1/22/98	SVE	SVE	SVE	SVE
	2/18/98	SVE	SVE	SVE	SVE
	10/2/98	SVE	SVE	SVE	SVE
RW-2	10/9/97	SVE	SVE	SVE	SVE
	11/8/97	SVE	SVE	SVE	SVE
	1/22/98	SVE	SVE	SVE	SVE
	2/18/98	SVE	SVE	SVE	SVE
	10/2/98	SVE	SVE	SVE	SVE

MW-8 was connected to RW-1 on 2/18/98. When the SVE system is aligned to RW-1, suction will also be applied to MW-8.
The SVE System was started on 8/1/96. No booms will be installed in RW-1/MW-8 and RW-2 while the system is running.
Aligned SVE System to RW-2 on 1/22/98. RW-1/MW-8 idle. Boom installed in MW-8.
SVE system blower moter failed on 3/12/98, SVE system is not in operation.

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

November 25, 1998

Scott A. Christensen
Sun Company, Inc. (SCI)
P.O. Box 2039
Tulsa Ok 74102-2039

Re: Sun Trucking, Inc. (R&M)
Lea Truck Station
Sec 31-Ts19s-R37e
Lea Co., NM

Dear Mr. Christensen:

New Mexico Oil Conservation Division (NMOCD) is in receipt of the letter dated October 23, 1998 concerning SCI's investigation plan for the above referenced facility. **The Plan is hereby approved with the following additions:**

1. SCI shall investigate the vertical extent inside of the berm area where crude oil contamination was observed.
2. Initial groundwater samples shall be tested for BTEX (8020) and general chemistry using EPA protocols.
3. Contaminated drill cuttings will have to be disposed of in a manner that is approved by NMOCD. The contaminated drill cuttings may be stored on site temporarily.
4. All monitor wells shall have an appropriate sized casing and screen. There shall be a minimum of ten feet of screen below and five feet above the static water lever. There shall be an appropriate sand/gravel pack placed whereas is will cover all of the screen and be two feet above the top the uppermost part of the screen where a bentonite plug shall be set. The remaining hole shall be cemented to the surface with cement containing 1-3% bentonite. There shall be a concrete pad at the surface. The well can be a flush or riser type design.
5. The investigation shall start on or before March 1, 1999 and the investigation report shall include conclusions and recommendations and be due on or before May 1, 1999.

Please be advised that NMOCD approval of this plan does not relieve SCI of liability should their operations fail to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD approval does not relieve SCI of responsibility for compliance with any other federal, state, or local laws and/or regulations.

If you require any further information or assistance please do not hesitate to call (505-827-7155) or write this office.

Sincerely Yours,

Wayne Price

Wayne Price-Environmental Engineer

cc: Chris Williams-NMOCD District I Supervisor
Bill Olson-Environmental Bureau

file:o/wp/sunlea

Shell Oil Products Company

Two Shell Plaza
P. O. Box 2099
Houston, TX 77252-2099

December 4, 1997

William Olson
State of New Mexico Oil Conservation Division
Environmental Bureau
2040 S. Pacheco St.
Santa Fe, New Mexico 87504

SUBJECT: ANNUAL MONITORING REPORT, LEA STATION, LEA COUNTY, NEW MEXICO

Dear Mr. Olson,

Enclosed is the 1996 Monitoring Report for Lea Station. Monitoring and groundwater sampling was conducted quarterly with poly-aromatic hydrocarbons (PAHs) sampling in January. No new wells were installed in 1997. The soil vapor extraction (SVE) system continues to operate and MW-8 was tied into the SVE system last April. The SVE system operates on different wells or well combinations each month. Between August 1996 and August 1997 approximately 250 pounds of hydrocarbon mass have been removed by the system. Monthly site visits are made to adjust the absorbent booms (MW-1, MW-2), bail Phase Separated Hydrocarbon (PSH) (MW-11) and alternate the SVE wells. The absorbent booms in MW-1 and MW-2 have prevented any measurable PSH from being detected in either well this year. Total PSH recovery has been about 84 gallons, since 1994, with about 10 gallons recovered this year. Well MW-11 continues to have the greatest amount of PSH accumulation. Wells MW-4, MW-6, MW-7, MW-9, and MW-10 were sampled for PAH's with all results being non-detect. Wells MW-3 and MW-12 were the only wells with any detectable BTEX concentrations in 1997. Wells MW-5 and MW-8 recorded "trace" amounts of PSH. Trace amounts are too small to be measurable or detected with an interface probe but droplets were visible on a bailer. Despite the trace PSH, the BTEX analyses for these wells were non-detect.

I do no propose any changes to the monitoring program in 1998. If you have any questions concerning the information presented in this report, or otherwise, please do not hesitate to call me at 713-241-2961.

Sincerely,

Neal Stidham
Staff Engineer
Shell Oil Products Company
Representing Shell Pipe Line Corporation

cc: Paul Newman-EOTT Energy Corp.
Jerry Sexton-OCD Hobbs

ENERCON SERVICES, INC.
An Employee Owned Company

2775 Villa Creek, Suite 120
Dallas, TX 75234
(972) 484-3854
Fax: (972) 484-8835

November 28, 1997

Mr. Neal D. Stidham
Shell Oil Products Company
Two Shell Plaza, Room 1452
777 Walker Street
Houston, Texas 77002

RE: Annual Groundwater Monitoring Report
Lea Station
Lea County, New Mexico

Mr Stidham:

Enercon Services, Inc. (Enercon) has completed the 1997 Annual Groundwater Monitoring operations at the above referenced site. The monitoring program consisted of four separate quarterly events.

The 1997 Annual Monitoring Report contains results from all four of the quarterly sampling events and includes the collection of groundwater elevation measurements from thirteen monitor wells (MW-1 thru MW-13) and two recovery wells (RW-1 and RW-2). Groundwater samples were collected from all monitor wells which did not contain measurable phase-separated hydrocarbons (PSH). Outlined in this report are the gauging, purging, and sampling operations conducted on January 22, April 10, July 16, and October 9, 1997.

Groundwater Gradient

All monitor wells were gauged in order to determine the depth to the groundwater table and the thickness of any phase-separated hydrocarbons (PSH). A summary of the groundwater elevations and PSH thicknesses is presented as Table 1. Figure 2 is a groundwater gradient map constructed from gauging data collected during the April 10, 1997 sampling event. The apparent groundwater flow direction is to the southeast and is concurrent with historical data.

PSH Recovery

Monthly visits are made to the site to perform routine maintenance on the soil vapor extraction (SVE) system in operation at the site and change absorbent booms or hand bail PSH from monitor wells MW-1, MW-2, MW-5, MW-8 and MW-11. The SVE system is extracting vapors from RW-1, RW-2 and MW-8. The SVE system became operational on August 1, 1996, and was initially extracting vapors from recovery wells RW-1 and RW-2. On April 9, 1997 monitor well MW-8 was also connected to the SVE system. Subsequent to April 9, 1997, vapor recovery has alternated from RW-1 and MW-8 and RW-2 on a monthly basis. Through August 8, 1997 approximately 248 pounds of hydrocarbon mass have been recovered by the SVE system. Absorbent booms are maintained in monitor wells indicating any measurable hydrocarbons. Approximately 84 gallons of PSH have been recovered from the site by absorbent boom or hand bailing operations in the past.

Groundwater Sampling

Monitor wells MW-4, MW-6, MW-7, MW-9 and MW-10 were sampled during each of the four (4) quarterly sampling events. Monitor wells MW-3 and MW-12 were sampled during the April and October sampling events. Monitor wells MW-5 was not sampled during the January sampling event due to measurable PSH. Monitor wells MW-8 and MW-13 were only sampled during the April sampling event.

All groundwater samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX). During the first quarterly sampling event (January 22, 1997) all samples were also analyzed for poly-aromatic hydrocarbons (PAHs). In addition, during the January sampling event each sample was analyzed in the field utilizing a Hach field test kit for dissolved oxygen (DO) concentrations. The sampling was conducted in accordance with the requirements of the NMOCD. The New Mexico Water Quality Control Commission (WQCC) regulations do not contain a groundwater standard for total petroleum hydrocarbons (TPH), therefore, this analysis was not conducted on any of the groundwater samples. Monitor wells MW-1, MW-2 and MW-11 were not sampled due to the presence of PSH.

Results of the BTEX and DO analysis are presented in Table 2. Results of the PAH analyses are presented in Table 4. Figure 1 is a map of dissolved hydrocarbon concentrations for the quarterly sampling events conducted in 1997.

Groundwater Analytical Results

BTEX concentrations for monitor wells MW-4, MW-7, and MW-9 were below laboratory method detection limits in each of the four quarters of 1997. BTEX concentrations for monitor well MW-3 ranged from 1.290 to 1.808 ppm. BTEX concentrations for monitor well MW-5 ranged from 0.008 to 0.022 ppm. BTEX concentrations for monitor well MW-6 ranged from below method detection limit to 0.013 ppm. Monitor well MW-8 recorded a BTEX concentration of 0.071 ppm in the April, 1997 sampling event. BTEX concentrations in monitor well MW-10 ranged from below method detection limits to 0.007 ppm. BTEX concentrations in monitor well MW-12 ranged from 1.157 to 1.395 ppm. Monitor well MW-13 recorded a BTEX concentration below method detection limits during the April, 1997, sampling event.

Groundwater samples from Monitor wells MW-4, MW-6, MW-7, MW-9 and MW-10 were analyzed for PAHs during the January sampling event. Analytical reports recorded PAH concentrations below method detection limits in each of the monitor wells.

ENERCON appreciates the opportunity to provide you with our professional consulting services. If you have any questions or concerns, please do not hesitate to contact us at (972) 484-3854.

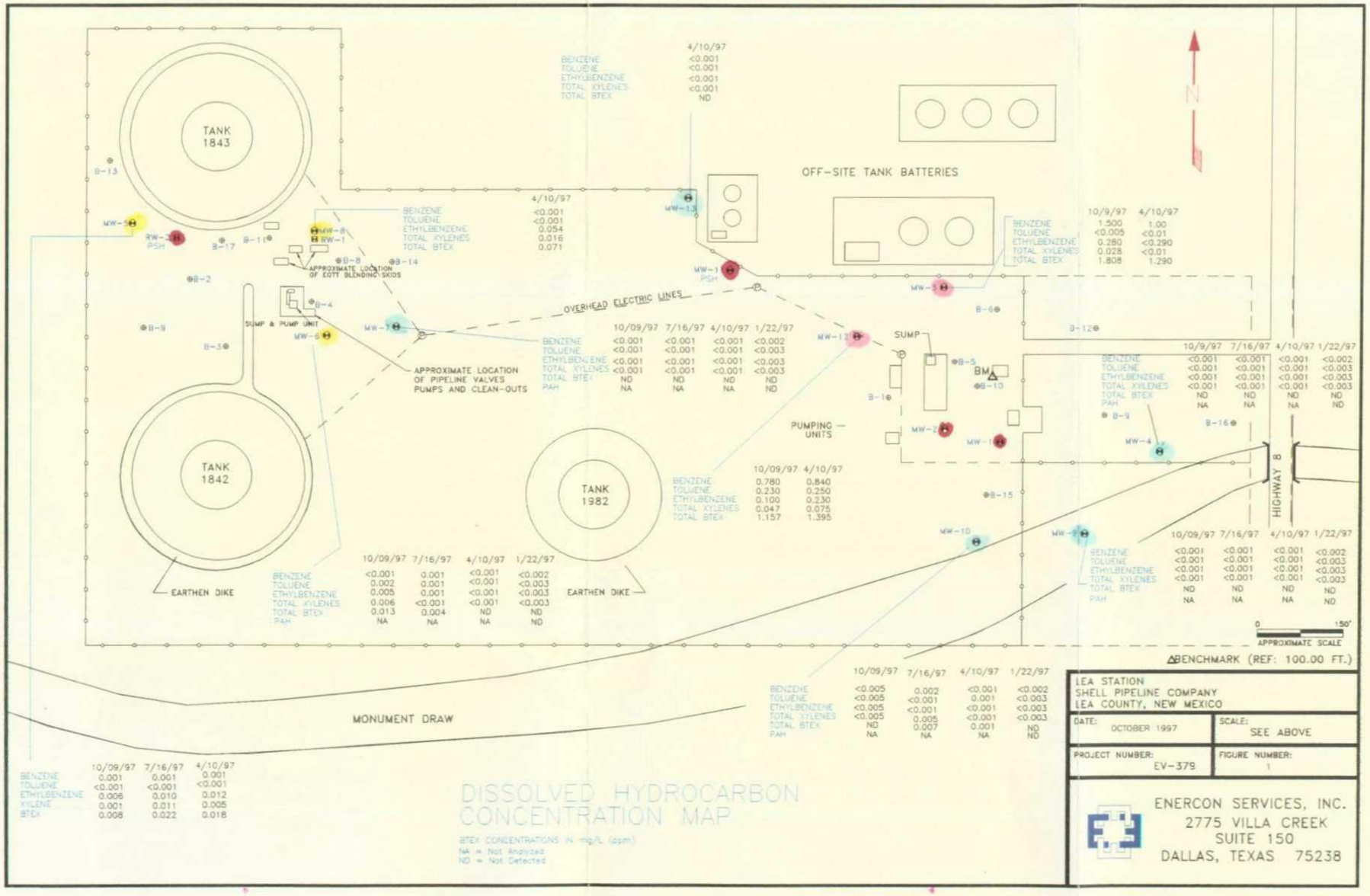
Sincerely,
Enercon Services Inc.

Steve Good
Environmental Specialist

Charles D. Harlan, C.P.G.
Project Manager

Attachments

FIGURES



	4/10/97
BENZENE	<0.001
TOLUENE	<0.001
ETHYLBENZENE	<0.001
TOTAL XYLENES	<0.001
TOTAL BTEX	ND

	4/10/97
BENZENE	<0.001
TOLUENE	<0.001
ETHYLBENZENE	0.054
TOTAL XYLENES	0.016
TOTAL BTEX	0.071

	10/9/97	4/10/97
BENZENE	1.500	1.00
TOLUENE	<0.005	<0.01
ETHYLBENZENE	0.280	<0.290
TOTAL XYLENES	0.025	<0.01
TOTAL BTEX	1.808	1.290

	10/09/97	7/16/97	4/10/97	1/22/97
BENZENE	<0.001	<0.001	<0.001	<0.002
TOLUENE	<0.001	<0.001	<0.001	<0.003
ETHYLBENZENE	<0.001	<0.001	<0.001	<0.003
TOTAL XYLENES	<0.001	<0.001	<0.001	<0.003
TOTAL BTEX	ND	ND	ND	ND
PAH	NA	NA	NA	ND

	10/09/97	7/16/97	4/10/97	1/22/97
BENZENE	<0.001	0.001	<0.001	<0.002
TOLUENE	0.002	0.001	<0.001	<0.003
ETHYLBENZENE	0.005	0.001	<0.001	<0.003
TOTAL XYLENES	0.006	<0.001	<0.001	<0.003
TOTAL BTEX	0.013	0.004	ND	ND
PAH	NA	NA	NA	ND

	10/09/97	4/10/97
BENZENE	0.780	0.840
TOLUENE	0.230	0.250
ETHYLBENZENE	0.100	0.230
TOTAL XYLENES	0.047	0.075
TOTAL BTEX	1.157	1.395

	10/09/97	7/16/97	4/10/97	1/22/97
BENZENE	<0.005	0.002	<0.001	<0.002
TOLUENE	<0.005	<0.001	0.001	<0.003
ETHYLBENZENE	<0.005	<0.001	<0.001	<0.003
TOTAL XYLENES	<0.005	0.005	<0.001	<0.003
TOTAL BTEX	ND	0.007	0.001	ND
PAH	NA	NA	NA	ND

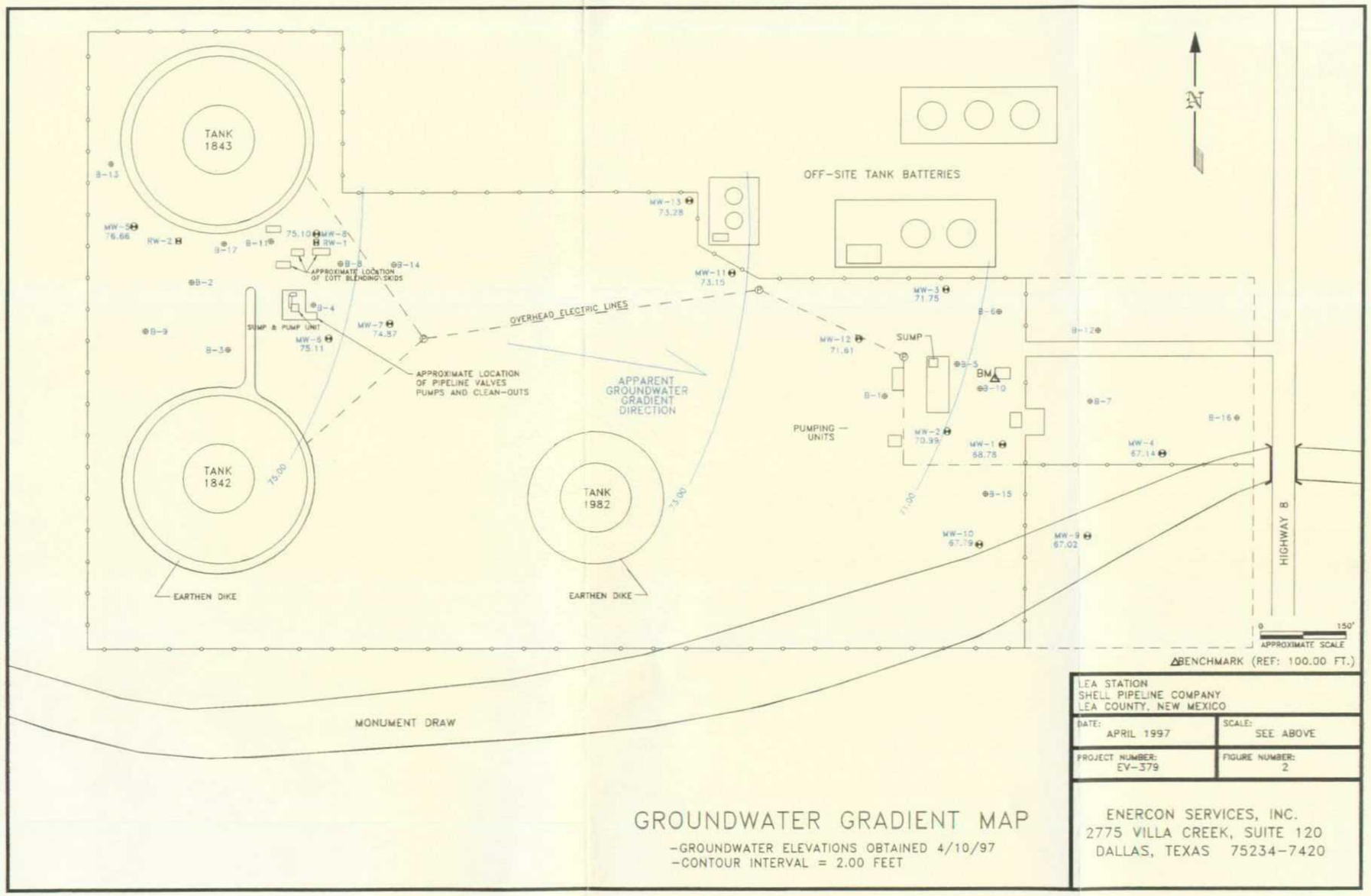
	10/09/97	7/16/97	4/10/97
BENZENE	0.001	0.001	0.001
TOLUENE	<0.001	<0.001	<0.001
ETHYLBENZENE	0.006	0.010	0.012
XYLENE	0.001	0.011	0.005
BTEX	0.008	0.022	0.018

	10/09/97	7/16/97	4/10/97	1/22/97
BENZENE	<0.001	<0.001	<0.001	<0.002
TOLUENE	<0.001	<0.001	<0.001	<0.003
ETHYLBENZENE	<0.001	<0.001	<0.001	<0.003
TOTAL XYLENES	<0.001	<0.001	<0.001	<0.003
TOTAL BTEX	ND	ND	ND	ND
PAH	NA	NA	NA	ND

LEA STATION
SHELL PIPELINE COMPANY
LEA COUNTY, NEW MEXICO

DATE:	SCALE:
OCTOBER 1997	SEE ABOVE
PROJECT NUMBER: EV-379	FIGURE NUMBER: 1

ENERCON SERVICES, INC.
2775 VILLA CREEK
SUITE 150
DALLAS, TEXAS 75238



ΔBENCHMARK (REF: 100.00 FT.)

LEA STATION
SHELL PIPELINE COMPANY
LEA COUNTY, NEW MEXICO

DATE:	SCALE:
APRIL 1997	SEE ABOVE
PROJECT NUMBER: EV-379	FIGURE NUMBER: 2

GROUNDWATER GRADIENT MAP

-GROUNDWATER ELEVATIONS OBTAINED 4/10/97
-CONTOUR INTERVAL = 2.00 FEET

ENERCON SERVICES, INC.
2775 VILLA CREEK, SUITE 120
DALLAS, TEXAS 75234-7420

TABLES

TABLE 1
LEA STATION
SUMMARY OF RELATIVE GROUNDWATER LEVEL ELEVATIONS AND PHASE-SEPARATED HYDROCARBON THICKNESSES

Monitor Well	Date Gauged	Relative Ground Surface Elevation (feet)	Relative Top of Casing Elevation (feet)*	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)**	Phase-Separated Hydrocarbon Thickness (feet)
MW-1	10/2/96	98.88	100.73	28.06	70.18	Trace
	1/21/97	98.88	100.73	32.63	68.17	0.08
	2/13/97	98.88	100.73	30.32	70.41	0.00
	3/13/97	98.88	100.73	31.10	69.63	0.00
	4/9/97	98.88	100.73	31.02	69.71	0.00
	5/7/97	98.88	100.73	30.83	69.90	0.00
	6/24/97	98.88	100.73	31.20	69.53	0.00
	7/16/97	98.88	100.73	31.14	69.59	0.00
	8/4/97	98.88	100.73	30.64	70.09	0.00
	9/1/97	98.88	100.73	30.42	70.31	0.00
	10/9/97	98.88	100.73	31.95	68.78	0.00
MW-2	10/2/96	100.78	102.37	32.71	70.18	0.58
	1/21/97	100.78	102.37	32.93	69.96	0.58
	2/13/97	100.78	102.37	31.05	71.32	0.00
	3/13/97	100.78	102.37	31.37	71.00	0.00
	4/9/97	100.78	102.37	31.24	71.13	0.00
	5/7/97	100.78	102.37	31.36	71.01	0.00
	6/24/97	100.78	102.37	31.57	70.80	0.00
	7/16/97	100.78	102.37	31.40	70.97	0.00
	8/4/97	100.78	102.37	31.05	71.32	0.00
	9/1/97	100.78	102.37	30.86	71.51	0.00
	10/9/97	100.78	102.37	31.38	70.99	0.00
MW-3	10/2/96	101.79	103.61	31.99	71.62	0.00
	1/21/97	101.79	103.61	32.20	71.41	0.00
	2/13/97	101.79	103.61	NM	NM	NM
	3/13/97	101.79	103.61	NM	NM	NM
	4/9/97	101.79	103.61	31.97	71.64	0.00
	5/7/97	101.79	103.61	NM	NM	NM
	6/24/97	101.79	103.61	NM	NM	NM
	7/16/97	101.79	103.61	32.05	71.56	0.00
	8/4/97	101.79	103.61	31.80	71.81	0.00
	9/1/97	101.79	103.61	NM	NM	NM
	10/9/97	101.79	103.61	31.86	71.75	0.00

TABLE 1
LEA STATION
SUMMARY OF RELATIVE GROUNDWATER LEVEL ELEVATIONS AND PHASE-SEPARATED HYDROCARBON THICKNESSES

Monitor Well	Date Gauged	Relative Ground Surface Elevation (feet)	Relative Top of Casing Elevation (feet)*	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)**	Phase-Separated Hydrocarbon Thickness (feet)
MW-4	10/2/96	93.80	96.08	28.06	68.02	0.00
	1/21/97	93.80	96.08	28.44	67.64	0.00
	2/13/97	93.80	96.08	NM	NM	NM
	3/13/97	93.80	96.08	NM	NM	NM
	4/9/97	93.80	96.08	28.44	67.64	0.00
	5/7/97	93.80	96.08	NM	NM	NM
	6/24/97	93.80	96.08	NM	NM	NM
	7/16/97	93.80	96.08	29.18	66.90	0.00
	8/4/97	93.80	96.08	NM	NM	0.00
	9/1/97	93.80	96.08	NM	NM	0.00
	10/9/97	93.80	96.08	28.94	67.14	0.00
MW-5	10/2/96	107.08	109.21	32.64	76.57	Trace
	1/21/97	107.08	109.21	32.31	76.94	0.04
	2/13/97	107.08	109.21	31.47	77.74	0.00
	3/13/97	107.08	109.21	32.65	76.56	0.00
	4/9/97	107.08	109.21	32.35	76.86	Trace
	5/7/97	107.08	109.21	32.71	76.50	Trace
	6/24/97	107.08	109.21	32.88	76.33	Trace
	7/16/97	107.08	109.21	32.56	76.65	Trace
	8/4/97	107.08	109.21	32.51	76.70	Trace
	9/1/97	107.08	109.21	32.14	77.07	Trace
	10/9/97	107.08	109.21	32.45	76.66	Trace
MW-6	10/2/96	103.66	106.26	31.09	75.17	0.00
	1/21/97	103.66	106.26	32.32	73.94	0.00
	2/13/97	103.66	106.26	NM	NM	NM
	3/13/97	103.66	106.26	NM	NM	NM
	4/9/97	103.66	106.26	31.12	75.14	0.00
	5/7/97	103.66	106.26	NM	NM	NM
	6/24/97	103.66	106.26	NM	NM	NM
	7/16/97	103.66	106.26	31.27	74.99	0.00
	8/4/97	103.66	106.26	NM	NM	NM
	9/1/97	103.66	106.26	NM	NM	NM
	10/9/97	103.66	106.26	31.15	75.11	0.00

TABLE 1
LEA STATION
SUMMARY OF RELATIVE GROUNDWATER LEVEL ELEVATIONS AND PHASE-SEPARATED HYDROCARBON THICKNESSES

Monitor Well	Date Gauged	Relative Ground Surface Elevation (feet)	Relative Top of Casing Elevation (feet)*	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)**	Phase-Separated Hydrocarbon Thickness (feet)
MW-7	10/2/96	104.34	106.27	31.80	74.47	0.00
	1/21/97	104.34	106.27	31.97	74.30	0.00
	2/13/97	104.34	106.27	NM	NM	NM
	3/13/97	104.34	106.27	NM	NM	NM
	4/9/97	104.34	106.27	31.75	74.52	0.00
	5/7/97	104.34	106.27	NM	NM	NM
	6/24/97	104.34	106.27	NM	NM	NM
	7/16/97	104.34	106.27	31.56	74.71	0.00
	8/4/97	104.34	106.27	NM	NM	0.00
	9/1/97	104.34	106.27	NM	NM	0.00
	10/9/97	104.34	106.27	31.40	74.87	0.00
MW-8	10/2/96	105.52	107.44	31.40	76.04	Trace
	1/21/97	105.52	107.44	32.01	75.48	0.06
	2/13/97	105.52	107.44	31.33	76.11	0.00
	3/13/97	105.52	107.44	31.61	75.83	0.00
	4/9/97	105.52	107.44	31.43	76.01	0.00
	5/7/97	105.52	107.44	32.58	74.86	Trace
	6/24/97	105.52	107.44	32.61	74.83	Trace
	7/16/97	105.52	107.44	32.49	74.95	Trace
	8/4/97	105.52	107.44	32.28	75.16	Trace
	9/1/97	105.52	107.44	31.66	75.78	Trace
	10/9/97	105.52	107.44	32.34	75.10	Trace
MW-9	10/2/96	93.76	97.21	30.16	67.05	0.00
	1/21/97	93.76	97.21	30.50	66.71	0.00
	2/13/97	93.76	97.21	NM	NM	NM
	3/13/97	93.76	97.21	NM	NM	NM
	4/9/97	93.76	97.21	30.46	66.75	0.00
	5/7/97	93.76	97.21	NM	NM	NM
	6/24/97	93.76	97.21	NM	NM	NM
	7/16/97	93.76	97.21	30.38	66.83	0.00
	8/4/97	93.76	97.21	NM	NM	0.00
	9/1/97	93.76	97.21	NM	NM	0.00
	10/9/97	93.76	97.21	30.19	67.02	0.00

TABLE 1
LEA STATION
SUMMARY OF RELATIVE GROUNDWATER LEVEL ELEVATIONS AND PHASE-SEPARATED HYDROCARBON THICKNESSES

Monitor Well	Date Gauged	Relative Ground Surface Elevation (feet)	Relative Top of Casing Elevation (feet)*	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)**	Phase-Separated Hydrocarbon Thickness (feet)
MW-10	10/2/96	99.63	102.51	34.79	67.72	0.00
	1/21/97	99.63	102.51	36.18	66.33	0.00
	2/13/97	99.63	102.51	NM	NM	NM
	3/13/97	99.63	102.51	NM	NM	NM
	4/9/97	99.63	102.51	36.10	66.41	0.00
	5/7/97	99.63	102.51	NM	NM	NM
	6/24/97	99.63	102.51	NM	NM	NM
	7/16/97	99.63	102.51	34.86	67.65	Trace
	8/4/97	99.63	102.51	NM	NM	NM
	9/1/97	99.63	102.51	NM	NM	NM
	10/9/97	99.63	102.51	34.72	67.79	0.00
MW-11	10/2/96	104.48	105.62	33.14	72.70	0.24
	1/21/97	104.48	105.62	32.41	73.47	0.29
	2/13/97	104.48	105.62	32.10	73.52	0.00
	3/13/97	104.48	105.62	32.44	73.18	0.00
	4/9/97	104.48	105.62	32.79	73.00	0.19
	5/7/97	104.48	105.62	32.54	73.46	0.42
	6/24/97	104.48	105.62	32.67	73.41	0.51
	7/16/97	104.48	105.62	32.63	73.11	0.13
	8/4/97	104.48	105.62	32.30	73.92	0.67
	9/1/97	104.48	105.62	31.72	74.38	0.53
	10/9/97	104.48	105.62	32.47	73.15	0.00
MW-12	10/2/96	NS	103.90	32.20	71.70	0.00
	1/21/97	NS	103.90	32.54	71.36	0.00
	2/13/97	NS	103.90	NM	NM	NM
	3/13/97	NS	103.90	NM	NM	NM
	4/9/97	NS	103.90	32.26	71.64	0.00
	5/7/97	NS	103.90	NM	NM	NM
	6/24/97	NS	103.90	NM	NM	NM
	7/16/97	NS	103.90	32.40	71.50	NM
	8/4/97	NS	103.90	NM	NM	NM
	9/1/97	NS	103.90	NM	NM	NM
	10/9/97	NS	103.90	32.29	71.61	0.00

TABLE 1
LEA STATION
SUMMARY OF RELATIVE GROUNDWATER LEVEL ELEVATIONS AND PHASE-SEPARATED HYDROCARBON THICKNESSES

Monitor Well	Date Gauged	Relative Ground Surface Elevation (feet)	Relative Top of Casing Elevation (feet)*	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)**	Phase-Separated Hydrocarbon Thickness (feet)
MW-13	10/2/96	NS	103.89	31.21	72.68	0.00
	1/21/97	NS	103.89	30.28	73.61	0.00
	2/13/97	NS	103.89	NM	NM	NM
	3/13/97	NS	103.89	NM	NM	NM
	4/9/97	NS	103.89	30.03	73.86	0.00
	5/7/97	NS	103.89	NM	NM	NM
	6/24/97	NS	103.89	NM	NM	NM
	7/16/97	NS	103.89	30.78	73.11	0.00
	8/4/97	NS	103.89	NM	NM	NM
	9/1/97	NS	103.89	NM	NM	NM
	10/9/97	NS	103.89	30.61	73.28	0.00
RW-1	10/2/96	NS	NS	NM	NM	NM
	1/21/97	NS	NS	NM	NM	NM
	2/13/97	NS	NS	NM	NM	NM
	3/13/97	NS	NS	28.61	NS	0.00
	4/9/97	NS	NS	NM	NM	NM
	5/7/97	NS	NS	NM	NM	NM
	6/24/97	NS	NS	NM	NM	NM
	7/16/97	NS	NS	NM	NM	NM
RW-2	10/2/96	NS	NS	NM	NM	NM
	1/21/97	NS	NS	NM	NM	NM
	2/13/97	NS	NS	NM	NM	NM
	3/13/97	NS	NS	27.35	NS	0.00
	4/9/97	NS	NS	NM	NM	NM
	5/7/97	NS	NS	NM	NM	NM
	6/24/97	NS	NS	NM	NM	NM
	7/16/97	NS	NS	NM	NM	NM

* Measured from a relative datum (benchmark = 100.00 feet).

** Correction equation for Phase-Separated Hydrocarbons: Corrected Groundwater Elevation = Top of Casing Elevation - (Depth to Water Below Top of Casing - [SG] [PSH Thickness]).

Specific Gravity (SG) = 0.9 for crude oil.

NS - Not Surveyed

NM - Not Monitored

TABLE 2
LEA STATION
WATER SAMPLE ANALYTICAL RESULTS

Monitor Well	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	Total BTEX	Dissolved Oxygen
MW-1	10/2/96	0.290	<0.003	0.120	<0.003	0.410	ND
	1/22/97	PSH	PSH	PSH	PSH	PSH	NS
	4/10/97	NS	NS	NS	NS	NS	NS
	7/16/97	NS	NS	NS	NS	NS	NS
	10/9/97	NS	NS	NS	NS	NS	NS
MW-2	10/2/96	PSH	PSH	PSH	PSH	PSH	NS
	1/22/97	PSH	PSH	PSH	PSH	PSH	NS
	4/10/97	NS	NS	NS	NS	NS	NS
	7/16/97	NS	NS	NS	NS	NS	NS
	10/9/97	NS	NS	NS	NS	NS	NS
MW-3	10/2/96	1.900	<0.15	0.320	<0.15	2.220	ND
	1/22/97	NS	NS	NS	NS	NS	NS
	4/10/97	1.000	<0.01	0.290	<0.01	1.290	NS
	7/16/97	NS	NS	NS	NS	NS	NS
	10/9/97	1.500	<0.005	0.280	0.028	1.808	NS
MW-4	10/2/96	<0.002	<0.003	<0.003	<0.003	BDL	1.3
	1/22/97	<0.002	<0.003	<0.003	<0.003	BDL	2.5
	4/10/97	<0.001	<0.001	<0.001	<0.001	BDL	NS
	7/16/97	<0.001	<0.001	<0.001	<0.001	BDL	NS
	10/9/97	<0.001	<0.001	<0.001	<0.001	BDL	NS
MW-5	10/2/96	0.002	<0.003	0.010	0.006	0.018	ND
	1/22/97	PSH	PSH	PSH	PSH	PSH	NS
	4/10/97	0.001	<0.001	0.012	0.005	0.018	NS
	7/16/97	0.001	<0.001	0.010	0.011	0.022	NS
	10/9/97	0.001	<0.001	0.006	0.001	0.008	NS
MW-6	10/2/96	<0.002	<0.003	<0.003	<0.003	BDL	3.9
	1/22/97	<0.002	<0.003	<0.003	<0.003	BDL	0.6
	4/10/97	<0.001	<0.001	<0.001	<0.001	BDL	NS
	7/16/97	0.001	0.001	0.001	<0.001	0.003	NS
	10/9/97	<0.001	0.002	0.005	0.006	0.013	NS
MW-7	10/2/96	<0.002	<0.003	<0.003	<0.003	BDL	6.4
	1/22/97	<0.002	<0.003	<0.003	<0.003	BDL	1.0
	4/10/97	<0.001	<0.001	<0.001	<0.001	BDL	NS
	7/16/97	<0.001	<0.001	<0.001	<0.001	BDL	NS
	10/9/97	<0.001	<0.001	<0.001	<0.001	BDL	NS
MW-8	10/2/96	0.003	0.007	0.082	0.052	0.144	ND
	1/22/97	PSH	PSH	PSH	PSH	PSH	NS
	4/10/97	<0.001	0.001	0.054	0.016	0.071	NS
	7/16/97	NS	NS	NS	NS	NS	NS
	10/9/97	NS	NS	NS	NS	NS	NS
MW-9	10/2/96	<0.002	<0.003	<0.003	<0.003	BDL	2.3
	1/22/97	<0.002	<0.003	<0.003	<0.003	BDL	1.4
	4/10/97	<0.001	<0.001	<0.001	<0.001	BDL	NS
	7/16/97	<0.001	<0.001	<0.001	<0.001	BDL	NS
	10/9/97	<0.001	<0.001	<0.001	<0.001	BDL	NS

TABLE 2
LEA STATION
WATER SAMPLE ANALYTICAL RESULTS

Monitor Well	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylenes	Total BTEX	Dissolved Oxygen
MW-10	10/2/96	<0.002	<0.003	<0.003	0.007	0.007	1.7
	1/22/97	<0.002	<0.003	<0.003	<0.003	BDL	ND
	4/10/97	<0.001	0.001	<0.001	<0.001	0.001	NS
	7/16/97	0.002	<0.001	<0.001	0.005	0.007	NS
	10/9/97	<0.005	<0.005	<0.005	<0.005	BDL	NS
MW-11	10/2/96	PSH	PSH	PSH	PSH	PSH	NS
	1/22/97	PSH	PSH	PSH	PSH	PSH	NS
	4/10/97	PSH	PSH	PSH	PSH	PSH	NS
	7/16/97	PSH	PSH	PSH	PSH	PSH	NS
	10/9/97	NS	NS	NS	NS	NS	NS
MW-12	10/2/96	0.680	0.180	0.280	0.100	1.240	ND
	1/22/97	NS	NS	NS	NS	NS	NS
	4/10/97	0.840	0.250	0.230	0.075	1.395	NS
	7/16/97	NS	NS	NS	NS	NS	NS
	10/9/97	0.780	0.230	0.100	0.047	1.157	NS
MW-13	10/2/96	<0.002	<0.003	<0.003	<0.003	BDL	3.05
	1/22/97	NS	NS	NS	NS	NS	NS
	4/10/97	<0.001	<0.001	<0.001	<0.001	BDL	NS
	7/16/97	NS	NS	NS	NS	NS	NS
	10/9/97	NS	NS	NS	NS	NS	NS

A total dissolved solids (TDS) concentration of 2,380 ppm was reported for MW-1 in December 1992.

A total dissolved solids (TDS) concentration of 2,500 ppm was reported for MW-6 in February 1993.

A total dissolved solids (TDS) concentration of 2,130 ppm was reported for MW-9 in August 1993.

BTEX and DO results listed in mg/l (parts per million; ppm) with method detection limits listed on the certificate of anlaysis.

Analysis were conducted using EPA Method 8020 or EPA Method 8240 (BTEX).

NS - Not Sampled.

TABLE 3
LEA STATION
PHASE-SEPARATED HYDROCARBON RECOVERY

Monitor Well	Date	PSH Thickness (feet)	PSH Recovery (gallons)	Cumulative PSH Recovery (gallons)	Type of Recovery
MW-1	10/2/96	Trace	0.22	11.26	Absorption Boom
	1/21/97	0.08	0.43	11.69	Absorption Boom
	2/13/97	0.00	0.11	11.80	Absorption Boom
	3/13/97	0.00	0.21	12.01	Absorption Boom
	4/9/97	0.00	0.00	12.01	Absorption Boom
	5/7/97	0.00	0.08	12.09	Absorption Boom
	6/24/97	0.00	0.04	12.13	Absorption Boom
	7/16/97	0.00	0.25	12.38	Absorption Boom
	8/4/97	0.00	0.05	12.43	Absorption Boom
	9/1/97	Trace	0.21	12.64	Absorption Boom
	10/9/97	0.00	0.21	12.85	Absorption Boom
MW-2	10/2/96	0.58	0.33	8.78	Absorption Boom
	1/21/97	0.58	0.43	9.21	Absorption Boom
	2/13/97	0.00	0.16	9.37	Absorption Boom
	3/13/97	0.00	0.16	9.53	Absorption Boom
	4/9/97	0.00	0.00	9.53	Absorption Boom
	5/7/97	0.00	0.08	9.61	Absorption Boom
	6/24/97	0.00	0.04	9.65	Absorption Boom
	7/16/97	0.00	0.25	9.90	Absorption Boom
	8/4/97	0.00	0.05	9.95	Absorption Boom
	9/1/97	Trace	0.14	10.09	Absorption Boom
	10/9/97	0.00	0.11	10.20	Absorption Boom
MW-5	10/2/96	Trace	0.05	6.57	Absorption Boom
	1/21/97	0.04	0.85	7.42	Absorption Boom
	2/13/97	0.00	0.16	7.58	Absorption Boom
	3/13/97	0.00	0.76	8.34	Absorption Boom
	4/9/97	0.00	0.00	8.34	Absorption Boom
	5/7/97	Trace	0.08	8.42	Absorption Boom
	6/24/97	Trace	0.08	8.51	Absorption Boom
	7/16/97	Trace	0.08	8.59	Absorption Boom
	8/4/97	Trace	0.03	8.62	Absorption Boom
	9/1/97	Trace	0.08	8.70	Absorption Boom
	10/9/97	0.00	0.00	8.70	Absorption Boom

TABLE 3
LEA STATION
PHASE-SEPARATED HYDROCARBON RECOVERY

Monitor Well	Date	PSH Thickness (feet)	PSH Recovery (gallons)	Cumulative PSH Recovery (gallons)	Type of Recovery
MW-8	10/2/96	Trace	0.16	32.90	Absorption Boom
	1/21/97	0.06	0.85	33.75	Absorption Boom
	2/13/97	0.00	0.16	33.91	Absorption Boom
	3/13/97	0.00	0.27	34.18	Absorption Boom
	4/9/97	0.00	0.00	34.18	Absorption Boom
	5/7/97	Trace	0.08	34.26	Absorption Boom
	6/24/97	Trace	0.08	34.35	Absorption Boom
	7/16/97	Trace	0.08	34.43	Absorption Boom
	8/4/97	Trace	0.08	34.51	Absorption Boom
	9/1/97	Trace	0.16	34.67	Absorption Boom
	10/9/97	Trace	0.00	34.67	Absorption Boom
MW-11	10/2/96	0.24	0.98	14.79	Absorption Boom
	1/21/97	0.29	0.85	15.64	Absorption Boom
	2/13/97	0.00	0.22	15.86	Absorption Boom
	3/13/97	0.00	0.22	16.08	Absorption Boom
	4/9/97	0.19	0.76	16.84	Absorption Boom
	5/7/97	0.42	0.12	16.96	Absorption Boom
	6/24/97	0.51	0.12	17.09	Absorption Boom
	7/16/97	0.13	0.12	17.21	Absorption Boom
	8/4/97	0.67	0.16	17.27	Absorption Boom
	9/1/97	0.53	0.22	17.49	Absorption Boom
	10/9/97	0.00	0.00	17.49	Absorption Boom
RW-1	10/2/96				No Boom
	1/21/97				No Boom
	2/13/97				No Boom
	3/13/97	0.00			No Boom
	4/9/97				No Boom
	5/7/97				No Boom
	6/24/97				No Boom
	7/16/97				No Boom
RW-2	10/2/96				No Boom
	1/21/97				No Boom
	2/13/97				No Boom
	3/13/97	0.00			No Boom
	4/9/97				No Boom
	5/7/97				No Boom
	6/24/97				No Boom
	7/16/97				No Boom

Total cumulative recovery as of 10/09/97 = 83.91 gallons

Started SVE system on August 1, 1996. No booms installed in RW-1 and RW-2 while the SVE system is running.

Connected MW-8 to SVE system on 4/09/97.

TABLE 4
LEA STATION
PAH ANALYTICAL RESULTS

Monitor Well	Date Sampled	1-Methylnapthalene	2-Methylnapthalene	Napthalene	Benzo-a-pyrene
MW-4	2/8/96 1/21/97	ND ND	ND ND	ND ND	ND ND
MW-6	2/8/96 1/21/97	ND ND	ND ND	ND ND	ND ND
MW-7	2/8/96 1/21/97	ND ND	ND ND	ND ND	ND ND
MW-9	2/8/96 1/21/97	ND ND	ND ND	ND ND	ND ND
MW-10	2/8/96 1/21/97	ND ND	ND ND	ND ND	ND ND

2/8/96 Analyses were conducted using EPA Method 8310 by SPL.
1/21/97 Analyses were conducted using EPA Method 8310. Napthalene, 1-Methylnapthalene and 2-Methylnapthalene detection limit 2.0 μg/L; ppb. Benzo(a)pyrene detection limit 0.02 μg/L; ppb.
ND - None Detected.

LABORATORY REPORTS

RECRA
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Virtual Laboratories Everywhere

March 11, 1997

Mr. Charles Harlan
Enercon Services, Inc.
1221 River Bend, Suite 259
Dallas, TX 75247

RE: Shell Pipeline Corporation - Lea and Denton Stations (EV-378 & EV-379)
Analytical Results Resubmission. Recra Work Orders: H97-0276 & H97-0279

Dear Mr. Harlan,

Please find enclosed revised analytical data packages for samples collected at Shell Pipeline Corporation's Lea and Denton Stations in January 1997. Per Mr. Neal Stidham's request, the analytical data sheets have been arranged on a per sample basis, and the PAHs list has been modified to comply with New Mexico's water standards.

Should you have any questions or comments, or should you require additional information, please contact me at (713) 266-6800.

Respectfully submitted,
RECRA LabNet-Houston

Gerardo Uría

J. Gerardo Uría
Project Manager

JGU/:learesub.wpd
Enclosure

cc: Neal Stidham - SPLC

Report
Prepared
for

ENERCON SERVICES, INC.
1221 River Bend, Suite 259
Dallas, Texas 75247

Attention: Charles Harlan

by

RECRA LabNet - Houston
8300 Westpark Drive
Houston, Texas 77063
(713) 266-6800

Certified by: Gerardo Uría

J. Gerardo Uría
Project Manager

Project ID : Shell Pipeline Corp Lea Station (EV-379)
P.O. Number :NA

Work Order : H97-0276
Date Received : 24-Jan-1997

REVISED
03/10/97

A RECRA Environmental Company

Date: 02/10/97
Time: 11:27

Shell Pipeline Corporation
SHELL PIPELINE CORPORATION
SAMPLE DESCRIPTION INFORMATION

Lab Sample ID	Client Sample ID	Laboratory Job Number	Sample Type	Matrix	Sample Date	Receive Date
H7027606	BLANK SPIKE	H97-0276	MSB	Aqueous	22-Jan-97	24-Jan-97
H7027607	BLANK SPIKE DUP	H97-0276	MSBD	Aqueous	22-Jan-97	24-Jan-97
H7027608	METHOD BLANK	H97-0276	MBLK	Aqueous	22-Jan-97	24-Jan-97
H7027605	MW-10	H97-0276	FS	Aqueous	22-Jan-97	24-Jan-97
H7027603	MW-4	H97-0276	FS	Aqueous	22-Jan-97	24-Jan-97
H7027601	MW-6	H97-0276	FS	Aqueous	22-Jan-97	24-Jan-97
H7027602	MW-7	H97-0276	FS	Aqueous	22-Jan-97	24-Jan-9[illegible]
H7027604	MW-9	H97-0276	FS	Aqueous	22-Jan-97	24-Jan-[illegible]

Sample ID: MW-4
Lab ID: H7027603
Date Collected: 01/22/97
Time Collected: 10:30

Date Received: 01/24/97
Project No: TX6A6130
Client No: L80036
P.O. No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
AQUEOUS-SW8463 8020 - BTEX							
Benzene	<2.0	U	2.0	UG/L	8020	01/27/9718:50	MS
Toluene	<3.0	U	3.0	UG/L	8020	01/27/9718:50	MS
Ethylbenzene	<3.0	U	3.0	UG/L	8020	01/27/9718:50	MS
Total Xylenes	<3.0	U	3.0	UG/L	8020	01/27/9718:50	MS
AQUEOUS-SW8463 8310 - PAHS BY METHOD 8310							
Benzo(a)pyrene	<0.0200	U	0.0200	UG/L	8310	01/29/9715:10	AY
Naphthalene	<2.00	U	2.00	UG/L	8310	01/29/9715:10	AY
1-Methylnapthalene	<2.00	U	2.00	UG/L	8310	01/29/9715:10	AY
2-Methylnaphthalene	<2.00	U	2.00	UG/L	8310	01/29/9715:10	AY

Shell Pipeline Corporation
[redacted]ll Pipeline / Enercon Services (Water Samp[redacted]
Sa[redacted]e Summary Excluding Internal Standards/Surrogates
Recra LabNet

Sample ID: MW-6
Lab ID: H7027601
Date Collected: 01/22/97
Time Collected: 09:30

Date Received: 01/24/97
Project No: TX6A6130
Client No: L80036
P.O. No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
AQUEOUS-SW8463 8020 - BTEX							
Benzene	<2.0	U	2.0	UG/L	8020	01/28/9719:41	MS
Toluene	<3.0	U	3.0	UG/L	8020	01/28/9719:41	MS
Ethylbenzene	<3.0	U	3.0	UG/L	8020	01/28/9719:41	MS
Total Xylenes	<3.0	U	3.0	UG/L	8020	01/28/9719:41	MS
AQUEOUS-SW8463 8310 - PAHS BY METHOD 8310							
Benzo(a)pyrene	<0.0200	U	0.0200	UG/L	8310	01/29/9713:51	AY
Naphthalene	<2.00	U	2.00	UG/L	8310	01/29/9713:51	AY
1-Methylnapthalene	<2.00	U	2.00	UG/L	8310	01/29/9713:51	AY
2-Methylnaphthalene	<2.00	U	2.00	UG/L	8310	01/29/9713:51	AY

Sample ID: MW-7
Lab ID: H7027602
Date Collected: 01/22/97
Time Collected: 10:00

Date Received: 01/24/97
Project No: TX6A6130
Client No: L80036
P.O. No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
AQUEOUS-SW8463 8020 - BTEX							
Benzene	<2.0	U	2.0	UG/L	8020	01/27/9718:15	MS
Toluene	<3.0	U	3.0	UG/L	8020	01/27/9718:15	MS
Ethylbenzene	<3.0	U	3.0	UG/L	8020	01/27/9718:15	MS
Total Xylenes	<3.0	U	3.0	UG/L	8020	01/27/9718:15	MS
AQUEOUS-SW8463 8310 - PAHS BY METHOD 8310							
Benzo(a)pyrene	<0.0200	U	0.0200	UG/L	8310	01/29/9714:31	AY
Naphthalene	<2.00	U	2.00	UG/L	8310	01/29/9714:31	AY
1-Methylnapthalene	<2.00	U	2.00	UG/L	8310	01/29/9714:31	AY
2-Methylnaphthalene	<2.00	U	2.00	UG/L	8310	01/29/9714:31	AY

Sample ID: MW-9
Lab ID: H7027604
Date Collected: 01/22/97
Time Collected: 11:00

Date Received: 01/24/97
Project No: TX6A6130
Client No: L80036
P.O. No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
AQUEOUS-SW8463 8020 - BTEX							
Benzene	<2.0	U	2.0	UG/L	8020	01/28/9720:16	MS
Toluene	<3.0	U	3.0	UG/L	8020	01/28/9720:16	MS
Ethylbenzene	<3.0	U	3.0	UG/L	8020	01/28/9720:16	MS
Total Xylenes	<3.0	U	3.0	UG/L	8020	01/28/9720:16	MS
AQUEOUS-SW8463 8310 - PAHS BY METHOD 8310							
Benzo(a)pyrene	<0.0200	U	0.0200	UG/L	8310	01/29/9715:50	AY
Naphthalene	<2.00	U	2.00	UG/L	8310	01/29/9715:50	AY
1-Methylnapthalene	<2.00	U	2.00	UG/L	8310	01/29/9715:50	AY
2-Methylnaphthalene	<2.00	U	2.00	UG/L	8310	01/29/9715:50	AY

Sample ID: MW-10
Lab ID: H7027605
Date Collected: 01/22/97
Time Collected: 11:30

Date Received: 01/24/97
Project No: TX6A6130
Client No: L80036
P.O. No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
AQUEOUS-SW8463 8020 - BTEX							
Benzene	<2.0	U	2.0	UG/L	8020	01/29/9719:40	MS
Toluene	<3.0	U	3.0	UG/L	8020	01/29/9719:40	MS
Ethylbenzene	<3.0	U	3.0	UG/L	8020	01/29/9719:40	MS
Total Xylenes	<3.0	U	3.0	UG/L	8020	01/29/9719:40	MS
AQUEOUS-SW8463 8310 - PAHS BY METHOD 8310							
Benzo(a)pyrene	<0.0200	U	0.0200	UG/L	8310	01/29/9716:30	AY
Naphthalene	<2.00	U	2.00	UG/L	8310	01/29/9716:30	AY
1-Methylnapthalene	<2.00	U	2.00	UG/L	8310	01/29/9716:30	AY
2-Methylnaphthalene	<2.00	U	2.00	UG/L	8310	01/29/9716:30	AY

Sample ID: METHOD BLANK
Lab ID: H7027608
Date Collected: 01/22/97
Time Collected: 09:30

Date Received: 01/24/97
Project No: TX6A6130
Client No: L80036
P.O. No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
AQUEOUS-SW8463 8020 - BTEX							
Benzene	<2.0	U	2.0	UG/L	8020	01/27/9711:42	MS
Toluene	<3.0	U	3.0	UG/L	8020	01/27/9711:42	MS
Ethylbenzene	<3.0	U	3.0	UG/L	8020	01/27/9711:42	MS
Total Xylenes	<3.0	U	3.0	UG/L	8020	01/27/9711:42	MS
AQUEOUS-SW8463 8310 - PAHS BY METHOD 8310							
Benzo(a)pyrene	<0.0200	U	0.0200	UG/L	8310	01/29/9713:11	AY
Naphthalene	<2.00	U	2.00	UG/L	8310	01/29/9713:11	AY
1-Methylnapthalene	<2.00	U	2.00	UG/L	8310	01/29/9713:11	AY
2-Methylnaphthalene	<2.00	U	2.00	UG/L	8310	01/29/9713:11	AY

Sample ID: BLANK SPIKE
Lab ID: H7027606
Date Collected: 01/22/97
Time Collected: 09:30

Date Received: 01/24/97
Project No: TX6A6130
Client No: L80036
P.O. No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
AQUEOUS-SW8463 8020 - BTEX							
Benzene	40		2.0	UG/L	8020	01/27/9705:23	MS
Toluene	39		3.0	UG/L	8020	01/27/9705:23	MS
Ethylbenzene	40		3.0	UG/L	8020	01/27/9705:23	MS
Total Xylenes	125		3.0	UG/L	8020	01/27/9705:23	MS
AQUEOUS-SW8463 8310 - PAHS BY METHOD 8310							
Acenaphthene	15.0		2.00	UG/L	8310	01/29/9717:10	AY
Acenaphthylene	14.0		2.00	UG/L	8310	01/29/9717:10	AY
Anthracene	17.0		0.100	UG/L	8310	01/29/9717:10	AY
Benzo(a)anthracene	15.0		0.0200	UG/L	8310	01/29/9717:10	AY
Benzo(a)pyrene	15.0		0.0200	UG/L	8310	01/29/9717:10	AY
Benzo(b)fluoranthene	14.0		0.0200	UG/L	8310	01/29/9717:10	AY
Benzo(ghi)perylene	14.0		0.0500	UG/L	8310	01/29/9717:10	AY
Chrysene	15.0		0.150	UG/L	8310	01/29/9717:10	AY
Benzo(k)fluoranthene	14.0		0.0200	UG/L	8310	01/29/9717:10	AY
Dibenzo(a,h)anthracene	11.0		0.0300	UG/L	8310	01/29/9717:10	AY
Fluoranthene	17.0		0.200	UG/L	8310	01/29/9717:10	AY
Fluorene	15.0		0.200	UG/L	8310	01/29/9717:10	AY
Indeno(1,2,3-cd)pyrene	13.0		0.0500	UG/L	8310	01/29/9717:10	AY
Naphthalene	18.0		2.00	UG/L	8310	01/29/9717:10	AY
Phenanthrene	17.0		0.500	UG/L	8310	01/29/9717:10	AY
Pyrene	15.0		0.200	UG/L	8310	01/29/9717:10	AY

Sample ID: BLANK SPIKE DUP
Lab ID: H7027607
Date Collected: 01/22/97
Time Collected: 09:30

Date Received: 01/24/97
Project No: TX6A6130
Client No: L80036
P.O. No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
AQUEOUS-SW8463 8310 - PAHS BY METHOD 8310							
Acenaphthene	17.0		2.00	UG/L	8310	01/29/9717:50	AY
Acenaphthylene	16.0		2.00	UG/L	8310	01/29/9717:50	AY
Anthracene	19.0		0.100	UG/L	8310	01/29/9717:50	AY
Benzo(a)anthracene	18.0		0.0200	UG/L	8310	01/29/9717:50	AY
Benzo(a)pyrene	19.0		0.0200	UG/L	8310	01/29/9717:50	AY
Benzo(b)fluoranthene	17.0		0.0200	UG/L	8310	01/29/9717:50	AY
Benzo(ghi)perylene	18.0		0.0500	UG/L	8310	01/29/9717:50	AY
Chrysene	18.0		0.150	UG/L	8310	01/29/9717:50	AY
Benzo(k)fluoranthene	18.0		0.0200	UG/L	8310	01/29/9717:50	AY
Dibenzo(a,h)anthracene	15.0		0.0300	UG/L	8310	01/29/9717:50	AY
Fluoranthene	19.0		0.200	UG/L	8310	01/29/9717:50	AY
Fluorene	17.0		0.200	UG/L	8310	01/29/9717:50	AY
Indeno(1,2,3-cd)pyrene	17.0		0.0500	UG/L	8310	01/29/9717:50	AY
Naphthalene	19.0		2.00	UG/L	8310	01/29/9717:50	AY
Phenanthrene	20.0		0.500	UG/L	8310	01/29/9717:50	AY
Pyrene	18.0		0.200	UG/L	8310	01/29/9717:50	AY

RECRA LabNet-Houston

LABORATORY QA/QC DATA

A RECRA Environmental Company

SHELL PIPELINE CORPORATION
SHELL PIPELINE CORPORATION
AQUEOUS- 8310 - PAHS
WATER SURROGATE RECOVERY

Laboratory: Recra LabNet - RECTX
Lab Job No: H97-0276
SDG No: EV-379

Client Sample ID	Lab Sample ID	S1 DFBP #
BLANK SPIKE	H7027606	71
BLANK SPIKE DUP	H7027607	66
METHOD BLANK	H7027608	54
MW-10	H7027605	87
MW-4	H7027603	83
MW-6	H7027601	79
MW-7	H7027602	61
MW-9	H7027604	92

QC Limits

S1 DFBP = Decafluorobiphenyl (35 - 115)

\# Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

SHELL PIPELINE CORPORATION
SHELL PIPELINE CORPORATION
METHOD 8020 - BTEX
WATER SURROGATE RECOVERY

Laboratory: Recra LabNet
Lab Job No: H97-0276
SDG No: EV-379

- RECTX

Client Sample ID	Lab Sample ID	S1 TFT #
BLANK SPIKE	H7027606	80
METHOD BLANK	H7027608	98
MW-10	H7027605	84
MW-4	H7027603	82
MW-6	H7027601	86
MW-7	H7027602	86
MW-9	H7027604	100

QC Limits

S1 TFT = a,a,a-Trifluorotoluene (66 - 131)

\# Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

SDG: EV-379
Client Sample ID: METHOD BLANK BLANK SPIKE
Lab Sample ID: H7027608 H7027606

Analyte	Units of Measure	Concentration Blank Spike	Concentration Spike Amount	% Recovery Blank Spike	QC LIMITS
METHOD 8020 - BTEX					
Benzene	UG/L	40	40	100	73-123
Ethylbenzene	UG/L	40	40	100	72-124
Toluene	UG/L	39	40	98	69-127
Total Xylenes	UG/L	125	120	104	70-130

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Calculated

Date : 02/04/97 14:50
Job No: H97-0276

SHELL PIPELINE CORPORATION
SHELL PIPELINE CORPORATION
SAMPLE DATE 01/22/97

Rept: AN0364

SDG: EV-379

Client Sample ID: METHOD BLANK	BLANK SPIKE	BLANK SPIKE DUP
Lab Sample ID: H7027608	H7027606	H7027607

Analyte	Units of Measure	Concentration		Spike Amount		% Recovery			% RPD	QC LIMITS	
		Spike Blank	Spike Blank Dup	SB	SBD	SB	SBD	Avg		RPD	REC.
AQUEOUS- 8310 - PAHS											
Naphthalene	UG/L	18.0	19.0	20.0	20.0	90	95	93	5	35.0	32-120
Acenaphthylene	UG/L	14.0	16.0	20.0	20.0	70	80	75	13	35.0	32-120
Acenaphthene	UG/L	15.0	17.0	20.0	20.0	75	85	80	12	35.0	32-120
Fluorene	UG/L	15.0	17.0	20.0	20.0	75	85	80	12	35.0	32-120
Phenanthrene	UG/L	17.0	20.0	20.0	20.0	85	100	93	16	35.0	32-120
Anthracene	UG/L	17.0	19.0	20.0	20.0	85	95	90	11	35.0	32-120
Fluoranthene	UG/L	17.0	19.0	20.0	20.0	85	95	90	11	35.0	32-120
Pyrene	UG/L	15.0	18.0	20.0	20.0	75	90	83	18	35.0	32-120
Benzo(a)anthracene	UG/L	15.0	18.0	20.0	20.0	75	90	83	18	35.0	32-120
Chrysene	UG/L	15.0	18.0	20.0	20.0	75	90	83	18	35.0	32-120
Benzo(b)fluoranthene	UG/L	14.0	17.0	20.0	20.0	70	85	78	19	35.0	32-120
Benzo(k)fluoranthene	UG/L	14.0	18.0	20.0	20.0	70	90	80	25	35.0	32-120
Benzo(a)pyrene	UG/L	15.0	19.0	20.0	20.0	75	95	85	24	35.0	32-120
Dibenzo(a,h)anthracene	UG/L	11.0	15.0	20.0	20.0	55	75	65	31	35.0	32-120
Benzo(ghi)perylene	UG/L	14.0	18.0	20.0	20.0	70	90	80	25	35.0	32-120
Indeno(1,2,3-cd)pyrene	UG/L	13.0	17.0	20.0	20.0	65	85	75	27	35.0	32-120

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Calculated

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING

CHAIN OF CUSTODY RECORD NO. H 19305

Date: 1-23-97
Page 1 of 1

SITE ADDRESS: LEA STATION
EV-
Proj # EV-379
CONSULTANT NAME & ADDRESS: ENERCON SERVICES
1221 River Bend, Ste. 259, Dallas TX 75247
CONSULTANT CONTACT: Charles Harlan
PHONE (214) 631-7693 FAX: (214) 631-7699
SAMPLED BY: Bill D. Smith

CHECK ONE BOX ONLY CT/DT

- QUARTERLY MONITORING ☒ 5461
- SITE INVESTIGATION ☐ 5441
- SOIL FOR DISPOSAL ☐ 5442
- WATER FOR DISPOSAL ☐ 5443
- AIR SAMPLER - SYS O+M ☐ 5452
- WATER SAMPLE - SYS O+M ☐ 5453
- OTHER ☐

SAMPLE I D	DATE	TIME	COMP	GRAB	MATRIX: H2O	SOIL	AIR	SLUDGE	OTHER	METHOD PRESERVED: HCl	HNO3	H2SO4	NONE	OTHER: ICE	NO. OF CONTAINERS	CONTAINER SIZE	BTEX 602 ☐ / BTEX/GAS WITH MTBE 8020 ☒	BTEX/GAS HYDROCARBONS PID/FID WITH MTBE ☐	VOL 624/PPL ☐ / 8240/TAL ☐	NBS (+15) ☐	PNA/PAH 8310 ☒	8100 ☐ / 610 ☐	SEMI - VOL 625/PPL ☐ / 8270/TAL ☐	NBS (+25) ☐	TPH/IR 418.1 ☐	SM503 ☐	TPHGC 8015 Mod. GAS ☐	8015 Mod DIESEL ☐	TCLP METALS ☐	VOL ☐	SEMI-VOL ☐	PEST ☐	HERB ☐	EP TOX METALS ☐	PESTICIDES ☐	HERBICIDES ☐	REACTIVITY ☐	CORROSIVITY ☐	IGNITABILITY ☐	OTHER	REMARKS
MW-6	1-22-97	0930		✓	✓					✓				✓	2	40 ml	✓																							
MW-7	1-22-97	1000		✓	✓					✓				✓	2	40 ml	✓																							
MW-4	1-22-97	1030		✓	✓					✓				✓	2	40 ml	✓																							
MW-9	1-22-97	1100		✓	✓					✓				✓	2	40 ml	✓																							
MW-10	1-22-97	1130		✓	✓					✓				✓	2	40 ml	✓																							
MW-6	1-22-97	0930		✓	✓									✓	1	1 l					✓																		
MW-7	1-22-97	1000		✓	✓									✓	1	1 l					✓																		
MW-4	1-22-97	1030		✓	✓									✓	1	1 l					✓																		
MW-9	1-22-97	1100		✓	✓									✓	1	1 l					✓																		
MW-10	1-22-97	1130		✓	✓									✓	1	1 l					✓																		
SVE-EFF	1-22-97	1200		✓			✓							✓	1		✓										✓												

Chester LabNet-Houston
Lab ID # H97-00176
COC ✓
pH +
Temperature 4°C
Date 1/24/97
Initials DM

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
Bill D. Smith	1-23-97	1130	D. Mahmud	1/24/97	1:32
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

BILL NO.:
LABORATORY:
SHELL CONTACT: PHONE: FAX:

TURN AROUND TIME (CHECK ONE)
7 DAYS ☒ 14 DAYS ☐
48 HOURS ☐ OTHER ☐

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN OF CUSTODY WITH INVOICE AND RESULTS

DISTRIBUTION: PINK Sampling Coordinator - WHITE & YELLOW Accompanies Shipment - WHITE Returned with Report

Certificate of Analysis No. H9-9704616-01

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.# MESA-CAO-B-131201-PX-4204-NS
DATE: 12/01/97

PROJECT: Lea Station
SITE: New Mexico
SAMPLED BY: Enercon Services Inc.
SAMPLE ID: MW-3

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 04/10/97 12:10:00
DATE RECEIVED: 04/12/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	1000	10 P	µg/L
TOLUENE	ND	10 P	µg/L
ETHYLBENZENE	290	10 P	µg/L
TOTAL XYLENE	ND	10 P	µg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	1290		µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	100
4-Bromofluorobenzene	103

Method 8020A ***
Analyzed by: RL
Date: 04/14/97

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL, Inc., - Project Manager

Certificate of Analysis No. H9-9704616-02

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.# MESA-CAO-B-131201-PX-4204-NS
DATE: 12/01/97

PROJECT: Lea Station
SITE: New Mexico
SAMPLED BY: Enercon Services Inc.
SAMPLE ID: MW-4

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 04/09/97 12:00:00
DATE RECEIVED: 04/12/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	µg/L
TOLUENE	ND	1.0 P	µg/L
ETHYLBENZENE	ND	1.0 P	µg/L
TOTAL XYLENE	ND	1.0 P	µg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	100
4-Bromofluorobenzene	100

Method 8020A ***
Analyzed by: RL
Date: 04/14/97

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL, Inc., - Project Manager

Certificate of Analysis No. H9-9704616-03

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.# MESA-CAO-B-131201-PX-4204-NS
DATE: 12/01/97

PROJECT: Lea Station
SITE: New Mexico
SAMPLED BY: Enercon Services Inc.
SAMPLE ID: MW-5

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 04/10/97 14:45:00
DATE RECEIVED: 04/12/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	1.6	1.0 P	µg/L
TOLUENE	ND	1.0 P	µg/L
ETHYLBENZENE	12	1.0 P	µg/L
TOTAL XYLENE	5.2	1.0 P	µg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	18.8		µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	100
4-Bromofluorobenzene	113

Method 8020A ***
Analyzed by: RL
Date: 04/14/97

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

Charlotte G. Sin

SPL, Inc., - Project Manager

Certificate of Analysis No. H9-9704616-04

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.# MESA-CAO-B-131201-PX-4204-NS
DATE: 12/01/97

PROJECT: Lea Station
SITE: New Mexico
SAMPLED BY: Enercon Services Inc.
SAMPLE ID: MW-6

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 04/10/97 14:00:00
DATE RECEIVED: 04/12/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	µg/L
TOLUENE	ND	1.0 P	µg/L
ETHYLBENZENE	ND	1.0 P	µg/L
TOTAL XYLENE	ND	1.0 P	µg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	100
4-Bromofluorobenzene	93

Method 8020A ***
Analyzed by: RL
Date: 04/13/97

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

Charlotte G. Hill
SPL, Inc., - Project Manager

Certificate of Analysis No. H9-9704616-05

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.#
MESA-CAO-B-131201-PX-4204-NS
DATE: 12/01/97

PROJECT: Lea Station
SITE: New Mexico
SAMPLED BY: Enercon Services Inc.
SAMPLE ID: MW-7

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 04/10/97 14:15:00
DATE RECEIVED: 04/12/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	µg/L
TOLUENE	ND	1.0 P	µg/L
ETHYLBENZENE	ND	1.0 P	µg/L
TOTAL XYLENE	ND	1.0 P	µg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	100
4-Bromofluorobenzene	100

Method 8020A ***
Analyzed by: RL
Date: 04/13/97

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL, Inc., - Project Manager

Certificate of Analysis No. H9-9704616-06

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.#
MESA-CAO-B-131201-PX-4204-NS
DATE: 12/01/97

PROJECT: Lea Station
SITE: New Mexico
SAMPLED BY: Enercon Services Inc.
SAMPLE ID: MW-8

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 04/10/97 14:20:00
DATE RECEIVED: 04/12/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	µg/L
TOLUENE	1.2	1.0 P	µg/L
ETHYLBENZENE	54	1.0 P	µg/L
TOTAL XYLENE	16	1.0 P	µg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	71.2		µg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	97		
4-Bromofluorobenzene	113		

Method 8020A ***
Analyzed by: RL
Date: 04/14/97

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL, Inc., - Project Manager

Certificate of Analysis No. H9-9704616-07

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.#
MESA-CAO-B-131201-PX-4204-NS
DATE: 12/01/97

PROJECT: Lea Station
SITE: New Mexico
SAMPLED BY: Enercon Services Inc.
SAMPLE ID: MW-9

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 04/09/97 12:20:00
DATE RECEIVED: 04/12/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	µg/L
TOLUENE	ND	1.0 P	µg/L
ETHYLBENZENE	ND	1.0 P	µg/L
TOTAL XYLENE	ND	1.0 P	µg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		µg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	90		
4-Bromofluorobenzene	83		

Method 8020A ***
Analyzed by: JN
Date: 04/13/97

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL, Inc., - Project Manager

Certificate of Analysis No. H9-9704616-08

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.# MESA-CAO-B-131201-PX-4204-NS
DATE: 12/01/97

PROJECT: Lea Station
SITE: New Mexico
SAMPLED BY: Enercon Services Inc.
SAMPLE ID: MW-10

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 04/09/97 12:40:00
DATE RECEIVED: 04/12/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	µg/L
TOLUENE	1.3	1.0 P	µg/L
ETHYLBENZENE	ND	1.0 P	µg/L
TOTAL XYLENE	ND	1.0 P	µg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	1.3		µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	100
4-Bromofluorobenzene	117

Method 8020A ***
Analyzed by: RL
Date: 04/14/97

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL, Inc., - Project Manager

Certificate of Analysis No. R9-9704616-09

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.# MESA-CAO-B-131201-PX-4204-NS
DATE: 12/01/97

PROJECT: Lea Station
SITE: New Mexico
SAMPLED BY: Enercon Services Inc.
SAMPLE ID: MW-12

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 04/10/97 12:30:00
DATE RECEIVED: 04/12/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	840	5.0 P	µg/L
TOLUENE	250	5.0 P	µg/L
ETHYLBENZENE	230	5.0 P	µg/L
TOTAL XYLENE	75	5.0 P	µg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	1395		µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	100
4-Bromofluorobenzene	107

Method 8020A ***
Analyzed by: RL
Date: 04/14/97

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

Bernadette A. Fini
SPL, Inc., - Project Manager

Certificate of Analysis No. H9-9704616-10

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.# MESA-CAO-B-131201-PX-4204-NS
DATE: 12/01/97

PROJECT: Lea Station
SITE: New Mexico
SAMPLED BY: Enercon Services Inc.
SAMPLE ID: MW-13

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 04/10/97 12:40:00
DATE RECEIVED: 04/12/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	µg/L
TOLUENE	ND	1.0 P	µg/L
ETHYLBENZENE	ND	1.0 P	µg/L
TOTAL XYLENE	ND	1.0 P	µg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	100
4-Bromofluorobenzene	97

Method 8020A ***
Analyzed by: RL
Date: 04/13/97

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL, Inc., - Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

August 1, 1997

Mr. Neal Stidham
SHELL PIPE LINE CORPORATION
P. O. Box 2648
Houston, Texas 77252

The following report contains analytical results for samples received at Southern Petroleum Laboratories (SPL) on July 18, 1997. The samples were assigned to Certificate of Analysis No(s).9707843 and analyzed for the parameters specified on the chain of custody.

There were no analytical problems encountered with this group of samples and all quality control data was within acceptance limits.

If you have any questions or comments pertaining to this data report, please do not hesitate to contact me. Please reference the above Certificate of Analysis Number(s) during any inquiries.

Again, SPL is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Southern Petroleum Laboratories

Bernadette A. Fini
Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

SOUTHERN PETROLEUM LABORATORIES, INC.

Certificate of Analysis Number: 97-07-843

Approved for Release by:

Bernadette A. Fini, Project Manager

Date: 8-1-97

Greg Grandits
Laboratory Director

Idelis Williams
Quality Assurance Officer

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

****SUMMARY REPORT*****

08/01/97

Company: Shell Pipe Line Corporation
Site: New Mexico
Project No: EV-379
Project: Shell Pipeline

ANALYTICAL DATA
NOTE: ND - Not Detected

SPL ID MATRIX	CLIENT ID DATE SAMPLED	BENZENE PQL	TOLUENE PQL	ETHYLBENZ. PQL	XYLENE PQL	TPH-IR	TPH-GC	LEAD	MTBE
9707843-01 WATER	MW-4 07/16/97 11:15:00	ND 1.0µg/L	ND 1.0µg/L	ND 1.0µg/L	ND 1.0µg/L				
9707843-02 WATER	MW-5 07/16/97 13:20:00	1.9 1.0µg/L	ND 1.0µg/L	10 1.0µg/L	11 1.0µg/L				
9707843-03 WATER	MW-6 07/16/97 12:45:00	1.9 1.0µg/L	1.2 1.0µg/L	1.7 1.0µg/L	ND 1.0µg/L				
9707843-04 WATER	MW-7 07/16/97 12:15:00	ND 1.0µg/L	ND 1.0µg/L	ND 1.0µg/L	ND 1.0µg/L				
9707843-05 WATER	MW-9 07/16/97 11:45:00	ND 1.0µg/L	ND 1.0µg/L	ND 1.0µg/L	ND 1.0µg/L				
9707843-06 WATER	MW-10 07/16/97 12:00:00	2.4 1.0µg/L	ND 1.0µg/L	ND 1.0µg/L	5.3 1.0µg/L				

BTEX - Method 8020A ***

Bernadette A. Irwin
SPL, Inc., - Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

Certificate of Analysis No. H9-9707843-01

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.#
MESA-CAO-B-131201-PX-4204-NS
DATE: 08/01/97

PROJECT: Shell Pipeline
SITE: New Mexico
SAMPLED BY: Enercon
SAMPLE ID: MW-4

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 07/16/97 11:15:00
DATE RECEIVED: 07/18/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	µg/L
TOLUENE	ND	1.0 P	µg/L
ETHYLBENZENE	ND	1.0 P	µg/L
TOTAL XYLENE	ND	1.0 P	µg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	93
4-Bromofluorobenzene	100

Method 8020A ***
Analyzed by: VHZ
Date: 07/28/97

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

Bernadette A. Fini

SPL, Inc., - Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

Certificate of Analysis No. H9-9707843-02

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.# MESA-CAO-B-131201-PX-4204-NS
DATE: 08/01/97

PROJECT: Shell Pipeline
SITE: New Mexico
SAMPLED BY: Enercon
SAMPLE ID: MW-5

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 07/16/97 13:20:00
DATE RECEIVED: 07/18/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	1.9	1.0 P	µg/L
TOLUENE	ND	1.0 P	µg/L
ETHYLBENZENE	10	1.0 P	µg/L
TOTAL XYLENE	11	1.0 P	µg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	22.9		µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	100
4-Bromofluorobenzene	117

Method 8020A ***
Analyzed by: VHZ
Date: 07/28/97

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

Brenda G. Sims

SPL, Inc., - Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

Certificate of Analysis No. H9-9707843-03

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.# MESA-CAO-B-131201-PX-4204-NS
DATE: 08/01/97

PROJECT: Shell Pipeline
SITE: New Mexico
SAMPLED BY: Enercon
SAMPLE ID: MW-6

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 07/16/97 12:45:00
DATE RECEIVED: 07/18/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	1.9	1.0 P	µg/L
TOLUENE	1.2	1.0 P	µg/L
ETHYLBENZENE	1.7	1.0 P	µg/L
TOTAL XYLENE	ND	1.0 P	µg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	4.8		µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	120
4-Bromofluorobenzene	123

Method 8020A ***
Analyzed by: LJ
Date: 07/29/97

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL, Inc., - Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

Certificate of Analysis No. H9-9707843-04

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.# MESA-CAO-B-131201-PX-4204-NS
DATE: 08/01/97

PROJECT: Shell Pipeline
SITE: New Mexico
SAMPLED BY: Enercon
SAMPLE ID: MW-7

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 07/16/97 12:15:00
DATE RECEIVED: 07/18/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	µg/L
TOLUENE	ND	1.0 P	µg/L
ETHYLBENZENE	ND	1.0 P	µg/L
TOTAL XYLENE	ND	1.0 P	µg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	97
4-Bromofluorobenzene	103

Method 8020A ***
Analyzed by: VHZ
Date: 07/28/97

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL, Inc., - Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

Certificate of Analysis No. H9-9707843-05

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.# MESA-CAO-B-131201-PX-4204-NS
DATE: 08/01/97

PROJECT: Shell Pipeline
SITE: New Mexico
SAMPLED BY: Enercon
SAMPLE ID: MW-9

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 07/16/97 11:45:00
DATE RECEIVED: 07/18/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	µg/L
TOLUENE	ND	1.0 P	µg/L
ETHYLBENZENE	ND	1.0 P	µg/L
TOTAL XYLENE	ND	1.0 P	µg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	97
4-Bromofluorobenzene	100

Method 8020A ***
Analyzed by: VHZ
Date: 07/28/97

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL, Inc., - Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

Certificate of Analysis No. H9-9707843-06

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.#
MESA-CAO-B-131201-PX-4204-NS
DATE: 08/01/97

PROJECT: Shell Pipeline
SITE: New Mexico
SAMPLED BY: Enercon
SAMPLE ID: MW-10

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 07/16/97 12:00:00
DATE RECEIVED: 07/18/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	2.4	1.0 P	µg/L
TOLUENE	ND	1.0 P	µg/L
ETHYLBENZENE	ND	1.0 P	µg/L
TOTAL XYLENE	5.3	1.0 P	µg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	7.7		µg/L

Surrogate	**% Recovery**
1,4-Difluorobenzene	110
4-Bromofluorobenzene	110

Method 8020A ***
Analyzed by: VHZ
Date: 07/29/97

(P) - Practical Quantitation Limit   ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL, Inc., - Project Manager

QUALITY CONTROL

DOCUMENTATION

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

** SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020/602

Matrix: Aqueous
Units: µg/L

Batch Id: HP_X970727213500

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
MTBE	ND	50	33	66.0	63 - 120
Benzene	ND	50	32	64.0	62 - 121
Toluene	ND	50	41	82.0	66 - 136
EthylBenzene	ND	50	44	88.0	70 - 136
O Xylene	ND	50	43	86.0	74 - 134
M & P Xylene	ND	100	85	85.0	77 - 140

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
MTBE	ND	20	17	85.0	15	75.0	12.5	20	39 - 150
BENZENE	ND	20	16	80.0	13	65.0	20.7	25	39 - 150
TOLUENE	ND	20	17	85.0	14	70.0	19.4	26	56 - 134
ETHYLBENZENE	ND	20	18	90.0	14	70.0	25.0	38	61 - 128
O XYLENE	ND	20	17	85.0	13	65.0	26.7	29	40 - 130
M & P XYLENE	ND	40	35	87.5	27	67.5	25.8 *	20	43 - 152

Analyst: VHZ
Sequence Date: 07/27/97
SPL ID of sample spiked: 9707A44-08A
Sample File ID: X_G7656.TXO
Method Blank File ID:
Blank Spike File ID: X_G7651.TXO
Matrix Spike File ID: X_G7683.TXO
Matrix Spike Duplicate File ID: X_G7684.TXO

* = Values Outside QC Range. « = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical Data (3rd Q '95)
(***) = Source: SPL-Houston Historical Data (2nd Q '95)

SAMPLES IN BATCH(SPL ID): 9707A44-09A 9707B97-02A 9707C52-02A 9707C52-01A 9707C54-01A 9707843-01A 9707A44-01A 9707843-02A 9707843-04A 9707843-05A 9707867-01A 9707867-06A 9707867-03A 9707867-04A 9707867-05A 9707B97-03A 9707A44-08A 9707B97-01A

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

** SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020/602

Matrix: Aqueous
Units: µg/L

Batch Id: HP_X970729155000

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
MTBE	ND	50	36	72.0	63 - 120
Benzene	ND	50	34	68.0	62 - 121
Toluene	ND	50	44	88.0	66 - 136
EthylBenzene	ND	50	48	96.0	70 - 136
O Xylene	ND	50	46	92.0	74 - 134
M & P Xylene	ND	100	91	91.0	77 - 140

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
MTBE	ND	20	17	85.0	18	90.0	5.71	20	39 - 150
BENZENE	ND	20	15	75.0	16	80.0	6.45	25	39 - 150
TOLUENE	ND	20	17	85.0	19	95.0	11.1	26	56 - 134
ETHYLBENZENE	ND	20	18	90.0	19	95.0	5.41	38	61 - 128
O XYLENE	ND	20	17	85.0	18	90.0	5.71	29	40 - 130
M & P XYLENE	ND	40	34	85.0	38	95.0	11.1	20	43 - 152

Analyst: LJ
Sequence Date: 07/29/97
SPL ID of sample spiked: 9707970-01A
Sample File ID: X_G7722.TXO
Method Blank File ID:
Blank Spike File ID: X_G7717.TXO
Matrix Spike File ID: X_G7718.TXO
Matrix Spike Duplicate File ID: X_G7719.TXO

* = Values Outside QC Range. « = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical Data (3rd Q '95)
(***) = Source: SPL-Houston Historical Data (2nd Q '95)

SAMPLES IN BATCH(SPL ID): 9707916-09A 9707970-01A 9707843-03A 9707B51-09A

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

** SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020/602

Matrix: Aqueous
Units: µg/L

Batch Id: HP_X970728170100

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
MTBE	ND	50	35	70.0	63 - 120
Benzene	ND	50	34	68.0	62 - 121
Toluene	ND	50	44	88.0	66 - 136
EthylBenzene	ND	50	46	92.0	70 - 136
O Xylene	ND	50	45	90.0	74 - 134
M & P Xylene	ND	100	90	90.0	77 - 140

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
MTBE	1900	20.0	1800	NC	1800	NC	NC	20	39 - 150
BENZENE	ND	20.0	17	85.0	19	95.0	11.1	25	39 - 150
TOLUENE	ND	20.0	18	90.0	21	105	15.4	26	56 - 134
ETHYLBENZENE	ND	20.0	18	90.0	21	105	15.4	38	61 - 128
O XYLENE	ND	20.0	17	85.0	20	100	16.2	29	40 - 130
M & P XYLENE	ND	40.0	35	87.5	40	100	13.3	20	43 - 152

Analyst: VHZ
Sequence Date: 07/29/97
SPL ID of sample spiked: 9707931-04A
Sample File ID: X_G7709.TXO
Method Blank File ID:
Blank Spike File ID: X_G7714.TXO
Matrix Spike File ID: X_G7710.TXO
Matrix Spike Duplicate File ID: X_G7711.TXO

* = Values Outside QC Range. « = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical Data (3rd Q '95)
(***) = Source: SPL-Houston Historical Data (2nd Q '95)

SAMPLES IN BATCH(SPL ID):

9707909-07A	9707909-08A	9707843-06A	9707909-09A
9707909-10A	9707886-02A	9707886-01A	9707931-01A
9707931-02A	9707931-03A	9707931-04A	9707931-07A
9707909-01A	9707909-05A	9707909-02A	9707909-03A
9707909-04A	9707909-06A		

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 9707843

13085

page 1 of 1

Client Name: ENERCON SERVICES, INC.

Address/Phone: 2775 Villa Creek, Ste. 120, Dallas TX 75234

Client Contact: Charles Harlan

Project Name: Shell Apollo - Lea Station

Project Number: EV-379

Project Location: New Mexico

Invoice To:

SAMPLE ID	DATE	TIME	comp	grab	matrix (W=water S=soil SL=sludge O=other:)	bottle (P=plastic A=amber glass G=glass V=vial)	size (1=1 liter 4=4oz 40=vial 8=8oz 16=16oz)	pres. (1=HCl 2=HNO3 3=H2SO4 O=other:)	Number of Containers	Requested Analysis: BTEX (8020)
MW-4	7-16-97	1115		✓	W	✓	40	1	3	✓
MW-5	7-16-97	1320		✓	W	✓	40	1	3	✓
MW-6	7-16-97	1245		✓	W	✓	40	1	3	✓
MW-7	7-16-97	1215		✓	W	✓	40	1	3	✓
MW-9	7-16-97	1145		✓	W	✓	40	1	3	✓
MW-10	7-16-97	1200		✓	W	✓	40	1	3	✓

Client/Consultant Remarks:

FAX results to (972)484-8935

Laboratory remarks:

FED EX: 449577054

Intact? ☒ Y ☐ N

Temp: 3°C

Requested TAT

24hr ☐ 72hr ☐

48hr ☐ Standard ☐

Other ☐ _____

Special Reporting Requirements: Fax Results ☒ Raw Data ☐ Standard QC ☐ Level 3 QC ☐ Level 4 QC ☐

Special Detection Limits (specify):

PM review (initial):

	date	time	
1. Relinquished by Sampler: Bill D. Smith	7-17-97	1045	2. Received by: Milton Stuart 7/18/97 1000
3. Relinquished by:	date	time	4. Received by:
5. Relinquished by:	date	time	6. Received by Laboratory:

☐ 8880 Interchange Drive, Houston, TX 77054 (713) 660-0901

☐ 459 Hughes Drive, Traverse City, MI 49684 (616) 947-5777

☐ 500 Ambassador Caffery Parkway, Scott, LA 70583 (318) 237-4775

☐ 1511 E. Orangethorpe Avenue, Fullerton, CA 92631 (714) 447-6868

SPL Houston Environmental Laboratory

Sample Login Checklist

Date: 7/18/97	Time: 1000

SPL Sample ID: 9707843

			Yes	No
1	Chain-of-Custody (COC) form is present.		✓	
2	COC is properly completed.		✓	
3	If no, Non-Conformance Worksheet has been completed.			
4	Custody seals are present on the shipping container.		✓	
5	If yes, custody seals are intact.		✓	
6	All samples are tagged or labeled.		✓	
7	If no, Non-Conformance Worksheet has been completed.			
8	Sample containers arrived intact		✓	
9	Temperature of samples upon arrival:		3° C	
10	Method of sample delivery to SPL:	SPL Delivery		
		Client Delivery		
		FedEx Delivery (airbill #)	499577054	
		Other:		
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name: Alberto Salas	Date: 7/18/97

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

October 29, 1997

Mr. Neal Stidman
Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252

The following report contains analytical results for samples received at Southern Petroleum Laboratories (SPL) on October 15, 1997. The samples were assigned to Certificate of Analysis No.(s) 9710737 and analyzed for all parameters as listed on the chain of custody.

There were no analytical problems encountered with this group of samples and all quality control data was within acceptance limits.

If you have any questions or comments pertaining to this data report, please do not hesitate to contact me. Please reference the above Certificate of Analysis No. during any inquiries.

Again, SPL is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Southern Petroleum Laboratories

Bernedette A Fini
Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

SOUTHERN PETROLEUM LABORATORIES, INC.

Certificate of Analysis Number: 97-10-737

Approved for Release by:

Bernadette A. Fini, Project Manager

Date: 10-29-97

Greg Grandits
Laboratory Director

Idelis Williams
Quality Assurance Officer

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9710737-01

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.# MESA-CAO-B-131201-PX-4204-NS
10/29/97

PROJECT: Shell Pipeline-Lea Station
SITE: New Mexico
SAMPLED BY: Enercon Services, Inc.
SAMPLE ID: MW-3

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 10/11/97 17:15:00
DATE RECEIVED: 10/15/97

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Benzene	1500	50	ug/L
Ethylbenzene	280	50	ug/L
Toluene	ND	5	ug/L
Xylenes (total)	28	5	ug/L

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	102	76	114
Toluene-d8	50 ug/L	102	88	110
4-Bromofluorobenzene	50 ug/L	108	86	115

ANALYZED BY: JC
DATE/TIME: 10/17/97 03:24:00
METHOD: 8240, Volatile Organics - Water
NOTES: * - Practical Quantitation Limit ND - Not Detected
NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL, Inc., - Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9710737-02

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.# MESA-CAO-B-131201-PX-4204-NS
DATE: 10/29/97

PROJECT: Shell Pipeline-Lea Station
SITE: New Mexico
SAMPLED BY: Enercon Services, Inc.
SAMPLE ID: MW-4

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 10/11/97 16:45:00
DATE RECEIVED: 10/15/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	µg/L
TOLUENE	ND	1.0 P	µg/L
ETHYLBENZENE	ND	1.0 P	µg/L
TOTAL XYLENE	ND	1.0 P	µg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	97
4-Bromofluorobenzene	97

Method 8020A ***
Analyzed by: RL
Date: 10/17/97

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL, Inc., - Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9710737-03

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.# MESA-CAO-B-131201-PX-4204-NS
DATE: 10/29/97

PROJECT: Shell Pipeline-Lea Station
SITE: New Mexico
SAMPLED BY: Enercon Services, Inc.
SAMPLE ID: MW-5

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 10/11/97 18:05:00
DATE RECEIVED: 10/15/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	1.3	1.0 P	µg/L
TOLUENE	ND	1.0 P	µg/L
ETHYLBENZENE	5.9	1.0 P	µg/L
TOTAL XYLENE	1.3	1.0 P	µg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	8.5		µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	97
4-Bromofluorobenzene	93

Method 8020A ***
Analyzed by: RL
Date: 10/17/97

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL, Inc., - Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9710737-04

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.# MESA-CAO-B-131201-PX-4204-NS
DATE: 10/29/97

PROJECT: Shell Pipeline-Lea Station
SITE: New Mexico
SAMPLED BY: Enercon Services, Inc.
SAMPLE ID: MW-6

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 10/11/97 17:30:00
DATE RECEIVED: 10/15/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	µg/L
TOLUENE	1.5	1.0 P	µg/L
ETHYLBENZENE	4.9	1.0 P	µg/L
TOTAL XYLENE	5.7	1.0 P	µg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	12.1		µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	93
4-Bromofluorobenzene	100

Method 8020A ***
Analyzed by: RL
Date: 10/16/97

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL, Inc., - Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9710737-05

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.# MESA-CAO-B-131201-PX-4204-NS
DATE: 10/29/97

PROJECT: Shell Pipeline-Lea Station
SITE: New Mexico
SAMPLED BY: Enercon Services, Inc.
SAMPLE ID: MW-7

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 10/11/97 17:40:00
DATE RECEIVED: 10/15/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	µg/L
TOLUENE	ND	1.0 P	µg/L
ETHYLBENZENE	ND	1.0 P	µg/L
TOTAL XYLENE	ND	1.0 P	µg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	93
4-Bromofluorobenzene	93

Method 8020A ***
Analyzed by: RL
Date: 10/16/97

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL, Inc., - Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9710737-06

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.# MESA-CAO-B-131201-PX-4204-NS
DATE: 10/29/97

PROJECT: Shell Pipeline-Lea Station
SITE: New Mexico
SAMPLED BY: Enercon Services, Inc.
SAMPLE ID: MW-9

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 10/11/97 17:05:00
DATE RECEIVED: 10/15/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	µg/L
TOLUENE	ND	1.0 P	µg/L
ETHYLBENZENE	ND	1.0 P	µg/L
TOTAL XYLENE	ND	1.0 P	µg/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		µg/L

Surrogate	% Recovery
1,4-Difluorobenzene	93
4-Bromofluorobenzene	100

Method 8020A ***
Analyzed by: RL
Date: 10/17/97

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL, Inc., - Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9710737-07

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.# MESA-CAO-B-131201-PX-4204-NS
10/29/97

PROJECT: Shell Pipeline-Lea Station
SITE: New Mexico
SAMPLED BY: Enercon Services, Inc.
SAMPLE ID: MW-10

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 10/11/97 17:00:00
DATE RECEIVED: 10/15/97

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Benzene	ND	5	ug/L
Ethylbenzene	ND	5	ug/L
Toluene	ND	5	ug/L
Xylenes (total)	ND	5	ug/L

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	98	76	114
Toluene-d8	50 ug/L	106	88	110
4-Bromofluorobenzene	50 ug/L	110	86	115

ANALYZED BY: JC
DATE/TIME: 10/17/97 03:49:00
METHOD: 8240, Volatile Organics - Water
NOTES: * - Practical Quantitation Limit
ND - Not Detected
NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL, Inc., - Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9710737-08

Shell Pipe Line Corporation
P.O. Box 2648
Houston, TX 77252
ATTN: Neal Stidham

P.O.# MESA-CAO-B-131201-PX-4204-NS
10/29/97

PROJECT: Shell Pipeline-Lea Station
SITE: New Mexico
SAMPLED BY: Enercon Services, Inc.
SAMPLE ID: MW-12

PROJECT NO: EV-379
MATRIX: WATER
DATE SAMPLED: 10/11/97 17:50:00
DATE RECEIVED: 10/15/97

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Benzene	780	50	ug/L
Ethylbenzene	230	50	ug/L
Toluene	100	5	ug/L
Xylenes (total)	47	5	ug/L

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1,2-Dichloroethane-d4	50 ug/L	102	76	114
Toluene-d8	50 ug/L	108	88	110
4-Bromofluorobenzene	50 ug/L	108	86	115

ANALYZED BY: JC
DATE/TIME: 10/17/97 04:14:00
METHOD: 8240, Volatile Organics - Water
NOTES: * - Practical Quantitation Limit
ND - Not Detected
NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL, Inc., - Project Manager

QUALITY CONTROL

DOCUMENTATION

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPL Contract:

Lab Code: Case No.: 9710738 SAS No.: SDG No.:

Matrix Spike - EPA Sample No.: MW-13

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50	0	55	110	61-145
Trichloroethene	50	0	60	120	71-120
Benzene	50	12	73	122	76-127
Toluene	50	0	60	120	76-125
Chlorobenzene	50	0	58	116	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50	56	112	2	14	61-145
Trichloroethene	50	57	114	5	14	71-120
Benzene	50	74	124	2	11	76-127
Toluene	50	59	118	2	13	76-125
Chlorobenzene	50	58	116	0	13	75-130

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

* Values outside of QC limits

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

SPL Labs

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: LCS
Level: LOW
Data Type: MS DATA
SpikeList File: 8260_water.spk
Method File: /chem/n.i/n971016.b/n8260wq.m
Misc Info: N289W1//N289CW2

Client SDG: n971016
Fraction: VOA
Operator: JC
SampleType: METHSPIKE
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
8	1,1-Dichloroethene	50	55	110.27	61-145
29	Trichloroethene	50	56	112.62	71-120
25	Benzene	50	59	117.31	76-127
37	Toluene	50	56	111.90	76-125
45	Chlorobenzene	50	57	114.32	75-130

	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 21	1,2-Dichloroethane	50	50	101.10	76-114
$ 36	Toluene-d8	50	51	102.95	88-110
$ 56	Bromofluorobenzene	50	54	107.94	86-115

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

SPL Blank QC Report

Matrix: Aqueous
Sample ID: VLBLK
Batch: N971016122720

Reported on: 10/20/97 14:02
Analyzed on: 10/16/97 21:54
Analyst: JC

METHOD 8260/8240 N289B01

Compound	Result	Detection Limit	Units
Benzene	ND	5	ug/L
Toluene	ND	5	ug/L
Ethylbenzene	ND	5	ug/L
Xylene (Total)	ND	5	ug/L

Surrogate	Result	QC Criteria	Units
1,2-Dichloroethane-d4	102	76-114	% Recovery
Toluene-d8	106	88-110	% Recovery
Bromofluorobenzene	108	86-115	% Recovery

Samples in Batch 9710737-01 9710737-07 9710737-08

Notes

ND - Not detected.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020***

Matrix: Aqueous
Units: µg/L

Batch Id: VARD971016014900

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Benzene	ND	50	44	88.0	61 - 119
Toluene	ND	50	52	104	65 - 125
EthylBenzene	ND	50	47	94.0	70 - 118
O Xylene	ND	50	48	96.0	72 - 117
M & P Xylene	ND	100	97	97.0	72 - 116

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
BENZENE	1.0	20	20	95.0	21	100	5.13	21	32 - 164
TOLUENE	ND	20	19	95.0	19	95.0	0	20	38 - 159
ETHYLBENZENE	ND	20	20	100	19	95.0	5.13	19	52 - 142
O XYLENE	ND	20	19	95.0	19	95.0	0	18	53 - 143
M & P XYLENE	ND	40	40	100	38	95.0	5.13	17	53 - 144

Analyst: RL
Sequence Date: 10/16/97
SPL ID of sample spiked: 9710769-01A
Sample File ID: D_J7443.TX0
Method Blank File ID:
Blank Spike File ID: D_J7439.TX0
Matrix Spike File ID: D_J7440.TX0
Matrix Spike Duplicate File ID: D_J7441.TX0

* = Values Outside QC Range. « = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical Data (1st Q '97)
(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID): 9710769-04A 9710769-04A 9710737-04A 9710737-05A 9710731-01A 9710737-02A 9710737-03A 9710737-06A 9710769-01A

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

R

9710737

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING

CHAIN OF CUSTODY RECORD NO. H 22434

Date: 10-13-97
Page 1 **of** 1

SITE ADDRESS: Shell Pipe Line
Lea Station
~~WIC~~ Proj. #: EV-379
CONSULTANT NAME & ADDRESS: ENERLON SERVICES, INC. 2775 Villa Creek, Ste 120. Dallas TX 75234
CONSULTANT CONTACT: Charles Harlan
PHONE: (972) 484-3854 FAX: (972) 484-8835
SAMPLED BY: Bill D. Smith

CHECK ONE BOX ONLY CT/DT

- QUARTERLY MONITORING ☐ 5461
- SITE INVESTIGATION ☐ 5441
- SOIL FOR DISPOSAL ☐ 5442
- WATER FOR DISPOSAL ☐ 5443
- AIR SAMPLER - SYS O+M ☐ 5452
- WATER SAMPLE - SYS O+M ☐ 5453
- OTHER ______ ☐

ANALYSIS REQUEST: (CHECK APPROPRIATE BOX)

SAMPLE I.D.	DATE	TIME	COMP.	GRAB	MATRIX H2O	MATRIX SOIL	MATRIX AIR	MATRIX SLUDGE	OTHER: ICE	METHOD PRESERVED HCl	HNO3	H2SO4	NONE	OTHER	NO. OF CONTAINERS	CONTAINER SIZE	~~BTEX 602~~ BTEX only 8020 ~~☐~~ WITH MTBE ☐	BTEX/GAS HYDROCARBONS PID/FID ☐ WITH MTBE	VOL 624/PPL ☐ 8240/TAL ☐ NBS (+15) ☐	PNA/PAH 8310 ☐ 8100 ☐ 610 ☐	SEMI-VOL 625/PPL ☐ 8270/TAL ☐ NBS (+25) ☐	TPH/IR 418.1 ☐ SM503 ☐ ☐ ☐	TPH/GC 8015 Mod. GAS ☐ 8015 Mod DIESEL ☐	TCLP METALS ☐ VOL ☐ SEMI-VOL ☐ PEST ☐ HERB ☐	EP TOX METALS ☐ PESTICIDES ☐ HERBICIDES ☐	REACTIVITY ☐ CORROSIVITY ☐ IGNITABILITY ☐	OTHER: BTEX only (8240)	OTHER	OTHER	REMARKS
MW-3	10-11-97	1715		✓	✓				✓	✓					3	40 Voa											✓			
MW-4	10-11-97	1645		✓	✓				✓	✓					3	40 ml	✓													
MW-5	10-11-97	1805		✓	✓				✓	✓					3	40 ml	✓													
MW-6	10-11-97	1730		✓	✓				✓	✓					3	40 ml	✓													
MW-7	10-11-97	1740		✓	✓				✓	✓					3	40 ml	✓													
MW-9	10-11-97	1705		✓	✓				✓	✓					3	40 ml	✓													
MW-10	10-11-97	1700		✓	✓				✓	✓					3	40 ml											✓			
MW-12	10-11-97	1750		✓	✓				✓	✓					3	40 ml											✓			

30C BOT

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
Bill D. Smith	10-13-97	0800	[signature]	10/15/97	1000

BILL NO.: ______
LABORATORY: ______
SHELL CONTACT: ______ PHONE: ______ FAX: ______

TURN AROUND TIME (CHECK ONE)
7 DAYS ☐ (NORMAL) 14 DAYS ☐
48 HOURS ☐ OTHER ☐ ______

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN OF CUSTODY WITH INVOICE AND RESULTS

DISTRIBUTION: PINK Sampling Coordinator - WHITE & YELLOW Accompanies Shipment - WHITE Returned with Report

SPL Houston Environmental Laboratory

Sample Login Checklist

Date:	Time:
10/15/97	1000

SPL Sample ID:
9710737

			Yes	No
1	Chain-of-Custody (COC) form is present.		✓	
2	COC is properly completed.		✓	
3	If no, Non-Conformance Worksheet has been completed.			
4	Custody seals are present on the shipping container.		✓	
5	If yes, custody seals are intact.		✓	
6	All samples are tagged or labeled.		✓	
7	If no, Non-Conformance Worksheet has been completed.			
8	Sample containers arrived intact		✓	
9	Temperature of samples upon arrival:		3° C	
10	Method of sample delivery to SPL:	SPL Delivery		
		Client Delivery		
		FedEx Delivery (airbill #)	499576 2505	
		Other:		
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name:	Date:
[signature]	10/15/97

Shell Oil Products Company

Two Shell Plaza
P. O. Box 2099
Houston, TX 77252-2099

December 2, 1997

William Olson
State of New Mexico Oil Conservation Division
Environmental Bureau
2040 S. Pacheco St.
Santa Fe, New Mexico 87504

SUBJECT: DEVELOPMENT WATER, DENTON STATION

Dear Mr. Olson,

Enclosed is a copy of the laboratory results from sampling the development water at the subject station. The sample was non-detect for benzene. Unless I hear otherwise from you, I plan to surface discharge this water the next time we are on site. If you have any questions please call me at 713-241-2961.

Sincerely,

Neal Stidham
Staff Engineer
Shell Oil Company
Representing Shell Pipe Line Corporation

cc: Paul Newman-EOTT Energy Corp.

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

SHELL OIL PRODUCTS
ATTN: MR. NEAL STIDHAM
P.O. BOX 2099
HOUSTON, TEXAS 77252
FAX: 713-241-1124

Receiving Date: 11/25/97
Sample Type: WATER
Project #: DENTON DEVELOPMENT
Project Location: NONE GIVEN

Analysis Date: 11/25/97
Sampling Date: 11/25/97
Sample Condition: Intact/Iced

ELT#	FIELD CODE	BENZENE (mg/l)
13131	DENTON DEVELOPMENT	<0.001
	% IA	87
	% EA	90
	BLANK	<0.001

METHODS: SW 846-8020,5030

Michael R. Fowler

11-26-97
Date