

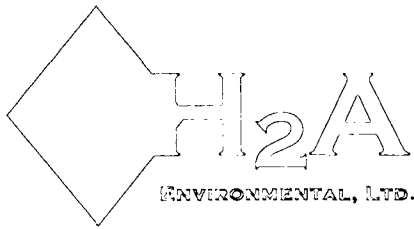
GW - 350

**MONITORING
REPORTS**

DATE:

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ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

ANNUAL 2001 GROUNDWATER MONITORING REPORT

JAL BASIN STATION
JAL, LEA COUNTY, NEW MEXICO

H₂A JOB NO. 106.001

Prepared for:



Approved by:

A handwritten signature in cursive script, appearing to read "Theresa Nix", is written over a horizontal line.

Theresa Nix
Project Manager

March 2001



ASSESSMENT • REMEDIATION • RISK ASSESSMENT • COMPLIANCE • LITIGATION / ENFORCEMENT SUPPORT

March 29, 2002

Mr. William C. Olson
Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 St. Francis Drive
Santa Fe, New Mexico 87505

Re: 2001 Annual Report
Equilon Pipeline Company LLC
Jal Basin Station
Jal, New Mexico

H₂A Job No. 106.001

Dear Mr. Olson:

Transmitted with this letter is the annual report for 2001, as required by the OCD letter dated December 18, 2001, for the above referenced site. The attached report presents the results of all remediation and monitoring activities conducted during 2001 at Jal Basin Station.

If you have any questions concerning this information please feel free to contact me at (361) 777-0860 or email at tnix@h2altd.com.

Respectfully,

A handwritten signature in cursive script, appearing to read "Theresa Nix", with the word "for" written in smaller letters below it.

Theresa Nix
Project Manager

Attachment

cc: Mr. Marc Oler, Equiva Services Co. LLC
Ernest Richarte, Equilon Pipeline
Chris Williams, OCD Hobbs

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INTRODUCTION

H₂A Environmental, Ltd. (H₂A) has completed the annual groundwater monitoring for the Jal Basin Station site located south of Jal, New Mexico. Monitoring events were conducted at the site in February, May, September, and December 2001.

Additional soil and groundwater investigation activities were conducted in December 2001, to further define the extent of subsurface impact at the Jal Basin Station. During the investigation, representatives from H₂A Environmental, Ltd. (H₂A) installed one soil boring and five groundwater monitoring wells (designated SB-1 and MW-16 through 20). Results of monitoring and investigation activities are summarized in the following text.

SUBSURFACE INVESTIGATION

FIELD ACTIVITIES

Field activities consisted of the advancement of six soil borings to an approximate depth of 100 feet below ground surface using air rotary drilling. Soil samples were collected at 10 foot intervals for the first 80 feet and then continuously to groundwater using split-spoon samplers. Phase-separated hydrocarbons were visually identified during drilling in MW-18, MW-19 (originally SB-1), and MW-20 (originally SB-3).

Five soil borings were completed as groundwater monitoring wells consisting of 20 feet of slotted 4-inch PVC screen and a blank PVC riser. The annulus was filled with clean sand to two to three feet above the screened interval. A two to three foot annular bentonite seal was placed above the sand pack and the remaining annulus was then grouted to the surface. The wells were each completed at the surface with a three foot blank PVC riser with locking steel cover and a two foot by two foot concrete pad.

The monitoring wells were designated MW-16 through MW-20 and well locations, determined by a professional surveyor licensed in the state of New Mexico are depicted on FIG. 1. Upon advancement to total depth and collection of soil samples the remaining soil boring (SB-2) was plugged to the surface. Soil boring and monitoring well logs are included as FIG. 2 through 7.

SPLP TPH via EPA method 418.1, and TPH fingerprint analysis via Texas method 1006. Concentration ranges are presented below:

PARAMETER	CONCENTRATION RANGE
PAH	<0.25 to 8.91 mg/kg
SPLP SVOC	<0.005 to 0.024 mg/L
SPLP PAH	<0.005 to 0.016 mg/L
SPLP VOC	<5.00 to 386 µg/l
SPLP TPH	246 mg/kg
TPH TX1006	Aliphatic: <1 to 5,620 mg/kg Aromatic: 14 to 27,136 mg/kg

Undisturbed soil samples were also collected during drilling and submitted to the analytical lab for determination of geotechnical parameters. Soil analytical results are summarized in TABLES I through III and graphically presented on FIG. 8. The soil laboratory report and chain-of-custody documentation are presented in APPENDIX A.

SOIL CUTTINGS DISPOSAL

Soil cuttings generated during the December drilling event are temporarily stored on-site in 55-gallon drums pending further characterization and disposal. A licensed contractor, approved for such services by Equilon Pipeline Company's Residual Disposal Coordinator, will handle off-site transportation and final disposition to an OCD approved facility.

GROUNDWATER MONITORING ACTIVITIES

Groundwater monitoring activities consisted of gauging the water levels in all the monitoring wells, then purging three well volumes from all wells not exhibiting measurable light non-aqueous phase liquids (LNAPL). After the monitoring wells had been purged, groundwater samples were collected and submitted to a certified laboratory. Samples were collected on a quarterly basis during 2001 and analyzed for determination of BTEX concentrations. During the fourth quarter monitoring event samples were also analyzed for determination of metals and PAH concentrations.

Groundwater samples collected for BTEX (Method SW846-8021B) analysis were placed in sterile, 40 ml glass VOA vials equipped with Teflon-lined caps and HCl preservative, as provided by the analytical laboratory. The vials were filled to a positive meniscus, sealed, and visually checked for the absence of air bubbles.

Groundwater samples collected for metals analysis (Methods 6010B and 7470A) were placed in 500 ml sterile plastic containers equipped with Teflon-lined caps and HNO₃ preservative, as provided by the analytical laboratory.

Groundwater samples collected for PAH analysis were collected in unpreserved sterile one liter glass containers equipped with Teflon-lined caps.

Filled sample containers were labeled, placed on ice in an insulated cooler, and chilled to an approximate temperature of 40°F (4°C). The cooler was sealed for transportation to the analytical laboratory. Proper chain of custody documentation was maintained throughout the sampling process.

GROUNDWATER MEASUREMENTS

Groundwater measurements were obtained from monitoring wells MW-1 through MW-6, and MW-8 through MW-15 on February 14 (MW-5 gauged on February 21), May 23, September 29, and December 20, 2001. Groundwater contour maps illustrating groundwater elevations measured during each quarterly event are presented as FIG. 9 through 12. Groundwater measurements are summarized in TABLE IV.

LNAPL thicknesses varied from ND to 7.45 feet during the annual period. LNAPL thicknesses measured in December 2001 ranged from ND to 5.85 feet. Quarterly LNAPL thickness maps are presented as FIGs 13 through 16.

Groundwater monitoring data sheets completed in 2001 are presented in APPENDIX C.

GROUNDWATER MONITORING RESULTS

Laboratory results for groundwater samples obtained during the four quarterly monitoring events were determined to have the following range of hydrocarbon concentrations:

PARAMETER	CONCENTRATION RANGE (mg/l)
Benzene	<0.001
BTEX	<0.001
PAH	<0.005
Metals	<0.005 to 0.559

Hydrocarbon constituent concentrations for each quarterly event are presented on FIGs. 9 through 12 and are summarized in TABLES V and VI. Metals concentrations are graphically presented on FIG. 17. Copies of the certified laboratory reports and chain of custody documentation are presented in APPENDIX B.

PRODUCT RECOVERY ACTIVITIES

The HVR system startup was initiated on January 4, 2001. The following table presents the volume and rate of groundwater and LNAPL recovered through January 2, 2002.

Parameter	Volume Recovered (gallons)	Rate of Recovery (gallons / day)
Groundwater	245,323	886
LNAPL (diesel)	20,018	72.3

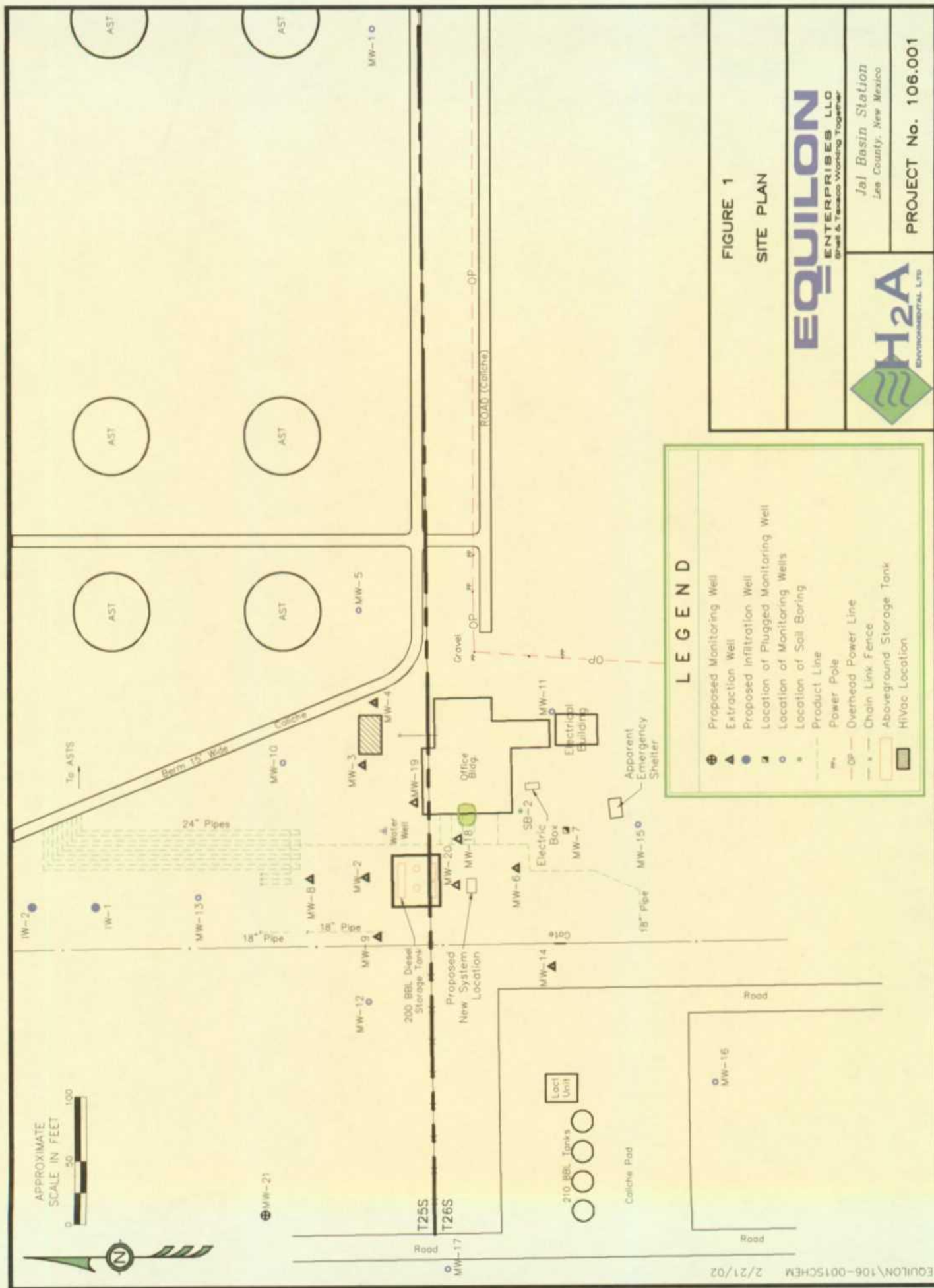
The system initially extracted from two monitoring wells (MW-3 and MW-6) for approximately two months. Due to permitting delays, the number of extraction wells was reduced to one (MW-6 only). Monthly product recovery volumes are summarized in TABLE VIII.

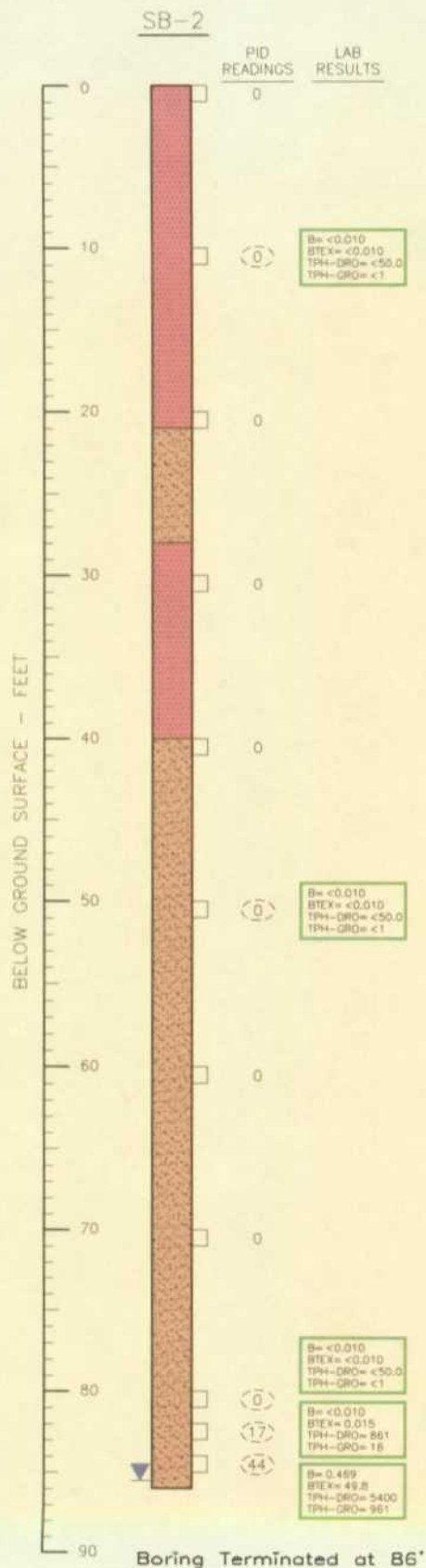
As the diesel storage tank reaches capacity, E&E Environmental located in Odessa, Texas, transports the recovered diesel off-site to their Brownfield, Texas facility. Approximately 13,175 gallons of diesel were transported off-site during 2001.

EFFLUENT SAMPLING AND RESULTS

Upon initial system startup in January of 2001, the treated groundwater was stored on-site prior to off-site disposal at Sundance Services, Inc. located in Eunice, New Mexico. Two infiltration wells, designated IW-1 and IW-2, were then installed during the second quarter of 2001. Effluent samples of the treated groundwater were obtained and analyzed in accordance with the facility Discharge Plan prior to initiating re-injection activities. Laboratory reports confirmed treated groundwater concentrations below the required discharge limits and re-injection activities were began in October, 2001. The monthly re-injection volumes are presented in TABLE VIII.

Effluent samples are obtained, preserved, and analyzed using the same procedures outlined above for groundwater sampling. The effluent laboratory results are summarized in TABLES IX and X. Copies of the certified laboratory reports and chain of custody documentation are presented in APPENDIX D.





LEGEND

Sand (SW/SM) - Fine to coarse grained, loose, sparse gravel, red to brown, dry to saturated.

Sand (SM) - Fine to medium grained, medium to very dense, calcareous, tan to brown, dry to moist.

Indicates the depth from which a soil sample was selected and prepared for field head space and/or laboratory analysis.

Indicates the groundwater level measured during drilling.

Indicates sample selected for laboratory analysis.

B = Benzene Concentration (mg/kg)
BTEX = BTEX Concentration (mg/kg)
TPH-DRO = Total Petroleum Hydrocarbons, Diesel Range Organics Concentration (mg/kg)
TPH-GRO = Total Petroleum Hydrocarbons, Gasoline Range Organics Concentration (mg/kg)

PID = Head-space readings in ppm obtained with a photo-ionization detector.

ND = Indicates the concentration was not detected.

NOTES

1. The soil borings were installed on December 19-20, 2001 using air rotary drilling techniques.
2. The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
3. The depths indicated are referenced from the ground surface.
4. Soil borings were grouted with a cement and bentonite mixture.

FIGURE 2

LEGEND, NOTES AND DETAILS FOR SOIL BORING SB-2

EQUILON
ENTERPRISES LLC
Shell & Texaco Working Together



*Jal Basin Station
Lea County, New Mexico*

PROJECT No. 106.001

MONITORING WELL MW-16

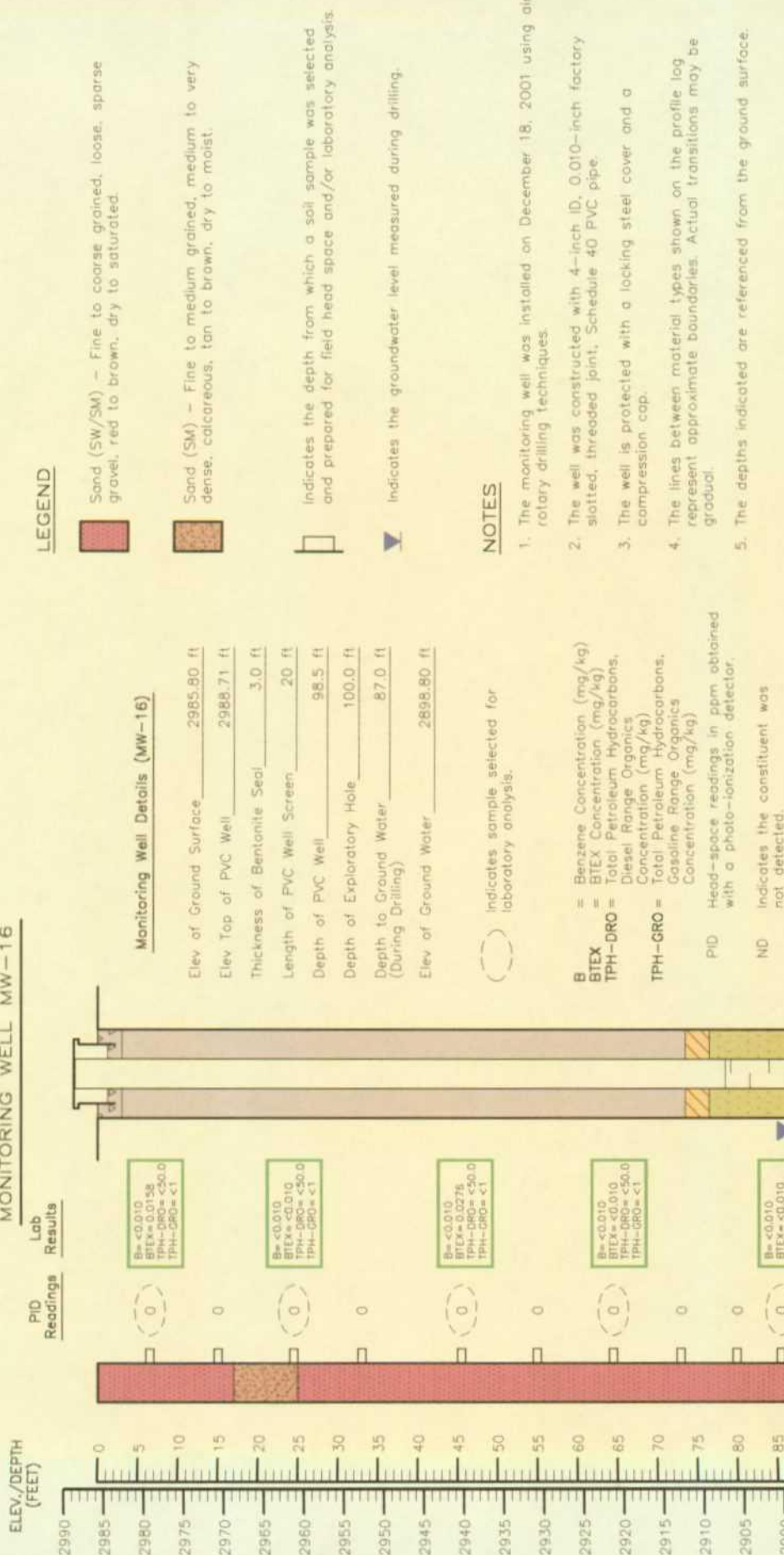


FIGURE 3

LOG AND DETAILS OF MONITORING WELL MW-16

EQUILON

ENTERPRISES LLC
Drill & Testwork Working Together



Jal Basin Station
Lea County, New Mexico

PROJECT No. 106.001

Boring Terminated at 100'

MONITORING WELL MW-17

ELEV./DEPTH (FEET)

PID Readings

Lab Results

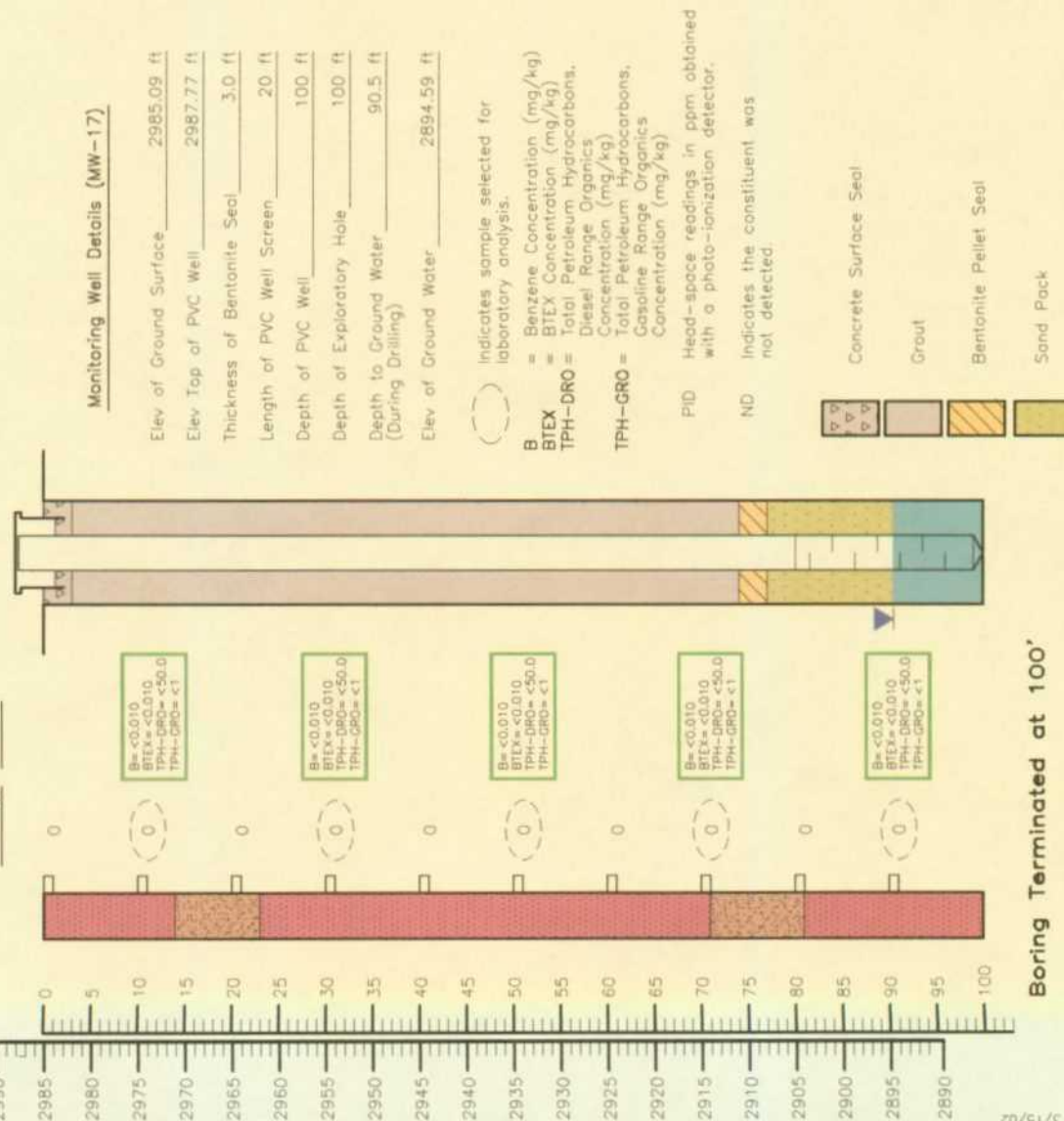


FIGURE 4
LOG AND DETAILS OF
MONITORING WELL MW-17

EQUILON
ENTERPRISES LLC
Steel & Trench Working Together

H2A
ENVIRONMENTAL LTD.

Jal Basin Station
Lea County, New Mexico

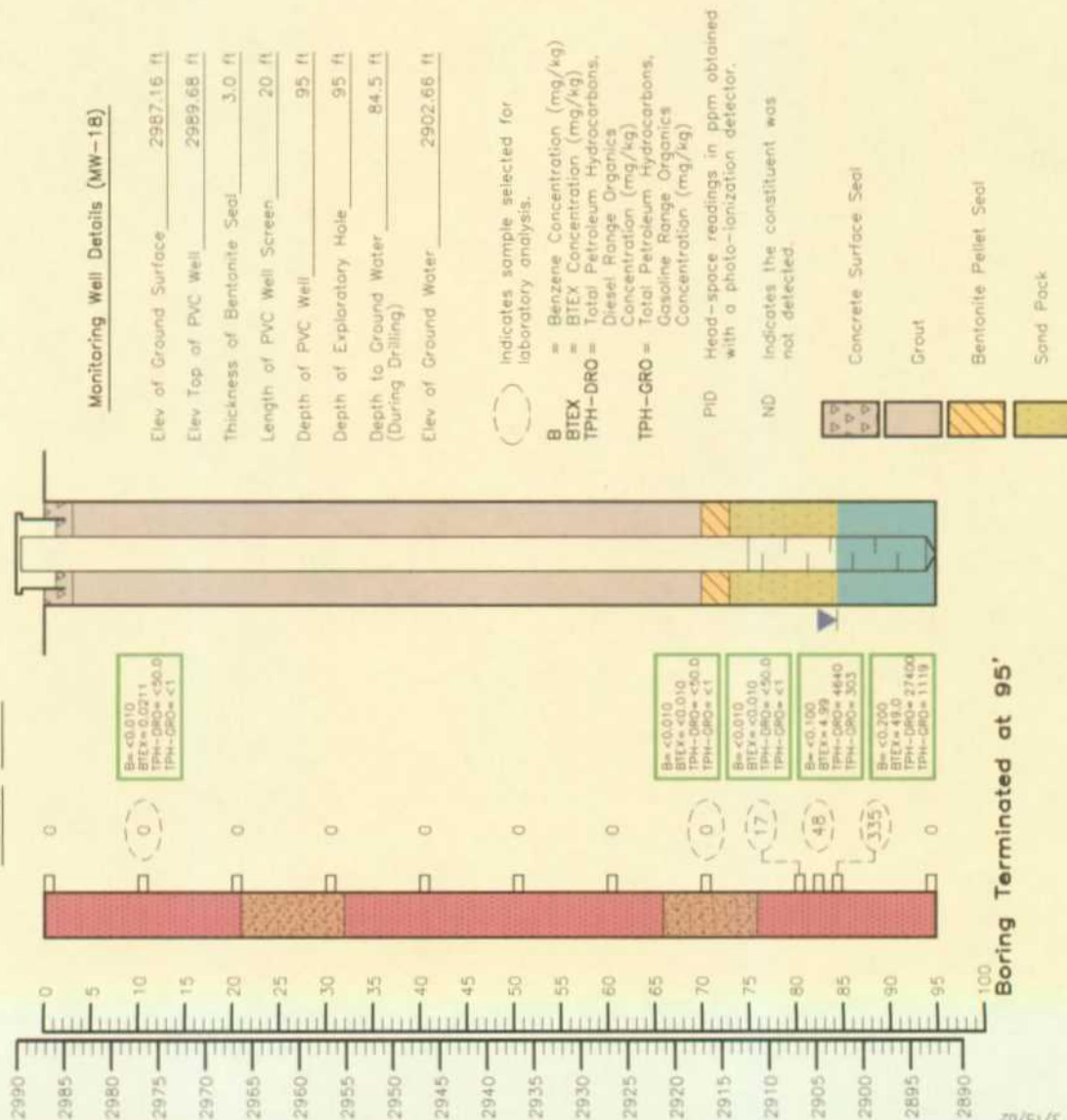
PROJECT No. 106.001

MONITORING WELL MW-1B

ELEV./DEPTH (FEET)

PID Readings

Lab Results



Boring Terminated at 95'

FIGURE 5
LOG AND DETAILS OF
MONITORING WELL MW-1B

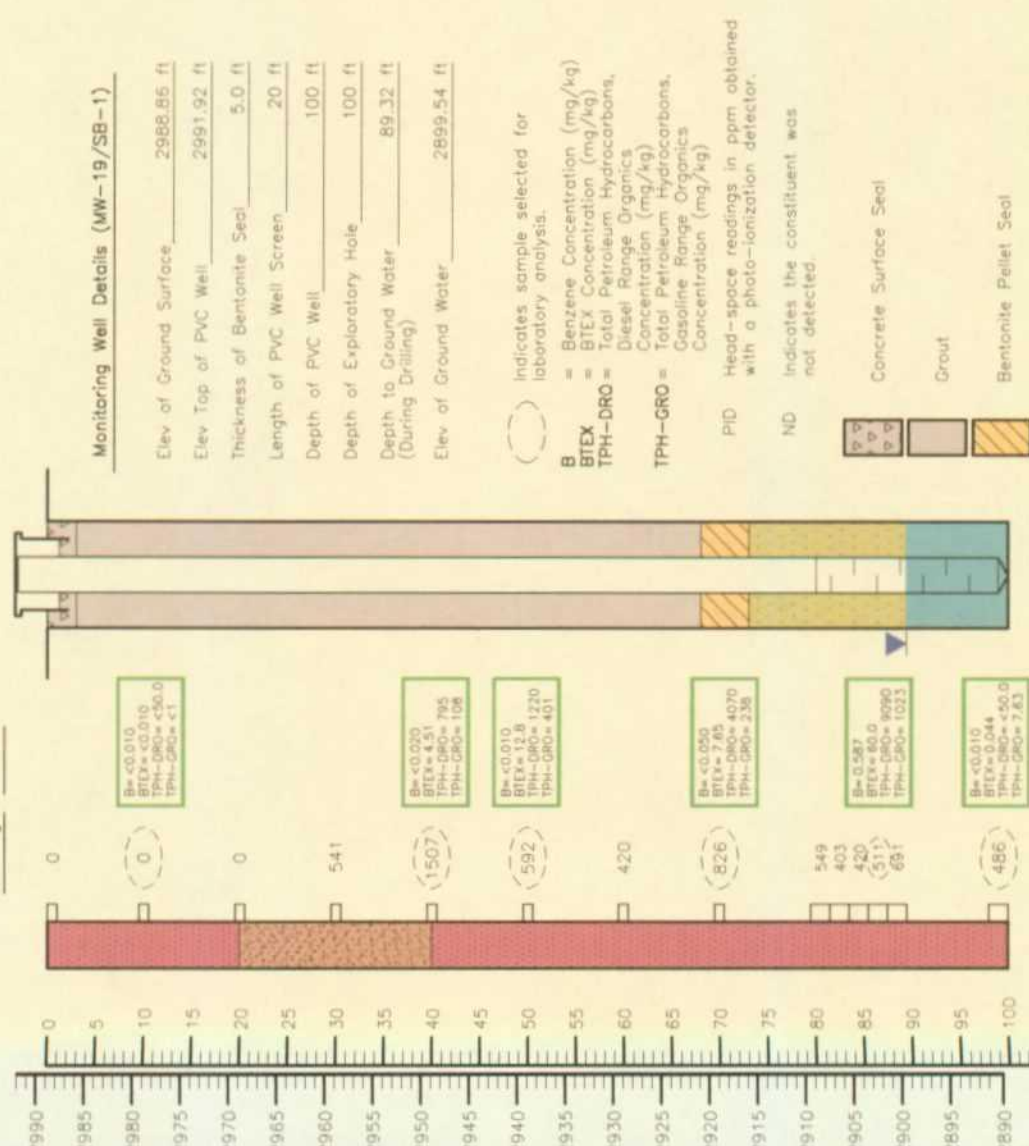
EQUILON
ENTERPRISES LLC
Drill & Testco Working Together



Jal Basin Station
Lea County, New Mexico
PROJECT No. 106.001

MONITORING WELL MW-19 (SB-1)

ELEV./DEPTH (FEET)



Boring Terminated at 100'

LEGEND

Sand (SW/SM) - Fine to coarse grained, loose, sparse gravel, red to brown, dry to saturated.

Sand (SM) - Fine to medium grained, medium to very dense, calcareous, tan to brown, dry to moist.

Indicates the depth from which a soil sample was selected and prepared for field head space and/or laboratory analysis.

Indicates the groundwater level measured during drilling.

NOTES

- The monitoring well was installed on December 19, 2001 using air rotary drilling techniques.
- The well was constructed with 4-inch ID, 0.010-inch factory slotted, threaded joint, Schedule 40 PVC pipe.
- The well is protected with a locking steel cover and a compression cap.
- The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
- The depths indicated are referenced from the ground surface.

FIGURE 6

LOG AND DETAILS OF
MONITORING WELL MW-19

EQUILON
ENTERPRISES LLC
Brent & Terence Working Together



Jal Basin Station
Lea County, New Mexico

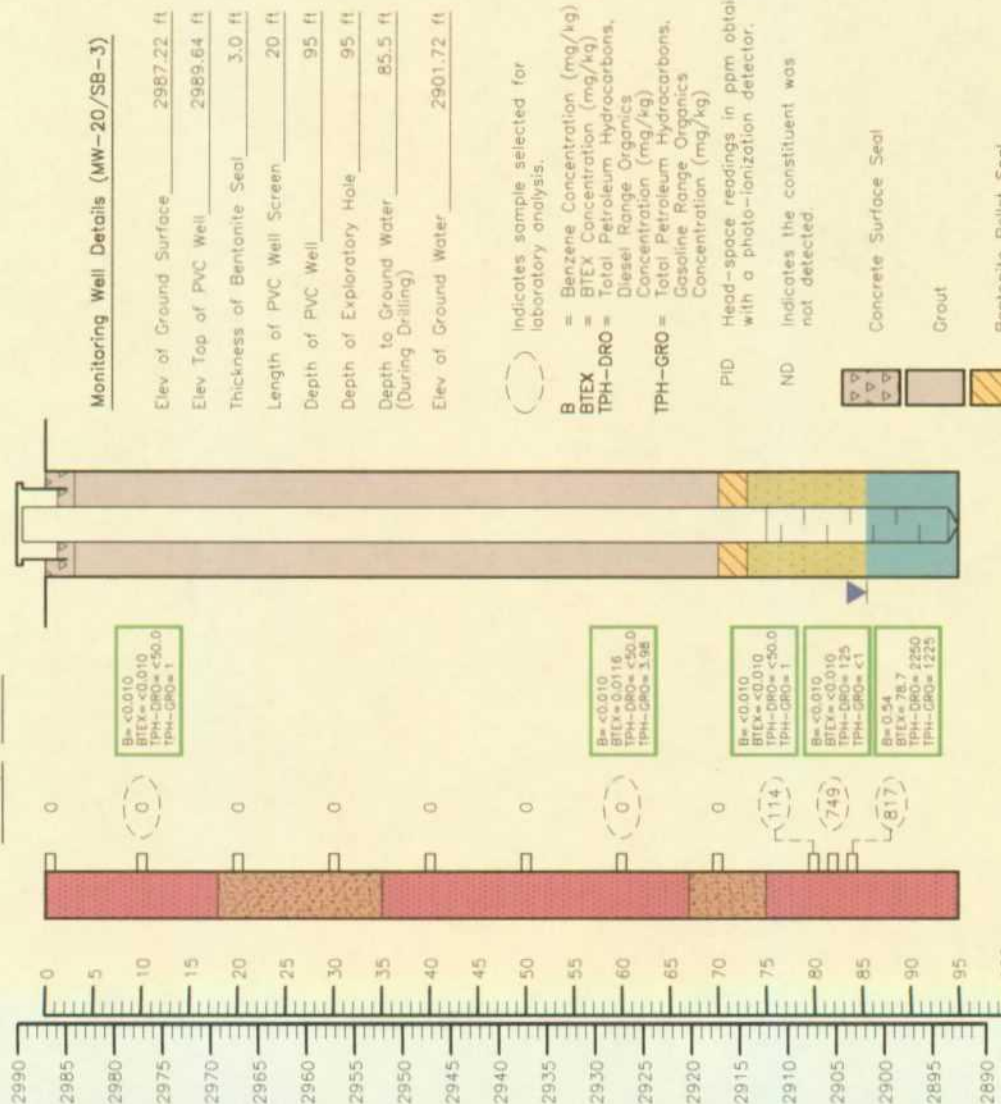
PROJECT No. 106.001

MONITORING WELL MW-20 (SB-3)

ELEV./DEPTH
(FEET)

PID
Readings

Lab
Results



Boring Terminated at 95'

FIGURE 7

LOG AND DETAILS OF MONITORING WELL MW-20

EQUILON
ENTERPRISES LLC
Drill & Testers Working Together



Jal Basin Station
Lea County, New Mexico

PROJECT No. 106.001

LEGEND

Symbol	Description	Depth of Sample in Feet	Concentration (mg/kg)
●	Proposed Monitoring Well	B	Benzene
▲	Extraction Well	T	Toluene
●	Infiltration Well	E	Ethylbenzene
●	Location of Plugged Monitoring Well	X	Xylene
●	Location of Monitoring Wells	BTEX	Total BTEX
●	Location of Soil Boring	TPH	Total Petroleum Hydrocarbon
---	Product Line	TPH1	Diesel Range Organics
---	Power Pole	TPH2	Gasoline Range Organics
---	Overhead Power Line		
---	Chain Link Fence		
---	Aboveground Storage Tank		
---	HIVac Location		

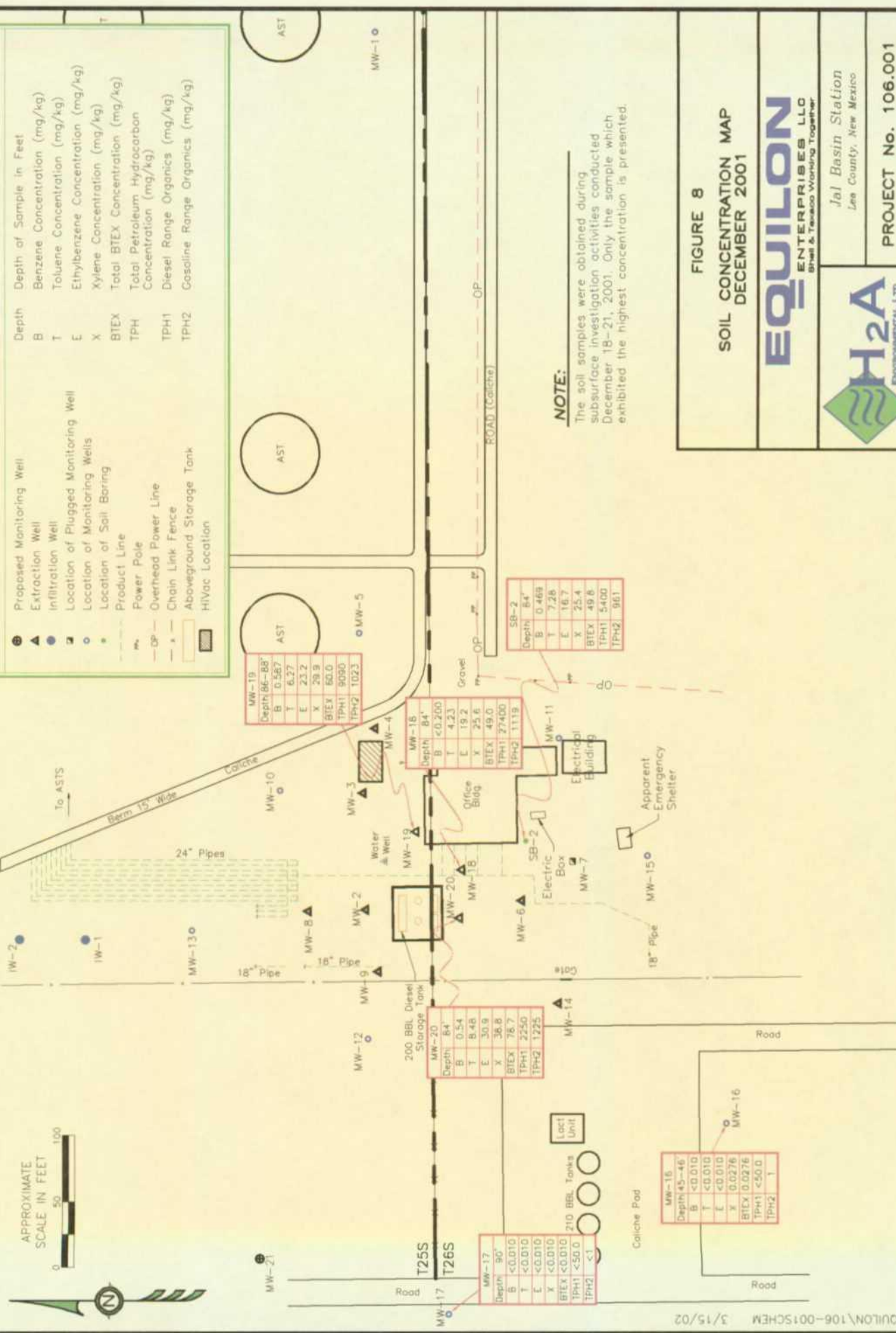


FIGURE 8

SOIL CONCENTRATION MAP
DECEMBER 2001

EQUILON
ENTERPRISES LLC
Brent & Tenebris Working Together



Jal Basin Station
Lee County, New Mexico

PROJECT No. 106.001

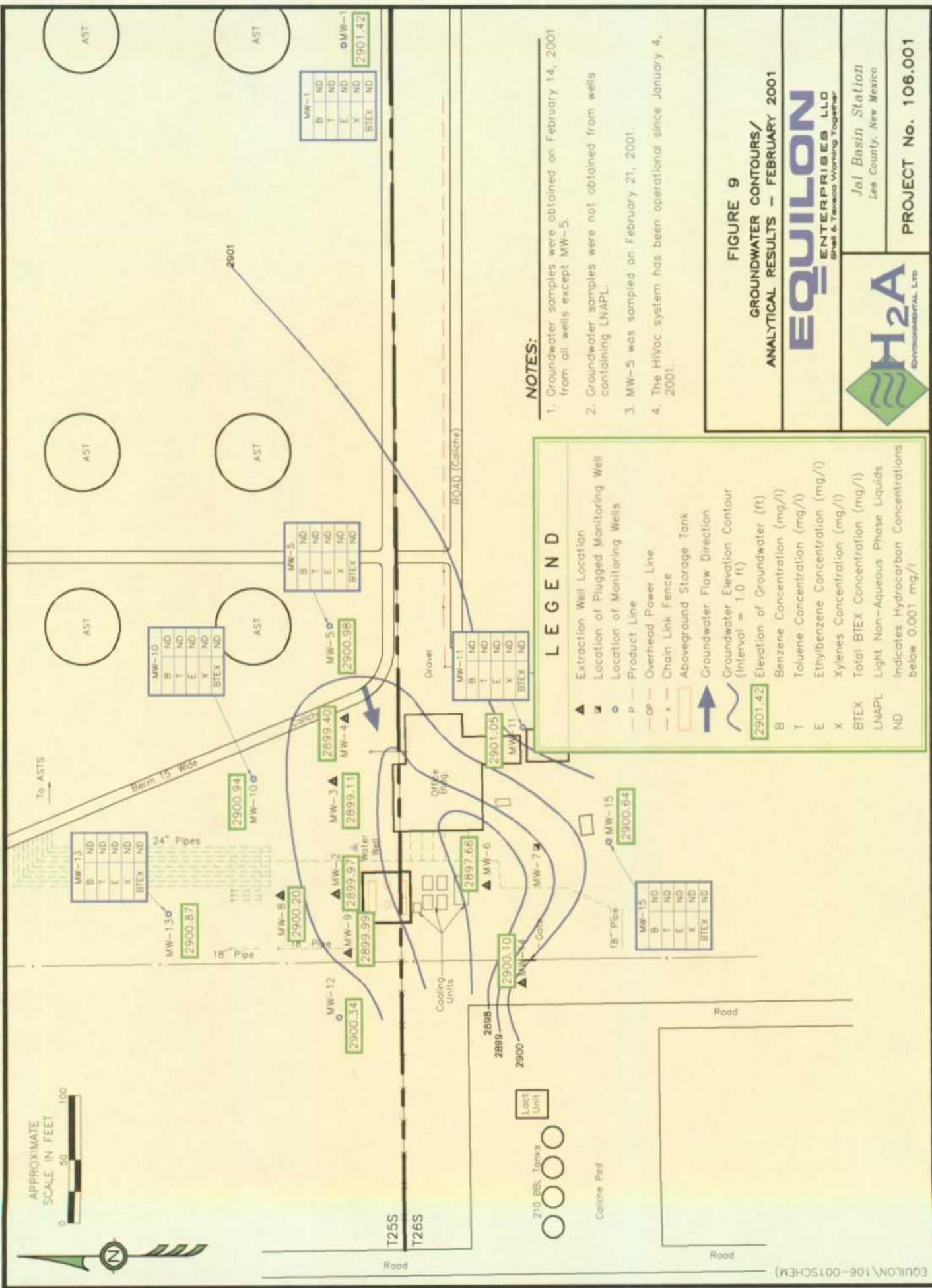


FIGURE 9
GROUNDWATER CONTOURS/
ANALYTICAL RESULTS - FEBRUARY 2001

EQUILON
ENTERPRISES, LLC
Bridle & Trenches Working Together

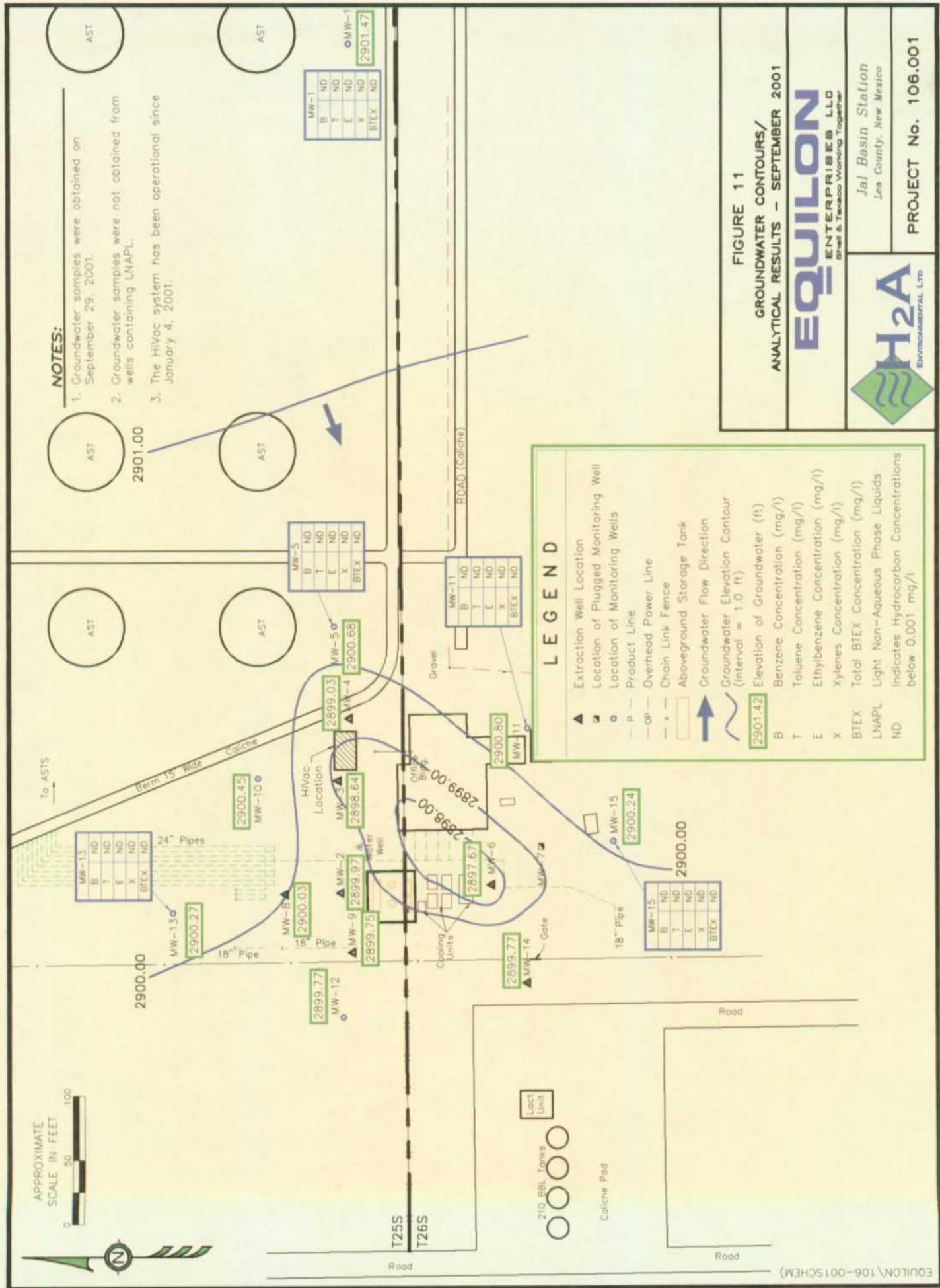
Jal Basin Station
Lee County, New Mexico

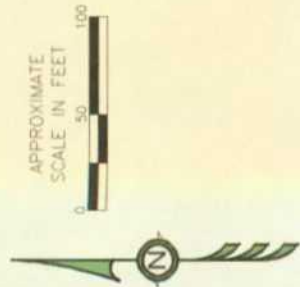


PROJECT No. 106.001

NOTES:

1. Groundwater samples were obtained on February 14, 2001 from all wells except MW-5.
2. Groundwater samples were not obtained from wells containing LNAPL.
3. MW-5 was sampled on February 21, 2001.
4. The HIVoc system has been operational since January 4, 2001.





LEGEND

- Proposed Monitoring Well
- Extraction Well
- Infiltration Well
- Location of Plugged Monitoring Well
- Location of Monitoring Wells
- Location of Soil Boring
- Product Line
- Power Pole
- Overhead Power Line
- Chain Link Fence
- Aboveground Storage Tank
- HIVac Location
- Groundwater Elevation Contour (Interval = 1.0 ft)
- Direction of Groundwater Flow
- Elevation of Groundwater (ft)
- Total BTEX Concentration (mg/l)
- Polycyclic Aromatic Hydrocarbons Concentration (mg/l)
- Arsenic Concentration (mg/l)
- Barium Concentration (mg/l)
- Chromium Concentration (mg/l)
- Lead Concentration (mg/l)
- Selenium Concentration (mg/l)
- LNAPL
- Light Non-Aqueous Phase Liquids
- Indicates Hydrocarbon Concentrations below 0.001 mg/l

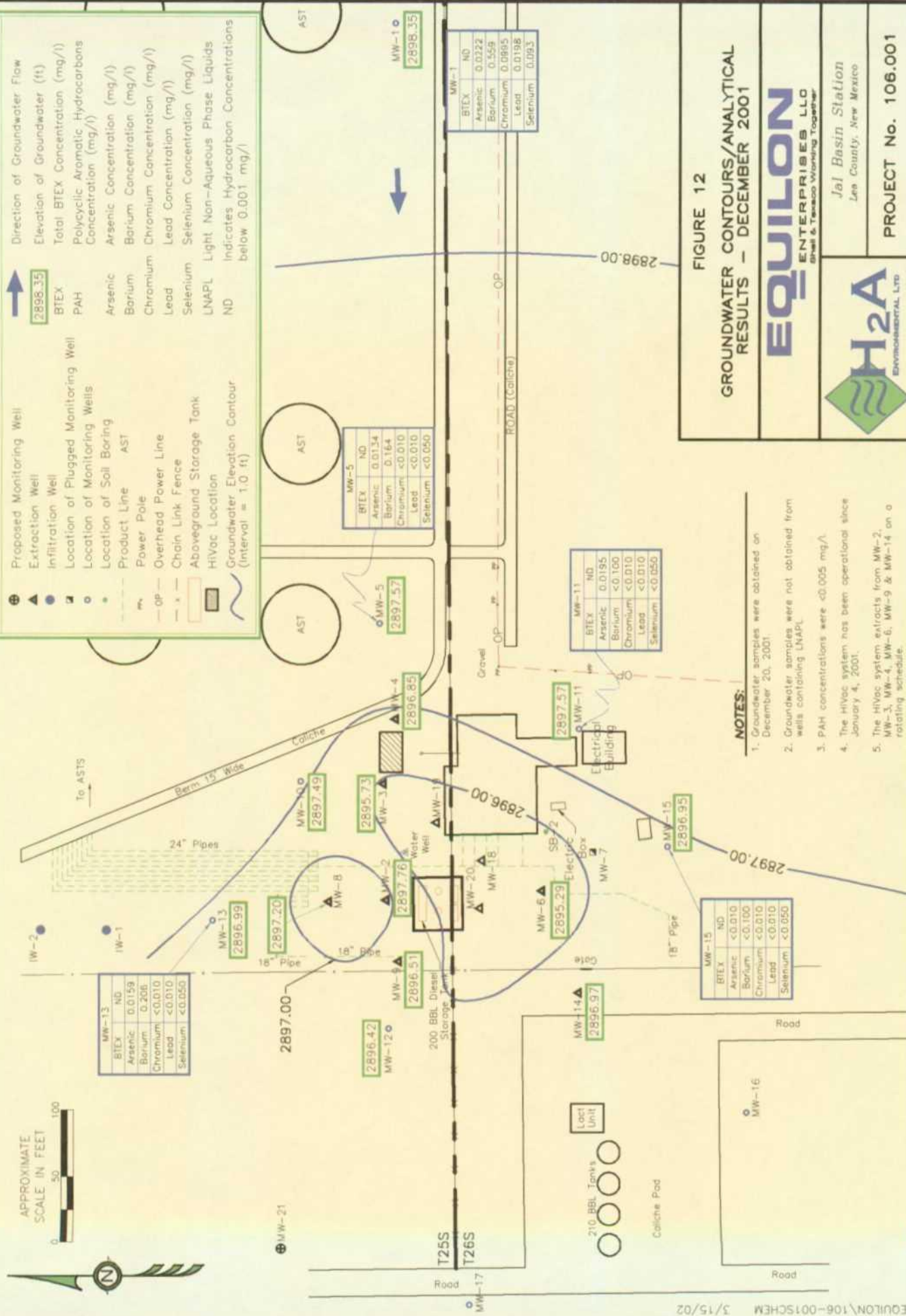


FIGURE 12
GROUNDWATER CONTOURS/ANALYTICAL
RESULTS - DECEMBER 2001

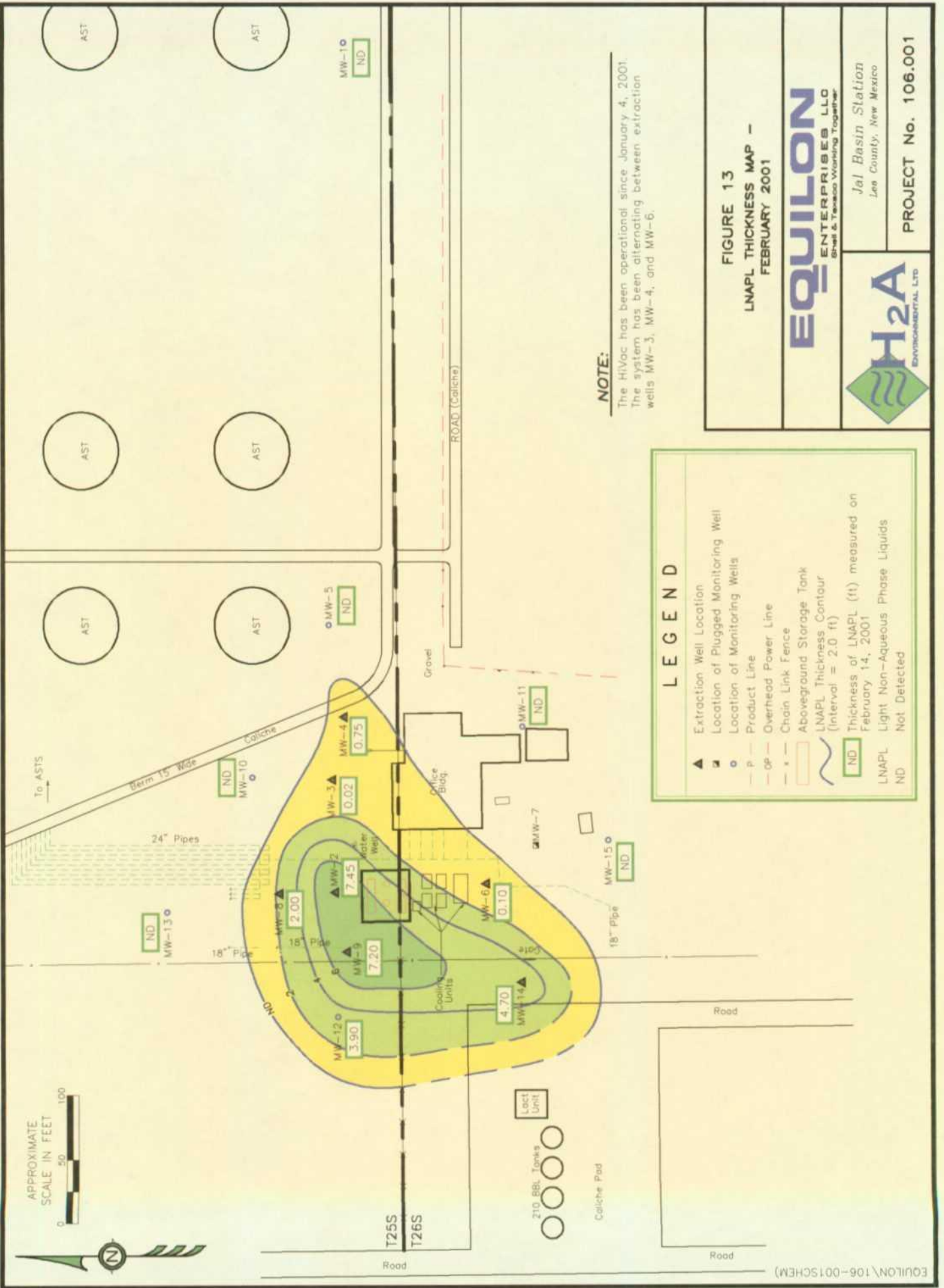
- NOTES:
- Groundwater samples were obtained on December 20, 2001.
 - Groundwater samples were not obtained from wells containing LNAPL.
 - PAH concentrations were <0.005 mg/l.
 - The HIVac system has been operational since January 4, 2001.
 - The HIVac system extracts from MW-2, MW-3, MW-4, MW-6, MW-9 & MW-14 on a rotating schedule.

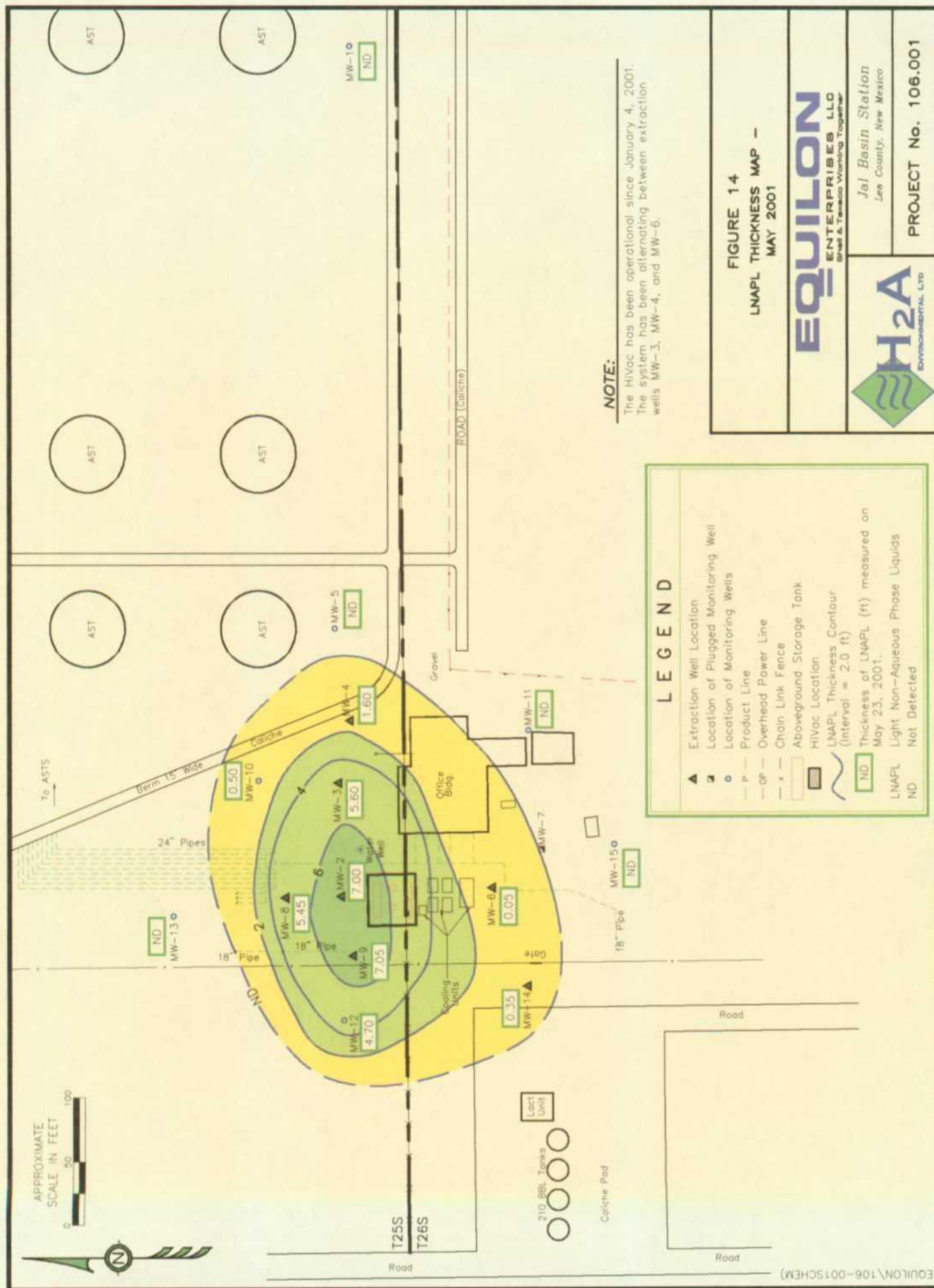
EQUILON
ENTERPRISES LLC
Small & Texasco Working Together

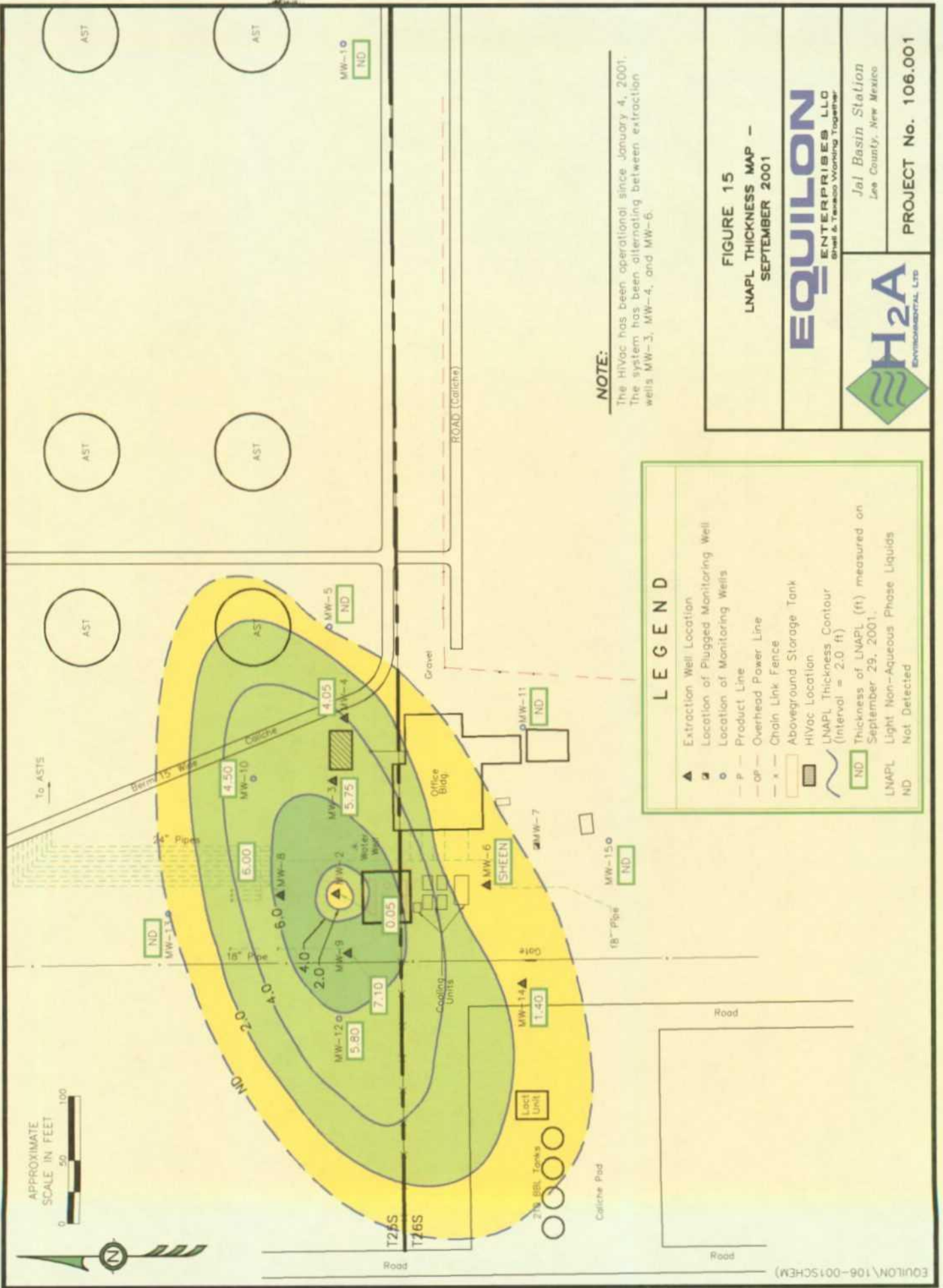


Jal Basin Station
Lea County, New Mexico

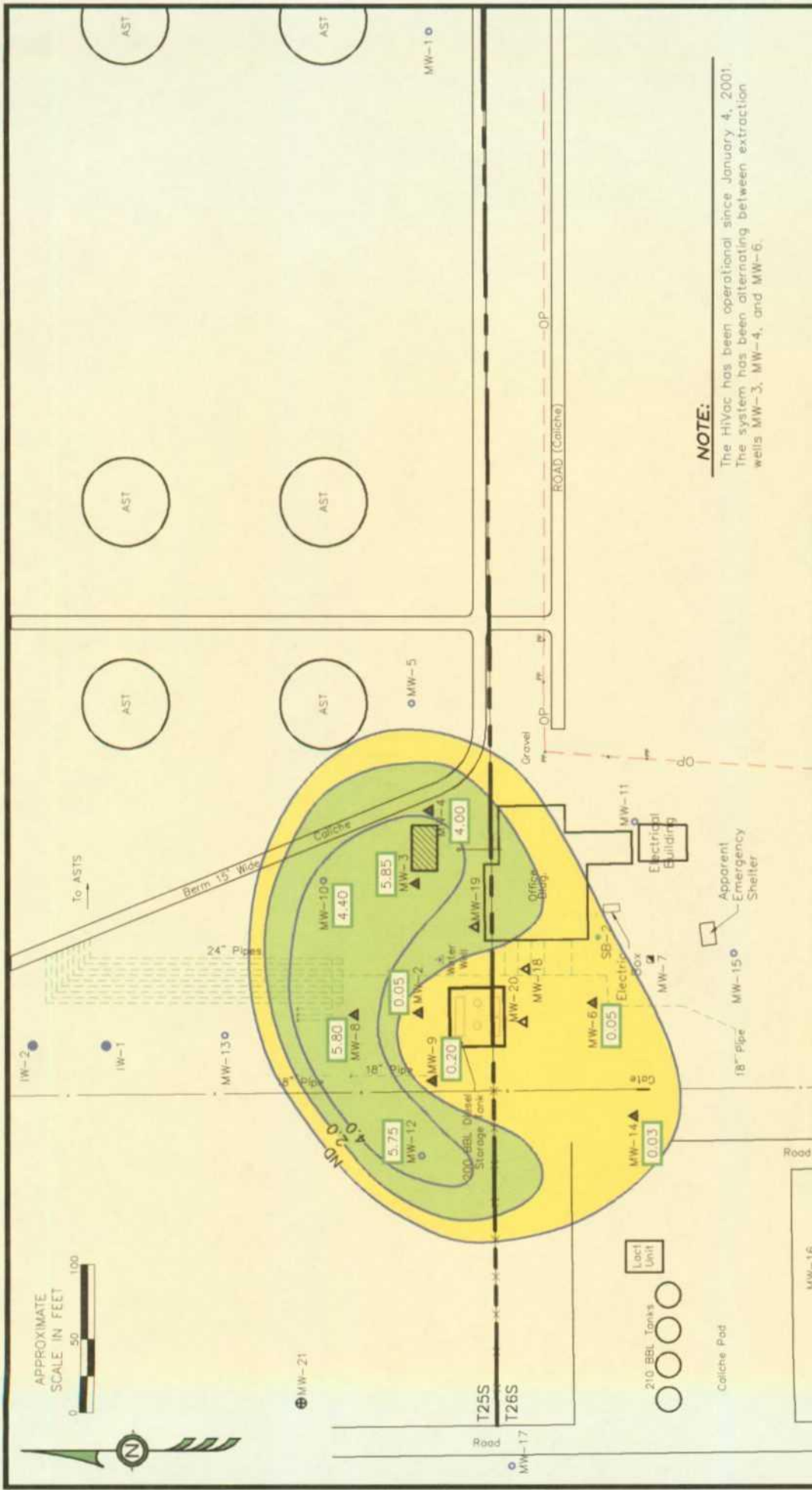
PROJECT No. 106.001







EQUILON\106-001\SCHEM



NOTE:
The HiVac has been operational since January 4, 2001. The system has been alternating between extraction wells MW-3, MW-4, and MW-6.

LEGEND

- ⊕ Proposed Monitoring Well
- ▲ Extraction Well
- Infiltration Well
- ▣ Location of Plugged Monitoring Well
- Location of Monitoring Wells
- Location of Soil Boring
- Product Line
- Power Pole
- OP — Overhead Power Line
- x — Chain Link Fence
- ▭ Aboveground Storage Tank
- ▣ HiVac Location
- LNAPL Thickness Contour (Interval = 2.0 ft)
- 0.05 Thickness of LNAPL (ft) measured on December 20, 2001.
- LNAPL Light Non-Aqueous Phase Liquids
- ND Not Detected

FIGURE 16

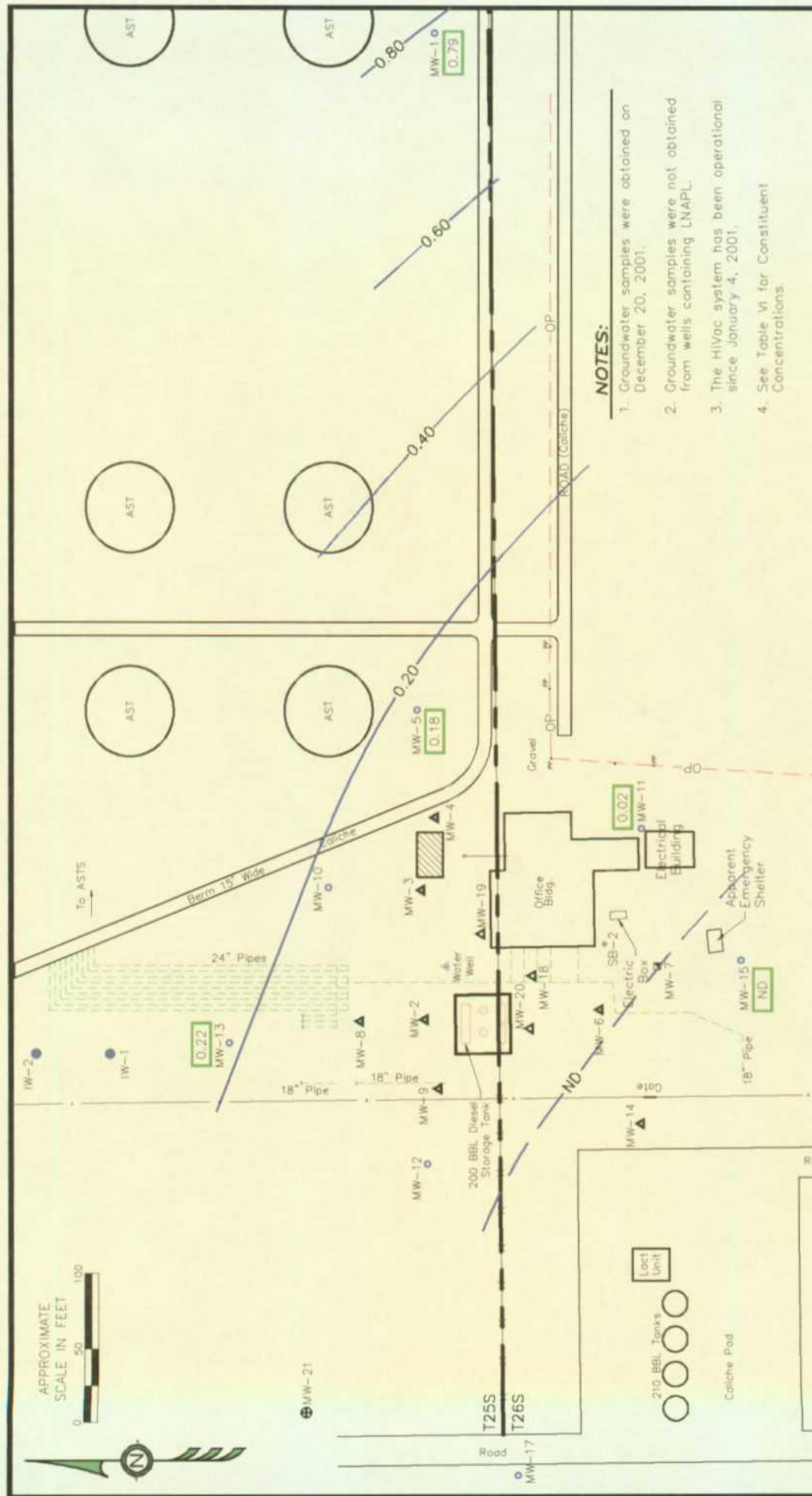
LNAPL THICKNESS - DECEMBER 2001

EQUILON
ENTERPRISES LLO
Small & Tenacious Working Together

Jal Basin Station
Lee County, New Mexico



PROJECT No. 106.001



NOTES:

1. Groundwater samples were obtained on December 20, 2001.
2. Groundwater samples were not obtained from wells containing LNAPL.
3. The HIVac system has been operational since January 4, 2001.
4. See Table VI for Constituent Concentrations.

LEGEND

- ⊕ Proposed Monitoring Well
- ▲ Extraction Well
- Proposed Infiltration Well
- ⬢ Location of Plugged Monitoring Well
- Location of Monitoring Wells
- Location of Soil Boring
- Product Line
- Power Pole
- OP Overhead Power Line
- - - Chain Link Fence
- ▭ Aboveground Storage Tank
- ⬢ HIVac Location
- ~ Total Metals Concentration Contour (Interval = 0.20 mg/l)
- 0.79 Total Metals Concentration (mg/l)
- ND Not Detected

FIGURE 17

**TOTAL METALS CONCENTRATIONS
DECEMBER 2001**

EQUILON
ENTERPRISES LLC
Oil & Gas Services Division



Jal Basin Station
Lee County, New Mexico

PROJECT No. 106.001

TABLE I

SUMMARY OF SOIL RESULTS - BTEX AND TPH
EQUILON PIPELINE COMPANY, LLC
JAL BASIN STATION
LEA COUNTY, NEW MEXICO

SAMPLE LOCATION	DATE	DEPTH (feet)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	XYLENES (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)
MW-19 (SB-1)	12/19/01	10	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
	12/19/01	40	<0.020	0.170	1.89	2.45	4.51	<50.0	<1
	12/19/01	50	<0.100	0.255	5.89	6.62	12.8	<50.0	<1
	12/19/01	70	<0.050	0.128	3.62	3.90	7.65	<50.0	<1
	12/19/01	86-88	0.587	6.27	23.2	29.9	60.0	<50.0	<1
	12/19/01	98-100	<0.010	<0.010	0.017	0.027	0.044	<50.0	<1
SB-2	12/19/01	10	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
	12/19/01	50	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
	12/20/01	80	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
	12/20/01	82	<0.010	<0.010	<0.010	0.015	0.015	861	16
	12/20/01	84	0.469	7.28	16.7	25.4	49.8	5400	961
MW-20 (SB-3)	12/21/01	10	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
	12/21/01	60	<0.010	<0.010	0.0116	<0.010	0.0116	<50.0	<1
	12/21/01	80	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
	12/21/01	82	<0.010	<0.010	<0.010	<0.010	<0.010	125	<1
	12/21/01	84	0.54	8.48	30.9	38.8	78.7	2250	1225
MW-16	12/18/01	6-7	<0.010	<0.010	<0.010	0.0158	0.0158	<50.0	<1
	12/18/01	24-25	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
	12/18/01	45-46	<0.010	<0.010	<0.010	0.0276	0.0276	<50.0	<1
	12/18/01	64-65	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
	12/18/01	85-86	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
MW-17	12/18/01	10	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
	12/18/01	30	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
	12/18/01	50	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
	12/18/01	70	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
	12/18/01	90	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
MW-18	12/20/01	10	<0.010	<0.010	<0.010	0.0211	0.0211	<50.0	<1
	12/20/01	70	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
	12/20/01	80	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
	12/20/01	82	<0.010	0.166	1.89	2.93	4.99	4640	303
	12/20/01	84	<0.200	4.23	19.2	25.6	49.0	27400	1119
Drum 1	12/20/01	—	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
Drum 2	12/20/01	—	<0.020	0.080	0.501	0.799	1.36	2070	80.9
Drum 3	12/20/01	—	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
Drum 4	12/20/01	—	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
Drum 5	12/20/01	—	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
Drum 6	12/20/01	—	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
Drum 7	12/20/01	—	<0.010	0.0611	0.586	0.883	1.53	1460	57.8
Drum 8	12/20/01	—	<0.020	0.104	1.09	1.63	2.82	5610	89.7
Drum 9	12/20/01	—	<0.020	0.068	0.836	1.33	2.23	1770	88.5
Drum 10	12/20/01	—	<0.020	0.034	0.87	1.21	2.11	2260	112
Drum 11	12/20/01	—	<0.020	0.049	0.775	1.21	2.03	3350	87.2
Drum 12	12/21/01	—	<0.020	0.0626	0.968	1.43	2.46	4080	118
Drum 13	12/21/01	—	<0.020	0.0346	0.552	0.882	1.47	1010	89.6

TABLE II

SUMMARY OF SOIL RESULTS - GEOTECHNICAL PARAMETERS
EQUILON PIPELINE COMPANY, LLC
JAL BASIN STATION
LEA COUNTY, NEW MEXICO

SAMPLE LOCATION	DATE	DEPTH (feet)	FOC (%)	pH	INITIAL MOISTURE CONTENT		DRY BULK DENSITY (g/cm ³)	WET BULK DENSITY (g/cm ³)	K _{transic} (cm ²)	K _{sat} (cm/sec)	φ _{calc} (%)	φ _{effective} (%, cm ³ /cm ³)
					(%, g/g)	(%, cm ³ /cm ³)						
SB-2	12/19/01	20	0.85	8.5	13.3	21.3	1.60	1.82	4.4E-09	4.3E-04	39.50	23.0
	12/20/01	70	0.61	8.8	16.6	28.6	1.72	2.00	2.7E-10	2.6E-05	35.20	28.7
	12/20/01	85	0.83	9.2	13.1	19.4	1.49	1.68	4.0E-08	3.9E-03	43.90	38.0
MW-17	12/18/01	10	0.42	8.5	16.8	29.0	1.73	2.02	4.1E-10	4.0E-05	34.70	27.9
	12/18/01	30	0.70	8.0	18.6	29.8	1.60	1.90	6.4E-09	6.3E-04	39.60	32.7

TABLE III

**SUMMARY OF SOIL RESULTS - OTHER
EQUILON PIPELINE COMPANY, LLC
LEA COUNTY, NEW MEXICO**

SAMPLE LOCATION	MW-18
DATE SAMPLED	12/20/01
DEPTH (feet)	84
SPLP VOC	
	CONCENTRATION (µg/l)
Methylene Chloride	386
Toluene	12.9
Ethylbenzene	65.6
m,p-Xylene	65.9
o-Xylene	42.7
p-Isopropyltoluene	73.1
n-Butylbenzene	131
Isopropylbenzene	51.4
n-Propylbenzene	98.9
1,3,5-Trimethylbenzene	56.8
1,2,4-Trimethylbenzene	266
sec-Butylbenzene	203
SPLP SVOC	
	CONCENTRATION (mg/l)
Naphthalene	0.017
1-Methylnaphthalene	0.024
2-Methylnaphthalene	0.019
SPLP PAH	
Naphthalene	0.016
SPLP TPH	
	246
PAH	
	CONCENTRATION (mg/kg)
Naphthalene	8.91
Phenanthrene	8.73
Fluoranthene	7.39
Pyrene	2.79
TPH TX1006	
Unfractionated C6-C35	51,570
Aliphatic:	
C6	<1
>C6-8	8
>C8-10	87
>C10-12	428
>C12-16	5,620
>C16-21	3,870
>C21-35	4,780
Aromatic:	
>C7-8	14
>C8-10	67
>C10-12	500
>C12-16	4,780
>C16-21	3,700
>C21-35	3,290
Aliphatic+Aromatic	27,136
Recovery	53%

TABLE IV

SUMMARY OF GROUNDWATER MONITORING
EQUILON PIPELINE COMPANY, LLC
JAL BASIN STATION
LEA COUNTY, NEW MEXICO

WELL	DATE	SURFACE ELEV. (feet)	DEPTH TO WATER (feet)	ELEV OF WATER (feet)	DEPTH TO PSH (feet)	ELEV. OF PSH (feet)	LNAPL THICKNESS (feet)
MW-01	02/04/99	2992.30	90.27	2902.03	—	—	—
	02/22/99	2992.30	90.19	2902.11	—	—	—
	03/11/99	2992.30	90.31	2901.99	—	—	—
	04/07/99	2992.30	90.63	2901.67	—	—	—
	05/03/99	2992.30	90.22	2902.08	—	—	—
	06/08/99	2992.30	90.40	2901.90	—	—	—
	06/22/99	2992.30	90.43	2901.87	—	—	—
	07/06/99	2992.30	90.41	2901.89	—	—	—
	08/14/99	2992.30	90.48	2901.82	—	—	—
	09/16/99	2992.30	90.44	2901.86	—	—	—
	10/19/99	2992.30	90.43	2901.87	—	—	—
	02/07/00	2992.30	90.48	2901.82	—	—	—
	08/02/00	2992.30	90.58	2901.72	—	—	—
	11/24/00	2992.30	90.68	2901.62	—	—	—
	02/14/01	2992.30	90.88	2901.42	—	—	—
	03/16/01	2992.30	93.35	2898.95	—	—	—
	04/19/01	2992.30	93.30	2899.00	—	—	—
	05/23/01	2992.30	91.13	2901.17	—	—	—
	09/29/01	2992.30	90.83	2901.47	—	—	—
	12/20/01	2992.30	93.95	2898.35	—	—	—
MW-02	02/04/99	2987.02	92.17	2901.95	83.89	2903.13	8.28
	02/22/99	2987.02	92.15	2901.85	84.02	2903.00	8.13
	03/11/99	2987.02	92.14	2901.88	83.98	2903.04	8.16
	03/24/99	2987.02	92.13	2901.64	84.26	2902.76	7.87
	03/31/99	2987.02	91.86	2902.05	83.83	2903.19	8.03
	04/02/99	2987.02	92.11	2901.85	84.02	2903.00	8.09
	04/07/99	2987.02	92.18	2902.02	83.81	2903.21	8.37
	07/15/99	2987.02	91.99	2901.65	84.28	2902.74	7.71
	10/26/99	2987.02	91.99	2901.44	84.52	2902.50	7.47
	08/02/00	2987.02	92.48	2901.10	84.84	2902.18	7.64
	11/24/00	2987.02	92.44	2900.50	85.54	2901.48	6.90
	02/14/01	2987.02	93.44	2899.97	85.99	2901.03	7.45
	05/23/01	2987.02	92.49	2900.54	85.49	2901.53	7.00
	09/29/01	2987.02	87.09	2899.97	87.04	2899.98	0.05
	12/20/01	2987.02	89.30	2897.76	89.25	2897.77	0.05
MW-03	02/04/99	2987.91	92.55	2902.25	84.52	2903.39	8.03
	02/22/99	2987.91	92.53	2902.24	84.53	2903.38	8.00
	03/11/99	2987.91	92.49	2902.16	84.64	2903.27	7.85
	03/24/99	2987.91	92.45	2902.21	84.58	2903.33	7.87
	03/31/99	2987.91	92.42	2902.11	84.71	2903.20	7.71
	04/02/99	2987.91	92.45	2902.08	84.74	2903.17	7.71
	07/15/99	2987.91	95.20	2899.45	87.34	2900.57	7.86

TABLE IV

**SUMMARY OF GROUNDWATER MONITORING
EQUILON PIPELINE COMPANY, LLC
JAL BASIN STATION
LEA COUNTY, NEW MEXICO**

WELL	DATE	SURFACE ELEV. (feet)	DEPTH TO WATER (feet)	ELEV. OF WATER (feet)	DEPTH TO PSH (feet)	ELEV. OF PSH (feet)	LNAPL THICKNESS (feet)
MW-03 cont.	08/07/99	2987.91	92.44	2901.95	84.89	2903.02	7.55
	08/14/99	2987.91	92.50	2901.83	85.02	2902.89	7.48
	08/22/99	2987.91	95.25	2898.37	88.60	2899.31	6.65
	09/01/99	2987.91	92.50	2901.80	85.05	2902.86	7.45
	09/11/99	2987.91	95.31	2898.99	87.86	2900.05	7.45
	09/16/99	2987.91	92.35	2901.93	84.92	2902.99	7.43
	09/25/99	2987.91	92.45	2901.68	85.20	2902.71	7.25
	10/02/99	2987.91	92.35	2901.05	85.95	2901.96	6.40
	10/09/99	2987.91	94.93	2899.24	87.63	2900.28	7.30
	10/15/99	2987.91	95.10	2899.12	87.75	2900.16	7.35
	10/21/99	2987.91	92.35	2901.82	85.05	2902.86	7.30
	10/26/99	2987.91	92.35	2901.78	85.10	2902.81	7.25
	08/02/00	2987.91	92.50	2901.99	84.83	2903.08	7.67
	11/24/00	2987.91	92.31	2900.07	87.10	2900.81	5.21
	02/14/01	2987.91	88.82	2899.11	88.80	2899.11	0.02
	03/16/01	2987.91	96.90	2895.99	91.10	2896.81	5.80
	04/19/01	2987.91	96.40	2896.14	91.00	2896.91	5.40
	05/23/01	2987.91	93.70	2899.01	88.10	2899.81	5.60
	09/29/01	2987.91	94.20	2898.64	88.45	2899.46	5.75
	12/20/01	2987.91	97.20	2895.73	91.35	2896.56	5.85
MW-04	02/04/99	2988.22	85.83	2902.39	—	—	—
	02/22/99	2988.22	85.90	2902.32	—	—	—
	03/11/99	2988.22	85.94	2902.28	—	—	—
	04/07/99	2988.22	86.11	2902.11	—	—	—
	05/03/99	2988.22	86.00	2902.27	85.94	2902.28	0.06
	05/10/99	2988.22	86.18	2902.14	86.06	2902.16	0.12
	05/18/99	2988.22	86.31	2902.04	86.16	2902.06	0.15
	05/24/99	2988.22	86.30	2902.06	86.14	2902.08	0.16
	06/01/99	2988.22	86.14	2902.19	86.01	2902.21	0.13
	06/08/99	2988.22	86.28	2902.10	86.09	2902.13	0.19
	06/14/99	2988.22	86.20	2902.20	85.99	2902.23	0.21
	06/22/99	2988.22	86.08	2902.32	85.87	2902.35	0.21
	07/02/99	2988.22	86.14	2902.31	85.87	2902.35	0.27
	07/06/99	2988.22	86.50	2902.01	86.16	2902.06	0.34
	07/13/99	2988.22	86.56	2901.97	86.20	2902.02	0.36
	07/20/99	2988.22	86.54	2902.01	86.16	2902.06	0.38
	07/26/99	2988.22	86.56	2902.00	86.16	2902.06	0.40
	08/07/99	2988.22	86.77	2901.85	86.30	2901.92	0.47
	08/14/99	2988.22	86.89	2901.83	86.31	2901.91	0.58
	08/22/99	2988.22	86.91	2901.87	86.26	2901.96	0.65
	09/01/99	2988.22	86.86	2901.92	86.21	2902.01	0.65
	09/11/99	2988.22	87.08	2901.82	86.29	2901.93	0.79

TABLE IV

**SUMMARY OF GROUNDWATER MONITORING
EQUILON PIPELINE COMPANY, LLC
JAL BASIN STATION
LEA COUNTY, NEW MEXICO**

WELL	DATE	SURFACE ELEV. (feet)	DEPTH TO WATER (feet)	ELEV. OF WATER (feet)	DEPTH TO PSH (feet)	ELEV. OF PSH (feet)	LNAPL THICKNESS (feet)
MW-04 cont.	09/16/99	2988.22	87.06	2901.85	86.26	2901.96	0.80
	09/25/99	2988.22	87.11	2901.89	86.20	2902.02	0.91
	10/02/99	2988.22	87.16	2901.88	86.20	2902.02	0.96
	10/09/99	2988.22	87.18	2901.94	86.13	2902.09	1.05
	10/15/99	2988.22	87.16	2901.96	86.11	2902.11	1.05
	10/21/99	2988.22	87.41	2901.84	86.21	2902.01	1.20
	10/26/99	2988.22	87.43	2901.85	86.19	2902.03	1.24
	08/02/00	2988.22	89.21	2901.49	86.32	2901.90	2.89
	11/24/00	2988.22	90.46	2899.65	88.26	2899.96	2.20
	02/14/01	2988.22	89.46	2899.40	88.71	2899.51	0.75
	03/16/01	2988.22	92.70	2896.42	91.65	2896.57	1.05
	04/19/01	2988.22	93.30	2896.46	91.50	2896.72	1.80
	05/23/01	2988.22	90.26	2899.33	88.66	2899.56	1.60
	09/29/01	2988.22	92.66	2899.03	88.61	2899.61	4.05
	12/20/01	2988.22	94.80	2896.85	90.80	2897.42	4.00
MW-05	02/04/99	2988.47	86.03	2902.44	—	—	—
	02/22/99	2988.47	86.07	2902.40	—	—	—
	03/11/99	2988.47	86.21	2902.26	—	—	—
	04/07/99	2988.47	86.25	2902.22	—	—	—
	05/03/99	2988.47	86.14	2902.33	—	—	—
	06/08/99	2988.47	86.49	2901.98	—	—	—
	06/22/99	2988.47	86.35	2902.12	—	—	—
	07/06/99	2988.47	86.43	2902.04	—	—	—
	08/14/99	2988.47	86.54	2901.93	—	—	—
	09/16/99	2988.47	86.54	2901.93	—	—	—
	10/19/99	2988.47	86.46	2902.01	—	—	—
	02/07/00	2988.47	86.69	2901.78	—	—	—
	08/02/00	2988.47	86.90	2901.57	—	—	—
	11/24/00	2988.47	87.04	2901.43	—	—	—
	02/21/01	2988.47	87.49	2900.98	—	—	—
	03/16/01	2988.47	90.35	2898.12	—	—	—
	04/19/01	2988.47	90.30	2898.17	—	—	—
	05/23/01	2988.47	87.49	2900.98	—	—	—
	09/29/01	2988.47	87.79	2900.68	—	—	—
	12/20/01	2988.47	90.90	2897.57	—	—	—
MW-06	02/04/99	2987.40	87.01	2902.35	84.72	2902.68	2.29
	02/22/99	2987.40	88.75	2902.20	84.61	2902.79	4.14
	03/03/99	2987.40	89.16	2902.13	84.63	2902.77	4.53
	07/15/99	2987.40	88.48	2901.77	85.16	2902.24	3.32
	08/07/99	2987.40	90.69	2900.94	85.76	2901.64	4.93
	08/14/99	2987.40	90.98	2901.57	84.98	2902.42	6.00

TABLE IV

**SUMMARY OF GROUNDWATER MONITORING
EQUILON PIPELINE COMPANY, LLC
JAL BASIN STATION
LEA COUNTY, NEW MEXICO**

WELL	DATE	SURFACE ELEV. (feet)	DEPTH TO WATER (feet)	ELEV. OF WATER (feet)	DEPTH TO PSH (feet)	ELEV. OF PSH (feet)	LNAPL THICKNESS (feet)
MW-06 cont.	08/22/99	2987.40	90.98	2901.64	84.90	2902.50	6.08
	09/01/99	2987.40	90.93	2901.67	84.87	2902.53	6.06
	09/11/99	2987.40	91.11	2901.58	84.95	2902.45	6.16
	09/16/99	2987.40	91.00	2901.65	84.88	2902.52	6.12
	09/25/99	2987.40	90.85	2901.72	84.83	2902.57	6.02
	10/02/99	2987.40	90.88	2901.70	84.84	2902.56	6.04
	10/09/99	2987.40	90.86	2901.72	84.82	2902.58	6.04
	10/15/99	2987.40	90.88	2901.74	84.80	2902.60	6.08
	10/21/99	2987.40	91.05	2901.64	84.88	2902.52	6.17
	10/26/99	2987.40	91.03	2901.65	84.88	2902.52	6.15
	08/02/00	2987.40	92.03	2901.20	85.23	2902.17	6.80
	11/24/00	2987.40	92.33	2900.65	85.83	2901.57	6.50
	02/14/01	2987.40	89.83	2897.66	89.73	2897.67	0.10
	03/16/01	2987.40	92.60	2894.89	92.50	2894.90	0.10
	04/19/01	2987.40	92.55	2894.94	92.45	2894.95	0.10
	05/23/01	2987.40	89.83	2897.61	89.78	2897.62	0.05
	09/29/01	2987.40	89.73	2897.67	—	—	Sheen
	12/20/01	2987.40	92.15	2895.25	92.10	2895.30	0.05
MW-07	02/04/99	2986.31	84.03	2902.28	—	—	—
	02/22/99	2986.31	84.13	2902.18	—	—	—
	03/11/99	2986.31	84.26	2902.05	—	—	—
	04/07/99	2986.31	84.35	2901.96	—	—	—
	05/03/99	2986.31	84.36	2902.10	84.18	2902.13	0.18
	05/10/99	2986.31	84.58	2902.02	84.24	2902.07	0.34
	05/18/99	2986.31	84.88	2901.92	84.31	2902.00	0.57
	05/24/99	2986.31	84.89	2901.93	84.29	2902.02	0.60
	06/01/99	2986.31	84.77	2901.99	84.25	2902.06	0.52
	06/08/99	2986.31	84.99	2901.92	84.29	2902.02	0.70
	06/14/99	2986.31	84.31	2902.76	83.43	2902.88	0.88
	06/22/99	2986.31	84.27	2902.83	83.35	2902.96	0.92
	07/02/99	2986.31	85.32	2901.92	84.24	2902.07	1.08
	07/06/99	2986.31	85.49	2901.81	84.34	2901.97	1.15
	07/13/99	2986.31	85.72	2901.77	84.34	2901.97	1.38
	07/20/99	2986.31	85.87	2901.80	84.28	2902.03	1.59
	07/26/99	2986.31	86.14	2901.76	84.29	2902.02	1.85
	08/07/99	2986.31	86.54	2901.64	84.36	2901.95	2.18
	08/14/99	2986.31	86.94	2901.63	84.31	2902.00	2.63
	08/22/99	2986.31	87.49	2901.65	84.19	2902.12	3.30
	09/01/99	2986.31	87.74	2901.68	84.11	2902.20	3.63
	09/11/99	2986.31	88.14	2901.69	84.04	2902.27	4.10
	09/16/99	2986.31	88.24	2901.72	83.99	2902.32	4.25
	09/25/99	2986.31	88.34	2900.14	85.81	2900.50	2.53

TABLE IV

**SUMMARY OF GROUNDWATER MONITORING
EQUILON PIPELINE COMPANY, LLC
JAL BASIN STATION
LEA COUNTY, NEW MEXICO**

WELL	DATE	SURFACE ELEV. (feet)	DEPTH TO WATER (feet)	ELEV. OF WATER (feet)	DEPTH TO PSH (feet)	ELEV. OF PSH (feet)	LNAPL THICKNESS (feet)
MW-07 cont.	10/02/99	2986.31	88.49	2901.81	83.84	2902.47	4.65
	10/09/99	2986.31	88.64	2901.79	83.84	2902.47	4.80
	10/15/99	2986.31	88.69	2901.82	83.79	2902.52	4.90
	10/19/99	PLUGGED AND ABANDONED					
MW-08	02/04/99	2987.97	86.00	2901.98	85.99	2901.98	0.01
	02/22/99	2987.97	86.06	2901.93	86.04	2901.93	0.02
	03/11/99	2987.97	86.18	2901.86	86.10	2901.87	0.08
	03/24/99	2987.97	86.42	2901.88	86.04	2901.93	0.38
	03/31/99	2987.97	86.47	2901.88	86.03	2901.94	0.44
	04/02/99	2987.97	86.39	2901.79	86.14	2901.83	0.25
	04/07/99	2987.97	86.94	2901.77	86.08	2901.89	0.86
	04/13/99	2987.97	86.83	2901.90	85.94	2902.03	0.89
	04/19/99	2987.97	87.01	2901.87	85.95	2902.02	1.06
	04/26/99	2987.97	87.30	2901.81	85.97	2902.00	1.33
	05/03/99	2987.97	87.47	2901.85	85.90	2902.07	1.57
	05/10/99	2987.97	87.89	2901.75	85.94	2902.03	1.95
	05/18/99	2987.97	88.39	2901.66	85.96	2902.01	2.43
	05/24/99	2987.97	88.60	2901.68	85.91	2902.06	2.69
	06/01/99	2987.97	89.04	2901.74	85.76	2902.21	3.28
	06/08/99	2987.97	88.51	2901.79	85.80	2902.17	2.71
	06/14/99	2987.97	86.14	2904.58	82.94	2905.03	3.20
	06/22/99	2987.97	85.74	2905.36	82.09	2905.88	3.65
	07/02/99	2987.97	89.62	2901.64	85.78	2902.19	3.84
	07/06/99	2987.97	89.76	2901.64	85.76	2902.21	4.00
	07/13/99	2987.97	89.92	2901.55	85.84	2902.13	4.08
	07/20/99	2987.97	89.94	2901.63	85.74	2902.23	4.20
	07/26/99	2987.97	90.09	2901.63	85.72	2902.25	4.37
	08/07/99	2987.97	90.20	2901.57	85.77	2902.20	4.43
	08/14/99	2987.97	90.44	2901.65	85.64	2902.33	4.80
	08/22/99	2987.97	90.49	2901.51	85.79	2902.18	4.70
	09/01/99	2987.97	90.40	2901.52	85.80	2902.17	4.60
	09/11/99	2987.97	90.74	2901.48	85.79	2902.18	4.95
	09/16/99	2987.97	90.74	2901.44	85.83	2902.14	4.91
	09/25/99	2987.97	90.74	2901.52	85.74	2902.23	5.00
	10/02/99	2987.97	90.79	2901.48	85.78	2902.19	5.01
	10/09/99	2987.97	90.74	2901.51	85.75	2902.22	4.99
	10/15/99	2987.97	90.89	2901.50	85.74	2902.23	5.15
	10/21/99	2987.97	91.04	2900.59	86.77	2901.20	4.27
	10/26/99	2987.97	91.09	2901.44	85.77	2902.20	5.32
	08/02/00	2987.97	90.92	2901.06	86.25	2901.72	4.67
	11/24/00	2987.97	91.44	2900.56	86.74	2901.23	4.70
	02/14/01	2987.97	91.44	2899.92	87.49	2900.48	3.95

TABLE IV

**SUMMARY OF GROUNDWATER MONITORING
EQUILON PIPELINE COMPANY, LLC
JAL BASIN STATION
LEA COUNTY, NEW MEXICO**

WELL	DATE	SURFACE ELEV. (feet)	DEPTH TO WATER (feet)	ELEV. OF WATER (feet)	DEPTH TO PSH (feet)	ELEV. OF PSH (feet)	LNAPL THICKNESS (feet)
MW-08 cont.	03/16/01	2987.97	91.55	2897.79	89.95	2898.02	1.60
	04/19/01	2987.97	93.60	2897.84	89.55	2898.42	4.05
	05/23/01	2987.97	92.09	2900.56	86.64	2901.33	5.45
	09/29/01	2987.97	93.09	2900.03	87.09	2900.88	6.00
	12/20/01	2987.97	95.75	2897.20	89.95	2898.02	5.80
MW-09	02/04/99	2987.39	86.06	2901.83	85.48	2901.91	0.58
	02/22/99	2987.39	88.60	2902.34	84.46	2902.93	4.14
	03/11/99	2987.39	91.48	2901.67	84.77	2902.62	6.71
	03/24/99	2987.39	91.43	2901.67	84.78	2902.61	6.65
	03/31/99	2987.39	91.40	2901.72	84.72	2902.67	6.68
	04/02/99	2987.39	91.52	2901.60	84.84	2902.55	6.68
	04/07/99	2987.39	91.58	2901.57	84.87	2902.52	6.71
	07/15/99	2987.39	91.13	2901.43	85.11	2902.28	6.02
	10/26/99	2987.39	90.63	2901.22	85.43	2901.96	5.20
	08/02/00	2987.39	92.73	2900.81	85.56	2901.83	7.17
	11/24/00	2987.39	92.63	2900.38	86.08	2901.31	6.55
	02/14/01	2987.39	93.58	2899.99	86.38	2901.01	7.20
	05/23/01	2987.39	93.08	2900.36	86.03	2901.36	7.05
	09/29/01	2987.39	93.73	2899.75	86.63	2900.76	7.10
	12/20/01	2987.39	91.05	2896.51	90.85	2896.54	0.20
MW-10	02/04/99	2987.96	85.73	2902.23	—	—	—
	02/22/99	2987.96	85.76	2902.20	—	—	—
	03/11/99	2987.96	85.87	2902.09	—	—	—
	04/07/99	2987.96	85.93	2902.03	—	—	—
	05/03/99	2987.96	85.81	2902.15	—	—	—
	06/08/99	2987.96	86.02	2901.94	—	—	—
	06/22/99	2987.96	87.07	2900.89	—	—	—
	07/06/99	2987.96	87.07	2900.89	—	—	—
	08/14/99	2987.96	86.19	2901.77	—	—	—
	09/16/99	2987.96	86.22	2901.74	—	—	—
	10/19/99	2987.96	86.17	2901.79	—	—	—
	02/07/00	2987.96	86.32	2901.64	—	—	—
	08/02/00	2987.96	86.57	2901.39	—	—	—
	11/24/00	2987.96	86.72	2901.24	—	—	—
	02/14/01	2987.96	87.02	2900.94	—	—	—
	03/16/01	2987.96	89.95	2898.01	—	—	—
	04/19/01	2987.96	89.55	2898.41	—	—	—
	05/23/01	2987.96	87.57	2900.82	87.07	2900.89	0.50
	09/29/01	2987.96	91.37	2900.45	86.87	2901.09	4.50
	12/20/01	2987.96	94.25	2897.49	89.85	2898.11	4.40

TABLE IV

SUMMARY OF GROUNDWATER MONITORING
EQUILON PIPELINE COMPANY, LLC
JAL BASIN STATION
LEA COUNTY, NEW MEXICO

WELL	DATE	SURFACE ELEV. (feet)	DEPTH TO WATER (feet)	ELEV. OF WATER (feet)	DEPTH TO PSH (feet)	ELEV. OF PSH (feet)	LNAPL THICKNESS (feet)
MW-11	02/04/99	2989.37	87.54	2901.83	---	---	---
	02/22/99	2989.37	87.50	2901.87	---	---	---
	03/11/99	2989.37	87.60	2901.77	---	---	---
	04/07/99	2989.37	87.56	2901.81	---	---	---
	05/03/99	2989.37	87.38	2901.99	---	---	---
	06/08/99	2989.37	87.72	2901.65	---	---	---
	06/22/99	2989.37	87.76	2901.61	---	---	---
	07/06/99	2989.37	87.84	2901.53	---	---	---
	08/14/99	2989.37	87.98	2901.39	---	---	---
	09/16/99	2989.37	87.61	2901.76	---	---	---
	10/19/99	2989.37	87.66	2901.71	---	---	---
	02/07/00	2989.37	87.52	2901.85	---	---	---
	08/02/00	2989.37	87.65	2901.72	---	---	---
	11/24/00	2989.37	87.87	2901.50	---	---	---
	02/14/01	2989.37	88.32	2901.05	---	---	---
	03/16/01	2989.37	91.40	2897.97	---	---	---
	04/19/01	2989.37	91.35	2898.02	---	---	---
	05/23/01	2989.37	88.52	2900.85	---	---	---
	09/29/01	2989.37	88.57	2900.80	---	---	---
	12/20/01	2989.37	91.80	2897.57	---	---	---
MW-12	02/04/99	2987.79	86.52	2901.27	---	---	---
	02/22/99	2987.79	86.26	2901.53	---	---	---
	03/11/99	2987.79	86.38	2901.41	---	---	---
	04/07/99	2987.79	86.46	2901.33	---	---	---
	05/03/99	2987.79	86.36	2901.43	---	---	---
	06/08/99	2987.79	86.55	2901.24	---	---	---
	06/22/99	2987.79	86.55	2901.24	---	---	---
	07/06/99	2987.79	86.60	2901.19	---	---	---
	08/14/99	2987.79	86.70	2901.09	---	---	---
	09/16/99	2987.79	86.71	2901.08	---	---	---
	10/19/99	2987.79	86.72	2901.07	---	---	---
	02/07/00	2987.79	86.80	2900.99	---	---	---
	08/02/00	2987.79	87.08	2900.71	---	---	---
	11/24/00	2987.79	88.45	2900.67	86.90	2900.89	1.55
	02/14/01	2987.79	90.80	2900.34	86.90	2900.89	3.90
	03/16/01	2987.79	94.35	2896.96	90.25	2897.54	4.10
	04/19/01	2987.79	94.45	2897.07	90.10	2897.69	4.35
	05/23/01	2987.79	91.65	2900.17	86.95	2900.84	4.70
	09/29/01	2987.79	93.00	2899.77	87.20	2900.59	5.80
	12/20/01	2987.79	96.30	2896.42	90.55	2897.24	5.75

TABLE IV

**SUMMARY OF GROUNDWATER MONITORING
EQUILON PIPELINE COMPANY, LLC
JAL BASIN STATION
LEA COUNTY, NEW MEXICO**

WELL	DATE	SURFACE ELEV. (feet)	DEPTH TO WATER (feet)	ELEV. OF WATER (feet)	DEPTH TO PSH (feet)	ELEV. OF PSH (feet)	LNAPL THICKNESS (feet)
MW-13	10/19/99	2989.79	88.28	2901.51	—	—	—
	02/07/00	2989.79	88.42	2901.37	—	—	—
	08/02/00	2989.79	88.62	2901.17	—	—	—
	11/24/00	2989.79	88.67	2901.12	—	—	—
	02/14/01	2989.79	88.92	2900.87	—	—	—
	03/16/01	2989.79	92.25	2897.54	—	—	—
	04/19/01	2989.79	92.20	2897.59	—	—	—
	05/23/01	2989.79	89.17	2900.62	—	—	—
	09/29/01	2989.79	89.52	2900.27	—	—	—
	12/20/01	2989.79	92.80	2896.99	—	—	—
MW-14	10/19/99	2986.02	85.04	2900.98	—	—	—
	02/07/00	2986.02	85.25	2900.77	—	—	—
	08/02/00	2986.02	86.95	2900.53	85.25	2900.77	1.70
	11/24/00	2986.02	88.60	2900.51	85.00	2901.02	3.60
	02/14/01	2986.02	89.95	2900.10	85.25	2900.77	4.70
	03/29/01	2986.02	88.76	2897.27	88.75	2897.27	0.01
	05/23/01	2986.02	86.30	2900.02	85.95	2900.07	0.35
	09/29/01	2986.02	87.45	2899.77	86.05	2899.97	1.40
	12/20/01	2986.02	89.08	2896.97	89.05	2896.97	0.03
MW-15	10/19/99	2986.45	85.32	2901.13	—	—	—
	02/07/00	2986.45	85.01	2901.44	—	—	—
	08/02/00	2986.45	85.30	2901.15	—	—	—
	11/24/00	2986.45	85.36	2901.09	—	—	—
	02/14/01	2986.45	85.81	2900.64	—	—	—
	03/16/01	2986.45	89.15	2897.30	—	—	—
	04/19/01	2986.45	89.05	2897.40	—	—	—
	05/23/01	2986.45	85.91	2900.54	—	—	—
	09/29/01	2986.45	86.21	2900.24	—	—	—
	12/20/01	2986.45	89.50	2896.95	—	—	—

TABLE V

SUMMARY OF GROUNDWATER RESULTS - BTEX AND TPH
EQUILON PIPELINE COMPANY, LLC
JAL BASIN STATION
LEA COUNTY, NEW MEXICO

SAMPLE LOCATION	DATE	BENZENE (mg/l)	TOLUENE (mg/l)	ETHYL- BENZENE (mg/l)	XYLENES (mg/l)	BTEX (mg/l)	TPH-DRO (mg/l)
MW-1	02/23/99	ND	ND	ND	ND	ND	---
	08/22/99	ND	ND	ND	ND	ND	ND
	10/19/99	ND	ND	ND	ND	ND	0.135
	02/07/00	ND	ND	ND	ND	ND	ND
	08/02/00	ND	ND	ND	ND	ND	---
	11/24/00	ND	ND	ND	ND	ND	---
	02/14/01	<0.001	<0.001	<0.001	<0.003	0	---
	05/23/01	<0.001	<0.001	<0.001	<0.001	<0.001	---
	09/29/01	<0.001	<0.001	<0.001	<0.001	<0.001	---
	12/20/01	<0.001	<0.001	<0.001	<0.001	<0.001	---
MW-2	02/23/99	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (8.28')					
	08/22/99	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (7.71')					
	10/19/99	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (7.47')					
	02/07/00	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL					
	08/02/00	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (7.64')					
	11/24/00	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (6.90')					
	02/14/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (7.45')					
	05/23/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (7.00')					
	09/29/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (0.05')					
	12/20/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (0.05')					
MW-3	02/23/99	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (8.00')					
	08/22/99	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (7.45')					
	10/19/99	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (7.30')					
	02/07/00	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL					
	08/02/00	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (7.67')					
	11/24/00	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (5.21')					
	02/14/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (0.02')					
	05/23/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (5.60')					
	09/29/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (5.75')					
	12/20/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (5.85')					
MW-4	02/23/99	ND	ND	ND	0.005	0.005	---
	08/22/99	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (0.65')					
	10/19/99	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (1.05')					
	02/07/00	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL					
	08/02/00	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (2.89')					
	11/24/00	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (2.20')					
	02/14/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (0.75')					
	05/23/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (1.60')					
	09/29/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (4.05')					
	12/20/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (4.00')					

TABLE V

SUMMARY OF GROUNDWATER RESULTS - BTEX AND TPH
EQUILON PIPELINE COMPANY, LLC
JAL BASIN STATION
LEA COUNTY, NEW MEXICO

SAMPLE LOCATION	DATE	BENZENE (mg/l)	TOLUENE (mg/l)	ETHYL-BENZENE (mg/l)	XYLENES (mg/l)	BTEX (mg/l)	TPH-DRO (mg/l)
MW-5	02/23/99	ND	ND	ND	ND	ND	—
	08/22/99	ND	ND	ND	ND	ND	ND
	10/19/99	ND	ND	ND	ND	ND	0.156
	02/07/00	ND	ND	ND	ND	ND	ND
	08/02/00	ND	ND	ND	ND	ND	—
	11/24/00	ND	ND	ND	ND	ND	—
	02/21/01	<0.001	<0.001	<0.001	<0.003	0	—
	05/23/01	<0.001	<0.001	<0.001	<0.001	<0.001	—
	09/29/01	<0.001	<0.001	<0.001	<0.001	<0.001	—
	12/20/01	<0.001	<0.001	<0.001	<0.001	<0.001	—
MW-6	02/23/99	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (4.14')					
	08/22/99	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (6.08')					
	10/19/99	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (6.08')					
	02/07/00	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL					
	08/02/00	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (6.80')					
	11/24/00	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (6.50')					
	02/14/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (0.10')					
	05/23/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (0.05')					
	09/29/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (SHEEN)					
	12/20/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (0.05')					
MW-7	02/23/99	ND	ND	ND	0.004	0.004	—
	08/22/99	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (3.30')					
	10/19/99	PLUGGED AND ABANDONED					
MW-8	02/23/99	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (0.02')					
	08/22/99	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (4.70')					
	10/19/99	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (5.15')					
	02/07/00	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL					
	08/02/00	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (4.67')					
	11/24/00	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (4.70')					
	02/14/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (3.95')					
	05/23/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (5.45')					
	09/29/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (6.00')					
	12/20/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (5.80')					
MW-9	02/23/99	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (4.14')					
	08/22/99	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (6.02')					
	10/19/99	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (5.20')					
	02/07/00	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL					
	08/02/00	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (7.17')					
	11/24/00	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (6.55')					
	02/14/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (7.20')					
	05/23/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (7.05')					
	09/29/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (7.10')					
	12/20/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (0.20')					

TABLE V

SUMMARY OF GROUNDWATER RESULTS - BTEX AND TPH
EQUILON PIPELINE COMPANY, LLC
JAL BASIN STATION
LEA COUNTY, NEW MEXICO

SAMPLE LOCATION	DATE	BENZENE (mg/l)	TOLUENE (mg/l)	ETHYL- BENZENE (mg/l)	XYLENES (mg/l)	BTEX (mg/l)	TPH-DRO (mg/l)
MW-10	02/23/99	ND	ND	ND	ND	ND	—
	08/22/99	ND	ND	ND	ND	ND	ND
	10/19/99	ND	ND	ND	ND	ND	0.124
	02/07/00	ND	ND	ND	ND	ND	ND
	08/02/00	ND	ND	ND	ND	ND	—
	11/24/00	ND	ND	ND	ND	ND	—
	02/14/01	<0.001	<0.001	<0.001	<0.001	<0.001	—
	05/23/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (0.50')					
	09/29/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (4.50')					
	12/20/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (4.40')					
MW-11	02/23/99	ND	ND	ND	ND	ND	—
	08/22/99	ND	ND	ND	ND	ND	3.2
	10/19/99	ND	ND	ND	ND	ND	0.077
	02/07/00	ND	ND	ND	ND	ND	ND
	08/02/00	ND	ND	ND	ND	ND	—
	11/24/00	ND	ND	ND	ND	ND	—
	02/14/01	<0.001	<0.001	<0.001	<0.003	0	—
	05/23/01	<0.001	<0.001	<0.001	<0.001	<0.001	—
	09/29/01	<0.001	<0.001	<0.001	<0.001	<0.001	—
	12/20/01	<0.001	<0.001	<0.001	<0.001	<0.001	—
MW-12	02/23/99	ND	ND	ND	ND	ND	—
	08/22/99	ND	ND	ND	ND	ND	2.5
	10/19/99	ND	ND	ND	ND	ND	0.306
	02/07/00	0.004	ND	ND	0.007	0.011	ND
	08/02/00	ND	ND	ND	ND	ND	—
	11/24/00	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (1.55')					
	02/14/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (3.90')					
	05/23/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (4.70')					
	09/29/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (5.80')					
	12/20/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (5.75')					
MW-13	10/19/99	ND	ND	ND	ND	ND	0.127
	02/07/00	ND	ND	ND	ND	ND	ND
	08/02/00	ND	ND	ND	ND	ND	—
	11/24/00	ND	ND	ND	ND	ND	—
	02/14/01	<0.001	<0.001	<0.001	<0.003	0	—
	05/23/01	<0.001	<0.001	<0.001	<0.001	<0.001	—
	09/29/01	<0.001	<0.001	<0.001	<0.001	<0.001	—
	12/20/01	<0.001	<0.001	<0.001	<0.001	<0.001	—

TABLE V

SUMMARY OF GROUNDWATER RESULTS - BTEX AND TPH
EQUILON PIPELINE COMPANY, LLC
JAL BASIN STATION
LEA COUNTY, NEW MEXICO

SAMPLE LOCATION	DATE	BENZENE (mg/l)	TOLUENE (mg/l)	ETHYL- BENZENE (mg/l)	XYLENES (mg/l)	BTEX (mg/l)	TPH-DRO (mg/l)
MW-14	10/19/99	0.007	ND	ND	0.010	0.017	0.481
	02/07/00	0.024	ND	ND	0.023	0.047	1.384
	08/02/00	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (1.70')					
	11/24/00	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (3.60')					
	02/14/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (4.70')					
	05/23/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (0.35')					
	09/29/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (1.40')					
	12/20/01	NOT SAMPLED DUE TO THE PRESENCE OF LNAPL (0.03')					
MW-15	10/19/99	ND	ND	ND	ND	ND	0.132
	02/07/00	ND	ND	ND	ND	ND	ND
	08/02/00	ND	ND	ND	ND	ND	—
	11/24/00	ND	ND	ND	ND	ND	—
	02/14/01	<0.001	<0.001	<0.001	<0.003	0	—
	05/23/01	<0.001	<0.001	<0.001	<0.001	<0.001	—
	09/29/01	<0.001	<0.001	<0.001	<0.001	<0.001	—
	12/20/01	<0.001	<0.001	<0.001	<0.001	<0.001	—
Product Tank	06/14/99	0.077	0.218	0.118	0.274	0.687	—

TABLE VI

SUMMARY OF GROUND WATER RESULTS - OTHER
EQUILON PIPELINE COMPANY, LLC
LEA COUNTY, NEW MEXICO

SAMPLE LOCATION DATE SAMPLED PARAMETER	MW-1		MW-4		MW-5		MW-7		MW-10	
	02/23/99	10/19/99	12/20/01	02/23/99	02/23/99	10/19/99	12/20/01	02/23/99	02/23/99	10/19/99
	CONCENTRATION (mg/l)									
PAH										
Acenaphthalene	ND	ND	<0.005	ND	ND	ND	<0.005	0.003	ND	ND
Fluorene	ND	ND	<0.005	ND	ND	ND	<0.005	0.005	ND	ND
Naphthalene	ND	ND	<0.005	0.005	ND	ND	<0.005	ND	ND	ND
Phenanthrene	ND	ND	<0.005	ND	ND	ND	<0.005	0.003	ND	ND
TOTAL	ND	ND	<0.005	0.005	ND	ND	<0.005	0.011	ND	ND
Metals										
Aluminum	ND	1.29	---	ND	ND	2.81	---	4.93	ND	2.72
Arsenic	---	---	0.0222	---	---	---	0.0134	---	---	---
Barium	ND	ND	0.559	ND	0.65	0.492	0.164	ND	ND	0.308
Boron	ND	0.918	---	1.76	ND	0.355	---	ND	ND	0.308
Cadmium	---	---	<0.005	---	---	---	<0.005	---	---	---
Calcium	587	413	---	447	1650	335	---	737	949	311
Chromium	0.13	ND	0.0995	ND	ND	ND	<0.010	ND	ND	ND
Copper	ND	ND	---	ND	ND	ND	---	0.034	0.065	ND
Iron	6.72	2.94	---	1.44	1.26	2.72	---	3.11	ND	3.28
Lead	0.021	ND	0.0198	0.019	ND	ND	<0.010	0.030	ND	ND
Magnesium	202	163	---	49.3	49.6	41.4	---	78.5	55.9	61.0
Manganese	0.31	ND	---	ND	0.85	0.184	---	0.42	0.32	0.121
Mercury	---	---	<0.0002	---	---	---	<0.0002	---	---	---
Potassium	14.56	13.0	---	9.17	6.39	7.17	---	12.11	9.44	7.56
Selenium	0.13	0.081	0.093	ND	ND	ND	<0.050	ND	ND	ND
Silica	62.28	51.30	---	60.08	54.67	52.20	---	60.44	44.11	59.5
Silver	---	---	<0.0125	---	---	---	<0.0125	---	---	---
Sodium	167	176	---	92.44	66.89	66.7	---	231	43.83	41.7
Strontium	11.59	10.6	---	2.89	4.61	2.38	---	4.74	3.89	3.80
Vanadium	ND	ND	---	ND	ND	0.12	---	ND	ND	ND
Cations/Anions										
Bicarbonate	362	385	---	377	280	336	---	402	256	376
Chloride	767	159	---	34	15	9.60	---	58.6	54	28.9
Sulfate	1960	453	---	55	40	33	---	980	38	25.9
TDS	2670	2290	---	730	640	512	---	1330	810	621

TABLE VI

SUMMARY OF GROUND WATER RESULTS - OTHER
EQUILON PIPELINE COMPANY, LLC
LEA COUNTY, NEW MEXICO

SAMPLE LOCATION DATE SAMPLED PARAMETER	MW-11			MW-12			MW-13		
	02/23/99	10/19/99	02/07/00	12/20/01	02/23/99	10/19/99	10/19/99	02/07/00	12/20/01
	CONCENTRATION (mg/l)								
PAH									
Acenaphthalene	ND	ND	ND	<0.005	ND	ND	ND	ND	<0.005
Fluorene	ND	ND	ND	<0.005	ND	ND	ND	ND	<0.005
Naphthalene	ND	ND	ND	<0.005	ND	ND	ND	ND	<0.005
Phenanthrene	ND	ND	ND	<0.005	ND	ND	ND	ND	<0.005
TOTAL	ND	ND	ND	<0.005	ND	ND	ND	ND	<0.005
Metals									
Aluminum	ND	0.528	---	---	5.78	0.696	4.56	---	---
Arsenic	---	---	---	0.0195	---	---	---	---	0.0159
Barium	ND	ND	---	<0.100	0.59	ND	0.451	---	0.206
Boron	ND	0.572	---	---	ND	0.636	ND	---	---
Cadmium	---	---	---	<0.005	---	---	---	---	<0.005
Calcium	387	110	---	---	524	128	807	---	---
Chromium	ND	ND	---	<0.010	ND	ND	ND	---	<0.010
Copper	ND	ND	---	---	0.04	ND	ND	---	---
Iron	2.56	0.556	---	---	3.33	0.072	5.89	---	---
Lead	0.019	ND	---	<0.010	0.031	ND	ND	---	<0.010
Magnesium	49.6	41.9	---	---	48.1	51.5	41.6	---	---
Manganese	0.23	ND	---	---	0.26	ND	0.581	---	---
Mercury	---	---	---	<0.0002	---	---	---	---	<0.0002
Potassium	9.389	6.76	---	---	9.67	6.08	10.9	---	---
Selenium	ND	ND	---	<0.050	ND	ND	ND	---	<0.050
Silica	61.56	58.70	---	---	64.33	54.2	54.6	---	---
Silver	---	---	---	<0.0125	---	---	---	---	<0.0125
Sodium	227	211	---	---	97.22	82.5	64.6	---	---
Strontium	2.909	2.85	---	---	2.85	3.1	2.92	---	---
Vanadium	ND	ND	---	---	ND	ND	0.143	---	---
Cations/Anions									
Bicarbonate	272	276	---	---	382	498	284	---	---
Chloride	69	67.3	---	---	8	14.7	4.90	---	---
Sulfate	369	350	---	---	31	38	10.9	---	---
TDS	2060	1060	---	---	600	710	454	---	---

TABLE VI

SUMMARY OF GROUND WATER RESULTS - OTHER
EQUILON PIPELINE COMPANY, LLC
LEA COUNTY, NEW MEXICO

SAMPLE LOCATION		MW-14		MW-15	
DATE SAMPLED		10/19/99	02/07/00	10/19/99	02/07/00
PARAMETER		CONCENTRATION (mg/l)			
PAH					
Acenaphthalene	ND	ND	ND	ND	<0.005
Fluorene	ND	ND	ND	ND	<0.005
Naphthalene	0.036	0.0152	ND	ND	<0.005
Phenanthrene	ND	ND	ND	ND	<0.005
TOTAL	0.036	0.0152	ND	ND	<0.005
Metals					
Aluminum	0.936		1.39		
Arsenic					<0.010
Barium	0.32		ND		<0.100
Boron	1.7		0.84		
Cadmium					<0.005
Calcium	1680		268		
Chromium	ND		ND		<0.010
Copper	ND		ND		
Iron	4.33		1.61		
Lead	ND		ND		<0.010
Magnesium	87.2		96.9		
Manganese	0.388		ND		
Mercury					<0.0002
Potassium	16.3		14.6		
Selenium	ND		ND		<0.050
Silica	51.00		52.2		
Silver					<0.0125
Sodium	188		167		
Strontium	6.22		5.18		
Vanadium	ND		ND		
Cations/Anions					
Bicarbonate	345		202		
Chloride	10		116.00		
Sulfate	62.3		562		
TDS	1110		1520		

TABLE VII

**SUMMARY OF MONTHLY PRODUCT RECOVERY
EQUILON PIPELINE COMPANY, LLC
JAL BASIN STATION
LEA COUNTY, NEW MEXICO**

MONTH / YEAR	HOURS OF SYSTEM OPERATION	DISSOLVE PHASE RECOVERY (GAL)	PRODUCT RECOVERY (GAL)	VAPOR RECOVERY (GAL)	TOTAL RECOVERY (gal)
Jan-01	677.1	0.20	3,100.00	43.67	3,143.87
Feb-01	1132.2	0.14	1,700.00	51.67	4,895.68
Mar-01	1957	0.13	2,350.00	59.91	7,305.72
Apr-01	2606	0.05	1,131.00	30.40	8,467.17
May-01	3432.9	0.06	1,571.00	65.71	10,103.94
Jun-01	3905	0.04	704.00	27.66	10,835.64
Jul-01	4072.4	0.01	359.00	12.14	11,206.79
Aug-01	4598.7	0.07	1,386.00	38.19	12,631.05
Sep-01	5096.7	0.09	1,591.00	31.07	14,253.21
Oct-01	5432	0.18	1,030.00	47.19	15,330.57
Nov-01	5692	0.01	580.00	9.36	15,919.94
Nov-01	5906	0.04	1,211.00	16.88	17,147.86
Dec-01	6646	0.21	3,305.00	58.05	20,511.12

NOTE:

Most of the diesel recovered during 2001 was extracted from monitoring well MW-6. A small portion was extracted from monitoring wells MW-2, MW-3, and MW-4.

TABLE VIII

**SUMMARY OF EFFLUENT INJECTION VOLUMES
EQUILON PIPELINE COMPANY, LLC
JAL BASIN STATION
LEA COUNTY, NEW MEXICO**

MONTH / YEAR	IW-1 VOLUME INJECTED (GAL)	IW-2 VOLUME INJECTED (GAL)	TOTAL VOLUME INJECTED (GAL)	TOTAL VOLUME INJECTED (GAL)
Jan-01	0.00	0.00	0.00	0
Feb-01	0.00	0.00	0.00	0
Mar-01	0.00	0.00	0.00	0
Apr-01	0.00	0.00	0.00	0
May-01	0.00	0.00	0.00	0
Jun-01	0.00	0.00	0.00	0
Jul-01	0.00	0.00	0.00	0
Aug-01	0.00	0.00	0.00	0
Sep-01	0.00	0.00	0.00	0
Oct-01	5,019	5,019	10,037	10,037
Nov-01	10,136	15,154	20,271	30,308
Dec-01	20,568	35,722	41,135	71,443

TABLE IX

EFFLUENT LABORATORY RESULTS - BTEX
 EQUILON PIPELINE COMPANY LLC
 JAL BASIN STATION, NEW MEXICO

CONSTITUENT	ACCEPTABLE CONCENTRATION (mg/L)	CONCENTRATION (mg/L)								
		8/29/01	8/30/01	8/31/01	9/1/01	9/2/01	9/3/01	9/4/01	9/6/01	9/7/01
Benzene	0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Toluene	0.75	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Ethylbenzene	0.75	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Xylenes	0.62	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total BTEX	---	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

TABLE IX

EFFLUENT LABORATORY RESULTS - BTEX
EQUILON PIPELINE COMPANY LLC
JAL BASIN STATION, NEW MEXICO

CONSTITUENT	ACCEPTABLE CONCENTRATION (mg/L)	CONCENTRATION (mg/L)			
		9/15/01	9/22/01	10/6/01	12/22/01
Benzene	0.01	<0.001	<0.001	<0.001	<0.005
Toluene	0.75	<0.001	<0.001	<0.001	<0.005
Ethylbenzene	0.75	<0.001	<0.001	<0.001	<0.005
Total Xylenes	0.62	<0.001	<0.001	<0.001	<0.005
Total BTEX	---	<0.001	<0.001	<0.001	<0.005

TABLE X

**EFFLUENT LABORATORY RESULTS - PAH, METALS, OTHER
EQUILON PIPELINE COMPANY LLC
JAL BASIN STATION, NEW MEXICO**

CONSTITUENT	ACCEPTABLE CONCENTRATION (mg/L)	CONCENTRATION (mg/L)	
		8/29/01	9/15/01
PAH:			
Carbon Tetrachloride	0.01	<0.001	---
1,2-Dichloroethane	0.01	<0.001	---
1,1-Dichloroethylene	0.005	<0.001	---
1,1,2,2-Tetrachloroethylene	0.02	---	<0.001
1,1,2-Trichloroethylene	0.1	<0.001	---
Methylene Chloride	0.1	0.00112	---
Chloroform	0.1	<0.001	---
1,1-Dichloroethane	0.025	<0.001	---
Ethylene Dibromide	0.0001	---	<0.001
1,1,1-Trichloroethane	0.06	<0.001	---
1,1,2-Trichloroethane	0.01	<0.001	---
1,1,2,2-Tetrachloroethane	0.01	<0.001	---
Vinyl Chloride	0.001	<0.001	---
PAHs: Total Naphthalene plus monomethylnaphthalenes	0.03	<0.005	---
Benzo-a-pyrene	0.0007	<0.005	---
Phenols	0.005	<0.005	---
Metals:			
Arsenic	0.1	0.11	<0.050
Barium	1	<0.100	---
Cadmium	0.01	<0.025	<0.01
Chromium	0.05	<0.010	---
Lead	0.05	<0.010	---
Total Mercury	0.002	<0.0002	---
Selenium	0.05	<0.050	---
Silver	0.05	<0.013	---
Copper	1	<0.013	---
Iron	1	<0.050	---
Manganese	0.2	0.410	<0.025
Aluminum	5	0.634	---
Boron	0.75	0.314	---
Cobalt	0.05	<0.025	---
Molybdenum	1	<0.050	---
Nickel	0.2	<0.025	---

TABLE X

**EFFLUENT LABORATORY RESULTS - PAH, METALS, OTHER
EQUILON PIPELINE COMPANY LLC
JAL BASIN STATION, NEW MEXICO**

CONSTITUENT	ACCEPTABLE CONCENTRATION (mg/L)	CONCENTRATION (mg/L)	
		8/29/01	9/15/01
Other:			
Cyanide	0.2	<0.01	---
Fluoride	1.6	3.12	---
Nitrate (NO ₃ as N)	10	2.90	---
Chloride	250	168	---
Sulfate	600	366	---
Total Dissolved Solids (TDS)	1000	1160	---
pH	between 6 and 9	7.9	---

NOTES:

1. Sock filters were added after the initial effluent testing and the effluent analyzed. was re-sampled and analyzed.
2. The fluoride and total dissolved solids concentrations are within background concentrations within groundwater.

Report Date: January 17, 2002 Order Number: A01122406

Page Number: 1 of 2

106.001.01

Jal Station

Jal, NM

Summary Report

Marc C Oler
Equiva Mark Oler
308 Wilcox #101
Castlerock, Co. 80104

Report Date: January 17, 2002

Order ID Number: A01122406

Project: 106.001.01
TA Job Code: Jal Station
Casualty Code: 106.001.01
Project Location: Jal, NM
Project Address: ...
H2A Environmental LTD / Portland / Theresa Nix

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
187998	MW-16 6-7	Soil	12/18/01	9:36	12/22/01
187999	MW-16 24-25	Soil	12/18/01	10:45	12/22/01
188000	MW-16 45-46	Soil	12/18/01	11:29	12/22/01
188001	MW-16 64-65	Soil	12/18/01	13:02	12/22/01
188002	MW-16 85-86	Soil	12/18/01	14:20	12/22/01
188003	MW-17 10	Soil	12/18/01	15:03	12/22/01
188004	MW-17 30	Soil	12/18/01	15:48	12/22/01
188005	MW-17 50	Soil	12/18/01	16:33	12/22/01
188006	MW-17 70	Soil	12/18/01	17:21	12/22/01
188007	MW-17 90	Soil	12/19/01	10:06	12/22/01
188008	SB2-10	Soil	12/19/01	13:45	12/22/01
188009	SB2-50	Soil	12/19/01	14:59	12/22/01
188010	SB2-80	Soil	12/20/01	9:26	12/22/01
188011	SB2-82	Soil	12/20/01	9:42	12/22/01
188012	SB2-84	Soil	12/20/01	10:27	12/22/01
188013	MW17-10	Soil	12/18/01	15:03	12/22/01
188014	MW17-30	Soil	12/18/01	15:48	12/22/01
188015	SB2-20	Soil	12/19/01	13:55	12/22/01
188016	SB2-70	Soil	12/19/01	15:56	12/22/01
188017	SB2-85	Soil	12/20/01	10:27	12/22/01

This report consists of a total of 2 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample - Field Code	BTEX					TPH DRO	TPH GRO
	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)	DRO (ppm)	GRO (ppm)
187998 - MW-16 6-7	<0.010	<0.010	<0.010	0.0158	0.0158	<50.0	<1
187999 - MW-16 24-25	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
188000 - MW-16 45-46	<0.010	<0.010	<0.010	0.0276	0.0276	<50.0	<1
188001 - MW-16 64-65	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
188002 - MW-16 85-86	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
188003 - MW-17 10	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
188004 - MW-17 30	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
188005 - MW-17 50	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
188006 - MW-17 70	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
188007 - MW-17 90	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1

Continued ...

Report Date: January 17, 2002 Order Number: A01122406
 106.001.01 Jal Station

Page Number: 2 of 2
 Jal, NM

Continued ...

Sample - Field Code	BTEX					TPH DRO	TPH GRO
	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)	DRO (ppm)	GRO (ppm)
188008 - SB2-10	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
188009 - SB2-50	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
188010 - SB2-80	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
188011 - SB2-82	<0.010	<0.010	<0.010	0.015	0.015	861	16
188012 - SB2-84	0.469	7.28	16.7	25.4	49.8	5400	961

Sample: 188013 - MW17-10

Param	Flag	Result	Units
FOC		0.42	%
pH		8.5	s.u.

Sample: 188014 - MW17-30

Param	Flag	Result	Units
FOC		0.70	%
pH		8.0	s.u.

Sample: 188015 - SB2-20

Param	Flag	Result	Units
FOC		0.85	%
pH		8.5	s.u.

Sample: 188016 - SB2-70

Param	Flag	Result	Units
FOC		0.61	%
pH		8.8	s.u.

Sample: 188017 - SB2-85

Param	Flag	Result	Units
FOC		0.83	%
pH		9.2	s.u.



Daniel B. Stephens & Associates, Inc.

Summary of Tests Performed

Laboratory Sample Number	Initial Soil Properties ¹ (θ , ρ_d , ϕ)	Saturated Hydraulic Conductivity ²			Moisture Characteristics ³					Unsaturated Hydraulic Conductivity	Particle Size ⁴			Effective Porosity	Particle Density	Air Permeability	1/3, 15 Bar Points and Water Holding Capacity	Atterberg Limits	Proctor Compaction
		CH	FH		HC	PP	TH	WP	RH		DS	WS	H						
188013	X	X												X					
188014	X	X												X					
188015	X	X												X					
188016	X	X												X					
188017	X	X												X					

¹ θ = Initial moisture content, ρ_d = Dry bulk density, ϕ = Calculated porosity

² CH = Constant head, FH = falling head

³ HC = Hanging column, PP = Pressure plate, TH = Thermocouple psychrometer, WP = Water activity meter, RH = Relative humidity box

⁴ DS = Dry sieve, WS = Wet sieve, H = Hydrometer



Daniel B. Stephens & Associates, Inc.

**Summary of Initial Moisture Content, Dry Bulk Density
Wet Bulk Density and Calculated Porosity**

Sample Number	Initial Moisture Content		Dry Bulk Density (g/cm ³)	Wet Bulk Density (g/cm ³)	Calculated Porosity (%)
	Gravimetric (%, g/g)	Volumetric (%, cm ³ /cm ³)			
188013	16.8	29.0	1.73	2.02	34.7
188014	18.6	29.8	1.60	1.90	39.6
188015	13.3	21.3	1.60	1.82	39.5
188016	16.6	28.6	1.72	2.00	35.2
188017	13.1	19.4	1.49	1.68	43.9



Daniel B. Stephens & Associates, Inc.

Summary of Saturated Hydraulic Conductivity Tests

Sample Number	K_{sat} (cm/sec)	Intrinsic Permeability (cm ²)	Method of Analysis	
			Constant Head	Falling Head
188013	4.0E-05	4.1E-10	X	
188014	6.3E-04	6.4E-09	X	
188015	4.3E-04	4.4E-09	X	
188016	2.6E-05	2.7E-10	X	
188017	3.9E-03	4.0E-08	X	



Daniel B. Stephens & Associates, Inc.

Summary of Effective Porosity Tests

Sample Number	Effective Porosity (% cm^3/cm^3)
188013	27.9
188014	32.7
188015	23.0
188016	28.7
188017	38.0

**Raw Laboratory Data and
Graphical Plots**



Daniel B. Stephens & Associates, Inc.

**Summary of Initial Moisture Content, Dry Bulk Density
Wet Bulk Density and Calculated Porosity**

Sample Number	Initial Moisture Content		Dry Bulk Density (g/cm ³)	Wet Bulk Density (g/cm ³)	Calculated Porosity (%)
	Gravimetric (%, g/g)	Volumetric (%, cm ³ /cm ³)			
188013	16.8	29.0	1.73	2.02	34.7
188014	18.6	29.8	1.60	1.90	39.6
188015	13.3	21.3	1.60	1.82	39.5
188016	16.6	28.6	1.72	2.00	35.2
188017	13.1	19.4	1.49	1.68	43.9



Daniel B. Stephens & Associates, Inc.

**Data for Initial Moisture Content,
Bulk Density, Porosity, and Percent Saturation**

Job Name: Trace Analysis
Job Number: L079.01
Sample Number: 188013
Ring Number: NA
Depth: NA

Test Date: 4-Jan-02

Field weight of sample (g):* 378.41
Tare weight, ring (g): 87.32
Tare weight, cap/plate/epoxy (g): 0.00

Dry weight of sample (g): 249.27
Sample volume (cm³): 144.05
Assumed particle density: 2.65

Initial Volumetric Moisture Content (% vol): 29.0
Initial Gravimetric Moisture Content (% g/g): 16.8
Dry bulk density (g/cm³): 1.73
Wet bulk density (g/cm³): 2.02
Calculated Porosity (% vol): 34.7
Percent Saturation: 83.7

Comments:

* Weight including tares

Laboratory analysis by: D. O'Dowd
Data entered by: D. O'Dowd
Checked by: D. O'Dowd



Daniel B. Stephens & Associates, Inc.

**Data for Initial Moisture Content,
Bulk Density, Porosity, and Percent Saturation**

Job Name: Trace Analysis
Job Number: L079.01
Sample Number: 188014
Ring Number: NA
Depth: NA

Test Date: 4-Jan-02

Field weight of sample (g):* 355.33
Tare weight, ring (g): 80.64
Tare weight, cap/plate/epoxy (g): 0.00

Dry weight of sample (g): 231.64
Sample volume (cm³): 144.69
Assumed particle density: 2.65

Initial Volumetric Moisture Content (% vol): 29.8
Initial Gravimetric Moisture Content (% g/g): 18.6
Dry bulk density (g/cm³): 1.60
Wet bulk density (g/cm³): 1.90
Calculated Porosity (% vol): 39.6
Percent Saturation: 75.2

Comments:

* Weight including tares

Laboratory analysis by: D. O'Dowd
Data entered by: D. O'Dowd
Checked by: D. O'Dowd



Daniel B. Stephens & Associates, Inc.

**Data for Initial Moisture Content,
Bulk Density, Porosity, and Percent Saturation**

Job Name: Trace Analysis
Job Number: L079.01
Sample Number: 188015
Ring Number: NA
Depth: NA

Test Date: 4-Jan-02

Field weight of sample (g):* 345.45
Tare weight, ring (g): 81.60
Tare weight, cap/plate/epoxy (g): 0.00

Dry weight of sample (g): 232.88
Sample volume (cm³): 145.18
Assumed particle density: 2.65

Initial Volumetric Moisture Content (% vol): 21.3
Initial Gravimetric Moisture Content (% g/g): 13.3
Dry bulk density (g/cm³): 1.60
Wet bulk density (g/cm³): 1.82
Calculated Porosity (% vol): 39.5
Percent Saturation: 54.1

Comments:

* Weight including tares

Laboratory analysis by: D. O'Dowd
Data entered by: D. O'Dowd
Checked by: D. O'Dowd



Daniel B. Stephens & Associates, Inc.

**Data for Initial Moisture Content,
Bulk Density, Porosity, and Percent Saturation**

Job Name: Trace Analysis
Job Number: L079.01
Sample Number: 188016
Ring Number: NA
Depth: NA

Test Date: 4-Jan-02

Field weight of sample (g):* 367.43
Tare weight, ring (g): 80.42
Tare weight, cap/plate/epoxy (g): 0.00

Dry weight of sample (g): 246.07
Sample volume (cm³): 143.28
Assumed particle density: 2.65

Initial Volumetric Moisture Content (% vol): 28.6
Initial Gravimetric Moisture Content (% g/g): 16.6
Dry bulk density (g/cm³): 1.72
Wet bulk density (g/cm³): 2.00
Calculated Porosity (% vol): 35.2
Percent Saturation: 81.2

Comments:

* Weight including tares

Laboratory analysis by: D. O'Dowd
Data entered by: D. O'Dowd
Checked by: D. O'Dowd



Daniel B. Stephens & Associates, Inc.

**Data for Initial Moisture Content,
Bulk Density, Porosity, and Percent Saturation**

Job Name: Trace Analysis
Job Number: L079.01
Sample Number: 188017
Ring Number: NA
Depth: NA

Test Date: 4-Jan-02

Field weight of sample (g):* 324.21
Tare weight, ring (g): 81.53
Tare weight, cap/plate/epoxy (g): 0.00

Dry weight of sample (g): 214.63
Sample volume (cm³): 144.31
Assumed particle density: 2.65

Initial Volumetric Moisture Content (% vol): 19.4
Initial Gravimetric Moisture Content (% g/g): 13.1
Dry bulk density (g/cm³): 1.49
Wet bulk density (g/cm³): 1.68
Calculated Porosity (% vol): 43.9
Percent Saturation: 44.3

Comments:

* Weight including tares

Laboratory analysis by: D. O'Dowd
Data entered by: D. O'Dowd
Checked by: D. O'Dowd



Daniel B. Stephens & Associates, Inc.

Summary of Saturated Hydraulic Conductivity Tests

Sample Number	K _{sat} (cm/sec)	Intrinsic Permeability (cm ²)	Method of Analysis	
			Constant Head	Falling Head
188013	4.0E-05	4.1E-10	X	
188014	6.3E-04	6.4E-09	X	
188015	4.3E-04	4.4E-09	X	
188016	2.6E-05	2.7E-10	X	
188017	3.9E-03	4.0E-08	X	



Daniel B. Stephens & Associates, Inc.

Saturated Hydraulic Conductivity Constant Head Method

Job name: Trace Analysis
Job number: L079.01
Sample number: 188013
Ring number: NA
Depth: NA

Type of water used: TAP
Collection vessel tare (g): 11.42
Sample length (cm): 7.57
Sample diameter (cm): 4.92
Sample x-sectional area (cm²): 19.02

Date	Time	Temp (°C)	Head (cm)	Q + Tare (g)	Q (cm ³)	Elapsed time (sec)	Ksat (cm/sec)	Ksat @ 20°C (cm/sec)
Test # 1:								
08-Jan-02	14:58:33	18.5	76.5	12.5	1.1	138	4.0E-05	4.2E-05
08-Jan-02	15:00:51							
Test # 2:								
10-Jan-02	09:26:39	19.0	76.5	20.0	8.6	1218	3.7E-05	3.7E-05
10-Jan-02	09:46:57							
Test # 3:								
10-Jan-02	13:58:39	19.0	76.5	17.5	6.0	809	3.9E-05	4.0E-05
10-Jan-02	14:12:08							

Average Ksat (cm/sec): 4.0E-05

Comments:

Laboratory analysis by: D. O'Dowd
Data entered by: D. O'Dowd
Checked by: D. O'Dowd



Daniel B. Stephens & Associates, Inc.

Saturated Hydraulic Conductivity Constant Head Method

Job name: Trace Analysis
Job number: L079.01
Sample number: 188014
Ring number: NA
Depth: NA

Type of water used: TAP
Collection vessel tare (g): 11.32
Sample length (cm): 7.58
Sample diameter (cm): 4.93
Sample x-sectional area (cm²): 19.09

Date	Time	Temp (°C)	Head (cm)	Q + Tare (g)	Q (cm ³)	Elapsed time (sec)	Ksat (cm/sec)	Ksat @ 20°C (cm/sec)
Test # 1:								
07-Jan-02	06:38:33	18.0	8.5	18.3	7.0	551	5.9E-04	6.1E-04
07-Jan-02	06:47:44							
Test # 2:								
07-Jan-02	12:36:15	18.0	8.5	19.9	8.6	655	6.1E-04	6.4E-04
07-Jan-02	12:47:10							
Test # 3:								
08-Jan-02	08:32:00	18.0	8.5	22.9	11.6	863	6.3E-04	6.5E-04
08-Jan-02	08:46:23							

Average Ksat (cm/sec): 6.3E-04

Comments:

Laboratory analysis by: D. O'Dowd
Data entered by: D. O'Dowd
Checked by: D. O'Dowd



Daniel B. Stephens & Associates, Inc.

Saturated Hydraulic Conductivity Constant Head Method

Job name: Trace Analysis
Job number: L079.01
Sample number: 188015
Ring number: NA
Depth: NA

Type of water used: TAP
Collection vessel tare (g): 10.63
Sample length (cm): 7.60
Sample diameter (cm): 4.93
Sample x-sectional area (cm²): 19.11

Date	Time	Temp (°C)	Head (cm)	Q + Tare (g)	Q (cm ³)	Elapsed time (sec)	Ksat (cm/sec)	Ksat @ 20°C (cm/sec)
Test # 1:								
04-Jan-02	11:24:35	18.0	9.1	13.4	2.8	300	4.0E-04	4.2E-04
04-Jan-02	11:29:35							
Test # 2:								
07-Jan-02	06:41:31	18.0	9.1	42.2	31.6	3289	4.2E-04	4.4E-04
07-Jan-02	07:36:20							
Test # 3:								
07-Jan-02	12:35:21	18.0	9.1	18.8	8.1	821	4.3E-04	4.5E-04
07-Jan-02	12:49:02							

Average Ksat (cm/sec): 4.3E-04

Comments:

Laboratory analysis by: D. O'Dowd

Data entered by: D. O'Dowd

Checked by: D. O'Dowd



Daniel B. Stephens & Associates, Inc.

**Saturated Hydraulic Conductivity
Constant Head Method**

Job name: Trace Analysis
Job number: L079.01
Sample number: 188016
Ring number: NA
Depth: NA

Type of water used: TAP
Collection vessel tare (g): 10.70
Sample length (cm): 7.57
Sample diameter (cm): 4.91
Sample x-sectional area (cm²): 18.93

Date	Time	Temp (°C)	Head (cm)	Q + Tare (g)	Q (cm ³)	Elapsed time (sec)	Ksat (cm/sec)	Ksat @ 20°C (cm/sec)
Test # 1:								
07-Jan-02	12:45:20	18.0	75.9	12.5	1.8	355	2.6E-05	2.7E-05
07-Jan-02	12:51:15							
Test # 2:								
08-Jan-02	08:30:49	18.0	75.9	16.1	5.4	1127	2.5E-05	2.6E-05
08-Jan-02	08:49:36							
Test # 3:								
08-Jan-02	11:55:05	18.5	75.9	13.2	2.5	557	2.4E-05	2.4E-05
08-Jan-02	12:04:22							

Average Ksat (cm/sec): 2.6E-05

Comments:

Laboratory analysis by: D. O'Dowd
Data entered by: D. O'Dowd
Checked by: D. O'Dowd



Daniel B. Stephens & Associates, Inc.

Saturated Hydraulic Conductivity Constant Head Method

Job name: Trace Analysis
Job number: L079.01
Sample number: 188017
Ring number: NA
Depth: NA

Type of water used: TAP
Collection vessel tare (g): 10.85
Sample length (cm): 7.56
Sample diameter (cm): 4.93
Sample x-sectional area (cm²): 19.09

Date	Time	Temp (°C)	Head (cm)	Q + Tare (g)	Q (cm ³)	Elapsed time (sec)	Ksat (cm/sec)	Ksat @ 20°C (cm/sec)
Test # 1:								
07-Jan-02	06:38:15	18.0	8.0	23.2	12.3	156	3.9E-03	4.1E-03
07-Jan-02	06:40:51							
Test # 2:								
07-Jan-02	12:36:03	18.0	8.0	26.5	15.6	199	3.9E-03	4.0E-03
07-Jan-02	12:39:22							
Test # 3:								
08-Jan-02	08:46:17	18.0	8.0	16.1	5.2	72	3.6E-03	3.7E-03
08-Jan-02	08:47:29							

Average Ksat (cm/sec): 3.9E-03

Comments:

Laboratory analysis by: D. O'Dowd
Data entered by: D. O'Dowd
Checked by: D. O'Dowd



Daniel B. Stephens & Associates, Inc.

Summary of Effective Porosity Tests

Sample Number	Effective Porosity (% cm^3/cm^3)
188013	27.9
188014	32.7
188015	23.0
188016	28.7
188017	38.0



Daniel B. Stephens & Associates, Inc.

Effective Porosity Data

Job Name: Trace Analysis
Job Number: L079.01
Sample Number: 188013
Ring Number: NA
Depth: NA
Test Date: 3-Jan-02

Sample Dry Weight* (g): 231.27
Tare Weight (g): 213.41
Bulk Density (g/cm³): 1.73
Calculated Porosity (% cm³/cm³): 34.7

Pressure plate potential (-bars): 15.0
Sample weight* at -15.0 bars (g): 232.0

Moisture content (% g/g): 3.9
Moisture content (% cm³/cm³): 6.8
Matric potential (-cm): 15,297

Moisture content at -15 bars (% cm³/cm³): 6.8
Effective porosity (% cm³/cm³): 27.9

Comments:

* Weight including tares

Laboratory analysis by: D. O'Dowd
Data entered by: D. O'Dowd
Checked by: D. O'Dowd



Daniel B. Stephens & Associates, Inc.

Effective Porosity Data

Job Name: Trace Analysis
Job Number: L079.01
Sample Number: 188014
Ring Number: NA
Depth: NA
Test Date: 3-Jan-02

Sample Dry Weight (g):* 227.21
Tare Weight (g): 211.03
Bulk Density (g/cm³): 1.60
Calculated Porosity (% cm³/cm³): 39.6

Pressure plate potential (-bars): 15.0
Sample weight at -15.0 bars (g):* 227.9

Moisture content (% g/g): 4.3
Moisture content (% cm³/cm³): 6.9
Matric potential (-cm): 15,297

Moisture content at -15 bars (% cm³/cm³): 6.9
Effective porosity (% cm³/cm³): 32.7

Comments:

* Weight including tares

Laboratory analysis by: D. O'Dowd
Data entered by: D. O'Dowd
Checked by: D. O'Dowd



Daniel B. Stephens & Associates, Inc.

Effective Porosity Data

Job Name: Trace Analysis
Job Number: L079.01
Sample Number: 188015
Ring Number: NA
Depth: NA
Test Date: 3-Jan-02

Sample Dry Weight (g):* 284.05
Tare Weight (g): 269.17
Bulk Density (g/cm³): 1.60
Calculated Porosity (% cm³/cm³): 39.5

Pressure plate potential (-bars): 15.0
Sample weight at -15.0 bars (g):* 285.6

Moisture content (% g/g): 10.3
Moisture content (% cm³/cm³): 16.5
Matric potential (-cm): 15,297

Moisture content at -15 bars (% cm³/cm³): 16.5
Effective porosity (% cm³/cm³): 23.0

Comments:

* Weight including tares

Laboratory analysis by: D. O'Dowd
Data entered by: D. O'Dowd
Checked by: D. O'Dowd



Daniel B. Stephens & Associates, Inc.

Effective Porosity Data

Job Name: Trace Analysis
Job Number: L079.01
Sample Number: 188016
Ring Number: NA
Depth: NA

Test Date: 3-Jan-02

Sample Dry Weight (g):* 225.24
Tare Weight (g): 208.58
Bulk Density (g/cm³): 1.72
Calculated Porosity (% cm³/cm³): 35.2

Pressure plate potential (-bars): 15.0
Sample weight at -15.0 bars (g):* 225.9

Moisture content (% g/g): 3.8
Moisture content (% cm³/cm³): 6.5
Matric potential (-cm): 15,297

Moisture content at -15 bars (% cm³/cm³): 6.5

Effective porosity (% cm³/cm³): 28.7

Comments:

* Weight including tares

Laboratory analysis by: D. O'Dowd
Data entered by: D. O'Dowd
Checked by: D. O'Dowd



Daniel B. Stephens & Associates, Inc.

Effective Porosity Data

Job Name: Trace Analysis
Job Number: L079.01
Sample Number: 188017
Ring Number: NA
Depth: NA

Test Date: 3-Jan-02

Sample Dry Weight (g):* 276.41
Tare Weight (g): 259.49
Bulk Density (g/cm³): 1.49
Calculated Porosity (% cm³/cm³): 43.9

Pressure plate potential (-bars): 15.0
Sample weight at -15.0 bars (g):* 277.1

Moisture content (% g/g): 4.0
Moisture content (% cm³/cm³): 5.9
Matric potential (-cm): 15,297

Moisture content at -15 bars (% cm³/cm³): 5.9
Effective porosity (% cm³/cm³): 38.0

Comments:

* Weight including tares

Laboratory analysis by: D. O'Dowd
Data entered by: D. O'Dowd
Checked by: D. O'Dowd



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Analytical and Quality Control Report

Marc C Oler
Equiva Mark Oler
308 Wilcox #101
Castlerock, Co. 80104

Report Date: January 17, 2002

Order ID Number: A01122406

Project: 106.001.01
TA Job Code: Jal Station
Casualty Code: 106.001.01
Project Location: Jal, NM
H2A Environmental LTD / Portland / Theresa Nix

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
187998	MW-16 6-7	Soil	12/18/01	9:36	12/22/01
187999	MW-16 24-25	Soil	12/18/01	10:45	12/22/01
188000	MW-16 45-46	Soil	12/18/01	11:29	12/22/01
188001	MW-16 64-65	Soil	12/18/01	13:02	12/22/01
188002	MW-16 85-86	Soil	12/18/01	14:20	12/22/01
188003	MW-17 10	Soil	12/18/01	15:03	12/22/01
188004	MW-17 30	Soil	12/18/01	15:48	12/22/01
188005	MW-17 50	Soil	12/18/01	16:33	12/22/01
188006	MW-17 70	Soil	12/18/01	17:21	12/22/01
188007	MW-17 90	Soil	12/19/01	10:06	12/22/01
188008	SB2-10	Soil	12/19/01	13:45	12/22/01
188009	SB2-50	Soil	12/19/01	14:59	12/22/01
188010	SB2-80	Soil	12/20/01	9:26	12/22/01
188011	SB2-82	Soil	12/20/01	9:42	12/22/01
188012	SB2-84	Soil	12/20/01	10:27	12/22/01
188013	MW17-10	Soil	12/18/01	15:03	12/22/01
188014	MW17-30	Soil	12/18/01	15:48	12/22/01
188015	SB2-20	Soil	12/19/01	13:55	12/22/01
188016	SB2-70	Soil	12/19/01	15:56	12/22/01
188017	SB2-85	Soil	12/20/01	10:27	12/22/01

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 23 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.


Dr. Blair Leftwich, Director

Analytical Report

Sample: 187998 - MW-16 6-7

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16861 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		0.0158	mg/Kg	10	0.001
Total BTEX		0.0158	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.844	mg/Kg	10	0.10	84	70 - 130
4-BFB		0.837	mg/Kg	10	0.10	84	70 - 130

Sample: 187998 - MW-16 6-7

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16930 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16721 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		135	mg/Kg	1	150	90	-

Sample: 187998 - MW-16 6-7

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16862 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.983	mg/Kg	10	0.10	98	70 - 130
4-BFB		0.935	mg/Kg	10	0.10	93	70 - 130

Sample: 187999 - MW-16 24-25

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16861 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.792	mg/Kg	10	0.10	79	70 - 130
4-BFB		0.794	mg/Kg	10	0.10	79	70 - 130

Sample: 187999 - MW-16 24-25

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16930 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16721 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		125	mg/Kg	1	150	83	-

Sample: 187999 - MW-16 24-25

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16862 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.853	mg/Kg	10	0.10	85	70 - 130
4-BFB		0.908	mg/Kg	10	0.10	91	70 - 130

Sample: 188000 - MW-16 45-46

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16861 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		0.0276	mg/Kg	10	0.001
Total BTEX		0.0276	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.784	mg/Kg	10	0.10	78	70 - 130
4-BFB		0.806	mg/Kg	10	0.10	81	70 - 130

Sample: 188000 - MW-16 45-46

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16930 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16721 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		124	mg/Kg	1	150	83	-

Sample: 188000 - MW-16 45-46

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16862 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.841	mg/Kg	10	0.10	84	70 - 130
4-BFB		0.882	mg/Kg	10	0.10	88	70 - 130

Sample: 188001 - MW-16 64-65

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16861 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.746	mg/Kg	10	0.10	75	70 - 130
4-BFB		0.752	mg/Kg	10	0.10	75	70 - 130

Sample: 188001 - MW-16 64-65

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16930 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16721 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		130	mg/Kg	1	150	87	-

Sample: 188001 - MW-16 64-65

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16862 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.791	mg/Kg	10	0.10	79	70 - 130
4-BFB		0.826	mg/Kg	10	0.10	83	70 - 130

Sample: 188002 - MW-16 85-86

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16861 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.792	mg/Kg	10	0.10	79	70 - 130
4-BFB		0.795	mg/Kg	10	0.10	80	70 - 130

Sample: 188002 - MW-16 85-86

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16930 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16721 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		124	mg/Kg	1	150	83	-

Sample: 188002 - MW-16 85-86

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16862 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.842	mg/Kg	10	0.10	84	70 - 130
4-BFB		0.878	mg/Kg	10	0.10	88	70 - 130

Sample: 188003 - MW-17 10

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16861 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.788	mg/Kg	10	0.10	79	70 - 130
4-BFB		0.784	mg/Kg	10	0.10	78	70 - 130

Sample: 188003 - MW-17 10

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16930 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16721 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		124	mg/Kg	1	150	83	-

Sample: 188003 - MW-17 10

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16862 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.917	mg/Kg	10	0.10	92	70 - 130
4-BFB		0.863	mg/Kg	10	0.10	86	70 - 130

Sample: 188004 - MW-17 30

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16861 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.768	mg/Kg	10	0.10	77	70 - 130
4-BFB		0.773	mg/Kg	10	0.10	77	70 - 130

Sample: 188004 - MW-17 30

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16930 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16721 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		122	mg/Kg	1	150	81	-

Sample: 188004 - MW-17 30

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16862 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.893	mg/Kg	10	0.10	89	70 - 130
4-BFB		0.851	mg/Kg	10	0.10	85	70 - 130

Sample: 188005 - MW-17 50

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16861 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.796	mg/Kg	10	0.10	80	70 - 130
4-BFB		0.806	mg/Kg	10	0.10	81	70 - 130

Sample: 188005 - MW-17 50

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16930 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16721 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		121	mg/Kg	1	150	81	-

Sample: 188005 - MW-17 50

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16862 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.842	mg/Kg	10	0.10	84	70 - 130
4-BFB		0.887	mg/Kg	10	0.10	89	70 - 130

Sample: 188006 - MW-17 70

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16861 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001

Continued ...

... Continued Sample: 188006 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.791	mg/Kg	10	0.10	79	70 - 130
4-BFB		0.800	mg/Kg	10	0.10	80	70 - 130

Sample: 188006 - MW-17 70

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16930 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16721 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		122	mg/Kg	1	150	81	-

Sample: 188006 - MW-17 70

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16862 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.941	mg/Kg	10	0.10	94	70 - 130
4-BFB		0.881	mg/Kg	10	0.10	88	70 - 130

Sample: 188007 - MW-17 90

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16861 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.701	mg/Kg	10	0.10	70	70 - 130
4-BFB		0.705	mg/Kg	10	0.10	70	70 - 130

Sample: 188007 - MW-17 90

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16930 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16721 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		125	mg/Kg	1	150	83	-

Sample: 188007 - MW-17 90

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16862 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.727	mg/Kg	10	0.10	73	70 - 130
4-BFB		0.782	mg/Kg	10	0.10	78	70 - 130

Sample: 188008 - SB2-10

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16861 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.820	mg/Kg	10	0.10	82	70 - 130
4-BFB		0.832	mg/Kg	10	0.10	83	70 - 130

Sample: 188008 - SB2-10

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16930 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16721 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		121	mg/Kg	1	150	81	-

Sample: 188008 - SB2-10

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16862 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.893	mg/Kg	10	0.10	89	70 - 130
4-BFB		0.916	mg/Kg	10	0.10	92	70 - 130

Sample: 188009 - SB2-50

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16861 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.711	mg/Kg	10	0.10	71	70 - 130
4-BFB		0.722	mg/Kg	10	0.10	72	70 - 130

Sample: 188009 - SB2-50

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16930 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16721 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		125	mg/Kg	1	150	83	-

Sample: 188009 - SB2-50

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16862 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.02	mg/Kg	10	0.10	102	70 - 130
4-BFB		0.798	mg/Kg	10	0.10	80	70 - 130

Sample: 188010 - SB2-80

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16861 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.784	mg/Kg	10	0.10	78	70 - 130
4-BFB		0.812	mg/Kg	10	0.10	81	70 - 130

Sample: 188010 - SB2-80

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16930 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16721 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		122	mg/Kg	1	150	81	-

Sample: 188010 - SB2-80

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16862 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.816	mg/Kg	10	0.10	82	70 - 130
4-BFB		0.887	mg/Kg	10	0.10	89	70 - 130

Sample: 188011 - SB2-82

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16861 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		0.015	mg/Kg	10	0.001
Total BTEX		0.015	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.771	mg/Kg	10	0.10	77	70 - 130
4-BFB		0.789	mg/Kg	10	0.10	79	70 - 130

Sample: 188011 - SB2-82

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16930 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16721 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		861	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		120	mg/Kg	1	150	80	-

Sample: 188011 - SB2-82

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16862 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		16	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.896	mg/Kg	10	0.10	90	70 - 130
4-BFB		0.961	mg/Kg	10	0.10	96	70 - 130

Sample: 188012 - SB2-84

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16861 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.469	mg/Kg	100	0.001
Toluene		7.28	mg/Kg	100	0.001
Ethylbenzene		16.7	mg/Kg	100	0.001
M,P,O-Xylene		25.4	mg/Kg	100	0.001
Total BTEX		49.8	mg/Kg	100	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	¹	2.72	mg/Kg	100	0.10	27	70 - 130
4-BFB	²	13.6	mg/Kg	100	0.10	136	70 - 130

Sample: 188012 - SB2-84

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16987 Date Analyzed: 1/2/02
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16778 Date Prepared: 1/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		5400	mg/Kg	20	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		449	mg/Kg	20	150	299	-

Sample: 188012 - SB2-84

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16862 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		961	mg/Kg	100	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	³	0.781	mg/Kg	100	0.10	8	70 - 130
4-BFB	⁴	40.9	mg/Kg	100	0.10	410	70 - 130

Sample: 188013 - MW17-10

Analysis: FOC Analytical Method: D2974-87 QC Batch: QC17275 Date Analyzed: 1/12/02
Analyst: JS Preparation Method: N/A Prep Batch: PB17011 Date Prepared: 1/10/02

¹Low surrogate due to dilution.

²High surrogate due to peak interference.

³Low surrogate due to dilution.

⁴High surrogate recovery due to peak interference.

Param	Flag	Result	Units	Dilution	RDL
FOC		0.42	%	1	0.10

Sample: 188013 - MW17-10

Analysis: pH Analytical Method: E 150.1 QC Batch: QC17318 Date Analyzed: 1/11/02
Analyst: RS Preparation Method: N/A Prep Batch: PB17051 Date Prepared: 1/11/02

Param	Flag	Result	Units	Dilution	RDL
pH		8.5	s.u.	1	1

Sample: 188014 - MW17-30

Analysis: FOC Analytical Method: D2974-87 QC Batch: QC17275 Date Analyzed: 1/12/02
Analyst: JS Preparation Method: N/A Prep Batch: PB17011 Date Prepared: 1/10/02

Param	Flag	Result	Units	Dilution	RDL
FOC		0.70	%	1	0.10

Sample: 188014 - MW17-30

Analysis: pH Analytical Method: E 150.1 QC Batch: QC17318 Date Analyzed: 1/11/02
Analyst: RS Preparation Method: N/A Prep Batch: PB17051 Date Prepared: 1/11/02

Param	Flag	Result	Units	Dilution	RDL
pH		8.0	s.u.	1	1

Sample: 188015 - SB2-20

Analysis: FOC Analytical Method: D2974-87 QC Batch: QC17275 Date Analyzed: 1/12/02
Analyst: JS Preparation Method: N/A Prep Batch: PB17011 Date Prepared: 1/10/02

Param	Flag	Result	Units	Dilution	RDL
FOC		0.85	%	1	0.10

Sample: 188015 - SB2-20

Analysis: pH Analytical Method: E 150.1 QC Batch: QC17318 Date Analyzed: 1/11/02
Analyst: RS Preparation Method: N/A Prep Batch: PB17051 Date Prepared: 1/11/02

Param	Flag	Result	Units	Dilution	RDL
pH		8.5	s.u.	1	1

Sample: 188016 - SB2-70

Analysis: FOC Analytical Method: D2974-87 QC Batch: QC17275 Date Analyzed: 1/12/02
Analyst: JS Preparation Method: N/A Prep Batch: PB17011 Date Prepared: 1/10/02

Param	Flag	Result	Units	Dilution	RDL
FOC		0.61	%	1	0.10

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Sample: 188016 - SB2-70

Analysis: pH Analytical Method: E 150.1 QC Batch: QC17318 Date Analyzed: 1/11/02
Analyst: RS Preparation Method: N/A Prep Batch: PB17051 Date Prepared: 1/11/02

Param	Flag	Result	Units	Dilution	RDL
pH		8.8	s.u.	1	1

Sample: 188017 - SB2-85

Analysis: FOC Analytical Method: D2974-87 QC Batch: QC17275 Date Analyzed: 1/12/02
Analyst: JS Preparation Method: N/A Prep Batch: PB17011 Date Prepared: 1/10/02

Param	Flag	Result	Units	Dilution	RDL
FOC		0.83	%	1	0.10

Sample: 188017 - SB2-85

Analysis: pH Analytical Method: E 150.1 QC Batch: QC17318 Date Analyzed: 1/11/02
Analyst: RS Preparation Method: N/A Prep Batch: PB17051 Date Prepared: 1/11/02

Param	Flag	Result	Units	Dilution	RDL
pH		9.2	s.u.	1	1

Quality Control Report Method Blank

Method Blank QCBatch: QC16861

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0895	mg/Kg	10	0.10	90	70 - 130
4-BFB		0.079	mg/Kg	10	0.10	79	70 - 130

Method Blank QCBatch: QC16862

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.05	mg/Kg	10	0.10	105	70 - 130
4-BFB		0.874	mg/Kg	10	0.10	87	70 - 130

Method Blank QCBatch: QC16930

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		125	mg/Kg	1	150	83	-

Method Blank QCBatch: QC16987

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		114	mg/Kg	1	150	76	-

Quality Control Report Duplicate Samples

Duplicate QCBatch: QC17275

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
FOC		1.70	1.03	%	1	49	80

Duplicate QCBatch: QC17318

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH		9.2	9.2	s.u.	1	0	0.85

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC16861

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.100	0.106	mg/Kg	10	0.10	<0.001	100	6	80 - 120	20
Benzene	0.0991	0.101	mg/Kg	10	0.10	<0.001	99	2	80 - 120	20
Toluene	0.105	0.106	mg/Kg	10	0.10	<0.001	105	1	80 - 120	20
Ethylbenzene	0.105	0.106	mg/Kg	10	0.10	<0.001	105	1	80 - 120	20
M,P,O-Xylene	0.320	0.322	mg/Kg	10	0.30	<0.001	107	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0839	0.0891	mg/Kg	10	0.10	84	89	70 - 130
4-BFB	0.0857	0.0893	mg/Kg	10	0.10	86	89	70 - 130

Laboratory Control Spikes QCBatch: QC16862

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.7	11.3	mg/Kg	10	1	<1	97	15	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	1.01	1.07	mg/Kg	10	0.10	101	107	70 - 130
4-BFB	0.98	0.985	mg/Kg	10	0.10	98	98	70 - 130

Laboratory Control Spikes

QCBatch: QC16930

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	278	251	mg/Kg	1	250	<50.0	111	10	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	136	126	mg/Kg	1	150	91	84	-

Laboratory Control Spikes

QCBatch: QC16987

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	237	234	mg/Kg	1	250	<50.0	94	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	124	122	mg/Kg	1	150	83	81	-

Quality Control Report Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC16861

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.872	0.846	mg/Kg	10	0.10	<0.010	87	3	80 - 120	20
Toluene	0.928	0.903	mg/Kg	10	0.10	<0.010	93	2	80 - 120	20
Ethylbenzene	0.929	0.902	mg/Kg	10	0.10	<0.010	93	2	80 - 120	20
M,P,O-Xylene	2.84	2.76	mg/Kg	10	0.30	<0.010	95	2	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.806	0.791	mg/Kg	10	0.10	81	79	70 - 130
4-BFB	0.83	0.806	mg/Kg	10	0.10	83	81	70 - 130

Matrix Spikes QCBatch: QC16862

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	10.3	9.82	mg/Kg	10	1	<1	103	4	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	1.11	1.06	mg/Kg	10	0.10	111	106	70 - 130
4-BFB	0.985	0.952	mg/Kg	10	0.10	98	95	70 - 130

Matrix Spikes QCBatch: QC16930

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	253	237	mg/Kg	1	250	<50.0	101	6	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	123	117	mg/Kg	1	150	82	78	-

Matrix Spikes QCBatch: QC16987

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	227	225	mg/Kg	1	250	<50.0	91	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	112	113	mg/Kg	1	150	75	75	-

Quality Control Report Continuing Calibration Verification Standards

CCV (1) QCBatch: QC16861

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.100	100	85 - 115	12/27/01

Continued ...

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.0981	98	85 - 115	12/27/01
Toluene		mg/L	0.10	0.104	104	85 - 115	12/27/01
Ethylbenzene		mg/L	0.10	0.104	104	85 - 115	12/27/01
M,P,O-Xylene		mg/L	0.30	0.318	106	85 - 115	12/27/01

CCV (2) QCBatch: QC16861

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.107	107	85 - 115	12/27/01
Benzene		mg/L	0.10	0.097	97	85 - 115	12/27/01
Toluene		mg/L	0.10	0.102	102	85 - 115	12/27/01
Ethylbenzene		mg/L	0.10	0.104	104	85 - 115	12/27/01
M,P,O-Xylene		mg/L	0.30	0.319	106	85 - 115	12/27/01

ICV (1) QCBatch: QC16861

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0995	100	85 - 115	12/27/01
Benzene		mg/L	0.10	0.0977	98	85 - 115	12/27/01
Toluene		mg/L	0.10	0.104	104	85 - 115	12/27/01
Ethylbenzene		mg/L	0.10	0.104	104	85 - 115	12/27/01
M,P,O-Xylene		mg/L	0.30	0.321	107	85 - 115	12/27/01

CCV (1) QCBatch: QC16862

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.12	112	75 - 125	12/27/01

CCV (2) QCBatch: QC16862

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.913	91	75 - 125	12/27/01

ICV (1) QCBatch: QC16862

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.11	111	75 - 125	12/27/01

CCV (1) QCBatch: QC16930

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	257	103	75 - 125	12/28/01

CCV (2) QCBatch: QC16930

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	263	105	75 - 125	12/28/01

CCV (3) QCBatch: QC16930

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	280	112	75 - 125	12/28/01

ICV (1) QCBatch: QC16930

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	274	110	75 - 125	12/28/01

CCV (1) QCBatch: QC16987

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	240	96	75 - 125	1/2/02

CCV (2) QCBatch: QC16987

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	249	99	75 - 125	1/2/02

ICV (1) QCBatch: QC16987

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	227	91	75 - 125	1/2/02

CCV (1) QCBatch: QC17318

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7	7.0	100	-0.1 s.u. - +0.1 s.u.	1/11/02

ICV (1) QCBatch: QC17318

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7	7.0	100	-0.1 s.u. - +0.1 s.u.	1/11/02

Report Date: January 28, 2002 Order Number: A01122407
106.001.01 Jal Station

Page Number: 1 of 2
Jal, NM

Summary Report

Marc C Oler
Equiva Mark Oler
308 Wilcox #101
Castlerock, Co. 80104

Report Date: January 28, 2002

Order ID Number: A01122407

Project: 106.001.01
TA Job Code: Jal Station
Casualty Code: 106.001.01
Project Location: Jal, NM
Project Address:
H2A Environmental LTD / Portland / Theresa Nix

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
188018	SB-1 (10')	Soil	12/19/01	10:35	12/22/01
188019	SB-1 (40')	Soil	12/19/01	11:45	12/22/01
188020	SB-1 (50')	Soil	12/19/01	12:40	12/22/01
188021	SB-1 (70')	Soil	12/19/01	14:00	12/22/01
188022	SB-1 (86-88')	Soil	12/19/01	:	12/22/01
188023	MW18-10	Soil	12/20/01	12:08	12/22/01
188024	MW18-70	Soil	12/20/01	15:12	12/22/01
188025	MW18-80	Soil	12/20/01	15:40	12/22/01
188026	MW18-82	Soil	12/20/01	16:10	12/22/01
188027	MW18-84	Soil	12/20/01	16:28	12/22/01
188028	SB-1 (98-100')	Soil	12/20/01	11:45	12/22/01
188029	Drum 1	Soil	12/20/01	10:15	12/22/01
188030	Drum 2	Soil	12/20/01	10:20	12/22/01
188031	Drum 3	Soil	12/20/01	10:25	12/22/01
188032	Drum 4	Soil	12/20/01	10:30	12/22/01
188033	Drum 5	Soil	12/20/01	10:35	12/22/01
188034	Drum 6	Soil	12/20/01	10:40	12/22/01
188035	Drum 7	Soil	12/20/01	14:15	12/22/01
188036	Drum 8	Soil	12/20/01	14:20	12/22/01
188037	Drum 9	Soil	12/20/01	14:25	12/22/01
188038	Drum 10	Soil	12/20/01	14:30	12/22/01
188039	Drum 11	Soil	12/20/01	14:35	12/22/01
188040	SB3-10	Soil	12/21/01	9:14	12/22/01
188041	SB3-60	Soil	12/21/01	10:56	12/22/01
188042	SB3-80	Soil	12/21/01	12:30	12/22/01
188043	SB3-82	Soil	12/21/01	12:40	12/22/01
188044	SB3-84	Soil	12/21/01	13:01	12/22/01
188045	Drum 12	Soil	12/21/01	14:40	12/22/01
188046	Drum 13	Soil	12/21/01	14:45	12/22/01

0 This report consists of a total of 2 page(s) and is intended only as a summary of results for the sample(s) listed above.

Continued ...

Report Date: January 28, 2002 Order Number: A01122407

Page Number: 2 of 2

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Jal Station

Jal, NM

Continued ...

Sample - Field Code	BTEX					TPH DRO	TPH GRO
	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)	DRO (ppm)	GRO (ppm)
188018 - SB-1 (10')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
188019 - SB-1 (40')	<0.020	0.170	1.89	2.45	4.51	795	108
188020 - SB-1 (50')	<0.100	0.255	5.89	6.62	12.8	1220	401
188021 - SB-1 (70')	<0.050	0.128	3.62	3.90	7.65	4070	238
188022 - SB-1 (86-88')	0.587	6.27	23.2	29.9	60.0	9090	1023
188023 - MW18-10	<0.010	<0.010	<0.010	0.0211	0.0211	<50.0	<1
188024 - MW18-70	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
188025 - MW18-80	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
188026 - MW18-82	<0.100	0.166	1.89	2.93	4.99	4640	303
188027 - MW18-84	<0.200	4.23	19.2	25.6	49.0	27400	1119
188028 - SB-1 (98-100')	<0.010	<0.010	0.017	0.027	0.044	<50.0	7.63
188029 - Drum 1	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
188030 - Drum 2	<0.020	0.060	0.501	0.799	1.36	2070	80.9
188031 - Drum 3	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
188032 - Drum 4	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
188033 - Drum 5	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
188034 - Drum 6	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
188035 - Drum 7	<0.010	0.0611	0.586	0.883	1.53	1460	57.8
188036 - Drum 8	<0.020	0.104	1.09	1.63	2.82	5610	89.7
188037 - Drum 9	<0.020	0.068	0.836	1.33	2.23	1770	88.5
188038 - Drum 10	<0.020	0.034	0.87	1.21	2.11	2260	112
188039 - Drum 11	<0.020	0.049	0.775	1.21	2.03	3350	87.2
188040 - SB3-10	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
188041 - SB3-60	<0.010	<0.010	0.0116	<0.010	0.0116	<50.0	3.98
188042 - SB3-80	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
188043 - SB3-82	<0.010	<0.010	<0.010	<0.010	<0.010	125	<1
188044 - SB3-84	0.54	8.48	30.9	38.8	78.7	2250	1225
188045 - Drum 12	<0.020	0.0626	0.968	1.43	2.46	4080	118
188046 - Drum 13	<0.020	0.0346	0.552	0.882	1.47	1010	89.6

Sample: 188027 - MW18-84

Param	Flag	Result	Units
Naphthalene		8.91	mg/Kg
Acenaphthylene		<0.25	mg/Kg
Acenaphthene		<0.25	mg/Kg
Fluorene		<0.25	mg/Kg
Phenanthrene		8.73	mg/Kg
Anthracene		<0.25	mg/Kg
Fluoranthene		7.39	mg/Kg
Pyrene		2.79	mg/Kg
Benzo(a)anthracene		<0.25	mg/Kg
Chrysene		<0.25	mg/Kg
Benzo(b)fluoranthene		<0.25	mg/Kg
Benzo(k)fluoranthene		<0.25	mg/Kg
Benzo(a)pyrene		<0.25	mg/Kg
Indeno(1,2,3-cd)pyrene		<0.25	mg/Kg
Dibenzo(a,h)anthracene		<0.25	mg/Kg
Benzo(g,h,i)perylene		<0.25	mg/Kg

Report Date: January 28, 2002 Order Number: A01122407
106.001.01 Jal Station

Page Number: 1 of 4
Jal, NM

Summary Report

Marc C Oler
Equiva Mark Oler
308 Wilcox #101
Castlerock, Co. 80104

Report Date: January 28, 2002

Order ID Number: A01122407

Project: 106.001.01
TA Job Code: Jal Station
Casualty Code: 106.001.01
Project Location: Jal, NM
Project Address:
H2A Environmental LTD / Portland / Theresa Nix

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
188027	MW18-84	Soil	12/20/01	16:28	12/22/01

0 This report consists of a total of 4 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample - Field Code	SPLP TPH TRPHC (ppm)
188027 - MW18-84	246

Sample: 188027 - MW18-84

Param	Flag	Result	Units
Pyridine		<0.005	mg/L
n-Nitrosodimethylamine		<0.005	mg/L
2-Picoline		<0.005	mg/L
Methyl methanesulfonate		<0.005	mg/L
Ethyl methanesulfonate		<0.005	mg/L
Phenol		<0.005	mg/L
Aniline		<0.005	mg/L
bis (2-chloroethyl) ether		<0.005	mg/L
2-Chlorophenol		<0.005	mg/L
1,3-Dichlorobenzene		<0.005	mg/L
1,4-Dichlorobenzene		<0.005	mg/L
Benzyl alcohol		<0.005	mg/L
1,2-Dichlorobenzene		<0.005	mg/L
2-Methylphenol		<0.005	mg/L
bis (2-chloroisopropyl) ether		<0.005	mg/L
4-Methylphenol/3-Methylphenol		<0.005	mg/L
Acetophenone		<0.005	mg/L
n-Nitrosodi-n-propylamine		<0.005	mg/L
Hexachloroethane		<0.005	mg/L
Nitrobenzene		<0.005	mg/L
n-Nitrosopiperidine		<0.005	mg/L

Continued on next page ...

Report Date: January 28, 2002 Order Number: A01122407

Page Number: 2 of 4

106.001.01

Jal Station

Jal, NM

Sample 188027 continued ...

Param	Flag	Result	Units
Isophorone		<0.005	mg/L
2-Nitrophenol		<0.005	mg/L
2,4-Dimethylphenol		<0.005	mg/L
bis (2-chloroethoxy) methane		<0.005	mg/L
Benzoic acid		<0.005	mg/L
2,4-Dichlorophenol		<0.005	mg/L
1,2,4-Trichlorobenzene		<0.005	mg/L
a,a-Dimethylphenethylamine		<0.005	mg/L
Naphthalene		0.017	mg/L
4-Chloroaniline		<0.005	mg/L
2,6-Dichlorophenol		<0.005	mg/L
Hexachlorobutadiene		<0.005	mg/L
n-Nitroso-di-n-butylamine		<0.005	mg/L
4-Chloro-3-methylphenol		<0.005	mg/L
1-Methylnaphthalene		0.024	mg/L
2-Methylnaphthalene		0.019	mg/L
1,2,4,5-Tetrachlorobenzene		<0.005	mg/L
Hexachlorocyclopentadiene		<0.005	mg/L
2,4,6-Trichlorophenol		<0.005	mg/L
2,4,5-Trichlorophenol		<0.005	mg/L
2-Chloronaphthalene		<0.005	mg/L
1-Chloronaphthalene		<0.005	mg/L
2-Nitroaniline		<0.005	mg/L
Dimethylphthalate		<0.005	mg/L
Acenaphthylene		<0.005	mg/L
2,6-Dinitrotoluene		<0.005	mg/L
3-Nitroaniline		<0.005	mg/L
Acenaphthene		<0.005	mg/L
2,4-Dinitrophenol		<0.005	mg/L
Dibenzofuran		<0.005	mg/L
Pentachlorobenzene		<0.005	mg/L
4-Nitrophenol		<0.005	mg/L
1-Naphthylamine		<0.005	mg/L
2,4-Dinitrotoluene		<0.005	mg/L
2-Naphthylamine		<0.005	mg/L
2,3,4,6-Tetrachlorophenol		<0.005	mg/L
Fluorene		<0.005	mg/L
Diethylphthalate		<0.005	mg/L
4-Chlorophenyl-phenylether		<0.005	mg/L
4-Nitroaniline		<0.005	mg/L
4,6-Dinitro-2-methylphenol		<0.005	mg/L
Diphenylamine		<0.005	mg/L
Diphenylhydrazine		<0.005	mg/L
4-Bromophenyl-phenylether		<0.005	mg/L
Phenacetin		<0.005	mg/L
Hexachlorobenzene		<0.005	mg/L
4-Aminobiphenyl		<0.005	mg/L
Pentachlorophenol		<0.005	mg/L
Pentachloronitrobenzene		<0.005	mg/L
Pronamide		<0.005	mg/L
Phenanthrene		<0.005	mg/L
Anthracene		<0.005	mg/L
Di-n-butylphthalate		<0.005	mg/L

Continued on next page ...

Report Date: January 28, 2002 Order Number: A01122407

Page Number: 3 of 4

106.001.01

Jal Station

Jal, NM

Sample 188027 continued ...

Param	Flag	Result	Units
Fluoranthene		<0.005	mg/L
Benzidine		<0.005	mg/L
Pyrene		<0.005	mg/L
p-Dimethylaminoazobenzene		<0.005	mg/L
Butylbenzylphthalate		<0.005	mg/L
Benzo(a)anthracene		<0.005	mg/L
3,3-Dichlorobenzidine		<0.005	mg/L
Chrysene		<0.005	mg/L
Bis (2-ethylhexyl) phthalate		<0.005	mg/L
Di-n-octylphthalate		<0.005	mg/L
Benzo(b)fluoranthene		<0.005	mg/L
7,12-Dimethylbenz(a)anthracene		<0.005	mg/L
Benzo(k)fluoranthene		<0.005	mg/L
Benzo(a)pyrene		<0.005	mg/L
3-Methylcholanthrene		<0.005	mg/L
Dibenzo(a,j)acridine		<0.005	mg/L
Indeno(1,2,3-cd)pyrene		<0.005	mg/L
Dibenzo(a,h)anthracene		<0.005	mg/L
Benzo(g,h,i)perylene		<0.005	mg/L
Naphthalene		0.016	mg/L
Acenaphthylene		<0.005	mg/L
Acenaphthene		<0.005	mg/L
Fluorene		<0.005	mg/L
Phenanthrene		<0.005	mg/L
Anthracene		<0.005	mg/L
Fluoranthene		<0.005	mg/L
Pyrene		<0.005	mg/L
Benzo(a)anthracene		<0.005	mg/L
Chrysene		<0.005	mg/L
Benzo(b)fluoranthene		<0.005	mg/L
Benzo(k)fluoranthene		<0.005	mg/L
Benzo(a)pyrene		<0.005	mg/L
Indeno(1,2,3-cd)pyrene		<0.005	mg/L
Dibenzo(a,h)anthracene		<0.005	mg/L
Bromochloromethane		<5.00	µg/L
Dichlorodifluoromethane		<5.00	µg/L
Chloromethane (methyl chloride)		<5.00	µg/L
Vinyl Chloride		<5.00	µg/L
Bromomethane (methyl bromide)		<25.0	µg/L
Chloroethane		<5.00	µg/L
Trichlorofluoromethane		<5.00	µg/L
Acetone		<50.0	µg/L
Iodomethane (methyl iodide)		<25.0	µg/L
Carbon Disulfide		<5.00	µg/L
Acrylonitrile		<5.00	µg/L
2-Butanone (MEK)		<25.0	µg/L
4-methyl-2-pentanone (MIBK)		<25.0	µg/L
2-hexanone		<25.0	µg/L
trans 1,4-Dichloro-2-butene		<50.0	µg/L
1,1-Dichloroethene		<5.00	µg/L
Methylene chloride		386	µg/L
MTBE		<5.00	µg/L
trans-1,2-Dichloroethene		<5.00	µg/L

Continued on next page ...

Report Date: January 28, 2002 Order Number: A01122407
106.001.01 Jal StationPage Number: 4 of 4
Jal, NM

Sample 188027 continued ...

Param	Flag	Result	Units
1,1-Dichloroethane		<5.00	µg/L
cis-1,2-Dichloroethene		<5.00	µg/L
2,2-Dichloropropane		<5.00	µg/L
1,2-Dichloroethane (EDC)		<5.00	µg/L
Chloroform		<5.00	µg/L
1,1,1-Trichloroethane		<5.00	µg/L
1,1-Dichloropropene		<5.00	µg/L
Benzene		<5.00	µg/L
Carbon Tetrachloride		<5.00	µg/L
1,2-Dichloropropane		<5.00	µg/L
Trichloroethene (TCE)		<5.00	µg/L
Dibromomethane (methylene bromide)		<5.00	µg/L
Bromodichloromethane		<5.00	µg/L
2-Chloroethyl vinyl ether		<25.0	µg/L
cis-1,3-Dichloropropene		<5.00	µg/L
trans-1,3-Dichloropropene		<5.00	µg/L
Toluene		12.9	µg/L
1,1,2-Trichloroethane		<5.00	µg/L
1,3-Dichloropropane		<5.00	µg/L
Dibromochloromethane		<5.00	µg/L
1,2-Dibromoethane (EDB)		<5.00	µg/L
Tetrachloroethene (PCE)		<5.00	µg/L
Chlorobenzene		<5.00	µg/L
1,1,1,2-Tetrachloroethane		<5.00	µg/L
Ethylbenzene		65.6	µg/L
m,p-Xylene		65.9	µg/L
Bromoform		<5.00	µg/L
Styrene		<5.00	µg/L
o-Xylene		42.7	µg/L
1,1,2,2-Tetrachloroethane		<5.00	µg/L
2-Chlorotoluene		<5.00	µg/L
1,2,3-Trichloropropane		<5.00	µg/L
Isopropylbenzene		51.4	µg/L
Bromobenzene		<5.00	µg/L
n-Propylbenzene		98.9	µg/L
1,3,5-Trimethylbenzene		56.8	µg/L
tert-Butylbenzene		<5.00	µg/L
1,2,4-Trimethylbenzene		266	µg/L
1,4-Dichlorobenzene (para)		<5.00	µg/L
sec-Butylbenzene		203	µg/L
p-Isopropyltoluene		73.1	µg/L
4-Chlorotoluene		<5.00	µg/L
1,2-Dichlorobenzene (ortho)		<5.00	µg/L
n-Butylbenzene		131	µg/L
1,2-Dibromo-3-chloropropane		<25.0	µg/L
1,2,3-Trichlorobenzene		<25.0	µg/L

TRACE ANALYSIS, INC.

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H2A ENVIRONMENTAL LTD/Portland, TX/Theresa Nix

H2A Job No: 106.001.01

January 25, 2002

Receiving Date: 12/22/2002

Sample Type: Soil

Location Address: Jal, NM

TA Job No: Jal Station

ANALYTICAL RESULTS FOR

EQUIVA - Mark Oler

Attention: Mark Oler

308 Wilcox #101

Castlerock, Co 80104

Lab Receiving #: A01122407

Equiva Location Code: NA

Equiva Casualty Loss No: 106.001.01

Prep Date: 01/02/2002

Analysis Date: 01/14/2002

Sampling Date: 12/20/2002

Sample Condition: Intact & Cool

Sample Received by: BC

T188027 - MW18 - 84

Sample ID	(mg/Kg) Unfractionated C6-C35	(mg/Kg) Aliphatic C6 >C6-8 >C8-10 >C10-12 >C12-16 >C16-21 >C21-35	(mg/Kg) Aromatic >C7-C8 >C8-10 >C10-12 >C12-16 >C16-21 >C21-35	Aliphatic + Aromatic (mg/Kg)	% Recovery
188027	51,570	<1 8 87 428 5,620 3,870 4,780	14 67 500 4,780 3,700 3,290	27,136	53

Avg. CV	518
% Extraction Accuracy	105
% Instrument Accuracy	104
RPD	2
CV T.V.	500
SPIKE T.V.	500

METHOD: TX1006
 CHEMIST: MM

[Signature]

Director, Dr. Blair Leftwich

1-25-02

Date

TRACE ANALYSIS, INC.

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Analytical and Quality Control Report

Marc C Oler
Equiva Mark Oler
308 Wilcox #101
Castlerock, Co. 80104

Report Date: January 28, 2002

Order ID Number: A01122407

Project: 106.001.01
TA Job Code: Jal Station
Casualty Code: 106.001.01
Project Location: Jal, NM
H2A Environmental LTD / Portland / Theresa Nix

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
188027	MW18-84	Soil	12/20/01	16:28	12/22/01

0

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 14 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of Trace Analysis, Inc.


Dr. Blair Leftwich, Director

Analytical Report

Sample: 188027 - MW18-84

Analysis: SPLP 8270 Analytical Method: S 8270C QC Batch: QC17447 Date Analyzed: 1/8/02
Analyst: RC Preparation Method: 1311 Prep Batch: PB17139 Date Prepared: 1/3/02

Param	Flag	Result	Units	Dilution	RDL
Pyridine		<0.005	mg/L	1	0.005
n-Nitrosodimethylamine		<0.005	mg/L	1	0.005
2-Picoline		<0.005	mg/L	1	0.005
Methyl methanesulfonate		<0.005	mg/L	1	0.005
Ethyl methanesulfonate		<0.005	mg/L	1	0.005
Phenol		<0.005	mg/L	1	0.005
Aniline		<0.005	mg/L	1	0.005
bis (2-chloroethyl) ether		<0.005	mg/L	1	0.005
2-Chlorophenol		<0.005	mg/L	1	0.005
1,3-Dichlorobenzene		<0.005	mg/L	1	0.005
1,4-Dichlorobenzene		<0.005	mg/L	1	0.005
Benzyl alcohol		<0.005	mg/L	1	0.005
1,2-Dichlorobenzene		<0.005	mg/L	1	0.005
2-Methylphenol		<0.005	mg/L	1	0.005
bis (2-chloroisopropyl) ether		<0.005	mg/L	1	0.005
4-Methylphenol/3-Methylphenol		<0.005	mg/L	1	0.005
Acetophenone		<0.005	mg/L	1	0.25
n-Nitrosodi-n-propylamine		<0.005	mg/L	1	0.005
Hexachloroethane		<0.005	mg/L	1	0.005
Nitrobenzene		<0.005	mg/L	1	0.005
n-Nitrosopiperidine		<0.005	mg/L	1	0.005
Isophorone		<0.005	mg/L	1	0.005
2-Nitrophenol		<0.005	mg/L	1	0.005
2,4-Dimethylphenol		<0.005	mg/L	1	0.25
bis (2-chloroethoxy) methane		<0.005	mg/L	1	0.005
Benzoic acid		<0.005	mg/L	1	0.005
2,4-Dichlorophenol		<0.005	mg/L	1	0.005
1,2,4-Trichlorobenzene		<0.005	mg/L	1	0.005
a,a-Dimethylphenethylamine		<0.005	mg/L	1	0.005
Naphthalene		0.017	mg/L	1	0.005
4-Chloroaniline		<0.005	mg/L	1	0.005
2,6-Dichlorophenol		<0.005	mg/L	1	0.005
Hexachlorobutadiene		<0.005	mg/L	1	0.005
n-Nitroso-di-n-butylamine		<0.005	mg/L	1	0.005
4-Chloro-3-methylphenol		<0.005	mg/L	1	0.005
1-Methylnaphthalene		0.024	mg/L	1	0.005
2-Methylnaphthalene		0.019	mg/L	1	0.005
1,2,4,5-Tetrachlorobenzene		<0.005	mg/L	1	0.005
Hexachlorocyclopentadiene		<0.005	mg/L	1	0.005
2,4,6-Trichlorophenol		<0.005	mg/L	1	0.005
2,4,5-Trichlorophenol		<0.005	mg/L	1	0.005
2-Chloronaphthalene		<0.005	mg/L	1	0.005
1-Chloronaphthalene		<0.005	mg/L	1	0.005
2-Nitroaniline		<0.005	mg/L	1	0.005
Dimethylphthalate		<0.005	mg/L	1	0.005
Acenaphthylene		<0.005	mg/L	1	0.005
2,6-Dinitrotoluene		<0.005	mg/L	1	0.005
3-Nitroaniline		<0.005	mg/L	1	0.005

Continued ...

... Continued Sample: 188027 Analysis: SPLP 8270

Param	Flag	Result	Units	Dilution	RDL
Acenaphthene		<0.005	mg/L	1	0.005
2,4-Dinitrophenol		<0.005	mg/L	1	0.25
Dibenzofuran		<0.005	mg/L	1	0.005
Pentachlorobenzene		<0.005	mg/L	1	0.005
4-Nitrophenol		<0.005	mg/L	1	0.005
1-Naphthylamine		<0.005	mg/L	1	0.005
2,4-Dinitrotoluene		<0.005	mg/L	1	0.005
2-Naphthylamine		<0.005	mg/L	1	0.005
2,3,4,6-Tetrachlorophenol		<0.005	mg/L	1	0.005
Fluorene		<0.005	mg/L	1	0.005
Diethylphthalate		<0.005	mg/L	1	0.005
4-Chlorophenyl-phenylether		<0.005	mg/L	1	0.005
4-Nitroaniline		<0.005	mg/L	1	0.005
4,6-Dinitro-2-methylphenol		<0.005	mg/L	1	0.005
Diphenylamine		<0.005	mg/L	1	0.005
Diphenylhydrazine		<0.005	mg/L	1	0.005
4-Bromophenyl-phenylether		<0.005	mg/L	1	0.005
Phenacetin		<0.005	mg/L	1	0.005
Hexachlorobenzene		<0.005	mg/L	1	0.005
4-Aminobiphenyl		<0.005	mg/L	1	0.005
Pentachlorophenol		<0.005	mg/L	1	0.005
Pentachloronitrobenzene		<0.005	mg/L	1	0.005
Pronamide		<0.005	mg/L	1	0.005
Phenanthrene		<0.005	mg/L	1	0.005
Anthracene		<0.005	mg/L	1	0.005
Di-n-butylphthalate		<0.005	mg/L	1	0.005
Fluoranthene		<0.005	mg/L	1	0.005
Benzidine		<0.005	mg/L	1	0.005
Pyrene		<0.005	mg/L	1	0.005
p-Dimethylaminoazobenzene		<0.005	mg/L	1	0.005
Butylbenzylphthalate		<0.005	mg/L	1	0.005
Benzo(a)anthracene		<0.005	mg/L	1	0.005
3,3-Dichlorobenzidine		<0.005	mg/L	1	0.005
Chrysene		<0.005	mg/L	1	0.005
Bis (2-ethylhexyl) phthalate		<0.005	mg/L	1	0.005
Di-n-octylphthalate		<0.005	mg/L	1	0.005
Benzo(b)fluoranthene		<0.005	mg/L	1	0.005
7,12-Dimethylbenz(a)anthracene		<0.005	mg/L	1	0.005
Benzo(k)fluoranthene		<0.005	mg/L	1	0.005
Benzo(a)pyrene		<0.005	mg/L	1	0.005
3-Methylcholanthrene		<0.005	mg/L	1	0.005
Dibenzo(a,j)acridine		<0.005	mg/L	1	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	1	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	1	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	1	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		24.67	mg/L	1	80	30	25 - 121
Phenol-d5	1	11.93	mg/L	1	80	14	24 - 113
Nitrobenzene-d5		61.93	mg/L	1	80	77	23 - 120
2-Fluorobiphenyl		62.55	mg/L	1	80	78	30 - 115

Continued ...

¹Low surrogate due to matrix.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,6-Tribromophenol		75.52	mg/L	1	80	94	19 - 122
Terphenyl-d14		89.97	mg/L	1	80	112	28 - 137

Sample: 188027 - MW18-84

Analysis: SPLP PAH Analytical Method: S 8270C QC Batch: QC17178 Date Analyzed: 1/8/02
Analyst: RC Preparation Method: 1312 Prep Batch: PB16938 Date Prepared: 1/3/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.016	mg/L	1	0.005
Acenaphthylene		<0.005	mg/L	1	0.005
Acenaphthene		<0.005	mg/L	1	0.005
Fluorene		<0.005	mg/L	1	0.005
Phenanthrene		<0.005	mg/L	1	0.005
Anthracene		<0.005	mg/L	1	0.005
Fluoranthene		<0.005	mg/L	1	0.005
Pyrene		<0.005	mg/L	1	0.005
Benzo(a)anthracene		<0.005	mg/L	1	0.005
Chrysene		<0.005	mg/L	1	0.005
Benzo(b)fluoranthene		<0.005	mg/L	1	0.005
Benzo(k)fluoranthene		<0.005	mg/L	1	0.005
Benzo(a)pyrene		<0.005	mg/L	1	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	1	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	1	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		48.31	mg/L	1	100	48	23 - 120
2-Fluorobiphenyl		53.52	mg/L	1	100	53	30 - 115
Terphenyl-d14		73.47	mg/L	1	100	73	28 - 137

Sample: 188027 - MW18-84

Analysis: SPLP TPH Analytical Method: E 418.1 QC Batch: QC17049 Date Analyzed: 1/3/02
Analyst: AG Preparation Method: 1312 Prep Batch: PB16830 Date Prepared: 1/3/02

Param	Flag	Result	Units	Dilution	RDL
TRPHC		246	mg/L	1	10

Sample: 188027 - MW18-84

Analysis: SPLP Volatiles Analytical Method: S 8260B QC Batch: QC17162 Date Analyzed: 1/4/02
Analyst: JG Preparation Method: 1312 Prep Batch: PB16935 Date Prepared: 1/2/02

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<5.00	µg/L	5	1
Dichlorodifluoromethane		<5.00	µg/L	5	1
Chloromethane (methyl chloride)		<5.00	µg/L	5	1
Vinyl Chloride		<5.00	µg/L	5	1
Bromomethane (methyl bromide)		<25.0	µg/L	5	5

Continued ...

... Continued Sample: 188027 Analysis: SPLP Volatiles

Param	Flag	Result	Units	Dilution	RDL
Chloroethane		<5.00	µg/L	5	1
Trichlorofluoromethane		<5.00	µg/L	5	1
Acetone		<50.0	µg/L	5	10
Iodomethane (methyl iodide)		<25.0	µg/L	5	5
Carbon Disulfide		<5.00	µg/L	5	1
Acrylonitrile		<5.00	µg/L	5	1
2-Butanone (MEK)		<25.0	µg/L	5	5
4-methyl-2-pentanone (MIBK)		<25.0	µg/L	5	5
2-hexanone		<25.0	µg/L	5	5
trans 1,4-Dichloro-2-butene		<50.0	µg/L	5	10
1,1-Dichloroethene		<5.00	µg/L	5	1
Methylene chloride		386	µg/L	5	5
MTBE		<5.00	µg/L	5	1
trans-1,2-Dichloroethene		<5.00	µg/L	5	1
1,1-Dichloroethane		<5.00	µg/L	5	1
cis-1,2-Dichloroethene		<5.00	µg/L	5	1
2,2-Dichloropropane		<5.00	µg/L	5	1
1,2-Dichloroethane (EDC)		<5.00	µg/L	5	1
Chloroform		<5.00	µg/L	5	1
1,1,1-Trichloroethane		<5.00	µg/L	5	1
1,1-Dichloropropene		<5.00	µg/L	5	1
Benzene		<5.00	µg/L	5	1
Carbon Tetrachloride		<5.00	µg/L	5	1
1,2-Dichloropropane		<5.00	µg/L	5	1
Trichloroethene (TCE)		<5.00	µg/L	5	1
Dibromomethane (methylene bromide)		<5.00	µg/L	5	1
Bromodichloromethane		<5.00	µg/L	5	1
2-Chloroethyl vinyl ether		<25.0	µg/L	5	5
cis-1,3-Dichloropropene		<5.00	µg/L	5	1
trans-1,3-Dichloropropene		<5.00	µg/L	5	1
Toluene		12.9	µg/L	5	1
1,1,2-Trichloroethane		<5.00	µg/L	5	1
1,3-Dichloropropane		<5.00	µg/L	5	1
Dibromochloromethane		<5.00	µg/L	5	1
1,2-Dibromoethane (EDB)		<5.00	µg/L	5	1
Tetrachloroethene (PCE)		<5.00	µg/L	5	1
Chlorobenzene		<5.00	µg/L	5	1
1,1,1,2-Tetrachloroethane		<5.00	µg/L	5	1
Ethylbenzene		65.6	µg/L	5	1
m,p-Xylene		65.9	µg/L	5	1
Bromoform		<5.00	µg/L	5	1
Styrene		<5.00	µg/L	5	1
o-Xylene		42.7	µg/L	5	1
1,1,2,2-Tetrachloroethane		<5.00	µg/L	5	1
2-Chlorotoluene		<5.00	µg/L	5	1
1,2,3-Trichloropropane		<5.00	µg/L	5	1
Isopropylbenzene		51.4	µg/L	5	1
Bromobenzene		<5.00	µg/L	5	1
n-Propylbenzene		98.9	µg/L	5	1
1,3,5-Trimethylbenzene		56.8	µg/L	5	1
tert-Butylbenzene		<5.00	µg/L	5	1
1,2,4-Trimethylbenzene		266	µg/L	5	1
1,4-Dichlorobenzene (para)		<5.00	µg/L	5	1
sec-Butylbenzene		203	µg/L	5	1

Continued ...

... Continued Sample: 188027 Analysis: SPLP Volatiles

Param	Flag	Result	Units	Dilution	RDL
p-Isopropyltoluene		73.1	µg/L	5	1
4-Chlorotoluene		<5.00	µg/L	5	1
1,2-Dichlorobenzene (ortho)		<5.00	µg/L	5	1
n-Butylbenzene		131	µg/L	5	1
1,2-Dibromo-3-chloropropane		<25.0	µg/L	5	5
1,2,3-Trichlorobenzene		<25.0	µg/L	5	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.8	µg/L	5	50	99	84 - 122
Toluene-d8		48.6	µg/L	5	50	97	95 - 105
4-Bromofluorobenzene		50.5	µg/L	5	50	101	91 - 108

... Continued Sample: 188027 Analysis: SPLP Volatiles

Param	Flag	Result	Units	Dilution	RDL
p-Isopropyltoluene		73.1	µg/L	5	1
4-Chlorotoluene		<5.00	µg/L	5	1
1,2-Dichlorobenzene (ortho)		<5.00	µg/L	5	1
n-Butylbenzene		131	µg/L	5	1
1,2-Dibromo-3-chloropropane		<25.0	µg/L	5	5
1,2,3-Trichlorobenzene		<25.0	µg/L	5	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.8	µg/L	5	50	99	84 - 122
Toluene-d8		48.6	µg/L	5	50	97	95 - 105
4-Bromofluorobenzene		50.5	µg/L	5	50	101	91 - 108

Quality Control Report Method Blank

Method Blank QCBatch: QC17049

Param	Flag	Results	Units	Reporting Limit
TRPHC		<0.500	mg/Kg	10

Method Blank QCBatch: QC17162

Param	Flag	Results	Units	Reporting Limit
Bromochloromethane		<1.00	µg/L	1
Dichlorodifluoromethane		<1.00	µg/L	1
Chloromethane (methyl chloride)		<1.00	µg/L	1
Vinyl Chloride		<1.00	µg/L	1
Bromomethane (methyl bromide)		<5.00	µg/L	5
Chloroethane		<1.00	µg/L	1
Trichlorofluoromethane		<1.00	µg/L	1
Acetone		<10.0	µg/L	10
Iodomethane (methyl iodide)		<5.00	µg/L	5
Carbon Disulfide		<1.00	µg/L	1
Acrylonitrile		<1.00	µg/L	1
2-Butanone (MEK)		<5.00	µg/L	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	5
2-hexanone		<5.00	µg/L	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	10
1,1-Dichloroethene		<1.00	µg/L	1
Methylene chloride		<5.00	µg/L	5
MTBE		<1.00	µg/L	1
trans-1,2-Dichloroethene		<1.00	µg/L	1
1,1-Dichloroethane		<1.00	µg/L	1
cis-1,2-Dichloroethene		<1.00	µg/L	1
2,2-Dichloropropane		<1.00	µg/L	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1
Chloroform		<1.00	µg/L	1
1,1,1-Trichloroethane		<1.00	µg/L	1
1,1-Dichloropropene		<1.00	µg/L	1
Benzene		<1.00	µg/L	1
Carbon Tetrachloride		<1.00	µg/L	1
1,2-Dichloropropane		<1.00	µg/L	1
Trichloroethene (TCE)		<1.00	µg/L	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1
Bromodichloromethane		<1.00	µg/L	1
2-Chloroethyl vinyl ether		<5.00	µg/L	5
cis-1,3-Dichloropropene		<1.00	µg/L	1
trans-1,3-Dichloropropene		<1.00	µg/L	1
Toluene		<1.00	µg/L	1
1,1,2-Trichloroethane		<1.00	µg/L	1
1,3-Dichloropropane		<1.00	µg/L	1
Dibromochloromethane		<1.00	µg/L	1

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Param	Flag	Results	Units	Reporting Limit
1,2-Dibromoethane (EDB)		<1.00	µg/L	1
Tetrachloroethene (PCE)		<1.00	µg/L	1
Chlorobenzene		<1.00	µg/L	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1
Ethylbenzene		<1.00	µg/L	1
m,p-Xylene		<1.00	µg/L	1
Bromoform		<1.00	µg/L	1
Styrene		<1.00	µg/L	1
o-Xylene		<1.00	µg/L	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1
2-Chlorotoluene		<1.00	µg/L	1
1,2,3-Trichloropropane		<1.00	µg/L	1
Isopropylbenzene		<1.00	µg/L	1
Bromobenzene		<1.00	µg/L	1
n-Propylbenzene		<1.00	µg/L	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1
tert-Butylbenzene		<1.00	µg/L	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1
sec-Butylbenzene		<1.00	µg/L	1
p-Isopropyltoluene		<1.00	µg/L	1
4-Chlorotoluene		<1.00	µg/L	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1
n-Butylbenzene		<1.00	µg/L	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	5
1,2,3-Trichlorobenzene		<5.00	µg/L	5

Method Blank

QCBatch: QC17178

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.005	mg/L	0.005
Acenaphthylene		<0.005	mg/L	0.005
Acenaphthene		<0.005	mg/L	0.005
Fluorene		<0.005	mg/L	0.005
Phenanthrene		<0.005	mg/L	0.005
Anthracene		<0.005	mg/L	0.005
Fluoranthene		<0.005	mg/L	0.005
Pyrene		<0.005	mg/L	0.005
Benzo(a)anthracene		<0.005	mg/L	0.005
Chrysene		<0.005	mg/L	0.005
Benzo(b)fluoranthene		<0.005	mg/L	0.005
Benzo(k)fluoranthene		<0.005	mg/L	0.005
Benzo(a)pyrene		<0.005	mg/L	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		66.09	mg/L	1	100	66	23 - 120

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Param	Flag	Results	Units	Reporting Limit
2,6-Dinitrotoluene		<0.005	mg/Kg	0.005
3-Nitroaniline		<0.005	mg/Kg	0.005
Acenaphthene		<0.005	mg/Kg	0.005
2,4-Dinitrophenol		<0.005	mg/Kg	0.25
Dibenzofuran		<0.005	mg/Kg	0.005
Pentachlorobenzene		<0.005	mg/Kg	0.005
4-Nitrophenol		<0.005	mg/Kg	0.005
1-Naphthylamine		<0.005	mg/Kg	0.005
2,4-Dinitrotoluene		<0.005	mg/Kg	0.005
2-Naphthylamine		<0.005	mg/Kg	0.005
2,3,4,6-Tetrachlorophenol		<0.005	mg/Kg	0.005
Fluorene		<0.005	mg/Kg	0.005
Diethylphthalate		<0.005	mg/Kg	0.005
4-Chlorophenyl-phenylether		<0.005	mg/Kg	0.005
4-Nitroaniline		<0.005	mg/Kg	0.005
4,6-Dinitro-2-methylphenol		<0.005	mg/Kg	0.005
Diphenylamine		<0.005	mg/Kg	0.005
Diphenylhydrazine		<0.005	mg/Kg	0.005
4-Bromophenyl-phenylether		<0.005	mg/Kg	0.005
Phenacetin		<0.005	mg/Kg	0.005
Hexachlorobenzene		<0.005	mg/Kg	0.005
4-Aminobiphenyl		<0.005	mg/Kg	0.005
Pentachlorophenol		<0.005	mg/Kg	0.005
Pentachloronitrobenzene		<0.005	mg/Kg	0.005
Pronamide		<0.005	mg/Kg	0.005
Phenanthrene		<0.005	mg/Kg	0.005
Anthracene		<0.005	mg/Kg	0.005
Di-n-butylphthalate		<0.005	mg/Kg	0.005
Fluoranthene		<0.005	mg/Kg	0.005
Benzidine		<0.005	mg/Kg	0.005
Pyrene		<0.005	mg/Kg	0.005
p-Dimethylaminoazobenzene		<0.005	mg/Kg	0.005
Butylbenzylphthalate		<0.005	mg/Kg	0.005
Benzo(a)anthracene		<0.005	mg/Kg	0.005
3,3-Dichlorobenzidine		<0.005	mg/Kg	0.005
Chrysene		<0.005	mg/Kg	0.005
Bis (2-ethylhexyl) phthalate		<0.005	mg/Kg	0.005
Di-n-octylphthalate		<0.005	mg/Kg	0.005
Benzo(b)fluoranthene		<0.005	mg/Kg	0.005
7,12-Dimethylbenz(a)anthracene		<0.005	mg/Kg	0.005
Benzo(k)fluoranthene		<0.005	mg/Kg	0.005
Benzo(a)pyrene		<0.005	mg/Kg	0.005
3-Methylcholanthrene		<0.005	mg/Kg	0.005
Dibenzo(a,j)acridine		<0.005	mg/Kg	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/Kg	0.005
Dibenzo(a,h)anthracene		<0.005	mg/Kg	0.005
Benzo(g,h,i)perylene		<0.005	mg/Kg	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		36.41	mg/Kg	1	80	45	25 - 121
Phenol-d5		17.42	mg/Kg	1	80	21	24 - 113
Nitrobenzene-d5		84.72	mg/Kg	1	80	105	23 - 120

Continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorobiphenyl		87.33	mg/Kg	1	80	109	30 - 115
2,4,6-Tribromophenol		60.17	mg/Kg	1	80	75	19 - 122
Terphenyl-d14		105.08	mg/Kg	1	80	131	28 - 137

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC17162

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
1,1-Dichloroethene	109	111	µg/L	1	100	<1.00	109	1	92 - 129	20
Benzene	102	104	µg/L	1	100	<1.00	102	1	94 - 112	20
Trichloroethene (TCE)	104	105	µg/L	1	100	<1.00	104	0	90 - 113	20
Toluene	100	102	µg/L	1	100	<1.00	100	1	89 - 109	20
Chlorobenzene	103	104	µg/L	1	100	<1.00	103	0	93 - 114	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Dibromofluoromethane	50.4	50.3	µg/L	1	50	100	100	84 - 122
Toluene-d8	48.6	49.6	µg/L	1	50	97	99	95 - 105
4-Bromofluorobenzene	48.9	48.3	µg/L	1	50	97	96	91 - 108

Laboratory Control Spikes

QCBatch: QC17178

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	76.06	74.13	mg/L	1	100	<0.005	76	2	21 - 133	20
Acenaphthylene	88.00	87.87	mg/L	1	100	<0.005	88	0	33 - 145	20
Acenaphthene	88.05	86.37	mg/L	1	100	<0.005	88	1	47 - 145	20
Fluorene	86.11	83.13	mg/L	1	100	<0.005	86	3	59 - 121	20
Phenanthrene	84.58	85.81	mg/L	1	100	<0.005	84	0	54 - 120	20
Anthracene	87.9	89.08	mg/L	1	100	<0.005	87	5	27 - 133	20
Fluoranthene	85.11	83.56	mg/L	1	100	<0.005	85	5	26 - 137	20
Pyrene	77.08	80.89	mg/L	1	100	<0.005	77	4	52 - 115	20
Benzo(a)anthracene	77.03	80.22	mg/L	1	100	<0.005	77	4	80 - 120	20
Chrysene	77.38	79.23	mg/L	1	100	<0.005	77	2	80 - 120	20
Benzo(b)fluoranthene	79.73	85.47	mg/L	1	100	<0.005	79	6	33 - 143	20
Benzo(k)fluoranthene	89.4	89.34	mg/L	1	100	<0.005	89	0	17 - 168	20
Benzo(a)pyrene	83.84	85.29	mg/L	1	100	<0.005	83	1	24 - 159	20
Indeno(1,2,3-cd)pyrene	86.25	87.67	mg/L	1	100	<0.005	86	1	0 - 171	20
Dibenzo(a,h)anthracene	60.45	64.57	mg/L	1	100	<0.005	60	6	0 - 227	20
Benzo(g,h,i)perylene	96.93	96.2	mg/L	1	100		96	0	0 - 219	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	66.47	61.75	mg/L	1	100	66	61	23 - 120

Continued ...

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
2-Fluorobiphenyl	69.81	66.12	mg/L	1	100	69	66	30 - 115
Terphenyl-d14	65.06	66.13	mg/L	1	100	65	66	28 - 137

Laboratory Control Spikes

QCBatch: QC17447

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Phenol	19.91	19.09	mg/Kg	1	80	<0.005	24	4	5 - 112	20
2-Chlorophenol	56.86	54.56	mg/Kg	1	80	<0.005	71	4	23 - 134	20
1,4-Dichlorobenzene	77.03	70.99	mg/Kg	1	80	<0.005	96	8	20 - 124	20
n-Nitrosodi-n-propylamine	65.68	62.41	mg/Kg	1	80	<0.005	82	5	0 - 230	20
1,2,4-Trichlorobenzene	87.31	84.87	mg/Kg	1	80	<0.005	109	2	44 - 142	20
4-Chloro-3-methylphenol	52.17	52.2	mg/Kg	1	80	<0.005	65	0	22 - 147	20
Acenaphthene	88.58	86.78	mg/Kg	1	80	<0.005	110	2	47 - 145	20
4-Nitrophenol	5.32	4.7	mg/Kg	1	80	<0.005	6	12	0 - 132	20
2,4-Dinitrotoluene	80.72	77.26	mg/Kg	1	80	<0.005	100	4	39 - 139	20
Pentachlorophenol	44.02	44.83	mg/Kg	1	80	<0.005	55	1	14 - 176	20
Pyrene	81.02	85.17	mg/Kg	1	80	<0.005	101	4	52 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
2-Fluorophenol	31.28	30.57	mg/Kg	1	80	39	38	25 - 121
Phenol-d5	15.74	15.47	mg/Kg	1	80	19	19	24 - 113
Nitrobenzene-d5	85.21	79.16	mg/Kg	1	80	106	98	23 - 120
2-Fluorobiphenyl	81.99	77.56	mg/Kg	1	80	102	96	30 - 115
2,4,6-Tribromophenol	70.45	68.44	mg/Kg	1	80	88	85	19 - 122
Terphenyl-d14	79.67	80.97	mg/Kg	1	80	99	101	28 - 137

Quality Control Report Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC17447

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Phenol	15.00	15.27	mg/Kg	1	80	<0.005	18	1	5 - 112	20
2-Chlorophenol	43.37	44.16	mg/Kg	1	80	<0.005	54	1	23 - 134	20
1,4-Dichlorobenzene	52.76	57.25	mg/Kg	1	80	<0.005	65	8	20 - 124	20
n-Nitrosodi-n-propylamine	50.24	56.4	mg/Kg	1	80	<0.005	62	11	0 - 230	20
1,2,4-Trichlorobenzene	61.49	66.01	mg/Kg	1	80	<0.005	76	7	44 - 142	20
4-Chloro-3-methylphenol	55.19	55.08	mg/Kg	1	80	<0.005	68	0	22 - 147	20
Acenaphthene	59.96	60.51	mg/Kg	1	80	<0.005	74	0	47 - 145	20
4-Nitrophenol	19.05	12.06	mg/Kg	1	80	<0.005	23	44	0 - 132	20
2,4-Dinitrotoluene	61.41	66.31	mg/Kg	1	80	<0.005	76	7	39 - 139	20
Pentachlorophenol	62.81	38.56	mg/Kg	1	80	<0.005	78	47	14 - 176	20
Pyrene	69.29	71.88	mg/Kg	1	80	<0.005	86	3	52 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
2-Fluorophenol	27.05	25.28	mg/Kg	1	80	33	31	25 - 121
Phenol-d5	14.03	13.18	mg/Kg	1	80	17	16	24 - 113
Nitrobenzene-d5	63.08	60.18	mg/Kg	1	80	78	75	23 - 120
2-Fluorobiphenyl	62.11	58.96	mg/Kg	1	80	77	73	30 - 115
2,4,6-Tribromophenol	81.02	73.46	mg/Kg	1	80	101	91	19 - 122
Terphenyl-d14	75.26	73.14	mg/Kg	1	80	94	91	28 - 137

Quality Control Report Continuing Calibration Verification Standards

CCV (1) QCBatch: QC17162

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	100	93	93	80 - 120	1/4/02
1,1-Dichloroethene		µg/L	100	103	103	80 - 120	1/4/02
Chloroform		µg/L	100	101	101	80 - 120	1/4/02
1,2-Dichloropropane		µg/L	100	100	100	80 - 120	1/4/02
Toluene		µg/L	100	99	99	80 - 120	1/4/02
Chlorobenzene		µg/L	100	101	101	80 - 120	1/4/02
Ethylbenzene		µg/L	100	101	101	80 - 120	1/4/02
Dibromofluoromethane		µg/L	50	50.9	101	80 - 120	1/4/02
Toluene-d8		µg/L	50	48.9	97	80 - 120	1/4/02
4-Bromofluorobenzene		µg/L	50	49.5	99	80 - 120	1/4/02

CCV (1) QCBatch: QC17178

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	80	54.53	68	80 - 120	1/8/02
Acenaphthylene		mg/L	80	55.68	69	80 - 120	1/8/02
Acenaphthene		mg/L	80	55.49	69	80 - 120	1/8/02
Fluorene		mg/L	80	52.69	65	80 - 120	1/8/02
Phenanthrene		mg/L	80	54.19	67	80 - 120	1/8/02
Anthracene		mg/L	80	54.18	67	80 - 120	1/8/02
Fluoranthene		mg/L	80	48.57	60	80 - 120	1/8/02
Pyrene		mg/L	80	49.04	61	80 - 120	1/8/02
Benzo(a)anthracene		mg/L	80	52.3	65	80 - 120	1/8/02
Chrysene		mg/L	80	52.88	66	80 - 120	1/8/02
Benzo(b)fluoranthene		mg/L	80	69.02	86	80 - 120	1/8/02
Benzo(k)fluoranthene		mg/L	80	67.5	84	80 - 120	1/8/02
Benzo(a)pyrene		mg/L	80	70.57	88	80 - 120	1/8/02
Indeno(1,2,3-cd)pyrene		mg/L	80	70.44	88	80 - 120	1/8/02
Dibenzo(a,h)anthracene		mg/L	80	68.89	86	80 - 120	1/8/02
Benzo(g,h,i)perylene		mg/L	80	67.95	84	80 - 120	1/8/02

CCV (1) QCBatch: QC17447

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/Kg	60	55.82	93	80 - 120	1/8/02
1,4-Dichlorobenzene		mg/Kg	60	55.21	92	80 - 120	1/8/02
2-Nitrophenol		mg/Kg	60	51.2	85	80 - 120	1/8/02
2,4-Dichlorophenol		mg/Kg	60	54.15	90	80 - 120	1/8/02
Hexachlorobutadiene		mg/Kg	60	66.61	111	80 - 120	1/8/02
4-Chloro-3-methylphenol		mg/Kg	60	63.37	105	80 - 120	1/8/02
2,4,6-Trichlorophenol		mg/Kg	60	60.15	100	80 - 120	1/8/02
Acenaphthene		mg/Kg	60	55.55	92	80 - 120	1/8/02
Diphenylamine		mg/Kg	60	50.03	83	80 - 120	1/8/02
Pentachlorophenol		mg/Kg	60	63.37	105	80 - 120	1/8/02
Fluoranthene		mg/Kg	60	51.09	85	80 - 120	1/8/02
Di-n-octylphthalate		mg/Kg	60	48.96	81	80 - 120	1/8/02
Benzo(a)pyrene		mg/Kg	60	63.1	105	80 - 120	1/8/02
2-Fluorophenol		mg/Kg	60	54.25	90	80 - 120	1/8/02
Phenol-d5		mg/Kg	60	52.27	87	80 - 120	1/8/02
Nitrobenzene-d5		mg/Kg	60	56.98	94	80 - 120	1/8/02
2-Fluorobiphenyl		mg/Kg	60	51.52	85	80 - 120	1/8/02
2,4,6-Tribromophenol		mg/Kg	60	63.35	105	80 - 120	1/8/02
Terphenyl-d14		mg/Kg	60	47.17	78	80 - 120	1/8/02

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Analytical and Quality Control Report

Marc C Oler
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Report Date: January 28, 2002

Order ID Number: A01122407

Project: 106.001.01
TA Job Code: Jal Station
Casualty Code: 106.001.01
Project Location: Jal, NM
H2A Environmental LTD / Portland / Theresa Nix

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
188018	SB-1 (10')	Soil	12/19/01	10:35	12/22/01
188019	SB-1 (40')	Soil	12/19/01	11:45	12/22/01
188020	SB-1 (50')	Soil	12/19/01	12:40	12/22/01
188021	SB-1 (70')	Soil	12/19/01	14:00	12/22/01
188022	SB-1 (86-88')	Soil	12/19/01	:	12/22/01
188023	MW18-10	Soil	12/20/01	12:08	12/22/01
188024	MW18-70	Soil	12/20/01	15:12	12/22/01
188025	MW18-80	Soil	12/20/01	15:40	12/22/01
188026	MW18-82	Soil	12/20/01	16:10	12/22/01
188027	MW18-84	Soil	12/20/01	16:28	12/22/01
188028	SB-1 (98-100')	Soil	12/20/01	11:45	12/22/01
188029	Drum 1	Soil	12/20/01	10:15	12/22/01
188030	Drum 2	Soil	12/20/01	10:20	12/22/01
188031	Drum 3	Soil	12/20/01	10:25	12/22/01
188032	Drum 4	Soil	12/20/01	10:30	12/22/01
188033	Drum 5	Soil	12/20/01	10:35	12/22/01
188034	Drum 6	Soil	12/20/01	10:40	12/22/01
188035	Drum 7	Soil	12/20/01	14:15	12/22/01
188036	Drum 8	Soil	12/20/01	14:20	12/22/01
188037	Drum 9	Soil	12/20/01	14:25	12/22/01
188038	Drum 10	Soil	12/20/01	14:30	12/22/01
188039	Drum 11	Soil	12/20/01	14:35	12/22/01
188040	SB3-10	Soil	12/21/01	9:14	12/22/01
188041	SB3-60	Soil	12/21/01	10:56	12/22/01
188042	SB3-80	Soil	12/21/01	12:30	12/22/01
188043	SB3-82	Soil	12/21/01	12:40	12/22/01
188044	SB3-84	Soil	12/21/01	13:01	12/22/01
188045	Drum 12	Soil	12/21/01	14:40	12/22/01
188046	Drum 13	Soil	12/21/01	14:45	12/22/01

0

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.

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Dr. Blair Leftwich, Director

Analytical Report

Sample: 188018 - SB-1 (10')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16861 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.782	mg/Kg	10	0.10	78	70 - 130
4-BFB		0.766	mg/Kg	10	0.10	77	70 - 130

Sample: 188018 - SB-1 (10')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16930 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16721 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		138	mg/Kg	1	150	92	70 - 130

Sample: 188018 - SB-1 (10')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16862 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.805	mg/Kg	10	0.10	80	70 - 130
4-BFB		0.889	mg/Kg	10	0.10	89	70 - 130

Sample: 188019 - SB-1 (40')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16861 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001
Toluene		0.170	mg/Kg	20	0.001
Ethylbenzene		1.89	mg/Kg	20	0.001
M,P,O-Xylene		2.45	mg/Kg	20	0.001
Total BTEX		4.51	mg/Kg	20	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	1	0.681	mg/Kg	20	0.10	30	70 - 130
4-BFB		2.36	mg/Kg	20	0.10	118	70 - 130

Sample: 188019 - SB-1 (40')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16930 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16721 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		795	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		123	mg/Kg	1	150	82	70 - 130

Sample: 188019 - SB-1 (40')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16862 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		108	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	2	1.01	mg/Kg	20	0.10	50	70 - 130
4-BFB		2.22	mg/Kg	20	0.10	111	70 - 130

Sample: 188020 - SB-1 (50')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16861 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.100	mg/Kg	100	0.001
Toluene		0.255	mg/Kg	100	0.001
Ethylbenzene		5.89	mg/Kg	100	0.001
M,P,O-Xylene		6.62	mg/Kg	100	0.001
Total BTEX		12.8	mg/Kg	100	0.001

Continued ...

¹Surrogate outside normal limits due to matrix difficulties.

²Surrogate outside normal limits due to matrix difficulties.

... Continued Sample: 188020 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Test Comments	3	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	4	1.02	mg/Kg	100	0.10	10	70 - 130
4-BFB	5	4.92	mg/Kg	100	0.10	50	70 - 130

Sample: 188020 - SB-1 (50')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16930 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16721 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		1220	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		122	mg/Kg	1	150	81	70 - 130

Sample: 188020 - SB-1 (50')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16862 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		401	mg/Kg	100	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	6	0.7	mg/Kg	100	0.10	7	70 - 130
4-BFB		10	mg/Kg	100	0.10	100	70 - 130

Sample: 188021 - SB-1 (70')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16861 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.050	mg/Kg	50	0.001
Toluene		0.128	mg/Kg	50	0.001
Ethylbenzene		3.62	mg/Kg	50	0.001
M,P,O-Xylene		3.90	mg/Kg	50	0.001
Total BTEX		7.65	mg/Kg	50	0.001

Continued ...

³Sample ran at a dilution due to hydrocarbons. Sample had a Benzene concentration of 0.0803 which is higher than the MDL of 0.0032 but lower than the RDL.

⁴Low surrogate due to matrix.

⁵High surrogate recovery due to peak interference.

⁶Surrogate outside normal limits due to matrix difficulties.

... Continued Sample: 188021 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Test Comments	7	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	8	1.04	mg/Kg	50	0.10	20	70 - 130
4-BFB		3.51	mg/Kg	50	0.10	70	70 - 130

Sample: 188021 - SB-1 (70')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16987 Date Analyzed: 1/2/02
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16778 Date Prepared: 1/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		4070	mg/Kg	10	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		263	mg/Kg	10	150	175	70 - 130

Sample: 188021 - SB-1 (70')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16862 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16675 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		238	mg/Kg	50	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	9	0.704	mg/Kg	50	0.10	14	70 - 130
4-BFB		4.18	mg/Kg	50	0.10	84	70 - 130

Sample: 188022 - SB-1 (86-88')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16858 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.587	mg/Kg	200	0.001
Toluene		6.27	mg/Kg	200	0.001
Ethylbenzene		23.2	mg/Kg	200	0.001
M,P,O-Xylene		29.9	mg/Kg	200	0.001
Total BTEX		60.0	mg/Kg	200	0.001

⁷Sample ran at a dilution due to hydrocarbons. Sample had a Benzene concentration of 0.0018 which is higher than the MDL of 0.0032 but lower than the RDL.

⁸Surrogate outside normal limits due to matrix difficulties.

⁹Surrogate outside normal limits due to matrix difficulties.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	¹⁰	0.659	mg/Kg	200	0.10	3	70 - 130
4-BFB	¹¹	12.6	mg/Kg	200	0.10	63	70 - 130

Sample: 188022 - SB-1 (86-88')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16987 Date Analyzed: 1/2/02
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16778 Date Prepared: 1/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		9090	mg/Kg	20	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		433	mg/Kg	20	150	289	70 - 130

Sample: 188022 - SB-1 (86-88')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16859 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		1023	mg/Kg	200	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	¹²	0.43	mg/Kg	200	0.10	2	70 - 130
4-BFB		21.2	mg/Kg	200	0.10	106	70 - 130

Sample: 188023 - MW18-10

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16858 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		0.0211	mg/Kg	10	0.001
Total BTEX		0.0211	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.823	mg/Kg	10	0.10	82	70 - 130
4-BFB		0.783	mg/Kg	10	0.10	78	70 - 130

¹⁰Low surrogate recovery due to matrix difficulties.

¹¹High surrogate recovery due to peak interference.

¹²Low surrogate recovery due to matrix difficulties.

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Sample: 188023 - MW18-10

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16925 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16723 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		119	mg/Kg	1	150	79	70 - 130

Sample: 188023 - MW18-10

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16859 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.85	mg/Kg	10	0.10	85	70 - 130
4-BFB		0.905	mg/Kg	10	0.10	90	70 - 130

Sample: 188024 - MW18-70

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16858 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.767	mg/Kg	10	0.10	77	70 - 130
4-BFB		0.772	mg/Kg	10	0.10	77	70 - 130

Sample: 188024 - MW18-70

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16925 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16723 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		127	mg/Kg	1	150	84	70 - 130

Sample: 188024 - MW18-70

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16859 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.841	mg/Kg	10	0.10	84	70 - 130
4-BFB		0.884	mg/Kg	10	0.10	88	70 - 130

Sample: 188025 - MW18-80

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16858 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.740	mg/Kg	10	0.10	74	70 - 130
4-BFB		0.757	mg/Kg	10	0.10	76	70 - 130

Sample: 188025 - MW18-80

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16925 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16723 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		121	mg/Kg	1	150	80	70 - 130

Sample: 188025 - MW18-80

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16859 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.884	mg/Kg	10	0.10	88	70 - 130
4-BFB		0.848	mg/Kg	10	0.10	85	70 - 130

Sample: 188026 - MW18-82

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16858 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.100	mg/Kg	100	0.001
Toluene		0.166	mg/Kg	100	0.001
Ethylbenzene		1.89	mg/Kg	100	0.001
M,P,O-Xylene		2.93	mg/Kg	100	0.001
Total BTEX		4.99	mg/Kg	100	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	¹³	0.704	mg/Kg	100	0.10	7	70 - 130
4-BFB	¹⁴	2.82	mg/Kg	100	0.10	28	70 - 130

Sample: 188026 - MW18-82

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16987 Date Analyzed: 1/2/02
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16778 Date Prepared: 1/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		4640	mg/Kg	10	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		268	mg/Kg	10	150	179	70 - 130

Sample: 188026 - MW18-82

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16859 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		303	mg/Kg	100	0.10

¹³Low surrogate due to matrix.

¹⁴Low surrogate recovery due to peak interference.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	¹⁵	3.46	mg/Kg	100	0.10	35	70 - 130
4-BFB	¹⁶	5.87	mg/Kg	100	0.10	59	70 - 130

Sample: 188027 - MW18-84

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16858 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.200	mg/Kg	200	0.001
Toluene		4.23	mg/Kg	200	0.001
Ethylbenzene		19.2	mg/Kg	200	0.001
M,P,O-Xylene		25.6	mg/Kg	200	0.001
Total BTEX		49.0	mg/Kg	200	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	¹⁷	2.45	mg/Kg	200	0.10	12	70 - 130
4-BFB	¹⁸	11.8	mg/Kg	200	0.10	59	70 - 130

Sample: 188027 - MW18-84

Analysis: PAH Analytical Method: S 8270C QC Batch: QC17174 Date Analyzed: 1/3/02
Analyst: RC Preparation Method: E 3510C Prep Batch: PB16932 Date Prepared: 1/2/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		8.91	mg/Kg	1	0.25
Acenaphthylene		<0.25	mg/Kg	1	0.25
Acenaphthene		<0.25	mg/Kg	1	0.25
Fluorene		<0.25	mg/Kg	1	0.25
Phenanthrene		8.73	mg/Kg	1	0.25
Anthracene		<0.25	mg/Kg	1	0.25
Fluoranthene		7.39	mg/Kg	1	0.25
Pyrene		2.79	mg/Kg	1	0.25
Benzo(a)anthracene		<0.25	mg/Kg	1	0.25
Chrysene		<0.25	mg/Kg	1	0.25
Benzo(b)fluoranthene		<0.25	mg/Kg	1	0.25
Benzo(k)fluoranthene		<0.25	mg/Kg	1	0.25
Benzo(a)pyrene		<0.25	mg/Kg	1	0.25
Indeno(1,2,3-cd)pyrene		<0.25	mg/Kg	1	0.25
Dibenzo(a,h)anthracene		<0.25	mg/Kg	1	0.25
Benzo(g,h,i)perylene		<0.25	mg/Kg	1	0.25

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		48.61	mg/Kg	1	80	60	23 - 120

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¹⁵Low surrogate recovery due to peak interference.

¹⁶Low surrogate recovery due to peak interference.

¹⁷Low surrogate recovery due to peak interference.

¹⁸Low surrogate recovery due to peak interference.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorobiphenyl	¹⁹	13.16	mg/Kg	1	80	16	30 - 115
Terphenyl-d14	²⁰	18.24	mg/Kg	1	80	22	28 - 137

Sample: 188027 - MW18-84

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16987 Date Analyzed: 1/2/02
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16778 Date Prepared: 1/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		27400	mg/Kg	20	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		424	mg/Kg	20	150	283	70 - 130

Sample: 188027 - MW18-84

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16859 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		1119	mg/Kg	200	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	²¹	0.464	mg/Kg	200	0.10	2	70 - 130
4-BFB	²²	27.4	mg/Kg	200	0.10	137	70 - 130

Sample: 188028 - SB-1 (98-100')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16858 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		0.017	mg/Kg	10	0.001
M,P,O-Xylene		0.027	mg/Kg	10	0.001
Total BTEX		0.044	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.777	mg/Kg	10	0.10	78	70 - 130
4-BFB		0.757	mg/Kg	10	0.10	76	70 - 130

¹⁹Sample surrogate out of limits due to sample matrix.

²⁰Sample surrogate out of limits due to sample matrix.

²¹Low surrogate recovery due to matrix difficulties.

²²High surrogate recovery due to peak interference.

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Sample: 188028 - SB-1 (98-100')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16987 Date Analyzed: 1/2/02
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16778 Date Prepared: 1/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		119	mg/Kg	1	150	79	70 - 130

Sample: 188028 - SB-1 (98-100')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16859 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		7.63	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.873	mg/Kg	10	0.10	87	70 - 130
4-BFB		0.933	mg/Kg	10	0.10	93	70 - 130

Sample: 188029 - Drum 1

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16858 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.716	mg/Kg	10	0.10	72	70 - 130
4-BFB		0.712	mg/Kg	10	0.10	71	70 - 130

Sample: 188029 - Drum 1

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16931 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16722 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		121	mg/Kg	1	150	81	70 - 130

Sample: 188029 - Drum 1

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16859 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.819	mg/Kg	10	0.10	82	70 - 130
4-BFB		0.795	mg/Kg	10	0.10	80	70 - 130

Sample: 188030 - Drum 2

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16858 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001
Toluene		0.060	mg/Kg	20	0.001
Ethylbenzene		0.501	mg/Kg	20	0.001
M,P,O-Xylene		0.799	mg/Kg	20	0.001
Total BTEX		1.36	mg/Kg	20	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	²³	0.690	mg/Kg	20	0.10	34	70 - 130
4-BFB	²⁴	1.22	mg/Kg	20	0.10	61	70 - 130

Sample: 188030 - Drum 2

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16987 Date Analyzed: 1/2/02
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16778 Date Prepared: 1/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		2070	mg/Kg	5	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		177	mg/Kg	5	150	118	70 - 130

²³Low surrogate recovery due to matrix difficulties.

²⁴Low surrogate due to matrix.

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Sample: 188030 - Drum 2

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16859 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		80.9	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	²⁵	1.08	mg/Kg	20	0.10	50	70 - 130
4-BFB		2.26	mg/Kg	20	0.10	113	70 - 130

Sample: 188031 - Drum 3

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16858 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.826	mg/Kg	10	0.10	83	70 - 130
4-BFB		0.787	mg/Kg	10	0.10	79	70 - 130

Sample: 188031 - Drum 3

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16931 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16722 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		119	mg/Kg	1	150	79	70 - 130

Sample: 188031 - Drum 3

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16859 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

²⁵Low surrogate recovery due to peak interference.

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.932	mg/Kg	10	0.10	93	70 - 130
4-BFB		0.894	mg/Kg	10	0.10	89	70 - 130

Sample: 188032 - Drum 4

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16858 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.796	mg/Kg	10	0.10	80	70 - 130
4-BFB		0.803	mg/Kg	10	0.10	80	70 - 130

Sample: 188032 - Drum 4

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16931 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16722 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		124	mg/Kg	1	150	83	70 - 130

Sample: 188032 - Drum 4

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16859 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.961	mg/Kg	10	0.10	96	70 - 130
4-BFB		0.91	mg/Kg	10	0.10	91	70 - 130

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Sample: 188033 - Drum 5

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16858 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.780	mg/Kg	10	0.10	78	70 - 130
4-BFB		0.792	mg/Kg	10	0.10	79	70 - 130

Sample: 188033 - Drum 5

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16931 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16722 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		125	mg/Kg	1	150	83	70 - 130

Sample: 188033 - Drum 5

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16859 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.934	mg/Kg	10	0.10	93	70 - 130
4-BFB		0.885	mg/Kg	10	0.10	88	70 - 130

Sample: 188034 - Drum 6

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16858 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001

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... Continued Sample: 188034 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.700	mg/Kg	10	0.10	70	70 - 130
4-BFB		0.704	mg/Kg	10	0.10	70	70 - 130

Sample: 188034 - Drum 6

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16931 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16722 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		122	mg/Kg	1	150	81	70 - 130

Sample: 188034 - Drum 6

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16859 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.841	mg/Kg	10	0.10	84	70 - 130
4-BFB		0.788	mg/Kg	10	0.10	79	70 - 130

Sample: 188035 - Drum 7

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16858 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		0.0611	mg/Kg	10	0.001
Ethylbenzene		0.586	mg/Kg	10	0.001
M,P,O-Xylene		0.883	mg/Kg	10	0.001
Total BTEX		1.53	mg/Kg	10	0.001

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.745	mg/Kg	10	0.10	74	70 - 130
4-BFB		1.30	mg/Kg	10	0.10	130	70 - 130

Sample: 188035 - Drum 7

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16931 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16722 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		1460	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		125	mg/Kg	1	150	83	70 - 130

Sample: 188035 - Drum 7

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16859 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		57.8	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.858	mg/Kg	10	0.10	86	70 - 130
4-BFB	26	1.53	mg/Kg	10	0.10	153	70 - 130

Sample: 188036 - Drum 8

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16858 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001
Toluene		0.104	mg/Kg	20	0.001
Ethylbenzene		1.09	mg/Kg	20	0.001
M,P,O-Xylene		1.63	mg/Kg	20	0.001
Total BTEX		2.82	mg/Kg	20	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	27	0.836	mg/Kg	20	0.10	40	70 - 130

Continued ...

²⁶High surrogate recovery due to peak interference.

²⁷Low surrogate recovery due to peak interference.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-BFB		1.74	mg/Kg	20	0.10	87	70 - 130

Sample: 188036 - Drum 8

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16987 Date Analyzed: 1/2/02
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16778 Date Prepared: 1/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		5610	mg/Kg	10	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		268	mg/Kg	10	150	179	70 - 130

Sample: 188036 - Drum 8

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16859 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		89.7	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	²⁸	0.858	mg/Kg	20	0.10	42	70 - 130
4-BFB	²⁹	2.83	mg/Kg	20	0.10	141	70 - 130

Sample: 188037 - Drum 9

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16858 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001
Toluene		0.068	mg/Kg	20	0.001
Ethylbenzene		0.836	mg/Kg	20	0.001
M,P,O-Xylene		1.33	mg/Kg	20	0.001
Total BTEX		2.23	mg/Kg	20	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	³⁰	0.790	mg/Kg	20	0.10	40	70 - 130
4-BFB		1.60	mg/Kg	20	0.10	80	70 - 130

²⁸Low surrogate due to matrix.

²⁹High surrogate recovery due to peak interference.

³⁰Low surrogate recovery due to peak interference.

Sample: 188037 - Drum 9

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16931 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16722 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		1770	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		122	mg/Kg	1	150	81	70 - 130

Sample: 188037 - Drum 9

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16859 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		88.5	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	³¹	1.04	mg/Kg	20	0.10	50	70 - 130
4-BFB		2.76	mg/Kg	20	0.10	130	70 - 130

Sample: 188038 - Drum 10

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16858 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001
Toluene		0.034	mg/Kg	20	0.001
Ethylbenzene		0.87	mg/Kg	20	0.001
M,P,O-Xylene		1.21	mg/Kg	20	0.001
Total BTEX		2.11	mg/Kg	20	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	³²	0.799	mg/Kg	20	0.10	40	70 - 130
4-BFB		1.69	mg/Kg	20	0.10	85	70 - 130

Sample: 188038 - Drum 10

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16987 Date Analyzed: 1/2/02
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16778 Date Prepared: 1/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		2260	mg/Kg	10	50

³¹Low surrogate recovery due to peak interference.

³²Low surrogate recovery due to peak interference.

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		270	mg/Kg	10	150	180	70 - 130

Sample: 188038 - Drum 10

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16859 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		112	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	³³	1.05	mg/Kg	20	0.10	50	70 - 130
4-BFB		2.34	mg/Kg	20	0.10	117	70 - 130

Sample: 188039 - Drum 11

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16858 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001
Toluene		0.049	mg/Kg	20	0.001
Ethylbenzene		0.775	mg/Kg	20	0.001
M,P,O-Xylene		1.21	mg/Kg	20	0.001
Total BTEX		2.03	mg/Kg	20	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	³⁴	0.743	mg/Kg	20	0.10	37	70 - 130
4-BFB		1.56	mg/Kg	20	0.10	78	70 - 130

Sample: 188039 - Drum 11

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16987 Date Analyzed: 1/2/02
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16778 Date Prepared: 1/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		3350	mg/Kg	5	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		182	mg/Kg	5	150	121	70 - 130

³³Low surrogate recovery due to peak interference.

³⁴Low surrogate recovery due to peak interference.

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Sample: 188039 - Drum 11

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16859 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		87.2	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	35	1.08	mg/Kg	20	0.10	50	70 - 130
4-BFB		2.29	mg/Kg	20	0.10	114	70 - 130

Sample: 188040 - SB3-10

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16858 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.796	mg/Kg	10	0.10	80	70 - 130
4-BFB	36	0.648	mg/Kg	10	0.10	65	70 - 130

Sample: 188040 - SB3-10

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16931 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16722 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		122	mg/Kg	1	150	81	70 - 130

Sample: 188040 - SB3-10

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16859 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

³⁵Low surrogate recovery due to peak interference.

³⁶Low surrogate recovery due to matrix difficulties.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.775	mg/Kg	10	0.10	77	70 - 130
4-BFB		0.754	mg/Kg	10	0.10	75	70 - 130

Sample: 188041 - SB3-60

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16858 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		0.0116	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		0.0116	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	³⁷	0.666	mg/Kg	10	0.10	66	70 - 130
4-BFB		0.709	mg/Kg	10	0.10	71	70 - 130

Sample: 188041 - SB3-60

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16931 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16722 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		116	mg/Kg	1	150	77	70 - 130

Sample: 188041 - SB3-60

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16859 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: 5035 Prep Batch: PB16676 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
GRO		3.98	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.3	mg/Kg	10	0.10	130	70 - 130
4-BFB		0.782	mg/Kg	10	0.10	78	70 - 130

³⁷Low surrogate recovery due to matrix difficulties.

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Sample: 188042 - SB3-80

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16972 Date Analyzed: 12/28/01
Analyst: CG Preparation Method: N/A Prep Batch: PB16756 Date Prepared: 12/28/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.744	mg/Kg	10	0.10	74	70 - 130
4-BFB		0.765	mg/Kg	10	0.10	76	70 - 130

Sample: 188042 - SB3-80

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16931 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16722 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		120	mg/Kg	1	150	80	70 - 130

Sample: 188042 - SB3-80

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16973 Date Analyzed: 12/28/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB16757 Date Prepared: 12/28/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.972	mg/Kg	10	0.10	97	70 - 130
4-BFB		0.844	mg/Kg	10	0.10	84	70 - 130

Sample: 188043 - SB3-82

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16972 Date Analyzed: 12/28/01
Analyst: CG Preparation Method: N/A Prep Batch: PB16756 Date Prepared: 12/28/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001

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... Continued Sample: 188043 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.786	mg/Kg	10	0.10	79	70 - 130
4-BFB		0.772	mg/Kg	10	0.10	77	70 - 130

Sample: 188043 - SB3-82

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16931 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16722 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		125	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		133	mg/Kg	1	150	89	70 - 130

Sample: 188043 - SB3-82

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16973 Date Analyzed: 12/28/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB16757 Date Prepared: 12/28/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.813	mg/Kg	10	0.10	81	70 - 130
4-BFB		0.852	mg/Kg	10	0.10	85	70 - 130

Sample: 188044 - SB3-84

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16972 Date Analyzed: 12/28/01
Analyst: CG Preparation Method: N/A Prep Batch: PB16756 Date Prepared: 12/28/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.54	mg/Kg	200	0.001
Toluene		8.48	mg/Kg	200	0.001
Ethylbenzene		30.9	mg/Kg	200	0.001
M,P,O-Xylene		38.8	mg/Kg	200	0.001
Total BTEX		78.7	mg/Kg	200	0.001

Continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	³⁸	0.783	mg/Kg	200	0.10	4	70 - 130
4-BFB	³⁹	13.3	mg/Kg	200	0.10	67	70 - 130

Sample: 188044 - SB3-84

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16931 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16722 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		2250	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		119	mg/Kg	1	150	79	70 - 130

Sample: 188044 - SB3-84

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16973 Date Analyzed: 12/28/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB16757 Date Prepared: 12/28/01

Param	Flag	Result	Units	Dilution	RDL
GRO		1225	mg/Kg	200	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	⁴⁰	0.583	mg/Kg	200	0.10	3	70 - 130
4-BFB	⁴¹	47.9	mg/Kg	200	0.10	240	70 - 130

Sample: 188045 - Drum 12

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16972 Date Analyzed: 12/28/01
Analyst: CG Preparation Method: N/A Prep Batch: PB16756 Date Prepared: 12/28/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001
Toluene		0.0626	mg/Kg	20	0.001
Ethylbenzene		0.968	mg/Kg	20	0.001
M,P,O-Xylene		1.43	mg/Kg	20	0.001
Total BTEX		2.46	mg/Kg	20	0.001

³⁸Low surrogate due to matrix.

³⁹Low surrogate recovery due to peak interference.

⁴⁰Surrogate outside normal limits due to matrix difficulties.

⁴¹Surrogate outside normal limits due to matrix difficulties.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	42	0.772	mg/Kg	20	0.10	39	70 - 130
4-BFB		1.81	mg/Kg	20	0.10	91	70 - 130

Sample: 188045 - Drum 12

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16987 Date Analyzed: 1/2/02
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16778 Date Prepared: 1/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		4080	mg/Kg	10	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		269	mg/Kg	10	150	179	70 - 130

Sample: 188045 - Drum 12

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16973 Date Analyzed: 12/28/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB16757 Date Prepared: 12/28/01

Param	Flag	Result	Units	Dilution	RDL
GRO		118	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	43	1.04	mg/Kg	20	0.10	50	70 - 130
4-BFB	44	2.95	mg/Kg	20	0.10	147	70 - 130

Sample: 188046 - Drum 13

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16972 Date Analyzed: 12/28/01
Analyst: CG Preparation Method: N/A Prep Batch: PB16756 Date Prepared: 12/28/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001
Toluene		0.0346	mg/Kg	20	0.001
Ethylbenzene		0.552	mg/Kg	20	0.001
M,P,O-Xylene		0.882	mg/Kg	20	0.001
Total BTEX		1.47	mg/Kg	20	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	45	0.761	mg/Kg	20	0.10	38	70 - 130
4-BFB		1.47	mg/Kg	20	0.10	74	70 - 130

⁴²Low surrogate recovery due to peak interference.

⁴³Low surrogate due to matrix.

⁴⁴High surrogate recovery due to peak interference.

⁴⁵Low surrogate recovery due to peak interference.

Sample: 188046 - Drum 13

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16931 Date Analyzed: 12/28/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB16722 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
DRO		1010	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		121	mg/Kg	1	150	81	70 - 130

Sample: 188046 - Drum 13

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16973 Date Analyzed: 12/28/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB16757 Date Prepared: 12/28/01

Param	Flag	Result	Units	Dilution	RDL
GRO		89.6	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	⁴⁶	1.3	mg/Kg	20	0.10	65	70 - 130
4-BFB	⁴⁷	4.3	mg/Kg	20	0.10	215	70 - 130

⁴⁶Low surrogate due to matrix.

⁴⁷High surrogate recovery due to peak interference.

Quality Control Report Method Blank

Method Blank QCBatch: QC16858

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0856	mg/Kg	10	0.10	86	70 - 130
4-BFB		0.0848	mg/Kg	10	0.10	85	70 - 130

Method Blank QCBatch: QC16859

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.104	mg/Kg	10	0.10	104	70 - 130
4-BFB		0.095	mg/Kg	10	0.10	95	70 - 130

Method Blank QCBatch: QC16861

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0895	mg/Kg	10	0.10	90	70 - 130
4-BFB		0.079	mg/Kg	10	0.10	79	70 - 130

Method Blank QCBatch: QC16862

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.05	mg/Kg	10	0.10	105	70 - 130
4-BFB		0.874	mg/Kg	10	0.10	87	70 - 130

Method Blank QCBatch: QC16925

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		125	mg/Kg	1	150	83	70 - 130

Method Blank QCBatch: QC16930

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		125	mg/Kg	1	150	83	70 - 130

Method Blank QCBatch: QC16931

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		130	mg/Kg	1	150	86	70 - 130

Method Blank QCBatch: QC16972

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.010	mg/Kg	0.001

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Param	Flag	Results	Units	Reporting Limit
Toluene		<0.010	mg/Kg	0.001
Ethylbenzene		<0.010	mg/Kg	0.001
M,P,O-Xylene		<0.010	mg/Kg	0.001
Total BTEX		< 0.01	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.881	mg/Kg	10	0.10	88	70 - 130
4-BFB		0.802	mg/Kg	10	0.10	80	70 - 130

Method Blank QCBatch: QC16973

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.05	mg/Kg	10	0.10	105	70 - 130
4-BFB		0.89	mg/Kg	10	0.10	89	70 - 130

Method Blank QCBatch: QC16987

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		114	mg/Kg	1	150	76	70 - 130

Method Blank QCBatch: QC17174

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.25	mg/Kg	0.25
Acenaphthylene		<0.25	mg/Kg	0.25
Acenaphthene		<0.25	mg/Kg	0.25
Fluorene		<0.25	mg/Kg	0.25
Phenanthrene		<0.25	mg/Kg	0.25
Anthracene		<0.25	mg/Kg	0.25
Fluoranthene		<0.25	mg/Kg	0.25
Pyrene		<0.25	mg/Kg	0.25
Benzo(a)anthracene		<0.25	mg/Kg	0.25

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Param	Flag	Results	Units	Reporting Limit
Chrysene		<0.25	mg/Kg	0.25
Benzo(b)fluoranthene		<0.25	mg/Kg	0.25
Benzo(k)fluoranthene		<0.25	mg/Kg	0.25
Benzo(a)pyrene		<0.25	mg/Kg	0.25
Indeno(1,2,3-cd)pyrene		<0.25	mg/Kg	0.25
Dibenzo(a,h)anthracene		<0.25	mg/Kg	0.25
Benzo(g,h,i)perylene		<0.25	mg/Kg	0.25

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		76.78	mg/Kg	1	80	95	23 - 120
2-Fluorobiphenyl		95.83	mg/Kg	1	80	119	30 - 115
Terphenyl-d14		100.84	mg/Kg	1	80	126	28 - 137

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC16858

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.974	0.962	mg/Kg	10	0.10	<0.001	97	1	80 - 120	20
Benzene	0.971	0.97	mg/Kg	10	0.10	<0.001	97	0	80 - 120	20
Toluene	1.02	1.03	mg/Kg	10	1	<0.001	102	0	80 - 120	20
Ethylbenzene	1.02	1.03	mg/Kg	10	0.10	<0.001	102	0	80 - 120	20
M,P,O-Xylene	3.1	3.14	mg/Kg	10	0.30	<0.001	103	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.85	0.843	mg/Kg	10	0.10	85	84	70 - 130
4-BFB	0.87	0.873	mg/Kg	10	0.10	87	87	70 - 130

Laboratory Control Spikes

QCBatch: QC16859

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.67	9.28	mg/Kg	10	1	<1	97	4	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.995	0.912	mg/Kg	10	0.10	99	91	70 - 130
4-BFB	0.996	0.995	mg/Kg	10	0.10	100	99	70 - 130

Laboratory Control Spikes

QCBatch: QC16861

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.100	0.106	mg/Kg	10	0.10	<0.001	100	6	80 - 120	20
Benzene	0.0991	0.101	mg/Kg	10	0.10	<0.001	99	2	80 - 120	20
Toluene	0.105	0.106	mg/Kg	10	0.10	<0.001	105	1	80 - 120	20
Ethylbenzene	0.105	0.106	mg/Kg	10	0.10	<0.001	105	1	80 - 120	20
M,P,O-Xylene	0.320	0.322	mg/Kg	10	0.30	<0.001	107	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0839	0.0891	mg/Kg	10	0.10	84	89	70 - 130
4-BFB	0.0857	0.0893	mg/Kg	10	0.10	86	89	70 - 130

Laboratory Control Spikes

QCBatch: QC16862

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.7	11.3	mg/Kg	10	1	<1	97	15	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	1.01	1.07	mg/Kg	10	0.10	101	107	70 - 130
4-BFB	0.98	0.985	mg/Kg	10	0.10	98	98	70 - 130

Laboratory Control Spikes

QCBatch: QC16925

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	247	251	mg/Kg	1	250	<50.0	98	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	125	127	mg/Kg	1	150	83	85	70 - 130

Laboratory Control Spikes

QCBatch: QC16930

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	278	251	mg/Kg	1	250	<50.0	111	10	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	136	126	mg/Kg	1	150	91	84	70 - 130

Laboratory Control Spikes

QCBatch: QC16931

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	254	308	mg/Kg	1	250	<50.0	102	19	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	124	145	mg/Kg	1	150	83	97	70 - 130

Laboratory Control Spikes

QCBatch: QC16972

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	1.04	0.982	mg/Kg	10	0.10	<0.010	104	6	80 - 120	20
Benzene	0.988	0.979	mg/Kg	10	0.10	<0.010	99	1	80 - 120	20
Toluene	1.04	1.04	mg/Kg	10	0.10	<0.010	104	0	80 - 120	20
Ethylbenzene	1.04	1.03	mg/Kg	10	0.10	<0.010	104	1	80 - 120	20
M,P,O-Xylene	3.14	3.12	mg/Kg	10	0.30	<0.010	105	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.885	0.868	mg/Kg	10	0.10	88	87	70 - 130
4-BFB	0.889	0.869	mg/Kg	10	0.10	89	87	70 - 130

Laboratory Control Spikes

QCBatch: QC16973

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	10.8	10.8	mg/Kg	10	1	<1	108	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	1.05	1.03	mg/Kg	10	0.10	105	103	70 - 130
4-BFB	0.97	0.96	mg/Kg	10	0.10	97	96	70 - 130

Laboratory Control Spikes

QCBatch: QC16987

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	237	234	mg/Kg	1	250	<50.0	94	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	124	122	mg/Kg	1	150	83	81	70 - 130

Laboratory Control Spikes

QCBatch: QC17174

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	69.04	64.00	mg/Kg	1	80	<0.25	86	7	21 - 133	20
Acenaphthylene	81.78	80.68	mg/Kg	1	80	<0.25	102	1	33 - 145	20
Acenaphthene	80.35	75.99	mg/Kg	1	80	<0.25	100	5	47 - 145	20
Fluorene	77.26	73.57	mg/Kg	1	80	<0.25	96	4	59 - 121	20
Phenanthrene	70.76	67.51	mg/Kg	1	80	<0.25	88	4	54 - 120	20
Anthracene	76.12	71.38	mg/Kg	1	80	<0.25	95	6	27 - 133	20
Fluoranthene	81.65	78.51	mg/Kg	1	80	<0.25	102	3	26 - 137	20
Pyrene	59.92	70.86	mg/Kg	1	80	<0.25	74	16	52 - 115	20
Benzo(a)anthracene	70.51	69.97	mg/Kg	1	80	<0.25	88	0	33 - 143	20
Chrysene	74.94	71.69	mg/Kg	1	80	<0.25	93	4	17 - 168	20
Benzo(b)fluoranthene	67.45	69.22	mg/Kg	1	80	<0.25	84	2	33 - 143	20
Benzo(k)fluoranthene	71.6	69.75	mg/Kg	1	80	<0.25	89	2	17 - 168	20
Benzo(a)pyrene	73.25	71.21	mg/Kg	1	80	<0.25	91	2	24 - 159	20
Indeno(1,2,3-cd)pyrene	85.56	84.14	mg/Kg	1	80	<0.25	106	1	0 - 171	20
Dibenzo(a,h)anthracene	62.14	67.68	mg/Kg	1	80	<0.25	77	8	0 - 227	20
Benzo(g,h,i)perylene	86.9	90.5	mg/Kg	1	80	<0.25	108	4	0 - 219	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	54.85	50.48	mg/Kg	1	80	68	63	23 - 120
2-Fluorobiphenyl	65.66	64.72	mg/Kg	1	80	82	80	30 - 115
Terphenyl-d14	53.93	62.42	mg/Kg	1	80	67	78	28 - 137

Quality Control Report Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC16858

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.852	0.84	mg/Kg	10	0.10	<0.010	85	1	80 - 120	20
Toluene	0.913	0.901	mg/Kg	10	0.10	<0.010	91	1	80 - 120	20
Ethylbenzene	0.906	0.895	mg/Kg	10	0.10	<0.010	91	1	80 - 120	20
M,P,O-Xylene	2.78	2.74	mg/Kg	10	0.30	<0.010	93	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.757	0.782	mg/Kg	10	0.10	76	78	70 - 130
4-BFB	0.771	0.794	mg/Kg	10	0.10	77	79	70 - 130

Matrix Spikes QCBatch: QC16859

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	11.04	9.7	mg/Kg	10	1	<1	110	12	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	1.17	1.04	mg/Kg	10	0.10	117	104	70 - 130
4-BFB	0.946	0.928	mg/Kg	10	0.10	95	93	70 - 130

Matrix Spikes QCBatch: QC16861

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.872	0.846	mg/Kg	10	0.10	<0.010	87	3	80 - 120	20
Toluene	0.928	0.903	mg/Kg	10	0.10	<0.010	93	2	80 - 120	20
Ethylbenzene	0.929	0.902	mg/Kg	10	0.10	<0.010	93	2	80 - 120	20
M,P,O-Xylene	2.84	2.76	mg/Kg	10	0.30	<0.010	95	2	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.806	0.791	mg/Kg	10	0.10	81	79	70 - 130
4-BFB	0.83	0.806	mg/Kg	10	0.10	83	81	70 - 130

Matrix Spikes QCBatch: QC16862

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	10.3	9.82	mg/Kg	10	1	<1	103	4	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	1.11	1.06	mg/Kg	10	0.10	111	106	70 - 130
4-BFB	0.985	0.952	mg/Kg	10	0.10	98	95	70 - 130

Matrix Spikes QCBatch: QC16925

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	238	238	mg/Kg	1	250	<50.0	95	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	120	119	mg/Kg	1	150	80	79	70 - 130

Matrix Spikes QCBatch: QC16930

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	253	237	mg/Kg	1	250	<50.0	101	6	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	123	117	mg/Kg	1	150	82	78	70 - 130

Matrix Spikes QCBatch: QC16931

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	⁴⁸ 532	⁴⁹ 526	mg/Kg	1	250	125	162	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	116	118	mg/Kg	1	150	77	79	70 - 130

Matrix Spikes QCBatch: QC16972

⁴⁸MS and MSD out of recovery limits due to matrix interference. LCS and LCSD show process is in control.
⁴⁹MS and MSD out of recovery limits due to matrix interference. LCS and LCSD show process is in control.

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.838	0.857	mg/Kg	10	0.10	<0.010	84	2	80 - 120	20
Toluene	0.915	0.927	mg/Kg	10	0.10	<0.010	92	1	80 - 120	20
Ethylbenzene	0.889	0.906	mg/Kg	10	0.10	<0.010	89	1	80 - 120	20
M,P,O-Xylene	2.75	2.77	mg/Kg	10	0.30	<0.010	92	0	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.915	0.817	mg/Kg	10	0.10	92	82	70 - 130
4-BFB	0.802	0.802	mg/Kg	10	0.10	80	80	70 - 130

Matrix Spikes QCBatch: QC16973

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	10.7	11.1	mg/Kg	10	1	<1	107	3	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	1.01	1.02	mg/Kg	10	0.10	101	102	70 - 130
4-BFB	0.918	0.891	mg/Kg	10	0.10	92	89	70 - 130

Matrix Spikes QCBatch: QC16987

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	227	225	mg/Kg	1	250	<50.0	91	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	112	113	mg/Kg	1	150	75	75	70 - 130

Quality Control Report

Continuing Calibration Verification Standards

CCV (1) QCBatch: QC16858

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.1	100	85 - 115	12/27/01
Benzene		mg/L	0.10	0.099	99	85 - 115	12/27/01
Toluene		mg/L	0.10	0.106	106	85 - 115	12/27/01
Ethylbenzene		mg/L	0.10	0.104	104	85 - 115	12/27/01
M,P,O-Xylene		mg/L	0.30	0.319	106	85 - 115	12/27/01

CCV (2) QCBatch: QC16858

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.096	96	85 - 115	12/27/01
Benzene		mg/L	0.10	0.094	94	85 - 115	12/27/01
Toluene		mg/L	0.10	0.101	101	85 - 115	12/27/01
Ethylbenzene		mg/L	0.10	0.101	101	85 - 115	12/27/01
M,P,O-Xylene		mg/L	0.30	0.309	103	85 - 115	12/27/01

ICV (1) QCBatch: QC16858

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0997	100	85 - 115	12/27/01
Benzene		mg/L	0.10	0.0991	99	85 - 115	12/27/01
Toluene		mg/L	0.10	0.106	106	85 - 115	12/27/01
Ethylbenzene		mg/L	0.10	0.104	104	85 - 115	12/27/01
M,P,O-Xylene		mg/L	0.30	0.321	107	85 - 115	12/27/01

CCV (1) QCBatch: QC16859

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.981	98	75 - 125	12/27/01

CCV (2) QCBatch: QC16859

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.944	94	75 - 125	12/27/01

ICV (1) QCBatch: QC16859

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.913	91	75 - 125	12/27/01

CCV (1) QCBatch: QC16861

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.100	100	85 - 115	12/27/01
Benzene		mg/L	0.10	0.0981	98	85 - 115	12/27/01
Toluene		mg/L	0.10	0.104	104	85 - 115	12/27/01
Ethylbenzene		mg/L	0.10	0.104	104	85 - 115	12/27/01
M,P,O-Xylene		mg/L	0.30	0.318	106	85 - 115	12/27/01

CCV (2) QCBatch: QC16861

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.107	107	85 - 115	12/27/01
Benzene		mg/L	0.10	0.097	97	85 - 115	12/27/01
Toluene		mg/L	0.10	0.102	102	85 - 115	12/27/01
Ethylbenzene		mg/L	0.10	0.104	104	85 - 115	12/27/01
M,P,O-Xylene		mg/L	0.30	0.319	106	85 - 115	12/27/01

ICV (1) QCBatch: QC16861

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0995	100	85 - 115	12/27/01
Benzene		mg/L	0.10	0.0977	98	85 - 115	12/27/01
Toluene		mg/L	0.10	0.104	104	85 - 115	12/27/01
Ethylbenzene		mg/L	0.10	0.104	104	85 - 115	12/27/01
M,P,O-Xylene		mg/L	0.30	0.321	107	85 - 115	12/27/01

CCV (1) QCBatch: QC16862

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.12	112	75 - 125	12/27/01

CCV (2) QCBatch: QC16862

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.913	91	75 - 125	12/27/01

ICV (1) QCBatch: QC16862

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.11	111	75 - 125	12/27/01

CCV (1) QCBatch: QC16925

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	261	104	75 - 125	12/28/01

ICV (1) QCBatch: QC16925

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	248	99	75 - 125	12/28/01

CCV (1) QCBatch: QC16930

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	257	103	75 - 125	12/28/01

CCV (2) QCBatch: QC16930

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	263	105	75 - 125	12/28/01

CCV (3) QCBatch: QC16930

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	280	112	75 - 125	12/28/01

ICV (1) QCBatch: QC16930

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	274	110	75 - 125	12/28/01

CCV (1) QCBatch: QC16931

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	266	106	75 - 125	12/28/01

CCV (2) QCBatch: QC16931

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	255	102	75 - 125	12/28/01

CCV (3) QCBatch: QC16931

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	275	110	75 - 125	12/28/01

ICV (1) QCBatch: QC16931

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	261	104	75 - 125	12/28/01

CCV (1) QCBatch: QC16972

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.101	101	85 - 115	12/28/01
Benzene		mg/L	0.10	0.098	98	85 - 115	12/28/01
Toluene		mg/L	0.10	0.105	105	85 - 115	12/28/01
Ethylbenzene		mg/L	0.10	0.103	103	85 - 115	12/28/01
M,P,O-Xylene		mg/L	0.30	0.314	105	85 - 115	12/28/01

CCV (2) QCBatch: QC16972

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.1095	109	85 - 115	12/28/01
Benzene		mg/L	0.10	0.0984	98	85 - 115	12/28/01
Toluene		mg/L	0.10	0.104	104	85 - 115	12/28/01
Ethylbenzene		mg/L	0.10	0.1029	102	85 - 115	12/28/01
M,P,O-Xylene		mg/L	0.30	0.3127	104	85 - 115	12/28/01

ICV (1) QCBatch: QC16972

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0987	99	85 - 115	12/28/01
Benzene		mg/L	0.10	0.0964	96	85 - 115	12/28/01
Toluene		mg/L	0.10	0.100	100	85 - 115	12/28/01
Ethylbenzene		mg/L	0.10	0.0996	100	85 - 115	12/28/01
M,P,O-Xylene		mg/L	0.30	0.302	101	85 - 115	12/28/01

CCV (1) QCBatch: QC16973

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1	0.906	90	75 - 125	12/28/01

ICV (1) QCBatch: QC16973

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1	0.941	94	75 - 125	12/28/01

CCV (1) QCBatch: QC16987

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	240	96	75 - 125	1/2/02

CCV (2) QCBatch: QC16987

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	249	99	75 - 125	1/2/02

ICV (1) QCBatch: QC16987

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	227	91	75 - 125	1/2/02

CCV (1) QCBatch: QC17174

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/Kg	60	52.81	88	80 - 120	1/3/02
Acenaphthylene		mg/Kg	60	58.63	97	80 - 120	1/3/02
Acenaphthene		mg/Kg	60	56.28	93	80 - 120	1/3/02
Fluorene		mg/Kg	60	52.31	87	80 - 120	1/3/02
Phenanthrene		mg/Kg	60	49.65	82	80 - 120	1/3/02
Anthracene		mg/Kg	60	52.12	86	80 - 120	1/3/02
Fluoranthene		mg/Kg	60	56.03	93	80 - 120	1/3/02
Pyrene		mg/Kg	60	50.17	83	80 - 120	1/3/02
Benzo(a)anthracene		mg/Kg	60	52.00	86	80 - 120	1/3/02
Chrysene		mg/Kg	60	52.32	87	80 - 120	1/3/02
Benzo(b)fluoranthene		mg/Kg	60	67.11	111	80 - 120	1/3/02
Benzo(k)fluoranthene		mg/Kg	60	62.41	104	80 - 120	1/3/02
Benzo(a)pyrene		mg/Kg	60	69.53	115	80 - 120	1/3/02
Indeno(1,2,3-cd)pyrene		mg/Kg	60	68.65	114	80 - 120	1/3/02
Dibenzo(a,h)anthracene		mg/Kg	60	70.61	117	80 - 120	1/3/02
Benzo(g,h,i)perylene		mg/Kg	60	70.87	118	80 - 120	1/3/02
Nitrobenzene-d5		mg/Kg	60	48.73	81	80 - 120	1/3/02
2-Fluorobiphenyl		mg/Kg	60	49.25	82	80 - 120	1/3/02
Terphenyl-d14		mg/Kg	60	41.87	69	80 - 120	1/3/02

Certes

2209 Wisconsin Street, Suite 200,
Dallas, Texas 75229
972-620-7966
972-620-7963 FAX • Email: certes@flash.net

Environmental Laboratories, L.L.C.

CERTES ENVIRONMENTAL LABORATORIES ANALYTICAL REPORT

Certes File Number: **01-0563**

Client Project I.D.:

106.001

Prepared for:

H2A ENVIRONMENTAL-PORTLAND

418 San Saba

Portland, TX. 78374

Attention:

Theresa Nix

Report Date:

02/19/01

Included are the results of chemical analyses for the samples submitted to Certes Environmental Laboratories, L.L.C., on 02/15/01. All analytical results meet Quality Control requirements as set by the industry accepted criteria. Please refer to the Laboratory Quality Control Results section of this report.

This report must be reproduced in its entirety.

Sincerely,

Certes Environmental Laboratories, L.L.C.



Amy LaSalle
President

		Result	Units	Reporting Limit	Date Prepared	Date Analyzed	Flag	Analyzed By	Dilution
Client Sample ID: MW-1						Sample Number: 01-0563-001			
Date Sampled: 02/14/01						Sample Matrix: Liquid			
Time Sampled: 8:30						Sampled By: JS			
EPA 8021B	Benzene	< 1	µg/L	1	02/15/01	02/15/01		DBC	1
	Toluene	< 1	µg/L	1	02/15/01	02/15/01		DBC	1
	Ethylbenzene	< 1	µg/L	1	02/15/01	02/15/01		DBC	1
	Xylenes (Total)	< 3	µg/L	3	02/15/01	02/15/01		DBC	1
	Total BTEX (Calculated)	0	µg/L		02/15/01	02/15/01		DBC	1
	**Surrogates*				02/15/01	02/15/01		DBC	1
	Difluorobenzene	83%	74-116%		02/15/01	02/15/01		DBC	1
	4-Bromofluorobenzene	100%	80-151%		02/15/01	02/15/01		DBC	1

Client Sample ID: MW-10						Sample Number: 01-0563-002			
Date Sampled: 02/14/01						Sample Matrix: Liquid			
Time Sampled: 9:15						Sampled By: JS			
EPA 8021B	Benzene	< 1	µg/L	1	02/15/01	02/15/01		DBC	1
	Toluene	< 1	µg/L	1	02/15/01	02/15/01		DBC	1
	Ethylbenzene	< 1	µg/L	1	02/15/01	02/15/01		DBC	1
	Xylenes (Total)	< 3	µg/L	3	02/15/01	02/15/01		DBC	1
	Total BTEX (Calculated)	0	µg/L		02/15/01	02/15/01		DBC	1
	**Surrogates*				02/15/01	02/15/01		DBC	1
	Difluorobenzene	87%	74-116%		02/15/01	02/15/01		DBC	1
	4-Bromofluorobenzene	99%	80-151%		02/15/01	02/15/01		DBC	1

Client Sample ID: MW-11						Sample Number: 01-0563-003			
Date Sampled: 02/14/01						Sample Matrix: Liquid			
Time Sampled: 10:00						Sampled By: JS			
EPA 8021B	Benzene	< 1	µg/L	1	02/15/01	02/15/01		DBC	1
	Toluene	< 1	µg/L	1	02/15/01	02/15/01		DBC	1
	Ethylbenzene	< 1	µg/L	1	02/15/01	02/15/01		DBC	1
	Xylenes (Total)	< 3	µg/L	3	02/15/01	02/15/01		DBC	1
	Total BTEX (Calculated)	0	µg/L		02/15/01	02/15/01		DBC	1
	**Surrogates*				02/15/01	02/15/01		DBC	1
	Difluorobenzene	83%	74-116%		02/15/01	02/15/01		DBC	1
	4-Bromofluorobenzene	100%	80-151%		02/15/01	02/15/01		DBC	1

		Result	Units	Reporting Limit	Date Prepared	Date Analyzed	Flag	Analyzed By	Dilution
Client Sample ID: MW-15						Sample Number: 01-0563-004			
Date Sampled: 02/14/01						Sample Matrix: Liquid			
Time Sampled: 10:45						Sampled By: JS			
EPA 8021B	Benzene	< 1	µg/L	1	02/15/01	02/15/01		DBC	1
	Toluene	< 1	µg/L	1	02/15/01	02/15/01		DBC	1
	Ethylbenzene	< 1	µg/L	1	02/15/01	02/15/01		DBC	1
	Xylenes (Total)	< 3	µg/L	3	02/15/01	02/15/01		DBC	1
	Total BTEX (Calculated)	0	µg/L		02/15/01	02/15/01		DBC	1
	**Surrogates*				02/15/01	02/15/01		DBC	1
	Difluorobenzene	85%	74-116%		02/15/01	02/15/01		DBC	1
	4-Bromofluorobenzene	101%	80-151%		02/15/01	02/15/01		DBC	1

Client Sample ID: MW-13						Sample Number: 01-0563-005			
Date Sampled: 02/14/01						Sample Matrix: Liquid			
Time Sampled: 11:30						Sampled By: JS			
EPA 8021B	Benzene	< 1	µg/L	1	02/15/01	02/15/01		DBC	1
	Toluene	< 1	µg/L	1	02/15/01	02/15/01		DBC	1
	Ethylbenzene	< 1	µg/L	1	02/15/01	02/15/01		DBC	1
	Xylenes (Total)	< 3	µg/L	3	02/15/01	02/15/01		DBC	1
	Total BTEX (Calculated)	0	µg/L		02/15/01	02/15/01		DBC	1
	**Surrogates*				02/15/01	02/15/01		DBC	1
	Difluorobenzene	83%	74-116%		02/15/01	02/15/01		DBC	1
	4-Bromofluorobenzene	100%	80-151%		02/15/01	02/15/01		DBC	1

Client Sample ID: LRP						Sample Number: 01-0563-006			
Date Sampled: 02/14/01						Sample Matrix: Air			
Time Sampled: 12:30						Sampled By: JS			
Sublet	Subcontracted Work								1

Index of Narrative Footnotes

A - Sample received with headspace for volatile analysis.
B - Analyte detected in the associated method blank.
C - Sample received in unapproved containers.
D - Surrogate diluted out of range.
DNI - Sample does not ignite.
E - Result is above the linear range of the instrument and is to be considered an estimate.
H - Sample contains significant levels of heavy petroleum products > C28.
I - Sample was reported at a dilution with few or no reportable values as a result of matrix interference.
J - Value is a J-value and to be considered an estimate only.
L - Re-analysis was not possible due to limited sample amount.
M - Recoveries out of range due to matrix interferences inherent in sample.
N - Sample has presumptive compounds other than fuel products.
O - Sample received out of hold time.
P - Result is unconfirmed. The quantitative result from the primary column and secondary column did not agree within 40%.
RR - Sample being re-extracted due to failing surrogate or internal standard.
S - Analysis performed at subcontract laboratory.
T - Sample prepared or analyzed out of hold time.
V - Insufficient sample was available for analysis as prescribed by the method. The lesser amount used for analysis raised reporting limits accordingly.
X - Laboratory contamination suspected.
Y - Benzo(B) and Benzo(K) Fluoranthene did not resolve. Value was reported as Benzo(B)fluoranthene.
Z - Dilution was required due to the dark color and thickness of the extract.

* - Analytical result reported on dry weight basis.

BTEX - EPA 8021B	Benzene	Toluene	Ethyl-benzene	Xylenes
Matrix Spike				
Batch Number	021501L3	021501L3	021501L3	021501L3
Date Prepared	02/15/01	02/15/01	02/15/01	02/15/01
Date Analyzed	02/15/01	02/15/01	02/15/01	02/15/01
Spiked Sample ID	0550-2	0550-2	0550-2	0550-2
Sample Measured Result	<1	<1	<1	<3
Spike Level (µg/L)	100	100	100	300
Spike Result (µg/L)	104	103	106	304
% Recovery	104	103	106	101
Spike Duplicate Result (µg/L)	100	105	109	320
% Recovery Duplicate	100	105	109	107
Relative Percent Difference (RPD)	4	2	3	5
RPD % Control Limits (low-high)	0-25	0-25	0-25	0-25
% Rec. Control Limits (low-high)	70-130	70-130	70-130	70-130
Method Blank (µg/L)	<1	<1	<1	<3
Laboratory Control Sample				
Spike Level (µg/L)	100	100	100	300
Spike Result (µg/L)	102	105	108	315
% Recovery	102	105	108	105
Spike Duplicate Result (µg/L)	105	106	109	314
% Recovery Duplicate	105	106	109	105
Relative Percent Difference (RPD)	3	1	1	0
RPD % Control Limits (low-high)	0-25	0-25	0-25	0-25
% Rec. Control Limits (low-high)	70-130	70-130	70-130	70-130

µg/l = micrograms per liter (ppb)
 µg/kg = micrograms per kilogram (ppb)
 < = less than
 MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Sample
 BS = Blank Spike
 µmhos/cm = micromhos/centimeter

mg/l = milligrams per liter (ppm)
 mg/kg = milligrams per kilogram (ppm)
 % = percent
 RPD = Relative Percentage Difference
 RW - Reagent Water
 LCSD = Laboratory Control Sample Duplicate
 BSD = Blank Spike Duplicate

Certes

Environmental Laboratories, L.L.C.

2209 Wisconsin Street, Suite 200,
Dallas, Texas 75229
972-620-7966
972-620-7963 FAX • Email: certes@flash.net

CERTES ENVIRONMENTAL LABORATORIES ANALYTICAL REPORT

Certes File Number: **01-0634**

Client Project I.D.:

106.001

Prepared for:

H2A ENVIRONMENTAL-PORTLAND

418 San Saba

Portland, TX. 78374

Attention:

Theresa Nix

Report Date:

02/23/01

Included are the results of chemical analyses for the samples submitted to Certes Environmental Laboratories, L.L.C., on 02/22/01. All analytical results meet Quality Control requirements as set by the industry accepted criteria. Please refer to the Laboratory Quality Control Results section of this report.

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Sincerely,

Certes Environmental Laboratories, L.L.C.



**Amy LaSalle
President**

		Result	Units	Reporting Limit	Date Prepared	Date Analyzed	Flag	Analyzed By	Dilution
Client Sample ID: MW-5						Sample Number: 01-0634-001			
Date Sampled: 02/21/01						Sample Matrix: Liquid			
Time Sampled: 9:00						Sampled By: JS			
EPA 8021B	Benzene	< 1	µg/L	1	02/22/01	02/22/01		DBC	1
	Toluene	< 1	µg/L	1	02/22/01	02/22/01		DBC	1
	Ethylbenzene	< 1	µg/L	1	02/22/01	02/22/01		DBC	1
	Xylenes (Total)	< 3	µg/L	3	02/22/01	02/22/01		DBC	1
	Total BTEX (Calculated)	0	µg/L		02/22/01	02/22/01		DBC	1
	**Surrogates*				02/22/01	02/22/01		DBC	1
	Difluorobenzene	99%	74-116%		02/22/01	02/22/01		DBC	1
	4-Bromofluorobenzene	105%	80-151%		02/22/01	02/22/01		DBC	1

Index of Narrative Footnotes

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M - Recoveries out of range due to matrix interferences inherent in sample.
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RR - Sample being re-extracted due to failing surrogate or internal standard.
S - Analysis performed at subcontract laboratory.
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X - Laboratory contamination suspected.
Y - Benzo(B) and Benzo(K) Fluoranthene did not resolve. Value was reported as Benzo(B)fluoranthene.
Z - Dilution was required due to the dark color and thickness of the extract.

* - Analytical result reported on dry weight basis.

BTEX - EPA 8021B	Benzene	Toluene	Ethyl-benzene	Xylenes
Matrix Spike				
Batch Number	022201L4	022201L4	022201L4	022201L4
Date Prepared	02/22/01	02/22/01	02/22/01	02/22/01
Date Analyzed	02/22/01	02/22/01	02/22/01	02/22/01
Spiked Sample ID	0618-1	0618-1	0618-1	0618-1
Sample Measured Result	<1	<1	<1	<3
Spike Level (µg/L)	100	100	100	300
Spike Result (µg/L)	99.0	98.0	98.0	294
% Recovery	99	98	98	98
Spike Duplicate Result (µg/L)	109	109	110	327
% Recovery Duplicate	109	109	110	109
Relative Percent Difference (RPD)	10	11	12	11
RPD % Control Limits (low-high)	0-25	0-25	0-25	0-25
% Rec. Control Limits (low-high)	70-130	70-130	70-130	70-130
Method Blank (µg/L)	<1	<1	<1	<3
Laboratory Control Sample				
Spike Level (µg/L)	100	100	100	300
Spike Result (µg/L)	123	123	123	370
% Recovery	123	123	123	123
Spike Duplicate Result (µg/L)	115	116	117	357
% Recovery Duplicate	115	116	117	119
Relative Percent Difference (RPD)	7	6	5	4
RPD % Control Limits (low-high)	0-25	0-25	0-25	0-25
% Rec. Control Limits (low-high)	70-130	70-130	70-130	70-130

µg/l = micrograms per liter (ppb)
 µg/kg = micrograms per kilogram (ppb)
 < = less than
 MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Sample
 BS = Blank Spike
 µmhos/cm = micromhos/centimeter

mg/l = milligrams per liter (ppm)
 mg/kg = milligrams per kilogram (ppm)
 % = percent
 RPD = Relative Percentage Difference
 RW - Reagent Water
 LCSD = Laboratory Control Sample Duplicate
 BSD = Blank Spike Duplicate

[illegible]

By Signing, you have agreed to our terms and agreements listed on the reverse side.

Report Date: June 4, 2001 Order Number: A01052507
106.001 Jal Station

Page Number: 1 of 1
Jal,NM

Summary Report

Theresa Nix
H2A Environmental LTD
418 San Saba
Portland, Tx. 78374

Report Date: June 4, 2001

Order ID Number: A01052507

Project Number: 106.001
Project Name: Jal Station
Project Location: Jal,NM

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
171878	MW-1	Water	5/23/01	8:30	5/25/01
171879	MW-5	Water	5/23/01	9:30	5/25/01
171880	MW-11	Water	5/23/01	10:30	5/25/01
171881	MW-15	Water	5/23/01	11:30	5/25/01
171882	MW-13	Water	5/23/01	12:30	5/25/01

This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample - Field Code	BTEX				
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	M,P,O-Xylene (mg/L)	Total BTEX (mg/L)
171878 - MW-1	<0.001	<0.001	<0.001	<0.001	<0.001
171879 - MW-5	<0.001	<0.001	<0.001	<0.001	<0.001
171880 - MW-11	<0.001	<0.001	<0.001	<0.001	<0.001
171881 - MW-15	<0.001	<0.001	<0.001	<0.001	<0.001
171882 - MW-13	<0.001	<0.001	<0.001	<0.001	<0.001

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Analytical and Quality Control Report

Theresa Nix
H2A Environmental LTD
418 San Saba
Portland, Tx. 78374

Report Date: June 4, 2001

Order ID Number: A01052507

Project Number: 106.001
Project Name: Jal Station
Project Location: Jal, NM

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
171878	MW-1	Water	5/23/01	8:30	5/25/01
171879	MW-5	Water	5/23/01	9:30	5/25/01
171880	MW-11	Water	5/23/01	10:30	5/25/01
171881	MW-15	Water	5/23/01	11:30	5/25/01
171882	MW-13	Water	5/23/01	12:30	5/25/01

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 5 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of Trace Analysis, Inc.


Dr. Blair Leftwich, Director

Analytical Report

Sample: 171878 - MW-1

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC11603 Date Analyzed: 5/25/01
Analyst: JW Preparation Method: E 5030B Prep Batch: PB09894 Date Prepared: 5/25/01

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		0.0962	mg/L	1	0.10	96	72 - 128
4-BFB		0.0752	mg/L	1	0.10	75	72 - 128

Sample: 171879 - MW-5

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC11603 Date Analyzed: 5/25/01
Analyst: JW Preparation Method: E 5030B Prep Batch: PB09894 Date Prepared: 5/25/01

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		0.0918	mg/L	1	0.10	91	72 - 128
4-BFB	1	0.0713	mg/L	1	0.10	71	72 - 128

Sample: 171880 - MW-11

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC11603 Date Analyzed: 5/25/01
Analyst: JW Preparation Method: E 5030B Prep Batch: PB09894 Date Prepared: 5/25/01

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

¹Surrogate recovery outside of normal limits due to matrix difficulties.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0891	mg/L	1	0.10	89	72 - 128
4-BFB	2	0.068	mg/L	1	0.10	68	72 - 128

Sample: 171881 - MW-15

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC11603 Date Analyzed: 5/25/01
Analyst: JW Preparation Method: E 5030B Prep Batch: PB09894 Date Prepared: 5/25/01

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		0.0981	mg/L	1	0.10	98	72 - 128
4-BFB		0.0768	mg/L	1	0.10	76	72 - 128

Sample: 171882 - MW-13

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC11603 Date Analyzed: 5/25/01
Analyst: JW Preparation Method: E 5030B Prep Batch: PB09894 Date Prepared: 5/25/01

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		0.0948	mg/L	1	0.10	94	72 - 128
4-BFB		0.075	mg/L	1	0.10	75	72 - 128

²Surrogate recovery outside of normal limits due to matrix difficulties.

Quality Control Report Method Blank

Method Blank QCBatch: QC11603

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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.1	mg/L	1	0.10	100	72 - 128
4-BFB		0.0838	mg/L	1	0.10	83	72 - 128

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC11603

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0997	0.0858	mg/L	1	0.10	<0.001	99	0	80 - 120	20
Benzene	0.0896	0.0918	mg/L	1	0.10	<0.001	89	0	80 - 120	20
Toluene	0.0816	0.082	mg/L	1	0.10	<0.001	81	0	80 - 120	20
Ethylbenzene	0.0799	0.0801	mg/L	1	0.10	<0.001	79	0	80 - 120	20
M,P,O-Xylene	0.2412	0.246	mg/L	1	0.30	<0.001	80	0	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0989	0.095	mg/L	1	0.10	98	95	72 - 128
4-BFB	0.0922	0.0862	mg/L	1	0.10	92	86	72 - 128

Quality Control Report Continuing Calibration Verification Standards

CCV (1) QCBatch: QC11603

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.1	100	85 - 115	5/25/01
Benzene		mg/L	0.10	0.0991	99	85 - 115	5/25/01

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		mg/L	0.10	0.0899	89	85 - 115	5/25/01
Ethylbenzene		mg/L	0.10	0.0882	88	85 - 115	5/25/01
M,P,O-Xylene		mg/L	0.30	0.27	90	85 - 115	5/25/01

CCV (2) QCBatch: QC11603

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.1024	102	85 - 115	5/25/01
Benzene		mg/L	0.10	0.0984	98	85 - 115	5/25/01
Toluene		mg/L	0.10	0.0899	89	85 - 115	5/25/01
Ethylbenzene		mg/L	0.10	0.0879	87	85 - 115	5/25/01
M,P,O-Xylene		mg/L	0.30	0.2663	88	85 - 115	5/25/01

ICV (1) QCBatch: QC11603

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0948	94	85 - 115	5/25/01
Benzene		mg/L	0.10	0.0912	91	85 - 115	5/25/01
Toluene		mg/L	0.10	0.0817	81	85 - 115	5/25/01
Ethylbenzene		mg/L	0.10	0.08	80	85 - 115	5/25/01
M,P,O-Xylene		mg/L	0.30	0.2479	82	85 - 115	5/25/01

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Company Name: **H2A Environmental**

Phone #: **361-777-0860**

Address: (Street, City, Zip)

418 San Sabra Portland TX 78374

Fax #:

361-777-0971

Contact Person:

Theresa Nix

Invoice to:

(If different from above)

Project #:

106.001

Project Name:

Jal Station

Project Location:

Jal, NM

Sampler Signature:

John Brown

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX				PRESERVATIVE METHOD					SAMPLING	
				WATER	SOIL	AIR	SLUDGE	HCl	HNO ₃	H ₂ SO ₄	NaOH	ICE	DATE	TIME
171878	MW-1	2	40	X				X					5-23-08	0830
79	MW-5	2	1										0930	
80	MW-11	2	1										1030	
81	MW-15	2	1										1130	
82	MW-13	2	1										1230	

Relinquished by:

Date:

Time:

Received by:

Date:

Time:

Relinquished by:

Date:

Time:

Received by:

Date:

Time:

Relinquished by:

Date:

Time:

Received at Laboratory by:

Date:

Time:

LAB USE ONLY

Intact

Y N

Headspace

Y / N

Temp

66

Log-in Review

MA

☐ Check If Special Reporting Limits Are Needed

6/5

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

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Carrier # **Bus 902 228 809 9**

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

AD1052507

ANALYSIS REQUEST

(Circle or Specify Method No.)

TPH 418.1/TX1005	
PAH 8270C	
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/2007	
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	

Hold

Turn Around Time if different from standard

Summary Report

Marc C Oler
Equiva
308 Wilcox #101
Castlerock, Co. 80104

Report Date: October 8, 2001

Order ID Number: A01100318

Project: 106.001
TA Job Code: Jal Station
Casualty Code: Jal,NM
Project Location: 106.001
Project Address:
H2A Environmental LTD / Portland / Theresa Nix

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
180939	MW-1	Water	9/29/01	8:15	10/3/01
180940	MW-5	Water	9/29/01	8:45	10/3/01
180941	MW-11	Water	9/29/01	9:15	10/3/01
180942	MW-15	Water	9/29/01	9:45	10/3/01
180943	MW-13	Water	9/29/01	10:15	10/3/01
180944	Effluent	Water	9/29/01	12:00	10/3/01

This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample - Field Code	BTEX				
	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
180939 - MW-1	<0.001	<0.001	<0.001	<0.001	<0.001
180940 - MW-5	<0.001	<0.001	<0.001	<0.001	<0.001
180941 - MW-11	<0.001	<0.001	<0.001	<0.001	<0.001
180942 - MW-15	<0.001	<0.001	<0.001	<0.001	<0.001
180943 - MW-13	<0.001	<0.001	<0.001	<0.001	<0.001
180944 - Effluent	<0.001	<0.001	<0.001	<0.001	<0.001

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Analytical and Quality Control Report

Marc C Oler
Equiva
308 Wilcox #101
Castlerock, Co. 80104

Report Date: October 8, 2001

Order ID Number: A01100318

Project: 106.001
TA Job Code: Jal Station
Casualty Code: Jal,NM
Project Location: 106.001
Project Address:
H2A Environmental LTD / Portland / Theresa Nix

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
180939	MW-1	Water	9/29/01	8:15	10/3/01
180940	MW-5	Water	9/29/01	8:45	10/3/01
180941	MW-11	Water	9/29/01	9:15	10/3/01
180942	MW-15	Water	9/29/01	9:45	10/3/01
180943	MW-13	Water	9/29/01	10:15	10/3/01
180944	Effluent	Water	9/29/01	12:00	10/3/01

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 6 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director

Analytical Report

Sample: 180939 - MW-1

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC14593 Date Analyzed: 10/4/01
Analyst: CG Preparation Method: E 5030B Prep Batch: PB12432 Date Prepared: 10/4/01

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		0.121	mg/L	1	0.10	121	72 - 128
4-BFB		0.0912	mg/L	1	0.10	91	72 - 128

Sample: 180940 - MW-5

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC14593 Date Analyzed: 10/4/01
Analyst: CG Preparation Method: E 5030B Prep Batch: PB12432 Date Prepared: 10/4/01

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		0.120	mg/L	1	0.10	120	72 - 128
4-BFB		0.0879	mg/L	1	0.10	88	72 - 128

Sample: 180941 - MW-11

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC14593 Date Analyzed: 10/4/01
Analyst: CG Preparation Method: E 5030B Prep Batch: PB12432 Date Prepared: 10/4/01

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

Continued ...

Report Date: October 8, 2001
106.001

Order Number: A01100318
Jal Station

Page Number: 3 of 6
Jal,NM

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.117	mg/L	1	0.10	117	72 - 128
4-BFB		0.0854	mg/L	1	0.10	85	72 - 128

Sample: 180942 - MW-15

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC14593 Date Analyzed: 10/4/01
Analyst: CG Preparation Method: E 5030B Prep Batch: PB12432 Date Prepared: 10/4/01

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		0.0985	mg/L	1	0.10	98	72 - 128
4-BFB		0.0746	mg/L	1	0.10	75	72 - 128

Sample: 180943 - MW-13

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC14593 Date Analyzed: 10/4/01
Analyst: CG Preparation Method: E 5030B Prep Batch: PB12432 Date Prepared: 10/4/01

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		0.103	mg/L	1	0.10	103	72 - 128
4-BFB		0.0785	mg/L	1	0.10	78	72 - 128

Sample: 180944 - Effluent

Analysis: BTEX Analytical Method: E 602 QC Batch: QC14593 Date Analyzed: 10/4/01
Analyst: CG Preparation Method: N/A Prep Batch: PB12432 Date Prepared: 10/4/01

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

Continued ...

Report Date: October 8, 2001
106.001

Order Number: A01100318
Jal Station

Page Number: 4 of 6
Jal,NM

... Continued Sample: 180944 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
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		0.0962	mg/L	1	0.10	96	72 - 128
4-BFB		0.0729	mg/L	1	0.10	73	72 - 128

Quality Control Report Method Blank

Method Blank QCBatch: QC14593

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.000	mg/L	1	0.10	98	72 - 128
TFT		0.000	mg/L	1	0.10	98	72 - 128
4-BFB		0.000	mg/L	1	0.10	76	72 - 128
4-BFB		0.000	mg/L	1	0.10	76	72 - 128

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC14593

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.092	0.0985	mg/L	1	0.10	<0.001	92	6	80 - 120	20
MTBE	0.092	0.0985	mg/L	1	0.10	<0.001	92	6	80 - 120	20
Benzene	0.1	0.105	mg/L	1	0.10	<0.001	100	4	80 - 120	20
Benzene	0.1	0.105	mg/L	1	0.10	<0.001	100	4	80 - 120	20
Toluene	0.0882	0.0934	mg/L	1	0.10	<0.001	88	5	80 - 120	20
Toluene	0.0882	0.0934	mg/L	1	0.10	<0.001	88	5	80 - 120	20
Ethylbenzene	0.0803	0.085	mg/L	1	0.10	<0.001	80	5	80 - 120	20
Ethylbenzene	0.0803	0.085	mg/L	1	0.10	<0.001	80	5	80 - 120	20
M,P,O-Xylene	0.248	0.26	mg/L	1	0.30	<0.001	82	4	80 - 120	20
M,P,O-Xylene	0.248	0.26	mg/L	1	0.30	<0.001	82	4	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.107	0.106	mg/L	1	0.10	107	106	72 - 128
TFT	0.107	0.106	mg/L	1	0.10	107	106	72 - 128
4-BFB	0.0917	0.0913	mg/L	1	0.10	91	91	72 - 128
4-BFB	0.0917	0.0913	mg/L	1	0.10	91	91	72 - 128

Quality Control Report Continuing Calibration Verification Standards

CCV (1) QCBatch: QC14593

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.000	0	85 - 115	10/4/01
MTBE		mg/L	0.10	0.000	0	85 - 115	10/4/01
Benzene		mg/L	0.10	0.000	0	85 - 115	10/4/01
Benzene		mg/L	0.10	0.000	0	85 - 115	10/4/01
Toluene		mg/L	0.10	0.000	0	85 - 115	10/4/01
Toluene		mg/L	0.10	0.000	0	85 - 115	10/4/01
Ethylbenzene		mg/L	0.10	0.000	0	85 - 115	10/4/01
Ethylbenzene		mg/L	0.10	0.000	0	85 - 115	10/4/01
M,P,O-Xylene		mg/L	0.30	0.000	0	85 - 115	10/4/01
M,P,O-Xylene		mg/L	0.30	0.000	0	85 - 115	10/4/01

CCV (2) QCBatch: QC14593

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.09	90	85 - 115	10/4/01
MTBE		mg/L	0.10	0.09	90	85 - 115	10/4/01
Benzene		mg/L	0.10	0.092	92	85 - 115	10/4/01
Benzene		mg/L	0.10	0.092	92	85 - 115	10/4/01
Toluene		mg/L	0.10	0.087	87	85 - 115	10/4/01
Toluene		mg/L	0.10	0.087	87	85 - 115	10/4/01
Ethylbenzene		mg/L	0.10	0.081	81	85 - 115	10/4/01
Ethylbenzene		mg/L	0.10	0.081	81	85 - 115	10/4/01
M,P,O-Xylene		mg/L	0.30	0.238	79	85 - 115	10/4/01
M,P,O-Xylene		mg/L	0.30	0.238	79	85 - 115	10/4/01

ICV (1) QCBatch: QC14593

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0985	98	85 - 115	10/4/01
MTBE		mg/L	0.10	0.0985	98	85 - 115	10/4/01
Benzene		mg/L	0.10	0.107	107	85 - 115	10/4/01
Benzene		mg/L	0.10	0.107	107	85 - 115	10/4/01
Toluene		mg/L	0.10	0.0979	98	85 - 115	10/4/01
Toluene		mg/L	0.10	0.0979	98	85 - 115	10/4/01
Ethylbenzene		mg/L	0.10	0.0893	89	85 - 115	10/4/01
Ethylbenzene		mg/L	0.10	0.0893	89	85 - 115	10/4/01
M,P,O-Xylene		mg/L	0.30	0.270	90	85 - 115	10/4/01
M,P,O-Xylene		mg/L	0.30	0.270	90	85 - 115	10/4/01

Trace Analysis, Inc.

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 Tel (806) 794 1296 Fax (806) 794 1298
 1 (800) 378 1296

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

LAB Order ID # AD1100318

Consulting Company Name: H2A Environmental
 Address: 418 San Saba Portland TX
 Consulting Contact: Theresa Nix
 Location Code: _____ Casualty Loss #: _____
 Location Address: Jal NM Jal Station
 Equiva Job #: _____
 Consultant Job #: 106-001
 Cost Center #: _____
 Sampler Signature: [Signature]

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX				PRESERVATIVE METHOD				DATE	TIME
				WATER	SOIL	AIR	SLUDGE	HCL	HNO3	ICE	NONE		
180939	MW-1	2	40ml	X				X				9-29-01	0815
40	MW-5	1	1										0845
41	MW-11	1	1										0915
42	MW-15	1	1										0945
43	MW-13	1	1										1015
44	Effluent	1	1										1200

Relinquished by: [Signature] Date: 10-1-01 Time: 0800

Relinquished by: Tony Zaur Date: 10-3-01 Time: 1000

Relinquished by: [Signature] Date: 10-3-01 Time: 1030

Received by: Tony Zaur Date: 10-1-01 Time: 0800

Received by: _____ Date: _____ Time: _____

Received at Laboratory by: [Signature] Date: 10-3-01 Time: 1030

Remarks:

LAB USE ONLY

Intact Y / N

Headspace Y / N

Temp 15 °

Log-In Review MA

Carrier # 902 227 9221

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B/602	<u>X</u>
BTEX 8021B/602	<u>X</u>
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	

Report Date: January 18, 2002 Order Number: A01122405
106.001 Jal Station

Page Number: 1 of 4
Jal,NM

Summary Report

Theresa Nix
H2A Environmental LTD
418 San Saba
Portland, Tx. 78374

Report Date: January 18, 2002

Order ID Number: A01122405

Project Number: 106.001
Project Name: Jal Station
Project Location: Jal,NM

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
187992	MW-1	Water	12/20/01	9:00	12/22/01
187993	MW-5	Water	12/20/01	10:00	12/22/01
187994	MW-11	Water	12/20/01	11:00	12/22/01
187995	MW-15	Water	12/20/01	12:00	12/22/01
187996	MW-13	Water	12/20/01	13:00	12/22/01
187997	Effluent	Water	12/20/01	15:00	12/22/01

This report consists of a total of 4 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample - Field Code	BTEX				
	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
187992 - MW-1	<0.001	<0.001	<0.001	<0.001	<0.001
187993 - MW-5	<0.001	<0.001	<0.001	<0.001	<0.001
187994 - MW-11	<0.001	<0.001	<0.001	<0.001	<0.001
187995 - MW-15	<0.001	<0.001	<0.001	<0.001	<0.001
187996 - MW-13	<0.001	<0.001	<0.001	<0.001	<0.001
187997 - Effluent	<0.005	<0.005	<0.005	<0.005	<0.005

Sample: 187992 - MW-1

Param	Flag	Result	Units
Total Mercury		<0.0002	mg/L
Naphthalene		<0.005	mg/L
Acenaphthylene		<0.005	mg/L
Acenaphthene		<0.005	mg/L
Fluorene		<0.005	mg/L
Phenanthrene		<0.005	mg/L
Anthracene		<0.005	mg/L
Fluoranthene		<0.005	mg/L
Pyrene		<0.005	mg/L
Benzo(a)anthracene		<0.005	mg/L
Chrysene		<0.005	mg/L
Benzo(b)fluoranthene		<0.005	mg/L
Benzo(k)fluoranthene		<0.005	mg/L
Benzo(a)pyrene		<0.005	mg/L
Indeno(1,2,3-cd)pyrene		<0.005	mg/L

Continued on next page ...

Report Date: January 18, 2002 Order Number: A01122405
106.001 Jal StationPage Number: 2 of 4
Jal,NM

Sample 187992 continued ...

Param	Flag	Result	Units
Dibenzo(a,h)anthracene		<0.005	mg/L
Benzo(g,h,i)perylene		<0.005	mg/L
Total Arsenic		0.0222	mg/L
Total Barium		0.559	mg/L
Total Cadmium		<0.005	mg/L
Total Chromium		0.0995	mg/L
Total Lead		0.0198	mg/L
Total Selenium		0.093	mg/L
Total Silver		<0.0125	mg/L

Sample: 187993 - MW-5

Param	Flag	Result	Units
Total Mercury		<0.0002	mg/L
Naphthalene		<0.005	mg/L
Acenaphthylene		<0.005	mg/L
Acenaphthene		<0.005	mg/L
Fluorene		<0.005	mg/L
Phenanthrene		<0.005	mg/L
Anthracene		<0.005	mg/L
Fluoranthene		<0.005	mg/L
Pyrene		<0.005	mg/L
Benzo(a)anthracene		<0.005	mg/L
Chrysene		<0.005	mg/L
Benzo(b)fluoranthene		<0.005	mg/L
Benzo(k)fluoranthene		<0.005	mg/L
Benzo(a)pyrene		<0.005	mg/L
Indeno(1,2,3-cd)pyrene		<0.005	mg/L
Dibenzo(a,h)anthracene		<0.005	mg/L
Benzo(g,h,i)perylene		<0.005	mg/L
Total Arsenic		0.0134	mg/L
Total Barium		0.164	mg/L
Total Cadmium		<0.005	mg/L
Total Chromium		<0.010	mg/L
Total Lead		<0.010	mg/L
Total Selenium		<0.050	mg/L
Total Silver		<0.0125	mg/L

Sample: 187994 - MW-11

Param	Flag	Result	Units
Total Mercury		<0.0002	mg/L
Naphthalene		<0.005	mg/L
Acenaphthylene		<0.005	mg/L
Acenaphthene		<0.005	mg/L
Fluorene		<0.005	mg/L
Phenanthrene		<0.005	mg/L
Anthracene		<0.005	mg/L
Fluoranthene		<0.005	mg/L
Pyrene		<0.005	mg/L

Continued on next page ...

Report Date: January 18, 2002 Order Number: A01122405
106.001 Jal StationPage Number: 3 of 4
Jal,NM

Sample 187994 continued ...

Param	Flag	Result	Units
Benzo(a)anthracene		<0.005	mg/L
Chrysene		<0.005	mg/L
Benzo(b)fluoranthene		<0.005	mg/L
Benzo(k)fluoranthene		<0.005	mg/L
Benzo(a)pyrene		<0.005	mg/L
Indeno(1,2,3-cd)pyrene		<0.005	mg/L
Dibenzo(a,h)anthracene		<0.005	mg/L
Benzo(g,h,i)perylene		<0.005	mg/L
Total Arsenic		0.0195	mg/L
Total Barium		<0.100	mg/L
Total Cadmium		<0.005	mg/L
Total Chromium		<0.010	mg/L
Total Lead		<0.010	mg/L
Total Selenium		<0.050	mg/L
Total Silver		<0.0125	mg/L

Sample: 187995 - MW-15

Param	Flag	Result	Units
Total Mercury		<0.0002	mg/L
Naphthalene		<0.005	mg/L
Acenaphthylene		<0.005	mg/L
Acenaphthene		<0.005	mg/L
Fluorene		<0.005	mg/L
Phenanthrene		<0.005	mg/L
Anthracene		<0.005	mg/L
Fluoranthene		<0.005	mg/L
Pyrene		<0.005	mg/L
Benzo(a)anthracene		<0.005	mg/L
Chrysene		<0.005	mg/L
Benzo(b)fluoranthene		<0.005	mg/L
Benzo(k)fluoranthene		<0.005	mg/L
Benzo(a)pyrene		<0.005	mg/L
Indeno(1,2,3-cd)pyrene		<0.005	mg/L
Dibenzo(a,h)anthracene		<0.005	mg/L
Benzo(g,h,i)perylene		<0.005	mg/L
Total Arsenic		<0.010	mg/L
Total Barium		<0.100	mg/L
Total Cadmium		<0.005	mg/L
Total Chromium		<0.010	mg/L
Total Lead		<0.010	mg/L
Total Selenium		<0.050	mg/L
Total Silver		<0.0125	mg/L

Sample: 187996 - MW-13

Param	Flag	Result	Units
Total Mercury		<0.0002	mg/L
Naphthalene		<0.005	mg/L
Acenaphthylene		<0.005	mg/L

Continued on next page ...

Report Date: January 18, 2002 Order Number: A01122405
106.001 Jal StationPage Number: 4 of 4
Jal,NM*Sample 187996 continued ...*

Param	Flag	Result	Units
Acenaphthene		<0.005	mg/L
Fluorene		<0.005	mg/L
Phenanthrene		<0.005	mg/L
Anthracene		<0.005	mg/L
Fluoranthene		<0.005	mg/L
Pyrene		<0.005	mg/L
Benzo(a)anthracene		<0.005	mg/L
Chrysene		<0.005	mg/L
Benzo(b)fluoranthene		<0.005	mg/L
Benzo(k)fluoranthene		<0.005	mg/L
Benzo(a)pyrene		<0.005	mg/L
Indeno(1,2,3-cd)pyrene		<0.005	mg/L
Dibenzo(a,h)anthracene		<0.005	mg/L
Benzo(g,h,i)perylene		<0.005	mg/L
Total Arsenic		0.0159	mg/L
Total Barium		0.206	mg/L
Total Cadmium		<0.005	mg/L
Total Chromium		<0.010	mg/L
Total Lead		<0.010	mg/L
Total Selenium		<0.050	mg/L
Total Silver		<0.0125	mg/L

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Analytical and Quality Control Report

Theresa Nix
H2A Environmental LTD
418 San Saba
Portland, Tx. 78374

Report Date: January 18, 2002

Order ID Number: A01122405

Project Number: 106.001
Project Name: Jal Station
Project Location: Jal, NM

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
187992	MW-1	Water	12/20/01	9:00	12/22/01
187993	MW-5	Water	12/20/01	10:00	12/22/01
187994	MW-11	Water	12/20/01	11:00	12/22/01
187995	MW-15	Water	12/20/01	12:00	12/22/01
187996	MW-13	Water	12/20/01	13:00	12/22/01
187997	Effluent	Water	12/20/01	15:00	12/22/01

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 16 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director

Analytical Report

Sample: 187992 - MW-1

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16830 Date Analyzed: 12/24/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16654 Date Prepared: 12/24/01

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		0.0822	mg/L	1	0.10	82	72 - 128
4-BFB		0.075	mg/L	1	0.10	75	72 - 128

Sample: 187992 - MW-1

Analysis: Hg, Total Analytical Method: S 7470A QC Batch: QC17027 Date Analyzed: 1/3/02
Analyst: BC Preparation Method: N/A Prep Batch: PB16816 Date Prepared: 1/2/02

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 187992 - MW-1

Analysis: PAH Analytical Method: S 8270C QC Batch: QC17176 Date Analyzed: 1/8/02
Analyst: RC Preparation Method: E 3510C Prep Batch: PB16936 Date Prepared: 12/24/01

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.005	mg/L	1	0.005
Acenaphthylene		<0.005	mg/L	1	0.005
Acenaphthene		<0.005	mg/L	1	0.005
Fluorene		<0.005	mg/L	1	0.005
Phenanthrene		<0.005	mg/L	1	0.005
Anthracene		<0.005	mg/L	1	0.005
Fluoranthene		<0.005	mg/L	1	0.005
Pyrene		<0.005	mg/L	1	0.005
Benzo(a)anthracene		<0.005	mg/L	1	0.005
Chrysene		<0.005	mg/L	1	0.005
Benzo(b)fluoranthene		<0.005	mg/L	1	0.005
Benzo(k)fluoranthene		<0.005	mg/L	1	0.005
Benzo(a)pyrene		<0.005	mg/L	1	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	1	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	1	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	1	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		42.35	mg/L	1	80	52	35 - 114
2-Fluorobiphenyl		43.68	mg/L	1	80	54	43 - 116
Terphenyl-d14		22.3	mg/L	1	80	27	33 - 141

Sample: 187992 - MW-1

Analysis: Total Metals Analytical Method: S 6010B QC Batch: QC16866 Date Analyzed: 12/26/01
Analyst: RR Preparation Method: N/A Prep Batch: PB16660 Date Prepared: 12/26/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		0.0222	mg/L	1	0.01
Total Barium		0.559	mg/L	1	0.10
Total Cadmium		<0.005	mg/L	1	0.005
Total Chromium		0.0995	mg/L	1	0.01
Total Lead		0.0198	mg/L	1	0.01
Total Selenium		0.093	mg/L	1	0.05
Total Silver		<0.0125	mg/L	1	0.01

Sample: 187993 - MW-5

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16830 Date Analyzed: 12/24/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16654 Date Prepared: 12/24/01

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		0.0863	mg/L	1	0.10	86	72 - 128
4-BFB		0.0787	mg/L	1	0.10	79	72 - 128

Sample: 187993 - MW-5

Analysis: Hg, Total Analytical Method: S 7470A QC Batch: QC17027 Date Analyzed: 1/3/02
Analyst: BC Preparation Method: N/A Prep Batch: PB16816 Date Prepared: 1/2/02

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 187993 - MW-5

Analysis: PAH Analytical Method: S 8270C QC Batch: QC17176 Date Analyzed: 1/8/02
Analyst: RC Preparation Method: E 3510C Prep Batch: PB16936 Date Prepared: 12/24/01

Continued ...

... Continued Sample: 187993 Analysis: PAH

Param	Flag	Result	Units	Dilution	RDL
Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.005	mg/L	1	0.005
Acenaphthylene		<0.005	mg/L	1	0.005
Acenaphthene		<0.005	mg/L	1	0.005
Fluorene		<0.005	mg/L	1	0.005
Phenanthrene		<0.005	mg/L	1	0.005
Anthracene		<0.005	mg/L	1	0.005
Fluoranthene		<0.005	mg/L	1	0.005
Pyrene		<0.005	mg/L	1	0.005
Benzo(a)anthracene		<0.005	mg/L	1	0.005
Chrysene		<0.005	mg/L	1	0.005
Benzo(b)fluoranthene		<0.005	mg/L	1	0.005
Benzo(k)fluoranthene		<0.005	mg/L	1	0.005
Benzo(a)pyrene		<0.005	mg/L	1	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	1	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	1	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	1	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		51.9	mg/L	1	80	64	35 - 114
2-Fluorobiphenyl		54.1	mg/L	1	80	67	43 - 116
Terphenyl-d14		31.71	mg/L	1	80	39	33 - 141

Sample: 187993 - MW-5

Analysis: Total Metals Analytical Method: S 6010B QC Batch: QC16866 Date Analyzed: 12/26/01
Analyst: RR Preparation Method: N/A Prep Batch: PB16660 Date Prepared: 12/26/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		0.0134	mg/L	1	0.01
Total Barium		0.164	mg/L	1	0.10
Total Cadmium		<0.005	mg/L	1	0.005
Total Chromium		<0.010	mg/L	1	0.01
Total Lead		<0.010	mg/L	1	0.01
Total Selenium		<0.050	mg/L	1	0.05
Total Silver		<0.0125	mg/L	1	0.01

Sample: 187994 - MW-11

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16830 Date Analyzed: 12/24/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16654 Date Prepared: 12/24/01

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		0.0806	mg/L	1	0.10	81	72 - 128
4-BFB		0.0721	mg/L	1	0.10	72	72 - 128

Sample: 187994 - MW-11

Analysis: Hg, Total Analytical Method: S 7470A QC Batch: QC17027 Date Analyzed: 1/3/02
Analyst: BC Preparation Method: N/A Prep Batch: PB16816 Date Prepared: 1/2/02

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 187994 - MW-11

Analysis: PAH Analytical Method: S 8270C QC Batch: QC17176 Date Analyzed: 1/8/02
Analyst: RC Preparation Method: E 3510C Prep Batch: PB16936 Date Prepared: 12/24/01

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.005	mg/L	1	0.005
Acenaphthylene		<0.005	mg/L	1	0.005
Acenaphthene		<0.005	mg/L	1	0.005
Fluorene		<0.005	mg/L	1	0.005
Phenanthrene		<0.005	mg/L	1	0.005
Anthracene		<0.005	mg/L	1	0.005
Fluoranthene		<0.005	mg/L	1	0.005
Pyrene		<0.005	mg/L	1	0.005
Benzo(a)anthracene		<0.005	mg/L	1	0.005
Chrysene		<0.005	mg/L	1	0.005
Benzo(b)fluoranthene		<0.005	mg/L	1	0.005
Benzo(k)fluoranthene		<0.005	mg/L	1	0.005
Benzo(a)pyrene		<0.005	mg/L	1	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	1	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	1	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	1	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5	1	6.34	mg/L	1	80	7	35 - 114
2-Fluorobiphenyl	2	28	mg/L	1	80	35	43 - 116
Terphenyl-d14		45.59	mg/L	1	80	56	33 - 141

Sample: 187994 - MW-11

Analysis: Total Metals Analytical Method: S 6010B QC Batch: QC16866 Date Analyzed: 12/26/01
Analyst: RR Preparation Method: N/A Prep Batch: PB16660 Date Prepared: 12/26/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		0.0195	mg/L	1	0.01
Total Barium		<0.100	mg/L	1	0.10

Continued ...

¹Sample surrogate recovery out of limits due to matrix. QC shows method in control.

²Sample surrogate recovery out of limits due to sample matrix. QC shows method in control.

... Continued Sample: 187994 Analysis: Total Metals

Param	Flag	Result	Units	Dilution	RDL
Total Cadmium		<0.005	mg/L	1	0.005
Total Chromium		<0.010	mg/L	1	0.01
Total Lead		<0.010	mg/L	1	0.01
Total Selenium		<0.050	mg/L	1	0.05
Total Silver		<0.0125	mg/L	1	0.01

Sample: 187995 - MW-15

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16830 Date Analyzed: 12/24/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16654 Date Prepared: 12/24/01

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		0.0881	mg/L	1	0.10	88	72 - 128
4-BFB		0.0807	mg/L	1	0.10	81	72 - 128

Sample: 187995 - MW-15

Analysis: Hg, Total Analytical Method: S 7470A QC Batch: QC17027 Date Analyzed: 1/3/02
Analyst: BC Preparation Method: N/A Prep Batch: PB16816 Date Prepared: 1/2/02

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 187995 - MW-15

Analysis: PAH Analytical Method: S 8270C QC Batch: QC17176 Date Analyzed: 1/8/02
Analyst: RC Preparation Method: E 3510C Prep Batch: PB16936 Date Prepared: 12/24/01

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.005	mg/L	1	0.005
Acenaphthylene		<0.005	mg/L	1	0.005
Acenaphthene		<0.005	mg/L	1	0.005
Fluorene		<0.005	mg/L	1	0.005
Phenanthrene		<0.005	mg/L	1	0.005
Anthracene		<0.005	mg/L	1	0.005
Fluoranthene		<0.005	mg/L	1	0.005
Pyrene		<0.005	mg/L	1	0.005
Benzo(a)anthracene		<0.005	mg/L	1	0.005
Chrysene		<0.005	mg/L	1	0.005
Benzo(b)fluoranthene		<0.005	mg/L	1	0.005
Benzo(k)fluoranthene		<0.005	mg/L	1	0.005
Benzo(a)pyrene		<0.005	mg/L	1	0.005

Continued ...

... Continued Sample: 187995 Analysis: PAH

Param	Flag	Result	Units	Dilution	RDL
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	1	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	1	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	1	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		46.57	mg/L	1	80	58	35 - 114
2-Fluorobiphenyl		49.68	mg/L	1	80	62	43 - 116
Terphenyl-d14		43.79	mg/L	1	80	54	33 - 141

Sample: 187995 - MW-15

Analysis: Total Metals Analytical Method: S 6010B QC Batch: QC16866 Date Analyzed: 12/26/01
Analyst: RR Preparation Method: N/A Prep Batch: PB16660 Date Prepared: 12/26/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<0.010	mg/L	1	0.01
Total Barium		<0.100	mg/L	1	0.10
Total Cadmium		<0.005	mg/L	1	0.005
Total Chromium		<0.010	mg/L	1	0.01
Total Lead		<0.010	mg/L	1	0.01
Total Selenium		<0.050	mg/L	1	0.05
Total Silver		<0.0125	mg/L	1	0.01

Sample: 187996 - MW-13

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16830 Date Analyzed: 12/24/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16654 Date Prepared: 12/24/01

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		0.0925	mg/L	1	0.10	92	72 - 128
4-BFB		0.0852	mg/L	1	0.10	85	72 - 128

Sample: 187996 - MW-13

Analysis: Hg, Total Analytical Method: S 7470A QC Batch: QC17028 Date Analyzed: 1/3/02
Analyst: BC Preparation Method: N/A Prep Batch: PB16816 Date Prepared: 1/2/02

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 187996 - MW-13

Analysis: PAH Analytical Method: S 8270C QC Batch: QC17176 Date Analyzed: 1/8/02
Analyst: RC Preparation Method: E 3510C Prep Batch: PB16936 Date Prepared: 12/24/01

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.005	mg/L	1	0.005
Acenaphthylene		<0.005	mg/L	1	0.005
Acenaphthene		<0.005	mg/L	1	0.005
Fluorene		<0.005	mg/L	1	0.005
Phenanthrene		<0.005	mg/L	1	0.005
Anthracene		<0.005	mg/L	1	0.005
Fluoranthene		<0.005	mg/L	1	0.005
Pyrene		<0.005	mg/L	1	0.005
Benzo(a)anthracene		<0.005	mg/L	1	0.005
Chrysene		<0.005	mg/L	1	0.005
Benzo(b)fluoranthene		<0.005	mg/L	1	0.005
Benzo(k)fluoranthene		<0.005	mg/L	1	0.005
Benzo(a)pyrene		<0.005	mg/L	1	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	1	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	1	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	1	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		48.16	mg/L	1	80	60	35 - 114
2-Fluorobiphenyl		51.66	mg/L	1	80	64	43 - 116
Terphenyl-d14		42.34	mg/L	1	80	52	33 - 141

Sample: 187996 - MW-13

Analysis: Total Metals Analytical Method: S 6010B QC Batch: QC16866 Date Analyzed: 12/26/01
Analyst: RR Preparation Method: N/A Prep Batch: PB16660 Date Prepared: 12/26/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		0.0159	mg/L	1	0.01
Total Barium		0.206	mg/L	1	0.10
Total Cadmium		<0.005	mg/L	1	0.005
Total Chromium		<0.010	mg/L	1	0.01
Total Lead		<0.010	mg/L	1	0.01
Total Selenium		<0.050	mg/L	1	0.05
Total Silver		<0.0125	mg/L	1	0.01

Sample: 187997 - Effluent

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16913 Date Analyzed: 12/28/01
Analyst: DN Preparation Method: N/A Prep Batch: PB16709 Date Prepared: 12/28/01

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

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.454	mg/L	5	0.10	91	72 - 128
4-BFB		0.443	mg/L	5	0.10	89	72 - 128

Quality Control Report Method Blank

Method Blank QCBatch: QC16830

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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.087	mg/L	1	0.10	87	72 - 128
4-BFB		0.0799	mg/L	1	0.10	80	72 - 128

Method Blank QCBatch: QC16913

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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0938	mg/L	1	0.10	94	72 - 128
4-BFB		0.0941	mg/L	1	0.10	94	72 - 128

Method Blank QCBatch: QC17027

Param	Flag	Results	Units	Reporting Limit
Total Mercury		<0.0002	mg/L	0.0002

Method Blank QCBatch: QC17028

Param	Flag	Results	Units	Reporting Limit
Total Mercury		<0.0002	mg/L	0.0002

Method Blank QCBatch: QC17176

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.005	mg/L	0.005
Acenaphthylene		<0.005	mg/L	0.005
Acenaphthene		<0.005	mg/L	0.005
Fluorene		<0.005	mg/L	0.005
Phenanthrene		<0.005	mg/L	0.005
Anthracene		<0.005	mg/L	0.005
Fluoranthene		<0.005	mg/L	0.005
Pyrene		<0.005	mg/L	0.005
Benzo(a)anthracene		<0.005	mg/L	0.005
Chrysene		<0.005	mg/L	0.005
Benzo(b)fluoranthene		<0.005	mg/L	0.005
Benzo(k)fluoranthene		<0.005	mg/L	0.005
Benzo(a)pyrene		<0.005	mg/L	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		65.44	mg/L	1	80	81	35 - 114
2-Fluorobiphenyl		71.48	mg/L	1	80	89	43 - 116
Terphenyl-d14		72.36	mg/L	1	80	90	33 - 141

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC16830

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.107	0.104	mg/L	1	0.10	<0.001	107	3	80 - 120	20
Benzene	0.103	0.102	mg/L	1	0.10	<0.001	103	1	80 - 120	20
Toluene	0.108	0.107	mg/L	1	0.10	<0.001	108	1	80 - 120	20
Ethylbenzene	0.108	0.107	mg/L	1	0.10	<0.001	108	1	80 - 120	20
M,P,O-Xylene	0.327	0.325	mg/L	1	0.30	<0.001	109	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0859	0.084	mg/L	1	0.10	86	84	72 - 128
4-BFB	0.0873	0.0848	mg/L	1	0.10	87	85	72 - 128

Laboratory Control Spikes QCBatch: QC16913

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0974	0.0956	mg/L	1	0.10	<0.001	97	2	80 - 120	20
Benzene	0.0935	0.0929	mg/L	1	0.10	<0.001	94	1	80 - 120	20
Toluene	0.0941	0.0936	mg/L	1	0.10	<0.001	94	0	80 - 120	20
Ethylbenzene	0.0939	0.0937	mg/L	1	0.10	<0.001	94	0	80 - 120	20
M,P,O-Xylene	0.278	0.276	mg/L	1	0.30	<0.001	93	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0914	0.0939	mg/L	1	0.10	91	94	72 - 128
4-BFB	0.0888	0.092	mg/L	1	0.10	89	92	72 - 128

Laboratory Control Spikes

QCBatch: QC17176

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	74.46	67.66	mg/L	1	80	<0.005	93	9	21 - 133	20
Acenaphthylene	86.06	81.64	mg/L	1	80	<0.005	107	5	33 - 145	20
Acenaphthene	83.03	78.85	mg/L	1	80	<0.005	103	5	47 - 145	20
Fluorene	80.62	74.16	mg/L	1	80	<0.005	100	8	59 - 121	20
Phenanthrene	82.5	79.87	mg/L	1	80	<0.005	103	3	54 - 120	20
Anthracene	88.2	83.76	mg/L	1	80	<0.005	110	5	27 - 133	20
Fluoranthene	91.19	80.08	mg/L	1	80	<0.005	113	12	26 - 137	20
Pyrene	72.15	68.09	mg/L	1	80	<0.005	90	5	52 - 115	20
Benzo(a)anthracene	79.37	76.27	mg/L	1	80	<0.005	99	3	33 - 143	20
Chrysene	77.31	73.03	mg/L	1	80	<0.005	96	5	17 - 168	20
Benzo(b)fluoranthene	77.57	78.74	mg/L	1	80	<0.005	96	1	33 - 143	20
Benzo(k)fluoranthene	81.6	81.00	mg/L	1	80	<0.005	102	0	17 - 168	20
Benzo(a)pyrene	81.89	81.18	mg/L	1	80	<0.005	102	0	24 - 159	20
Indeno(1,2,3-cd)pyrene	82.6	85.59	mg/L	1	80	<0.005	103	3	0 - 171	20
Dibenzo(a,h)anthracene	61.21	61.14	mg/L	1	80	<0.005	76	0	0 - 227	20
Benzo(g,h,i)perylene	87.46	88.29	mg/L	1	80	<0.005	109	0	0 - 219	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	65.76	57.38	mg/L	1	80	82	71	35 - 114
2-Fluorobiphenyl	69.53	63.84	mg/L	1	80	86	79	43 - 116
Terphenyl-d14	64.07	56.91	mg/L	1	80	80	71	33 - 141

Quality Control Report Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC16830

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.102	102	85 - 115	12/24/01

Continued ...

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.101	101	85 - 115	12/24/01
Toluene		mg/L	0.10	0.106	106	85 - 115	12/24/01
Ethylbenzene		mg/L	0.10	0.106	106	85 - 115	12/24/01
M,P,O-Xylene		mg/L	0.30	0.321	107	85 - 115	12/24/01

CCV (2) QCBatch: QC16830

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.107	107	85 - 115	12/24/01
Benzene		mg/L	0.10	0.103	103	85 - 115	12/24/01
Toluene		mg/L	0.10	0.108	108	85 - 115	12/24/01
Ethylbenzene		mg/L	0.10	0.107	107	85 - 115	12/24/01
M,P,O-Xylene		mg/L	0.30	0.3286	109	85 - 115	12/24/01

ICV (1) QCBatch: QC16830

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.106	106	85 - 115	12/24/01
Benzene		mg/L	0.10	0.102	102	85 - 115	12/24/01
Toluene		mg/L	0.10	0.107	107	85 - 115	12/24/01
Ethylbenzene		mg/L	0.10	0.107	107	85 - 115	12/24/01
M,P,O-Xylene		mg/L	0.30	0.324	108	85 - 115	12/24/01

CCV (1) QCBatch: QC16866

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Arsenic		mg/L	1	1.00	100	90 - 110	12/26/01
Total Barium		mg/L	2	2.03	102	90 - 110	12/26/01
Total Cadmium		mg/L	0.50	0.508	102	90 - 110	12/26/01
Total Chromium		mg/L	0.20	0.202	101	90 - 110	12/26/01
Total Lead		mg/L	1	1.01	101	90 - 110	12/26/01
Total Selenium		mg/L	1	0.977	98	90 - 110	12/26/01
Total Silver		mg/L	0.25	0.252	101	90 - 110	12/26/01

ICV (1) QCBatch: QC16866

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Arsenic		mg/L	1	1.00	100	90 - 110	12/26/01
Total Barium		mg/L	2	2.00	100	90 - 110	12/26/01
Total Cadmium		mg/L	0.50	0.502	100	90 - 110	12/26/01
Total Chromium		mg/L	0.20	0.200	100	90 - 110	12/26/01
Total Lead		mg/L	1	1.00	100	90 - 110	12/26/01
Total Selenium		mg/L	1	1.00	100	90 - 110	12/26/01
Total Silver		mg/L	0.25	0.250	100	90 - 110	12/26/01

CCV (1) QCBatch: QC16913

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0977	98	85 - 115	12/28/01
Benzene		mg/L	0.10	0.0935	94	85 - 115	12/28/01
Toluene		mg/L	0.10	0.094	94	85 - 115	12/28/01
Ethylbenzene		mg/L	0.10	0.0949	95	85 - 115	12/28/01
M,P,O-Xylene		mg/L	0.30	0.280	93	85 - 115	12/28/01

CCV (2) QCBatch: QC16913

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.098	98	85 - 115	12/28/01
Benzene		mg/L	0.10	0.095	95	85 - 115	12/28/01
Toluene		mg/L	0.10	0.096	96	85 - 115	12/28/01
Ethylbenzene		mg/L	0.10	0.096	96	85 - 115	12/28/01
M,P,O-Xylene		mg/L	0.30	0.285	95	85 - 115	12/28/01

ICV (1) QCBatch: QC16913

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.097	97	85 - 115	12/28/01
Benzene		mg/L	0.10	0.0976	98	85 - 115	12/28/01
Toluene		mg/L	0.10	0.0981	98	85 - 115	12/28/01
Ethylbenzene		mg/L	0.10	0.0986	99	85 - 115	12/28/01
M,P,O-Xylene		mg/L	0.30	0.292	97	85 - 115	12/28/01

CCV (1) QCBatch: QC17027

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.001	0.00097	97	80 - 120	1/3/02

ICV (1) QCBatch: QC17027

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.001	0.00094	94	80 - 120	1/3/02

CCV (1) QCBatch: QC17028

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.001	0.00097	97	80 - 120	1/3/02

ICV (1) QCBatch: QC17028

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.001	0.00094	94	80 - 120	1/3/02

CCV (1) QCBatch: QC17176

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	54.53	90	80 - 120	1/8/02
Acenaphthylene		mg/L	60	55.68	92	80 - 120	1/8/02
Acenaphthene		mg/L	60	55.49	92	80 - 120	1/8/02
Fluorene		mg/L	60	52.69	87	80 - 120	1/8/02
Phenanthrene		mg/L	60	54.19	90	80 - 120	1/8/02
Anthracene		mg/L	60	54.18	90	80 - 120	1/8/02
Fluoranthene		mg/L	60	48.57	80	80 - 120	1/8/02
Pyrene		mg/L	60	49.04	81	80 - 120	1/8/02
Benzo(a)anthracene		mg/L	60	52.3	87	0 - 120	1/8/02
Chrysene		mg/L	60	52.88	88	0 - 120	1/8/02
Benzo(b)fluoranthene		mg/L	60	69.02	115	80 - 120	1/8/02
Benzo(k)fluoranthene		mg/L	60	67.5	112	80 - 120	1/8/02
Benzo(a)pyrene		mg/L	60	70.57	117	80 - 120	1/8/02
Indeno(1,2,3-cd)pyrene		mg/L	60	70.44	117	80 - 120	1/8/02
Dibenzo(a,h)anthracene		mg/L	60	68.89	114	80 - 120	1/8/02
Benzo(g,h,i)perylene		mg/L	60	67.95	113	80 - 120	1/8/02
Nitrobenzene-d5		mg/L	60	50.77	84	80 - 120	1/8/02

Continued ...

Report Date: January 18, 2002
106.001

Order Number: A01122405
Jal Station

Page Number: 16 of 16
Jal,NM

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
2-Fluorobiphenyl		mg/L	60	47.00	78	80 - 120	1/8/02
Terphenyl-d14		mg/L	60	38.53	64	80 - 120	1/8/02

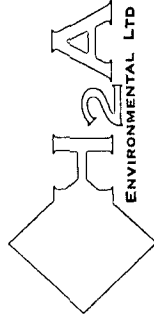
GROUND WATER MONITORING DATA SHEET

Job No. 106.001

Date 2/14/01

Project Equilon - Jal Basin Station

Field Tech. John Savoie



Well No.	PVC Elev.	GS Elev.	DTW		GW Elevation		Well Depth	Depth to PSH		PSH Elev.	PSH Thickness	Vac in. H2O
			DTWgs	DTWpvc	Actual	Corrected		DTWgs	DTWpvc			
MW-1	2994.62	2992.30	90.88	93.20	2901.42	---	98.75	---	---	---	---	NM
MW-2	2989.43	2987.02	93.44	95.85	2893.58	2899.97	NM	85.99	88.40	2901.03	7.45	NM
MW-3	2990.81	2987.91	88.82	91.72	2899.09	2899.11	NM	88.80	91.70	2899.11	0.02	NM
MW-4	2991.16	2988.22	89.46	92.40	2898.76	2899.40	NM	88.71	91.65	2899.51	0.75	NM
MW-5	2991.38	2988.47	87.49	90.40	2900.98	---	98.40	---	---	---	---	NM
MW-6	2990.17	2987.40	89.83	92.60	2897.57	2897.66	NM	89.73	92.50	2897.67	0.10	NM
MW-8	2990.73	2987.97	89.49	92.25	2898.48	2900.20	NM	87.49	90.25	2900.48	2.00	NM
MW-9	2990.31	2987.39	93.58	96.50	2893.81	2899.99	NM	86.38	89.30	2901.01	7.20	NM
MW-10	2990.84	2987.96	87.02	89.90	2900.94	---	98.65	---	---	---	---	NM
MW-11	2992.30	2989.37	88.32	91.25	2901.05	---	100.20	---	---	---	---	NM
MW-12	2990.99	2987.79	90.80	94.00	2896.99	2900.34	NM	86.90	90.10	2900.89	3.90	NM
MW-13	2992.97	2989.79	88.92	92.10	2900.87	---	100.60	---	---	---	---	NM
MW-14	2989.12	2986.02	89.95	93.05	2896.07	2900.10	NM	85.25	88.35	2900.77	4.70	NM
MW-15	2989.64	2986.45	85.81	89.00	2900.64	---	101.00	---	---	---	---	NM
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Note: 1. All measurements are reported in feet unless otherwise indicated

2. The corrected ground water elevation was calculated using a specific gravity for PSH of :

0.86

Comments : MW-5 was gauged and sampled on 02/21/01.

H2A
ENVIRONMENTAL LTD

Date 3/16/01
Field Tech. John Savoc

Note :

1. All measurements are reported in feet unless otherwise indicated
2. The corrected ground water elevation was calculated using a specific gravity for PSH of :

D:\Projects\Faillion\106 001\GW Data Sheet.xls

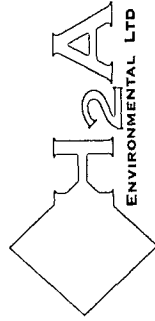
GROUND WATER MONITORING DATA SHEET

Job No. 106.001

Date 5/23/01

Project Equilon - Jal Basin Station

Field Tech. John Savoie



Well No.	PVC Elev.	GS Elev.	DTW		GW Elevation		Well Depth	Depth to PSH		PSH Elev.	PSH Thickness	Vac in. H2O
			DTWgs	DTWpvc	Actual	Corrected		DTPgs	DTPpvc			
MW-1	2994.62	2992.30	91.13	93.45	2901.17	---	98.75	---	---	---	---	NM
MW-2	2989.43	2987.02	92.49	94.90	2894.53	2900.54	NM	85.49	87.90	2901.53	7.00	NM
MW-3	2990.81	2987.91	93.70	96.60	2894.21	2899.01	NM	88.10	91.00	2899.81	5.60	NM
MW-4	2991.16	2988.22	90.26	93.20	2897.96	2899.33	NM	88.66	91.60	2899.56	1.60	NM
MW-5	2991.38	2988.47	87.49	90.40	2900.98	---	98.40	---	---	---	---	NM
MW-6	2990.17	2987.40	89.83	92.60	2897.57	2897.61	NM	89.78	92.55	2897.62	0.05	NM
MW-8	2990.73	2987.97	92.09	94.85	2895.88	2900.56	NM	86.64	89.40	2901.33	5.45	NM
MW-9	2990.31	2987.39	93.08	96.00	2894.31	2900.36	NM	86.03	88.95	2901.36	7.05	NM
MW-10	2990.84	2987.96	87.57	90.45	2900.39	2900.82	---	87.07	89.95	2900.89	0.50	NM
MW-11	2992.30	2989.37	88.52	91.45	2900.85	---	100.20	---	---	---	---	NM
MW-12	2990.99	2987.79	91.65	94.85	2896.14	2900.17	NM	86.95	90.15	2900.84	4.70	NM
MW-13	2992.97	2989.79	89.17	92.35	2900.62	---	100.60	---	---	---	---	NM
MW-14	2989.12	2986.02	86.30	89.40	2899.72	2900.02	NM	85.95	89.05	2900.07	0.35	NM
MW-15	2989.64	2986.45	85.91	89.10	2900.54	---	101.00	---	---	---	---	NM
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Note : 1. All measurements are reported in feet unless otherwise indicated
2. The corrected ground water elevation was calculated using a specific gravity for PSH of : 0.86

Comments :

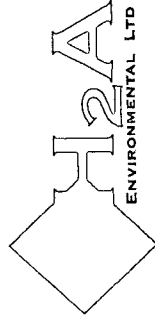
GROUND WATER MONITORING DATA SHEET

Job No. 106.001

Date 7/17/01

Project Equilon - Jal Basin Station

Field Tech. John Savoie



Well No.	PVC Elev.	GS Elev.	DTW		GW Elevation		Well Depth	Depth to PSH		PSH Elev.	PSH Thickness	Vac in. H2O
			DTWgs	DTWpvc	Actual	Corrected		DTPgs	DTPpvc			
MW-1	2994.62	2992.30	91.23	93.55	2901.07	---	NM	---	---	---	---	NM
MW-2	2989.43	2987.02	92.49	94.90	2894.53	2900.49	NM	85.54	87.95	2901.48	6.95	NM
MW-3	2990.81	2987.91	92.00	94.90	2895.91	2898.91	NM	88.50	91.40	2899.41	3.50	NM
MW-4	2991.16	2988.22	91.56	94.50	2896.66	2899.23	NM	88.56	91.50	2899.66	3.00	NM
MW-5	2991.38	2988.47	87.59	90.50	2900.88	---	NM	---	---	---	---	NM
MW-6	2990.17	2987.40	86.48	89.25	2900.92	---	NM	---	---	---	---	NM
MW-8	2990.73	2987.97	92.54	95.30	2895.43	2900.45	NM	86.69	89.45	2901.28	5.85	NM
MW-9	2990.31	2987.39	92.33	95.25	2895.06	2900.34	NM	86.18	89.10	2901.21	6.15	NM
MW-10	2990.84	2987.96	90.47	93.35	2897.49	2900.71	NM	86.72	89.60	2901.24	3.75	NM
MW-11	2992.30	2989.37	88.47	91.40	2900.90	---	NM	---	---	---	---	NM
MW-12	2990.99	2987.79	92.35	95.55	2895.44	2900.12	NM	86.90	90.10	2900.89	5.45	NM
MW-13	2992.97	2989.79	89.17	92.35	2900.62	---	NM	---	---	---	---	NM
MW-14	2989.12	2986.02	86.90	90.00	2899.12	2899.94	NM	85.95	89.05	2900.07	0.95	NM
MW-15	2989.64	2986.45	85.96	89.15	2900.49	---	NM	---	---	---	---	NM
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Note : 1. All measurements are reported in feet unless otherwise indicated
2. The corrected ground water elevation was calculated using a specific gravity for PSH of : 0.86

Comments :

APPENDIX D
Effluent Analytical Results

Results for effluent samples collected on September 29, and December 20, 2001 are included in Analytical Report numbers A01100318 and A01122405 respectively, found in APPENDIX B.

Report Date: September 4, 2001 Order Number: A01083108
106.001 Jal Sta,Hi-Vac

Page Number: 1 of 1
3 Min South of Jal, NM

Summary Report

Theresa Nix
H2A Environmental LTD
418 San Saba
Portland, Tx. 78374

Report Date: September 4, 2001

Order ID Number: A01083108

Project Number: 106.001
Project Name: Jal Sta,Hi-Vac
Project Location: 3 Min South of Jal, NM

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
178362	Effluent #1	Water	8/30/01	7:30	8/31/01

This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample - Field Code	BTEX				
	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
178362 - Effluent #1	<0.001	<0.001	<0.001	0.001	0.001

TRACE ANALYSIS, INC.

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155 McCutcheon, Suite H

Lubbock, Texas 79424
El Paso, Texas 79932

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E-Mail: lab@traceanalysis.com

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915•585•3443

FAX 806•794•1298
FAX 915•585•4944

Analytical and Quality Control Report

Theresa Nix
H2A Environmental LTD
418 San Saba
Portland, Tx. 78374

Report Date: September 4, 2001

Order ID Number: A01083108

Project Number: 106.001
Project Name: Jal Sta, Hi-Vac
Project Location: 3 Min South of Jal, NM

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
178362	Effluent #1	Water	8/30/01	7:30	8/31/01

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 including the chain of custody (COC), without written approval of Trace Analysis, Inc.


Dr. Blair Leftwich, Director

Analytical Report

Sample: 178362 - Effluent #1

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC13745 Date Analyzed: 8/29/01
Analyst: CG Preparation Method: E 5030B Prep Batch: PB11730 Date Prepared: 8/29/01

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		0.105	mg/L	1	0.10	105	72 - 128
4-BFB		0.100	mg/L	1	0.10	100	72 - 128

Quality Control Report Method Blank

Method Blank QCBatch: QC13745

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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.095	mg/L	1	0.10	95	72 - 128
4-BFB		0.090	mg/L	1	0.10	90	72 - 128

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC13745

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.096	0.098	mg/L	1	0.10	<0.001	96	2	80 - 120	20
Benzene	0.085	0.088	mg/L	1	0.10	<0.001	85	3	80 - 120	20
Toluene	0.088	0.090	mg/L	1	0.10	<0.001	88	2	80 - 120	20
Ethylbenzene	0.088	0.090	mg/L	1	0.10	<0.001	88	2	80 - 120	20
M,P,O-Xylene	0.265	0.273	mg/L	1	0.30	<0.001	88	3	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.092	0.090	mg/L	1	0.10	92	90	72 - 128
4-BFB	0.094	0.093	mg/L	1	0.10	94	93	72 - 128

Quality Control Report Continuing Calibration Verification Standards

CCV (1) QCBatch: QC13745

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.094	94	85 - 115	8/29/01
Benzene		mg/L	0.10	0.085	85	85 - 115	8/29/01

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		mg/L	0.10	0.087	87	85 - 115	8/29/01
Ethylbenzene		mg/L	0.10	0.087	87	85 - 115	8/29/01
M,P,O-Xylene		mg/L	0.30	0.266	89	85 - 115	8/29/01

CCV (2) QCBatch: QC13745

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.094	94	85 - 115	8/29/01
Benzene		mg/L	0.10	0.085	85	85 - 115	8/29/01
Toluene		mg/L	0.10	0.087	87	85 - 115	8/29/01
Ethylbenzene		mg/L	0.10	0.087	87	85 - 115	8/29/01
M,P,O-Xylene		mg/L	0.30	0.263	87	85 - 115	8/29/01

ICV (1) QCBatch: QC13745

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.110	110	85 - 115	8/29/01
Benzene		mg/L	0.10	0.088	88	85 - 115	8/29/01
Toluene		mg/L	0.10	0.089	89	85 - 115	8/29/01
Ethylbenzene		mg/L	0.10	0.089	89	85 - 115	8/29/01
M,P,O-Xylene		mg/L	0.30	0.269	90	85 - 115	8/29/01

Report Date: September 5, 2001
106.001

Order Number: A01090413
Jal Station

Page Number: 1 of 1
Jal,NM

Summary Report

Theresa Nix
H2A Environmental LTD
418 San Saba
Portland, Tx. 78374

Report Date: September 5, 2001

Order ID Number: A01090413

Project Number: 106.001
Project Name: Jal Station
Project Location: Jal,NM

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
178474	Effluent #1	Water	8/31/01	:	9/1/01

This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample - Field Code	BTEX				
	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
178474 - Effluent #1	<0.001	<0.001	<0.001	<0.001	<0.001

TRACE ANALYSIS, INC.

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915•585•3443

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FAX 915•585•4944

Analytical and Quality Control Report

Theresa Nix
H2A Environmental LTD
418 San Saba
Portland, Tx. 78374

Report Date: September 5, 2001

Order ID Number: A01090413

Project Number: 106.001
Project Name: Jal Station
Project Location: Jal,NM

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
178474	Effluent #1	Water	8/31/01	:	9/1/01

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.

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Dr. Blair Leftwich, Director

Analytical Report

Sample: 178474 - Effluent #1

Analysis: BTEX Analytical Method: E 602 QC Batch: QC13796 Date Analyzed: 9/4/01
Analyst: CG Preparation Method: N/A Prep Batch: PB11774 Date Prepared: 9/4/01

Param	Flag	Result	Units	Dilution	RD
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		0.110	mg/L	1	0.10	110	72 - 128
4-BFB		0.086	mg/L	1	0.10	86	72 - 128

Quality Control Report Method Blank

Method Blank QCBatch: QC13796

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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.096	mg/L	1	0.10	96	72 - 128
4-BFB		0.075	mg/L	1	0.10	75	72 - 128

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC13796

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.096	0.093	mg/L	1	0.10	<0.001	96	3	80 - 120	20
Benzene	0.098	0.095	mg/L	1	0.10	<0.001	98	3	80 - 120	20
Toluene	0.091	0.087	mg/L	1	0.10	<0.001	91	4	80 - 120	20
Ethylbenzene	0.091	0.088	mg/L	1	0.10	<0.001	91	3	80 - 120	20
M,P,O-Xylene	0.273	0.263	mg/L	1	0.30	<0.001	91	4	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.101	0.096	mg/L	1	0.10	101	96	72 - 128
4-BFB	0.091	0.088	mg/L	1	0.10	91	88	72 - 128

Quality Control Report Continuing Calibration Verification Standards

CCV (1) QCBatch: QC13796

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.095	95	85 - 115	9/4/01
Benzene		mg/L	0.10	0.099	99	85 - 115	9/4/01

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		mg/L	0.10	0.091	91	85 - 115	9/4/01
Ethylbenzene		mg/L	0.10	0.092	92	85 - 115	9/4/01
M,P,O-Xylene		mg/L	0.30	0.273	91	85 - 115	9/4/01

CCV (2) QCBatch: QC13796

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.092	92	85 - 115	9/4/01
Benzene		mg/L	0.10	0.096	96	85 - 115	9/4/01
Toluene		mg/L	0.10	0.087	87	85 - 115	9/4/01
Ethylbenzene		mg/L	0.10	0.087	87	85 - 115	9/4/01
M,P,O-Xylene		mg/L	0.30	0.261	87	85 - 115	9/4/01

ICV (1) QCBatch: QC13796

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.094	94	85 - 115	9/4/01
Benzene		mg/L	0.10	0.097	97	85 - 115	9/4/01
Toluene		mg/L	0.10	0.092	92	85 - 115	9/4/01
Ethylbenzene		mg/L	0.10	0.092	92	85 - 115	9/4/01
M,P,O-Xylene		mg/L	0.30	0.274	91	85 - 115	9/4/01

Report Date: September 6, 2001
106.001

Order Number: A01090503
Jal Station

Page Number: 1 of 1
Jal,NM

Summary Report

Marc C Oler
Equiva
308 Wilcox #101
Castlerock, Co. 80104

Report Date: September 6, 2001

Order ID Number: A01090503

Project: 106.001
TA Job Code: Jal Station
Casualty Code: Jal,NM
Project Location: 106.001
Project Address:
H2A Environmental LTD / Portland / Theresa Nix

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
178580	Effluent 9-1-01	Water	9/1/01	8:00	9/5/01
178581	Effluent 9-2-01	Water	9/2/01	8:00	9/5/01
178582	Effluent 9-3-01	Water	9/3/01	8:00	9/5/01
178583	Effluent 9-4-01	Water	9/4/01	8:00	9/5/01

This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample - Field Code	BTEX				
	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
178580 - Effluent 9-1-01	<0.001	<0.001	<0.001	<0.001	<0.001
178581 - Effluent 9-2-01	<0.001	<0.001	<0.001	<0.001	<0.001
178582 - Effluent 9-3-01	<0.001	<0.001	<0.001	<0.001	<0.001
178583 - Effluent 9-4-01	<0.001	<0.001	<0.001	<0.001	<0.001

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Analytical and Quality Control Report

Marc C Oler
Equiva
308 Wilcox #101
Castlerock, Co. 80104

Report Date: September 6, 2001

Order ID Number: A01090503

Project: 106.001
TA Job Code: Jal Station
Casualty Code: Jal,NM
Project Location: 106.001
Project Address:
H2A Environmental LTD / Portland / Theresa Nix

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
178580	Effluent 9-1-01	Water	9/1/01	8:00	9/5/01
178581	Effluent 9-2-01	Water	9/2/01	8:00	9/5/01
178582	Effluent 9-3-01	Water	9/3/01	8:00	9/5/01
178583	Effluent 9-4-01	Water	9/4/01	8:00	9/5/01

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 5 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director

Analytical Report

Sample: 178580 - Effluent 9-1-01

Analysis: BTEX Analytical Method: E 602 QC Batch: QC13821 Date Analyzed: 9/4/01
Analyst: CG Preparation Method: N/A Prep Batch: PB11798 Date Prepared: 9/4/01

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		0.092	mg/L	1	0.10	92	72 - 128
4-BFB		0.073	mg/L	1	0.10	73	72 - 128

Sample: 178581 - Effluent 9-2-01

Analysis: BTEX Analytical Method: E 602 QC Batch: QC13821 Date Analyzed: 9/4/01
Analyst: CG Preparation Method: N/A Prep Batch: PB11798 Date Prepared: 9/4/01

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	1	0.069	mg/L	1	0.10	69	72 - 128
4-BFB	2	0.066	mg/L	1	0.10	66	72 - 128

Sample: 178582 - Effluent 9-3-01

Analysis: BTEX Analytical Method: E 602 QC Batch: QC13821 Date Analyzed: 9/4/01
Analyst: CG Preparation Method: N/A Prep Batch: PB11798 Date Prepared: 9/4/01

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

¹Low surrogate recovery due to lack of mixing.

²Low surrogate recovery due to lack of mixing.

Report Date: September 6, 2001
106.001

Order Number: A01090503
Jal Station

Page Number: 3 of 5
Jal,NM

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.095	mg/L	1	0.10	95	72 - 128
4-BFB		0.073	mg/L	1	0.10	73	72 - 128

Sample: 178583 - Effluent 9-4-01

Analysis: BTEX Analytical Method: E 602 QC Batch: QC13821 Date Analyzed: 9/4/01
Analyst: CG Preparation Method: N/A Prep Batch: PB11798 Date Prepared: 9/4/01

Param	Flag	Result	Units	Dilution	RD L
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		0.092	mg/L	1	0.10	92	72 - 128
4-BFB		0.072	mg/L	1	0.10	72	72 - 128

Quality Control Report Method Blank

Method Blank QCBatch: QC13821

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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.099	mg/L	1	0.10	99	72 - 128
4-BFB		0.081	mg/L	1	0.10	81	72 - 128

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC13821

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.089	0.092	mg/L	1	0.10	<0.001	89	3	80 - 120	20
Benzene	0.092	0.094	mg/L	1	0.10	<0.001	92	2	80 - 120	20
Toluene	0.086	0.088	mg/L	1	0.10	<0.001	86	2	80 - 120	20
Ethylbenzene	0.088	0.090	mg/L	1	0.10	<0.001	88	2	80 - 120	20
M,P,O-Xylene	0.261	0.266	mg/L	1	0.30	<0.001	87	2	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.097	0.098	mg/L	1	0.10	97	98	72 - 128
4-BFB	0.091	0.092	mg/L	1	0.10	91	92	72 - 128

Quality Control Report Continuing Calibration Verification Standards

CCV (1) QCBatch: QC13821

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.093	93	85 - 115	9/4/01
Benzene		mg/L	0.10	0.096	96	85 - 115	9/4/01

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		mg/L	0.10	0.088	88	85 - 115	9/4/01
Ethylbenzene		mg/L	0.10	0.090	90	85 - 115	9/4/01
M,P,O-Xylene		mg/L	0.30	0.266	89	85 - 115	9/4/01

CCV (2) QCBatch: QC13821

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.098	98	85 - 115	9/4/01
Benzene		mg/L	0.10	0.1	100	85 - 115	9/4/01
Toluene		mg/L	0.10	0.095	95	85 - 115	9/4/01
Ethylbenzene		mg/L	0.10	0.098	98	85 - 115	9/4/01
M,P,O-Xylene		mg/L	0.30	0.288	96	85 - 115	9/4/01

ICV (1) QCBatch: QC13821

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.096	96	85 - 115	9/4/01
Benzene		mg/L	0.10	0.096	96	85 - 115	9/4/01
Toluene		mg/L	0.10	0.089	89	85 - 115	9/4/01
Ethylbenzene		mg/L	0.10	0.091	91	85 - 115	9/4/01
M,P,O-Xylene		mg/L	0.30	0.269	90	85 - 115	9/4/01

TraceAnalysis, Inc.

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Consulting Company Name:

H₂A Envision mental

Phone #:

961-777-0860

Consulting Company Address:

418 San Jose Portland TX

Ex #:

361-777-0971

Consulting Contact:

Theresa Nix

Equiva Contact:

Marc Oler

Location/SAP:

Equilon LLC

Incident #

1

Location Address:

3 mi South of Jol KM

Project Task:

Sta. Hi-VAC

Consultant Job#:

106.001

Sampler Signature:

PS + DG

[illegible][illegible]

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID: # AD1090505

ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB USE ONLY

REMARKS:

☐ Check if special reporting limits needed.

Intact Y/N

Headspace Y/N

Temp

Log-in Review

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of COC

Carrier # BWD 902 228 9101

TraceAnalysis, Inc.

6701 Aberdeen Ave., Suite 9

Lubbock, TX 79424-1515

(806) 794-1296

Report Date: September 7, 2001
102.001Order Number: A01090603
Jal Sta Hi-VacPage Number: 1 of 1
3 Mi. South of Jal,NM

Summary Report

Marc C Oler
Equiva
308 Wilcox #101
Castlerock, Co. 80104

Report Date: September 7, 2001

Order ID Number: A01090603

Project: 102.001
TA Job Code: Jal Sta Hi-Vac
Casualty Code: 3 Mi. South of Jal,NM
Project Location: 102.001
Project Address:
H2A Environmental LTD / Portland / Theresa Nix

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
178660	Effluent	Water	9/5/01	8:00	9/6/01

This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample - Field Code	BTEX				
	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
178660 - Effluent	<0.001	<0.001	<0.001	<0.001	<0.001

TRACEANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Marc C Oler
Equiva
308 Wilcox #101
Castlerock, Co. 80104

Report Date: September 7, 2001

Order ID Number: A01090603

Project: 102.001
TA Job Code: Jal Sta Hi-Vac
Casualty Code: 3 Mi. South of Jal,NM
Project Location: 102.001
Project Address:
H2A Environmental LTD / Portland / Theresa Nix

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
178660	Effluent	Water	9/5/01	8:00	9/6/01

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.

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Dr. Blair Leftwich, Director

Report Date: September 7, 2001
102.001

Order Number: A01090603
Jal Sta Hi-Vac

Page Number: 2 of 4
3 Mi. South of Jal,NM

Analytical Report

Sample: 178660 - Effluent

Analysis: BTEX Analytical Method: E 602 QC Batch: QC13856 Date Analyzed: 9/5/01
Analyst: CG Preparation Method: N/A Prep Batch: PB11821 Date Prepared: 9/5/01

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		0.100	mg/L	1	0.10	100	72 - 128
4-BFB		0.096	mg/L	1	0.10	96	72 - 128

Quality Control Report Method Blank

Method Blank QCBatch: QC13856

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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.091	mg/L	1	0.10	91	72 - 128
4-BFB		0.087	mg/L	1	0.10	87	72 - 128

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC13856

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.089	0.085	mg/L	1	0.10	<0.001	89	4	80 - 120	20
Benzene	0.090	0.085	mg/L	1	0.10	<0.001	90	6	80 - 120	20
Toluene	0.090	0.085	mg/L	1	0.10	<0.001	90	6	80 - 120	20
Ethylbenzene	0.090	0.085	mg/L	1	0.10	<0.001	90	6	80 - 120	20
M,P,O-Xylene	0.260	0.246	mg/L	1	0.30	<0.001	87	6	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.096	0.090	mg/L	1	0.10	96	90	72 - 128
4-BFB	0.096	0.091	mg/L	1	0.10	96	91	72 - 128

Quality Control Report Continuing Calibration Verification Standards

CCV (1) QCBatch: QC13856

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.091	91	85 - 115	9/5/01
Benzene		mg/L	0.10	0.089	89	85 - 115	9/5/01

Continued ...

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		mg/L	0.10	0.088	88	85 - 115	9/5/01
Ethylbenzene		mg/L	0.10	0.088	88	85 - 115	9/5/01
M,P,O-Xylene		mg/L	0.30	0.255	85	85 - 115	9/5/01

CCV (2) QCBatch: QC13856

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.091	91	85 - 115	9/5/01
Benzene		mg/L	0.10	0.091	91	85 - 115	9/5/01
Toluene		mg/L	0.10	0.090	90	85 - 115	9/5/01
Ethylbenzene		mg/L	0.10	0.090	90	85 - 115	9/5/01
M,P,O-Xylene		mg/L	0.30	0.259	86	85 - 115	9/5/01

ICV (1) QCBatch: QC13856

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.089	89	85 - 115	9/5/01
Benzene		mg/L	0.10	0.090	90	85 - 115	9/5/01
Toluene		mg/L	0.10	0.089	89	85 - 115	9/5/01
Ethylbenzene		mg/L	0.10	0.090	90	85 - 115	9/5/01
M,P,O-Xylene		mg/L	0.30	0.260	87	85 - 115	9/5/01

Report Date: September 11, 2001
106.001

Order Number: A01090706
Jal Station

Page Number: 1 of 1
Jal,NM

Summary Report

Theresa Nix
H2A Environmental LTD
418 San Saba
Portland, Tx. 78374

Report Date: September 11, 2001

Order ID Number: A01090706

Project Number: 106.001
Project Name: Jal Station
Project Location: Jal,NM

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
178744	Effluent	Water	9/6/01	7:40	9/7/01

This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample - Field Code	BTEX				
	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
178744 - Effluent	<0.001	<0.001	<0.001	<0.001	<0.001

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Analytical and Quality Control Report

Theresa Nix
H2A Environmental LTD
418 San Saba
Portland, Tx. 78374

Report Date: September 11, 2001

Order ID Number: A01090706

Project Number: 106.001
Project Name: Jal Station
Project Location: Jal, NM

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
178744	Effluent	Water	9/6/01	7:40	9/7/01

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 including the chain of custody (COC), without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director

Analytical Report

Sample: 178744 - Effluent

Analysis: BTEX Analytical Method: E 602 QC Batch: QC13876 Date Analyzed: 9/6/01
Analyst: CG Preparation Method: N/A Prep Batch: PB11837 Date Prepared: 9/6/01

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		0.102	mg/L	1	0.10	102	72 - 128
4-BFB		0.086	mg/L	1	0.10	86	72 - 128

Quality Control Report Method Blank

Method Blank QCBatch: QC13876

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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.099	mg/L	1	0.10	99	72 - 128
4-BFB		0.084	mg/L	1	0.10	84	72 - 128

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC13876

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.104	0.106	mg/L	1	0.10	<0.001	104	2	80 - 120	20
Benzene	0.102	0.104	mg/L	1	0.10	<0.001	102	2	80 - 120	20
Toluene	0.097	0.100	mg/L	1	0.10	<0.001	97	3	80 - 120	20
Ethylbenzene	0.099	0.103	mg/L	1	0.10	<0.001	99	4	80 - 120	20
M,P,O-Xylene	0.295	0.303	mg/L	1	0.30	<0.001	98	3	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.096	0.101	mg/L	1	0.10	96	101	72 - 128
4-BFB	0.094	0.098	mg/L	1	0.10	94	98	72 - 128

Quality Control Report Continuing Calibration Verification Standards

CCV (1) QCBatch: QC13876

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.100	100	85 - 115	9/6/01
Benzene		mg/L	0.10	0.096	96	85 - 115	9/6/01

Continued ...

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		mg/L	0.10	0.090	90	85 - 115	9/6/01
Ethylbenzene		mg/L	0.10	0.093	93	85 - 115	9/6/01
M,P,O-Xylene		mg/L	0.30	0.277	92	85 - 115	9/6/01

CCV (2) QCBatch: QC13876

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.099	99	85 - 115	9/6/01
Benzene		mg/L	0.10	0.104	104	85 - 115	9/6/01
Toluene		mg/L	0.10	0.111	111	85 - 115	9/6/01
Ethylbenzene		mg/L	0.10	0.109	109	85 - 115	9/6/01
M,P,O-Xylene		mg/L	0.30	0.319	106	85 - 115	9/6/01

ICV (1) QCBatch: QC13876

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.109	109	85 - 115	9/6/01
Benzene		mg/L	0.10	0.104	104	85 - 115	9/6/01
Toluene		mg/L	0.10	0.100	100	85 - 115	9/6/01
Ethylbenzene		mg/L	0.10	0.102	102	85 - 115	9/6/01
M,P,O-Xylene		mg/L	0.30	0.302	101	85 - 115	9/6/01

TraceAnalysis, Inc.

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

Consulting Company Name:

H₂A ENVIRONMENTAL

Consulting Company Address:

418 SAN SABA, PORTLAND, TX.

Consulting Contact:

Theresa Nix

Location/SAP:

Evilor LLC

Location Address:

3 mi. South of Tol. Nar.

Consultant Job#:

106.001

二

Jak STA. H1-VAC

Sampler Signature:

Don Deen

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Room 1-101

Submission of samples constitutes agreement to Terms and Conditions listed on reverse side of COC

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ANALYSIS REQUEST (Circle or Specify Method No.)		REMARKS:	
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			

LAB USE ONLY

Intact Y N

Headspace Y N

Temp 3 °

Log-In Review MA

Carrier # Bus 9022288188

Report Date: September 11, 2001 Order Number: A01091007
106.001 Jal Station

Page Number: 1 of 1
Jal,NM

Summary Report

Theresa Nix
H2A Environmental LTD
418 San Saba
Portland, Tx. 78374

Report Date: September 11, 2001

Order ID Number: A01091007

Project Number: 106.001
Project Name: Jal Station
Project Location: Jal,NM

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
178892	Effluent	Water	9/7/01	7:55	9/8/01

This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample - Field Code	BTEX				
	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
178892 - Effluent	<0.001	<0.001	<0.001	<0.001	<0.001

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
155 McCutcheon, Suite H

Lubbock, Texas 79424
El Paso, Texas 79932

800•378•1296
888•588•3443

806•794•1296
915•585•3443

FAX 806•794•1298
FAX 915•585•4944

E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Theresa Nix
H2A Environmental LTD
418 San Saba
Portland, Tx. 78374

Report Date: September 11, 2001

Order ID Number: A01091007

Project Number: 106.001
Project Name: Jal Station
Project Location: Jal, NM

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
178892	Effluent	Water	9/7/01	7:55	9/8/01

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 including the chain of custody (COC), without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director

Analytical Report

Sample: 178892 - Effluent

Analysis: BTEX Analytical Method: E 602 QC Batch: QC13896 Date Analyzed: 9/10/01
Analyst: CG Preparation Method: N/A Prep Batch: PB11854 Date Prepared: 9/10/01

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		0.104	mg/L	1	0.10	104	72 - 128
4-BFB		0.089	mg/L	1	0.10	89	72 - 128

Quality Control Report Method Blank

Method Blank QCBatch: QC13896

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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.102	mg/L	1	0.10	102	72 - 128
4-BFB		0.085	mg/L	1	0.10	85	72 - 128

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC13896

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.095	0.096	mg/L	1	0.10	<0.001	95	1	80 - 120	20
Benzene	0.098	0.099	mg/L	1	0.10	<0.001	98	1	80 - 120	20
Toluene	0.092	0.094	mg/L	1	0.10	<0.001	92	2	80 - 120	20
Ethylbenzene	0.092	0.095	mg/L	1	0.10	<0.001	92	3	80 - 120	20
M,P,O-Xylene	0.273	0.278	mg/L	1	0.30	<0.001	91	2	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.099	0.096	mg/L	1	0.10	99	96	72 - 128
4-BFB	0.091	0.089	mg/L	1	0.10	91	89	72 - 128

Quality Control Report Continuing Calibration Verification Standards

CCV (1) QCBatch: QC13896

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.102	102	85 - 115	9/10/01
Benzene		mg/L	0.10	0.102	102	85 - 115	9/10/01

Continued ...

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		mg/L	0.10	0.102	102	85 - 115	9/10/01
Ethylbenzene		mg/L	0.10	0.101	101	85 - 115	9/10/01
M,P,O-Xylene		mg/L	0.30	0.294	98	85 - 115	9/10/01

CCV (2)

QCBatch: QC13896

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.107	107	85 - 115	9/10/01
Benzene		mg/L	0.10	0.105	105	85 - 115	9/10/01
Toluene		mg/L	0.10	0.105	105	85 - 115	9/10/01
Ethylbenzene		mg/L	0.10	0.103	103	85 - 115	9/10/01
M,P,O-Xylene		mg/L	0.30	0.303	101	85 - 115	9/10/01

ICV (1)

QCBatch: QC13896

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.099	99	85 - 115	9/10/01
Benzene		mg/L	0.10	0.103	103	85 - 115	9/10/01
Toluene		mg/L	0.10	0.098	98	85 - 115	9/10/01
Ethylbenzene		mg/L	0.10	0.099	99	85 - 115	9/10/01
M,P,O-Xylene		mg/L	0.30	0.291	97	85 - 115	9/10/01

TraceAnalysis, Inc.

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

Consulting Company Name:

H₂A ENVIRONMENTAL

Consulting Company Address:

418 SAN SABA, PORTLAND, TX 361-777-0971

Consulting Contact:

Theresa Nix

[illegible]

377 377

Location Address:

Mr. South of JAL, KM

Consultant Job#:

106.001

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Relinquished by: _____ Date: _____ Time: _____

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # FO1991007

ANALYSIS REQUEST

(Circle or Specify Method No.)

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LAB USE ONLY

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Headspace Y/N

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Carrier # Bc- 163 506 6395

REMARKS:

☐ Check if special reporting limits needed.

verbals 9/11

ORIGINAL COPY

Report Date: September 14, 2001 Order Number: A01083005
106.001 Jal StationPage Number: 1 of 4
Jal,NM

Summary Report

Theresa Nix
H2A Environmental LTD
418 San Saba
Portland, Tx. 78374

Report Date: September 14, 2001

Order ID Number: A01083005

Project Number: 106.001
Project Name: Jal Station
Project Location: Jal,NM

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
178284	Effluent	Water	8/29/01	9:50	8/30/01

This report consists of a total of 4 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample: 178284 - Effluent

Param	Flag	Result	Units
Bromochloromethane		<1.00	µg/L
Dichlorodifluoromethane		<1.00	µg/L
Chloromethane (methyl chloride)		1.12	µg/L
Vinyl Chloride		<1.00	µg/L
Bromomethane (methyl bromide)		<5.00	µg/L
Chloroethane		<1.00	µg/L
Trichlorofluoromethane		<1.00	µg/L
Acetone		<10.0	µg/L
Iodomethane (methyl iodide)		<5.00	µg/L
Carbon Disulfide		<1.00	µg/L
Acrylonitrile		<1.00	µg/L
2-Butanone (MEK)		<5.00	µg/L
4-methyl-2-pentanone (MIBK)		<5.00	µg/L
2-hexanone		<5.00	µg/L
trans 1,4-Dichloro-2-butene		<10.0	µg/L
1,1-Dichloroethene		<1.00	µg/L
Methylene chloride		<5.00	µg/L
MTBE		<1.00	µg/L
trans-1,2-Dichloroethene		<1.00	µg/L
1,1-Dichloroethane		<1.00	µg/L
cis-1,2-Dichloroethene		<1.00	µg/L
2,2-Dichloropropane		<1.00	µg/L
1,2-Dichloroethane (EDC)		<1.00	µg/L
Chloroform		<1.00	µg/L
1,1,1-Trichloroethane		<1.00	µg/L
1,1-Dichloropropene		<1.00	µg/L
Benzene		<1.00	µg/L
Carbon Tetrachloride		<1.00	µg/L
1,2-Dichloropropane		<1.00	µg/L
Trichloroethene (TCE)		<1.00	µg/L
Dibromomethane (methylene bromide)		<1.00	µg/L
Bromodichloromethane		<1.00	µg/L

Continued on next page ...

Report Date: September 14, 2001 Order Number: A01083005

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106.001

Jal Station

Jal,NM

Sample 178284 continued ...

Param	Flag	Result	Units
2-Chloroethyl vinyl ether		<5.00	µg/L
cis-1,3-Dichloropropene		<1.00	µg/L
trans-1,3-Dichloropropene		<1.00	µg/L
Toluene		<1.00	µg/L
1,1,2-Trichloroethane		<1.00	µg/L
1,3-Dichloropropane		<1.00	µg/L
Dibromochloromethane		<1.00	µg/L
1,2-Dibromoethane (EDB)		<1.00	µg/L
Tetrachloroethene (PCE)		<1.00	µg/L
Chlorobenzene		<1.00	µg/L
1,1,1,2-Tetrachloroethane		<1.00	µg/L
Ethylbenzene		<1.00	µg/L
m,p-Xylene		<1.00	µg/L
Bromoform		<1.00	µg/L
Styrene		<1.00	µg/L
o-Xylene		<1.00	µg/L
1,1,2,2-Tetrachloroethane		<1.00	µg/L
2-Chlorotoluene		<1.00	µg/L
1,2,3-Trichloropropane		<1.00	µg/L
Isopropylbenzene		<1.00	µg/L
Bromobenzene		<1.00	µg/L
n-Propylbenzene		<1.00	µg/L
1,3,5-Trimethylbenzene		<1.00	µg/L
tert-Butylbenzene		<1.00	µg/L
1,2,4-Trimethylbenzene		<1.00	µg/L
1,4-Dichlorobenzene (para)		<1.00	µg/L
sec-Butylbenzene		<1.00	µg/L
1,3-Dichlorobenzene		<1.00	µg/L
p-Isopropyltoluene		<1.00	µg/L
4-Chlorotoluene		<1.00	µg/L
1,2-Dichlorobenzene (ortho)		<1.00	µg/L
n-Butylbenzene		<1.00	µg/L
1,2-Dibromo-3-chloropropane		<2.00	µg/L
1,2,3-Trichlorobenzene		<5.00	µg/L
1,2,4-Trichlorobenzene		<5.00	µg/L
Naphthalene		<5.00	µg/L
Hexachlorobutadiene		<5.00	µg/L
Pyridine		<0.005	mg/L
n-Nitrosodimethylamine		<0.005	mg/L
2-Picoline		<0.005	mg/L
Methyl methanesulfonate		<0.005	mg/L
Ethyl methanesulfonate		<0.005	mg/L
Phenol		<0.005	mg/L
Aniline		<0.005	mg/L
bis (2-chloroethyl) ether		<0.005	mg/L
2-Chlorophenol		<0.005	mg/L
1,3-Dichlorobenzene		<0.005	mg/L
1,4-Dichlorobenzene		<0.005	mg/L
Benzyl alcohol		<0.005	mg/L
1,2-Dichlorobenzene		<0.005	mg/L
2-Methylphenol		<0.005	mg/L
bis (2-chloroisopropyl) ether		<0.005	mg/L
4-Methylphenol/3-Methylphenol		<0.005	mg/L

Continued on next page ...

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106.001

Jal Station

Jal,NM

Sample 178284 continued ...

Param	Flag	Result	Units
Acetophenone		<0.005	mg/L
n-Nitrosodi-n-propylamine		<0.005	mg/L
Hexachloroethane		<0.005	mg/L
Nitrobenzene		<0.005	mg/L
n-Nitrosopiperidine		<0.005	mg/L
Isophorone		<0.005	mg/L
2-Nitrophenol		<0.005	mg/L
2,4-Dimethylphenol		<0.005	mg/L
bis (2-chloroethoxy) methane		<0.005	mg/L
Benzoic acid		<0.005	mg/L
2,4-Dichlorophenol		<0.005	mg/L
1,2,4-Trichlorobenzene		<0.005	mg/L
a,a-Dimethylphenethylamine		<0.005	mg/L
Naphthalene		<0.005	mg/L
4-Chloroaniline		<0.005	mg/L
2,6-Dichlorophenol		<0.005	mg/L
Hexachlorobutadiene		<0.005	mg/L
n-Nitroso-di-n-butylamine		<0.005	mg/L
4-Chloro-3-methylphenol		<0.005	mg/L
1-Methylnaphthalene		<0.005	mg/L
2-Methylnaphthalene		<0.005	mg/L
1,2,4,5-Tetrachlorobenzene		<0.005	mg/L
Hexachlorocyclopentadiene		<0.005	mg/L
2,4,6-Trichlorophenol		<0.005	mg/L
2,4,5-Trichlorophenol		<0.005	mg/L
2-Chloronaphthalene		<0.005	mg/L
1-Chloronaphthalene		<0.005	mg/L
2-Nitroaniline		<0.005	mg/L
Dimethylphthalate		<0.005	mg/L
Acenaphthylene		<0.005	mg/L
2,6-Dinitrotoluene		<0.005	mg/L
3-Nitroaniline		<0.005	mg/L
Acenaphthene		<0.005	mg/L
2,4-Dinitrophenol		<0.005	mg/L
Dibenzofuran		<0.005	mg/L
Pentachlorobenzene		<0.005	mg/L
4-Nitrophenol		<0.005	mg/L
1-Naphthylamine		<0.005	mg/L
2,4-Dinitrotoluene		<0.005	mg/L
2-Naphthylamine		<0.005	mg/L
2,3,4,6-Tetrachlorophenol		<0.005	mg/L
Fluorene		<0.005	mg/L
Diethylphthalate		<0.005	mg/L
4-Chlorophenyl-phenylether		<0.005	mg/L
4-Nitroaniline		<0.005	mg/L
4,6-Dinitro-2-methylphenol		<0.005	mg/L
Diphenylamine		<0.005	mg/L
Diphenylhydrazine		<0.005	mg/L
4-Bromophenyl-phenylether		<0.005	mg/L
Phenacetin		<0.005	mg/L
Hexachlorobenzene		<0.005	mg/L
4-Aminobiphenyl		<0.005	mg/L
Pentachlorophenol		<0.005	mg/L

Continued on next page ...

Report Date: September 14, 2001 Order Number: A01083005

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106.001

Jal Station

Jal,NM

Sample 178284 continued ...

Param	Flag	Result	Units
Pentachloronitrobenzene		<0.005	mg/L
Pronamide		<0.005	mg/L
Phenanthrene		<0.005	mg/L
Anthracene		<0.005	mg/L
Di-n-butylphthalate		<0.005	mg/L
Fluoranthene		<0.005	mg/L
Benzidine		<0.005	mg/L
Pyrene		<0.005	mg/L
p-Dimethylaminoazobenzene		<0.005	mg/L
Butylbenzylphthalate		<0.005	mg/L
Benzo(a)anthracene		<0.005	mg/L
3,3-Dichlorobenzidine		<0.005	mg/L
Chrysene		<0.005	mg/L
Bis (2-ethylhexyl) phthalate		<0.005	mg/L
Di-n-octylphthalate		<0.005	mg/L
Benzo(b)fluoranthene		<0.005	mg/L
7,12-Dimethylbenz(a)anthracene		<0.005	mg/L
Benzo(k)fluoranthene		<0.005	mg/L
Benzo(a)pyrene		<0.005	mg/L
3-Methylcholanthrene		<0.005	mg/L
Dibenzo(a,j)acridine		<0.005	mg/L
Indeno(1,2,3-cd)pyrene		<0.005	mg/L
Dibenzo(a,h)anthracene		<0.005	mg/L
Benzo(g,h,i)perylene		<0.005	mg/L
Total Mercury		<0.0002	mg/L
CL		168	mg/L
Fluoride		3.12	mg/L
Nitrate-N		2.90	mg/L
Sulfate	1	366	mg/L
Total Dissolved Solids		1160	mg/L
Total Cyanide		<0.01	mg/L
Total Aluminum		0.634	mg/L
Total Arsenic		0.11	mg/L
Total Barium		<0.100	mg/L
Total Boron		0.314	mg/L
Total Cadmium		<0.025	mg/L
Total Chromium		<0.010	mg/L
Total Cobalt		<0.025	mg/L
Total Copper		<0.013	mg/L
Total Iron		<0.050	mg/L
Total Lead		<0.010	mg/L
Total Manganese		0.410	mg/L
Total Molybdenum		<0.050	mg/L
Total Nickel		<0.025	mg/L
Total Selenium		<0.050	mg/L
Total Silver		<0.013	mg/L
Total Zinc		<0.025	mg/L
pH	2	7.9	s.u.

¹Re-Run on 9/11/2001. ICV = 96, CCV = 97, LCS = 96, RPD = 1.²out of holding time

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Analytical and Quality Control Report

Theresa Nix
H2A Environmental LTD
418 San Saba
Portland, Tx. 78374

Report Date: September 14, 2001

Order ID Number: A01083005

Project Number: 106.001
Project Name: Jal Station
Project Location: Jal, NM

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
178284	Effluent	Water	8/29/01	9:50	8/30/01

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 18 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director

Analytical Report

Sample: 178284 - Effluent

Analysis: 8260 Analytical Method: S 8260B QC Batch: QC13909 Date Analyzed: 9/7/01
Analyst: JG Preparation Method: E 5030B Prep Batch: PB11866 Date Prepared: 9/7/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		1.12	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<5.00	µg/L	1	5
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		<1.00	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-Dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		<1.00	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		<1.00	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		<1.00	µg/L	1	1
m,p-Xylene		<1.00	µg/L	1	1
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1

Continued ...

... Continued Sample: 178284 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		<1.00	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		<1.00	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<2.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<5.00	µg/L	1	5
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		99	µg/L	1	100	99	88 - 112
Toluene-d8		100	µg/L	1	100	100	90 - 109
4-Bromofluorobenzene		96	µg/L	1	100	96	84 - 103

Sample: 178284 - Effluent

Analysis: 8270 Analytical Method: S 8270C QC Batch: QC13931 Date Analyzed: 9/6/01
Analyst: RC Preparation Method: E 3510C Prep Batch: PB11886 Date Prepared: 9/5/01

Param	Flag	Result	Units	Dilution	RDL
Pyridine		<0.005	mg/L	1	0.005
n-Nitrosodimethylamine		<0.005	mg/L	1	0.005
2-Picoline		<0.005	mg/L	1	0.005
Methyl methanesulfonate		<0.005	mg/L	1	0.005
Ethyl methanesulfonate		<0.005	mg/L	1	0.005
Phenol		<0.005	mg/L	1	0.005
Aniline		<0.005	mg/L	1	0.005
bis (2-chloroethyl) ether		<0.005	mg/L	1	0.005
2-Chlorophenol		<0.005	mg/L	1	0.005
1,3-Dichlorobenzene		<0.005	mg/L	1	0.005
1,4-Dichlorobenzene		<0.005	mg/L	1	0.005
Benzyl alcohol		<0.005	mg/L	1	0.005
1,2-Dichlorobenzene		<0.005	mg/L	1	0.005
2-Methylphenol		<0.005	mg/L	1	0.005
bis (2-chloroisopropyl) ether		<0.005	mg/L	1	0.005
4-Methylphenol/3-Methylphenol		<0.005	mg/L	1	0.005
Acetophenone		<0.005	mg/L	1	0.005
n-Nitrosodi-n-propylamine		<0.005	mg/L	1	0.005

Continued ...

... Continued Sample: 178284 Analysis: 8270

Param	Flag	Result	Units	Dilution	RDL
Hexachloroethane		<0.005	mg/L	1	0.005
Nitrobenzene		<0.005	mg/L	1	0.005
n-Nitrosopiperidine		<0.005	mg/L	1	0.005
Isophorone		<0.005	mg/L	1	0.005
2-Nitrophenol		<0.005	mg/L	1	0.005
2,4-Dimethylphenol		<0.005	mg/L	1	0.005
bis (2-chloroethoxy) methane		<0.005	mg/L	1	0.005
Benzoic acid		<0.005	mg/L	1	0.005
2,4-Dichlorophenol		<0.005	mg/L	1	0.005
1,2,4-Trichlorobenzene		<0.005	mg/L	1	0.005
a,a-Dimethylphenethylamine		<0.005	mg/L	1	0.005
Naphthalene		<0.005	mg/L	1	0.005
4-Chloroaniline		<0.005	mg/L	1	0.005
2,6-Dichlorophenol		<0.005	mg/L	1	0.005
Hexachlorobutadiene		<0.005	mg/L	1	0.005
n-Nitroso-di-n-butylamine		<0.005	mg/L	1	0.005
4-Chloro-3-methylphenol		<0.005	mg/L	1	0.005
1-Methylnaphthalene		<0.005	mg/L	1	0.005
2-Methylnaphthalene		<0.005	mg/L	1	0.005
1,2,4,5-Tetrachlorobenzene		<0.005	mg/L	1	0.005
Hexachlorocyclopentadiene		<0.005	mg/L	1	0.005
2,4,6-Trichlorophenol		<0.005	mg/L	1	0.005
2,4,5-Trichlorophenol		<0.005	mg/L	1	0.005
2-Chloronaphthalene		<0.005	mg/L	1	0.005
1-Chloronaphthalene		<0.005	mg/L	1	0.005
2-Nitroaniline		<0.005	mg/L	1	0.005
Dimethylphthalate		<0.005	mg/L	1	0.005
Acenaphthylene		<0.005	mg/L	1	0.005
2,6-Dinitrotoluene		<0.005	mg/L	1	0.005
3-Nitroaniline		<0.005	mg/L	1	0.005
Acenaphthene		<0.005	mg/L	1	0.005
2,4-Dinitrophenol		<0.005	mg/L	1	0.005
Dibenzofuran		<0.005	mg/L	1	0.005
Pentachlorobenzene		<0.005	mg/L	1	0.005
4-Nitrophenol		<0.005	mg/L	1	0.005
1-Naphthylamine		<0.005	mg/L	1	0.005
2,4-Dinitrotoluene		<0.005	mg/L	1	0.005
2-Naphthylamine		<0.005	mg/L	1	0.005
2,3,4,6-Tetrachlorophenol		<0.005	mg/L	1	0.005
Fluorene		<0.005	mg/L	1	0.005
Diethylphthalate		<0.005	mg/L	1	0.005
4-Chlorophenyl-phenylether		<0.005	mg/L	1	0.005
4-Nitroaniline		<0.005	mg/L	1	0.005
4,6-Dinitro-2-methylphenol		<0.005	mg/L	1	0.005
Diphenylamine		<0.005	mg/L	1	0.005
Diphenylhydrazine		<0.005	mg/L	1	0.005
4-Bromophenyl-phenylether		<0.005	mg/L	1	0.005
Phenacetin		<0.005	mg/L	1	0.005
Hexachlorobenzene		<0.005	mg/L	1	0.005
4-Aminobiphenyl		<0.005	mg/L	1	0.005
Pentachlorophenol		<0.005	mg/L	1	0.005
Pentachloronitrobenzene		<0.005	mg/L	1	0.005
Pronamide		<0.005	mg/L	1	0.005
Phenanthrene		<0.005	mg/L	1	0.005

Continued ...

... Continued Sample: 178284 Analysis: 8270

Param	Flag	Result	Units	Dilution	RDL
Anthracene		<0.005	mg/L	1	0.005
Di-n-butylphthalate		<0.005	mg/L	1	0.005
Fluoranthene		<0.005	mg/L	1	0.005
Benzidine		<0.005	mg/L	1	0.005
Pyrene		<0.005	mg/L	1	0.005
p-Dimethylaminoazobenzene		<0.005	mg/L	1	0.005
Butylbenzylphthalate		<0.005	mg/L	1	0.005
Benzo(a)anthracene		<0.005	mg/L	1	0.005
3,3-Dichlorobenzidine		<0.005	mg/L	1	0.005
Chrysene		<0.005	mg/L	1	0.005
Bis (2-ethylhexyl) phthalate		<0.005	mg/L	1	0.005
Di-n-octylphthalate		<0.005	mg/L	1	0.005
Benzo(b)fluoranthene		<0.005	mg/L	1	0.005
7,12-Dimethylbenz(a)anthracene		<0.005	mg/L	1	0.005
Benzo(k)fluoranthene		<0.005	mg/L	1	0.005
Benzo(a)pyrene		<0.005	mg/L	1	0.005
3-Methylcholanthrene		<0.005	mg/L	1	0.005
Dibenzo(a,j)acridine		<0.005	mg/L	1	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	1	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	1	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	1	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		27.41	mg/L	1	80	34	21 - 100
Phenol-d5		15.99	mg/L	1	80	19	11 - 94
Nitrobenzene-d5		72.28	mg/L	1	80	90	35 - 114
2-Fluorobiphenyl		75.13	mg/L	1	80	93	43 - 116
2,4,6-Tribromophenol		71.76	mg/L	1	80	89	10 - 123
Terphenyl-d14		71.31	mg/L	1	80	89	33 - 141

Sample: 178284 - Effluent

Analysis: Hg, Total Analytical Method: E 245.2 QC Batch: QC13979 Date Analyzed: 9/13/01
Analyst: BC Preparation Method: N/A Prep Batch: PB11917 Date Prepared: 9/13/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 178284 - Effluent

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC13985 Date Analyzed: 8/30/01
Analyst: RS Preparation Method: N/A Prep Batch: PB11930 Date Prepared: 8/30/01

Param	Flag	Result	Units	Dilution	RDL
CL		168	mg/L	1	2
Fluoride		3.12	mg/L	1	0.20
Nitrate-N		2.90	mg/L	1	0.20
Sulfate	1	366	mg/L	1	2

¹ Re-Run on 9/11/2001. ICV = 96, CCV = 97, LCS = 96, RPD = 1.

Sample: 178284 - Effluent

Analysis: TDS Analytical Method: E 160.1 QC Batch: QC13885 Date Analyzed: 9/5/01
Analyst: RS Preparation Method: N/A Prep Batch: PB11841 Date Prepared: 9/4/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		1160	mg/L	2	10

Sample: 178284 - Effluent

Analysis: Total Cyanide Analytical Method: SM 4500-CN C,E QC Batch: QC13865 Date Analyzed: 9/7/01
Analyst: JSW Preparation Method: N/A Prep Batch: PB11825 Date Prepared: 9/6/01

Param	Flag	Result	Units	Dilution	RDL
Total Cyanide		<0.01	mg/L	1	0.01

Sample: 178284 - Effluent

Analysis: Total Metals Analytical Method: E 200.7 QC Batch: QC13860 Date Analyzed: 9/6/01
Analyst: RR Preparation Method: N/A Prep Batch: PB11707 Date Prepared: 8/31/01

Param	Flag	Result	Units	Dilution	RDL
Total Aluminum		0.634	mg/L	10	0.01
Total Arsenic		0.11	mg/L	10	0.01
Total Barium		<0.100	mg/L	1	0.10
Total Boron		0.314	mg/L	10	0.01
Total Cadmium		<0.025	mg/L	1	0.02
Total Chromium		<0.010	mg/L	1	0.01
Total Cobalt		<0.025	mg/L	1	0.02
Total Copper		<0.013	mg/L	1	0.01
Total Iron		<0.050	mg/L	1	0.05
Total Lead		<0.010	mg/L	1	0.01
Total Manganese		0.410	mg/L	1	0.02
Total Molybdenum		<0.050	mg/L	1	0.05
Total Nickel		<0.025	mg/L	1	0.02
Total Selenium		<0.050	mg/L	1	0.05
Total Silver		<0.013	mg/L	1	0.01
Total Zinc		<0.025	mg/L	1	0.02

Sample: 178284 - Effluent

Analysis: pH Analytical Method: E 150.1 QC Batch: QC13782 Date Analyzed: 8/30/01
Analyst: JSW Preparation Method: N/A Prep Batch: PB11764 Date Prepared: 8/30/01

Param	Flag	Result	Units	Dilution	RDL
pH	2	7.9	s.u.	1	1

Quality Control Report Method Blank

Method Blank QCBatch: QC13860

Param	Flag	Results	Units	Reporting Limit
Total Aluminum		<0.100	mg/L	0.10
Total Arsenic		<0.050	mg/L	0.05
Total Barium		<0.100	mg/L	0.10
Total Boron		<0.010	mg/L	0.01
Total Cadmium		<0.025	mg/L	0.02
Total Chromium		<0.010	mg/L	0.01
Total Cobalt		<0.025	mg/L	0.02
Total Copper		<0.013	mg/L	0.01
Total Iron		<0.050	mg/L	0.05
Total Lead		<0.010	mg/L	0.01
Total Manganese		<0.025	mg/L	0.02
Total Molybdenum		<0.050	mg/L	0.05
Total Nickel		<0.025	mg/L	0.02
Total Selenium		<0.050	mg/L	0.05
Total Silver		<0.013	mg/L	0.01
Total Zinc		<0.025	mg/L	0.02

Method Blank QCBatch: QC13865

Param	Flag	Results	Units	Reporting Limit
Total Cyanide		<0.01	mg/L	0.01

Method Blank QCBatch: QC13885

Param	Flag	Results	Units	Reporting Limit
Total Dissolved Solids		<10	mg/L	10

Method Blank QCBatch: QC13909

Param	Flag	Results	Units	Reporting Limit
Bromochloromethane		<1.00	µg/L	1
Dichlorodifluoromethane		<1.00	µg/L	1
Chloromethane (methyl chloride)		<1.00	µg/L	1
Vinyl Chloride		<1.00	µg/L	1
Bromomethane (methyl bromide)		<5.00	µg/L	5
Chloroethane		<1.00	µg/L	1
Trichlorofluoromethane		<1.00	µg/L	1
Acetone		<10.0	µg/L	10

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Param	Flag	Results	Units	Reporting Limit
Iodomethane (methyl iodide)		<5.00	µg/L	5
Carbon Disulfide		<1.00	µg/L	1
Acrylonitrile		<1.00	µg/L	1
2-Butanone (MEK)		<5.00	µg/L	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	5
2-hexanone		<5.00	µg/L	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	10
1,1-Dichloroethene		<1.00	µg/L	1
Methylene chloride		<5.00	µg/L	5
MTBE		<1.00	µg/L	1
trans-1,2-Dichloroethene		<1.00	µg/L	1
1,1-Dichloroethane		<1.00	µg/L	1
cis-1,2-Dichloroethene		<1.00	µg/L	1
2,2-Dichloropropane		<1.00	µg/L	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1
Chloroform		<1.00	µg/L	1
1,1,1-Trichloroethane		<1.00	µg/L	1
1,1-Dichloropropene		<1.00	µg/L	1
Benzene		<1.00	µg/L	1
Carbon Tetrachloride		<1.00	µg/L	1
1,2-Dichloropropane		<1.00	µg/L	1
Trichloroethene (TCE)		<1.00	µg/L	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1
Bromodichloromethane		<1.00	µg/L	1
2-Chloroethyl vinyl ether		<5.00	µg/L	5
cis-1,3-Dichloropropene		<1.00	µg/L	1
trans-1,3-Dichloropropene		<1.00	µg/L	1
Toluene		<1.00	µg/L	1
1,1,2-Trichloroethane		<1.00	µg/L	1
1,3-Dichloropropane		<1.00	µg/L	1
Dibromochloromethane		<1.00	µg/L	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1
Tetrachloroethene (PCE)		<1.00	µg/L	1
Chlorobenzene		<1.00	µg/L	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1
Ethylbenzene		<1.00	µg/L	1
m,p-Xylene		<1.00	µg/L	1
Bromoform		<1.00	µg/L	1
Styrene		<1.00	µg/L	1
o-Xylene		<1.00	µg/L	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1
2-Chlorotoluene		<1.00	µg/L	1
1,2,3-Trichloropropane		<1.00	µg/L	1
Isopropylbenzene		<1.00	µg/L	1
Bromobenzene		<1.00	µg/L	1
n-Propylbenzene		<1.00	µg/L	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1
tert-Butylbenzene		<1.00	µg/L	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1
sec-Butylbenzene		<1.00	µg/L	1
1,3-Dichlorobenzene		<1.00	µg/L	1
p-Isopropyltoluene		<1.00	µg/L	1

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Param	Flag	Results	Units	Reporting Limit
4-Chlorotoluene		<1.00	µg/L	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1
n-Butylbenzene		<1.00	µg/L	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	5
1,2,3-Trichlorobenzene		<5.00	µg/L	5
1,2,4-Trichlorobenzene		<5.00	µg/L	5
Naphthalene		<5.00	µg/L	5
Hexachlorobutadiene		<5.00	µg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		100	µg/L	1	50	200	88 - 112
Toluene-d8		100	µg/L	1	50	200	90 - 109
4-Bromofluorobenzene		97	µg/L	1	50	194	84 - 103

Method Blank

QCBatch: QC13931

Param	Flag	Results	Units	Reporting Limit
Pyridine		<0.005	mg/L	0.005
n-Nitrosodimethylamine		<0.005	mg/L	0.005
2-Picoline		<0.005	mg/L	0.005
Methyl methanesulfonate		<0.005	mg/L	0.005
Ethyl methanesulfonate		<0.005	mg/L	0.005
Phenol		<0.005	mg/L	0.005
Aniline		<0.005	mg/L	0.005
bis (2-chloroethyl) ether		<0.005	mg/L	0.005
2-Chlorophenol		<0.005	mg/L	0.005
1,3-Dichlorobenzene		<0.005	mg/L	0.005
1,4-Dichlorobenzene		<0.005	mg/L	0.005
Benzyl alcohol		<0.005	mg/L	0.005
1,2-Dichlorobenzene		<0.005	mg/L	0.005
2-Methylphenol		<0.005	mg/L	0.005
bis (2-chloroisopropyl) ether		<0.005	mg/L	0.005
4-Methylphenol/3-Methylphenol		<0.005	mg/L	0.005
Acetophenone		<0.005	mg/L	0.005
n-Nitrosodi-n-propylamine		<0.005	mg/L	0.005
Hexachloroethane		<0.005	mg/L	0.005
Nitrobenzene		<0.005	mg/L	0.005
n-Nitrosopiperidine		<0.005	mg/L	0.005
Isophorone		<0.005	mg/L	0.005
2-Nitrophenol		<0.005	mg/L	0.005
2,4-Dimethylphenol		<0.005	mg/L	0.005
bis (2-chloroethoxy) methane		<0.005	mg/L	0.005
Benzoic acid		<0.005	mg/L	0.005
2,4-Dichlorophenol		<0.005	mg/L	0.005
1,2,4-Trichlorobenzene		<0.005	mg/L	0.005
a,a-Dimethylphenethylamine		<0.005	mg/L	0.005
Naphthalene		<0.005	mg/L	0.005
4-Chloroaniline		<0.005	mg/L	0.005

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Param	Flag	Results	Units	Reporting Limit
2,6-Dichlorophenol		<0.005	mg/L	0.005
Hexachlorobutadiene		<0.005	mg/L	0.005
n-Nitroso-di-n-butylamine		<0.005	mg/L	0.005
4-Chloro-3-methylphenol		<0.005	mg/L	0.005
1-Methylnaphthalene		<0.005	mg/L	0.005
2-Methylnaphthalene		<0.005	mg/L	0.005
1,2,4,5-Tetrachlorobenzene		<0.005	mg/L	0.005
Hexachlorocyclopentadiene		<0.005	mg/L	0.005
2,4,6-Trichlorophenol		<0.005	mg/L	0.005
2,4,5-Trichlorophenol		<0.005	mg/L	0.005
2-Chloronaphthalene		<0.005	mg/L	0.005
1-Chloronaphthalene		<0.005	mg/L	0.005
2-Nitroaniline		<0.005	mg/L	0.005
Dimethylphthalate		<0.005	mg/L	0.005
Acenaphthylene		<0.005	mg/L	0.005
2,6-Dinitrotoluene		<0.005	mg/L	0.005
3-Nitroaniline		<0.005	mg/L	0.005
Acenaphthene		<0.005	mg/L	0.005
2,4-Dinitrophenol		<0.005	mg/L	0.005
Dibenzofuran		<0.005	mg/L	0.005
Pentachlorobenzene		<0.005	mg/L	0.005
4-Nitrophenol		<0.005	mg/L	0.005
1-Naphthylamine		<0.005	mg/L	0.005
2,4-Dinitrotoluene		<0.005	mg/L	0.005
2-Naphthylamine		<0.005	mg/L	0.005
2,3,4,6-Tetrachlorophenol		<0.005	mg/L	0.005
Fluorene		<0.005	mg/L	0.005
Diethylphthalate		<0.005	mg/L	0.005
4-Chlorophenyl-phenylether		<0.005	mg/L	0.005
4-Nitroaniline		<0.005	mg/L	0.005
4,6-Dinitro-2-methylphenol		<0.005	mg/L	0.005
Diphenylamine		<0.005	mg/L	0.005
Diphenylhydrazine		<0.005	mg/L	0.005
4-Bromophenyl-phenylether		<0.005	mg/L	0.005
Phenacetin		<0.005	mg/L	0.005
Hexachlorobenzene		<0.005	mg/L	0.005
4-Aminobiphenyl		<0.005	mg/L	0.005
Pentachlorophenol		<0.005	mg/L	0.005
Pentachloronitrobenzene		<0.005	mg/L	0.005
Pronamide		<0.005	mg/L	0.005
Phenanthrene		<0.005	mg/L	0.005
Anthracene		<0.005	mg/L	0.005
Di-n-butylphthalate		<0.005	mg/L	0.005
Fluoranthene		<0.005	mg/L	0.005
Benzidine		<0.005	mg/L	0.005
Pyrene		<0.005	mg/L	0.005
p-Dimethylaminoazobenzene		<0.005	mg/L	0.005
Butylbenzylphthalate		<0.005	mg/L	0.005
Benzo(a)anthracene		<0.005	mg/L	0.005
3,3-Dichlorobenzidine		<0.005	mg/L	0.005
Chrysene		<0.005	mg/L	0.005
Bis (2-ethylhexyl) phthalate		<0.005	mg/L	0.005
Di-n-octylphthalate		<0.005	mg/L	0.005

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Param	Flag	Results	Units	Reporting Limit
Benzo(b)fluoranthene		<0.005	mg/L	0.005
7,12-Dimethylbenz(a)anthracene		<0.005	mg/L	0.005
Benzo(k)fluoranthene		<0.005	mg/L	0.005
Benzo(a)pyrene		<0.005	mg/L	0.005
3-Methylcholanthrene		<0.005	mg/L	0.005
Dibenzo(a,j)acridine		<0.005	mg/L	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		74.58	mg/L	1	80	93	21 - 100
Phenol-d5		78.87	mg/L	1	80	98	11 - 94
Nitrobenzene-d5		80.38	mg/L	1	80	100	35 - 114
2-Fluorobiphenyl		83.23	mg/L	1	80	104	43 - 116
2,4,6-Tribromophenol		76.93	mg/L	1	80	96	10 - 123
Terphenyl-d14		74.35	mg/L	1	80	92	33 - 141

Method Blank QCBatch: QC13979

Param	Flag	Results	Units	Reporting Limit
Total Mercury		<0.0002	mg/L	0.0002

Method Blank QCBatch: QC13985

Param	Flag	Results	Units	Reporting Limit
CL		<2.0	mg/L	2
Fluoride		<0.2	mg/L	0.20
Nitrate-N		<0.2	mg/L	0.20
Sulfate		<2.0	mg/L	2

Quality Control Report Duplicate Samples

Duplicate QCBatch: QC13782

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	³	7.9	7.9	s.u.	1	0	0.99

³out of holding time

Duplicate QCBatch: QC13885

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		3524	3618	mg/L	1	2	8.9

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC13860

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Aluminum	0.892	0.881	mg/L	1	1	<0.100	89	1	75 - 125	20
Total Arsenic	0.500	0.474	mg/L	1	0.50	<0.050	100	5	75 - 125	20
Total Barium	1.010000	0.962	mg/L	1	1	<0.100	101	4	75 - 125	20
Total Boron	0.0482	0.0475	mg/L	1	0.05	<0.010	96	1	75 - 125	20
Total Cadmium	0.248	0.238	mg/L	1	0.25	<0.025	99	4	75 - 125	20
Total Chromium	0.102	0.099	mg/L	1	0.10	<0.010	102	3	75 - 125	20
Total Cobalt	0.254	0.246	mg/L	1	0.25	<0.025	101	3	75 - 125	20
Total Copper	0.131	0.124	mg/L	1	0.12	<0.013	104	5	75 - 125	20
Total Iron	0.514	0.526	mg/L	1	0.50	<0.050	102	2	75 - 125	20
Total Lead	0.499	0.482	mg/L	1	0.50	<0.010	99	3	75 - 125	20
Total Manganese	0.251	0.243	mg/L	1	0.25	<0.025	100	3	75 - 125	20
Total Molybdenum	0.500	0.488	mg/L	1	0.50	<0.050	100	2	75 - 125	20
Total Nickel	0.250	0.243	mg/L	1	0.25	<0.025	100	2	75 - 125	20
Total Selenium	0.459	0.444	mg/L	1	0.50	<0.050	92	3	75 - 125	20
Total Silver	0.124	0.121	mg/L	1	0.12	<0.013	99	2	75 - 125	20
Total Zinc	0.260	0.254	mg/L	1	0.25	<0.025	104	2	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes QCBatch: QC13865

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Cyanide	0.108	0.104	mg/L	1	0.12	<0.01	90	3	64 - 121	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes QCBatch: QC13909

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
1,1-Dichloroethene	98	98	µg/L	1	100	<1.00	98	0	74 - 127	20
Benzene	102	102	µg/L	1	100	<1.00	102	0	89 - 114	20
Trichloroethene (TCE)	94	94	µg/L	1	100	<1.00	94	0	77 - 102	20
Toluene	97	97	µg/L	1	100	<1.00	97	0	87 - 111	20
Chlorobenzene	98	97	µg/L	1	100	<1.00	98	1	87 - 109	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Dibromofluoromethane	99	100	µg/L	1	100	99	100	88 - 112
Toluene-d8	100	100	µg/L	1	100	100	100	90 - 109
4-Bromofluorobenzene	97	98	µg/L	1	100	97	98	84 - 103

Laboratory Control Spikes

QCBatch: QC13931

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Phenol	51.15	46.29	mg/L	1	80	<0.005	63	9	5 - 112	20
2-Chlorophenol	51.03	46.45	mg/L	1	80	<0.005	63	9	23 - 134	20
1,4-Dichlorobenzene	42.55	45.62	mg/L	1	80	<0.005	53	6	20 - 124	20
n-Nitrosodi-n-propylamine	48.03	53.05	mg/L	1	80	<0.005	60	9	0 - 230	20
1,2,4-Trichlorobenzene	44.13	47.81	mg/L	1	80	<0.005	55	8	44 - 142	20
4-Chloro-3-methylphenol	54.41	51.42	mg/L	1	80	<0.005	68	5	22 - 147	20
Acenaphthene	45.61	49.86	mg/L	1	80	<0.005	57	8	47 - 145	20
4-Nitrophenol	28.49	28.56	mg/L	1	80	<0.005	35	0	0 - 132	20
2,4-Dinitrotoluene	47.62	53.9	mg/L	1	80	<0.005	59	12	39 - 139	20
Pentachlorophenol	34.71	36.63	mg/L	1	80	<0.005	43	5	14 - 176	20
Pyrene	42.39	46.39	mg/L	1	80	<0.005	52	9	52 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
2-Fluorophenol	67.85	67.92	mg/L	1	80	84	84	21 - 100
Phenol-d5	75.01	75.18	mg/L	1	80	93	93	11 - 94
Nitrobenzene-d5	71.23	73.57	mg/L	1	80	89	91	35 - 114
2-Fluorobiphenyl	70.28	71.94	mg/L	1	80	87	89	43 - 116
2,4,6-Tribromophenol	74.2	76.68	mg/L	1	80	92	95	10 - 123
Terphenyl-d14	67.47	67.84	mg/L	1	80	84	84	33 - 141

Laboratory Control Spikes

QCBatch: QC13979

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Mercury	0.00115	0.00116	mg/L	1	0.001	<0.0002	115	0	84 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC13985

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Bromide	1.99	2.37	mg/L	1	2.50	<0.2	79	17	90 - 110	20
CL	11.43	11.65	mg/L	1	12.50	<2.0	91	1	90 - 110	20
Fluoride	2.37	2.30	mg/L	1	2.50	<0.2	94	2	90 - 110	20
Nitrate-N	2.31	2.31	mg/L	1	2.50	<0.2	92	0	90 - 110	20
Sulfate	11.61	11.48	mg/L	1	12.50	<2.0	92	1	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report Matrix Spikes and Duplicate Spikes

Matrix Spikes QCBatch: QC13860

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Aluminum	1.680000	1.650000	mg/L	10	1	0.634	104	2	75 - 125	20
Total Arsenic	0.532	< 0.5	mg/L	10	0.50	0.11	84	16	75 - 125	20
Total Barium	0.951	0.955	mg/L	1	1	<0.100	95	0	75 - 125	20
Total Boron	⁴ 0.336	⁵ 0.343	mg/L	10	0.05	0.314	44	27	75 - 125	20
Total Cadmium	0.235	0.235	mg/L	1	0.25	<0.025	94	0	75 - 125	20
Total Chromium	0.0922	0.0941	mg/L	1	0.10	<0.010	92	2	75 - 125	20
Total Cobalt	0.227	0.230	mg/L	1	0.25	<0.025	90	1	75 - 125	20
Total Copper	0.130	0.127	mg/L	1	0.12	<0.013	104	2	75 - 125	20
Total Iron	0.510	0.512	mg/L	1	0.50	<0.050	102	0	75 - 125	20
Total Lead	0.467	0.473	mg/L	1	0.50	<0.010	93	1	75 - 125	20
Total Manganese	0.643	0.645	mg/L	1	0.25	0.410	93	0	75 - 125	20
Total Molybdenum	0.482	0.487	mg/L	1	0.50	<0.050	96	1	75 - 125	20
Total Nickel	0.235	0.242	mg/L	1	0.25	<0.025	94	2	75 - 125	20
Total Selenium	0.481	0.482	mg/L	1	0.50	<0.050	96	0	75 - 125	20
Total Silver	0.119	0.120	mg/L	1	0.12	<0.013	95	0	75 - 125	20
Total Zinc	0.277	0.268	mg/L	1	0.25	<0.025	111	3	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spikes QCBatch: QC13865

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Cyanide	0.105	0.101	mg/L	1	0.12	<0.01	87	3	69 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spikes QCBatch: QC13979

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Mercury	0.00096	0.00101	mg/L	1	0.001	<0.0002	96	5	84 - 127	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report Continuing Calibration Verification Standards

ICV (1) QCBatch: QC13782

⁴Matrix spike recovery invalid due to required dilution. LCS demonstrates process under control.

⁵Matrix spike recovery invalid due to required dilution. LCS demonstrates process under control.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7	7.0	100	-0.1 s.u. - +0.1 s.u.	8/30/01

CCV (1) QCBatch: QC13860

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Aluminum		mg/L	2	1.890000	94	90 - 110	9/6/01
Total Arsenic		mg/L	1	1.020000	102	90 - 110	9/6/01
Total Barium		mg/L	2	1.910000	95	90 - 110	9/6/01
Total Boron		mg/L	0.10	0.101	101	90 - 110	9/6/01
Total Cadmium		mg/L	0.50	0.466	93	90 - 110	9/6/01
Total Chromium		mg/L	0.20	0.190	95	90 - 110	9/6/01
Total Cobalt		mg/L	0.50	0.472	94	90 - 110	9/6/01
Total Copper		mg/L	0.25	0.236	94	90 - 110	9/6/01
Total Iron		mg/L	1	0.953	95	90 - 110	9/6/01
Total Lead		mg/L	1	0.918	91	90 - 110	9/6/01
Total Manganese		mg/L	0.50	0.481	96	90 - 110	9/6/01
Total Molybdenum		mg/L	1	0.925	92	90 - 110	9/6/01
Total Nickel		mg/L	0.50	0.468	93	90 - 110	9/6/01
Total Selenium		mg/L	1	1	100	90 - 110	9/6/01
Total Silver		mg/L	0.25	0.237	94	90 - 110	9/6/01
Total Zinc		mg/L	0.50	0.456	91	90 - 110	9/6/01

ICV (1) QCBatch: QC13860

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Aluminum		mg/L	2	1.940000	97	90 - 110	9/6/01
Total Arsenic		mg/L	1	1.030000	103	90 - 110	9/6/01
Total Barium		mg/L	2	2.010000	100	90 - 110	9/6/01
Total Boron		mg/L	0.10	0.104	104	90 - 110	9/6/01
Total Cadmium		mg/L	0.50	0.500	100	90 - 110	9/6/01
Total Chromium		mg/L	0.20	0.199	100	90 - 110	9/6/01
Total Cobalt		mg/L	0.50	0.502	100	90 - 110	9/6/01
Total Copper		mg/L	0.25	0.250	100	90 - 110	9/6/01
Total Iron		mg/L	1	1.000000	100	90 - 110	9/6/01
Total Lead		mg/L	1	0.991	99	90 - 110	9/6/01
Total Manganese		mg/L	0.50	0.502	100	90 - 110	9/6/01
Total Molybdenum		mg/L	1	0.996	99	90 - 110	9/6/01
Total Nickel		mg/L	0.50	0.495	99	90 - 110	9/6/01
Total Selenium		mg/L	1	0.990	99	90 - 110	9/6/01
Total Silver		mg/L	0.25	0.249	99	90 - 110	9/6/01
Total Zinc		mg/L	0.50	0.500	100	90 - 110	9/6/01

CCV (1) QCBatch: QC13865

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cyanide		mg/L	0.12	0.122	101	85 - 115	9/7/01

ICV (1) QCBatch: QC13865

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cyanide		mg/L	0.12	0.124	103	85 - 115	9/7/01

CCV (1) QCBatch: QC13885

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	989	98	90 - 110	9/5/01

ICV (1) QCBatch: QC13885

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	976	97	90 - 110	9/5/01

CCV (1) QCBatch: QC13909

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	100	99	99	80 - 120	9/7/01
1,1-Dichloroethene		µg/L	100	95	95	80 - 120	9/7/01
Chloroform		µg/L	100	95	95	80 - 120	9/7/01
1,2-Dichloropropane		µg/L	100	99	99	80 - 120	9/7/01
Toluene		µg/L	100	94	94	80 - 120	9/7/01
Chlorobenzene		µg/L	100	95	95	80 - 120	9/7/01
Ethylbenzene		µg/L	100	96	96	80 - 120	9/7/01
Dibromofluoromethane		µg/L	100	98	98	80 - 120	9/7/01
Toluene-d8		µg/L	100	100	100	80 - 120	9/7/01
4-Bromofluorobenzene		µg/L	100	100	100	80 - 120	9/7/01

CCV (1) QCBatch: QC13931

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60	61.07	101	80 - 120	9/6/01
1,4-Dichlorobenzene		mg/L	60	61.94	103	80 - 120	9/6/01
2-Nitrophenol		mg/L	60	61.97	103	80 - 120	9/6/01
2,4-Dichlorophenol		mg/L	60	60.29	100	80 - 120	9/6/01
Hexachlorobutadiene		mg/L	60	64.92	108	80 - 120	9/6/01
4-Chloro-3-methylphenol		mg/L	60	55.65	92	80 - 120	9/6/01
2,4,6-Trichlorophenol		mg/L	60	60.6	101	80 - 120	9/6/01
Acenaphthene		mg/L	60	61.06	101	80 - 120	9/6/01
Diphenylamine		mg/L	60	61.67	102	80 - 120	9/6/01
Pentachlorophenol		mg/L	60	71.65	119	80 - 120	9/6/01
Fluoranthene		mg/L	60	62.96	104	80 - 120	9/6/01
Di-n-octylphthalate		mg/L	60	59.31	98	80 - 120	9/6/01
Benzo(a)pyrene		mg/L	60	59.48	99	80 - 120	9/6/01
2-Fluorophenol		mg/L	60	60.31	100	80 - 120	9/6/01
Phenol-d5		mg/L	60	62.64	104	80 - 120	9/6/01
Nitrobenzene-d5		mg/L	60	61.76	102	80 - 120	9/6/01
2-Fluorobiphenyl		mg/L	60	62.94	104	80 - 120	9/6/01
2,4,6-Tribromophenol		mg/L	60	59.66	99	80 - 120	9/6/01
Terphenyl-d14		mg/L	60	54.69	91	80 - 120	9/6/01

CCV (1)

QCBatch: QC13979

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.001	0.00093	93	80 - 120	9/13/01

ICV (1)

QCBatch: QC13979

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.001	0.00108	108	80 - 120	9/13/01

CCV (1)

QCBatch: QC13985

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.36	94	90 - 110	8/30/01
CL		mg/L	12.50	11.56	92	90 - 110	8/30/01
Fluoride		mg/L	2.50	2.33	93	90 - 110	8/30/01
Nitrate-N		mg/L	2.50	2.34	93	90 - 110	8/30/01
Sulfate		mg/L	12.50	11.57	92	90 - 110	8/30/01

Report Date: September 14, 2001
106.001

Order Number: A01083005
Jal Station

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Jal,NM

ICV (1) QCBatch: QC13985

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.34	93	90 - 110	8/30/01
CL		mg/L	12.50	11.52	92	90 - 110	8/30/01
Fluoride		mg/L	2.50	2.37	94	90 - 110	8/30/01
Nitrate-N		mg/L	2.50	2.30	92	90 - 110	8/30/01
Sulfate		mg/L	12.50	11.58	92	90 - 110	8/30/01

Report Date: September 27, 2001 Order Number: A01091905
106.001 Jal Station

Page Number: 1 of 2
Jal,NM

Summary Report

Marc C Oler
Equiva
308 Wilcox #101
Castlerock, Co. 80104

Report Date: September 27, 2001

Order ID Number: A01091905

Project: 106.001
TA Job Code: Jal Station
Casualty Code: Jal,NM
Project Location: 106.001
Project Address:
H2A Environmental LTD / Portland / Theresa Nix

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
179606	Knock Out Tank	Water	9/15/01	12:00	9/19/01
179607	Before Sock Filter	Water	9/15/01	12:10	9/19/01
179608	After Sock Filter	Water	9/15/01	12:20	9/19/01
179609	Effluent	Water	9/15/01	12:30	9/19/01

This report consists of a total of 2 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample - Field Code	BTEX				
	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
179606 - Knock Out Tank	0.020	0.142	0.153	0.386	0.701
179607 - Before Sock Filter	0.012	0.078	0.093	0.209	0.392
179608 - After Sock Filter	<0.005	0.069	0.072	0.188	0.329

Sample: 179606 - Knock Out Tank

Param	Flag	Result	Units
Fluoride		4.20	mg/L
Total Dissolved Solids		832	mg/L
Total Arsenic		<0.050	mg/L
Total Manganese		0.0371	mg/L

Sample: 179607 - Before Sock Filter

Param	Flag	Result	Units
Fluoride		4.08	mg/L
Total Dissolved Solids		825	mg/L
Total Arsenic		<0.050	mg/L
Total Manganese		0.0322	mg/L

Report Date: September 27, 2001 Order Number: A01091905
106.001 Jal StationPage Number: 2 of 2
Jal,NM**Sample: 179608 - After Sock Filter**

Param	Flag	Result	Units
Fluoride		4.09	mg/L
Total Dissolved Solids		844	mg/L
Total Arsenic		<0.050	mg/L
Total Manganese		<0.025	mg/L

Sample: 179609 - Effluent

Param	Flag	Result	Units
1,1-Dichloroethene		<1.00	µg/L
1,2-Dichloroethane (EDC)		<1.00	µg/L
Benzene		<1.00	µg/L
Toluene		<1.00	µg/L
1,2-Dibromoethane (EDB)		<1.00	µg/L
Ethylbenzene		<1.00	µg/L
m,p-Xylene		<1.00	µg/L
o-Xylene		<1.00	µg/L
1,1,2,2-Tetrachloroethane		<1.00	µg/L
Total Cadmium		<0.01	mg/L

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Analytical and Quality Control Report

Marc C Oler
Equiva
308 Wilcox #101
Castlerock, Co. 80104

Report Date: September 27, 2001

Order ID Number: A01091905

Project: 106.001
TA Job Code: Jal Station
Casualty Code: Jal,NM
Project Location: 106.001
Project Address:
H2A Environmental LTD / Portland / Theresa Nix

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
179606	Knock Out Tank	Water	9/15/01	12:00	9/19/01
179607	Before Sock Filter	Water	9/15/01	12:10	9/19/01
179608	After Sock Filter	Water	9/15/01	12:20	9/19/01
179609	Effluent	Water	9/15/01	12:30	9/19/01

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 12 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.


Dr. Blair Leftwich, Director

Analytical Report

Sample: 179606 - Knock Out Tank

Analysis: BTEX Analytical Method: E 602 QC Batch: QC14174 Date Analyzed: 9/20/01
Analyst: CG Preparation Method: N/A Prep Batch: PB12089 Date Prepared: 9/20/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.020	mg/L	10	0.001
Toluene		0.142	mg/L	10	0.001
Ethylbenzene		0.153	mg/L	10	0.001
M,P,O-Xylene		0.386	mg/L	10	0.001
Total BTEX		0.701	mg/L	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.866	mg/L	1	0.10	87	72 - 128
4-BFB		0.696	mg/L	1	0.10	70	72 - 128

Sample: 179606 - Knock Out Tank

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC14209 Date Analyzed: 9/20/01
Analyst: RS Preparation Method: N/A Prep Batch: PB12124 Date Prepared: 9/20/01

Param	Flag	Result	Units	Dilution	RDL
Fluoride		4.20	mg/L	5	0.20

Sample: 179606 - Knock Out Tank

Analysis: TDS Analytical Method: E 160.1 QC Batch: QC14276 Date Analyzed: 9/25/01
Analyst: RS Preparation Method: N/A Prep Batch: PB12174 Date Prepared: 9/20/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		832	mg/L	1	10

Sample: 179606 - Knock Out Tank

Analysis: Total Metals Analytical Method: E 200.7 QC Batch: QC14140 Date Analyzed: 9/20/01
Analyst: RR Preparation Method: N/A Prep Batch: PB12033 Date Prepared: 9/20/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<0.050	mg/L	1	0.05
Total Manganese		0.0371	mg/L	1	0.02

Sample: 179607 - Before Sock Filter

Analysis: BTEX Analytical Method: E 602 QC Batch: QC14174 Date Analyzed: 9/20/01
Analyst: CG Preparation Method: N/A Prep Batch: PB12089 Date Prepared: 9/20/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.012	mg/L	5	0.001

Continued ...

... Continued Sample: 179607 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Toluene		0.078	mg/L	5	0.001
Ethylbenzene		0.093	mg/L	5	0.001
M,P,O-Xylene		0.209	mg/L	5	0.001
Total BTEX		0.392	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.432	mg/L	1	0.10	86	72 - 128
4-BFB		0.369	mg/L	1	0.10	74	72 - 128

Sample: 179607 - Before Sock Filter

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC14209 Date Analyzed: 9/20/01
Analyst: RS Preparation Method: N/A Prep Batch: PB12124 Date Prepared: 9/20/01

Param	Flag	Result	Units	Dilution	RDL
Fluoride		4.08	mg/L	5	0.20

Sample: 179607 - Before Sock Filter

Analysis: TDS Analytical Method: E 160.1 QC Batch: QC14276 Date Analyzed: 9/25/01
Analyst: RS Preparation Method: N/A Prep Batch: PB12174 Date Prepared: 9/20/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		825	mg/L	1	10

Sample: 179607 - Before Sock Filter

Analysis: Total Metals Analytical Method: E 200.7 QC Batch: QC14140 Date Analyzed: 9/20/01
Analyst: RR Preparation Method: N/A Prep Batch: PB12033 Date Prepared: 9/20/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<0.050	mg/L	1	0.05
Total Manganese		0.0322	mg/L	1	0.02

Sample: 179608 - After Sock Filter

Analysis: BTEX Analytical Method: E 602 QC Batch: QC14174 Date Analyzed: 9/20/01
Analyst: CG Preparation Method: N/A Prep Batch: PB12089 Date Prepared: 9/20/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		0.069	mg/L	5	0.001
Ethylbenzene		0.072	mg/L	5	0.001
M,P,O-Xylene		0.188	mg/L	5	0.001
Total BTEX		0.329	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.439	mg/L	1	0.10	88	72 - 128
4-BFB		0.364	mg/L	1	0.10	73	72 - 128

Sample: 179608 - After Sock Filter

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC14209 Date Analyzed: 9/20/01
Analyst: RS Preparation Method: N/A Prep Batch: PB12124 Date Prepared: 9/20/01

Param	Flag	Result	Units	Dilution	RDL
Fluoride		4.09	mg/L	5	0.20

Sample: 179608 - After Sock Filter

Analysis: TDS Analytical Method: E 160.1 QC Batch: QC14276 Date Analyzed: 9/25/01
Analyst: RS Preparation Method: N/A Prep Batch: PB12174 Date Prepared: 9/20/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		844	mg/L	1	10

Sample: 179608 - After Sock Filter

Analysis: Total Metals Analytical Method: E 200.7 QC Batch: QC14140 Date Analyzed: 9/20/01
Analyst: RR Preparation Method: N/A Prep Batch: PB12033 Date Prepared: 9/20/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<0.050	mg/L	1	0.05
Total Manganese		<0.025	mg/L	1	0.02

Sample: 179609 - Effluent

Analysis: 624 Analytical Method: E 624 QC Batch: QC14167 Date Analyzed: 9/20/01
Analyst: JG Preparation Method: N/A Prep Batch: PB12083 Date Prepared: 9/20/01

Param	Flag	Result	Units	Dilution	RDL
1,1-Dichloroethene		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Benzene		<1.00	µg/L	1	1
Toluene		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Ethylbenzene		<1.00	µg/L	1	1
m,p-Xylene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		47.48	µg/L	1	50	94	88 - 112
Toluene-d8		48.44	µg/L	1	50	96	90 - 109
4-Bromofluorobenzene		48.88	µg/L	1	50	97	84 - 103

Report Date: September 27, 2001
106.001

Order Number: A01091905
Jal Station

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Jal,NM

Sample: 179609 - Effluent

Analysis: Total Metals Analytical Method: E 200.7 QC Batch: QC14140 Date Analyzed: 9/20/01
Analyst: RR Preparation Method: N/A Prep Batch: PB12033 Date Prepared: 9/20/01

Param	Flag	Result	Units	Dilution	RDL
Total Cadmium		<0.01	mg/L	1	0.01

Quality Control Report Method Blank

Method Blank QCBatch: QC14140

Param	Flag	Results	Units	Reporting Limit
Total Arsenic		<0.050	mg/L	0.05
Total Cadmium		<0.025	mg/L	0.01
Total Manganese		<0.025	mg/L	0.02

Method Blank QCBatch: QC14167

Param	Flag	Results	Units	Reporting Limit
1,1-Dichloroethene		<1.00	µg/L	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1
Benzene		<1.00	µg/L	1
Toluene		<1.00	µg/L	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1
Ethylbenzene		<1.00	µg/L	1
m,p-Xylene		<1.00	µg/L	1
o-Xylene		<1.00	µg/L	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		47.83	µg/L	1	50	95	88 - 112
Toluene-d8		48.07	µg/L	1	50	96	90 - 109
4-Bromofluorobenzene		49.1	µg/L	1	50	98	84 - 103

Method Blank QCBatch: QC14174

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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.093	mg/L	1	0.10	93	72 - 128
4-BFB		0.0707	mg/L	1	0.10	71	72 - 128

Method Blank QCBatch: QC14209

Param	Flag	Results	Units	Reporting Limit
Fluoride		<0.2	mg/L	0.20

Method Blank QCBatch: QC14276

Param	Flag	Results	Units	Reporting Limit
Total Dissolved Solids		<10	mg/L	10

Quality Control Report Duplicate Samples

Duplicate QCBatch: QC14276

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		63000	62800	mg/L	1	0	8.9

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC14140

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Aluminum	0.966	0.961	mg/L	1	1	<0.100	97	0	75 - 125	20
Total Antimony	0.228	0.215	mg/L	1	0.25	<0.025	91	6	75 - 125	20
Total Arsenic	0.494	0.476	mg/L	1	0.50	<0.050	99	4	75 - 125	20
Total Barium	0.937	0.937	mg/L	1	1	<0.100	94	0	75 - 125	20
Total Beryllium	0.0228	0.0228	mg/L	1	0.02	<0.0025	91	0	75 - 125	20
Total Cadmium	0.232	0.230	mg/L	1	0.25	<0.025	93	1	75 - 125	20
Total Chromium	0.0933	0.0942	mg/L	1	0.10	<0.010	93	1	75 - 125	20
Total Copper	0.120	0.119	mg/L	1	0.12	<0.0125	96	1	75 - 125	20
Total Iron	0.464	0.466	mg/L	1	0.50	<0.050	93	0	75 - 125	20
Total Lead	0.465	0.460	mg/L	1	0.50	<0.010	93	1	75 - 125	20
Total Manganese	0.236	0.238	mg/L	1	0.25	<0.025	94	1	75 - 125	20
Total Selenium	0.397	0.405	mg/L	1	0.50	<0.050	79	2	75 - 125	20
Total Silver	0.115	0.114	mg/L	1	0.12	<0.0125	92	1	75 - 125	20
Total Thallium	0.421	0.421	mg/L	1	0.50	<0.050	84	0	75 - 125	20
Total Zinc	0.240	0.244	mg/L	1	0.25	<0.025	96	2	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes QCBatch: QC14167

Continued ...

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Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
1,1-Dichloroethene	96	97	µg/L	1	100	<1.00	96	1	80 - 120	20
Benzene	101	103	µg/L	1	100	<1.00	101	1	89 - 114	20
Trichloroethene (TCE)	93	95	µg/L	1	100	<1.00	93	2	77 - 102	20
Toluene	97	99	µg/L	1	100	<1.00	97	2	87 - 111	20
Chlorobenzene	93	95	µg/L	1	100	<1.00	93	2	87 - 109	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Dibromofluoromethane	48.45	45.31	µg/L	1	50	96	90	88 - 112
Toluene-d8	48.14	48.28	µg/L	1	50	96	96	90 - 109
4-Bromofluorobenzene	48.96	49.29	µg/L	1	50	97	98	84 - 103

Laboratory Control Spikes

QCBatch: QC14174

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.085	0.087	mg/L	1	0.10	<0.001	85	2	80 - 120	20
Benzene	0.089	0.091	mg/L	1	0.10	<0.001	89	2	80 - 120	20
Toluene	0.077	0.079	mg/L	1	0.10	<0.001	77	2	80 - 120	20
Ethylbenzene	0.078	0.081	mg/L	1	0.10	<0.001	78	3	80 - 120	20
M,P,O-Xylene	0.241	0.247	mg/L	1	0.30	<0.001	80	2	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.090	0.097	mg/L	1	0.10	90	97	72 - 128
4-BFB	0.082	0.087	mg/L	1	0.10	82	87	72 - 128

Laboratory Control Spikes

QCBatch: QC14209

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
CL	12.17	11.85	mg/L	1	12.50	<2.0	97	2	90 - 110	20
Fluoride	2.29	2.32	mg/L	1	2.50	<0.2	91	1	90 - 110	20
Nitrate-N	2.35	2.33	mg/L	1	2.50	<0.2	94	0	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report Matrix Spikes and Duplicate Spikes

Matrix Spikes QCBatch: QC14140

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Arsenic	0.500	0.489	mg/L	1	0.50	<0.050	100	2	75 - 125	20
Total Cadmium	0.224	0.219	mg/L	1	0.25	<0.025	90	2	75 - 125	20
Total Manganese	0.232	0.227	mg/L	1	0.25	<0.025	93	2	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spikes QCBatch: QC14209

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Fluoride	115.76	115.78	mg/L	1	125		85	0	80 - 113	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report Continuing Calibration Verification Standards

CCV (1) QCBatch: QC14140

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Aluminum		mg/L	2	1.87	94	90 - 110	9/20/01
Total Antimony		mg/L	0.50	0.489	98	90 - 110	9/20/01
Total Arsenic		mg/L	1	0.961	96	90 - 110	9/20/01
Total Barium		mg/L	2	1.91	96	90 - 110	9/20/01
Total Beryllium		mg/L	0.05	0.0481	96	90 - 110	9/20/01
Total Cadmium		mg/L	0.50	0.483	97	90 - 110	9/20/01
Total Chromium		mg/L	0.20	0.192	96	90 - 110	9/20/01
Total Copper		mg/L	0.25	0.239	96	90 - 110	9/20/01
Total Iron		mg/L	1	0.961	96	90 - 110	9/20/01
Total Lead		mg/L	1	0.957	96	90 - 110	9/20/01
Total Manganese		mg/L	0.50	0.479	96	90 - 110	9/20/01
Total Selenium		mg/L	1	0.984	98	90 - 110	9/20/01
Total Silver		mg/L	0.25	0.238	95	90 - 110	9/20/01
Total Thallium		mg/L	1	0.973	97	90 - 110	9/20/01
Total Zinc		mg/L	0.50	0.484	97	90 - 110	9/20/01

ICV (1) QCBatch: QC14140

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Aluminum		mg/L	2	1.96	98	90 - 110	9/20/01
Total Antimony		mg/L	0.50	0.485	97	90 - 110	9/20/01

Continued ...

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Arsenic		mg/L	1	0.977	98	90 - 110	9/20/01
Total Barium		mg/L	2	1.98	99	90 - 110	9/20/01
Total Beryllium		mg/L	0.05	0.0492	98	90 - 110	9/20/01
Total Cadmium		mg/L	0.50	0.493	99	90 - 110	9/20/01
Total Chromium		mg/L	0.20	0.196	98	90 - 110	9/20/01
Total Copper		mg/L	0.25	0.247	99	90 - 110	9/20/01
Total Iron		mg/L	1	0.988	99	90 - 110	9/20/01
Total Lead		mg/L	1	0.972	97	90 - 110	9/20/01
Total Manganese		mg/L	0.50	0.494	99	90 - 110	9/20/01
Total Selenium		mg/L	1	0.971	97	90 - 110	9/20/01
Total Silver		mg/L	0.25	0.246	98	90 - 110	9/20/01
Total Thallium		mg/L	1	0.980	98	90 - 110	9/20/01
Total Zinc		mg/L	0.50	0.487	97	90 - 110	9/20/01

CCV (1) QCBatch: QC14167

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	100	89	89	80 - 120	9/20/01
1,1-Dichloroethene		µg/L	100	93	93	80 - 120	9/20/01
Chloroform		µg/L	100	95	95	80 - 120	9/20/01
1,2-Dichloropropane		µg/L	100	99	99	80 - 120	9/20/01
Toluene		µg/L	100	96	96	80 - 120	9/20/01
Chlorobenzene		µg/L	100	91	91	80 - 120	9/20/01
Ethylbenzene		µg/L	100	92	92	80 - 120	9/20/01
Dibromofluoromethane		µg/L	50	48.04	96	80 - 120	9/20/01
Toluene-d8		µg/L	50	48.75	97	80 - 120	9/20/01
4-Bromofluorobenzene		µg/L	50	51.02	102	80 - 120	9/20/01

CCV (1) QCBatch: QC14174

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.086	86	85 - 115	9/20/01
Benzene		mg/L	0.10	0.089	89	85 - 115	9/20/01
Toluene		mg/L	0.10	0.079	79	85 - 115	9/20/01
Ethylbenzene		mg/L	0.10	0.080	80	85 - 115	9/20/01
M,P,O-Xylene		mg/L	0.30	0.243	81	85 - 115	9/20/01

CCV (2) QCBatch: QC14174

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.092	92	85 - 115	9/20/01
Benzene		mg/L	0.10	0.098	98	85 - 115	9/20/01
Toluene		mg/L	0.10	0.087	87	85 - 115	9/20/01
Ethylbenzene		mg/L	0.10	0.088	88	85 - 115	9/20/01
M,P,O-Xylene		mg/L	0.30	0.270	90	85 - 115	9/20/01

ICV (1) QCBatch: QC14174

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.084	84	85 - 115	9/20/01
Benzene		mg/L	0.10	0.090	90	85 - 115	9/20/01
Toluene		mg/L	0.10	0.080	80	85 - 115	9/20/01
Ethylbenzene		mg/L	0.10	0.080	80	85 - 115	9/20/01
M,P,O-Xylene		mg/L	0.30	0.244	81	85 - 115	9/20/01

CCV (1) QCBatch: QC14209

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.44	97	90 - 110	9/20/01
CL		mg/L	12.50	11.98	95	90 - 110	9/20/01
Fluoride		mg/L	2.50	2.34	93	90 - 110	9/20/01
Nitrate-N		mg/L	2.50	2.26	90	90 - 110	9/20/01
Sulfate		mg/L	12.50	11.59	92	90 - 110	9/20/01

ICV (1) QCBatch: QC14209

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.44	97	90 - 110	9/20/01
CL		mg/L	12.50	11.79	94	90 - 110	9/20/01
Fluoride		mg/L	2.50	2.37	94	90 - 110	9/20/01
Nitrate-N		mg/L	2.50	2.29	91	90 - 110	9/20/01
Sulfate		mg/L	12.50	11.52	92	90 - 110	9/20/01

CCV (1) QCBatch: QC14276

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	984	98	90 - 110	9/25/01

Report Date: September 27, 2001
106.001

Order Number: A01091905
Jal Station

Page Number: 12 of 12
Jal,NM

ICV (1) QCBatch: QC14276

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	972	97	90 - 110	9/25/01

Report Date: October 2, 2001 Order Number: A01091905
106.001 Jal Station

Page Number: 1 of 1
Jal,NM

Summary Report

Marc C Oler
Equiva
308 Wilcox #101
Castlerock, Co. 80104

Report Date: October 2, 2001

Order ID Number: A01091905

Project: 106.001
TA Job Code: Jal Station
Casualty Code: Jal,NM
Project Location: 106.001
Project Address:
H2A Environmental LTD / Portland / Theresa Nix

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
179609	Effluent	Water	9/15/01	12:30	9/19/01

This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample: 179609 - Effluent

Param	Flag	Result	Units
Total Arsenic		<0.050	mg/L
Total Cadmium		<0.01	mg/L
Total Manganese		<0.025	mg/L

TRACE ANALYSIS, INC.

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El Paso, Texas 79932 888•588•3443
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806•794•1296 FAX 806•794•1298
915•585•3443 FAX 915•585•4944

Analytical and Quality Control Report

Marc C Oler
Equiva
308 Wilcox #101
Castlerock, Co. 80104

Report Date: October 2, 2001

Order ID Number: A01091905

Project: 106.001
TA Job Code: Jal Station
Casualty Code: Jal,NM
Project Location: 106.001
Project Address:
H2A Environmental LTD / Portland / Theresa Nix

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
179609	Effluent	Water	9/15/01	12:30	9/19/01

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 including the chain of custody (COC), without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director

Report Date: October 2, 2001
106.001

Order Number: A01091905
Jal Station

Page Number: 2 of 4
Jal,NM

Analytical Report

Sample: 179609 - Effluent

Analysis: Total Metals Analytical Method: E 200.7 QC Batch: QC14140 Date Analyzed: 9/20/01
Analyst: RR Preparation Method: N/A Prep Batch: PB12298 Date Prepared: 10/1/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<0.050	mg/L	1	0.05
Total Cadmium		<0.01	mg/L	1	0.01
Total Manganese		<0.025	mg/L	1	0.02

Quality Control Report Method Blank

Method Blank QCBatch: QC14140

Param	Flag	Results	Units	Reporting Limit
Total Arsenic		<0.050	mg/L	0.05
Total Cadmium		<0.025	mg/L	0.01
Total Manganese		<0.025	mg/L	0.02

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC14140

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Aluminum	0.966	0.961	mg/L	1	1	<0.100	97	0	75 - 125	20
Total Antimony	0.228	0.215	mg/L	1	0.25	<0.025	91	6	75 - 125	20
Total Arsenic	0.494	0.476	mg/L	1	0.50	<0.050	99	4	75 - 125	20
Total Barium	0.937	0.937	mg/L	1	1	<0.100	94	0	75 - 125	20
Total Beryllium	0.0228	0.0228	mg/L	1	0.02	<0.0025	91	0	75 - 125	20
Total Cadmium	0.232	0.230	mg/L	1	0.25	<0.025	93	1	75 - 125	20
Total Chromium	0.0933	0.0942	mg/L	1	0.10	<0.010	93	1	75 - 125	20
Total Copper	0.120	0.119	mg/L	1	0.12	<0.0125	96	1	75 - 125	20
Total Iron	0.464	0.466	mg/L	1	0.50	<0.050	93	0	75 - 125	20
Total Lead	0.465	0.460	mg/L	1	0.50	<0.010	93	1	75 - 125	20
Total Manganese	0.236	0.238	mg/L	1	0.25	<0.025	94	1	75 - 125	20
Total Selenium	0.397	0.405	mg/L	1	0.50	<0.050	79	2	75 - 125	20
Total Silver	0.115	0.114	mg/L	1	0.12	<0.0125	92	1	75 - 125	20
Total Thallium	0.421	0.421	mg/L	1	0.50	<0.050	84	0	75 - 125	20
Total Zinc	0.240	0.244	mg/L	1	0.25	<0.025	96	2	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report Matrix Spikes and Duplicate Spikes

Matrix Spikes QCBatch: QC14140

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Arsenic	0.500	0.489	mg/L	1	0.50	<0.050	100	2	75 - 125	20
Total Cadmium	0.224	0.219	mg/L	1	0.25		90	2	75 - 125	20
Total Cadmium	0.224	0.219	mg/L	1	0.25	<0.025	90	2	75 - 125	20
Total Manganese	0.232	0.227	mg/L	1	0.25	<0.025	93	2	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC14140

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Aluminum		mg/L	2	1.87	94	90 - 110	9/20/01
Total Antimony		mg/L	0.50	0.489	98	90 - 110	9/20/01
Total Arsenic		mg/L	1	0.961	96	90 - 110	9/20/01
Total Barium		mg/L	2	1.91	96	90 - 110	9/20/01
Total Beryllium		mg/L	0.05	0.0481	96	90 - 110	9/20/01
Total Cadmium		mg/L	0.50	0.483	97	90 - 110	9/20/01
Total Chromium		mg/L	0.20	0.192	96	90 - 110	9/20/01
Total Copper		mg/L	0.25	0.239	96	90 - 110	9/20/01
Total Iron		mg/L	1	0.961	96	90 - 110	9/20/01
Total Lead		mg/L	1	0.957	96	90 - 110	9/20/01
Total Manganese		mg/L	0.50	0.479	96	90 - 110	9/20/01
Total Selenium		mg/L	1	0.984	98	90 - 110	9/20/01
Total Silver		mg/L	0.25	0.238	95	90 - 110	9/20/01
Total Thallium		mg/L	1	0.973	97	90 - 110	9/20/01
Total Zinc		mg/L	0.50	0.484	97	90 - 110	9/20/01

ICV (1)

QCBatch: QC14140

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Aluminum		mg/L	2	1.96	98	90 - 110	9/20/01
Total Antimony		mg/L	0.50	0.485	97	90 - 110	9/20/01
Total Arsenic		mg/L	1	0.977	98	90 - 110	9/20/01
Total Barium		mg/L	2	1.98	99	90 - 110	9/20/01
Total Beryllium		mg/L	0.05	0.0492	98	90 - 110	9/20/01
Total Cadmium		mg/L	0.50	0.493	99	90 - 110	9/20/01
Total Chromium		mg/L	0.20	0.196	98	90 - 110	9/20/01
Total Copper		mg/L	0.25	0.247	99	90 - 110	9/20/01
Total Iron		mg/L	1	0.988	99	90 - 110	9/20/01
Total Lead		mg/L	1	0.972	97	90 - 110	9/20/01
Total Manganese		mg/L	0.50	0.494	99	90 - 110	9/20/01
Total Selenium		mg/L	1	0.971	97	90 - 110	9/20/01
Total Silver		mg/L	0.25	0.246	98	90 - 110	9/20/01
Total Thallium		mg/L	1	0.980	98	90 - 110	9/20/01
Total Zinc		mg/L	0.50	0.487	97	90 - 110	9/20/01

Trace Analysis, Inc.

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

Phone #: 361-777-0860
Fax #: 361-777-0971

Consulting Company Name: H2A Environmental
Address: 418 San Jacinto Boulevard #8

Consulting Contact:

T. Dix

Location Code:

Casualty Loss #:

Equiva Job #

Consultant Job # 100-701

Location Address:

Sampler Signature:

[illegible]

Relinquished by: _____

Date: _____ Time: _____

Time:

Date: 4-17-11 Time: 0800

Relinquished by:

Date: _____ Time: _____

Time:

Date: _____ Time: _____

W. A. R. R.
Relinquished by:

Date: _____ Time: _____

Time:

Date: Time:

2. Acceptance of complex constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

Carrier # B1502 77V 0301

6071

CHAIN-OF-CUSTODY RECORD AND ANALYSIS

LAB Order ID # FD1011905

ANALYSIS REQUEST

(Circle or Specify Method No.)

[illegible]

REMARKS:

LAB USE ONLY

Intact

$$\frac{Y}{N}$$

Heads

space Y/N

Temp

11

Review

Carrier

315

TraceAnalysis, Inc.

6701 Aberdeen Ave., Suite 9

Lubbock, TX 79424-1515

(806) 794-1296

Report Date: September 28, 2001
106.001

Order Number: A01092503
Jal Station

Page Number: 1 of 1
Jal,NM

Summary Report

Theresa Nix
H2A Environmental LTD
418 San Saba
Portland, Tx. 78374

Report Date: September 28, 2001

Order ID Number: A01092503

Project Number: 106.001
Project Name: Jal Station
Project Location: Jal,NM

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
180141	Effluent	Water	9/22/01	8:00	9/25/01

This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample - Field Code	BTEX				
	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
180141 - Effluent	<0.001	<0.001	<0.001	<0.001	<0.001

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
155 McCutcheon, Suite H

Lubbock, Texas 79424 800•378•1296
El Paso, Texas 79932 888•588•3443
E-Mail: lab@traceanalysis.com

806•794•1296 FAX 806•794•1298
915•585•3443 FAX 915•585•4944

Analytical and Quality Control Report

Theresa Nix
H2A Environmental LTD
418 San Saba
Portland, Tx. 78374

Report Date: September 28, 2001

Order ID Number: A01092503

Project Number: 106.001
Project Name: Jal Station
Project Location: Jal, NM

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
180141	Effluent	Water	9/22/01	8:00	9/25/01

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 including the chain of custody (COC), without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director

Report Date: September 28, 2001
106.001

Order Number: A01092503
Jal Station

Page Number: 2 of 4
Jal,NM

Analytical Report

Sample: 180141 - Effluent

Analysis: BTEX Analytical Method: E 602 QC Batch: QC14343 Date Analyzed: 9/24/01
Analyst: CG Preparation Method: N/A Prep Batch: PB12224 Date Prepared: 9/24/01

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		0.0952	mg/L	1	0.10	95	72 - 128
4-BFB		0.0871	mg/L	1	0.10	87	72 - 128

Quality Control Report Method Blank

Method Blank QCBatch: QC14343

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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0867	mg/L	1	0.10	87	72 - 128
4-BFB		0.0764	mg/L	1	0.10	76	72 - 128

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC14343

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.090	0.094	mg/L	1	0.10	<0.001	90	4	80 - 120	20
Benzene	0.089	0.092	mg/L	1	0.10	<0.001	89	3	80 - 120	20
Toluene	0.087	0.090	mg/L	1	0.10	<0.001	87	3	80 - 120	20
Ethylbenzene	0.089	0.092	mg/L	1	0.10	<0.001	89	3	80 - 120	20
M,P,O-Xylene	0.266	0.275	mg/L	1	0.30	<0.001	89	3	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.093	0.094	mg/L	1	0.10	93	94	72 - 128
4-BFB	0.089	0.092	mg/L	1	0.10	89	92	72 - 128

Quality Control Report Continuing Calibration Verification Standards

CCV (1) QCBatch: QC14343

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.092	92	85 - 115	9/24/01
Benzene		mg/L	0.10	0.087	87	85 - 115	9/24/01

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		mg/L	0.10	0.085	85	85 - 115	9/24/01
Ethylbenzene		mg/L	0.10	0.087	87	85 - 115	9/24/01
M,P,O-Xylene		mg/L	0.30	0.262	87	85 - 115	9/24/01

CCV (2) QCBatch: QC14343

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.087	87	85 - 115	9/24/01
Benzene		mg/L	0.10	0.093	93	85 - 115	9/24/01
Toluene		mg/L	0.10	0.091	91	85 - 115	9/24/01
Ethylbenzene		mg/L	0.10	0.096	96	85 - 115	9/24/01
M,P,O-Xylene		mg/L	0.30	0.289	96	85 - 115	9/24/01

ICV (1) QCBatch: QC14343

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.082	82	85 - 115	9/24/01
Benzene		mg/L	0.10	0.082	82	85 - 115	9/24/01
Toluene		mg/L	0.10	0.082	82	85 - 115	9/24/01
Ethylbenzene		mg/L	0.10	0.084	84	85 - 115	9/24/01
M,P,O-Xylene		mg/L	0.30	0.251	84	85 - 115	9/24/01

Report Date: October 17, 2001 Order Number: A01101511
106.001 Jal Station

Page Number: 1 of 1
Jal,NM

Summary Report

Marc C Oler
Equiva
308 Wilcox #101
Castlerock, Co. 80104

Report Date: October 17, 2001

Order ID Number: A01101511

Project: 106.001
TA Job Code: Jal Station
Casualty Code: 106.001
Project Location: Jal,NM
Project Address:
H2A Environmental LTD / Portland / Theresa Nix

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
181797	Effluent 10-6-01	Water	10/6/01	9:00	10/13/01

This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample - Field Code	BTEX				
	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
181797 - Effluent 10-6-01	<0.001	<0.001	<0.001	<0.001	<0.001

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
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915•585•3443

FAX 806•794•1298
FAX 915•585•4944

E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Marc C Oler
Equiva
308 Wilcox #101
Castlerock, Co. 80104

Report Date: October 17, 2001

Order ID Number: A01101511

Project: 106.001
TA Job Code: Jal Station
Casualty Code: 106.001
Project Location: Jal, NM
H2A Environmental LTD / Portland / Theresa Nix

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
181797	Effluent 10-6-01	Water	10/6/01	9:00	10/13/01

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.

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Dr. Blair Leftwich, Director

Analytical Report

Sample: 181797 - Effluent 10-6-01

Analysis: BTEX Analytical Method: E 602 QC Batch: QC14861 Date Analyzed: 10/15/01
Analyst: CG Preparation Method: N/A Prep Batch: PB12638 Date Prepared: 10/15/01

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		0.115	mg/L	1	0.10	115	72 - 128
4-BFB		0.0892	mg/L	1	0.10	89	72 - 128

Quality Control Report Method Blank

Method Blank QCBatch: QC14861

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	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.119	mg/L	1	0.10	119	72 - 128
4-BFB		0.0901	mg/L	1	0.10	90	72 - 128

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC14861

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.108	0.113	mg/L	1	0.10	<0.001	108	4	80 - 120	20
Benzene	0.111	0.113	mg/L	1	0.10	<0.001	111	2	80 - 120	20
Toluene	0.0997	0.102	mg/L	1	0.10	<0.001	100	2	80 - 120	20
Ethylbenzene	0.102	0.105	mg/L	1	0.10	<0.001	102	3	80 - 120	20
M,P,O-Xylene	0.307	0.314	mg/L	1	0.30	<0.001	102	2	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.114	0.117	mg/L	1	0.10	114	117	72 - 128
4-BFB	0.100	0.104	mg/L	1	0.10	100	104	72 - 128

Quality Control Report Continuing Calibration Verification Standards

CCV (1) QCBatch: QC14861

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.112	112	85 - 115	10/15/01
Benzene		mg/L	0.10	0.113	113	85 - 115	10/15/01

Continued ...

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		mg/L	0.10	0.102	102	85 - 115	10/15/01
Ethylbenzene		mg/L	0.10	0.105	105	85 - 115	10/15/01
M,P,O-Xylene		mg/L	0.30	0.314	105	85 - 115	10/15/01

CCV (2)

QCBatch: QC14861

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.114	114	85 - 115	10/15/01
Benzene		mg/L	0.10	0.11	110	85 - 115	10/15/01
Toluene		mg/L	0.10	0.099	99	85 - 115	10/15/01
Ethylbenzene		mg/L	0.10	0.102	102	85 - 115	10/15/01
M,P,O-Xylene		mg/L	0.30	0.308	102	85 - 115	10/15/01

ICV (1)

QCBatch: QC14861

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.118	118	85 - 115	10/15/01
Benzene		mg/L	0.10	0.118	118	85 - 115	10/15/01
Toluene		mg/L	0.10	0.111	111	85 - 115	10/15/01
Ethylbenzene		mg/L	0.10	0.112	112	85 - 115	10/15/01
M,P,O-Xylene		mg/L	0.30	0.331	110	85 - 115	10/15/01

