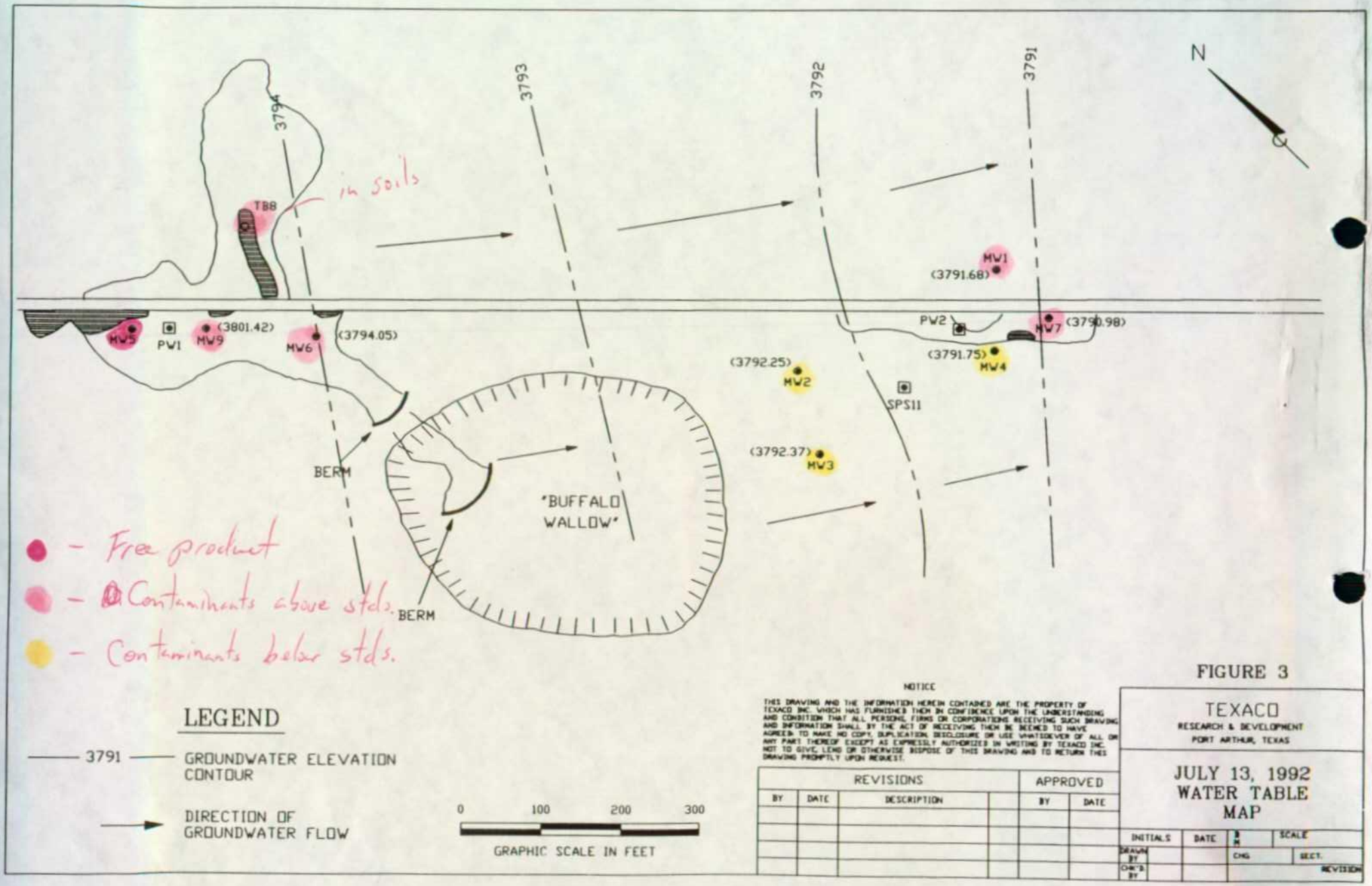
GW - 140

MONITORING REPORTS

& Correspondence

DATE:

2006-1992



LEGEND

——— 3791 ——— GROUNDWATER ELEVATION CONTOUR

→ DIRECTION OF GROUNDWATER FLOW

0 100 200 300

GRAPHIC SCALE IN FEET

REVISIONS				APPROVED	
BY	DATE	DESCRIPTION		BY	DATE

FIGURE 3

TEXACO
RESEARCH & DEVELOPMENT
PORT ARTHUR, TEXAS

JULY 13, 1992
WATER TABLE MAP

INITIALS	DATE	SCALE
DRAWN BY		CHG. SECT.
CHK'D BY		REVISION

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

May 2, 2006

Ms. Camille Reynolds
Plains Marketing, L.P.
3112 West Highway 82
Lovington, NM 88260

RE: 2005 Annual Monitoring Report
TNM SPS-11 Site
NW/4 SE/4 Section 18, Township 18 South, Range 36 East
Lea County, New Mexico
Plains EMS Number: TNM-SPS-11
NMOCD Reference GW-0140

The New Mexico Oil Conservation Division (NMOCD) has received and reviewed the above report submitted on behalf of Plains Marketing, L.P. (Plains) by NOVA Safety and Environmental. This report is hereby accepted and approved with the following understandings and conditions:

1. Groundwater monitoring will continue throughout 2006. A recap of this activity will be included in the 2006 Annual Monitoring Report due to the NMOCD by April 1, 2007.
2. Plains will accomplish additional horizontal delineation by installing two additional monitor wells down gradient of the site.
3. The sampling and analysis frequency of monitor well MW-10 will be increased from semi-annually to quarterly.
4. Manual product recovery of PSH from monitor well MW-1 will be increased from monthly to bi-weekly until the PSH levels in this well stabilize at some lower level.

NMOCD approval does not relieve Plains of responsibility should its operations at this site prove to have been harmful to public health or the environment. Nor does it relieve Plains of its responsibility to comply with the rules and regulations of any other governmental agency.

If you have any questions, contact me at (505) 476-3492 or ed.martin@state.nm.us

NEW MEXICO OIL CONSERVATION DIVISION

Ed Martin

Edwin E. Martin
Environmental Bureau

Copy: NMOCD, Hobbs
Curt Stanley, NOVA

PLAINS Marketing, L.P.

March 24, 2006

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

Re: Plains – Annual Monitoring Reports
16 Sites in Lea County, New Mexico

Dear Mr. Martin:

Plains All American is an operator of crude oil pipelines and terminal facilities in the state of New Mexico. Plains All American actively monitors certain historical release sites exhibiting groundwater impacts, consistent with assessments and work plans developed in consultation with the New Mexico Oil Conservation Division (NMOCD). In accordance with the rules and regulations of the NMOCD, Plains All American hereby submits our Annual Monitoring reports for the following sites:

TNM 97-17	Section 21, Township 20 South, Range 37 East, Lea County
TNM 97-18	Section 28, Township 20 South, Range 37 East, Lea County
TNM 98-05A	Section 26, Township 21 South, Range 37 East, Lea County
TNM 98-05B	Section 26, Township 21 South, Range 37 East, Lea County
TNM 97-04	Section 11, Township 16 South, Range 35 East, Lea County
Texaco Skelly "F"	Section 21, Township 20 South, Range 37 East, Lea County
Darr Angell #2	Sections 11 and 14, Township 15 South, Range 37 East, Lea County
LF-59	Section 32, Township 19 South, Range 37 East, Lea County
SPS-11	Section 18, Township 18 South, Range 36 East, Lea County
Monument #2	Sections 6 and 7, Township 20 South, Range 37 East, Lea County
Monument #10	Section 32, Township 19 South, Range 37 East, Lea County
Monument #17	Section 29, Township 19 South, Range 37 East, Lea County
Monument #18	Section 7, Township 20 South, Range 37 East, Lea County
Bob Durham	Sections 31 and 32, Township 19 South, Range 37 East, Lea County
Monument Barber 10" Sour	Section 32, Township 19 South, Range 37 East, Lea County
Lea Station to Monument 6"	Section 5, Township 20 South, Range 37 East, Lea County

3112 West Highway 82 • Lovington, NM 88260 • (505) 396-3341

Nova prepared these documents and has vouched for their accuracy an completeness, and on behalf of Plains All American, I have personally reviewed the documents and interviewed Nova in order to verify the accuracy and completeness of these documents. It is based upon these inquires and reviews that Plains All American submits the enclosed Annual Monitoring Reports for the above facilities.

If you have any questions or require further information, please contact me at (505) 441-0965.

Sincerely,

Camille Reynolds

Camille Reynolds
Remediation Coordinator
Plains All American Pipeline

CC: Larry Johnson, NMOCD, Hobbs, New Mexico

Enclosure

2005
ANNUAL MONITORING REPORT

TNM SPS-11

NW ¼ SE ¼ of SECTION 18, TOWNSHIP 18 SOUTH, RANGE 36 EAST
LEA COUNTY, NEW MEXICO
PLAINS EMS NUMBER: TNM-SPS-11
NMOCD Reference GW-0140

PREPARED FOR:

PLAINS MARKETING, L.P.
333 CLAY STREET, SUITE 1600
HOUSTON, TEXAS 77002

NOVA
safety and environmental

PREPARED BY:

NOVA Safety and Environmental
2057 Commerce
Midland, Texas 79703

March 2006

Curt D. Stanley
Project Manager

Todd K. Choban, P.G.
Vice-President Technical Services

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FIGURES

TABLES

APPENDICES

ENCLOSED ON DATA DISK

2005 Annual Monitoring Report
2005 Tables 1 and 2 - Groundwater Elevation and BTEX Concentration Data
2005 Figures 1, 2A-2B, and 3A-3B
Electronic Copies of Laboratory Reports
Historic Groundwater Elevation Tables
Historic BTEX Concentration Tables

INTRODUCTION

On behalf of Plains Marketing, L.P. (Plains), NOVA Safety and Environmental (NOVA) is pleased to submit this Annual Monitoring Report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998 requiring submittal of an Annual Monitoring Report by April 1 of each year. Beginning on May 29, 2004, project management responsibilities were assumed by NOVA, having previously been managed by Environmental Technology Group, Inc (ETGI). The TNM SPS-11 site (the site), which was formerly the responsibility of Texas New Mexico Pipeline Company (TNM) and EOTT Energy Corporation (EOTT) which became Link Energy, is now the responsibility of Plains. This report is intended to be viewed as a complete document with text, figures, tables and appendices. The report presents the results of the quarterly groundwater monitoring events conducted in calendar year 2005 only. However, historical data tables as well as 2005 laboratory analytical reports are included on the enclosed data disk. Historic information prior to August 19, 1999 does not appear on the enclosed data disk because this data is unavailable. For reference, the Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during each quarter of 2005 to assess the extent of dissolved phase constituents and Phase Separated Hydrocarbon (PSH). Each groundwater monitor event consisted of measuring static water levels in the monitor wells, checking for the presence of PSH on the water column and the purging and sampling of each well exhibiting sufficient recharge. Monitor wells containing a thickness of PSH greater than 0.01 foot were not sampled.

SITE DESCRIPTION AND BACKGROUND INFORMATION

The site is located approximately 15 miles west of the town of Hobbs, New Mexico in the NW ¼ of the SE ¼ of Section 18, Township 18 South, Range 36 East. Observations in the field indicate the surface topography in the area of the site to be nearly flat. Ground cover consists of low grasses with few mesquite bushes. The predominant land usage is in the production of oil and gas and as livestock pasture.

According to the Site Investigation and Remedial Action Plan prepared by TNM and dated January 25, 1993, water from a utility well (SPS-11) belonging to Southwestern Public Service Company (SPS) was sampled on April 2, 1991. The analytical results indicated benzene concentrations were above the Environmental Protection Agency (EPA) drinking water standards. The water well was taken out of service in April 1991. A TNM pipeline adjacent to the water well was identified and a hydrocarbon surface stain was observed in the vicinity of SPS-11. The staining was reportedly the result of a pipeline release prior to 1975. No detailed information from the previous pipeline owners or consultants with respect to the release date, volume of crude oil released, or pipeline repair is available, at this time. The Release Notification and Corrective Action (Form C-141) is provided as Appendix A.

Initial site investigation actions were performed for TNM and EOTT by previous consultants. A total of twenty-five (25) soil borings/groundwater monitoring wells (MW-1 through MW-25) were installed prior to October 1999. ETGI, representing EOTT, assumed responsibility for

remedial action planning and oversight in March 2000. An additional six (6) monitor wells were installed between May 2000 and December 2001 to further delineate the down gradient extent of impact at the site. Two (2) additional monitor wells were installed in 2004. Of the thirty-three (33) monitor wells installed at the site since project inception, two (2) monitor wells (MW-5 and MW-8) cannot be accounted for in the available historic data. Monitor wells MW-20, MW-22, and MW-27 were plugged and abandoned September 14, 2005 after review of relevance and approval from the NMOCD. There are currently twenty eight (28) monitor wells present at the site.

FIELD ACTIVITIES

Based on gauging data collected during the reporting period, a measurable thickness of PSH was detected in monitor well MW-1 only. PSH thicknesses ranged from a sheen to 2.5 feet with an average of 0.45 feet. A maximum PSH thickness of 2.5 feet was recorded on November 11, 2005 and is shown on Table 1. The absorbent sock previously present in MW-1 was removed during the reporting period. Recovery is now performed monthly by manual recovery methods.

Quarterly monitoring events for the reporting period were performed according to the following sampling schedule, which was approved by the NMOCD in correspondence dated April 28, 2004 and amended by NMOCD correspondence dated June 22, 2005.

NMOCD Approved Sampling Schedule					
MW-1	Quarterly	MW-12	Quarterly	MW-23	Quarterly
MW-2	Annually	MW-13	Annually	MW-24	Quarterly
MW-3	Annually	MW-14	Quarterly	MW-25	Annually
MW-4	Quarterly	MW-15	Quarterly	MW-26	Quarterly
MW-5	-	MW-16	Quarterly	MW-27	Plugged and Abandoned
MW-6	Quarterly	MW-17	Quarterly	MW-28	Quarterly
MW-7	Quarterly	MW-18	Semi-Annually	MW-29	Quarterly
MW-8	-	MW-19	Annually	MW-30	Annually
MW-9	Quarterly	MW-20	Plugged and Abandoned	MW-31	Annually
MW-10	Semi-Annually	MW-21	Annually	MW-32	Quarterly
MW-11	Quarterly	MW-22	Plugged and Abandoned	MW-33	Quarterly

The site monitor wells were gauged and sampled on March 17, June 15, September 14-15, and December 13, 2005. During each sampling event, monitor wells were purged of approximately three well volumes of water or until the wells failed to produce water. Purging was performed using disposable polyethylene bailer for each well or electrical Grundfos Pump and dedicated tubing. Groundwater was allowed to recharge and samples were obtained using disposable Teflon samplers. Water samples were collected in clean glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed of by Key Energy utilizing a licensed disposal facility (NMOCD AO SWD-730).

Locations of the monitor wells and the inferred groundwater gradient, which were constructed from measurements collected during quarterly sampling events performed in 2005, are depicted on Figures 2A through 2D, the Inferred Groundwater Gradient Maps. Groundwater elevation

data for 2005 is provided as Table 1. Historic groundwater elevation data beginning August 19, 1999 is enclosed on the attached data disk.

The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.003 feet/foot to the southeast as measured between monitor wells MW-6 and MW-17. This is consistent with data presented on Figures 2A through 2C from earlier in the year. The corrected groundwater elevations ranged between 3796.41 and 3807.74 feet above mean sea level, in MW-33 on September 14, 2005 and in MW-25 on March 17, 2005, respectively. PSH data for the 2005 gauging events can be found in Table 1 and on Figures 3A through 3D.

Plains received approval to plug and abandon monitor wells MW-20, MW-22, and MW-27 from the NMOCD in a letter dated June 6, 2005. This activity occurred on September 14, 2005.

LABORATORY RESULTS

Monitor well MW-1 contained PSH during the first, third and fourth quarter sampling events and was not sampled.

Groundwater samples obtained during the each quarterly monitoring event were delivered to TraceAnalysis, Inc. in Lubbock, Texas for analysis of Benzene, Toluene, Ethylbenzene and Xylene (BTEX) constituent concentrations by EPA Method 8021b. BTEX constituent concentrations for 2005 are summarized in Table 2. Copies of the laboratory reports for 2005 are provided on the enclosed data disk. The quarterly groundwater sample results for benzene and BTEX constituent concentrations are depicted on Figures 3A through 3D.

Review of laboratory analytical results of groundwater samples obtained during the 2005 monitoring period indicate the benzene and BTEX constituent concentrations are below NMOCD regulatory standards in twelve (12) monitor wells on site. The benzene concentration in the remaining sixteen (16) monitor wells (MW-1, MW-2 MW-4, MW-6, MW-7, MW-9 through MW-12, MW-14, MW-16, MW-17, MW-24, MW-26, MW-28, MW-29, and MW-32) were above the NMOCD regulatory standard during at least one quarterly sampling event of 2005. Furthermore, the total BTEX constituent concentration in seven (7) monitor wells (MW-1, MW-7, MW-9, MW-14, MW-26, MW-28, and MW-32) was above the NMOCD regulatory standard. As stated previously, monitor wells MW-5, MW-8, MW-20, MW-22, and MW-27 are no longer present at the site.

Laboratory analytical results were compared to NMOCD regulatory limits published in section 20.6.2.3103 of the New Mexico Administrative Code.

SUMMARY

This report presents the results of monitoring activities for the annual reporting period of 2005. Currently, there are twenty eight (28) groundwater monitor wells (MW-1 through MW-33, excluding MW-5, MW-8, MW-20, MW-22, and MW-27) on site. The most recent Groundwater Gradient Map indicates a general gradient of approximately 0.003 feet/foot to the southeast.

During the reporting period, a measurable thickness of PSH was detected in monitor well MW-1 only. A maximum PSH thickness of 2.5 feet was recorded on November 11, 2005. At this time PSH impact at the site is limited to MW-1, which has displayed PSH thicknesses ranging from a sheen to 2.5 feet during 2005. The absorbent sock previously present in MW-1 was removed during the reporting period due to excess product thickness. Product recovery is now performed monthly by manual recovery methods

Review of laboratory analytical results generated from analysis of the groundwater samples obtained during the reporting period indicate the benzene and BTEX constituent concentrations are below NMOCD regulatory standards in twelve (12) monitor wells on site. The benzene concentration in nine (9) monitor wells is above the NMOCD regulatory standard, while total BTEX constituent concentrations are below the NMOCD regulatory standard in those wells. Both the benzene and BTEX constituent concentrations in the remaining seven (7) monitor wells are above the appropriate NMOCD regulatory standards.

ANTICIPATED ACTIONS

Groundwater monitoring and annual reporting will continue in 2006. The need for additional horizontal delineation in the down gradient direction of the site will likely require the installation of two additional monitor wells in this area in 2006.

Based on the analytical results of groundwater samples collected from monitor well MW-10, which exhibited BTEX concentrations above the NMOCD regulatory standard during each sampling event of 2005, Plains recommends increasing the sampling frequency from semi-annual to quarterly for this monitor well only.

LIMITATIONS

NOVA has prepared this Annual Monitoring Report to the best of its ability. No other warranty, expressed or implied, is made or intended.

NOVA has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. NOVA has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. NOVA has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. NOVA also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Plains. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of NOVA and/or Plains.

DISTRIBUTION

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New Mexico Energy, Minerals and Natural Resources Department
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Oil Conservation Division, District 1
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Midland, TX 79703
cstanley@novatraining.cc

Figures

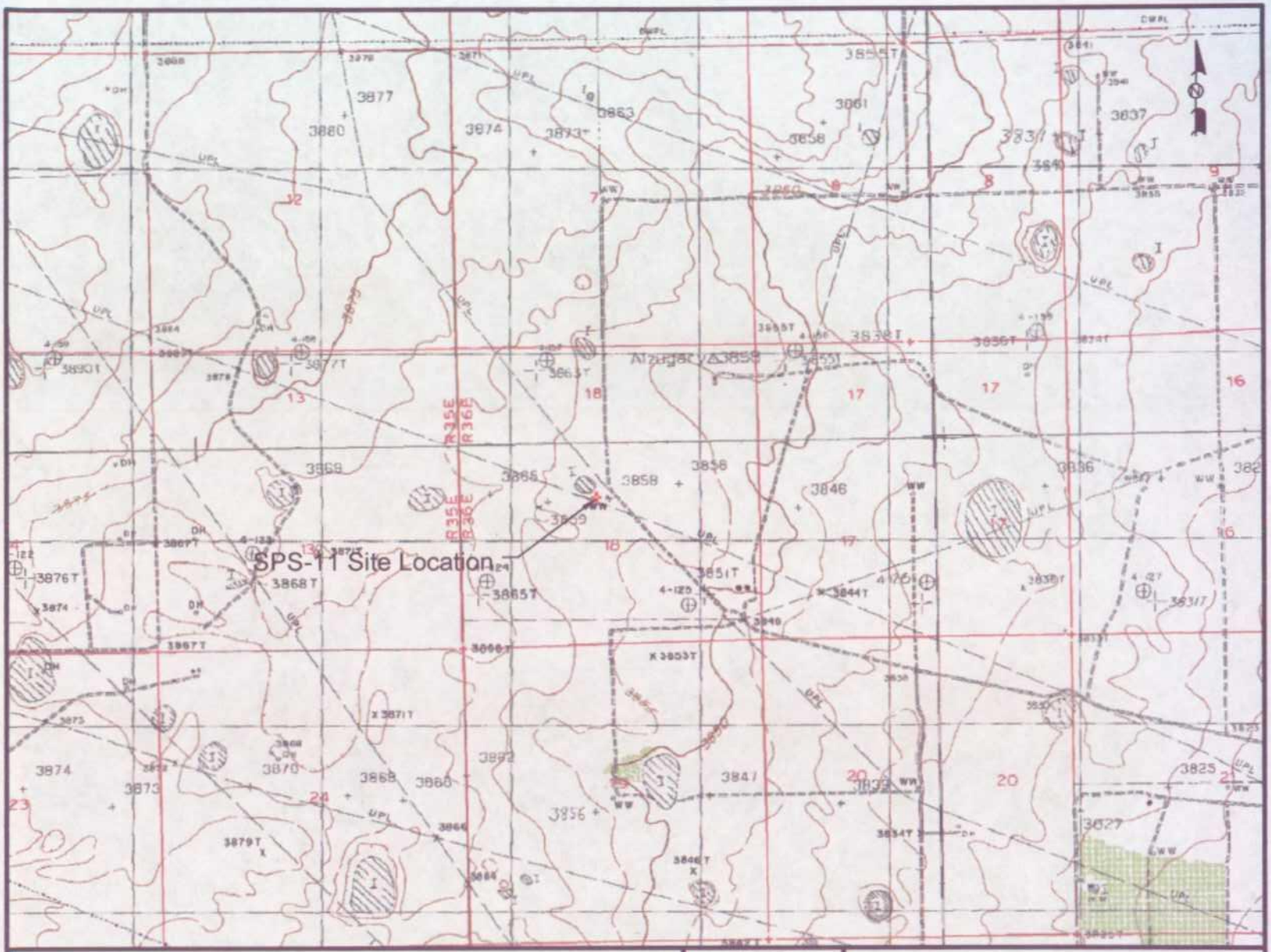
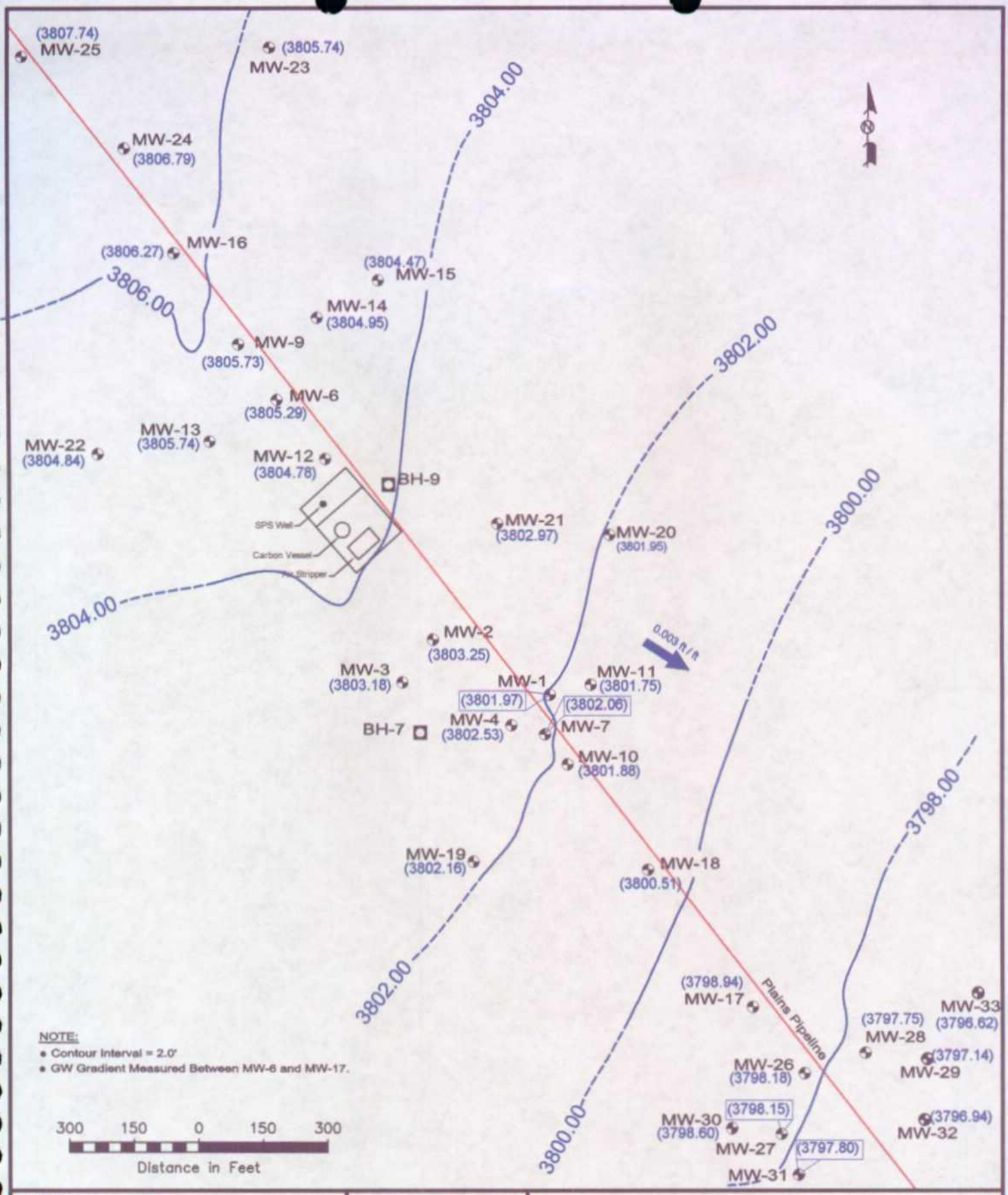


Figure 1
Site Location Map

Plains Marketing, L.P.
SPS-11
Lea County, NM

NOVA Safety and Environmental

Scale: NTS	Prep By: CDS	Checked By: TKC
February 20, 2005	NW1/4 SE1/4 Sec 18 T18S R36E	
	Lat. N32° 44' 50.3" Long. W103° 23' 36.5"	



LEGEND:
- Monitor Well Location
- Soil Boring Location
- Pipeline
- Groundwater Gradient Contour Line
- (3800.51) Groundwater Elevation (feet)
- 0.003 ft / ft Groundwater Gradient Direction and Magnitude

Figure 2A
Inferred Groundwater Gradient Map (3/17/05)
Plains Marketing, L.P.
TNM SPS-11
Lea County, NM

NOVA Safety and Environmental

NOVA safety and environmental

Scale: 1" = 300'	Drawn By: DPM	Prepared By: CDS
June 2, 2005	NW1/4 SE1/4 Sec 18 T18S R36E	
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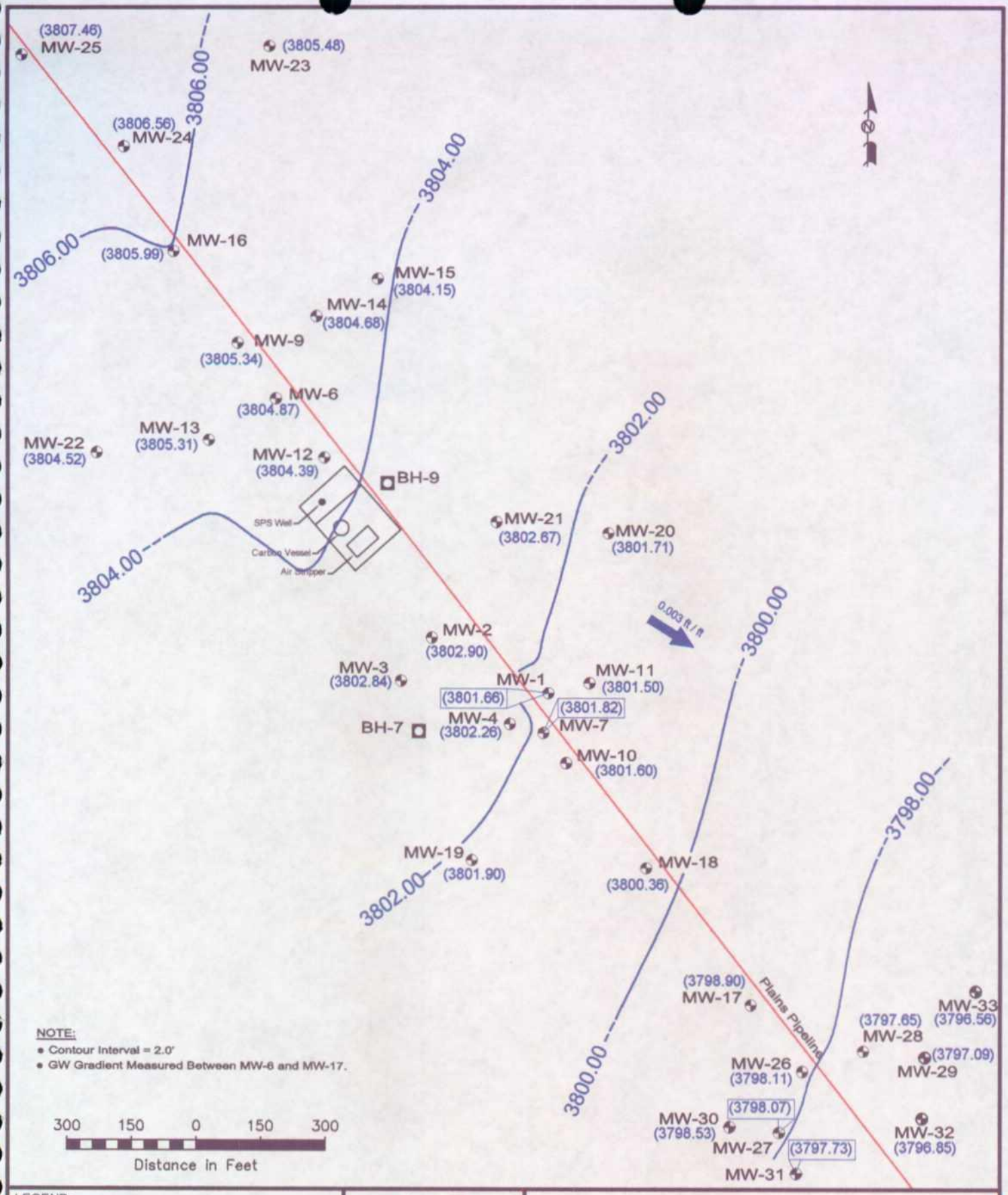

Figure 2B
Inferred Groundwater Gradient Map (6/15/05)
Plains Marketing, L.P.
TNM SPS-11
Lea County, NM

NOVA Safety and Environmental

Scale: 1" = 300'	Drawn By: DPM	Prepared By: CDS
July 25, 2005	NW1/4 SE1/4 Sec 18 T18S R36E	
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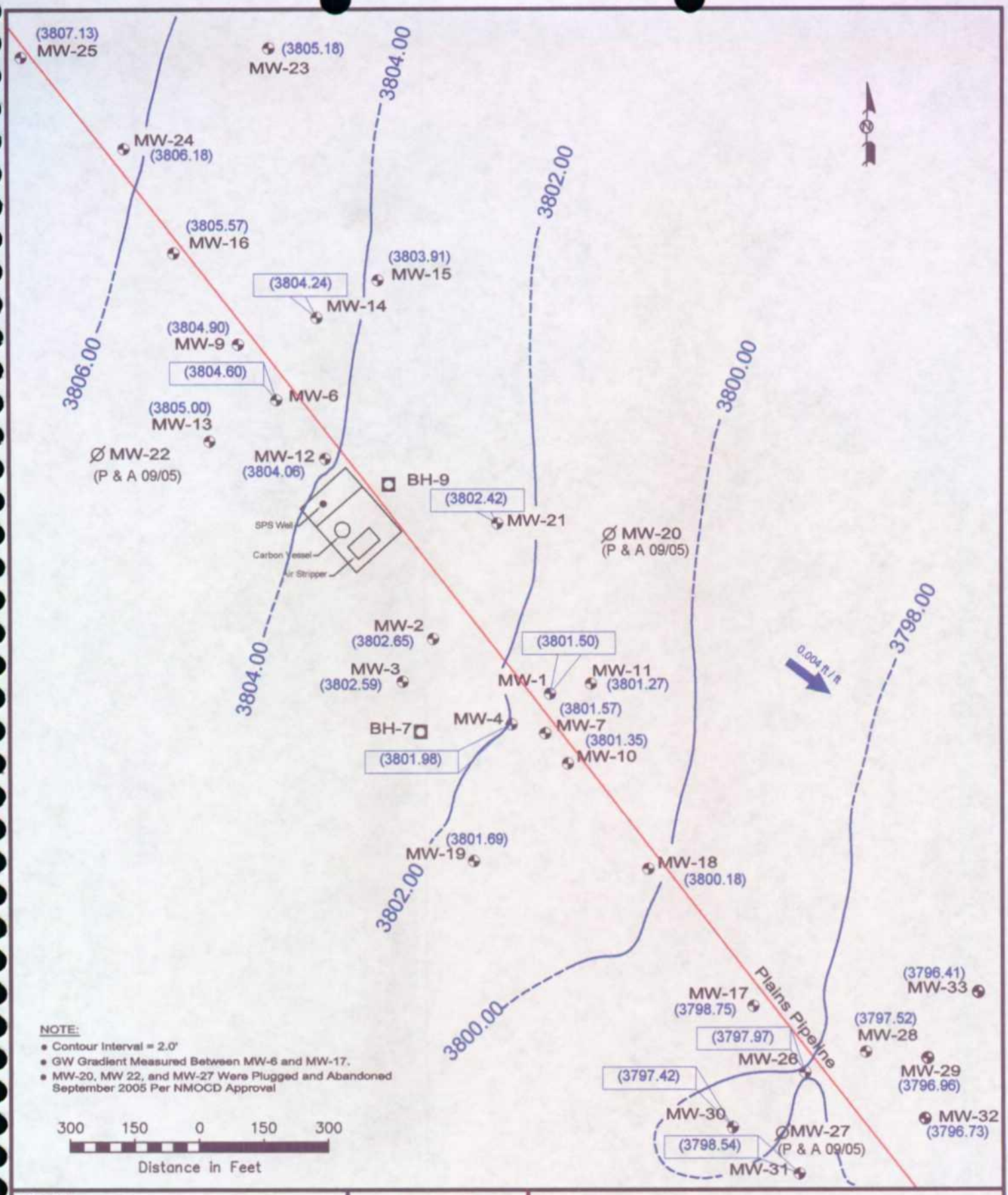


Figure 2C
Inferred Groundwater Gradient Map
(9/14 Thru 9/15/05)
Plains Marketing, L.P.
TNM SPS-11
Lea County, NM

NOVA Safety and Environmental

NOVA safety and environmental

Scale: 1" = 300'	Drawn By: DPM	Prepared By: CDS
September 22, 2005	NW1/4 SE1/4 Sec 18 T18S R36E	
	Lat. N32° 44' 50.3" Long. W103° 23' 38.5"	

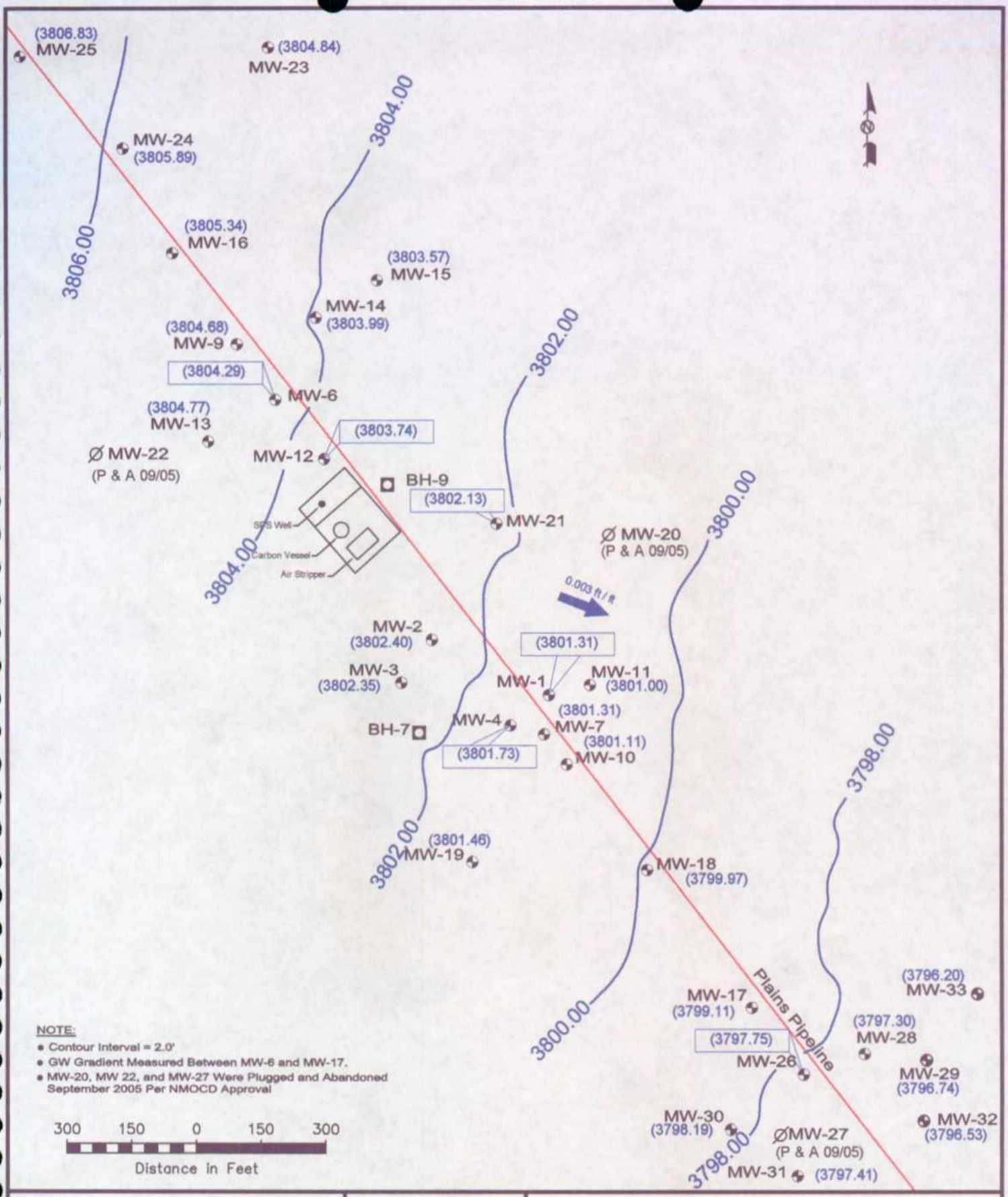
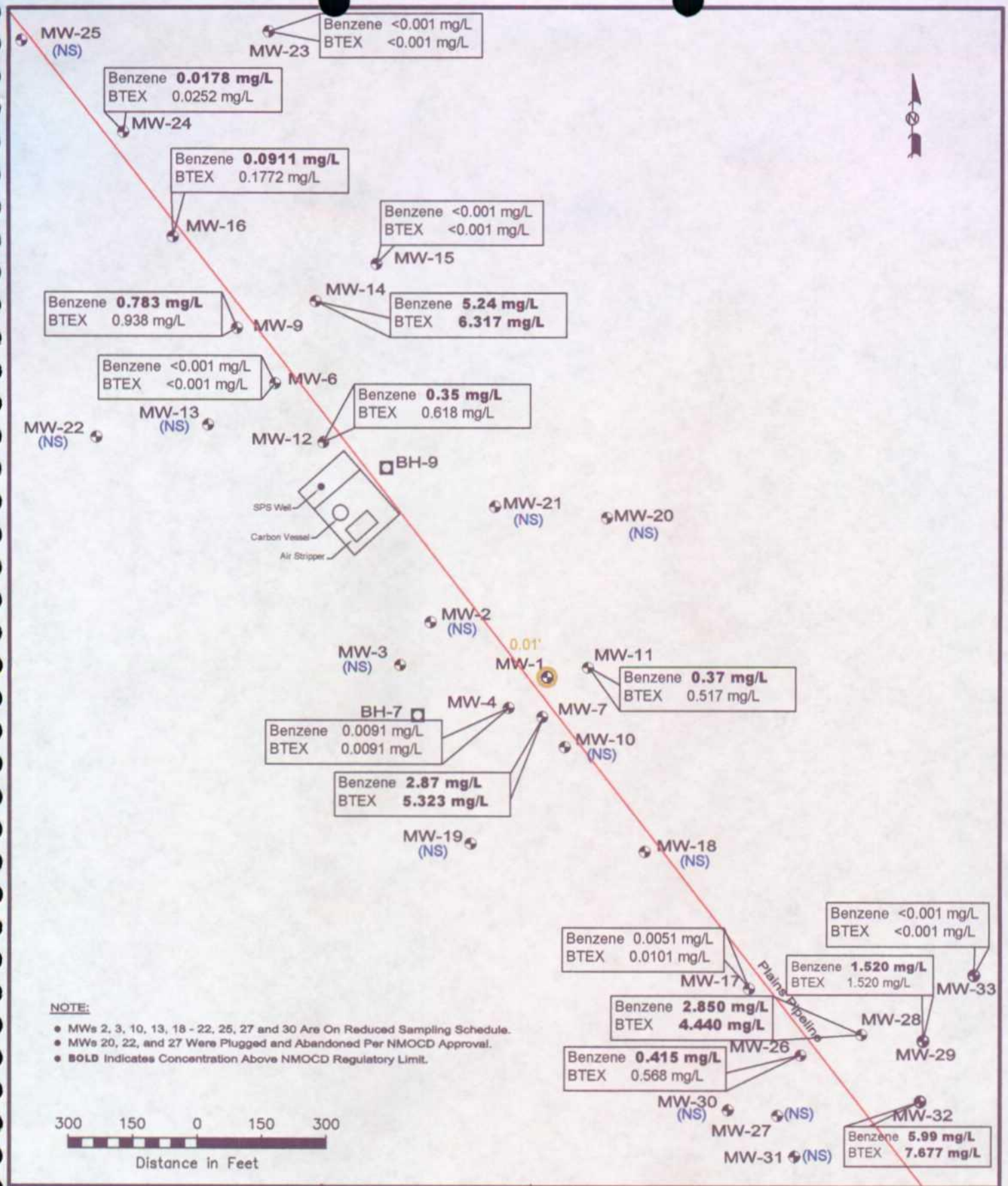


Figure 2D
Inferred Groundwater Gradient Map
(12/13/05)
Plains Marketing, L.P.
TNM SPS-11
Lea County, NM

NOVA Safety and Environmental

NOVA safety and environmental

Scale: 1" = 300'	Drawn By: DPM	Prepared By: CDS
January 03, 2005	NW1/4 SE1/4 Sec 18 T18S R36E	
	Lat. N32° 44' 50.3" Long. W103° 23' 38.5"	



LEGEND:

- Monitoring Well Location (NS) Not Sampled
- Soil Boring Location
- Pipeline
- <0.001 Constituent Concentration (mg/L)
- 0.01' PSH Thickness (Feet)
- Inferred PSH Extent

Figure 3A
Groundwater Concentration and Inferred PSH Extent Map (3/17/05)
Plains Marketing, L.P.
TNM SPS-11
Lea County, NM

NOVA Safety and Environmental

NOVA safety and environmental

Scale: 1" = 300'	Drawn By: DPM	Prepared By: CDS
May 16, 2005	NW1/4 SE1/4 Sec 18 T18S R36E	
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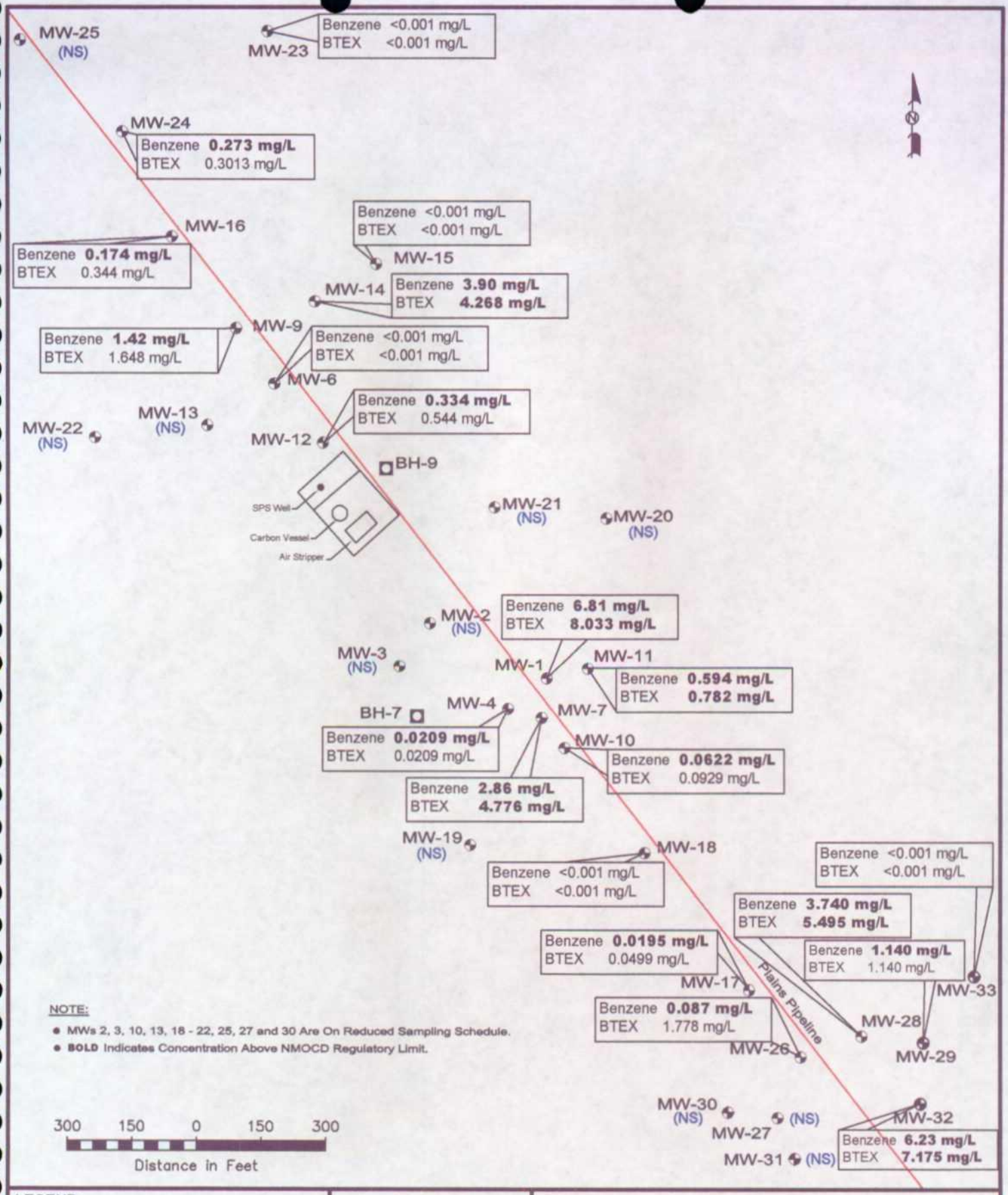

LEGEND:

- Monitoring Well Location (NS) Not Sampled
- Soil Boring Location
- Pipeline
- <0.001 Constituent Concentration (mg/L)
- 0.01' PSH Thickness (Feet)
- Inferred PSH Extent

Figure 3B
Groundwater Concentration and Inferred PSH Extent Map (6/15/05)
Plains Marketing, L.P.
TNM SPS-11
Lea County, NM

NOVA Safety and Environmental

Scale: 1" = 300'	Drawn By: DPM	Prepared By: CDS
July 22, 2005	NW1/4 SE1/4 Sec 18 T18S R36E	
	Lat. N32° 44' 50.3" Long. W103° 23' 38.5"	

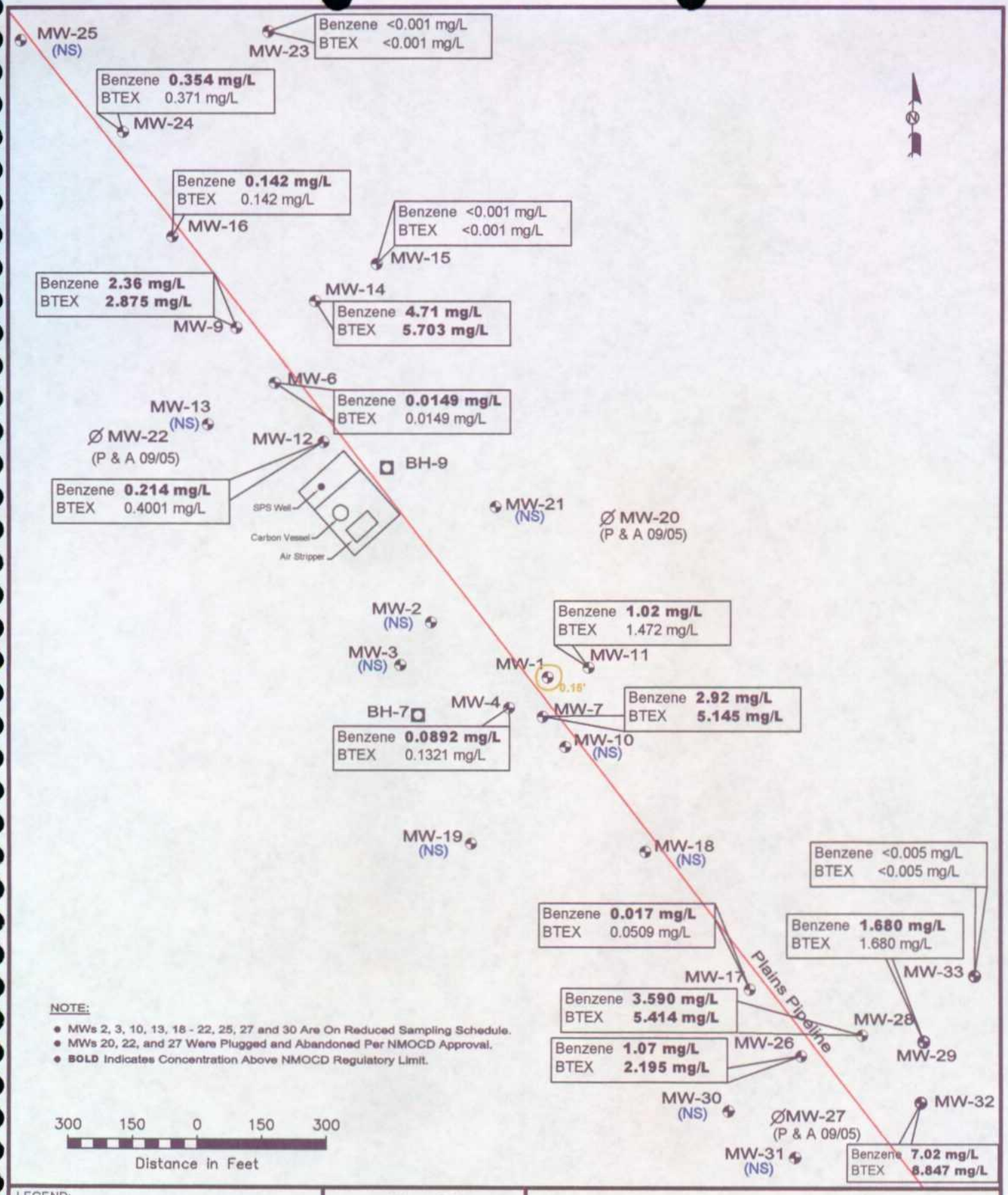

Figure 3C
Groundwater Concentration and Inferred PSH Extent Map (9/14 Thru 9/15/05)
Plains Marketing, L.P.
TNM SPS-11
Lea County, NM

NOVA Safety and Environmental

NOVA safety and environmental

Scale: 1" = 300'	Drawn By: DPM	Prepared By: CDS
October 13, 2005	NW1/4 SE1/4 Sec 18 T18S R36E	
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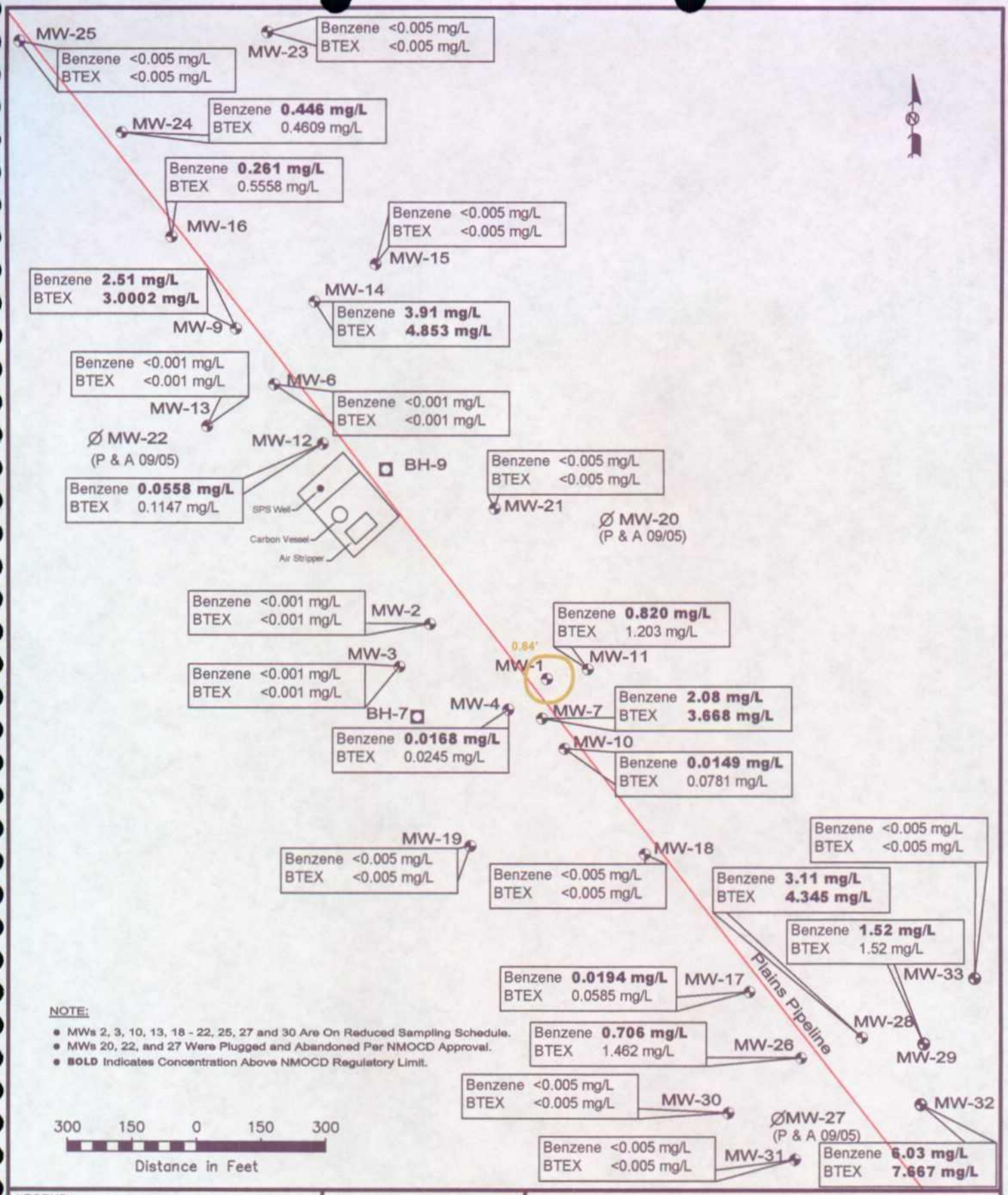


Figure 3D
Groundwater Concentration and Inferred PSH Extent Map (12/13/05)
Plains Marketing, L.P.
TNM SPS-11
Lea County, NM

NOVA Safety and Environmental

Scale: 1" = 300'	Drawn By: DPM	Prepared By: CDS
January 03, 2006	NW1/4 SE1/4 Sec 18 T18S R36E	
	Lat. N32° 44' 50.3" Long. W103° 23' 38.5"	

Tables

TABLE 1

2005 GROUNDWATER ELEVATION DATA
PLAINS MARKETING, L.P.

SPS - 11
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-1	01/13/05	3859.08	56.97	57.20	0.23	3802.08
	01/20/05	3859.08	56.94	56.97	0.03	3802.14
	01/27/05	3859.08	sheen	57.09	0.00	3801.99
	02/04/05	3859.08	sheen	57.02	0.00	3802.06
	02/10/05	3859.08	sheen	56.98	0.00	3802.10
	02/17/05	3859.08	sheen	57.08	0.00	3802.00
	02/24/05	3859.08	sheen	57.04	0.00	3802.04
	03/03/05	3859.08	sheen	57.08	0.00	3802.00
	03/17/05	3859.08	57.11	57.12	0.01	3801.97
	04/07/05	3859.08	57.18	57.25	0.07	3801.89
	05/26/05	3859.08	57.42	57.45	0.03	3801.66
	06/15/05	3859.08	-	57.42	0.00	3801.66
	06/23/05	3859.08	sheen	57.38	0.00	3801.70
	07/27/05	3859.08	sheen	57.51	0.00	3801.57
	08/25/05	3859.08	sheen	57.30	0.00	3801.78
	09/14/05	3859.08	57.56	57.71	0.15	3801.50
	09/28/05	3859.08	57.50	57.74	0.24	3801.54
	10/28/05	3859.08	57.55	57.95	0.40	3801.47
	11/16/05	3859.08	57.51	60.01	2.50	3801.20
	12/13/05	3859.08	57.67	58.31	0.64	3801.31
	12/29/05	3859.08	57.70	58.40	0.70	3801.28
MW-2	*03/17/05*	3860.76	-	57.51	0.00	3803.25
	06/15/05	3860.76	-	57.86	0.00	3802.90
	09/14/05	3860.76	-	58.11	0.00	3802.65
	12/13/05	3860.76	-	58.36	0.00	3802.40
MW-3	*03/17/05*	3861.15	-	57.97	0.00	3803.18
	06/15/05	3861.15	-	58.31	0.00	3802.84
	09/14/05	3861.15	-	58.56	0.00	3802.59
	12/13/05	3861.15	-	58.80	0.00	3802.35
MW-4	*03/17/05*	3859.62	-	57.09	0.00	3802.53
	06/15/05	3859.62	-	57.36	0.00	3802.26
	09/14/05	3859.62	-	57.64	0.00	3801.98
	12/13/05	3859.62	-	57.89	0.00	3801.73
MW-6	*03/17/05*	3862.47	-	57.18	0.00	3805.29
	06/15/05	3862.47	-	57.60	0.00	3804.87
	09/14/05	3862.47	-	57.87	0.00	3804.60
	12/13/05	3862.47	-	58.18	0.00	3804.29
MW-7	*03/17/05*	3859.31	-	57.25	0.00	3802.06
	06/15/05	3859.31	-	57.49	0.00	3801.82
	09/14/05	3859.31	-	57.74	0.00	3801.57
	12/13/05	3859.31	-	58.00	0.00	3801.31

TABLE 1

2005 GROUNDWATER ELEVATION DATA
PLAINS MARKETING, L.P.

SPS - 11
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-9	*03/17/05*	3861.88	-	56.15	0.00	3805.73
	06/15/05	3861.88	-	56.54	0.00	3805.34
	09/15/05	3861.88	-	56.98	0.00	3804.90
	12/13/05	3861.88	-	57.20	0.00	3804.68
MW-10	*03/17/05*	3860.58	-	58.70	0.00	3801.88
	06/15/05	3860.58	-	58.98	0.00	3801.60
	09/14/05	3860.58	-	59.23	0.00	3801.35
	12/13/05	3860.58	-	59.47	0.00	3801.11
MW-11	*03/17/05*	3860.00	-	58.25	0.00	3801.75
	06/15/05	3860.00	-	58.50	0.00	3801.50
	09/14/05	3860.00	-	58.73	0.00	3801.27
	12/13/05	3860.00	-	59.00	0.00	3801.00
MW-12	*03/17/05*	3863.10	-	58.32	0.00	3804.78
	06/15/05	3863.10	-	58.71	0.00	3804.39
	09/14/05	3863.10	-	59.04	0.00	3804.06
	12/13/05	3863.10	-	59.36	0.00	3803.74
MW-13	*03/17/05*	3862.44	-	56.70	0.00	3805.74
	06/15/05	3862.44	-	57.13	0.00	3805.31
	09/14/05	3862.44	-	57.44	0.00	3805.00
	12/13/05	3862.44	-	57.67	0.00	3804.77
MW-14	*03/17/05*	3862.95	-	58.00	0.00	3804.95
	06/15/05	3862.95	-	58.27	0.00	3804.68
	09/15/05	3862.95	-	58.71	0.00	3804.24
	12/13/05	3862.95	-	58.96	0.00	3803.99
MW-15	*03/17/05*	3861.70	-	57.23	0.00	3804.47
	06/15/05	3861.70	-	57.55	0.00	3804.15
	09/14/05	3861.70	-	57.79	0.00	3803.91
	12/13/05	3861.70	-	58.13	0.00	3803.57
MW-16	*03/17/05*	3863.15	-	56.88	0.00	3806.27
	06/15/05	3863.15	-	57.16	0.00	3805.99
	09/15/05	3863.15	-	57.58	0.00	3805.57
	12/13/05	3863.15	-	57.81	0.00	3805.34
MW-17	*03/17/05*	3859.17	-	60.23	0.00	3798.94
	06/15/05	3859.17	-	60.27	0.00	3798.90
	09/14/05	3859.17	-	60.42	0.00	3798.75
	12/13/05	3859.17	-	60.60	0.00	3798.57

TABLE 1

2005 GROUNDWATER ELEVATION DATA
PLAINS MARKETING, L.P.

SPS - 11
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-18	*03/17/05*	3859.98	-	59.47	0.00	3800.51
	06/15/05	3859.98	-	59.62	0.00	3800.36
	09/14/05	3859.98	-	59.80	0.00	3800.18
	12/13/05	3859.98	-	60.01	0.00	3799.97
MW-19	*03/17/05*	3862.30	-	60.14	0.00	3802.16
	06/15/05	3862.30	-	60.40	0.00	3801.90
	09/14/05	3862.30	-	60.61	0.00	3801.69
	12/13/05	3862.30	-	60.84	0.00	3801.46
MW-20	*03/17/05*	3861.30	-	59.35	0.00	3801.95
	06/15/05	3861.30	-	59.59	0.00	3801.71
	09/14/05	Plugged and Abandoned				
MW-21	*03/17/05*	3862.30	-	59.33	0.00	3802.97
	06/15/05	3862.30	-	59.63	0.00	3802.67
	09/14/05	3862.30	-	59.88	0.00	3802.42
	12/13/05	3862.30	-	60.17	0.00	3802.13
MW-22	*03/17/05*	3862.44	-	57.60	0.00	3804.84
	06/15/05	3862.44	-	57.92	0.00	3804.52
	09/14/05	Plugged andAbandoned				
MW-23	*03/17/05*	3862.44	-	56.70	0.00	3805.74
	06/15/05	3862.44	-	56.96	0.00	3805.48
	09/14/05	3862.44	-	57.26	0.00	3805.18
	12/13/05	3862.44	-	57.60	0.00	3804.84
MW-24	*03/17/05*	3864.36	-	57.57	0.00	3806.79
	06/15/05	3864.36	-	57.80	0.00	3806.56
	09/15/05	3864.36	-	58.18	0.00	3806.18
	12/13/05	3864.36	-	58.47	0.00	3805.89
MW-25	*03/17/05*	3864.16	-	56.42	0.00	3807.74
	06/15/05	3864.16	-	56.70	0.00	3807.46
	09/14/05	3864.16	-	57.03	0.00	3807.13
	12/13/05	3864.16	-	57.33	0.00	3806.83
MW-26	*03/17/05*	3858.79	-	60.61	0.00	3798.18
	06/15/05	3858.79	-	60.68	0.00	3798.11
	09/14/05	3858.79	-	60.82	0.00	3797.97
	12/13/05	3858.79	-	61.04	0.00	3797.75
MW-27	*03/17/05*	3858.23	-	60.08	0.00	3798.15
	06/15/05	3858.23	-	60.16	0.00	3798.07
	09/14/05	Plugged and Abandoned				

TABLE 1

2005 GROUNDWATER ELEVATION DATA
PLAINS MARKETING, L.P.

SPS - 11
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-28	*03/17/05*	3858.60	-	60.85	0.00	3797.75
	06/15/05	3858.60	-	60.95	0.00	3797.65
	09/14/05	3858.60	-	61.08	0.00	3797.52
	12/13/05	3858.60	-	61.30	0.00	3797.30
MW-29	*03/17/05*	3858.54	-	61.40	0.00	3797.14
	06/15/05	3858.54	-	61.45	0.00	3797.09
	09/14/05	3858.54	-	61.58	0.00	3796.96
	12/13/05	3858.54	-	61.80	0.00	3796.74
MW-30	*03/17/05*	3858.35	-	59.75	0.00	3798.60
	06/15/05	3858.35	-	59.82	0.00	3798.53
	09/14/05	3858.35	-	60.93	0.00	3797.42
	12/13/05	3858.35	-	60.16	0.00	3798.19
MW-31	*03/17/05*	3858.52	-	60.72	0.00	3797.80
	06/15/05	3858.52	-	60.79	0.00	3797.73
	09/14/05	3858.52	-	59.98	0.00	3798.54
	12/13/05	3858.52	-	61.11	0.00	3797.41
MW-32	03/17/05	3858.07	-	61.13	0.00	3796.94
	06/15/05	3858.07	-	61.22	0.00	3796.85
	09/14/05	3858.07	-	61.34	0.00	3796.73
	12/13/05	3858.07	-	61.54	0.00	3796.53
MW-33	*03/17/05*	3858.36	-	61.74	0.00	3796.62
	06/15/05	3858.36	-	61.80	0.00	3796.56
	09/14/05	3858.36	-	61.95	0.00	3796.41
	12/13/05	3858.36	-	62.16	0.00	3796.20

Elevations based on the North America Vertical Datum of 1929.

TABLE 2
2005 CONCENTRATIONS OF BTEX IN GROUNDWATER
PLAINS MARKETING, L.P.

SPS 11
LEA COUNTY, NEW MEXICO

All concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-8260b				
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
NMOCD REGULATORY LIMIT		**0.01**	**0.75**	**0.75**	**0.62**	
MW-1	03/17/05	Not Sampled Due to PSH in Well				
	06/15/05	**6.81**	0.122	**0.92**	0.181	
	09/14/05	Not Sampled Due to PSH in Well				
	12/13/05	Not Sampled Due to PSH in Well				
MW-2	03/17/05	Not Sampled Due to Sample Reduction				
	06/15/05	Not Sampled Due to Sample Reduction				
	09/14/05	Not Sampled Due to Sample Reduction				
	12/13/05	<0.001	<0.001	<0.001	<0.001	
MW-3	03/17/05	Not Sampled Due to Sample Reduction				
	06/15/05	Not Sampled Due to Sample Reduction				
	09/14/05	Not Sampled Due to Sample Reduction				
	12/13/05	<0.001	<0.001	<0.001	<0.001	
MW-4	03/17/05	0.0091	<0.005	<0.005	<0.005	
	06/15/05	**0.0209**	<0.001	<0.001	<0.001	
	09/14/05	**0.0892**	0.0019	0.0325	0.0085	
	12/13/05	**0.0168**	0.0013	0.005	0.0014	
MW-6	03/17/05	<0.001	<0.001	<0.001	<0.001	
	06/15/05	<0.001	<0.001	<0.001	<0.001	
	09/14/05	**0.0149**	<0.001	<0.001	<0.001	
	12/13/05	<0.001	<0.001	<0.001	<0.001	
MW-7	03/17/05	**2.87**	0.0291	**1.78**	**0.644**	
	06/15/05	**2.86**	0.0804	**1.41**	0.426	
	09/14/05	**2.92**	<0.05	**1.77**	0.455	
	12/13/05	**2.08**	<0.02	**1.4**	0.188	
MW-9	03/17/05	**0.783**	<0.01	0.0891	0.0655	
	06/15/05	**1.42**	<0.02	0.168	0.06	
	09/15/05	**2.36**	<0.05	0.431	0.0838	
	12/13/05	**2.51**	<0.02	0.462	0.0282	
MW-10	03/17/05	Not Sampled Due to Sample Reduction				
	06/15/05	**0.0622**	<0.005	0.0132	0.0175	

TABLE 2
2005 CONCENTRATIONS OF BTEX IN GROUNDWATER
PLAINS MARKETING, L.P.

SPS 11
LEA COUNTY, NEW MEXICO

All concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-8260b				
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
NMOCD REGULATORY LIMIT		0.01	0.75	0.75	0.62	
MW-10	09/14/05	Not Sampled Due to Sample Reduction				
	12/13/05	**0.0149**	<0.005	0.0561	0.0071	
MW-11	03/17/05	**0.37**	<0.005	0.139	0.0077	
	06/15/05	**0.594**	<0.01	0.188	<0.01	
	09/14/05	**1.02**	<0.02	0.422	0.0303	
	12/14/05	**0.820**	<0.02	0.356	0.0267	
MW-12	03/17/05	**0.35**	<0.005	0.205	0.0629	
	06/15/05	**0.334**	<0.01	0.168	0.0419	
	09/14/05	**0.214**	<0.005	0.136	0.0501	
	12/13/05	**0.0558**	<0.005	0.0444	0.0145	
MW-13	03/17/05	Not Sampled Due to Sample Reduction				
	06/15/05	Not Sampled Due to Sample Reduction				
	09/14/05	Not Sampled Due to Sample Reduction				
	12/13/05	<0.001	<0.001	<0.001	<0.001	
MW-14	03/17/05	**5.24**	<0.05	**1.000**	0.077	
	06/15/05	**3.9**	<0.1	0.368	<0.1	
	09/15/05	**4.71**	<0.1	**0.993**	<0.1	
	12/13/05	**3.91**	<0.1	**0.943**	<0.1	
MW-15	03/17/05	<0.001	<0.001	<0.001	<0.001	
	06/15/05	<0.001	<0.001	<0.001	<0.001	
	09/14/05	<0.001	<0.001	<0.001	<0.001	
	12/14/05	<0.005	<0.005	<0.005	<0.005	
MW-16	03/17/05	**0.0911**	0.0388	0.0355	0.0118	
	06/15/05	**0.174**	0.0372	0.106	0.0268	
	09/15/05	**0.142**	<0.1	<0.1	<0.1	
	12/13/05	**0.261**	0.177	0.0809	0.0369	
MW-17	03/17/05	0.0051	0.002	0.0013	0.0017	
	06/15/05	**0.0195**	0.0148	0.0063	0.0093	
	09/14/05	**0.017**	0.014	0.0076	0.0123	
	12/13/05	**0.0194**	0.019	0.0086	0.0115	

TABLE 2
2005 CONCENTRATIONS OF BTEX IN GROUNDWATER
PLAINS MARKETING, L.P.

SPS 11
LEA COUNTY, NEW MEXICO

All concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-8260b				
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
NMOCD REGULATORY LIMIT		0.01	0.75	0.75	0.62	
MW-18	03/17/05	Not Sampled Due to Sample Reduction				
	06/15/05	<0.001	<0.001	<0.001	<0.001	
	09/14/05	Not Sampled Due to Sample Reduction				
	12/13/05	<0.005	<0.005	<0.005	<0.005	
MW-19	03/17/05	Not Sampled Due to Sample Reduction				
	06/15/05	Not Sampled Due to Sample Reduction				
	09/14/05	Not Sampled Due to Sample Reduction				
	12/13/05	<0.005	<0.005	<0.005	<0.005	
MW-20	03/17/05	Not Sampled Due to Sample Reduction				
	06/15/05	Not Sampled Due to Sample Reduction				
	09/14/05	Plugged and Abandoned				
MW-21	03/17/05	Not Sampled Due to Sample Reduction				
	06/15/05	Not Sampled Due to Sample Reduction				
	09/14/05	Not Sampled Due to Sample Reduction				
	12/14/05	<0.005	<0.005	<0.005	<0.005	
MW-22	03/17/05	Not Sampled Due to Sample Reduction				
	06/15/05	Not Sampled Due to Sample Reduction				
	09/14/05	Plugged and Abandoned				
MW-23	03/17/05	<0.001	<0.001	<0.001	<0.001	
	06/15/05	<0.001	<0.001	<0.001	<0.001	
	09/14/05	<0.001	<0.001	<0.001	<0.001	
	12/14/05	<0.005	<0.005	<0.005	<0.005	
MW-24	03/17/05	**0.0178**	0.0031	0.0023	0.002	
	06/15/05	**0.273**	0.0101	0.0182	<0.01	
	09/15/05	**0.354**	<0.001	0.0152	0.0018	
	12/13/05	**0.446**	<0.005	0.0149	<0.005	
MW-25	03/17/05	Not Sampled Due to Sample Reduction				
	06/15/05	Not Sampled Due to Sample Reduction				
	09/14/05	Not Sampled Due to Sample Reduction				

TABLE 2
2005 CONCENTRATIONS OF BTEX IN GROUNDWATER
PLAINS MARKETING, L.P.

SPS 11
LEA COUNTY, NEW MEXICO

All concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-8260b				
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
NMOCD REGULATORY LIMIT		**0.01**	**0.75**	**0.75**	**0.62**	
MW-25	12/13/05	<0.005	<0.005	<0.005	<0.005	
MW-26	03/17/05	**0.415**	0.0479	0.0642	0.0412	
	06/15/05	**0.87**	0.412	0.276	0.22	
	09/14/05	**1.07**	0.389	0.384	0.352	
	12/13/05	**0.706**	0.34	0.23	0.186	
MW-27	03/17/05	Not Sampled Due to Sample Reduction				
	06/15/05	Not Sampled Due to Sample Reduction				
	09/14/05	Plugged and Abandoned				
MW-28	03/17/05	**2.850**	<0.02	**1.06**	0.53	
	06/15/05	**3.740**	<0.05	**1.29**	0.465	
	09/14/05	**3.590**	<0.05	**1.27**	0.554	
	12/13/05	**3.110**	<0.05	**0.868**	0.367	
MW-29	03/17/05	**1.520**	<0.01	<0.01	<0.01	
	06/15/05	**1.140**	<0.02	<0.02	<0.02	
	09/14/05	**1.680**	<0.05	<0.05	<0.05	
	12/13/05	**1.520**	<0.02	<0.02	<0.02	
MW-30	03/17/05	Not Sampled Due to Sample Reduction				
	06/15/05	Not Sampled Due to Sample Reduction				
	09/14/05	Not Sampled Due to Sample Reduction				
	12/13/05	<0.005	<0.005	<0.005	<0.005	
MW-31	03/17/05	Not Sampled Due to Sample Reduction				
	06/15/05	Not Sampled Due to Sample Reduction				
	09/14/05	Not Sampled Due to Sample Reduction				
	12/13/05	<0.005	<0.005	<0.005	<0.005	
MW-32	03/17/05	**5.99**	0.43	**0.781**	0.476	
	06/15/05	**6.23**	0.112	0.637	0.196	
	09/14/05	**7.02**	0.26	**1.17**	0.397	
	12/13/05	**6.03**	0.392	**0.955**	0.29	
MW-33	03/17/05	<0.001	<0.001	<0.001	<0.001	

TABLE 2
2005 CONCENTRATIONS OF BTEX IN GROUNDWATER
PLAINS MARKETING, L.P.

SPS 11
LEA COUNTY, NEW MEXICO

All concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-8260b				
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
NMOCD REGULATORY LIMIT		0.01	0.75	0.75	0.62	
MW-33	06/15/05	<0.001	<0.001	<0.001	<0.001	
	09/14/05	<0.005	<0.005	<0.005	<0.005	
	12/14/05	<0.005	<0.005	<0.005	<0.005	

Note: m,p and o Xylenes combined when analyzed by Trace Laboratories, Inc. only.

Appendices

Appendix A:
Notification of Release and Corrective Action (Form C-141)

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

x Initial Report ☐ Final Report

Name of Company	Plains Pipeline, LP	Contact:	Camille Reynolds
Address:	3705 E. Hwy 158, Midland, TX 79706	Telephone No.	505-441-0965
Facility Name	SPS #11	Facility Type:	Pipeline

Surface Owner:	Mineral Owner	Lease No.
New Mexico State Land Office		

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	18	18S	36E					Lea

Latitude 32 degrees 44' 50.3" **Longitude** 103 degrees 23' 36.5"

NATURE OF RELEASE

Type of Release:	Volume of Release:	Volume Recovered
Source of Release:	Date and Hour of Occurrence Unknown	Date and Hour of Discovery
Was Immediate Notice Given? Yes ☐ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Describe Area Affected and Cleanup Action Taken.*
NOTE: Texas-New Mexico Pipeline was the owner/operator of the pipeline system at the time of the release, initial response information is unavailable .

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Camille Reynolds	Approved by District Supervisor:	
Title: Remediation Coordinator	Approval Date:	Expiration Date:
E-mail Address: cjreynolds@paalp.com	Conditions of Approval:	Attached ☐
Date: 3/21/2005 Phone: (505)441-0965		

* Attach Additional Sheets If Necessary

Martin, Ed, EMNRD

To: Camille J Reynolds
Subject: RE: Plains Proposal for additional drilling

All of the proposed monitor well sites are approved.

Ed Martin
New Mexico Oil Conservation Division
Environmental Bureau
1220 S. St. Francis
Santa Fe, NM 87505
Phone: 505-476-3492
Fax: 505-476-3462
email: ed.martin@state.nm.us

GW-140

-----Original Message-----
From: Camille J Reynolds [mailto:cjreynolds@paalp.com]
Sent: Thursday, February 02, 2006 11:51 AM
To: Martin, Ed, EMNRD
Subject: Plains Proposal for additional drilling

Ed;

Please find attached the proposal for additional drilling to be conducted at various Plains remediation sites. Please contact me with any questions or comments.

Sincerely,

Camille

<<Additional MW installation.pdf>>

PLAINS PIPELINE

January 31, 2006

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

Re: Plains Pipeline Remediation Sites
Various Locations in Lea County

Dear Mr. Martin:

Based on the results of our ongoing groundwater monitoring and sampling program at several of our remediation and groundwater monitoring sites in Lea County, we have identified the need for additional groundwater monitor and/or recovery wells at the following sites.

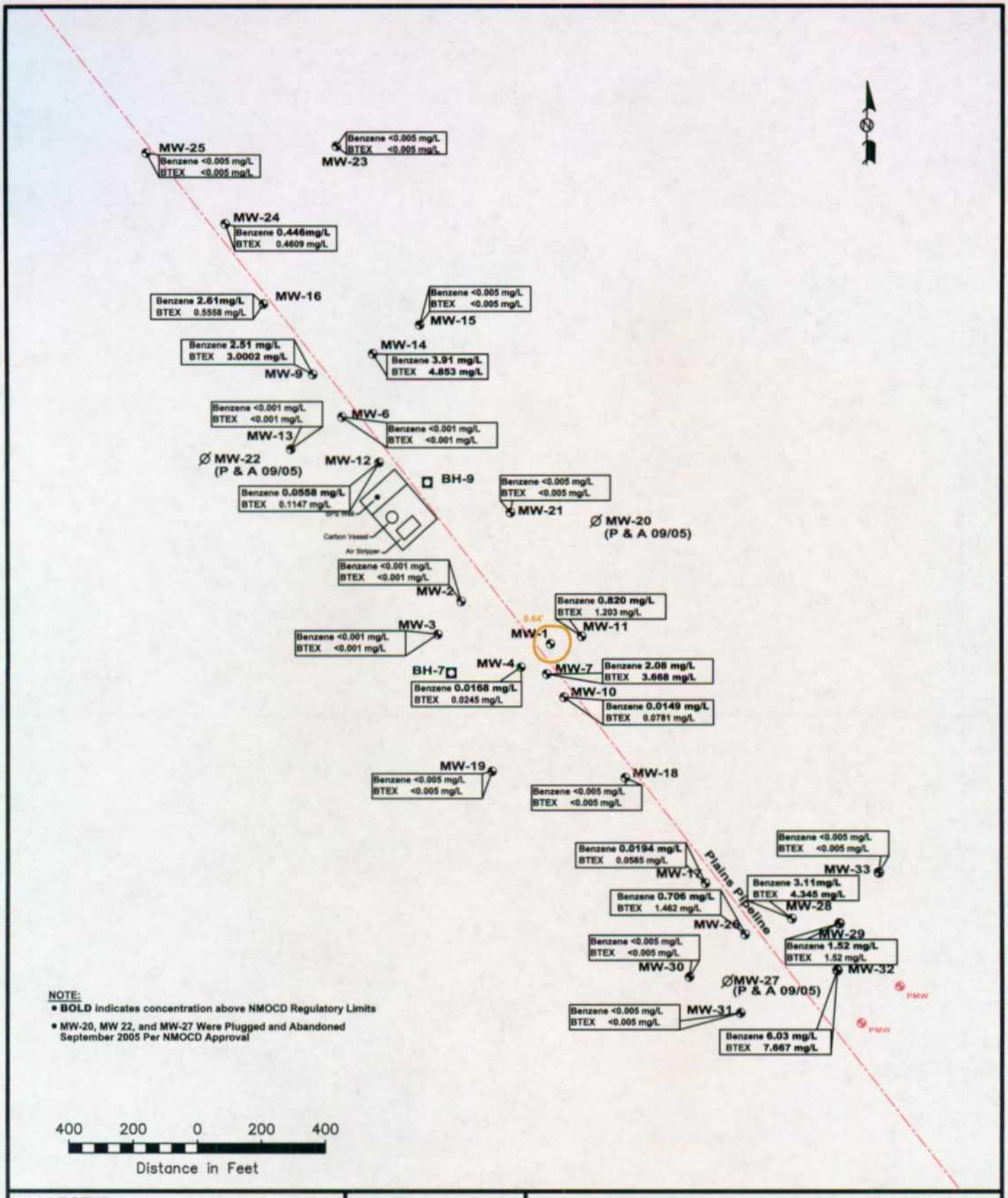
Site Name	Plains EMS No.	Site Location	Number of Wells
SPS-11	TNM SPS-11	Section 18, T18S, R36E	2
Texaco Skelly F	2002-11229	Section 21, T20S, R37E	2 and/or 3
Red Byrd #1	TNM Red Byrd #1	Section 1, T19S, R36E	6
Junction 34 to Lea	2002-10286	Section 21, T20S, R37E	3
CS Caylor	2002-10250	Section 6, T17S, R37E	6
Abandoned Vacuum 10" Sour	2004-00208	Section 8, T20S, R37E	3
34 Junction South	2005-00138	Section 2, T17S, R36E	3
WSDDU Texaco	2001-11152	Section 31, T24S, R38E	3
D. S. Hugh Gathering	2000-10807	Section 3, T21S, R37E	2

The proposed well locations are illustrated on the attached site maps. Plains requests your approval of the proposed monitor well locations at the above referenced sites. We anticipate commencement of drilling activities the week of February 13, 2006Should you have any questions or comments, please contact me at (505) 441-0965.

Sincerely,

Camille Reynolds

Camille Reynolds
Remediation Coordinator
Plains All American Pipeline



NOTE:

- **BOLD** indicates concentration above NMOCD Regulatory Limits
- MW-20, MW 22, and MW-27 Were Plugged and Abandoned September 2005 Per NMOCD Approval

LEGEND:

- Monitoring Well Location
- Soil Boring Location
- PMW Proposed Monitor Well

Proposed Monitor Wells 2006

Plains Marketing, L.P.
TNM SPS-11
Lea County, NM

NOVA Safety and Environmental

NOVA safety and environmental

Scale: 1" = 400'	Prepared / Drawn By: CDS	Checked By: TKC
December 20, 2005	NW1/4 SE1/4 Sec 18 T18S R36E	
	Lat. N32° 44' 50.3" Long. W103° 23' 38.5"	

PLAINS PIPELINE

September 23, 2005

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

Re: Plains Pipeline – Plugging and Abandonment of Monitor Wells
8 Sites in Lea County, New Mexico

Dear Mr. Martin:

Please find attached for your review the Plugging and Abandonment of Monitor Wells Reports for the following Plains sites:

Bob Durham	Section 32, Township 19 South, Range 37 East, Lea County
Darr Angell #2	Sections 11 and 14, Township 15 South, Range 37 East,LeaCounty
HDO 90-23	Section 6, Township 20 South, Range 37 East, Lea County
TNM Monument 17	Section 29, Township 19 South, Range 37 East, Lea County
TNM Monument 18	Section 7, Township 20 South, Range 37 East, Lea County
TNM 97-04	Section 11, Township 16 South, Range 35 East, Lea County
TNM 97-18	Section 28, Township 20 South, Range 37 East, Lea County
GW-140 SPS-11	Section 18, Township 18 South, Range 36 East, Lea County

If you have any questions or require further information, please contact me at (505) 441-0965.

Sincerely,

Dan Byrt for C.J.R.

Camille Reynolds
Remediation Coordinator
Plains Pipeline

Enclosures

September 16, 2005

Mr. Ed Martin
New Mexico Energy, Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Re: Notification of Plains Marketing, L.P. Plugging and Abandonment of Monitor Wells
TNM SPS-11
NW ¼, SE ¼, Section 18, T-18-S, R-36-E
Lea County, NM

Dear Mr. Martin,

NOVA Safety and Environmental (NOVA), on behalf of Plains Marketing, L.P. (Plains) respectfully submits the following notification of plugging and abandonment of monitor wells at the Plains TNM SPS-11 leak site (the site), located in the NW ¼, SE ¼, Section 18, T-18-S, R-36-E in Lea County, NM.

On September 14, 2005, three (3) monitor wells were plugged and abandoned at the site. Please reference your letter to Ms. Camille Reynolds of Plains Marketing L.P. dated June 22, 2005 regarding authorization to plug and abandon these wells.

The monitor wells were plugged and abandoned by Environmental Plus, Inc (EPI) of Eunice, New Mexico, a licensed water well driller in the State of New Mexico. The monitor wells were plugged utilizing guidelines set forth by the office of the New Mexico State Engineer. EPI removed and disposed of the monitor well covers, vaults, and the remains of the concrete pads.

Monitor well MW-20 was filled with approximately three (3) bags of bentonite pellets to a depth of approximately one (1) foot below ground surface (bgs) and properly hydrated with water. Topsoil was placed above the former monitor well to complete the procedure.

Monitor well MW-22 was filled with approximately two and a half (2½) bags of bentonite pellets to a depth of approximately one (1) foot below ground surface (bgs) and properly hydrated with water. Topsoil was placed above the former monitor well to complete the procedure.

Monitor well MW-27 was filled with approximately two (2) bags of bentonite pellets to a depth of approximately one (1) foot below ground surface (bgs) and properly hydrated with water. Topsoil was placed above the former monitor well to complete the procedure.

The former monitor well locations are as follows:

- MW-20, 32 degrees, 44.903" N, 103 degrees, 23.564" W
- MW-22, 32 degrees, 44.938" N, 103 degrees, 23.794" W
- MW-27, 32 degrees, 44.680" N, 103 degrees, 23.491" W

Plains has completed the approved plugging and abandonment of the above referenced monitor wells as directed by the New Mexico Oil Conservation Division (NMOCD). Plains will continue to gauge and sample the remaining monitor wells at the site.

In the future, Plains may make additional requests to the NMOCD for plugging and abandonment of monitor well(s) at this site, as warranted.

Sincerely,

Curt D. Stanley
Project Manager
NOVA Safety and Environmental

cc:
Paul Sheeley / Larry Johnson, NMOCD, Hobbs, NM

Cody Morrow, New Mexico State Land Office, Santa Fe, NM

Myra Meyers, New Mexico State Land Office, Hobbs, NM

Camille Reynolds, Plains Marketing, L.P., Lovington, NM
cjreynolds@paalp.com
Jeff Dann, Plains Marketing, L.P., Houston, TX
jpdann@paalp.com
NOVA Safety and Environmental, Midland, TX
cstanley@novatraining.cc

Attachments:
Attachment #1 – Form C-141 – Release Notification and Corrective Action

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

x Initial Report ☐ Final Report

Name of Company	Plains Pipeline, LP	Contact:	Camille Reynolds
Address:	3705 E. Hwy 158, Midland, TX 79706	Telephone No.	505-441-0965
Facility Name	SPS #11	Facility Type:	Pipeline

Surface Owner:	Mineral Owner	Lease No.
New Mexico State Land Office		

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	18	18S	36E					Lea

Latitude 32 degrees 44' 50.3" **Longitude** 103 degrees 23' 36.5"

NATURE OF RELEASE

Type of Release:	Volume of Release:	Volume Recovered
Source of Release:	Date and Hour of Occurrence Unknown	Date and Hour of Discovery
Was Immediate Notice Given? Yes ☐ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Describe Area Affected and Cleanup Action Taken.*
NOTE: Texas-New Mexico Pipeline was the owner/operator of the pipeline system at the time of the release, initial response information is unavailable .

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Camille Reynolds	Approved by District Supervisor:	
Title: Remediation Coordinator	Approval Date:	Expiration Date:
E-mail Address: cjreynolds@paalp.com	Conditions of Approval:	Attached ☐
Date: 3/21/2005 Phone: (505)441-0965		

* Attach Additional Sheets If Necessary

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

June 22, 2005

Ms. Camille Reynolds
Plains Pipeline
3112 West Highway 82
Lovington, NM 88260

Re: 2004 Annual Monitoring Report
TNM SPS-11 Release Site
NW/4 SE/4 of Section 18, Township 18 South, Range 36 East
Lea County, New Mexico
Plains Marketing EMS Number: TNM-SPS-11
NMOCD Reference GW-0140

Dear Ms. Reynolds:

The New Mexico Oil Conservation Division (NMOCD) has received and reviewed the above report submitted on behalf of Plains Marketing, L.P. (Plains) by Nova Safety and Environmental and dated April 2005. This report is accepted with the following understandings and conditions:

1. Quarterly sampling and annual reporting will continue throughout 2005.
2. Plains will submit a work plan detailing the additional delineation that will take place at the site.
3. Monitor wells MW-20, MW-22, and MW-27 may be plugged and abandoned using a slurry containing 3% - 5% bentonite.

NMOCD acceptance does not relieve Plains of responsibility should its operations at this site prove to have been harmful to public health or the environment. Nor does it relieve Plains of its responsibility to comply with the rules and regulations of any other federal, state, or local governmental entity.

If you have any questions, contact me at (505) 476-3492 or ed.martin@state.nm.us

NEW MEXICO OIL CONSERVATION DIVISION

Ed Martin

Edwin E. Martin
Environmental Bureau

Cc: NMOCD, Hobbs

PLAINS
ALL AMERICAN

March 29, 2005

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

Re: Plains All American – Annual Monitoring Reports
21 Sites in Lea County, New Mexico

Dear Mr. Martin:

Plains All American is an operator of crude oil pipelines and terminal facilities in the state of New Mexico. Plains All American actively monitors certain historical release sites exhibiting groundwater impacts, consistent with assessments and work plans developed in consultation with the New Mexico Oil Conservation Division (NMOCD). In accordance with the rules and regulations of the NMOCD, Plains All American hereby submits our Annual Monitoring reports for the following sites:

LF-59	Section 32, Township 19 South, Range 37 East, Lea County
TNM 97-04	Section 11, Township 16 South, Range 35 East, Lea County
HDO 90-23	Section 06, Township 20 South, Range 37 East, Lea County
Darr Angell 2	Section 11,14, Township 15 South, Range 37 East, Lea County
SPS 11	Section 18, Township 18 South, Range 36 East, Lea County
TNM 97-17	Section 21, Township 20 South, Range 37 East, Lea County
TNM 97-18	Section 28, Township 20 South, Range 37 East, Lea County
TNM 98-05A	Section 26, Township 21 South, Range 37 East, Lea County
Red Byrd # 1	Section 01, Township 20 South, Range 36 East, Lea County
Bob Durham	Section 31, 32, Township 19 South, Range 37 East, Lea County
Monument Site 11	Section 30, Township 19 South, Range 37 East, Lea County
Darr Angell 1	Section 11, Township 15 South, Range 37 East, Lea County
TNM 98-05B	Section 26, Township 21 South, Range 37 East, Lea County
Monument Site 2	Section 6, 7, Township 20 South, Range 37 East, Lea County
Monument Site 10	Section 32, Township 19 South, Range 37 East, Lea County
Monument Site 17	Section 29, Township 19 South, Range 37 East, Lea County
Monument Site 18	Section 07, Township 20 South, Range 37 East, Lea County
Monument Barber 10" PL	Section 32, Township 19 South, Range 37 East, Lea County
Darr Angell 4	Section 11, 02, Township 15 South, Range 37 East, Lea County
Monument to Lea 6"	Section 05, Township 20 South, Range 37 East, Lea County
Texaco Skelly "F"	Section 21, Township 20 South, Range 37 East, Lea County

PLAINS
ALL AMERICAN

Nova prepared these documents and has vouched for their accuracy and completeness, and on behalf of Plains All American, I have personally reviewed the documents and interviewed Nova in order to verify the accuracy and completeness of these documents. It is based upon these inquiries and reviews that Plains All American submits the enclosed Annual Monitoring Reports for the above 21 facilities.

If you have any questions or require further information, please contact me at (505) 441-0965.

Sincerely,

David Byrd for CR

Camille Reynolds
Remediation Coordinator
Plains All American

CC: Larry Johnson, NMOCD, Hobbs, NM

Enclosures

2004
ANNUAL MONITORING REPORT

GW-140

TNM SPS-11

NW ¼ SE ¼ of SECTION 18, TOWNSHIP 18 SOUTH, RANGE 36 EAST
LEA COUNTY, NEW MEXICO
PLAINS EMS NUMBER: TNM-SPS-11

PREPARED FOR:

PLAINS MARKETING, L.P.
333 Clay Street, Suite 1600
Houston, Texas 77002

NOVA
safety and environmental

PREPARED BY:

NOVA Safety and Environmental
2057 Commerce Street
Midland, Texas 79703

April 2005

Curt Stanley
Project Manager

for: Todd Choban
Vice President Technical Services

TABLE OF CONTENTS

INTRODUCTION

On behalf of Plains Marketing, L.P. (Plains), NOVA Safety and Environmental (NOVA) is pleased to submit this Annual Monitoring Report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998 requiring submittal of an Annual Monitoring Report by April 1 of each year. Beginning on May 29, 2004, project management responsibilities were assumed by NOVA, having previously been managed by Environmental Technology Group, Inc (ETGI). The TNM-SPS-11 site, which was formerly the responsibility of Texas New Mexico Pipeline Company (TNM) and EOTT Energy Corporation (EOTT) which became Link Energy (Link), is now the responsibility of Plains. This report is intended to be viewed as a complete document with text, figures, tables and appendices. The report presents the results of the quarterly groundwater monitoring events conducted in calendar year 2004 only. However, historical data tables as well as 2004 laboratory analytical reports are included on the enclosed data disk. This Annual Monitoring Report does not include data prior to August 19, 1999 because TNM has not made this data available. For reference, the Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during four quarterly events in calendar year 2004 to assess the levels and extent of dissolved phase and Phase Separated Hydrocarbon (PSH) impacts. The groundwater monitoring events consisted of measuring static water levels in the monitor wells, checking for the presence of PSH, and purging and sampling each well exhibiting sufficient recharge. Monitor wells containing a thickness of PSH greater than 0.01 foot were not sampled.

SITE DESCRIPTION AND BACKGROUND INFORMATION

The site is located approximately 15 miles west of the town of Hobbs, New Mexico in the NW ¼ of the SE ¼ of Section 18, Township 18 South, Range 36 East. No detailed information with respect to the release date, volume of crude oil released and recovered, excavation dimensions or pipeline repair has been found. However, it is believed the release occurred in the early 1990's.

Initial site investigation actions were performed for TNM and EOTT by other environmental consultants. A total of twenty-five (25) soil borings/groundwater monitoring wells (MW-1 through MW-25) were installed prior to October, 1999. ETGI, representing EOTT, assumed responsibility for remedial action planning and oversight in March, 2000. An additional six (6) monitor wells were installed by ETGI between May 2000 and December 2001 to further delineate the down gradient extent of impacted groundwater at the site. NOVA installed two (2) additional monitor wells in 2004. Of the thirty-three (33) monitor wells installed at the site since project inception, two (2) monitor wells (MW-5 and MW-8) are no longer present for unknown reasons. There are currently thirty-one (31) monitor wells present at the site.

FIELD ACTIVITIES

Quarterly monitoring events for the reporting period were performed according to the following sampling schedule, which was approved by the NMOCD in correspondence dated April 28, 2004:

NMOCD Approved Sampling Schedule					
MW-1	Quarterly	MW-12	Quarterly	MW-23	Quarterly
MW-2	Annually	MW-13	Annually	MW-24	Quarterly
MW-3	Annually	MW-14	Quarterly	MW-25	Annually
MW-4	Quarterly	MW-15	Quarterly	MW-26	Quarterly
MW-5	-	MW-16	Quarterly	MW-27	Annually
MW-6	Quarterly	MW-17	Quarterly	MW-28	Quarterly
MW-7	Quarterly	MW-18	Semi-Annually	MW-29	Quarterly
MW-8	-	MW-19	Annually	MW-30	Annually
MW-9	Quarterly	MW-20	Annually	MW-31	Annually
MW-10	Semi-Annually	MW-21	Annually	MW-32	Quarterly
MW-11	Quarterly	MW-22	Annually	MW-33	Quarterly

The site monitor wells were gauged and sampled on March 1, May 19, August 6, and December 9, 2004. During each sampling event, sampled monitor wells were purged of approximately three well volumes of water or until the wells were dry using a PVC bailer or electrical Grundfos Pump. Groundwater was allowed to recharge and samples were obtained using disposable Teflon samplers. Water samples were collected in clean glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed of by Key Energy of Lovington, New Mexico utilizing a licensed disposal facility (NMOCD AO SWD-730).

Locations of the monitor wells and the inferred groundwater gradient, which were constructed from measurements collected during the four (4) quarterly monitoring events, are depicted on Figures 2A through 2D, the Inferred Groundwater Gradient Maps. Groundwater elevation data for 2004 is provided as Table 1. Historical groundwater elevation data beginning at project inception is included on the enclosed data disk.

The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.001 ft./ft. to the southeast as measured between MW-25 and MW-29. This is consistent with data presented on Figures 2A through 2C from earlier in the year. The corrected groundwater elevation has ranged between 3796.29 and 3807.68 feet above mean sea level, in MW-29 on August 26, 2004 and MW-25 on December 29, 2004, respectively.

Based on gauging data collected during 2004, a measurable thickness of PSH, ranging from a sheen to 0.45 feet, was detected in monitor well MW-1. A maximum PSH thickness of 0.45 feet in monitor well MW-1 was recorded on September 23, 2004 and is shown on Table 1. An absorbent sock was installed in monitor well MW-1 during the third quarter of 2003 sampling event. Limited amounts of PSH were passively recovered from the site during the 2004 monitoring period using absorbent socks.

In November 2004, two (2) additional monitor wells (MW-32 and MW-33) were installed by NOVA to further delineate the extent of impacted groundwater down gradient of monitor well MW-29.

LABORATORY RESULTS

Groundwater samples obtained during the March 1, May 19 and August 26, 2004 monitoring events were delivered to AnalySys, Inc. in Austin, Texas for determination of Benzene, Toluene, Ethylbenzene and Xylene (BTEX) constituent concentrations by EPA Method 8021b. Groundwater samples obtained during the December 9, 2004 monitoring event were delivered to TraceAnalysis, Inc. in Lubbock, Texas for analysis of BTEX using EPA Method 8021b. BTEX constituent concentrations for 2004 are summarized in Table 2. Copies of the laboratory reports generated for 2004 are provided on the attached data disk. The quarterly groundwater sample results for benzene and BTEX constituent concentrations are depicted on Figures 3A-3D.

Review of laboratory analytical results of groundwater samples obtained during the 2004 monitoring period indicate the benzene and BTEX constituent concentrations are below NMOCD regulatory standards in monitor wells MW-2, MW-3, MW-4, MW-10, MW-13, MW-15, MW-17, MW-18, MW-19, MW-20, MW-21, MW-22, MW-23, MW-25, MW-27, MW-30, MW-31 and MW-33. The benzene concentration in monitor wells MW-6, MW-7, MW-11, MW-12, MW-16, MW-24 and MW-26 is above NMOCD regulatory standard for benzene, while total BTEX constituent concentrations are below NMOCD regulatory standards. The benzene and total BTEX constituent concentrations in monitor wells MW-1, MW-9, MW-14, MW-28, MW-29 and MW-32 are above NMOCD regulatory standard of 2.13 mg/L. As stated previously, monitor wells MW-5 and MW-8 no longer exist at the site.

Laboratory analytical results were compared to NMOCD regulatory limits based on the New Mexico groundwater standards found in section 20.6.2.3103 of the New Mexico Administrative Code.

SUMMARY

This report presents the results of monitoring activities for the annual monitoring period of 2004. Currently, there are thirty-one (31) groundwater monitor wells (MW-1 through MW-33, excluding MW-5 and MW-8) on-site. NOVA installed MW-32 and MW-33 in November 2004. The most recent Groundwater Gradient Map, Figure 2D indicates a general gradient of approximately 0.001 ft/ft to the southeast.

A measurable thickness of PSH was detected in monitor well MW-1 during the 2004 reporting period. A maximum thickness of 0.45 feet in monitor well MW-1 was recorded on September 23, 2004. None of the monitor wells have exhibited PSH at any time during the monitoring with the exception of MW-1. At this time PSH impact is limited to MW-1, which has displayed PSH thicknesses ranging from a sheen to 0.45 feet in 2004. An absorbent sock is currently installed in MW-1 for passive product recovery.

Review of laboratory analytical results generated from analysis of the groundwater samples obtained during the 2004 monitoring period indicate that the benzene and BTEX constituent concentrations are below NMOCD regulatory standards in eighteen (18) of the thirty-one (31) monitor wells on site. The benzene concentration in seven (7) monitor wells is above the

NMOCD regulatory standard, while total BTEX constituent concentrations are below the NMOCD regulatory standard. The benzene and BTEX constituent concentrations in the remaining six (6) monitor wells are above NMOCD regulatory standards.

The Release Notification and Corrective Action (Form C-141) is provided as Appendix A.

ANTICIPATED ACTIONS

Groundwater monitoring and annual reporting will continue in 2005. The analytical results of groundwater samples collected from monitor wells installed in November of 2004 (MW-32 and MW-33) indicate additional horizontal delineation is required down gradient from monitor well MW-32. This is based on groundwater sample results collected from MW-32 which indicate BTEX constituent concentrations above the NMOCD regulatory standards for both benzene and total BTEX. The results of samples collected from MW-33 are below the NMOCD regulatory standards for benzene and total BTEX. Plains will submit work plans for additional delineation to the NMOCD in 2005.

Plains requests approval to plug and abandon monitor wells MW-20, MW-22 and MW-27. These wells have exhibited benzene and total BTEX constituent concentrations below the applicable NMOCD regulatory standard for seventeen (17) consecutive sampling events. In addition, these monitor wells are not required to demonstrate delineation of the hydrocarbon impact at the site. Pending approval, these monitor wells will be plugged and abandoned by a licensed water well driller pursuant to NMOCD regulations. Monitor wells adjacent to and down gradient from monitor wells MW-20, MW-22 and MW-27 will continue to be sampled on the NMOCD approved sampling schedule.

LIMITATIONS

NOVA has prepared this Annual Monitoring Report to the best of its ability. No other warranty, either expressed or implied, is made or intended.

NOVA has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. NOVA has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. NOVA has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. NOVA also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Plains. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of NOVA and/or Plains.

DISTRIBUTION

Copy 1 Ed Martin
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Copy 2: Paul Sheeley and Larry Johnson
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division, District 1
1625 French Drive
Hobbs, NM 88240

Copy 3: Camille Reynolds
Plains Marketing, L.P.
3112 Highway 82
Lovington, NM
cjreynolds@paalp.com

Copy 4: Jeff Dann
Plains Marketing, L.P.
333 Clay Street
Suite 1600
Houston, TX 77002
jpdann@paalp.com

Copy 5: NOVA Safety and Environmental
2057 Commerce Street
Midland, TX 79703
cstanley@novatraining.cc

Copy Number:

Figures

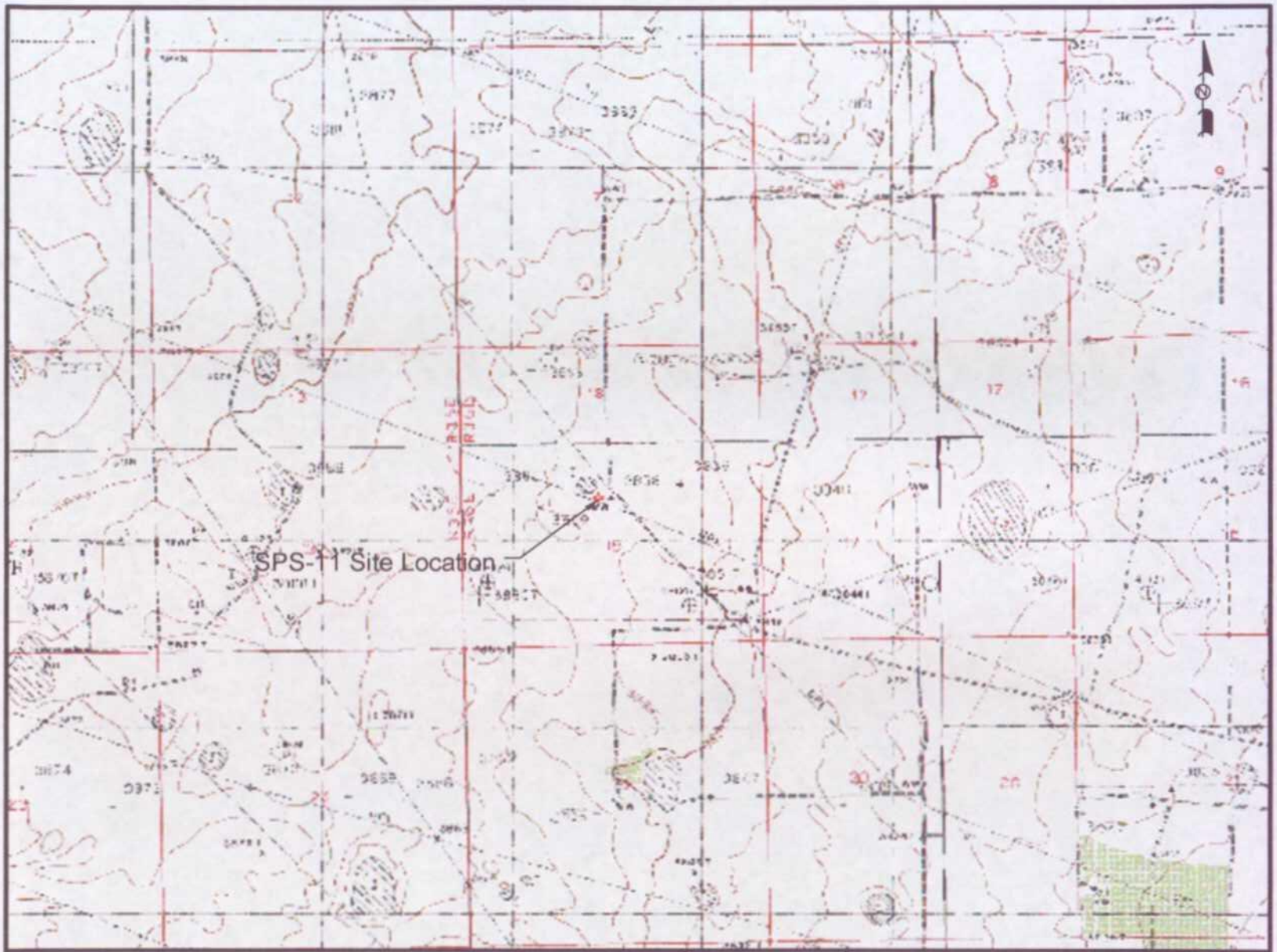
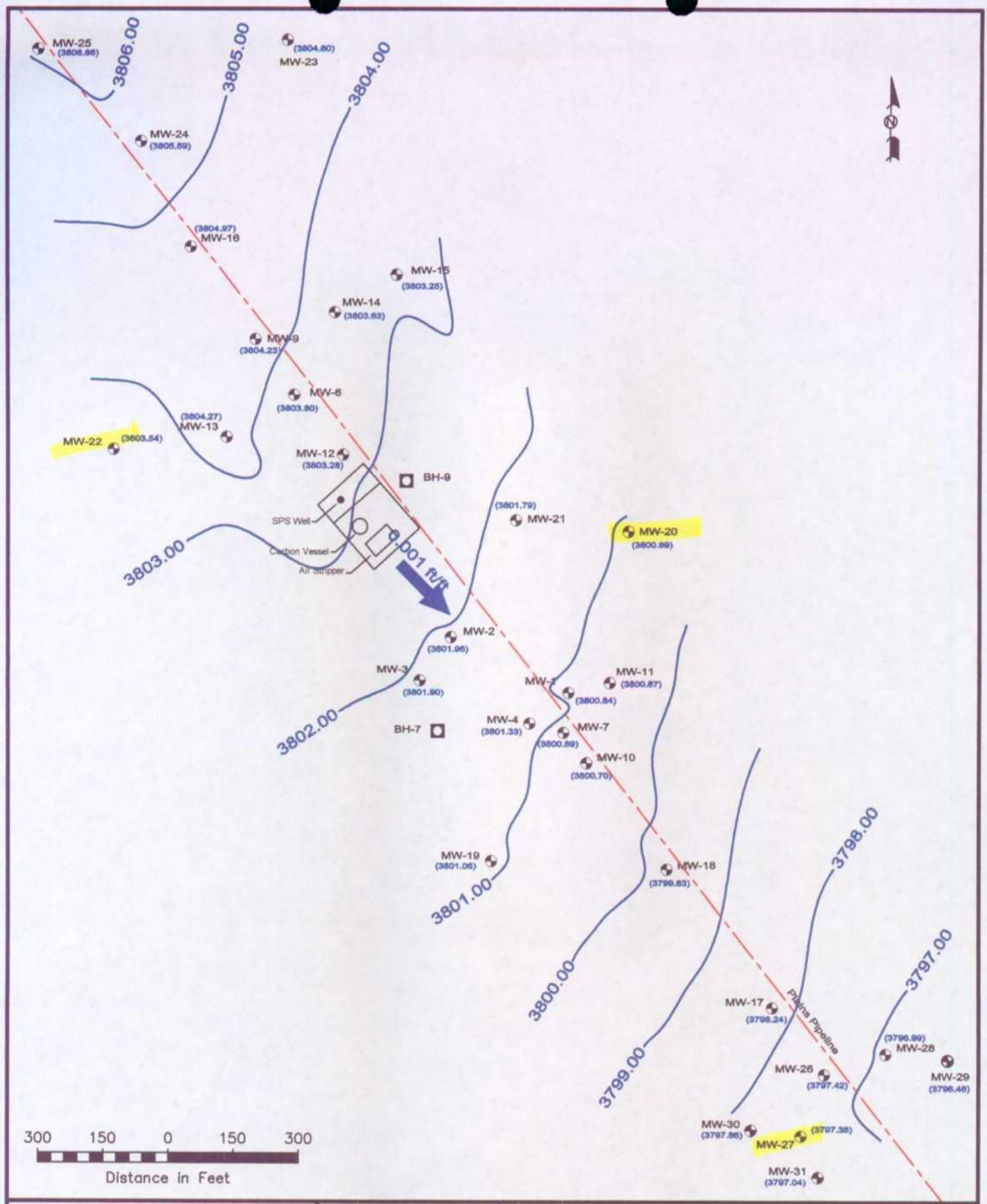


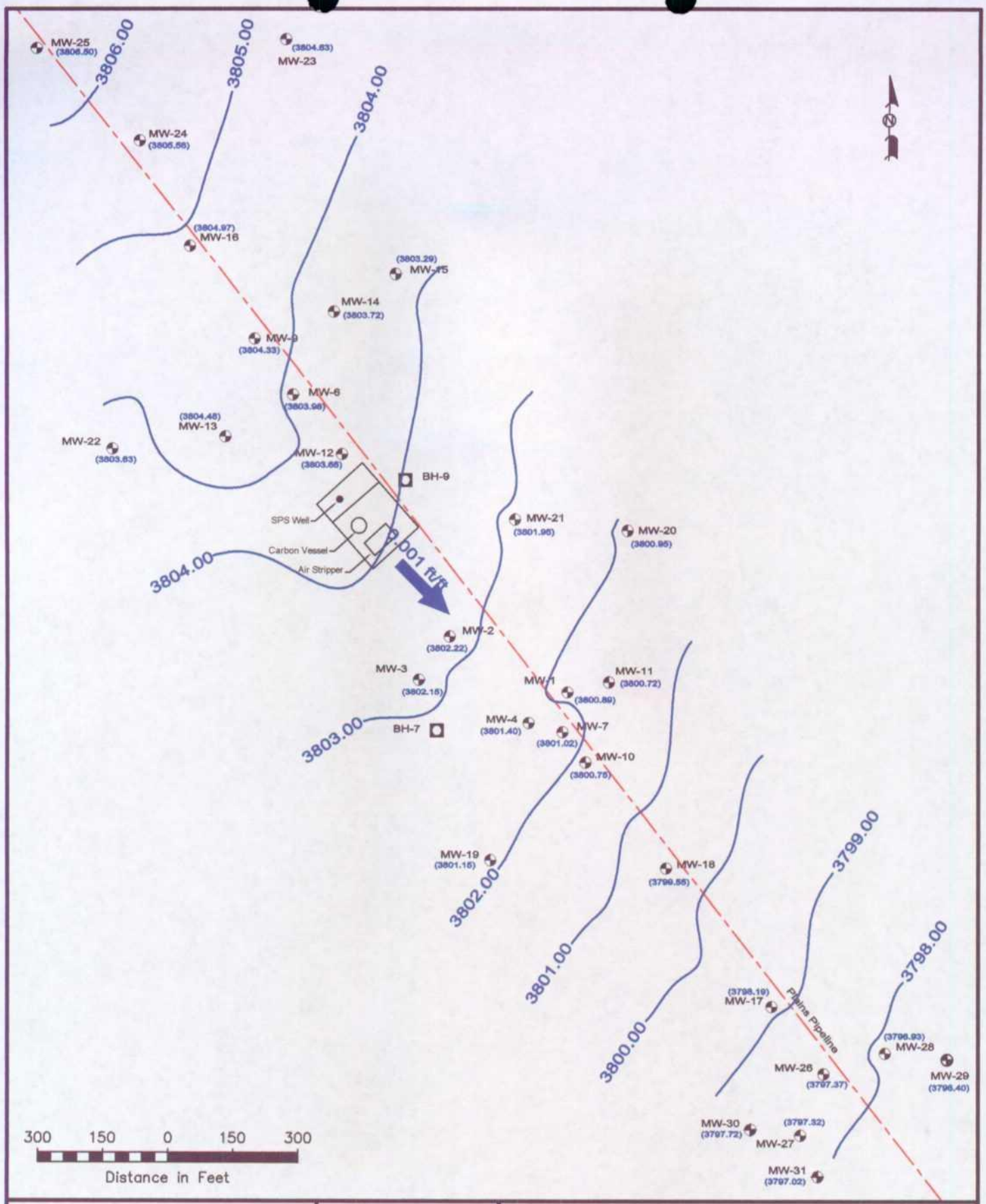
Figure 1
Site Location Map

Plains Marketing, L.P.
SPS-11
Lea County, NM

NOVA Safety and Environmental

Scale: NTS	Prep By: CDS	Checked By: TKC
February 20, 2005	NW1/4 SE1/4 Sec 18 T18S R36E	
	Lat. N32° 44' 50.3" Long. W103° 23' 38.5"	


MW-25
(3806.86)
3806.00
3805.00
(3804.80)
MW-23
3804.00
MW-24
(3805.59)
(3804.97)
MW-16
MW-15
(3803.25)
MW-14
(3803.83)
MW-9
(3804.23)
MW-6
(3803.80)
(3804.27)
MW-13
MW-22
(3803.54)
MW-12
(3803.28)
BH-9
SPS Well
Carbon Vessel
Air Stripper
3803.00
0.001 ft/ft
(3801.79)
MW-21
MW-20
(3800.89)
MW-2
(3801.96)
MW-3
(3801.90)
MW-11
(3800.67)
(3800.84)
3802.00
BH-7
MW-4
(3801.33)
MW-7
(3800.89)
MW-10
(3800.70)
MW-19
(3801.06)
MW-18
(3799.83)
3801.00
3798.00
3800.00
3797.00
MW-17
(3798.24)
Plains Pipeline
(3796.99)
MW-28
MW-26
(3797.42)
MW-29
(3796.46)
3799.00
MW-30
(3797.86)
(3797.38)
MW-27
MW-31
(3797.04)
300 150 0 150 300
Distance in Feet
LEGEND:
Monitoring Well Location
Soil Boring Location
Groundwater Gradient
(3807.65) Groundwater Elevation (In Feet)
0.001 ft/ft Groundwater Gradient Direction and Magnitude
Figure 2A
Inferred Groundwater Gradient Map (3/01/04)
Plains Marketing, L.P.
TNM SPS-11
Lea County, NM
NOVA Safety and Environmental
NOVA safety and environmental
Scale: 1" = 300'
Drawn By: CDS
Prepared By: TKC
February 17, 2005
NW1/4 SE1/4 Sec 18 T18S R36E
Lat. N32° 44' 50.3" Long. W103° 23' 38.5"



LEGEND:

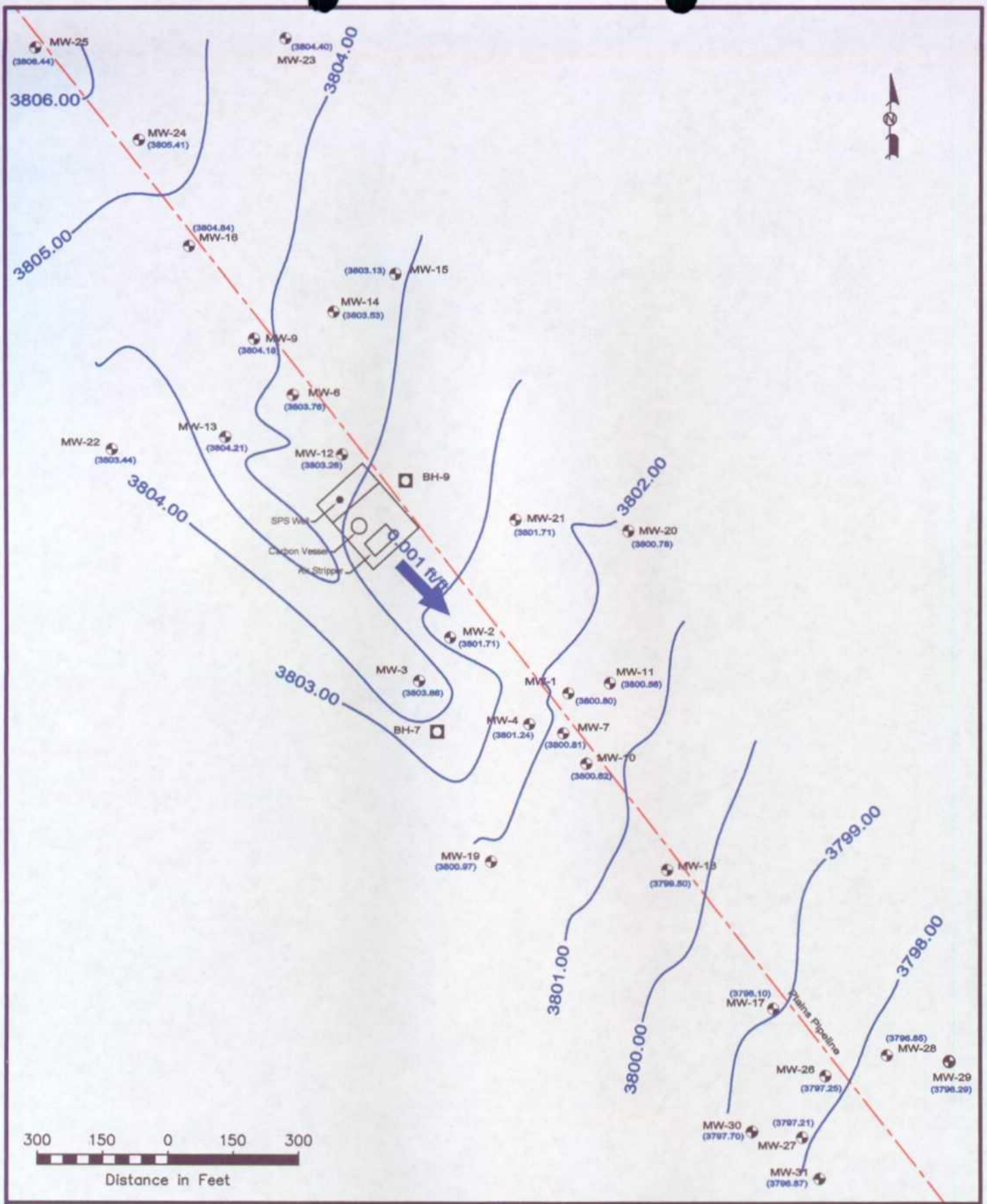
- Monitoring Well Location
- Soil Boring Location
- Groundwater Gradient
- (3807.65) Groundwater Elevation (In Feet)
- 0.001 ft/ft Groundwater Gradient Direction and Magnitude

Figure 2B
Inferred Groundwater Gradient Map (5/19/04)
Plains Marketing, L.P.
TNM SPS-11
Lea County, NM

NOVA Safety and Environmental

NOVA safety and environmental

Scale: 1" = 300'	Drawn By: CDS	Prepared By: TKC
February 17, 2005	NW1/4 SE1/4 Sec 18 T18S R36E	
	Lat. N32° 44' 50.3" Long. W103° 23' 38.5"	



LEGEND:

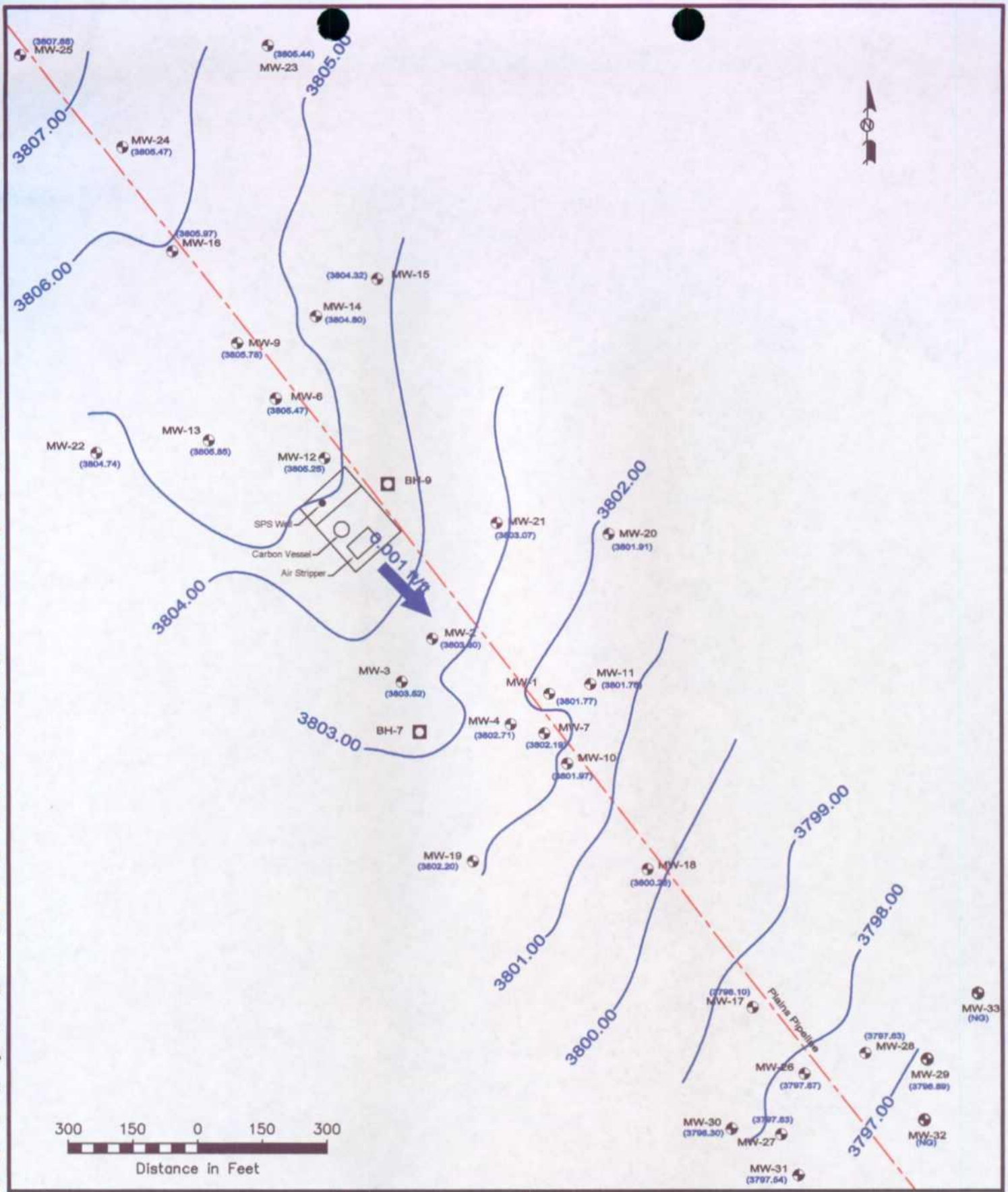
- Monitoring Well Location
- Soil Boring Location
- Groundwater Gradient
- (3807.85) Groundwater Elevation (in Feet)
- 0.001 ft/ft Groundwater Gradient Direction and Magnitude

Figure 2C
Inferred Groundwater Gradient Map (8/26/04)
Plains Marketing, L.P.
TNM SPS-11
Lea County, NM

NOVA Safety and Environmental

NOVA safety and environmental

Scale: 1" = 300'	Drawn By: CDS	Prepared By: TKC
February 17, 2005	NW1/4 SE1/4 Sec 18 T18S R36E	
	Lat. N32° 44' 50.3" Long. W103° 23' 38.5"	



LEGEND:

- Monitoring Well Location
- Soil Boring Location
- Groundwater Gradient
- (3807.85) Groundwater Elevation (In Feet)
- 0.001 ft/ft Groundwater Gradient Direction and Magnitude

Figure 2D

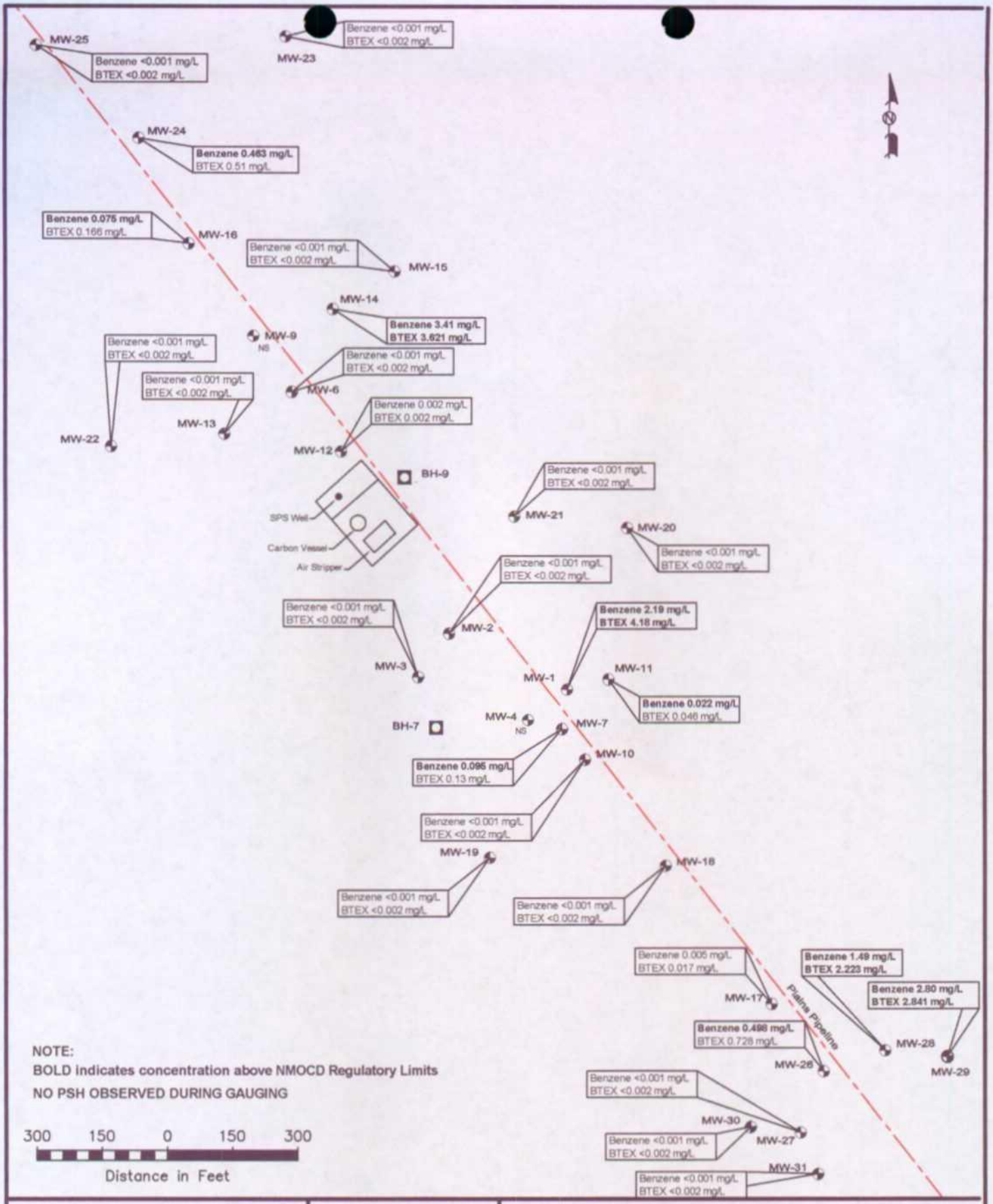
Inferred Groundwater Gradient Map (12/9/04)

Plains Marketing, L.P.
TNM SPS-11
Lea County, NM

NOVA Safety and Environmental

NOVA safety and environmental

Scale: 1" = 300'	Drawn By: CDS	Prepared By: TKC
February 17, 2005	NW1/4 SE1/4 Sec 18 T18S R36E	
	Lat. N32° 44' 50.3" Long. W103° 23' 38.5"	



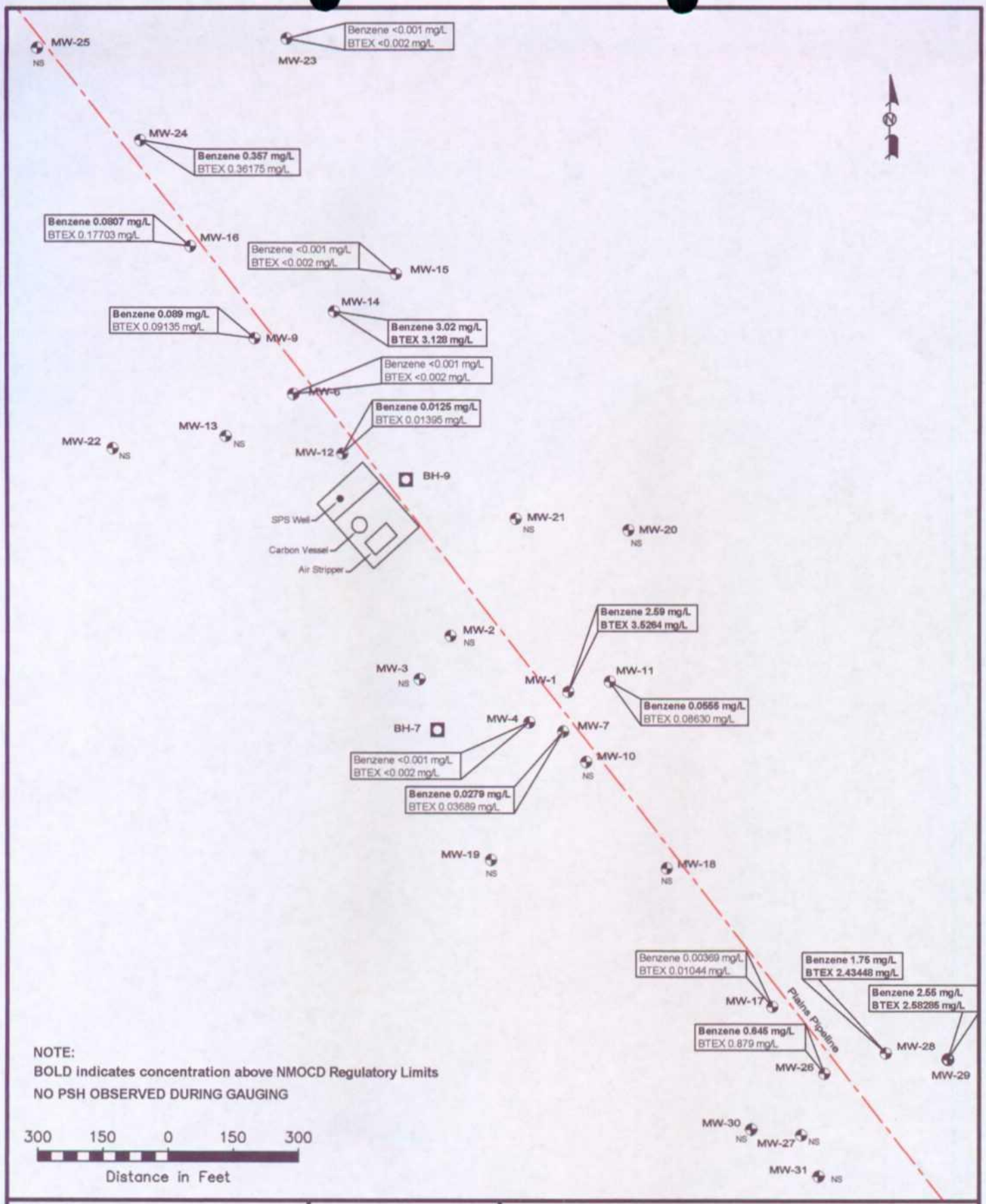
LEGEND:
- NS Not Sampled
- Monitoring Well Location
- Soil Boring Location
- Pipeline
- <0.001 Constituent Concentration mg/L
- 0.01' PSH Thickness (Feet)
- Inferred PSH Extent

Figure 3A
Groundwater Concentration and Inferred PSH Extent Map (3/01/04)
Plains Marketing, L.P.
TNM SPS-11
Lea County, NM

NOVA Safety and Environmental

NOVA safety and environmental

Scale: 1" = 300'	Drawn By: CDS	Prepared By: CDS
February 16, 2005	NW1/4 SE1/4 Sec 18 T18S R36E	
	Lat. N32° 44' 50.3" Long. W103° 23' 38.5"	



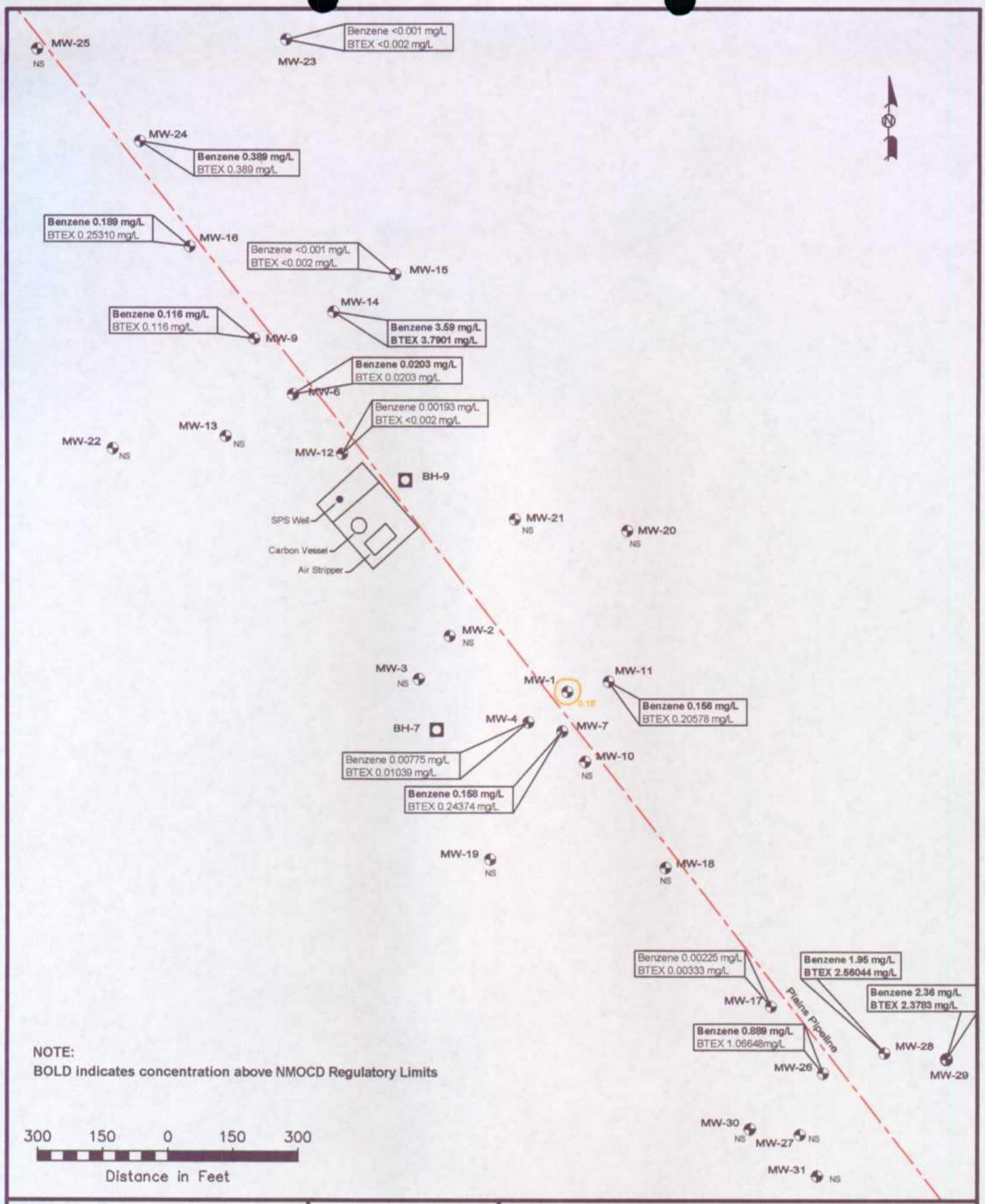
LEGEND: NS Not Sampled
- Monitoring Well Location
- Soil Boring Location
- Pipeline
- <0.001 Constituent Concentration mg/L
- 0.01' PSH Thickness (Feet)
- Inferred PSH Extent

Figure 3B
Groundwater Concentration and Inferred PSH Extent Map (5/19/04)
Plains Marketing, L.P.
TNM SPS-11
Lea County, NM

NOVA Safety and Environmental

NOVA safety and environmental

Scale: 1" = 300'	Drawn By: CDS	Prepared By: CDS
February 16, 2005	NW1/4 SE1/4 Sec 18 T18S R36E	
	Lat. N32° 44' 50.3" Long. W103° 23' 38.5"	



LEGEND: NS Not Sampled
- Monitoring Well Location
- Soil Boring Location
- Pipeline
- <0.001 Constituent Concentration mg/L
- 0.01' PSH Thickness (Feet)
- Inferred PSH Extent

Figure 3C
Groundwater Concentration and Inferred PSH Extent Map (8/26/04)
Plains Marketing, L.P.
TNM SPS-11
Lea County, NM

NOVA Safety and Environmental

NOVA safety and environmental

Scale: 1" = 300'	Drawn By: CDS	Prepared By: CDS
February 16, 2005	NW1/4 SE1/4 Sec 18 T16S R36E	
	Lat. N32° 44' 50.3" Long. W103° 23' 38.5"	

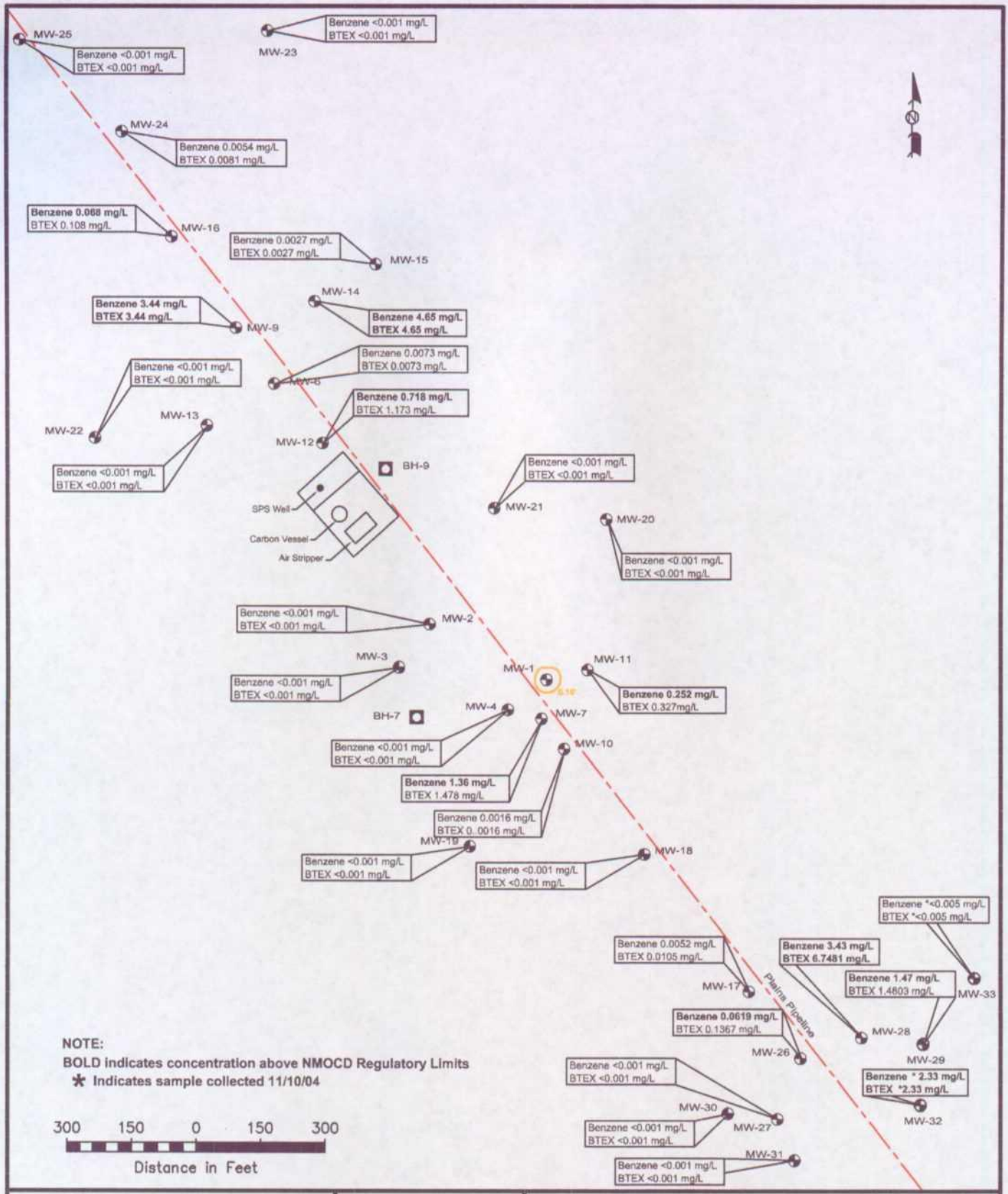


Figure 3D
Groundwater Concentration and Inferred PSH Extent Map (12/09/04)
Plains Marketing, L.P.
TNM SPS-11
Lea County, NM

NOVA Safety and Environmental

NOVA safety and environmental

Scale: 1" = 300'	Drawn By: CDS	Prepared By: CDS
February 16, 2005	NW1/4 SE1/4 Sec 18 T18S R36E	
	Lat. N32° 44' 50.3" Long. W103° 23' 38.5"	

Tables

TABLE 1

GROUNDWATER ELEVATION DATA FOR 2004
PLAINS MARKETING, L.P.

SPS - 11
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 1	01/05/04	3,859.08	58.16	58.54	0.38	3,800.86
	01/13/04	3,859.08	58.67	58.68	0.01	3,800.41
	02/19/04	3,859.08	-	58.37	0.00	3,800.71
	03/01/04	3,859.08	-	58.24	0.00	3,800.84
	03/11/04	3,859.09	-	58.56	0.00	3,800.53
	04/09/04	3,859.09	58.85	58.87	0.02	3,800.24
	05/19/04	3,859.09	-	58.20	0.00	3,800.89
	06/10/04	3,859.08	58.27	58.28	0.01	3,800.81
	07/01/04	3,859.08	58.33	58.34	0.01	3,800.75
	08/26/04	3,859.08	58.26	58.42	0.16	3,800.80
	09/23/04	3,859.08	58.30	58.75	0.45	3,800.71
	10/15/04	3,859.08	sheen	57.66	0.00	3,801.42
	11/14/04	3,859.08	57.22	57.23	0.01	3,801.86
	12/09/04	3,859.08	57.30	57.35	0.05	3,801.77
	12/14/04	3,859.08	57.28	57.35	0.07	3,801.79
	12/31/04	3,859.08	57.08	57.31	0.23	3801.97
MW-2	03/01/04	3,860.76	-	58.80	0.00	3,801.96
	05/19/04	3,860.76	-	58.54	0.00	3,802.22
	08/26/04	3,860.76	-	59.05	0.00	3,801.71
	12/09/04	3,860.76	-	57.16	0.00	3,803.60
MW-3	03/01/04	3,861.15	-	59.25	0.00	3,801.90
	05/19/04	3,861.15	-	59.00	0.00	3,802.15
	08/26/04	3,861.15	-	57.29	0.00	3,803.86
	12/09/04	3,861.15		57.63	0.00	3,803.52
MW-4	03/01/04	3,859.62	-	58.29	0.00	3801.33
	05/19/04	3,859.62	-	58.13	0.00	3801.49
	08/26/04	3,859.62	-	58.38	0.00	3801.24
	12/09/04	3,859.62	-	56.91	0.00	3802.71
MW-6	03/01/04	3,862.47	-	58.67	0.00	3,803.80
	05/19/04	3,862.47	-	58.49	0.00	3,803.98
	08/26/04	3,862.47	-	58.71	0.00	3,803.76
	12/09/04	3,862.47	-	57.00	0.00	3,805.47
MW-7	03/01/04	3,859.31	-	58.42	0.00	3,800.89
	05/19/04	3,859.31	-	58.29	0.00	3,801.02

TABLE 1

GROUNDWATER ELEVATION DATA FOR 2004
PLAINS MARKETING, L.P.

SPS - 11
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
	08/26/04	3,859.31	-	58.50	0.00	3,800.81
	12/09/04	3,859.31	-	57.12	0.00	3,802.19
MW-9	03/01/04	3,861.88	-	57.65	0.00	3,804.23
	05/19/04	3,861.88	-	57.55	0.00	3,804.33
	08/26/04	3,861.88	-	57.70	0.00	3,804.18
	12/09/04	3,861.88	-	56.10	0.00	3,805.78
MW-10	03/01/04	3,860.58	-	59.88	0.00	3,800.70
	05/19/04	3,860.58	-	59.83	0.00	3,800.75
	08/26/04	3,860.58	-	59.96	0.00	3,800.62
	12/09/04	3,860.58	-	58.61	0.00	3,801.97
MW-11	03/01/04	3860.00	-	59.33	0.00	3800.67
	05/19/04	3860.00	-	59.28	0.00	3800.72
	08/26/04	3860.00	-	59.44	0.00	3800.56
	12/09/04	3860.00	-	58.25	0.00	3801.75
MW-12	03/01/04	3,863.10	-	59.82	0.00	3,803.28
	05/19/04	3,863.10	-	59.45	0.00	3,803.65
	08/26/04	3,863.10	-	59.84	0.00	3,803.26
	12/09/04	3,863.10	-	57.85	0.00	3,805.25
MW-13	03/01/04	3,862.44	-	58.17	0.00	3,804.27
	05/19/04	3,862.44	-	57.96	0.00	3,804.48
	08/26/04	3,862.44	-	58.23	0.00	3,804.21
	12/09/04	3,862.44	-	56.59	0.00	3,805.85
MW-14	03/01/04	3,862.95	-	59.32	0.00	3,803.63
	05/19/04	3,862.95	-	59.23	0.00	3,803.72
	08/26/04	3,862.95	-	59.42	0.00	3,803.53
	12/09/04	3,862.95	-	58.06	0.00	3,804.89
MW-15	03/01/04	3,861.70	-	58.45	0.00	3,803.25
	05/19/04	3,861.70	-	58.41	0.00	3,803.29
	08/26/04	3,861.70	-	58.57	0.00	3,803.13
	12/09/04	3,861.70	-	57.38	0.00	3,804.32
MW-16	03/01/04	3,863.15	-	58.18	0.00	3804.97

TABLE 1

GROUNDWATER ELEVATION DATA FOR 2004
PLAINS MARKETING, L.P.

SPS - 11
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
	05/19/04	3,863.15	-	58.18	0.00	3804.97
	08/26/04	3,863.15	-	58.31	0.00	3804.84
	12/09/04	3,863.15	-	57.18	0.00	3805.97
MW-17	03/01/04	3,859.17	-	60.93	0.00	3,798.24
	05/19/04	3,859.17	-	60.98	0.00	3,798.19
	08/26/04	3,859.17	-	61.07	0.00	3,798.10
	12/09/04	3,859.17	-	60.58	0.00	3,798.59
MW-18	03/01/04	3,859.98	-	60.35	0.00	3,799.63
	05/19/04	3,859.98	-	60.43	0.00	3,799.55
	08/26/04	3,859.98	-	60.48	0.00	3,799.50
	12/09/04	3,859.98	-	59.72	0.00	3,800.26
MW-19	03/01/04	3,862.30	-	61.24	0.00	3,801.06
	05/19/04	3,862.30	-	61.15	0.00	3,801.15
	08/26/04	3,862.30	-	61.33	0.00	3,800.97
	12/09/04	3,862.30	-	60.10	0.00	3,802.20
MW-20	03/01/04	3,861.30	-	60.41	0.00	3,800.89
	05/19/04	3,861.30	-	60.35	0.00	3,800.95
	08/26/04	3,861.30	-	60.52	0.00	3,800.78
	12/09/04	3,861.30	-	59.39	0.00	3,801.91
MW-21	03/01/04	3862.30	-	60.51	0.00	3801.79
	05/19/04	3862.30	-	60.35	0.00	3801.95
	08/26/04	3862.30	-	60.59	0.00	3801.71
	12/09/04	3862.30	-	59.23	0.00	3803.07
MW-22	03/01/04	3,862.44	-	58.90	0.00	3,803.54
	05/19/04	3,862.44	-	58.81	0.00	3,803.63
	08/26/04	3,862.44	-	59.00	0.00	3,803.44
	12/09/04	3,862.44	-	57.70	0.00	3,804.74
MW-23	03/01/04	3,862.44	-	57.84	0.00	3,804.60
	05/19/04	3,862.44	-	57.91	0.00	3,804.53
	08/26/04	3,862.44	-	58.04	0.00	3,804.40
	12/09/04	3,862.44	-	57.00	0.00	3,805.44

TABLE 1

GROUNDWATER ELEVATION DATA FOR 2004
PLAINS MARKETING, L.P.

SPS - 11
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-24	03/01/04	3,864.36	-	58.77	0.00	3,805.59
	05/19/04	3,864.36	-	58.80	0.00	3,805.56
	08/26/04	3,864.36	-	58.95	0.00	3,805.41
	12/09/04	3,864.36	-	57.90	0.00	3,806.46
MW-25	03/01/04	3,864.16	-	57.30	0.00	3,806.86
	05/19/04	3,864.16	-	57.66	0.00	3,806.50
	08/26/04	3,864.16	-	57.72	0.00	3,806.44
	12/09/04	3,864.16	-	56.48	0.00	3,807.68
MW-26	03/01/04	3858.79	-	61.37	0.00	3,797.42
	05/19/04	3858.79	-	61.42	0.00	3,797.37
	08/26/04	3858.79	-	61.54	0.00	3,797.25
	12/09/04	3858.79	-	60.92	0.00	3,797.87
MW-27	03/01/04	3,858.23	-	60.87	0.00	3,797.36
	05/19/04	3,858.23	-	60.91	0.00	3,797.32
	08/26/04	3,858.23	-	61.02	0.00	3,797.21
	12/09/04	3,858.23	-	60.40	0.00	3,797.83
MW-28	03/01/04	3,858.60	-	61.61	0.00	3,796.99
	05/19/04	3,858.60	-	61.67	0.00	3,796.93
	08/26/04	3,858.60	-	61.75	0.00	3,796.85
	12/09/04	3,858.60	-	60.97	0.00	3,797.63
MW-29	03/01/04	3,858.54	-	62.08	0.00	3,796.46
	05/19/04	3,858.54	-	62.14	0.00	3,796.40
	08/26/04	3,858.54	-	62.25	0.00	3,796.29
	12/09/04	3,858.54	-	61.65	0.00	3,796.89
MW-30	03/01/04	3,858.35	-	60.49	0.00	3797.86
	05/19/04	3,858.35	-	60.63	0.00	3797.72
	08/26/04	3,858.35	-	60.65	0.00	3797.70
	12/09/04	3,858.35	-	60.05	0.00	3798.30
MW-31	03/01/04	3,858.52	-	61.48	0.00	3797.04
	05/19/04	3,858.52	-	61.50	0.00	3797.02
	08/26/04	3,858.52	-	61.65	0.00	3796.87
	12/09/04	3,858.52	-	60.98	0.00	3797.54

TABLE 1

GROUNDWATER ELEVATION DATA FOR 2004
PLAINS MARKETING, L.P.

SPS - 11
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-32	11/3/2004		-	61.62	0.00	
	11/10/2004		-	61.58	0.00	
MW-33	11/3/2004		-	62.20	0.00	
	11/10/2005		-	62.18	0.00	

Elevations based on the North America Vertical Datum of 1929.

TABLE 2
CONCENTRATIONS OF BTEX IN GROUNDWATER FOR 2004
PLAINS MARKETING, L.P.

SPS 11
LEA COUNTY, NEW MEXICO

All concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
NMOCD REGULATORY LIMIT		0.01	0.75	0.75	TOTAL XYLENES 0.67	
MW-1	03/01/04	2.91	0.114	0.481	0.511	0.170
	05/19/04	2.59	0.0794	0.429	0.303	0.125
MW-2	03/01/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/09/04	<0.001	<0.001	<0.001	<0.001	
MW-3	03/01/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/09/04	<0.001	<0.001	<0.001	<0.001	
MW-4	03/01/04	0.002	<0.001	<0.001	<0.002	<0.001
	05/19/04	<0.001	<0.001	<0.001	<0.002	<0.001
	08/26/04	0.00775	<0.001	0.00264	<0.002	<0.001
	12/09/04	<0.001	<0.001	<0.001	<0.001	
MW-6	03/01/04	<0.001	<0.001	<0.001	<0.002	<0.001
	05/19/04	<0.001	<0.001	<0.001	<0.002	<0.001
	08/26/04	0.0203	<0.001	<0.001	<0.002	<0.001
	12/09/04	0.0073	<0.001	<0.001	<0.001	
MW-7	03/01/04	0.095	0.004	0.027	0.003	0.001
	05/19/04	0.0279	0.0014	0.00759	<0.002	<0.001
	08/26/04	0.158	0.00834	0.0479	0.0172	0.0123
	12/09/04	1.36	<0.001	0.118	<0.001	
MW-9	03/01/04	0.069	<0.001	0.002	<0.002	<0.001
	05/19/04	0.089	<0.001	0.00235	<0.002	<0.001
	08/26/04	0.116	<0.001	<0.001	<0.002	<0.001
	12/09/04	3.44	<0.001	<0.001	<0.001	
MW-10	03/01/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/09/04	0.0016	<0.001	<0.001	<0.001	
MW-11	03/01/04	0.022	<0.001	0.024	<0.002	<0.001
	05/19/04	0.0555	<0.001	0.0308	<0.002	<0.001
	08/26/04	0.156	<0.001	0.0467	0.00308	<0.001
	12/09/04	0.252	<0.001	0.075	<0.001	
MW-12	03/01/04	0.002	<0.001	<0.001	<0.002	<0.001

TABLE 2
CONCENTRATIONS OF BTEX IN GROUNDWATER FOR 2004
PLAINS MARKETING, L.P.

SPS 11
LEA COUNTY, NEW MEXICO

All concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
NMOCD REGULATORY LIMIT		0.01	0.75	0.75	TOTAL XYLENES 0.67	
	05/19/04	0.0125	<0.001	0.00145	<0.002	<0.001
	08/26/04	0.00193	<0.001	<0.001	<0.002	<0.001
	12/09/04	0.718	<0.1	0.28	0.175	
MW-13	03/01/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/09/04	<0.001	<0.001	<0.001	<0.001	
MW-14	03/01/04	3.41	<0.001	0.160	0.051	<0.001
	05/19/04	3.02	<0.001	0.096	0.0117	<0.001
	08/26/04	3.59	<0.001	0.176	0.0241	<0.001
	12/09/04	4.65	<0.2	<0.2	<0.2	
MW-15	03/01/04	<0.001	<0.001	<0.001	<0.002	<0.001
	05/19/04	<0.001	<0.001	<0.001	<0.002	<0.001
	08/26/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/09/04	0.0027	<0.001	<0.001	<0.001	
MW-16	03/01/04	0.075	0.001	0.075	0.013	0.002
	05/19/04	0.0807	0.0109	0.0687	0.0141	0.00263
	08/26/04	0.189	0.0047	0.046	0.0134	<0.001
	12/09/04	0.068	0.0046	0.0354	<0.001	
MW-17	03/01/04	0.005	0.005	0.003	0.003	0.001
	05/19/04	0.00369	0.00431	0.00244	<0.002	<0.001
	08/26/04	0.00225	0.00108	<0.001	<0.002	<0.001
	12/09/04	0.0052	0.0025	0.0011	0.0017	
MW-18	03/01/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/09/04	<0.001	<0.001	<0.001	<0.001	
MW-19	03/01/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/09/04	<0.001	<0.001	<0.001	<0.001	
MW-20	03/01/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/09/04	<0.001	<0.001	<0.001	<0.001	
MW-21	03/01/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/09/04	<0.001	<0.001	<0.001	<0.001	

TABLE 2
CONCENTRATIONS OF BTEX IN GROUNDWATER FOR 2004
PLAINS MARKETING, L.P.

SPS 11
LEA COUNTY, NEW MEXICO

All concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
NMOCD REGULATORY LIMIT		0.01	0.75	0.75	TOTAL XYLENES 0.67	
MW-22	03/01/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/09/04	<0.001	<0.001	<0.001	<0.001	
MW-23	03/01/04	<0.001	<0.001	<0.001	<0.002	<0.001
	05/19/04	<0.001	<0.001	<0.001	<0.002	<0.001
	08/26/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/09/04	<0.001	<0.001	<0.001	<0.001	
MW-24	03/01/04	0.463	0.017	0.019	0.009	0.002
	05/19/04	0.357	0.00259	0.00216	<0.002	<0.001
	08/26/04	0.389	<0.001	<0.001	<0.002	<0.001
	12/09/04	0.0054	0.0016	0.0011	<0.001	
MW-25	03/01/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/09/04	<0.001	<0.001	<0.001	<0.001	
MW-26	03/01/04	0.498	0.034	0.116	0.058	0.022
	05/19/04	0.645	0.0332	0.121	0.058	0.0218
	08/26/04	0.889	0.0157	0.0971	0.058	0.00668
	12/09/04	0.0619	0.0339	0.017	0.0239	
MW-27	03/01/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/09/04	<0.001	<0.001	<0.001	<0.001	
MW-28	03/01/04	1.490	0.003	0.484	0.215	0.031
	05/19/04	1.750	0.00248	0.437	0.217	0.028
	08/26/04	1.950	<0.001	0.407	0.2	0.00344
	12/09/04	3.430	0.0381	1.79	1.49	
MW-29	03/01/04	2.800	<0.001	0.038	0.003	<0.001
	05/19/04	2.550	<0.001	0.0327	0.00215	<0.001
	08/26/04	2.360	<0.001	0.0183	<0.002	<0.001
	12/09/04	1.470	<0.001	0.0103	<0.001	
MW-30	03/01/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/09/04	<0.001	<0.001	<0.001	<0.001	

TABLE 2
CONCENTRATIONS OF BTEX IN GROUNDWATER FOR 2004
PLAINS MARKETING, L.P.

SPS 11
LEA COUNTY, NEW MEXICO

All concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
NMOCD REGULATORY LIMIT		0.01	0.75	0.75	TOTAL XYLENES 0.67	
MW-31	03/01/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/09/04	<0.001	<0.001	<0.001	<0.001	
MW-32	11/10/04	2.33	<0.05	<0.05	<0.05	
MW-33	11/10/04	<0.005	<0.005	<0.005	<0.005	

Note: m,p and o Xylenes combined when analyzed by Trace Laboratories, Inc. only.

Appendices

Appendix A
Notification of Release and Corrective Action

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

x Initial Report ☐ Final Report

Name of Company	Plains Pipeline, LP	Contact:	Camille Reynolds
Address:	3705 E. Hwy 158, Midland, TX 79706	Telephone No.	505-441-0965
Facility Name	SPS #11	Facility Type:	Pipeline

Surface Owner:	Mineral Owner	Lease No.
New Mexico State Land Office		

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	18	18S	36E					Lea

Latitude 32 degrees 44' 50.3" **Longitude** 103 degrees 23' 36.5"

NATURE OF RELEASE

Type of Release:	Volume of Release:	Volume Recovered
Source of Release:	Date and Hour of Occurrence Unknown	Date and Hour of Discovery
Was Immediate Notice Given? Yes ☐ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Describe Area Affected and Cleanup Action Taken.*
NOTE: Texas-New Mexico Pipeline was the owner/operator of the pipeline system at the time of the release, initial response information is unavailable .

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Camille Reynolds	Approved by District Supervisor:	
Title: Remediation Coordinator	Approval Date:	Expiration Date:
E-mail Address: cjreynolds@paalp.com	Conditions of Approval:	Attached ☐
Date: 3/21/2005 Phone: (505)441-0965		

* Attach Additional Sheets If Necessary

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

October 14, 2004

Mr. Jeffrey P. Dann
Plains All American L.P.
P.O. Box 4648
Houston, TX 77210-4648

SPS-11
GW-140

Dear Mr. Dann:

The New Mexico Oil Conservation Division (NMOCD) has received your letter, dated September 20, 2004, identifying the need for additional groundwater monitor and/or recovery wells at various sites. This request is hereby approved.

This approval does not relieve Plains Marketing, L.P. of any future liability at these sites should it prove that Plains' operations have caused harm to public health or the environment. Nor does it relieve Plains of its obligation to comply with the rules and regulations of any other governmental agency.

If you have any questions, contact me at (505) 476-3492 or emartin@state.nm.us

NEW MEXICO OIL CONSERVATION DIVISION

Ed Martin

Edwin E. Martin
Environmental Bureau

Cc: Larry Johnson, NMOCD, Hobbs
Camille Reynolds, Plains, Midland

PLAINS MARKETING, L.P.

September 20, 2004

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

Re: *Plains Marketing, L.P. (formerly Link Energy) Remediation Sites*
Various Locations in Lea County

Dear Mr. Martin:

Based on the results of our ongoing groundwater monitoring and sampling program at several of our remediation and groundwater monitoring sites in Lea County, we have identified the need for additional groundwater monitor and/or recovery wells at the flowing sites.

Site Name	Plains EMS No.	Site Location	Number of Wells
Jct 34 to Lea	2002-10286	Section 21, T20S, R37E	3
Livingston Line-Bob McCasland	2001-11043	Section 3, T21S, R37E	2
Hugh Gathering	2002-10235	Section 11, T21S, R37E	1
C. S. Cayler	2002-10250	Section 6, T17S, R37E	5
Lovington Deep 6-Inch	2002-1-312	Section 6, T21S, R36E	6
Kimbrough Sweet	2000-10757	Section 3, T18S, R37E	2
8" Moore to Jal #1	2002-10270	Section 16, T17S, R37E	3
8" Moore to Jal #2	2002-10273	Section 16, T17S, R37E	3
Darr Angell #1	Darr Angell #1	Section 11, T15S, R37E	1
Darr Angell #4	2001-10876	Section 2/11, T15S, R37E	2
Red Byrd #1	Red Byrd #1	Section 1, T19S, R36E	5
HDO 90-23	HDO 90-23	Section 6, T20S, R37E	2
Monument 6" Pipeline	2001-11056	Section 5, T20S, R37E	3
Texaco Skelly F	2002-11229	Section 21, T20S, R37E	1
SPS-11	SPS-11	Section 18, T18S, R36E	2
Monument #11	TNM Mon #11	Section 30, T19S, R37E	2
Monument #2	TNM Mon #2	Section 6, T20S, R37E	1
Monument #17	TNM Mon #17	Section 29, T19S, R37E	1
Monument #18	TNM Mon #18	Section 7, T20S, R37E	2
98-05A	TNM 98-05A	Section 26, T21S, R37E	1
LF-59	LF-59	Section 32, T19S, R37E	2

The proposed well locations are illustrated on the attached site maps. Plains requests your approval of the proposed monitor well locations at the above-referenced sites. We anticipate commencement of drilling activities the week of October 4, 2004.

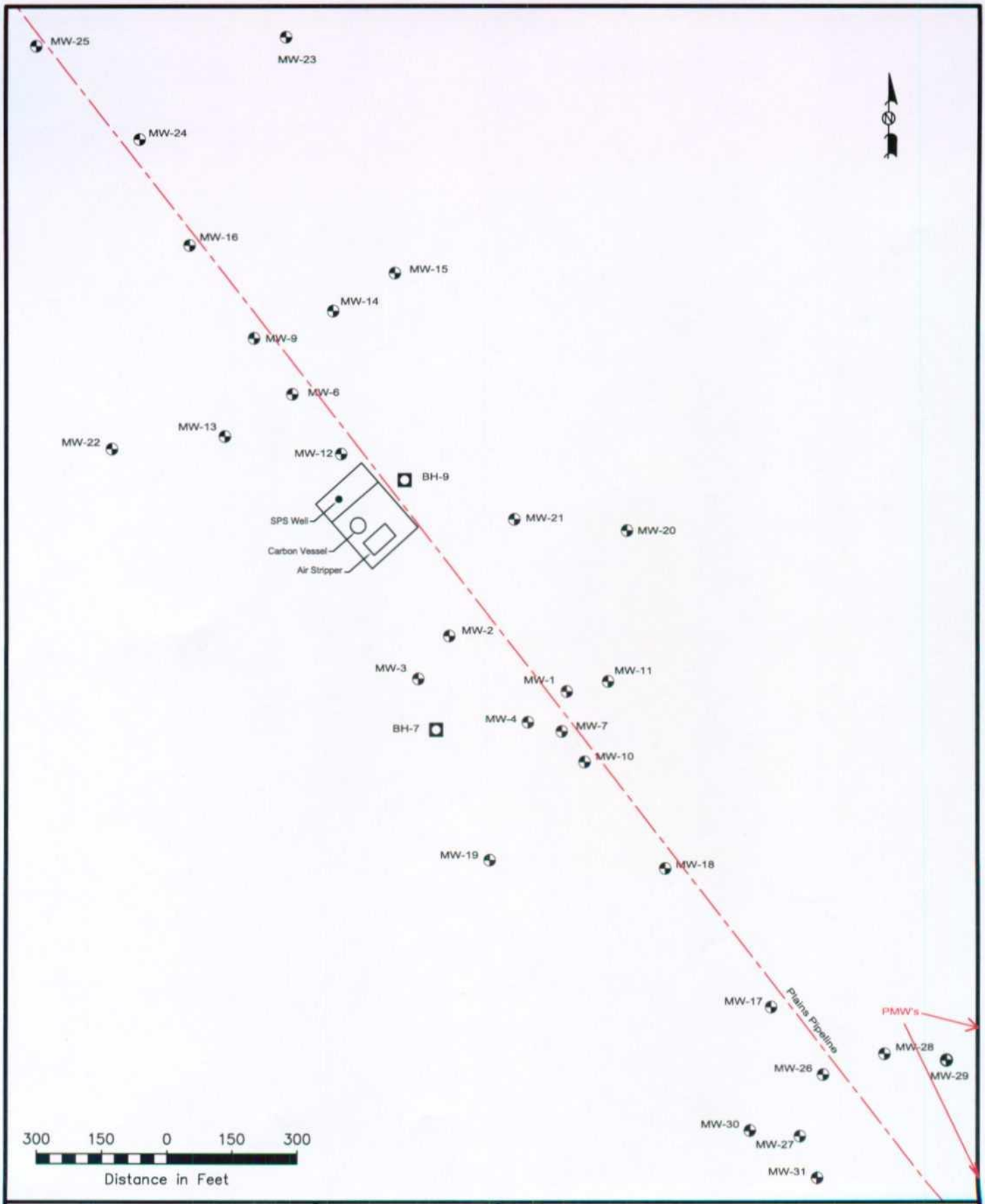
Should you have any questions or comments concerning this information, please contact me at (713) 646-4657.

Sincerely,

Jeffrey P. Dann, P.G.
Sr. Environmental Specialist
Plains All American

CC: Larry Johnson, NMOCD, Hobbs, NM
Camille Reynolds, Plains
Todd Choban, Nova
Pat McCasland, EPI

File: c/jeff-files/OCD-DrillingSchOct2004



LEGEND:

- Monitoring Well Location
- Soil Boring Location
- Proposed Monitor Well

Figure 2

Site Map

Plains Pipeline, L.P.
TNM SPS-11
Lea County, NM

NOVA Safety and Environmental

Scale: 1" = 300'	Drawn By: CS	Prepared By: TKC
September 2, 2004	NW1/4 SE1/4 Sec 18 T18S R36E	
	Lat. N32° 44' 50.3" Long. W103° 23' 38.5"	

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor

April 28, 2004

Joanna Prukop
Cabinet Secretary
Acting Director
Oil Conservation Division

Mr. Robert B. Eidson
Environmental Technology Group, Inc.
2540 West Marland
Hobbs, NM 88240

RE: Your "Annual Sampling and Quarterly Gauging of Groundwater Monitor Wells Meeting Regulatory Cleanup Standards" letter dated March 25, 2004

Sampling of the below-listed monitor wells may be done in the timeframes indicated:

Darr Angell #1: MW-4, 11, 15, 16, 19, and 20 may be sampled annually; MW-7 may be sampled semi-annually.
Darr Angell #2: MW-1, 5, 6, 7, 8, 9, and 10 may be sampled annually; MW-3, and 4 may be sampled semi-annually.
Darr Angell #4: MW-1, 2, 4, 5, 7, and 12 may be sampled annually; MW-9 may be sampled semi-annually.
HDO 90-23: MW-1, 7, and 8 may be sampled annually; MW-4, and 5 may be sampled semi-annually.
LF-37: MW-1, 2, 5, 6, 7, 8, and 9 may be sampled annually; MW-4 may be sampled semi-annually.
LF-59: MW-3, 5, and 6 may be sampled annually; MW-7 may be sampled semi-annually.
Monument 2: MW-6, and 7 may be sampled annually; MW-4 may be sampled semi-annually.
Monument 10: MW-4 may be sampled annually; MW-6, and 7 may be sampled semi-annually.
Monument 11: MW-1, 2, and 3 may be sampled annually.
Monument 17: MW-5, and 8 may be sampled annually. MW-4, and 6 may be sampled semi-annually.
Monument 18: MW-2, 6, 7, and 8 may be sampled annually. MW-5 may be sampled semi-annually.
TNM 97-04: MW-1, 7, 8, 10, and 12 may be sampled annually.
TNM 97-17: MW-1, 3, 11, 12, 13, 16, 17, 18, and 28 may be sampled annually. MW-22, 23, 24, 25, and 27 may be sampled semi-annually.
TNM 97-18: MW-1, 8, 9, 11, 12, 13, 14, 15, 16, 19, 20, and 21 may be sampled annually. MW-22, 26, 28, 29, and 30 may be sampled semi-annually.
TNM 97-23: MW-1, 2, 3, and 5 may be sampled annually.
TNM 98-05: MW-3, and 4 may be sampled annually.
TNM 98-05A: MW-5, and 8 may be sampled annually. MW-6, and 7 may be sampled semi-annually.
SPS-11: MW-2, 3, 13, 19, 20, 21, 22, 25, 27, 30, and 31 may be sampled annually. MW-10, and 18 may be sampled semi-annually.

Conditions:

1. Gauging of all monitor wells will continue on a quarterly basis.
2. A request for a change in sampling frequency for any other monitor wells must be made specifically for those wells. This approval of annual and semi-annual sampling for the above wells does not constitute a "blanket" approval for any other monitor well not shown above.

If you have any questions, do not hesitate to contact me.

NEW MEXICO OIL CONSERVATION DIVISION

Ed Martin
Environmental Bureau

DRAFT

March 25, 2004

Mr. Ed Martin
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Annual sampling and quarterly gauging of groundwater monitor wells meeting regulatory cleanup standards.

Mr. Martin:

Environmental Technology Group, Inc. (ETGI) for Link Energy is requesting that the groundwater sampling schedule of the wells listed below be changed from a quarterly to an annual sampling schedule. Quarterly gauging will continue on all site monitor wells during the regularly scheduled monitoring events. Benzene and total BTEX concentrations have been below regulatory standards in all of the monitor wells listed below for at least eight consecutive monitoring periods:

HDO 90-23: MW-1, 4, 5, 7 and 8;
LF-37: MW-1, 2, 4, 5, 6, 7, 8 and 9;
LF-59: MW-3, 5, 6 and 7;
Monument 2: MW-4, 6 and 7;
Monument 10: MW-1, 4, 5, 6 and 7;
Monument 11: MW-1, 2 and 3;
Monument 17: MW-4, 5, 6 and 8;
Monument 18: MW-2, 5, 6, 7 and 8;
TNM 97-04: MW-1, 7, 8, 10 and 12;
TNM97-17: MW-1, 3, 11, 12, 13, 16, 17, 18, 22, 23, 24, 25, 27 and 28;
TNM 97-18: MW-1; + E-mail
TNM 97-23: MW-1, 2, 3 and 5;
TNM 98-05: MW-3 and 4;
TNM 98-05A: MW-5, 6, 7 and 8;
SPS-11: MW-2, 3, 13, 15, 18, 19, 20, 21, 22, 25, 27, 30 and 31. + E-mail (#10)

As additional monitor wells meet the eight consecutive monitoring events requirement with concentrations below regulatory standards we will formally request that they too be sampled on an annual basis.

DRAFT

Please contact me with any questions you have concerning ETGI's proposed groundwater sampling schedule at these sites.

Sincerely;

Robert B. Edison
Geologist / Senior Project Manager
ETGI, Hobbs, New Mexico

(505) 397-4882 office phone
(505) 631-2974 cell
(505) 397-4701 fax

From: Robert Eidson [reidson@etgi.cc]
Sent: Tuesday, April 27, 2004 10:53 AM
To: Ed Martin
Subject: Groundwater sampling frequency letter

Ed:
The letter is attached for your reference.

Tabulated analytical results are included in all of the Annual Groundwater Monitoring reports. The Figure 3's should also be helpful in determining sampling frequency changes. Of those sites which show only seven consecutive quarters of acceptable groundwater sampling results, I checked the first quarter results of this year to meet the requirement (8). All wells will continue to be gauged during each sampling event.

At the **Darr Angell 1 site (AP-07)** we would like to sample monitor wells MW-4, 7, 11, 15, 16, 19 and 20 annually.
At the **Darr Angell 2 site (AP-07)** we would like to sample monitor wells MW-1, 3, 4, 5, 6, 7, 8, 9 and 10 annually.
At the **Darr Angell 4 site (AP-07)** we would like to sample monitor wells MW-1, 2, 4, 5, 7, 9 and 12 annually.

Additionally, we would like to add the following monitor wells to the list shown on the attached letter:

At **TNM 97-18 (AP-13)** monitor wells MW-8, 9, 11, 12, 13, 14, 15, 16, 19, 20, 21, 22, 26, 28, 29 and 30. and SPS-11.
At **SPS-11** monitor wells MW-10 and MW-19.

I will send the corresponding maps in groups to speed transmission and delivery.
Sincerely,
Robert B. Eidson
Geologist / Sr. Project Manager
ETGI
Hobbs, New Mexico
505-397-4882 office
505-397-4701 fax
505-631-2974 cell

From: Robert Eidson [reidson@etgi.cc]
Sent: Tuesday, April 27, 2004 10:53 AM
To: Ed Martin
Subject: Groundwater sampling frequency letter
Ed:
The letter is attached for your reference.

Tabulated analytical results are included in all of the Annual Groundwater Monitoring reports. The Figure 3's should also be helpful in determining sampling frequency changes. Of those sites which show only seven consecutive quarters of acceptable groundwater sampling results, I checked the first quarter results of this year to meet the requirement (8). All wells will continue to be gauged during each sampling event.

At the **Darr Angell 1 site (AP-07)** we would like to sample monitor wells MW-4, 7, 11, 15, 16, 19 and 20 annually.
At the **Darr Angell 2 site (AP-07)** we would like to sample monitor wells MW-1, 3, 4, 5, 6, 7, 8, 9 and 10 annually.
At the **Darr Angell 4 site (AP-07)** we would like to sample monitor wells MW-1, 2, 4, 5, 7, 9 and 12 annually.

Additionally, we would like to add the following monitor wells to the list shown on the attached letter:

At **TNM 97-18 (AP-13)** monitor wells MW-8, 9, 11, 12, 13, 14, 15, 16, 19, 20, 21, 22, 26, 28, 29 and 30. and SPS-11.
At **SPS-11** monitor wells MW-10 and MW-19.

I will send the corresponding maps in groups to speed transmission and delivery.
Sincerely,
Robert B. Eidson
Geologist / Sr. Project Manager
ETGI
Hobbs, New Mexico
505-397-4882 office
505-397-4701 fax
505-631-2974 cell

Site Name: SPS-11
Remediation Plan: ~~1R - 387~~ GW-140
Company: EOTT
Contractor: ETGI
Date Inspected: September 24, 2003 by Ed Martin, Larry Johnson and Paul Sheeley

Horizontal delineation is incomplete. Monitoring continuing. State land. SPS water well has been contaminated. No "shallow" impacted soils. No soil data on some wells, which were installed by another party. Treatment system has been shut down, approval of which was given by OCD.

Site Name: SPS-11
Remediation Plan: ~~IR - 387~~ GW-140
Company: EOTT
Contractor: ETGI
Date Inspected: September 24, 2003 by Ed Martin, Larry Johnson and Paul Sheeley

IR-387

ANNUAL MONITORING REPORT

EOTT ENERGY, LLC
TNM SPS-11
NW ¼ SE ¼ SECTION 18, TOWNSHIP 18 SOUTH, RANGE 36 EAST
LEA COUNTY, NEW MEXICO

PREPARED FOR:

EOTT ENERGY, LLC
5805 EAST HIGHWAY 80
MIDLAND, TEXAS 79701

PREPARED BY:

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
2540 WEST MARLAND
HOBBS, NEW MEXICO 88240

April 2003

Camille Reynolds
Project Manager

Chance I. Johnson
New Mexico Regional Manager

TABLE OF CONTENTS

INTRODUCTION

Environmental Technology Group, Inc. (ETGI), on behalf of EOTT Energy, LLC (EOTT), prepared this Annual Monitoring Report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an Annual Monitoring Report by April 1 of each year. This report is intended to be viewed as a complete document with figures, attachments, tables, and text. The report presents the results of the quarterly groundwater monitoring events only. For reference, the Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during four quarterly events in calendar year 2002 to assess the levels and extent of dissolved phase and phase-separated petroleum hydrocarbon (PSH) constituents. The groundwater monitoring events consisted of measuring static water levels in the monitor wells, checking for the presence of PSH, and purging and sampling of each well exhibiting sufficient recharge. Monitor wells containing measurable levels of PSH were not sampled.

FIELD ACTIVITIES

The site monitor wells were gauged and sampled on March 26, June 26, September 25, and December 10, 2002. During each sampling event the monitor wells designated to be sampled were purged of approximately three well volumes of water or until the wells were dry using a PVC bailer or electrical Grundfos Pump. Groundwater was allowed to recharge and samples were obtained using disposable Teflon samplers. Water samples were collected in clean glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed of by Pate Trucking, Hobbs, New Mexico or Vista Trucking, Eunice, New Mexico utilizing a licensed disposal facility (NMOCD AO SWD-730).

GROUNDWATER GRADIENT

Locations of the monitor wells and the inferred groundwater gradient, as measured on December 10, 2002, are depicted on Figure 2, the Inferred Groundwater Gradient Map. The groundwater elevation data are provided as Table 1. Groundwater elevation contours generated from the final quarterly event of calendar year 2002 water level measurements indicate a general gradient of approximately 0.003 ft/ft to the southeast as measured between groundwater monitor wells MW-25 and MW-26. The depth to groundwater as measured from the top of the well casing ranged between 56.74 to 61.59 feet in the shallow alluvial aquifer.

LABORATORY RESULTS

Groundwater samples collected during the sampling events were delivered to AnalySys, Inc. in Austin, Texas for determination of Benzene, Toluene, Ethylbenzene and Xylene (BTEX) constituent concentrations by EPA Method SW846-8260b. Cumulative groundwater chemistry data is provided as Table 2 and the copies of the Laboratory Reports are provided as Appendix A. Groundwater samples, which exceeded regulatory standards for benzene and/or BTEX constituents, are indicated on Figure 3, the NMOCD Site Map.

Laboratory results for groundwater samples collected during the calendar year 2002 indicated that dissolved phase benzene and BTEX constituent concentrations were below NMOCD regulatory standards in monitor wells MW-2, MW-3, MW-13, MW-15, MW-18, MW-20, MW-21, MW-22, MW-23, MW-25, MW-27, MW-30, and MW-31. The benzene concentrations contained in monitor wells MW-4, MW-6, MW-7, MW-9, MW-10, MW-11, MW-12, MW-16, MW-17, MW-19, and MW-24 were above NMOCD regulatory standards, while the BTEX concentrations were below NMOCD regulatory standards. The benzene and BTEX constituent concentrations contained in monitor wells MW-1, MW-14, MW-26, MW-28, and MW-29 were above NMOCD regulatory standards for the monitoring period.

SUMMARY

This report presents the results of monitoring activities for the annual monitoring period of calendar year 2002. No detectable or measurable amounts of PSH were encountered during the monitoring events conducted on the site during this reporting period.

Groundwater elevation contours generated from the final quarterly event of calendar year 2002 water level measurements indicated a general gradient of approximately 0.003 ft/ft to the southeast as measured between groundwater monitor wells MW-25 and MW-26.

Laboratory results for groundwater samples collected during the calendar year 2002 indicated that Benzene and BTEX concentrations were below NMOCD regulatory standards in monitor wells MW-2, MW-3, MW-13, MW-15, MW-18, MW-20, MW-21, MW-22, MW-23, MW-25, MW-27, MW-30, and MW-31. The benzene concentrations contained in monitor wells MW-4, MW-6, MW-7, MW-9, MW-10, MW-11, MW-12, MW-16, MW-17, MW-19, and MW-24 were above NMOCD regulatory standards, while the BTEX concentrations were below NMOCD regulatory standards. The benzene and BTEX constituent concentrations contained in monitor wells MW-1, MW-14, MW-26, MW-28, and MW-29 were above NMOCD regulatory standards for the monitoring period.

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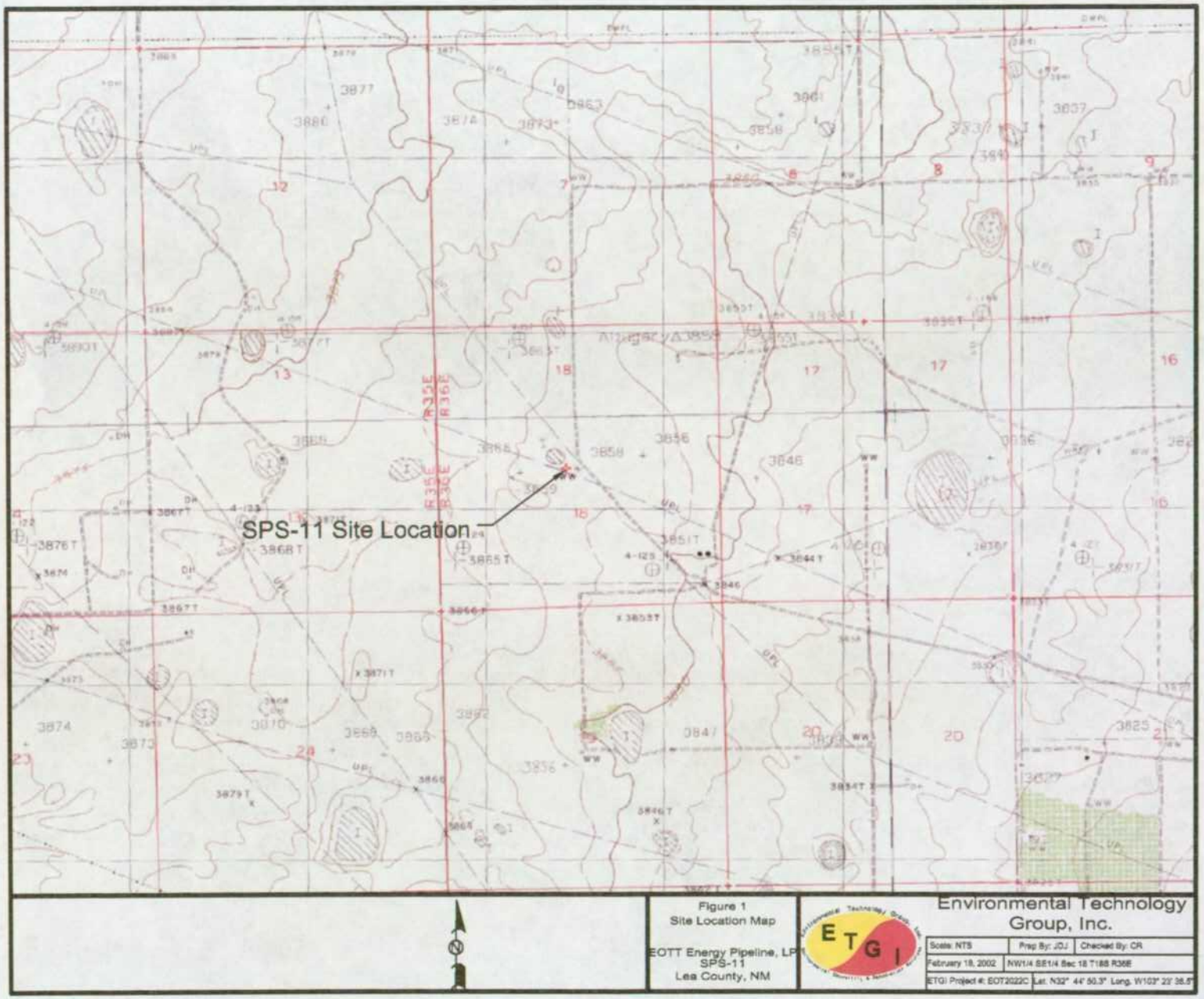
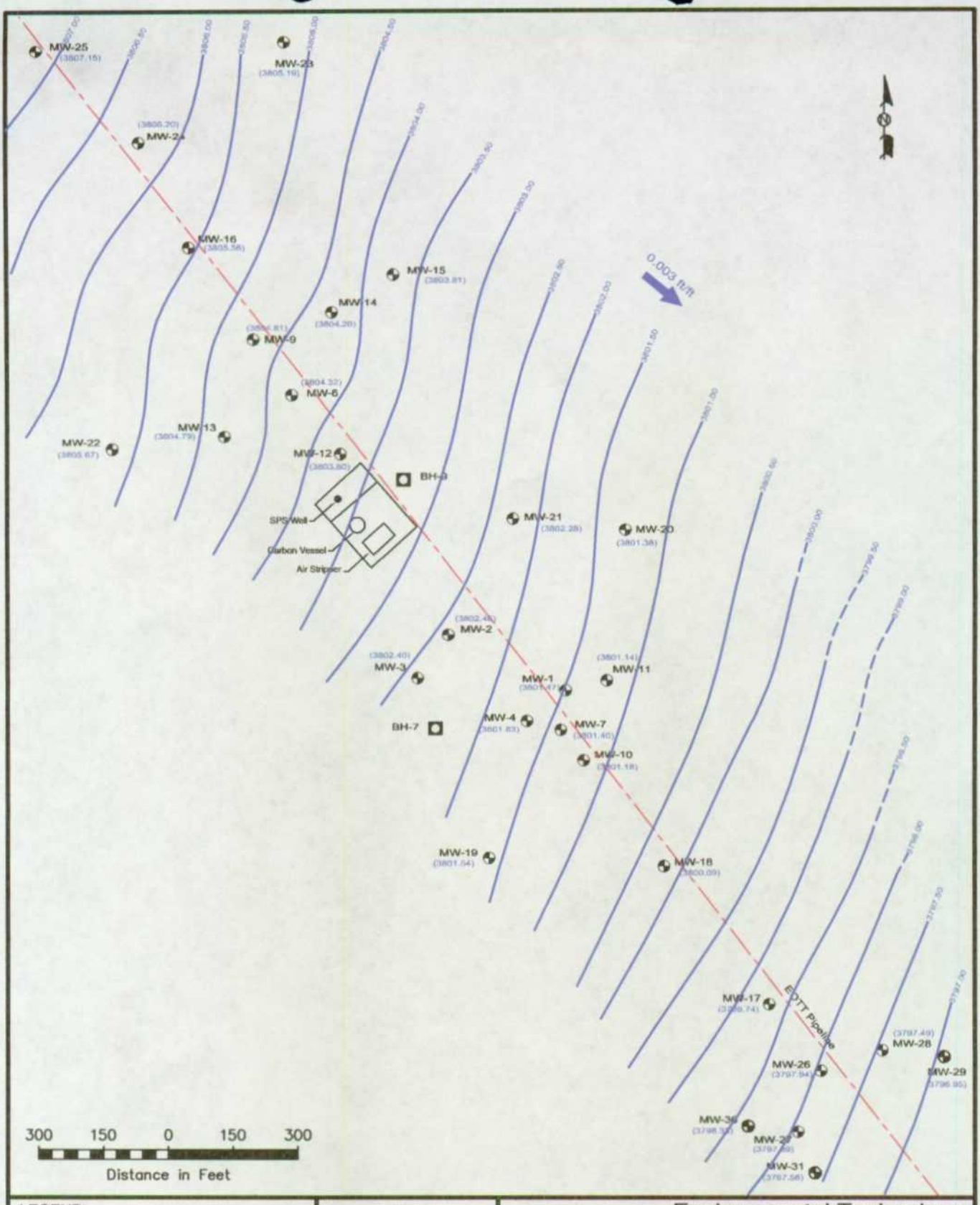


Figure 1
Site Location Map

EOTT Energy Pipeline, LP
SPS-11
Lea County, NM

Environmental Technology Group, Inc.

Scale: NTS	Prep By: JDJ	Checked By: CR
February 18, 2002	NW1/4 SE1/4 Sec 18 T18S R36E	
ETGI Project #: EOT2022C	Lat. N32° 44' 50.3" Long. W103° 23' 38.5"	



LEGEND:

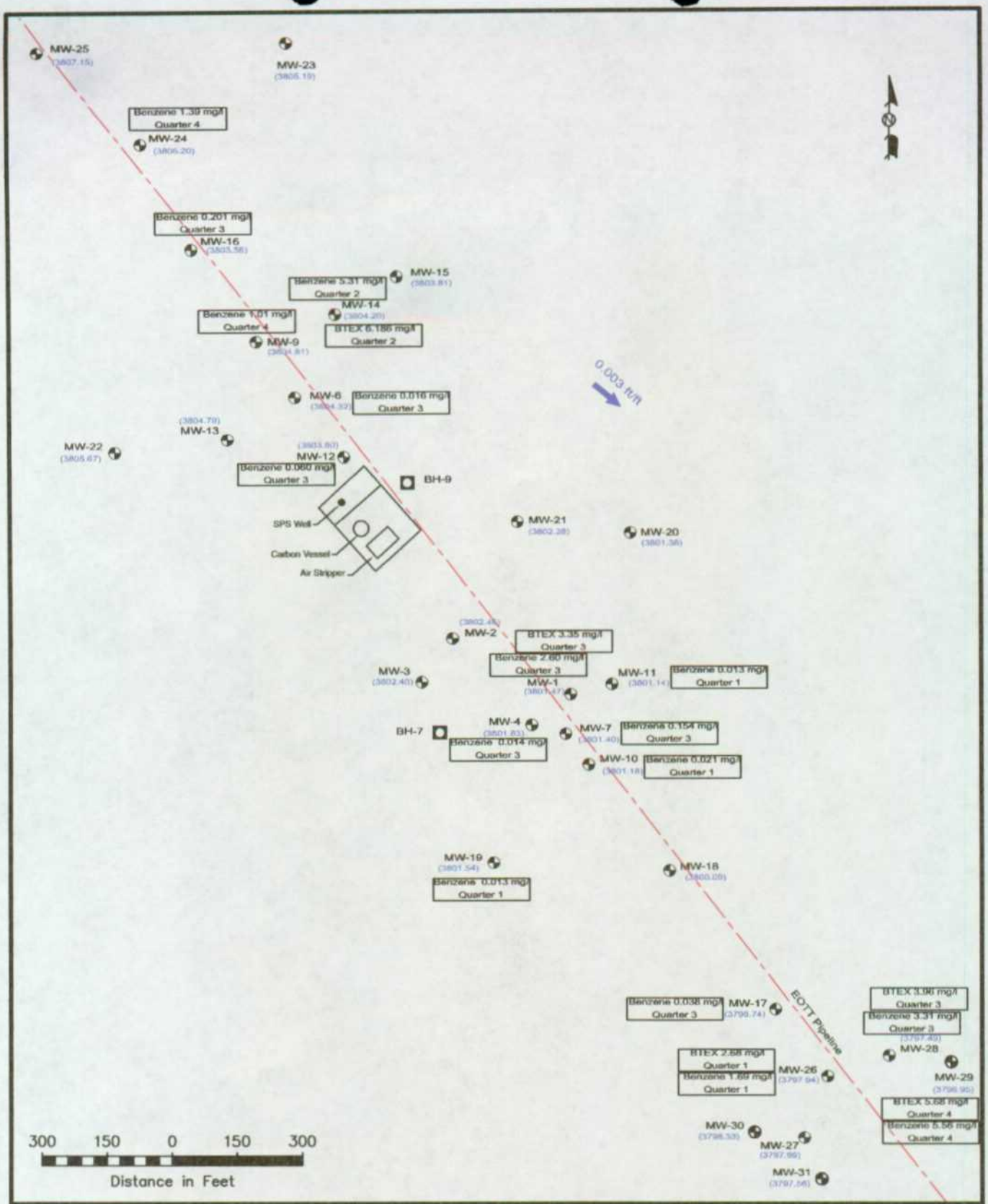
- Monitoring Well Location
- Soil Boring Location
- Groundwater Gradient
- (3807.65) Groundwater Elevation (In Feet)
- Groundwater Gradient Direction and Magnitude

Figure 2
Inferred Groundwater Gradient Map (12/10/02)

EOTT Energy Corp.
TNM SPS-11
Lea County, NM

Environmental Technology Group, Inc.

Scale: 1" = 300'	Drawn By: JDJ	Prepared By: CR
March 20, 2003	NW1/4 SE1/4 Sec 18 T16S R36E	
ETGI Project #: EO2022	Lat. N32° 44' 50.3" Long. W103° 23' 38.5"	



LEGEND:

- Monitoring Well Location
- Soil Boring Location
- Groundwater Gradient
- (3807.60) Groundwater Elevation (In Feet)
- Groundwater Gradient Direction and Magnitude

Figure 3
NMOCD Site Map
12/10/02 Data

EOTT Energy Corp.
TNM SPS-11
Lea County, NM

Environmental Technology Group, Inc.

Scale: 1" = 300'	Drawn By: JDJ	Prepared By: CR
March 20, 2003	NW1/4 SE1/4 Sec 18 T18S R36E	
ETGI Project #: EO2022	Lat. N32° 44' 50.3" Long. W103° 23' 38.5"	

TABLE 1
GROUNDWATER ELEVATION DATA
EOTT ENERGY, LLC

SPS - 11
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EO 2022

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 1	03/24/00	3,859.08	-	56.87	0.00	3,802.21
	06/14/00	3,859.08	-	57.40	0.00	3,801.68
	09/22/00	3,859.08	-	56.50	0.00	3,802.58
	12/28/00	3,859.08	-	56.68	0.00	3,802.40
	03/14/01	3,859.08	-	56.78	0.00	3,802.30
	06/06/01	3,859.08	-	56.94	0.00	3,802.14
	09/28/01	3,859.08	-	57.05	0.00	3,802.03
	11/17/01	3,859.08	-	57.57	0.00	3,801.51
	03/26/02	3,859.08	-	57.54	0.00	3,801.54
	06/26/02	3,859.08	-	57.45	0.00	3,801.63
	09/25/02	3,859.08	-	57.60	0.00	3,801.48
	12/10/02	3,859.08	-	57.61	0.00	3,801.47
MW - 2	03/24/00	3,860.76	-	57.55	0.00	3,803.21
	06/14/00	3,860.76	-	58.05	0.00	3,802.71
	09/22/00	3,860.76	-	57.04	0.00	3,803.72
	12/28/00	3,860.76	-	57.32	0.00	3,803.44
	03/14/01	3,860.76	-	57.41	0.00	3,803.35
	06/06/01	3,860.76	-	57.58	0.00	3,803.18
	09/28/01	3,860.76	-	57.68	0.00	3,803.08
	11/17/01	3,860.76	-	58.00	0.00	3,802.76
	03/26/02	3,860.76	-	58.20	0.00	3,802.56
	06/26/02	3,860.76	-	58.12	0.00	3,802.64
	09/25/02	3,860.76	-	58.28	0.00	3,802.48
	12/10/02	3,860.76	-	58.30	0.00	3,802.46
MW - 3	03/24/00	3,861.15	-	57.98	0.00	3,803.17
	06/14/00	3,861.15	-	58.50	0.00	3,802.65
	09/22/00	3,861.15	-	57.48	0.00	3,803.67
	12/28/00	3,861.15	-	57.74	0.00	3,803.41
	03/14/01	3,861.15	-	57.85	0.00	3,803.30
	06/06/01	3,861.15	-	58.00	0.00	3,803.15
	09/28/01	3,861.15	-	58.13	0.00	3,803.02
	11/17/01	3,861.15	-	58.46	0.00	3,802.69
	03/26/02	3,861.15	-	58.65	0.00	3,802.50
	06/26/02	3,861.15	-	58.55	0.00	3,802.60
	09/25/02	3,861.15	-	58.71	0.00	3,802.44
	12/10/02	3,861.15	-	58.75	0.00	3,802.40

TABLE 1
GROUNDWATER ELEVATION DATA
EOTT ENERGY, LLC

SPS - 11
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EO 2022

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 4	03/24/00	3,859.62	-	57.03	0.00	3,802.59
	06/14/00	3,859.62	-	57.57	0.00	3,802.05
	09/22/00	3,859.62	-	56.64	0.00	3,802.98
	12/28/00	3,859.62	-	56.86	0.00	3,802.76
	03/14/01	3,859.62	-	56.96	0.00	3,802.66
	06/06/01	3,859.62	-	57.12	0.00	3,802.50
	09/28/01	3,859.62	-	57.23	0.00	3,802.39
	11/17/01	3,859.62	-	58.04	0.00	3,801.58
	03/26/02	3,859.62	-	57.69	0.00	3,801.93
	06/26/02	3,859.62	-	57.60	0.00	3,802.02
	09/25/02	3,859.62	-	57.77	0.00	3,801.85
	12/10/02	3,859.62	-	57.79	0.00	3,801.83
MW - 6	03/24/00	3,862.47	-	57.43	0.00	3,805.04
	06/14/00	3,862.47	-	57.98	0.00	3,804.49
	09/22/00	3,862.47	-	56.82	0.00	3,805.65
	12/28/00	3,862.47	-	57.03	0.00	3,805.44
	03/14/01	3,862.47	-	57.14	0.00	3,805.33
	06/06/01	3,862.47	-	57.35	0.00	3,805.12
	09/28/01	3,862.47	-	57.42	0.00	3,805.05
	11/17/01	3,862.47	-	57.77	0.00	3,804.70
	03/26/02	3,862.47	-	58.05	0.00	3,804.42
	06/26/02	3,862.47	-	57.90	0.00	3,804.57
	09/25/02	3,862.47	-	58.13	0.00	3,804.34
	12/10/02	3,862.47	-	58.15	0.00	3,804.32
MW - 7	03/24/00	3,859.31	-	57.17	0.00	3,802.14
	06/14/00	3,859.31	-	57.72	0.00	3,801.59
	09/22/00	3,859.31	-	56.79	0.00	3,802.52
	12/28/00	3,859.31	-	56.96	0.00	3,802.35
	03/14/01	3,859.31	-	57.11	0.00	3,802.20
	06/06/01	3,859.31	-	57.20	0.00	3,802.11
	09/28/01	3,859.31	-	57.32	0.00	3,801.99
	11/17/01	3,859.31	-	57.77	0.00	3,801.54
	03/26/02	3,859.31	-	57.82	0.00	3,801.49
	06/26/02	3,859.31	-	57.73	0.00	3,801.58
	09/25/02	3,859.31	-	57.90	0.00	3,801.41
	12/10/02	3,859.31	-	57.91	0.00	3,801.40

TABLE 1
GROUNDWATER ELEVATION DATA
EOTT ENERGY, LLC

SPS - 11
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EO 2022

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 9	03/24/00	3,861.88	-	56.34	0.00	3,805.54
	06/14/00	3,861.88	-	56.88	0.00	3,805.00
	09/22/00	3,861.88	-	55.86	0.00	3,806.02
	12/28/00	3,861.88	-	56.02	0.00	3,805.86
	03/14/01	3,861.88	-	56.14	0.00	3,805.74
	06/06/01	3,861.88	-	56.30	0.00	3,805.58
	09/28/01	3,861.88	-	56.38	0.00	3,805.50
	11/17/01	3,861.88	-	57.23	0.00	3,804.65
	03/26/02	3,861.88	-	56.95	0.00	3,804.93
	06/26/02	3,861.88	-	56.84	0.00	3,805.04
	09/25/02	3,861.88	-	57.07	0.00	3,804.81
	12/10/02	3,861.88	-	57.07	0.00	3,804.81
MW - 10	03/24/00	3,860.58	-	58.68	0.00	3,801.90
	06/14/00	3,860.58	-	59.20	0.00	3,801.38
	09/22/00	3,860.58	-	58.29	0.00	3,802.29
	12/28/00	3,860.58	-	58.47	0.00	3,802.11
	03/14/01	3,860.58	-	58.59	0.00	3,801.99
	06/06/01	3,860.58	-	58.70	0.00	3,801.88
	09/28/01	3,860.58	-	58.82	0.00	3,801.76
	11/17/01	3,860.58	-	59.06	0.00	3,801.52
	03/26/02	3,860.58	-	59.34	0.00	3,801.24
	06/26/02	3,860.58	-	59.24	0.00	3,801.34
	09/25/02	3,860.58	-	59.41	0.00	3,801.17
	12/10/02	3,860.58	-	59.40	0.00	3,801.18
MW - 11	03/24/00	3,860.00	-	58.11	0.00	3,801.89
	06/14/00	3,860.00	-	58.59	0.00	3,801.41
	09/22/00	3,860.00	-	57.75	0.00	3,802.25
	12/28/00	3,860.00	-	57.94	0.00	3,802.06
	03/14/01	3,860.00	-	58.05	0.00	3,801.95
	06/06/01	3,860.00	-	58.18	0.00	3,801.82
	09/28/01	3,860.00	-	58.29	0.00	3,801.71
	11/17/01	3,860.00	-	58.56	0.00	3,801.44
	03/26/02	3,860.00	-	58.78	0.00	3,801.22
	06/26/02	3,860.00	-	58.69	0.00	3,801.31
	09/25/02	3860.00	-	58.85	0.00	3,801.15
	12/10/02	3860.00	-	58.86	0.00	3,801.14

TABLE 1
GROUNDWATER ELEVATION DATA
EOTT ENERGY, LLC

SPS - 11
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EO 2022

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 12	03/24/00	3,863.10	-	58.55	0.00	3,804.55
	06/14/00	3,863.10	-	59.05	0.00	3,804.05
	09/22/00	3,863.10	-	57.80	0.00	3,805.30
	12/28/00	3,863.10	-	58.18	0.00	3,804.92
	03/14/01	3,863.10	-	58.28	0.00	3,804.82
	06/06/01	3,863.10	-	58.47	0.00	3,804.63
	09/28/01	3,863.10	-	58.53	0.00	3,804.57
	11/17/01	3,863.10	-	58.84	0.00	3,804.26
	03/26/02	3,863.10	-	59.04	0.00	3,804.06
	06/26/02	3,863.10	-	59.12	0.00	3,803.98
	09/25/02	3,863.10	-	59.29	0.00	3,803.81
	12/09/02	3,863.10	-	59.30	0.00	3,803.80
MW-13	03/24/01	3,862.44	-	56.92	0.00	3,805.52
	06/14/01	3,862.44	-	57.42	0.00	3,805.02
	09/22/00	3,862.44	-	56.24	0.00	3,806.20
	12/28/00	3,862.44	-	56.58	0.00	3,805.86
	03/14/01	3,862.44	-	56.72	0.00	3,805.72
	06//06/01	3,862.44	-	56.88	0.00	3,805.56
	09/28/01	3,862.44	-	56.98	0.00	3,805.46
	11/17/01	3,862.44	-	57.21	0.00	3,805.23
	03/26/02	3,862.44	-	57.52	0.00	3,804.92
	06/26/02	3,862.44	-	57.48	0.00	3,804.96
	09/25/02	3,862.44	-	57.62	0.00	3,804.82
	12/09/02	3,862.44	-	57.65	0.00	3,804.79
MW - 14	03/24/00	3,862.95	-	57.97	0.00	3,804.98
	06/14/00	3,862.95	-	58.40	0.00	3,804.55
	09/22/00	3,862.95	-	57.57	0.00	3,805.38
	12/28/00	3,862.95	-	57.72	0.00	3,805.23
	03/14/01	3,862.95	-	57.88	0.00	3,805.07
	06/06/01	3,862.95	-	58.02	0.00	3,804.93
	09/28/01	3,862.95	-	58.14	0.00	3,804.81
	11/17/01	3,862.95	-	58.58	0.00	3,804.37
	03/26/02	3,862.95	-	58.61	0.00	3,804.34
	06/26/02	3,862.95	-	58.52	0.00	3,804.43
	09/25/02	3,862.95	-	58.74	0.00	3,804.21
	12/09/02	3,862.95	-	58.75	0.00	3,804.20

TABLE 1
GROUNDWATER ELEVATION DATA
EOTT ENERGY, LLC

SPS - 11
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EO 2022

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 15	03/24/00	3,861.70	-	57.11	0.00	3,804.59
	06/14/00	3,861.70	-	57.51	0.00	3,804.19
	09/22/00	3,861.70	-	56.76	0.00	3,804.94
	12/28/00	3,861.70	-	56.89	0.00	3,804.81
	03/14/01	3,861.70	-	57.00	0.00	3,804.70
	06/06/01	3,861.70	-	57.15	0.00	3,804.55
	09/28/01	3,861.70	-	57.25	0.00	3,804.45
	11/17/01	3,861.70	-	57.50	0.00	3,804.20
	03/26/02	3,861.70	-	57.57	0.00	3,804.13
	06/26/02	3,861.70	-	57.73	0.00	3,803.97
	09/25/02	3,861.70	-	57.90	0.00	3,803.80
	12/09/02	3,861.70	-	57.89	0.00	3,803.81
MW - 16	03/24/00	3,863.15	-	56.81	0.00	3,806.34
	06/14/00	3,863.15	-	57.24	0.00	3,805.91
	09/22/00	3,863.15	-	56.46	0.00	3,806.69
	12/28/00	3,863.15	-	56.64	0.00	3,806.51
	03/14/01	3,863.15	-	56.73	0.00	3,806.42
	06/06/01	3,863.15	-	56.85	0.00	3,806.30
	09/28/01	3,863.15	-	56.99	0.00	3,806.16
	11/17/01	3,863.15	-	57.28	0.00	3,805.87
	03/26/02	3,863.15	-	57.43	0.00	3,805.72
	06/26/02	3,863.15	-	57.43	0.00	3,805.72
	09/25/02	3,863.15	-	57.58	0.00	3,805.57
	12/10/02	3,863.15	-	57.59	0.00	3,805.56
MW - 17	03/24/00	3,859.17	-	59.57	0.00	3,799.60
	06/14/00	3,859.17	-	59.72	0.00	3,799.45
	09/22/00	3,859.17	-	59.65	0.00	3,799.52
	12/28/00	3,859.17	-	59.70	0.00	3,799.47
	03/14/01	3,859.17	-	59.66	0.00	3,799.51
	06/06/01	3,859.17	-	59.75	0.00	3,799.42
	09/28/01	3,859.17	-	59.90	0.00	3,799.27
	11/17/01	3,859.17	-	60.02	0.00	3,799.15
	03/26/02	3,859.17	-	60.41	0.00	3,798.76
	06/26/02	3,859.17	-	60.26	0.00	3,798.91
	09/25/02	3,859.17	-	60.39	0.00	3,798.78
	12/10/02	3,859.17	-	60.43	0.00	3,798.74

TABLE 1
GROUNDWATER ELEVATION DATA
EOTT ENERGY, LLC

SPS - 11
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EO 2022

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 18	03/24/00	3,859.98	-	59.15	0.00	3,800.83
	06/14/00	3,859.98	-	59.42	0.00	3,800.56
	09/22/00	3,859.98	-	58.97	0.00	3,801.01
	12/28/00	3,859.98	-	59.02	0.00	3,800.96
	03/14/01	3,859.98	-	59.15	0.00	3,800.83
	06/06/01	3,859.98	-	59.20	0.00	3,800.78
	09/28/01	3,859.98	-	59.43	0.00	3,800.55
	11/17/01	3,859.98	-	59.44	0.00	3,800.54
	03/26/02	3,859.98	-	59.94	0.00	3,800.04
	06/26/02	3,859.98	-	59.75	0.00	3,800.23
	09/25/02	3,859.98	-	59.86	0.00	3,800.12
	12/10/02	3,859.98	-	59.89	0.00	3,800.09
MW - 19	03/24/00	3,862.30	-	57.97	0.00	3,804.33
	06/14/00	3,862.30	-	60.41	0.00	3,801.89
	09/22/00	3,862.30	-	59.64	0.00	3,802.66
	12/28/00	3,862.30	-	59.83	0.00	3,802.47
	03/14/01	3,862.30	-	58.92	0.00	3,803.38
	09/28/01	3,862.30	-	59.19	0.00	3,803.11
	11/17/01	3,862.30	-	60.35	0.00	3,801.95
	03/26/02	3,862.30	-	60.64	0.00	3,801.66
	06/26/02	3,862.30	-	60.59	0.00	3,801.71
	09/25/02	3,862.30	-	60.73	0.00	3,801.57
	12/10/02	3,862.30	-	60.76	0.00	3,801.54
MW - 20	03/24/00	3,861.30	-	59.13	0.00	3,802.17
	06/14/00	3,861.30	-	59.54	0.00	3,801.76
	09/22/00	3,861.30	-	58.84	0.00	3,802.46
	12/28/00	3,861.30	-	59.01	0.00	3,802.29
	03/14/01	3,861.30	-	59.11	0.00	3,802.19
	06/06/01	3,861.30	-	59.20	0.00	3,802.10
	09/28/01	3,861.30	-	59.34	0.00	3,801.96
	11/17/01	3,861.30	-	59.53	0.00	3,801.77
	03/26/02	3,861.30	-	59.80	0.00	3,801.50
	06/26/02	3,861.30	-	59.75	0.00	3,801.55
	09/25/02	3,861.30	-	59.91	0.00	3,801.39
	12/10/02	3,861.30	-	59.92	0.00	3,801.38
MW - 21	03/24/00	3,862.30	-	59.25	0.00	3,803.05
	06/14/00	3,862.30	-	59.70	0.00	3,802.60
	09/22/00	3,862.30	-	58.84	0.00	3,803.46
	12/28/00	3,862.30	-	59.06	0.00	3,803.24
	03/14/01	3,862.30	-	59.16	0.00	3,803.14
	06/06/01	3,862.30	-	59.29	0.00	3,803.01
	09/28/01	3,862.30	-	59.40	0.00	3,802.90
	11/17/01	3,862.30	-	59.60	0.00	3,802.70
	03/26/02	3,862.30	-	59.89	0.00	3,802.41
	06/26/02	3,862.30	-	59.83	0.00	3,802.47
	09/25/02	3,862.30	-	60.01	0.00	3,802.29
	12/10/02	3862.30	-	60.02	0.00	3,802.28

TABLE 1
GROUNDWATER ELEVATION DATA
EOTT ENERGY, LLC

SPS - 11
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EO 2022

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 22	03/24/00	3,864.01	-	57.55	0.00	3,806.46
	06/14/00	3,864.01	-	57.93	0.00	3,806.08
	09/22/00	3,864.01	-	57.13	0.00	3,806.88
	12/28/00	3,864.01	-	57.37	0.00	3,806.64
	03/14/01	3,864.01	-	57.50	0.00	3,806.51
	06/06/01	3,864.01	-	57.55	0.00	3,806.46
	09/28/01	3,864.01	-	57.75	0.00	3,806.26
	11/17/01	3,864.01	-	57.94	0.00	3,806.07
	03/26/02	3,864.01	-	58.20	0.00	3,805.81
	06/26/02	3,864.01	-	58.22	0.00	3,805.79
	09/25/02	3,864.01	-	58.31	0.00	3,805.70
	12/09/02	3,864.01	-	58.34	0.00	3,805.67
MW - 23	03/24/00	3,862.44	-	56.34	0.00	3,806.10
	06/14/00	3,862.44	-	56.58	0.00	3,805.86
	09/22/00	3,862.44	-	56.20	0.00	3,806.24
	12/28/00	3,862.44	-	56.32	0.00	3,806.12
	03/14/01	3,862.44	-	56.83	0.00	3,805.61
	06/06/01	3,862.44	-	56.50	0.00	3,805.94
	09/28/01	3,862.44	-	56.56	0.00	3,805.88
	11/17/01	3,862.44	-	56.79	0.00	3,805.65
	03/26/02	3,862.44	-	57.00	0.00	3,805.44
	06/26/02	3,862.44	-	57.07	0.00	3,805.37
	09/25/02	3,862.44	-	57.23	0.00	3,805.21
	12/09/02	3,862.44	-	57.25	0.00	3,805.19
MW - 24	03/24/00	3,864.36	-	57.31	0.00	3,807.05
	06/14/00	3,864.36	-	57.59	0.00	3,806.77
	09/22/00	3,864.36	-	57.09	0.00	3,807.27
	12/28/00	3,864.36	-	57.23	0.00	3,807.13
	03/14/01	3,864.36	-	57.30	0.00	3,807.06
	06/06/01	3,864.36	-	57.38	0.00	3,806.98
	09/28/01	3,864.36	-	57.58	0.00	3,806.78
	11/17/01	3,864.36	-	57.75	0.00	3,806.61
	03/26/02	3,864.36	-	57.94	0.00	3,806.42
	06/26/02	3,864.36	-	57.98	0.00	3,806.38
	09/25/02	3,864.36	-	58.14	0.00	3,806.22
	12/09/02	3,864.36	-	58.16	0.00	3,806.20

TABLE 1
GROUNDWATER ELEVATION DATA
EOTT ENERGY, LLC

SPS - 11
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EO 2022

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 25	03/24/00	3,864.16	-	56.08	0.00	3,808.08
	06/14/00	3,864.16	-	56.28	0.00	3,807.88
	09/22/00	3,864.16	-	55.93	0.00	3,808.23
	12/28/00	3,864.16	-	56.05	0.00	3,808.11
	03/14/01	3,864.16	-	56.12	0.00	3,808.04
	06/06/01	3,864.16	-	56.28	0.00	3,807.88
	09/28/01	3,864.16	-	56.37	0.00	3,807.79
	11/17/01	3,864.16	-	56.51	0.00	3,807.65
	03/26/02	3,864.16	-	56.74	0.00	3,807.42
	06/26/02	3,864.16	-	56.79	0.00	3,807.37
	09/25/02	3,864.16	-	56.96	0.00	3,807.20
	12/09/02	3,864.16	-	57.01	0.00	3,807.15
MW - 26	06/14/00	3,858.79	-	60.10	0.00	3,798.69
	09/22/00	3,858.79	-	60.00	0.00	3,798.79
	12/28/00	3,858.79	-	60.08	0.00	3,798.71
	03/14/01	3,858.79	-	60.05	0.00	3,798.74
	06/06/01	3,858.79	-	60.18	0.00	3,798.61
	09/28/01	3,858.79	-	60.32	0.00	3,798.47
	11/17/01	3,858.79	-	60.48	0.00	3,798.31
	03/26/02	3,858.79	-	60.84	0.00	3,797.95
	06/26/02	3,858.79	-	60.67	0.00	3,798.12
	09/25/02	3,858.79	-	60.79	0.00	3,798.00
	12/10/02	3858.79	-	60.85	0.00	3,797.94
MW - 27	06/14/00	3,858.23	-	59.60	0.00	3,798.63
	09/22/00	3,858.23	-	59.50	0.00	3,798.73
	12/28/00	3,858.23	-	59.54	0.00	3,798.69
	03/14/01	3,858.23	-	59.60	0.00	3,798.63
	06/06/01	3,858.23	-	59.64	0.00	3,798.59
	09/28/01	3,858.23	-	59.88	0.00	3,798.35
	11/17/01	3,858.23	-	59.91	0.00	3,798.32
	03/26/02	3,858.23	-	60.40	0.00	3,797.83
	06/26/02	3,858.23	-	60.16	0.00	3,798.07
	09/25/02	3,858.23	-	60.29	0.00	3,797.94
	12/10/02	3,858.23	-	60.24	0.00	3,797.99
MW - 28	06/14/00	3,858.60	-	60.33	0.00	3,798.27
	09/22/00	3,858.60	-	60.29	0.00	3,798.31
	12/28/00	3,858.60	-	60.33	0.00	3,798.27
	03/14/01	3,858.60	-	60.38	0.00	3,798.22
	16/16/01	3,858.60	-	60.40	0.00	3,798.20
	19/28/01	3,858.60	-	60.63	0.00	3,797.97
	11/17/01	3,858.60	-	60.71	0.00	3,797.89
	03/26/02	3,858.60	-	60.85	0.00	3,797.75
	06/26/02	3,858.60	-	60.93	0.00	3,797.67
	09/25/02	3,858.60	-	61.06	0.00	3,797.54
	12/10/02	3,858.60	-	61.11	0.00	3,797.49

TABLE 1
GROUNDWATER ELEVATION DATA
EOTT ENERGY, LLC

SPS - 11
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EO 2022

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 29	01/24/02	3,858.54	-	61.19	0.00	3,797.35
	03/26/02	3,858.54	-	61.28	0.00	3,797.26
	06/26/02	3,858.54	-	61.42	0.00	3,797.12
	09/25/02	3,858.54	-	61.53	0.00	3,797.01
	12/10/02	3,858.54	-	61.59	0.00	3,796.95
MW - 30	01/24/02	3,858.35	-	59.63	0.00	3,798.72
	03/26/02	3,858.35	-	59.75	0.00	3,798.60
	06/26/02	3,858.35	-	59.84	0.00	3,798.51
	09/25/02	3,858.35	-	59.96	0.00	3,798.39
	12/10/02	3,858.35	-	60.02	0.00	3,798.33
MW - 31	01/24/02	3,858.52	-	60.59	0.00	3,797.93
	03/26/02	3,858.52	-	60.70	0.00	3,797.82
	06/26/02	3,858.52	-	60.77	0.00	3,797.75
	09/25/02	3,858.52	-	60.90	0.00	3,797.62
	12/10/02	3,858.52	-	60.96	0.00	3,797.56

TABLE 2
GROUNDWATER CHEMISTRY
EOTT ENERGY, LLC

SPS 11
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EO 2022

All concentrations are in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-8620b			
		BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES
MW - 1	08/20/99	6.54	0.078	1.36	0.822
	12/08/99	5.20	0.386	1.06	0.724
	03/24/00	0.547	0.098	0.169	0.056
	06/14/00	2.28	0.060	0.451	0.073
	09/22/00	0.455	0.115	0.128	0.074
	12/28/00	1.99	0.050	0.442	0.166
	03/14/01	2.72	0.199	0.659	0.275
	06/06/01	3.56	0.155	0.812	0.372
	09/28/01	1.28	0.065	0.366	0.013
	11/17/01	6.880	0.121	1.650	1.069
	03/26/02	1.850	0.049	0.361	0.049
	06/26/02	2.070	0.169	0.545	0.018
	09/25/02	2.600	0.311	0.402	0.033
	12/10/02	1.610	0.307	0.248	0.103
MW-2	08/19/99	<0.001	<0.001	<0.001	<0.001
	12/08/99	<0.001	<0.001	<0.001	<0.001
	03/24/00	0.001	0.001	<0.001	<0.001
	06/14/00	0.015	0.006	0.007	0.002
	09/22/00	<0.001	<0.001	<0.001	<0.001
	12/28/00	0.002	0.001	0.001	<0.001
	03/14/01	0.001	0.001	<0.001	<0.001
	06/06/01	0.007	0.013	<0.001	<0.001
	09/28/01	0.001	0.001	<0.001	<0.001
	11/17/01	0.011	0.002	0.003	0.002
	03/26/02	<0.001	<0.001	<0.001	<0.001
	06/26/02	0.002	0.002	0.001	0.001
	09/25/02	<0.001	<0.001	<0.001	<0.001
	12/10/02	<0.001	<0.001	<0.001	<0.001
MW-3	08/19/99	<0.001	<0.001	<0.001	<0.001
	12/08/99	<0.001	<0.001	<0.001	<0.001
	03/24/00	<0.001	0.001	<0.001	<0.001
	06/14/00	0.003	0.001	0.003	<0.001
	09/22/00	<0.001	<0.001	<0.001	<0.001
	12/28/00	<0.001	<0.001	<0.001	<0.001
	03/14/01	0.004	0.005	0.003	0.003
	06/06/01	0.006	<0.001	<0.001	<0.001
	09/28/01	0.002	0.002	<0.001	0.001
	11/17/01	0.006	0.001	0.002	0.002
	03/26/02	<0.001	<0.001	<0.001	<0.001
	06/26/02	0.003	0.004	0.002	0.002
	09/25/02	<0.001	<0.001	<0.001	<0.001
	12/10/02	<0.001	<0.001	<0.001	<0.001

TABLE 2
GROUNDWATER CHEMISTRY
EOTT ENERGY, LLC

SPS 11
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EO 2022

All concentrations are in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-8620b			
		BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES
MW - 4	08/19/00	0.009	<0.001	0.002	<0.001
	12/08/99	0.014	0.002	0.003	0.002
	03/24/00	0.015	0.001	0.003	0.001
	06/14/00	0.021	0.001	0.006	0.001
	09/22/00	0.015	0.002	0.006	0.003
	12/28/00	0.011	0.002	0.003	<0.001
	03/14/01	0.008	<0.001	0.002	<0.001
	06/06/01	0.020	<0.001	<0.001	<0.001
	09/28/01	0.012	0.001	0.003	0.001
	11/17/01	0.002	<0.001	<0.001	<0.001
	03/26/02	<0.001	<0.001	<0.001	<0.001
	06/26/02	0.013	<0.001	0.003	<0.001
	09/25/02	0.014	<0.001	0.003	<0.001
	12/10/02	0.001	<0.001	<0.001	<0.001
MW - 6	08/19/99	0.009	<0.001	<0.001	<0.001
	12/08/99	0.011	<0.001	0.002	<0.001
	03/24/00	0.009	<0.001	<0.001	<0.001
	06/14/00	0.005	<0.001	0.002	<0.001
	09/02/00	0.04	<0.001	0.010	0.003
	12/28/00	0.010	0.001	0.002	<0.001
	03/14/01	0.021	<0.001	0.004	0.001
	06/06/01	0.024	<0.001	<0.001	<0.001
	09/28/01	0.027	<0.001	0.004	0.002
	11/17/01	0.013	<0.001	0.003	0.001
	03/26/02	0.013	<0.001	<0.001	<0.001
	06/26/02	0.003	0.002	<0.001	<0.001
	09/25/02	0.016	<0.001	<0.001	<0.001
	12/10/02	<0.001	<0.001	<0.001	<0.001
MW-7	08/19/99	0.039	0.008	0.018	0.009
	12/08/99	0.108	0.011	0.094	0.21
	03/24/00	0.044	0.010	0.014	0.006
	06/14/00	0.014	0.003	0.004	<0.001
	09/22/00	0.150	0.026	0.084	0.037
	12/28/00	0.043	0.002	0.040	0.002
	03/14/01	0.055	0.002	0.057	0.002
	06/06/01	0.080	<0.005	0.079	<0.005
	09/28/01	0.100	0.004	0.124	0.009
	11/17/01	0.162	0.004	0.154	0.02
	03/26/02	0.041	0.001	0.036	0.002
	06/26/02	0.081	0.007	0.060	0.003
	09/25/02	0.154	0.013	0.079	0.009
	12/10/02	0.066	0.007	0.054	0.005

TABLE 2
GROUNDWATER CHEMISTRY
EOTT ENERGY, LLC

SPS 11
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EO 2022

All concentrations are in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-8620b			
		BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES
MW-9	08/19/99	0.725	0.163	0.368	0.356
	12/08/99	0.058	<0.001	0.022	0.004
	03/24/00	0.012	0.002	0.002	<0.001
	06/14/00	0.041	<0.001	0.024	0.002
	09/22/00	0.058	<0.001	0.008	0.002
	12/28/00	0.867	<0.010	0.344	0.043
	03/14/01	2.52	<0.010	1.12	0.117
	06/06/01	2.98	<0.005	1.15	0.198
	09/28/01	2.360	<0.002	1.000	0.015
	11/17/01	1.820	0.002	0.724	0.015
	03/26/02	0.162	<0.001	0.037	0.001
	06/26/02	0.836	<0.001	0.481	0.185
	09/25/02	0.710	0.002	0.199	0.003
	12/10/02	1.010	<0.001	0.369	0.017
MW-10	08/19/99	0.040	0.007	0.006	0.009
	12/08/99	0.048	0.022	0.021	0.021
	03/24/00	0.022	0.004	0.005	0.006
	06/14/00	0.012	0.004	0.007	0.004
	09/22/00	0.026	0.005	0.016	0.011
	12/28/00	0.018	0.003	0.015	0.004
	03/14/01	0.011	0.004	0.013	0.004
	06/06/01	0.022	<0.001	0.016	0.035
	09/28/01	0.007	<0.001	0.008	0.001
	11/17/01	0.014	<0.001	0.007	0.002
	03/26/02	0.021	<0.001	0.006	<0.001
	06/26/02	<0.001	<0.001	<0.001	<0.001
	09/25/02	0.002	<0.001	0.002	<0.001
	12/10/02	0.001	<0.001	<0.001	<0.001
MW-11	08/20/99	1.763	<0.010	<0.010	<0.010
	12/08/99	2.94	<0.010	<0.010	<0.010
	03/24/00	1.40	<0.025	<0.025	<0.025
	06/14/00	0.724	0.002	0.001	<0.001
	09/22/00	1.97	<0.100	<0.100	<0.100
	12/28/00	0.250	<0.001	<0.001	<0.001
	03/14/01	0.105	<0.001	<0.001	<0.001
	06/06/01	0.073	<0.001	0.013	0.035
	09/28/01	0.013	<0.001	0.001	<0.001
	11/17/01	0.032	<0.001	0.007	<0.001
	03/26/02	0.013	0.001	0.004	<0.001
	06/26/02	0.001	<0.001	0.004	<0.001
	09/25/02	0.001	<0.001	0.004	<0.001
	12/10/02	<0.001	<0.001	0.002	<0.001

TABLE 2
GROUNDWATER CHEMISTRY
EOTT ENERGY, LLC

SPS 11
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EO 2022

All concentrations are in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-8620b			
		BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES
MW-12	08/19/99	0.434	0.006	0.054	0.029
	12/08/99	0.604	0.012	0.080	0.034
	03/24/00	0.012	0.002	<0.001	0.005
	06/14/00	0.009	<0.001	0.001	<0.001
	09/22/00	0.716	0.026	0.310	0.130
	12/28/00	0.313	0.006	0.063	0.016
	03/14/01	0.424	0.013	0.037	0.02
	06/06/01	0.419	0.013	0.052	0.04
	09/28/01	0.063	0.004	0.008	0.001
	11/17/01	0.050	0.003	0.006	0.004
	03/26/02	0.002	<0.001	<0.001	<0.001
	06/26/02	0.021	0.002	<0.001	0.005
	09/25/02	0.060	0.009	0.002	0.015
	12/09/02	0.016	0.006	<0.001	0.010
MW-13	08/19/99	<0.001	<0.001	<0.001	<0.001
	12/08/99	0.001	<0.001	<0.001	<0.001
	03/24/00	<0.001	<0.001	<0.001	<0.001
	06/14/00	<0.001	<0.001	<0.001	<0.001
	09/22/00	0.001	<0.001	0.003	<0.001
	12/28/00	<0.001	<0.001	<0.001	<0.001
	03/14/01	0.002	<0.001	0.003	<0.001
	06/06/01	<0.001	<0.001	<0.001	<0.001
	09/27/01	0.002	<0.001	<0.001	<0.001
	11/17/01	0.001	<0.001	<0.001	<0.001
	03/26/02	<0.001	<0.001	<0.001	<0.001
	06/26/02	<0.001	<0.001	<0.001	<0.001
	09/25/02	0.002	<0.001	<0.001	<0.001
	12/09/02	<0.001	<0.001	<0.001	<0.001
MW-14	08/19/99	8.03	0.210	1.31	1.044
	12/08/99	7.97	0.022	1.18	0.692
	03/24/00	3.47	<0.025	0.200	0.106
	06/14/00	1.59	0.016	0.106	0.010
	09/22/00	3.65	<0.100	0.518	0.229
	12/28/00	3.97	0.003	0.392	0.254
	03/14/01	3.92	<0.020	0.483	0.157
	06/06/01	5.46	<0.005	0.695	0.418
	09/27/01	4.890	<0.005	0.498	0.297
	11/17/01	7.140	0.030	0.427	0.567
	03/26/02	2.460	<0.001	0.186	0.005
	06/26/02	5.310	<0.001	0.495	0.381
	09/25/02	4.290	<0.001	0.309	0.194
	12/10/02	2.370	<0.002	0.123	0.097

TABLE 2
GROUNDWATER CHEMISTRY
EOTT ENERGY, LLC

SPS 11
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EO 2022

All concentrations are in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-8620b			
		BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES
MW-15	08/19/99	0.031	<0.001	0.001	<0.001
	12/08/99	<0.001	<0.001	<0.001	<0.001
	03/24/00	0.001	<0.001	<0.001	<0.001
	06/14/00	0.006	<0.001	<0.001	<0.001
	09/22/00	0.011	<0.001	0.002	<0.001
	12/28/00	0.028	<0.001	<0.001	<0.001
	03/14/01	0.023	<0.001	0.003	<0.001
	06/06/01	0.021	<0.001	<0.001	<0.001
	09/27/01	0.008	<0.001	<0.001	<0.001
	11/17/01	0.040	<0.001	0.003	0.001
	03/26/02	0.006	<0.001	<0.001	<0.001
	06/26/02	0.001	<0.001	<0.001	<0.001
	09/25/02	0.002	<0.001	<0.001	<0.001
	12/09/02	<0.001	<0.001	<0.001	<0.001
MW-16	08/19/99	0.065	0.004	0.002	<0.001
	12/08/99	0.055	0.025	0.005	0.007
	03/24/00	0.108	0.028	0.005	0.007
	06/14/00	0.017	0.002	<0.001	0.001
	09/22/00	0.036	0.003	<0.001	<0.001
	12/28/00	0.043	0.032	0.007	0.006
	03/14/01	0.057	0.036	0.015	0.008
	06/06/01	0.044	0.016	0.017	0.035
	09/27/01	0.044	0.027	0.012	0.006
	11/17/01	0.039	0.025	0.015	0.012
	03/26/02	0.021	0.004	0.004	0.002
	06/26/02	0.105	0.020	0.028	0.006
	09/25/02	0.201	0.072	0.030	0.018
	12/10/02	0.049	0.026	0.016	0.007
MW-17	08/19/99	0.010	0.016	0.008	0.004
	12/08/99	0.066	0.068	0.027	0.028
	03/24/00	0.055	0.063	0.023	0.024
	06/14/00	0.019	0.023	0.011	0.011
	09/22/00	0.058	0.059	0.029	0.020
	12/28/00	0.065	0.080	0.024	0.021
	03/14/01	0.045	0.057	0.023	0.019
	06/06/01	0.096	0.058	0.028	0.042
	09/27/01	0.064	0.090	0.050	0.042
	11/17/01	0.026	0.041	0.023	0.006
	03/26/02	0.012	0.022	0.012	0.011
	06/26/02	0.016	0.021	0.014	0.010
	09/25/02	0.038	0.039	0.025	0.019
	12/10/02	0.008	0.013	0.008	0.008

TABLE 2
GROUNDWATER CHEMISTRY
EOTT ENERGY, LLC

SPS 11
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EO 2022

All concentrations are in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-8620b			
		BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES
MW-18	08/19/99	<0.001	<0.001	0.001	<0.001
	12/08/99	0.004	<0.001	0.002	0.002
	03/24/00	<0.001	<0.001	<0.001	<0.001
	06/14/00	<0.001	<0.001	<0.001	<0.001
	09/22/00	0.002	<0.001	<0.001	<0.001
	12/28/00	0.007	<0.001	0.002	0.001
	03/14/01	<0.001	<0.001	<0.001	<0.001
	06/06/01	0.005	<0.001	<0.001	<0.001
	09/27/01	0.001	<0.001	<0.001	<0.001
	11/17/01	0.003	<0.001	0.002	0.001
	03/26/02	0.004	<0.001	0.001	<0.001
	06/26/02	0.001	<0.001	0.001	<0.001
	09/25/02	<0.001	<0.001	<0.001	<0.001
	12/10/02	<0.001	<0.001	<0.001	<0.001
MW-19	08/19/99	<0.001	<0.001	<0.001	<0.001
	12/08/99	0.008	0.001	0.002	0.002
	03/24/00	0.003	<0.001	<0.001	<0.001
	06/14/00	0.002	<0.001	<0.001	<0.001
	09/22/00	0.002	<0.001	0.002	<0.001
	12/28/00	0.012	<0.001	0.002	<0.001
	03/14/01	0.008	<0.001	0.002	<0.001
	06/06/01	0.006	<0.001	<0.001	<0.001
	09/27/01	0.001	<0.001	0.001	<0.001
	11/17/01	0.005	<0.001	0.003	0.001
	03/26/02	0.013	<0.001	0.004	<0.001
	06/26/02	<0.001	<0.001	<0.001	<0.001
	09/25/02	<0.001	<0.001	<0.001	<0.001
	12/10/02	<0.001	<0.001	<0.001	<0.001
MW-20	08/20/99	0.002	<0.001	<0.001	<0.001
	12/08/99	0.005	<0.001	0.002	0.001
	03/24/00	<0.001	<0.001	<0.001	<0.001
	06/14/00	<0.001	<0.001	<0.001	<0.001
	09/22/00	0.002	<0.001	0.001	<0.001
	12/28/00	0.005	<0.001	<0.001	<0.001
	03/14/01	<0.001	<0.001	<0.001	<0.001
	06/06/01	<0.001	<0.001	<0.001	<0.001
	09/27/01	0.004	<0.001	0.003	<0.001
	11/17/01	0.007	<0.001	0.003	0.001
	03/26/02	0.003	<0.001	0.002	<0.001
	06/26/02	0.001	<0.001	<0.001	<0.001
	09/25/02	0.001	<0.001	<0.001	<0.001
	12/10/02	0.001	<0.001	<0.001	<0.001

TABLE 2
GROUNDWATER CHEMISTRY
EOTT ENERGY, LLC

SPS 11
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EO 2022

All concentrations are in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-8620b			
		BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES
MW-21	08/20/99	0.701	<0.01	<0.01	<0.01
	12/08/99	0.052	<0.001	<0.001	<0.001
	03/24/00	0.002	<0.001	<0.001	<0.001
	06/14/00	0.002	<0.001	<0.001	<0.001
	09/22/00	0.002	<0.001	0.001	<0.001
	12/28/00	<0.001	<0.001	<0.001	<0.001
	03/14/01	<0.001	<0.001	<0.001	<0.001
	06/06/01	<0.005	<0.005	<0.005	<0.005
	09/27/01	0.003	<0.001	0.003	<0.001
	11/17/01	0.014	<0.001	0.006	0.002
	03/26/02	0.004	<0.001	0.003	<0.001
	06/26/02	<0.001	<0.001	<0.001	<0.001
	09/25/02	0.001	<0.001	0.002	<0.001
	12/10/02	0.001	<0.001	<0.001	<0.001
MW-22	08/19/99	<0.001	<0.001	<0.001	<0.001
	12/08/99	<0.001	<0.001	<0.001	<0.001
	03/24/00	<0.001	<0.001	<0.001	<0.001
	06/14/00	<0.001	<0.001	<0.001	<0.001
	09/22/00	<0.001	<0.001	<0.001	<0.001
	12/08/00	<0.001	<0.001	<0.001	<0.001
	03/14/01	0.008	<0.001	0.004	<0.001
	06/06/01	0.006	<0.001	<0.001	<0.001
	09/27/01	0.006	<0.001	0.003	<0.001
	11/17/01	0.007	<0.001	0.004	0.001
	03/26/02	0.002	<0.001	<0.001	<0.001
	06/26/02	<0.001	<0.001	<0.001	<0.001
	09/25/02	<0.001	<0.001	<0.001	<0.001
	12/09/02	<0.001	<0.001	<0.001	<0.001
MW-23	08/19/99	<0.001	<0.001	<0.001	<0.001
	12/08/99	0.002	<0.001	<0.001	<0.001
	03/24/00	<0.001	<0.001	<0.001	<0.001
	06/14/00	0.007	<0.001	<0.001	<0.001
	09/22/00	<0.001	<0.001	<0.001	<0.001
	12/28/00	0.001	<0.001	<0.001	<0.001
	03/14/01	0.001	<0.001	<0.001	<0.001
	06/06/01	0.006	<0.001	<0.001	<0.001
	09/28/01	<0.001	<0.001	<0.001	<0.001
	11/17/01	0.004	<0.001	0.002	<0.001
	03/26/02	0.003	<0.001	<0.001	<0.001
	06/26/02	<0.001	<0.001	<0.001	<0.001
	09/25/02	<0.001	<0.001	<0.001	<0.001
	12/09/02	<0.001	<0.001	<0.001	<0.001

TABLE 2
GROUNDWATER CHEMISTRY
EOTT ENERGY, LLC

SPS 11
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EO 2022

All concentrations are in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-8620b			
		BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES
MW-24	08/19/99	2.29	<0.001	0.023	0.010
	12/08/99	0.839	0.007	0.002	0.008
	03/24/00	0.762	<0.010	<0.010	<0.010
	06/14/00	0.887	0.013	0.004	0.006
	09/22/00	0.663	0.012	0.004	0.005
	12/28/00	1.38	<0.010	<0.010	<0.010
	03/14/01	1.81	0.045	0.019	0.012
	06/06/01	0.909	<0.001	<0.001	<0.001
	09/28/01	1.470	0.024	0.015	0.013
	11/17/01	0.986	0.004	0.011	0.005
	03/26/02	0.839	0.002	0.005	0.002
	06/26/02	0.870	0.003	0.008	0.002
	09/25/02	1.080	0.017	0.014	0.011
	12/10/02	1.390	0.021	0.012	0.010
MW-25	08/19/99	<0.001	<0.001	<0.001	<0.001
	12/08/99	<0.001	<0.001	<0.001	<0.001
	03/24/00	<0.001	<0.001	<0.001	<0.001
	06/14/00	0.002	<0.001	<0.001	<0.001
	09/22/00	<0.001	<0.001	<0.001	<0.001
	12/28/00	<0.001	<0.001	<0.001	<0.001
	03/14/01	<0.001	<0.001	<0.001	<0.001
	06/06/01	0.007	<0.001	<0.001	<0.001
	09/28/01	<0.001	<0.001	<0.001	<0.001
	11/17/01	0.006	<0.001	0.003	<0.001
	03/26/02	0.005	<0.001	<0.001	<0.001
	06/26/02	<0.001	<0.001	<0.001	<0.001
	09/25/02	<0.001	<0.001	<0.001	<0.001
	12/09/02	<0.001	<0.001	<0.001	<0.001
MW - 26	09/22/00	0.021	0.041	0.008	0.019
	12/28/00	0.386	0.130	0.040	0.039
	03/14/01	0.731	0.267	0.160	0.106
	06/06/01	1.01	0.263	0.179	0.204
	09/28/01	1.700	0.469	0.441	0.084
	11/17/01	1.600	0.534	0.417	0.081
	03/26/02	1.690	0.547	0.361	0.086
	06/26/02	0.780	0.259	0.223	0.053
	09/25/02	1.420	0.551	0.384	0.074
	12/10/02	1.390	0.691	0.155	0.110
MW - 27	09/22/00	<0.001	<0.001	<0.001	<0.001
	12/28/00	0.003	0.004	0.002	<0.001
	03/14/01	<0.001	0.002	<0.001	<0.001
	06/06/01	0.005	<0.001	<0.001	<0.001
	09/28/01	0.001	0.002	0.001	<0.001
	11/17/01	0.001	0.001	0.001	<0.001
	03/26/02	0.004	0.003	0.002	0.001
	06/26/02	0.001	<0.001	0.002	<0.001
	09/25/02	<0.001	<0.001	<0.001	<0.001
	12/10/02	<0.001	<0.001	<0.001	<0.001

TABLE 2
GROUNDWATER CHEMISTRY
EOTT ENERGY, LLC

SPS 11
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EO 2022

All concentrations are in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-8620b			
		BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES
MW - 28	09/22/00	1.58	0.059	0.374	0.216
	12/28/00	4.08	0.073	0.469	0.188
	03/14/01	2.73	0.018	0.212	0.045
	06/06/01	2.06	0.064	0.121	0.182
	09/28/01	2.250	0.027	0.094	0.056
	11/17/01	1.490	0.035	0.104	0.077
	03/26/02	2.130	0.073	0.226	0.042
	06/26/02	2.220	0.043	0.292	0.052
	09/25/02	3.310	0.060	0.506	0.088
	12/10/02	2.120	0.025	0.125	0.047
MW - 29	03/26/02	2.340	0.002	0.102	0.017
	06/26/02	1.660	0.001	0.109	0.026
	09/25/02	4.330	0.001	0.087	0.019
	12/10/02	5.660	0.003	0.014	0.005
MW - 30	03/26/02	<0.001	<0.001	<0.001	<0.001
	06/26/02	0.002	0.003	0.002	0.002
	09/25/02	<0.001	<0.001	<0.001	<0.001
	12/10/02	<0.001	<0.001	<0.001	<0.001
MW - 31	03/26/02	0.002	0.001	<0.001	<0.001
	06/26/02	<0.001	<0.001	<0.001	<0.001
	09/25/02	<0.001	<0.001	<0.001	<0.001
	12/10/02	<0.001	<0.001	<0.001	<0.001
EB - 1	09/22/00	<0.001	<0.001	<0.001	<0.001
	12/28/00	<0.001	<0.001	<0.001	<0.001
	03/14/01	<0.001	<0.001	<0.001	<0.001
	06/06/01	<0.001	<0.001	<0.001	<0.001
	11/17/01	<0.001	<0.001	<0.001	<0.001
	06/26/02	<0.001	<0.001	<0.001	<0.001
	09/25/02	<0.001	<0.001	<0.001	<0.001
	12/10/02	<0.001	<0.001	<0.001	<0.001

SPS-11 ETGI Project # 2022

- Leak occurred: unknown;
- Volume released: unknown;
- No excavation conducted on-site;
- 31 monitor wells are on-site and are monitored on a quarterly basis, delineation incomplete; Need MW's installed to the southeast to complete Dissolved Phase delineation;
- No PSH on-site;
- Benzene concentrations exceeding the NMOCD standard have been recorded at numerous monitor wells during every monitoring event conducted (since August 1999);
- A one-well pump and treat system is installed on-site (not running); ETGI has verbal NMOCD approval to shut down the treatment system and conduct a long tern groundwater monitoring program; install two monitor wells to complete down gradient plume delineation;
- Submitted a SIR / Modified Stage II Abatement plan (Oct. 2002), Annual Groundwater Monitoring Report to be submitted April 2003.

ONE CALL	12/3/2001		
EOTT	CO. ID: 739		
SPS-11			
EFFECTIVE:	Dec. 5 - Dec. 19, 2001		
			CONTACTED
SPS-11	SE/4 Sec 18, T 18S, R 36E		
	500' Radius		
	Confirmation #2001490013		
	NATURAL GAS PIPELINE		
	DUKE		
Directions:			
	From Hobbs at intersection of W. County Rd and 62/180		
	proceed west on 62/180 for 10.2 mi. Turn N on 483 for		
	2.6 mi, turn west at white cattle guard with Concho Oil		
	and Gas sign, proceed west on main caliche rd road for		
	2.3 miles, turn north across cattle guard, turn immediately		
	left onto unimproved raod, proceed .6 miles to site.		

ANNUAL MONITORING REPORT

EOTT PIPELINE COMPANY
SPS-11
LEA COUNTY, NEW MEXICO

RECEIVED

MAY 0 9 2001

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

PREPARED FOR:

EOTT PIPELINE COMPANY
5805 EAST HIGHWAY 80
MIDLAND, TEXAS 79701

PREPARED BY:

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
2540 WEST MARLAND
HOBBS, NEW MEXICO 88240

APRIL 2001

TABLE OF CONTENTS

INTRODUCTION

Environmental Technology Group, Inc. (ETGI), on behalf of EOTT Energy Corp. (EOTT), prepared this annual report in compliance with the New Mexico Oil Conservation Division (OCD) letter of May 1998, requiring submittal of an annual report by April 1 of each year. The report presents the results of the quarterly ground water monitoring events only. For reference, the Site Location Map is provided as Figure 1.

Ground water monitoring was conducted during four quarterly events in calendar year 2000 to assess the levels and extent of dissolved phase constituents. The ground water monitoring events consisted of measuring static water levels in the monitoring wells, and purging and sampling of each well exhibiting sufficient recharge.

FIELD ACTIVITIES

The site monitoring wells were gauged and sampled on March 24, June 14, September 22, and December 28, 2000. During each sampling event, the monitoring wells, designated to be sampled, were purged of approximately 3 well volumes of water or until the wells were dry using a PVC bailer or electrical Grundfos Pump. Ground water was allowed to recharge and samples were obtained using disposable Teflon samplers. Water samples were stored in clean, glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed of by Pate Trucking, Hobbs, New Mexico, utilizing a licensed disposal facility (OCD AO SWD-730).

GROUND WATER GRADIENT

Locations of the monitoring wells and the inferred ground water gradient, as measured on December 28, 2000, are depicted on Figure 2, the Site Ground Water Gradient Map. The ground water elevation data are provided as Table 1. Ground water elevation contours, generated from the final quarterly event of calendar year 2000 water level measurements, indicated a general gradient of approximately 0.003 ft/ft to the southeast as measured between ground water monitoring wells MW-25 and MW-28. The depth to ground water, as measured from the top of the well casing, ranged between 55.93 to 60.41 feet for the shallow alluvial aquifer.

LABORATORY RESULTS

Ground water samples obtained during the sampling events were hand delivered to Environmental Laboratory of Texas, Midland, Texas, for determination of benzene, toluene, ethyl benzene and total xylenes (BTEX) concentrations by EPA Method SW846-8021B. The ground water chemistry data are provided as Table 2 and the Laboratory Reports are provided as Appendix A.

Laboratory results for all of the site ground water samples, obtained during the calendar year 2000 monitoring period, indicated that Benzene and BTEX concentrations were below method detection limits in monitoring well MW-22. Benzene and BTEX concentrations contained in monitoring wells MW-3, MW-13, MW-18, MW-19, MW-20, MW-21, MW-23, MW-25 and

MW-27 were below regulatory standards. Benzene concentrations contained in the remaining monitoring wells were above regulatory standards while the BTEX concentrations were below regulatory standards.

SUMMARY

This report presents the results of monitoring activities for the annual monitoring period of calendar year 2000. Ground water elevation contours, generated from the final quarterly event of 2000 water level measurements, indicated a general gradient of approximately 0.003 ft/ft to the southeast as measured between ground water monitoring wells MW-25 and MW-28.

Laboratory results for all of the site ground water samples, obtained during the calendar year 2000 monitoring period, indicated that Benzene and BTEX concentrations were below method detection limits in monitoring well MW-22. Benzene and BTEX concentrations contained in monitoring wells MW-3, MW-13, MW-18, MW-19, MW-20, MW-21, MW-23, MW-25 and MW-27 were below regulatory standards. Benzene concentrations contained in the remaining monitoring wells were above regulatory standards while the BTEX concentrations were below regulatory standards.

FIGURES

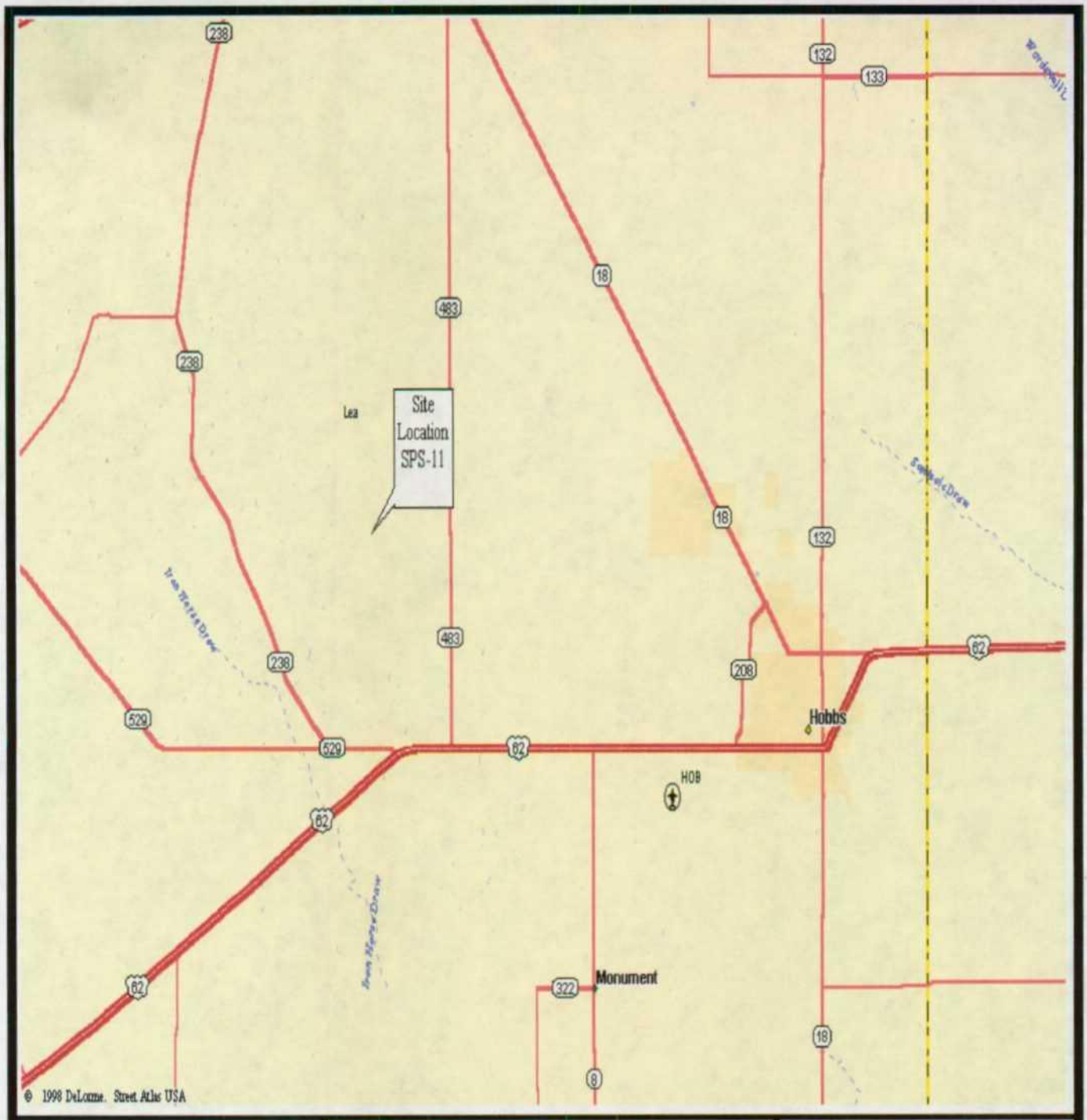
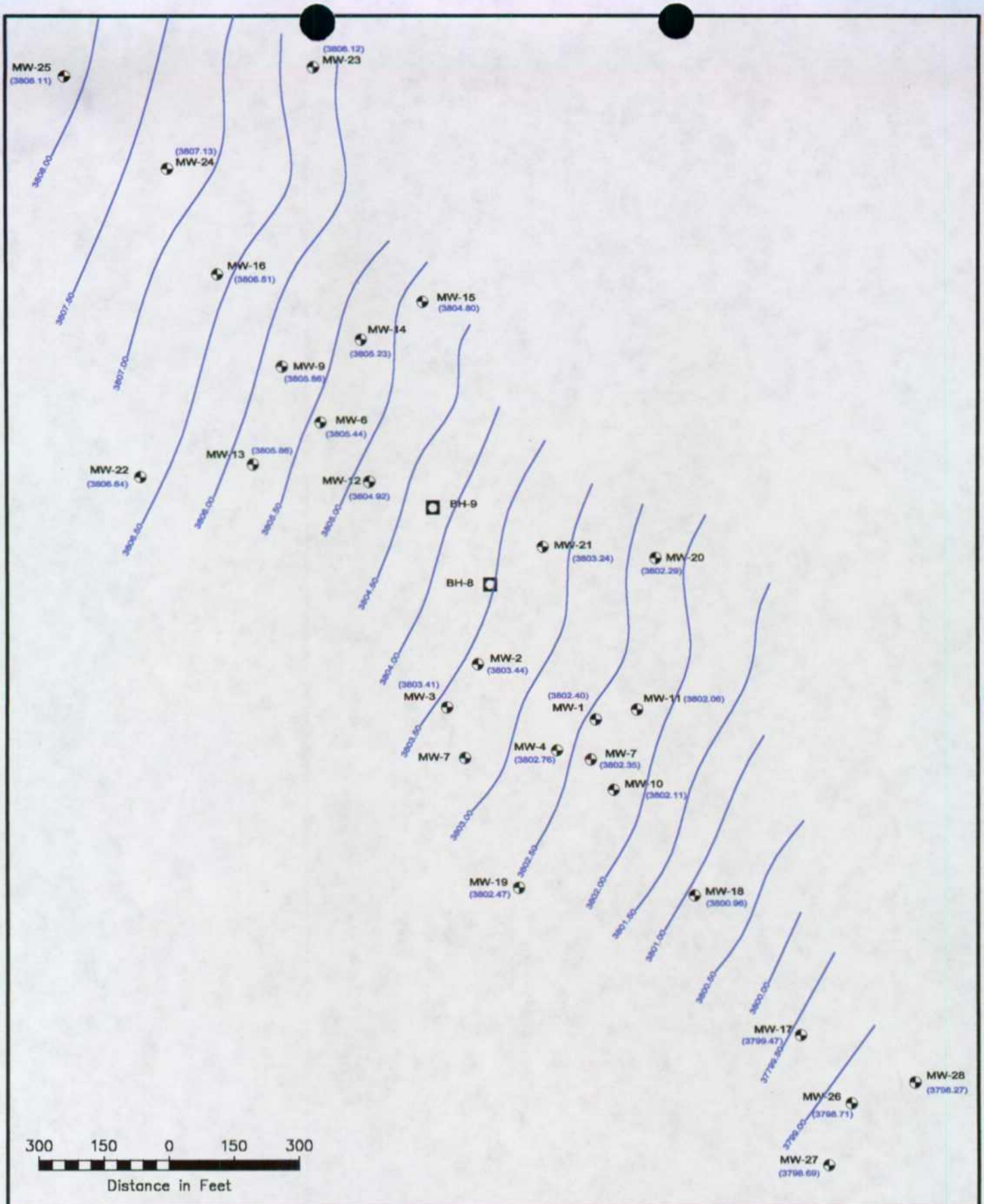


FIGURE 1	Site Location Map	Environmental Technology Group, Inc.
Not To Scale	EOTT Energy Corp. SPS-11 Hobbs, NM	11 - 22 - 99 RS
		ETGI Project #: EOT2022



LEGEND:

- Monitoring Well Location
- Soil Boring Location
- Groundwater Gradient
- (3802.47) Groundwater Elevation (In Feet)

Figure 2
Site Groundwater
Gradient Map (12/28/00)

EOTT Energy Corp.
TNM SPS-11
Lea County, NM

Environmental Technology Group, Inc.

Scale: 1" = 300	Prep By: JDJ	Checked By: CR
December 28, 2000	ETGI Project # 2022C	

TABLES

TABLE 1

GROUND WATER ELEVATION
ANNUAL REPORT

EOTT ENERGY CORPORATION
SPS - 11
LEA COUNTY, NEW MEXICO
PROJECT # EOT 2022C

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 1	3/24/00	3,859.08	-	56.87	0.00	3,802.21
	6/14/00	3,859.08	-	57.40	0.00	3,801.68
	9/22/00	3,859.08	-	56.50	0.00	3,802.58
	12/28/00	3,859.08	-	56.68	0.00	3,802.40
MW - 2	3/24/00	3,860.76	-	57.55	0.00	3,803.21
	6/14/00	3,860.76	-	58.05	0.00	3,802.71
	9/22/00	3,860.76	-	57.04	0.00	3,803.72
	12/28/00	3,860.76	-	57.32	0.00	3,803.44
MW - 3	3/24/00	3,861.15	-	57.98	0.00	3,803.17
	6/14/00	3,861.15	-	58.50	0.00	3,802.65
	9/22/00	3,861.15	-	57.48	0.00	3,803.67
	12/28/00	3,861.15	-	57.74	0.00	3,803.41
MW - 4	3/24/00	3,859.62	-	57.03	0.00	3,802.59
	6/14/00	3,859.62	-	57.57	0.00	3,802.05
	9/22/00	3,859.62	-	56.64	0.00	3,802.98
	12/28/00	3,859.62	-	56.86	0.00	3,802.76
MW - 6	3/24/00	3,862.47	-	57.43	0.00	3,805.04
	6/14/00	3,862.47	-	57.98	0.00	3,804.49
	9/22/00	3,862.47	-	56.82	0.00	3,805.65
	12/28/00	3,862.47	-	57.03	0.00	3,805.44
MW - 7	3/24/00	3,859.31	-	57.17	0.00	3,802.14
	6/14/00	3,859.31	-	57.72	0.00	3,801.59
	9/22/00	3,859.31	-	56.79	0.00	3,802.52
	12/28/00	3,859.31	-	56.96	0.00	3,802.35
MW - 9	3/24/00	3,861.88	-	56.34	0.00	3,805.54
	6/14/00	3,861.88	-	56.88	0.00	3,805.00
	9/22/00	3,861.88	-	55.86	0.00	3,806.02
	12/28/00	3,861.88	-	56.02	0.00	3,805.86
MW - 10	3/24/00	3,860.58	-	58.68	0.00	3,801.90
	6/14/00	3,860.58	-	59.20	0.00	3,801.38
	9/22/00	3,860.58	-	58.29	0.00	3,802.29
	12/28/00	3,860.58	-	58.47	0.00	3,802.11
MW - 11	3/24/00	3,860.00	-	58.11	0.00	3,801.89
	6/14/00	3,860.00	-	58.59	0.00	3,801.41
	9/22/00	3,860.00	-	57.75	0.00	3,802.25
	12/28/00	3,860.00	-	57.94	0.00	3,802.06

TABLE 1 (CON'T)

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 12	3/24/00	3,863.10	-	58.55	0.00	3,804.55
	6/14/00	3,863.10	-	59.05	0.00	3,804.05
	9/22/00	3,863.10	-	57.80	0.00	3,805.30
	12/28/00	3,863.10	-	58.18	0.00	3,804.92
MW - 13	3/24/00	3,862.44	-	56.92	0.00	3,805.52
	6/14/00	3,862.44	-	57.42	0.00	3,805.02
	9/22/00	3,862.44	-	56.24	0.00	3,806.20
	12/28/00	3,862.44	-	56.58	0.00	3,805.86
MW - 14	3/24/00	3,862.95	-	57.97	0.00	3,804.98
	6/14/00	3,862.95	-	58.40	0.00	3,804.55
	9/22/00	3,862.95	-	57.57	0.00	3,805.38
	12/28/00	3,862.95	-	57.72	0.00	3,805.23
MW - 15	3/24/00	3,861.70	-	57.11	0.00	3,804.59
	6/14/00	3,861.70	-	57.51	0.00	3,804.19
	9/22/00	3,861.70	-	56.76	0.00	3,804.94
	12/28/00	3,861.70	-	56.89	0.00	3,804.81
MW - 16	3/24/00	3,863.15	-	56.81	0.00	3,806.34
	6/14/00	3,863.15	-	57.24	0.00	3,805.91
	9/22/00	3,863.15	-	56.46	0.00	3,806.69
	12/28/00	3,863.15	-	56.64	0.00	3,806.51
MW - 17	3/24/00	3,859.17	-	59.57	0.00	3,799.60
	6/14/00	3,859.17	-	59.72	0.00	3,799.45
	9/22/00	3,859.17	-	59.65	0.00	3,799.52
	12/28/00	3,859.17	-	59.70	0.00	3,799.47
MW - 18	3/24/00	3,859.98	-	59.15	0.00	3,800.83
	6/14/00	3,859.98	-	59.42	0.00	3,800.56
	9/22/00	3,859.98	-	58.97	0.00	3,801.01
	12/28/00	3,859.98	-	59.02	0.00	3,800.96
MW - 19	3/24/00	3,862.30	-	57.97	0.00	3,804.33
	6/14/00	3,862.30	-	60.41	0.00	3,801.89
	9/22/00	3,862.30	-	59.64	0.00	3,802.66
	12/28/00	3,862.30	-	59.83	0.00	3,802.47
MW - 20	3/24/00	3,861.30	-	59.13	0.00	3,802.17
	6/14/00	3,861.30	-	59.54	0.00	3,801.76
	9/22/00	3,861.30	-	58.84	0.00	3,802.46
	12/28/00	3,861.30	-	59.01	0.00	3,802.29
MW - 21	3/24/00	3,862.30	-	59.25	0.00	3,803.05
	6/14/00	3,862.30	-	59.70	0.00	3,802.60
	9/22/00	3,862.30	-	58.84	0.00	3,803.46
	12/28/00	3,862.30	-	59.06	0.00	3,803.24

TABLE 1 (CON'T)

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 22	3/24/00	3,864.01	-	57.55	0.00	3,806.46
	6/14/00	3,864.01	-	57.93	0.00	3,806.08
	9/22/00	3,864.01	-	57.13	0.00	3,806.88
	12/28/00	3,864.01	-	57.37	0.00	3,806.64
MW - 23	3/24/00	3,862.44	-	56.34	0.00	3,806.10
	6/14/00	3,862.44	-	56.58	0.00	3,805.86
	9/22/00	3,862.44	-	56.20	0.00	3,806.24
	12/28/00	3,862.44	-	56.32	0.00	3,806.12
MW - 24	3/24/00	3,864.36	-	57.31	0.00	3,807.05
	6/14/00	3,864.36	-	57.59	0.00	3,806.77
	9/22/00	3,864.36	-	57.09	0.00	3,807.27
	12/28/00	3,864.36	-	57.23	0.00	3,807.13
MW - 25	3/24/00	3,864.16	-	56.08	0.00	3,808.08
	6/14/00	3,864.16	-	56.28	0.00	3,807.88
	9/22/00	3,864.16	-	55.93	0.00	3,808.23
	12/28/00	3,864.16	-	56.05	0.00	3,808.11
MW - 26	6/14/00	3,858.79	-	60.10	0.00	3,798.69
	9/22/00	3,858.79	-	60.00	0.00	3,798.79
	12/28/00	3,858.79	-	60.08	0.00	3,798.71
MW - 27	6/14/00	3,858.23	-	59.60	0.00	3,798.63
	9/22/00	3,858.23	-	59.50	0.00	3,798.73
	12/28/00	3,858.23	-	59.54	0.00	3,798.69
MW - 28	6/14/00	3,858.60	-	60.33	0.00	3,798.27
	9/22/00	3,858.60	-	60.29	0.00	3,798.31
	12/28/00	3,858.60	-	60.33	0.00	3,798.27

TABLE 2

GROUND WATER CHEMISTRY

EOTT ENERGY CORPORATION
SPS 11
LEA COUNTY, NEW MEXICO
ETGI Project # EOT 2022C

All concentrations are in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL-BENZENE	M,P-XYLENES	O-XYLENES
MW - 1	03/24/00	0.547	0.098	0.169	0.042	0.014
	06/14/00	2.280	0.060	0.451	0.060	0.013
	09/22/00	0.455	0.115	0.128	0.051	0.023
	12/28/00	1.990	0.050	0.442	0.110	0.056
MW - 2	03/24/00	0.001	0.001	<0.001	<0.001	<0.001
	06/14/00	0.015	0.006	0.007	0.002	<0.001
	09/22/00	<0.001	<0.001	<0.001	<0.001	<0.001
	12/28/00	0.002	0.001	0.001	<0.001	<0.001
MW - 3	03/24/00	<0.001	0.001	<0.001	<0.001	<0.001
	06/14/00	0.003	0.001	0.003	<0.001	<0.001
	09/22/00	<0.001	<0.001	<0.001	<0.001	<0.001
	12/28/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 4	03/24/00	0.015	0.001	0.003	0.001	<0.001
	06/14/00	0.021	0.001	0.006	0.001	<0.001
	09/22/00	0.015	0.002	0.006	0.002	0.001
	12/28/00	0.011	0.002	0.003	<0.001	<0.001
MW - 6	03/24/00	0.009	<0.001	<0.001	<0.001	<0.001
	06/14/00	0.005	<0.001	0.002	<0.001	<0.001
	09/02/00	0.040	<0.001	0.010	0.003	<0.001
	12/28/00	0.010	0.001	0.002	<0.001	<0.001
MW - 7	03/24/00	0.044	0.010	0.014	0.004	0.002
	06/14/00	0.014	0.003	0.004	<0.001	<0.001
	09/22/00	0.150	0.026	0.084	0.022	0.015
	12/28/00	0.043	0.002	0.040	0.002	<0.001
MW - 9	03/24/00	0.012	0.002	0.002	<0.001	<0.001
	06/14/00	0.041	<0.001	0.024	0.002	<0.001
	09/22/00	0.058	<0.001	0.008	0.002	<0.001
	12/28/00	0.867	<0.010	0.344	0.043	<0.010
MW - 10	03/24/00	0.022	0.004	0.005	0.004	0.002
	06/14/00	0.012	0.004	0.007	0.002	0.002
	09/22/00	0.026	0.005	0.016	0.006	0.005
	12/28/00	0.018	0.003	0.015	0.002	0.002

TABLE 2 (CON'T)

SAMPLE LOCATION	SAMPLE DATE	SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL-BENZENE	M,P-XYLENES	O-XYLENES
MW - 11	03/24/00	1.400	<0.025	<0.025	<0.025	<0.025
	06/14/00	0.724	0.002	0.001	<0.001	<0.001
	09/22/00	1.970	<0.100	<0.100	<0.100	<0.100
	12/28/00	0.250	<0.001	<0.001	<0.001	<0.001
MW - 12	03/24/00	0.012	0.002	<0.001	0.004	0.001
	06/14/00	0.009	<0.001	0.001	<0.001	<0.001
	09/22/00	0.716	0.026	0.310	0.091	0.039
	12/28/00	0.313	0.006	0.063	0.012	0.004
MW - 13	03/24/00	<0.001	<0.001	<0.001	<0.001	<0.001
	06/14/00	<0.001	<0.001	<0.001	<0.001	<0.001
	09/22/00	0.001	<0.001	0.003	<0.001	<0.001
	12/28/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 14	03/24/00	3.470	<0.025	0.200	0.069	0.037
	06/14/00	1.590	0.016	0.106	0.000	<0.010
	09/22/00	3.650	<0.100	0.518	0.229	<0.100
	12/28/00	3.970	0.003	0.392	0.239	0.015
MW - 15	03/24/00	0.001	<0.001	<0.001	<0.001	<0.001
	06/14/00	0.006	<0.001	<0.001	<0.001	<0.001
	09/22/00	0.011	<0.001	0.002	<0.001	<0.001
	12/28/00	0.028	<0.001	<0.001	<0.001	<0.001
MW - 16	03/24/00	0.108	0.028	0.005	0.005	0.002
	06/14/00	0.017	0.002	<0.001	0.001	<0.001
	09/22/00	0.036	0.003	<0.001	<0.001	<0.001
	12/28/00	0.043	0.032	0.007	0.004	0.002
MW - 17	03/24/00	0.055	0.063	0.023	0.017	0.007
	06/14/00	0.019	0.023	0.011	0.007	0.004
	09/22/00	0.058	0.059	0.029	0.014	0.006
	12/28/00	0.065	0.080	0.024	0.014	0.007
MW - 18	03/24/00	<0.001	<0.001	<0.001	<0.001	<0.001
	06/14/00	<0.001	<0.001	<0.001	<0.001	<0.001
	09/22/00	0.002	<0.001	<0.001	<0.001	<0.001
	12/28/00	0.007	<0.001	0.002	0.001	<0.001
MW - 19	03/24/00	0.003	<0.001	<0.001	<0.001	<0.001
	06/14/00	0.002	<0.001	<0.001	<0.001	<0.001
	09/22/00	0.002	<0.001	<0.001	<0.001	<0.001
	12/28/00	0.012	<0.001	0.002	<0.001	<0.001
MW - 20	03/24/00	<0.001	<0.001	<0.001	<0.001	<0.001
	06/14/00	<0.001	<0.001	<0.001	<0.001	<0.001
	09/22/00	0.002	<0.001	0.001	<0.001	<0.001
	12/28/00	0.005	<0.001	<0.001	<0.001	<0.001

TABLE 2 (CON'T)

SAMPLE LOCATION	SAMPLE DATE	SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL-BENZENE	M,P-XYLENES	O-XYLENES
MW - 21	03/24/00	0.002	<0.001	<0.001	<0.001	<0.001
	06/14/00	0.002	<0.001	<0.001	<0.001	<0.001
	09/22/00	0.002	<0.001	0.001	<0.001	<0.001
	12/28/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 22	03/24/00	<0.001	<0.001	<0.001	<0.001	<0.001
	06/14/00	<0.001	<0.001	<0.001	<0.001	<0.001
	09/22/00	<0.001	<0.001	<0.001	<0.001	<0.001
	12/08/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 23	03/24/00	<0.001	<0.001	<0.001	<0.001	<0.001
	06/14/00	0.007	<0.001	<0.001	<0.001	<0.001
	09/22/00	<0.001	<0.001	<0.001	<0.001	<0.001
	12/28/00	0.001	<0.001	<0.001	<0.001	<0.001
MW - 24	03/24/00	0.762	<0.010	<0.010	<0.010	<0.010
	06/14/00	0.887	0.013	0.004	0.004	0.002
	09/22/00	0.663	0.012	0.004	0.003	0.002
	12/28/00	1.380	<0.010	<0.010	<0.010	<0.010
MW - 25	03/24/00	<0.001	<0.001	<0.001	<0.001	<0.001
	06/14/00	0.002	<0.001	<0.001	<0.001	<0.001
	09/22/00	<0.001	<0.001	<0.001	<0.001	<0.001
	12/28/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 26	09/22/00	0.021	0.041	0.008	0.013	0.006
	12/28/00	0.386	0.130	0.040	0.025	0.014
MW - 27	09/22/00	<0.001	<0.001	<0.001	<0.001	<0.001
	12/28/00	0.003	0.004	0.002	<0.001	<0.001
MW - 28	09/22/00	1.580	0.059	0.374	0.192	0.024
	12/28/00	4.080	0.073	0.469	0.015	0.038

APPENDIX

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: MR. JESSE TAYLOR
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 915-520-4310
FAX: 505-392-3760

SampleType: Water
Sample Condition: Intact/ Iced/HCl
Project #: EOT 1015C
Project Name: SPS-11
Project Location: Lea County , N.M.

Sampling Date: 03/24/00
Receiving Date: 03/25/00
Analysis Date: 3/27- 3/29/00

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
24291	MW 1	0.547	0.098	0.169	0.042	0.014
24292	MW 2	0.001	0.001	<0.001	<0.001	<0.001
24293	MW 3	<0.001	0.001	<0.001	<0.001	<0.001
24294	MW 4	0.015	0.001	0.003	0.001	<0.001
24295	MW 6	0.009	<0.001	<0.001	<0.001	<0.001
24296	MW 7	0.044	0.010	0.014	0.004	0.002
24297	MW 9	0.012	0.002	0.002	<0.001	<0.001
24298	MW 10	0.022	0.004	0.005	0.004	0.002
24299	MW 11	1.40	<0.025	<0.025	<0.025	<0.025
24300	MW 12	0.012	0.002	<0.001	0.004	0.001
24301	MW 13	<0.001	<0.001	<0.001	<0.001	<0.001
24302	MW 14	3.47	<0.025	0.200	0.069	0.037
24303	MW 15	0.001	<0.001	<0.001	<0.001	<0.001
24304	MW 16	0.108	0.028	0.005	0.005	0.002
24305	MW 17	0.055	0.063	0.023	0.017	0.007
24306	MW 18	<0.001	<0.001	<0.001	<0.001	<0.001
24307	MW 19	0.003	<0.001	<0.001	<0.001	<0.001
24308	MW 20	<0.001	<0.001	<0.001	<0.001	<0.001
24309	MW 21	0.092	<0.001	<0.001	<0.001	<0.001
24310	MW 22	<0.001	<0.001	<0.001	<0.001	<0.001
24311	MW 23	<0.001	<0.001	<0.001	<0.001	<0.001
24312	MW 24	0.762	<0.010	<0.010	<0.010	<0.010
24313	MW 25	<0.001	<0.001	<0.001	<0.001	<0.001
	% IA	101	92	91	100	87
	% EA	97	87	87	94	85
	BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: SW 846-8021B,5030

Raland K. Tuttle

3-30-00
Date

Environmental Lab of Texas, Inc.

12600 West I-20 East Odessa, Texas 79763
(915) 563-1800 FAX (915) 563-1713

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

COC # 112

Project Manager: JESSE TAYLOR
Phone #: (915) 664-9166
FAX #: (505) 392-3760

Company Name & Address: ETGI
P.O. BOX 4845 MIDLAND TX 79704

Project #: EOT1015C
Project Name: SPS-11

Project Location: LEA COUNTY NM
Sampler Signature:

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE	TIME	ANALYSIS REQUEST: BTEX 8021B/5030	TPH 418.1	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI
	MW 1	2	V	X					X		X			3-24-00	1117	X							
	MW 2														1127								
	MW 3														1133								
	MW 4														1140								
	MW 6														1037								
	MW 7														1148								
	MW 9														1003								
	MW 10														1155								
	MW 11														1110								
	MW 12														1043								
	MW 13														1032								

Relinquished by:	Date:	Times:	Received by:
Lenora Casas	3-24-00	1500	
Relinquished by:	Date:	Times:	Received by:
Jesse Taylor	25 MAR 00	1235	mcmurrey
Relinquished by:	Date:	Times:	Received by Laboratory:

REMARKS: MAIL RESULTS K. BUTTON

INVOICE CONOCO-PHILLIPS FROST 1015M

Environmental Lab of Texas, Inc.

12600 West I-20 East Odessa, Texas 79763
(915) 563-1800 FAX (915) 563-1713

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

COC # 112

Project Manager: JESSE TAYLOR
Phone #: (915) 664-9166
FAX #: (505) 352-3760

Company Name & Address: ETGT
P.O. BOX 4845 MIDLAND TX 79704

Project #: EOT105C
Project Name: SPS-11

Project Location: LEA COUNTY NM
Sampler Signature: Jesse Taylor

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE	TIME	BTEX 8021/5030	TPH 418.1	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI
	MW 14	2	V	X					X		X			3-24	1107	X							
	MW 15														1010								
	MW 16														0957								
	MW 17														1218								
	MW 18														1210								
	MW 19														1203								
	MW 20														1100								
	MW 21														1050								
	MW 22														1025								
	MW 23														0950								
	MW 24														0945								

Relinquished by:	Date:	Times:	Received by:
Jesse Taylor	3-24-00	1500	
Relinquished by:	Date:	Times:	Received by:
	25 MAR 00	1235	
Relinquished by:	Date:	Times:	Received by Laboratory:

REMARKS: MAIL RESULTS K. BURTON

INVOICE LONNIE FROST 105M

Environmental Lab of Texas, Inc.

12600 West I-20 East Odessa, Texas 79763
(915) 563-1800 FAX (915) 563-1713

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

COC # 112

Project Manager: Jesse Taylor

Phone #: (915) 664-9166
FAX #: (505) 392-3760

Company Name & Address: ETGT
P.O. Box 4648 Midland TX 79704

Project #: EOT 1015C

Project Name: SPS-11

Project Location: Lea County NM

Sampler Signature: Jesse Cano

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE	TIME	ANALYSIS REQUEST: BTEX 8021B/5030	TPH 418.1	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI
	MW 25	1	V	X					X		X			3-24-00	1435	X						

Relinquished by:	Date:	Times:	Received by:
Jesse Cano	3-24-00	1500	
Relinquished by:	Date:	Times:	Received by:
Jesse Taylor	25 Mar 00	1235	
Relinquished by:	Date:	Times:	Received by Laboratory:

REMARKS: Mail Results K. Dutton

Invoice Conoco Attn: Frost 1015M

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: MR. JESSE TAYLOR
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 915-520-4310
FAX: 505-397-4701

Sample Type: Water
Sample Condition: Intact/ Iced/ HCl/ 29 deg. F
Project #: EOT 2015c
Project Name: SPS-11
Project Location: Lea County, N.M.

Sampling Date: 06/14/00
Receiving Date: 06/17/00
Analysis Date: 06/21/00

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L	TOTAL BTEX mg/L
26989	MW 1	2.28	0.060	0.451	0.060	0.013	2.86
26990	MW 2	0.015	0.006	0.007	0.002	<0.001	0.030
26991	MW 3	0.003	0.001	0.003	<0.001	<0.001	0.007
26992	MW 4	0.021	0.001	0.006	0.001	<0.001	0.029
26993	MW 8	0.005	<0.001	0.002	<0.001	<0.001	0.007
26994	MW 7	0.014	0.003	0.004	<0.001	<0.001	0.021
26995	MW 9	0.041	<0.001	0.024	0.002	<0.001	0.067
26996	MW 10	0.012	0.004	0.007	0.002	0.002	0.027
26997	MW 11	0.724	0.002	0.001	<0.001	<0.001	0.727
26998	MW 12	0.009	<0.001	0.001	<0.001	<0.001	0.010
26999	MW 13	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
27000	MW 14	1.59	0.016	0.106	0.010	<0.010	1.72
27001	MW 15	0.008	<0.001	<0.001	<0.001	<0.001	0.008
27002	MW 16	0.017	0.002	<0.001	0.001	<0.001	0.020
27003	MW 17	0.019	0.023	0.011	0.007	0.004	0.064
27004	MW 18	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	% IA	91	87	96	94	87	
	% EA	96	91	93	102	94	
	BLANK	<0.001	<0.001	<0.001	<0.001	<0.001	

METHODS: SW 846-8021B,5030

Umesh Rao, Ph. D.

6/23/00
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: MR. JESSE TAYLOR
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 915-520-4310
FAX: 505-397-4701

Sample Type: Water
Sample Condition: Intact/ Iced/ HCl/ 29 deg. F
Project #: EOT 2015c
Project Name: SPS-11
Project Location: Lea County, N.M.

Sampling Date: 06/14/00
Receiving Date: 06/17/00
Analysis Date: 06/21/00

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L	TOTAL BTEX mg/L
27005	MW 19	0.002	<0.001	<0.001	<0.001	<0.001	0.002
27006	MW 20	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
27007	MW 21	0.002	<0.001	<0.001	<0.001	<0.001	0.002
27008	MW 22	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
27009	MW 23	0.007	<0.001	<0.001	<0.001	<0.001	0.008
27010	MW 24	0.887	0.013	0.004	0.004	0.002	0.910
27011	MW 25	0.002	<0.001	<0.001	<0.001	<0.001	0.002
	% IA	88	86	86	94	87	
	% EA	85	82	81	84	80	
	BLANK	<0.001	<0.001	<0.001	<0.001	<0.001	

METHODS: SW 846-8021B,5030

Umesh Rao

Umesh Rao, Ph. D.

6/23/00
Date

Environmental Lab of Texas, Inc. 12600 West I-20 East Odessa, Texas 79763

(915) 563-1800 FAX (915) 563-1713

1 of 3

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

COC 160

Project Manager: Jesse Taylor

Phone #: (505) 397 4882

FAX #: (505) 397-4701

Company Name & Address: ETGI 2540 W Marland Hobbs NM

Project #: EOT 2015C

Project Name: SPS-11

Project Location: LEA County NM

Sampler Signature: Simon Casas

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE (2000)	TIME	ANALYSIS REQUEST: BTEX 8021B	TPH 418.1	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI
	mw 1	2	✓	X					X		X			6-14	1217	X							
	mw 2	↓	↓	↓					↓		↓			↓	1120	↓							
	mw 3	↓	↓	↓					↓		↓			↓	1108	↓							
	mw 4	↓	↓	↓					↓		↓			↓	1235	↓							
	mw 6	↓	↓	↓					↓		↓			↓	1031	↓							
	mw 7	↓	↓	↓					↓		↓			↓	1245	↓							
	mw 9	↓	↓	↓					↓		↓			↓	1003	↓							
	mw 10	↓	↓	↓					↓		↓			↓	1300	↓							
	mw 11	↓	↓	↓					↓		↓			↓	1207	↓							
	mw 12	↓	↓	↓					↓		↓			↓	1100	↓							
	mw 13	↓	↓	↓					↓		↓			↓	1250	↓							

Relinquished by:	Date:	Times:	Received by:
Simon Casas	6-16-00	1600	
[signature]	6-17-00	140 pm	[signature]
			Received by Laboratory:

REMARKS

F.R. - Hobbs Office

29° F

Environmental Lab of Texas, Inc.

12600 West I-20 East Odessa, Texas 79763
(915) 563-1800 FAX (915) 563-1713

2063.

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

COC 160

Project Manager: Jesse Taylor

Phone #: (505) 397-4882

FAX #: (505) 397-4701

Company Name & Address: ETGI
2540 W Marland Hobbs NM

Project #: EOT 2015C

Project Name: SPS-11

Project Location: Lea County

Sampler Signature:

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE	TIME	BTEX 8021B/5030	TPH 418.1	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI
	MW 14	2	✓	X					X		X			6-14	1010	X							
	MW 15														1020								
	MW 16														0955								
	MW 17														1320								
	MW 18														1313								
	MW 19														1305								
	MW 20														1155								
	MW 21														1145								
	MW 22														1040								
	MW 23														0945								
	MW 24	↓	↓	↓					↓		↓			↓	0935	↓							

Relinquished by:	Date:	Times:	Received by:
	6/16/00	1600	
Relinquished by:	Date:	Times:	Received by:
	6-17-00	140 pm	
Relinquished by:	Date:	Times:	

REMARKS

Fax Results: 397-4701

29°F

[redacted] (9[redacted]3-18[redacted] FAX([redacted]) 56[redacted]3 [redacted]N-OF [redacted]TOD[redacted] [redacted]CORI[redacted] ANA[redacted] REC[redacted]

COC 160

Project Manager: Jesse Taylor

Phone #: (505) 397-4882

FAX #: (505) 397-4701

Company Name & Address: ETGI
2540 W Marland Hobbs NM

Project #: EOT 2015C

Project Name: SPS-11

Project Location: Lea County

Sampler Signature:

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE	TIME	BTEX 8021B/5030	TPH 418.1	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI
	MW 25	2	✓	X					X		X			6-14	0925	X							

ANALYSIS REQUEST

Relinquished by:	Date:	Times:	Received by:
	6-16-00	1600	
Relinquished by:	Date:	Times:	Received by:
	6-17-00	140 pm	
Relinquished by:	Date:	Times:	Received by Laboratory:

REMARKS

F.R. Hobbs Office

29°F

Invoice: EOT 1015M

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: BETH ALDRICH
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 915-520-4310
FAX: 505-397-4701

Sample Type: Water
Sample Condition: Intact/ Iced/ HCl/ -4deg. C
Project #: EOT 2022C
Project Name: SPS-11
Project Location: Lea Co., N.M.

Sampling Date: 09/22/00
Receiving Date: 09/27/00
Analysis Date: 10/03/00

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
31349	MW-1	0.455	0.115	0.128	0.051	0.023
31350	MW-2	<0.001	<0.001	<0.001	<0.001	<0.001
31351	MW-3	<0.001	<0.001	<0.001	<0.001	<0.001
31352	MW-4	0.015	0.002	0.006	0.002	0.001
31353	MW-6	0.040	<0.001	0.010	0.003	<0.001
31354	MW-7	0.150	0.026	0.084	0.022	0.015
31355	MW-9	0.058	<0.001	0.008	0.002	<0.001
31356	MW-10	0.026	0.005	0.016	0.006	0.005
	%IA	95	101	96	102	101
	%EA	104	110	109	114	114
	BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8021B ,5030

Ralahd K. Tuttle

10-6-00
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: BETH ALDRICH
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 915-520-4310
FAX: 505-397-4701

Sample Type: Water
Sample Condition: Intact/ Iced/ HCl/ -4deg. C
Project #: EOT 2022C
Project Name: SPS-11
Project Location: Lea Co., N.M.

Sampling Date: 09/22/00
Receiving Date: 09/27/00
Analysis Date: 10/04/00

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
31357	MW-11	1.97	<0.100	<0.100	<0.100	<0.100
31358	MW-12	0.716	0.026	0.310	0.091	0.039
31359	MW-13	0.001	<0.001	0 003	<0.001	<0.001
31360	MW-15	0.011	<0.001	0.002	<0.001	<0.001
31361	MW-16	0.036	0.003	<0.001	<0.001	<0.001
31362	MW-17	0.058	0.059	0.029	0.014	0.006
31363	MW-18	0.002	<0.001	<0.001	<0.001	<0.001
31364	MW-19	0.002	<0.001	0.002	<0.001	<0.001
31365	MW-20	0.002	<0.001	0.001	<0.001	<0.001
31366	MW-21	0.002	<0.001	0.001	<0.001	<0.001
31367	MW-22	<0.001	<0.001	<0 001	<0.001	<0.001
31368	MW-23	<0.001	<0.001	<0.001	<0.001	<0.001
31369	MW-24	0.663	0.012	0.004	0.003	0.002
	%IA	104	96	98	102	95
	%EA	97	89	87	90	84
	BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8021B ,5030

Raland K. Tuttle

10-6-00
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: BETH ALDRICH
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 915-520-4310
FAX: 505-397-4701

Sample Type: Water
Sample Condition: Intact/ Iced/ HCl/ -4deg. C
Project #: EOT 2022C
Project Name: SPS-11
Project Location: Lea Co., N.M.

Sampling Date: 09/22/00
Receiving Date: 09/27/00
Analysis Date: 10/04/00

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
31370	MW-25	<0.001	<0.001	<0.001	<0.001	<0.001
31371	MW-26	0.021	0.041	0.008	0.013	0.006
31372	MW-27	<0.001	<0.001	<0.001	<0.001	<0.001
31373	MW-28	1.58	0.059	0.374	0.192	0.024
31374	EB-1	<0.001	<0.001	<0.001	<0.001	<0.001
31375	MW-14	3.65	<0.100	0.518	0.229	<0.100
	%IA	95	101	96	102	101
	%EA	93	99	95	100	99
	BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8021B ,5030

Raland K. Tuttle

10-6-00
Date

Environmental Lab of Texas, Inc.

12600 West I-20 E Odessa, Texas 79763
(915) 563-1800 FAX (915) 563-1713

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

COC # 236

Project Manager: BETH ALDRICH
Phone #: (505) 397-4882
FAX #: (505) 397-4781

ANALYSIS REQUEST 1063

Company Name & Address: ETGI
2540 W MARLAND HOBBS NM

Project #: EOT 2022C
Project Name: SPS-11

Project Location: LEA COUNTY NM
Sampler Signature: Lemon Casas

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE	TIME	BTEX 8021	TPH 418.1	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI
	MW 1	2	✓	X					X		X			9-22	1107	X							
	MW 2														1039								
	MW 3														1030								
	MW 4														1115								
	MW 6														1015								
	MW 7														1121								
	MW 9														0917								
	MW 10														1129								
	MW 11														1100								
	MW 12														1023								
	MW 13	↓	↓	↓					↓		↓			↓	1007	↓							

Relinquished by:	Date:	Times:	Received by:
Lemon Casas	9-27-06	0800	D McMurry
Relinquished by:	Date:	Times:	Received by:
Relinquished by:	Date:	Times:	Received by Laboratory:

REMARKS

INVOICE: EOTT Rec -4°C
FAX RESULTS: HOBBS OFFICE
MAIL RESULTS: EOTT

Environmental Lab of Texas, Inc.

12600 West I-20 E Odessa, Texas 79763
(915) 563-1800 FAX (915) 563-1713

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

COC # 286

Project Manager: BETH ALDRICH
Phone #: (505) 397-4882
FAX #: (505) 397-4781

Company Name & Address: ETGI
2540 W MARLAND HOBBS NM

Project #: EOT 2022C
Project Name: SPS-11

Project Location: LEA COUNTY NM
Sampler Signature:

ANALYSIS REQUEST 2063

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE	TIME	BTEX 8021	TPH 418.1	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI
	MW 15	2	V	X					X		X			9-22	0948	X							
	MW 16														0908								
	MW 17														1150								
	MW 18														1143								
	MW 19														1137								
	MW 20														1054								
	MW 21														1047								
	MW 22														0959								
	MW 23														0900								
	MW 24														0852								
	MW 25	↓	↓	↓					↓		↓			↓	0845	↓							

Relinquished by:	Date:	Time:	Received by:
[signature]	9-22-04	0846	[signature]
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by Laboratory:

REMARKS

Rec-4°C

INVOICE: EOTT

FAX RESULTS: HOBBS OFFICE

MAIL RESULTS: EOTT

Environmental Lab of Texas, Inc.

12600 West I-20 E Odessa, Texas 79763
(915) 563-1800 FAX (915) 563-1713

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

COC # 236

3063

Project Manager: BETH ALDRICH
Phone #: (505) 397-4882
FAX #: (505) 397-4781

Company Name & Address: ETGI
2540 W MARLAND HOBBS NM

Project #: EOT 2022C
Project Name: SPS-11

Project Location: LEA COUNTY
Sampler Signature: Simon Casco

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE	TIME	BTEX 8021	TPH 418.1	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI
	MW 26	2	V	X					X		X			9-22	1203	X							
	MW 27														1157								
	MW 28														1209								
	EB 1														1215								
	MW 14														0940								

Relinquished by:	Date:	Time:	Received by:
Simon Casco	9-22-22	0800	
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by Laboratory:

REMARKS:
Rec 4°C
INVOICE: EOTT
FAX RESULTS: HOBBS OFFICE
MAIL RESULTS: EOTT

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: BETH ALDRICH
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 915-520-4310

Sample Type: Water
Sample Condition: Intact/ Iced/ HCl/ -2.0 deg. C
Project #: EOT 2022C
Project Name: SPS-11
Project Location: Lea County, N.M.

Sampling Date: 12/28/00
Receiving Date: 12/30/00
Analysis Date: 01/01/01

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
35769	MW 1	1.99	0.050	0.442	0.110	0.056
35770	MW 2	0.002	0.001	0.001	<0.001	<0.001
35771	MW 3	<0.001	<0.001	<0.001	<0.001	<0.001
35772	MW 4	0.011	0.002	0.003	<0.001	<0.001
35773	MW 6	0.010	0.001	0.002	<0.001	<0.001
35774	MW 7	0.043	0.002	0.040	0.002	<0.001
35775	MW 9	0.867	<0.010	0.344	0.043	<0.010
35776	MW 10	0.018	0.003	0.015	0.002	0.002
35777	MW 11	0.250	<0.001	<0.001	<0.001	<0.001
35778	MW 12	0.313	0.006	0.063	0.012	0.004
35779	MW 13	<0.001	<0.001	<0.001	<0.001	<0 001
35780	MW 14	3.97	0.003	0.392	0.239	0.015
	%IA	89	89	91	96	92
	%EA	87	88	88	93	89
	BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8021B ,5030

Raland K. Tuttle

01-04-01
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: BETH ALDRICH
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 915-520-4310

Sample Type: Water
Sample Condition: Intact/ Iced/ HCl/ -2.0 deg. C
Project #: EOT 2022C
Project Name: SPS-11
Project Location: Lea County, N.M.

Sampling Date: 12/28/00
Receiving Date: 12/30/00
Analysis Date: 01/03/01

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
35781	MW 15	0.028	<0.001	<0.001	<0.001	<0.001
35782	MW 16	0.043	0.032	0.007	0.004	0.002
35783	MW 17	0.065	0.080	0.024	0.014	0.007
35784	MW 18	0.007	<0.001	0.002	0.001	<0.001
35785	MW 19	0.012	<0.001	0.002	<0.001	<0.001
35786	MW 20	0.005	<0.001	0.001	<0.001	<0.001
35787	MW 21	<0.001	<0.001	<0.001	<0.001	<0.001
35788	MW 22	<0.001	<0.001	<0.001	<0.001	<0.001
35789	MW 23	0.001	<0.001	<0.001	<0.001	<0.001
35790	MW 24	1.38	<0.010	<0.010	<0.010	<0.010
35791	MW 25	<0.001	<0.001	<0.001	<0.001	<0.001
35792	MW 26	0.386	0.130	0.040	0.025	0.014
35793	MW 27	0.003	0.004	0.002	<0.001	<0.001
35794	MW 28	4.08	0.073	0.469	0.150	0.038
35795	EB 1	<0.001	<0.001	<0.001	<0.001	<0.001
	%IA	102	107	102	105	104
	%EA	99	92	90	88	93
	BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8021B ,5030

Raland K. Tuttle

01-04-01
Date

Environmental Technology Group, Inc.
Environmental Consulting & Remediation Services

For Use On **EOTT ENERGY CORP.** Projects Only

4600 West Wall
Midland, TX 79703
Tel (915) 522-1139
Fax (915) 520-4310

2540 West Marland
Hobbs, NM 88242
Tel (505) 397-4882
Fax (505) 397-4701

EOTT ENERGY CORP.
East Business 20
TX 79702
(915) 687-3400
(915) 582-2781

5805
Midland,
Tel
Fax

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ANALYSIS REQUEST
(Circle or Specify Method No.)

Project Manager: BETH ALDRICH
EOTT Leak Number:
Project Name: SPS-11
ETGI Project Number: EOT 2022C
Project Location: LEA COUNTY NM
Sampler Signature: Simon Casas

LAB # (Lab Use Only)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATION METHOD: HCL	HNO_3	$NaHSO_4$	ICE	NONE	SAMPLING: DATE	TIME	BTEX 8021B/~~5030~~	TPH 418.1/TX 1005	TPH 8015M GRO/DRO	PAH 8270C (8100 New Mexico only)	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/7470	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	Volatiles 8260B	Semi Volatiles 8270C	TDS 160.1	Cations/Anions 375.4/325.3
	MW 1	2	✓	X				X			X		12-28	1400	X											
	MW 2													1230												
	MW 3													1315												
	MW 4													1330												
	MW 6													1410												
	MW 7													1340												
	MW 9													1415												
	MW 10													1100												
	MW 11													1554												
	MW 12													1527												
	MW 13													1200												
	MW 14	↓	↓	↓				↓			↓		↓	1515	↓											

Relinquished by: Simon Casas Date: 12-29-00 Time: 4:00
Received by: Date: 12-29-00 Time: 4:00

Relinquished by: Date: 12:30-00 Time: 12:30
Received at Lab by: Date: 12-30-00 Time: 1250

REMARKS: Rec-2.0°C
FAX RESULTS: HOBBS
MAIL RESULTS: EOTT
INVOICE: EOTT

Environmental Technology Group, Inc
Environmental Consulting & Remediation Services

For Use On **EOTT ENERGY CORP.** Its Only

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(915) 582-2781

5805
Midland,
Tel
Fax

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ANALYSIS REQUEST
(Circle or Specify Method No.)

Project Manager: BETH ALDRICH
EOTT Leak Number:
Project Name: SPS - 11
ETGI Project Number: EOT 2022C
Project Location: LEA COUNTY NM
Sampler Signature: Simon Casas

LAB # (Lab Use Only)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATION METHOD: HCL	HNO_3	$NaHSO_4$	ICE	NONE	SAMPLING: DATE	TIME	BTEX 8021B/~~8~~	TPH 418.1/TX 1005	TPH 8015M GRO/DRO	PAH 8270C (8100 New Mexico only)	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/7470	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	Volatiles 8260B	Semi Volatiles 8270C	TDS 160.1	Cations/Anions 375.4/325.3
	MW 15	2	V	X				X			X		12-28	1507	X											
	MW 16													1459												
	MW 17													1609												
	MW 18													1546												
	MW 19													1535												
	MW 20													1600												
	MW 21													1255												
	MW 22													1130												
	MW 23													1450												
	MW 24													1438												
	MW 25													1425												
	MW 26	↓	↓	↓				↓			↓		↓	1626	↓											

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Simon Casas	12-29-00	4:00	Dana Davis	12-29-00	4:00
Relinquished by:	Date:	Time:	Received at Lab by:	Date:	Time:
Dana Davis	12-30-00	12:30	Sonia Monarrez	12-30-00	1230

REMARKS:
Rec -2.0°C

Environmental Technology Group, Inc
Environmental Consulting & Remediation Services

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5805
Midland,
Tel
Fax

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Project Manager: BETH ALDRICH
EOTT Leak Number:
Project Name: SPS - 11
ETGI Project Number: EOT 2022C
Project Location: LEA COUNTY NM
Sampler Signature: Simon Casas

LAB # (Lab Use Only)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATION METHOD: HCL	HNO_3	$NaHSO_4$	ICE	NONE	SAMPLING: DATE	TIME	BTEX 8021B/602	TPH 418.1/TX 1005	TPH 8015M GRO/DRO	PAH 8270C (8100 New Mexico only)	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/7470	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	Volatiles 8260B	Semi Volatiles 8270C	TDS 160.1	Cations/Anions 375.4/325.3
	MW 27	2	✓	X				X			X		12-28	1618	X											
	MW 28	↓	↓	↓				↓			↓		↓	1632	↓											
	EB 1	↓	↓	↓				↓			↓		↓	1645	↓											

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Simon Casas	12-29-00	4:00		12-29-00	4:00
Relinquished by:	Date:	Time:	Received at Lab by:	Date:	Time:
	12-30-00	12:30		12-30-00	1230

REMARKS:
Rec - 2.0°C

Table

CONCENTRATIONS OF METALS IN WATER

EOTT ENERGY CORPORATION
SPS - 11
EGTI Project # EOT 2022C
ANNUAL REPORT
All water concentrations are in mg/L

SAMPLE LOCATION	SAMPLE DATE	SAMPLE TYPE	EPA SW846-6010B, 7470																								
			Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Tin	Vanadium	Zinc	Boron	Strontium
MW - 26	6/3/2000	WATER	22.8	0.0160	0.5880	ND	0.0030	298.0	0.0980	0.0240	0.0220	18.20	0.0180	26.80	0.5920	ND	ND	0.0490	8.070	ND	ND	32.70	ND	0.1390	0.0530	0.119	0.584
MW - 27	6/3/2000	WATER	6.82	ND	0.1470	ND	0.0020	266.0	0.0530	ND	ND	4.660	ND	16.80	0.0900	ND	ND	0.0190	4.910	ND	ND	33.60	ND	0.0450	ND	0.106	0.522
MW - 28	6/3/2000	WATER	15.4	0.0140	0.4090	ND	0.0040	655.0	0.0860	ND	0.0130	9.730	0.0070	30.30	0.2450	ND	ND	0.0330	8.180	ND	ND	40.60	ND	0.0880	0.0590	0.144	0.994

EOTT ENERGY Pipeline Limited Partnership

P.O. BOX 1660
5805 E. BUSINESS 20
MIDLAND, TEXAS 79702
(915) 682-3761

FEDERAL EXPRESS
AIR BILL # 8170 0342 3660

March 30, 2000

State of New Mexico
Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505
Attn: William Olson

RE: **ANNUAL GROUND WATER MONITORING REPORTS**

Dear Mr. Olson:

Attached please find the 2000 Annual Groundwater Monitoring Reports for the following sites:

Monument #18	Monument #10
Monument #17	TNM-97-16 (Becky Jo Doom site)
Monument #2	HDO-90-23
Monument #15	SPS-11
TNM-97-17	TNM-98-02
TNM-97-18	TNM-98-S01
TNM-98-05A	TNM-97-23
TNM-96-16	TNM-95-10 (Saunders)
TNM-97-14	TNM-97-04 (Townsend)

I hope all meets with OCD requirements for closure of the site but if you have any questions, please don't hesitate to call me at 915/684-3467.

Sincerely,

Lennah Frost
Sr. Environmental Engineer

cc: Environmental File

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

February 11, 2000

CERTIFIED MAIL
RETURN RECEIPT NO. Z-559-572-900

Ms. Lennah Frost
EOTT Energy Pipeline Limited Partnership
P.O. Box 1660
Midland, Texas 79702

RE: DISCHARGE PLAN FEES
SPS-11 DISCHARGE PLAN GW-140
LEA COUNTY, NEW MEXICO

Dear Ms. Frost:

On January 23, 1997, the New Mexico Oil Conservation Division (OCD) approved discharge plan GW-140 for the EOTT Energy Pipeline Limited Partnership's (EOTT) SPS-11 ground water remediation project. The conditions of the discharge plan approval required submission of a $50.00 discharge plan filing fee and a $1380 discharge plan flat fee pursuant to New Mexico Water Quality Control Commission (WQCC) Regulation 3114. The fees were due upon receipt of the discharge plan approval. A review of the OCD's files shows that the OCD has no record of receiving these required fees.

EOTT shall submit the required $50.00 discharge plan filing fee and a $1380 discharge plan flat fee in full immediately upon receipt of this notice in order to be in compliance with WQCC Regulation 3114. Please make all checks payable to the **NMED-Water Quality Management Fund** and addressed to the OCD Santa Fe Office

If you have any questions or comments, please contact me at (505) 827-7154.

Sincerely,

Roger C. Anderson
Environmental Bureau Chief

xc: Chris Williams, OCD Hobbs District Office

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

November 4, 1999

CERTIFIED MAIL
RETURN RECEIPT NO. Z-274-520-728

Ms. Lennah Frost
EOTT Energy Pipeline Limited Partnership
P.O. Box 1660
Midland, Texas 79702

RE: SPS-11 DISCHARGE PLAN GW-140
GROUND WATER INVESTIGATIONS
LEA COUNTY, NEW MEXICO

Dear Ms. Frost:

The New Mexico Oil Conservation Division (OCD) has reviewed EOTT Energy Pipeline Limited Partnership's (EOTT) October 4, 1999 "ADDITIONAL DATA REQUIRED TO COMPLETE STAGE 1 ABATEMENT PLANS FOR THE FOLLOWING SITES: SPS-11 LEA COUNTY, NEW MEXICO; TNM-98-05A LEA COUNTY, NEW MEXICO; TNM-97-14 LEA COUNTY, NEW MEXICO; TNM-97-16 LEA COUNTY, NEW MEXICO; TNM-97-17 LEA COUNTY, NEW MEXICO; TNM-97-18 LEA COUNTY, NEW MEXICO". This document, which was submitted on behalf of EOTT by their consultant Environmental Technology Group, Inc., contains EOTT's work plans for installation of additional monitor wells at a number of EOTT crude oil pipeline spill sites.

The above referenced work plan for the SPS-11 site **is approved with the following conditions**:

1. EOTT shall complete the new monitor wells as follows:

   a. At least 15 feet of well screen shall be placed across the water table interface with 5 feet of the well screen above the water table and 10 feet of the well screen below the water table.

   b. An appropriately sized gravel pack shall be set in the annulus around the well screen from the bottom of the hole to 2-3 feet above the top of the well screen.

   c. A 2-3 foot bentonite plug shall be placed in the annulus above the gravel pack.

d. The remainder of the annulus shall be grouted to the surface with cement containing 3-5% bentonite.

e. A concrete pad and locking well cover shall be placed at the surface.

f. The well shall be developed after construction using EPA approved procedures.

2. EOTT shall wait a minimum of 24 hours after the monitor wells have been developed to purge and sample ground water from the monitor wells.

3. All soil and ground water samples shall be sampled and analyzed using EPA approved methods and quality assurance/quality control (QA/QC) procedures.

4. All wastes generated during the investigation and remediation activities shall be disposed of at an OCD approved facility.

5. EOTT shall submit the results of the investigation actions to the OCD in the annual report and shall include the following information:

   a. A description of all investigation activities which occurred including conclusions and recommendations.

   b. A geologic/lithologic log and well completion diagram for each monitor well and soil boring.

   c. A water table potentiometric map showing the location of spills, excavated areas, monitor wells, soil borings, and any other pertinent site features as well as the direction and magnitude of the hydraulic gradient.

   d. Isopleth maps for contaminants of concern which were observed during the investigations.

   e. Summary tables of all soil and ground water quality sampling results obtained during the investigation and copies of all laboratory analytical data sheets and associated QA/QC data.

   f. The disposition of all wastes generated.

   g. A modified long term ground water monitoring plan which includes the newly installed wells.

Please be advised that OCD approval does not relieve EOTT of liability should the work plan fail to adequately determine the extent of contamination related to EOTT, or if contamination exists which is outside the scope of the work plan. In addition, OCD approval does not relieve EOTT of responsibility for compliance with any other federal, state or local laws and regulations.

The OCD requests that in the future EOTT submit separate work plans and reports for each site since some of the sites are being remediated under different rules and regulations.

If you have any questions or comments, please contact me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office
Jesse Taylor, Environmental Technology Group, Inc.

EOTT ENERGY Pipeline Limited Partnership

P.O. BOX 1660
5805 E. BUSINESS 20
MIDLAND, TEXAS 79702
(915) 682-2761 → 684-3400

October 15, 1999

State of New Mexico
Oil Conservation Division - Hobbs District Office
1625 N. French Dr.
Hobbs, NM 88240
Attn: Donna Williams

RE: Installation of Additional Monitor Wells in Lea County, NM

Dear Ms. Williams:

Below is a list of old Texas-New Mexico Pipeline sites that require additional monitor wells to be installed. Also on this list are 3 EOTT sites that require additional and/or new monitor wells.

TNM - SPS-11	TNM - 98-05A
TNM - 97-14	TNM - 97-16
TNM - 97-17	TNM - 97-18
EOTT - Darr Angell site #1	
EOTT - Darr Angell site #2	
EOTT - leak #TNM-LF-59	

We will begin drilling these wells on Monday, October 25, 1999 and will proceed from site to site on a geographic basis. The SPS-11 site is scheduled first. I will be out of town that week but Wayne Brunette will be coordinating drilling activity with our contractor Jerry Nickell and Allan Eades of Eades Drilling. Wayne's number is 915/556-0190. If you would like to be present at any of these installations, please contact Wayne to verify time and locations for each day's drilling.

Donna, I hope this meets with your approval but if you have any questions or need additional information, please don't hesitate to call me.

Sincerely,

Lennah Frost
Sr. Environmental Engineer

cc: William Olson - NMOCD - Santa Fe
Wayne Brunette
Glenn Waldrop

October 4, 1999

State of New Mexico
Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505

BY CERTIFIED MAIL
RETURN RECEIPT NO.
Z 203 735 137

Attn: William Olson

RE: Additional Data Required to Complete Stage 1 Abatement Plans for the Following Sites:

- **SPS-11 Lea County, New Mexico**
- **TNM-98-05A Lea County, New Mexico**
- **TNM-97-14 Lea County, New Mexico**
- **TNM-97-16 Lea County, New Mexico**
- **TNM-97-17 Lea County, New Mexico**
- **TNM-97-18 Lea county, New Mexico**

Dear Mr. Olson:

EOTT Energy Corporation (EOTT) has requested that Environmental Technology Group, Incorporated (ETGI) assist them in field activities and the acquisition of additional data at the referenced sites. The additional field activities consist primarily in the completion of additional soil borings and/or ground water monitoring wells at these sites to either document soil and ground water conditions at the release point or define the lateral extent of ground water impact. In order to minimize cost and maximize efficiency, ETGI would like to conduct these similar tasks in sequence.

As such, on the behalf of EOTT, ETGI request the approval for the following work plans for each site. The work plans are designed to allow for the collection data required to complete a Stage 1 Abatement Plan for each site. In addition, a generalized summary of our Quality Assurance/Quality Control (QA/QC) Plan is provided as Attachment A. These protocol will be applicable to all the referenced sites.

Once the following work plans are approved, ETGI will initiate field activities within 14 days and complete the field work within 14 days subsequent to initiation. Individual Stage 1 Abatement Plans will be submitted to your agency within 60 days of the completion of the field work. Subsequent to your approval of each Stage 1 Abatement Plan, a Stage 2 Abatement Plan will be completed for each site within 60 days, or 120 days with good cause. Quarterly ground water monitoring, at all of the referenced sites, will continue as previously approved by your agency.

All of the sites are located in Lea County, New Mexico, which is situated in the southeast portion of the state. The area is located in the geologic province commonly known as the Permian Sedimentary Basin from which oil and gas are produced from various Permian and Pennsylvanian age Formations. Generally, all of the sites are located in sparsely populated, semi-arid terrain common to the basin. Topographically, the area ranges from flat to rolling hills or draws containing intermittent streams. Ground water at the sites range from 40 to 60 feet below the ground surface (bgs). The site locations are depicted on Figure 1 and individual site maps are provided in the subsequent figures, all of which are in Attachment B.

SPS-11

A review of the file for this site indicates that ground water samples, collected from down gradient monitoring well, MW-17, have contained benzene in excess of regulatory limits for several monitoring events. The soil and groundwater data indicate the possibility of multiple release events and locations. Regardless of the site's past release history, the down gradient extent of impacted ground water is currently not defined.

ETGI recommends the installation of an estimated three to five additional wells, located down gradient to monitoring well MW-17. The initial well will be placed approximately 200 feet southeast of monitoring well MW-17 and subsequent well locations will be based on field data collected from the initial well. The stated goal of the well placement selection will be to define the cross gradient and down gradient extent of the plume associated with monitoring well MW-17. A site map is provided as Figure 2.

TNM-98-05A

A review of the file for this site indicates that the four existing monitoring wells do not adequately define the extent of impacted soil, free phase product or dissolved phase hydrocarbons in the ground water. As much as 3.36 feet of product has been measured in monitoring well MW-2, which represents the most down gradient well in the western portion of the site. In addition, impacted soil was collected from the boring advanced for the well. Dissolved phase benzene concentrations, in excess of regulatory standards, have been detected in samples collected from monitoring well MW-4. This well represents the most down gradient well in the eastern portion of the site.

ETGI recommends that approximately eight geoprobe borings be advanced around the release point to more completely characterize the extent of impacted soil remaining subsequent to the excavation. An estimated minimum of five monitoring wells will be required to define the lateral extent of impacted ground water. These include:

- One - up gradient well, north of monitoring well MW-1;
- Two - cross gradient wells, west of monitoring well MW-2 and east of monitoring well MW-4; and

- Two - downgradient wells, south of monitoring well MW-2 and south of monitoring well MW-4.

Field data from the initial proposed wells may modify the exact locations, however, the stated purpose of the well location selection is to define the lateral extent of impacted ground water associated with the release. The proposed monitoring well points are depicted on Figure 3

TNM-97-14

A review of the file for this site indicates that there is no monitoring well located near the release point. ETGI recommends that one monitoring well be installed within 20 feet of the southwest corner of the excavation. If highly impacted soil is present in the boring, approximately four geoprobe borings will be installed in the area to determine the lateral extent of impacted soil remaining subsequent to the excavation. The proposed monitoring well location is depicted on Figure 4.

TNM 97-16

A geoprobe survey is under way at the site to determine the extent of impacted soil remaining subsequent to the excavation has been determined. ETGI recommends that one additional monitoring well be installed near the release point. In addition, a representative soil sample, from each 2,000 cubic yards of the land farm soil has been collected in order to characterize the present condition of the soil. The location of the proposed monitoring well is depicted on Figure-5.

TNM 97-17

A review of the file for this site indicates that there is no ground water monitoring well installed near the release point. ETGI recommends that one ground water monitoring well should be installed between soil boring SB-1 and the release point as depicted on Figure 6.

TNM 97-18

A review of the file for this site indicates that there is no ground water monitoring well installed near the release area and that ground water samples collected from down gradient well MW-3 exceed regulatory standards for dissolved phase benzene. ETGI recommends that one well should be installed in the release area and that two wells should be installed down gradient of monitoring well MW-3 as depicted on Figure 7.

If you have any questions or concerning any of the activities or scheduling proposed in this letter, please contact Lennah Frost, of EOTT Energy Corp. at (915) 684-3467.

Sincerely:

ENVIRONMENTAL TECHNOLOGY GROUP, INC.

Jesse Taylor
Principal Geologist

cc: Lennah Frost - EOTT Energy Corporation

Attachment

ATTACHMENT A

ETGI QA/QC PROCEDURES

Soil Sampling

Samples of subsurface soils will be obtained utilizing either a split spoon sampler (air rotary drilling rig) or a two inch, continuous sampling tube with a clean polybuterate liner (geoprobe). Representative soil samples will be divided into two separate portions using clean, disposable gloves and clean sampling tools. One portion of the soil sample will be placed in a disposable sample bag. The bag will be labeled and sealed for head-space analysis using a photo-ionization detector (PID) calibrated to a 100 ppm isobutylene standard. Each sample will be allowed to volatilize for approximately thirty minutes at ambient temperature prior to conducting the analysis.

The other portion of the soil sample will be placed in a sterile glass container equipped with a Teflon-lined lid furnished by the analytical laboratory. The container will be filled to capacity to limit the amount of head-space present. Each container will be labeled and placed on ice in an insulated cooler. Upon selection of samples for analysis, the cooler will be sealed for shipment to the laboratory. Proper chain-of-custody documentation will be maintained throughout the sampling process.

Soil samples will be delivered to Environmental Lab of Texas, Inc. in Midland, Texas for BTEX and TPH analyses using the methods described below. Soil samples will be analyzed for BTEX and TPH-DRO within fourteen days following the collection date.

The soil samples will be analyzed as follows:

- BTEX concentrations in accordance with EPA Method 8020, 5030
- TPH concentrations in accordance with modified EPA Method 8015-GRO/DRO

Ground Water Sampling

Monitoring wells will be developed and purged with a clean PVC bailer. The bailer will be cleaned prior to each use with Liqui-Nox detergent and rinsed with distilled water. Monitoring wells with sufficient recharge will be purged by removing a minimum of three
well volumes. Monitoring wells that do not recharge sufficiently will be purged until no additional ground water can be obtained.

After purging the wells, ground water samples will be collected with a disposable Teflon sampler and polyethylene line by personnel wearing clean, disposable gloves. Ground water sample containers will be filled in the order of decreasing volatilization sensitivity (i.e., BTEX containers will be filled first and PAH containers second).

Ground water samples collected for BTEX analysis will be placed in 40 ml glass VOA vials equipped with Teflon-lined caps. The containers will be provided by the analytical laboratory. The vials will be filled to a positive meniscus, sealed, and visually checked to ensure the absence of air bubbles.

Ground water samples collected for PAH analysis will be filled to capacity in sterile, 1 liter glass containers equipped with Teflon-lined caps. Ground water samples collected for metals analysis will be filled to capacity in sterile, 1 liter plastic containers equipped with Teflon-lined caps. The containers will be provided by the analytical laboratory.

The filled containers will be labeled and placed on ice in an insulated cooler. The cooler will be sealed for transportation to the analytical laboratory. Proper chain-of-custody documentation will be maintained throughout the sampling process.

The ground water samples will be analyzed as follows:

- BTEX concentrations in accordance with EPA Method 8020, 5030
- TPH concentrations in accordance with modified EPA Method 8015-GRO/DRO

Decontamination Of Equipment

Cleaning of drilling equipment will be the responsibility of the drilling company. In general, the cleaning procedures will consist of using high pressure steam to wash the drilling and sampling equipment prior to drilling and prior to starting each hole. Prior to use, the sampling equipment will be cleaned with Liqui-Nox detergent and rinsed with distilled water.

Laboratory Protocol

The laboratory will be responsible for proper QA/QC procedures. These procedures will either be transmitted with the laboratory reports or on file at the laboratory.

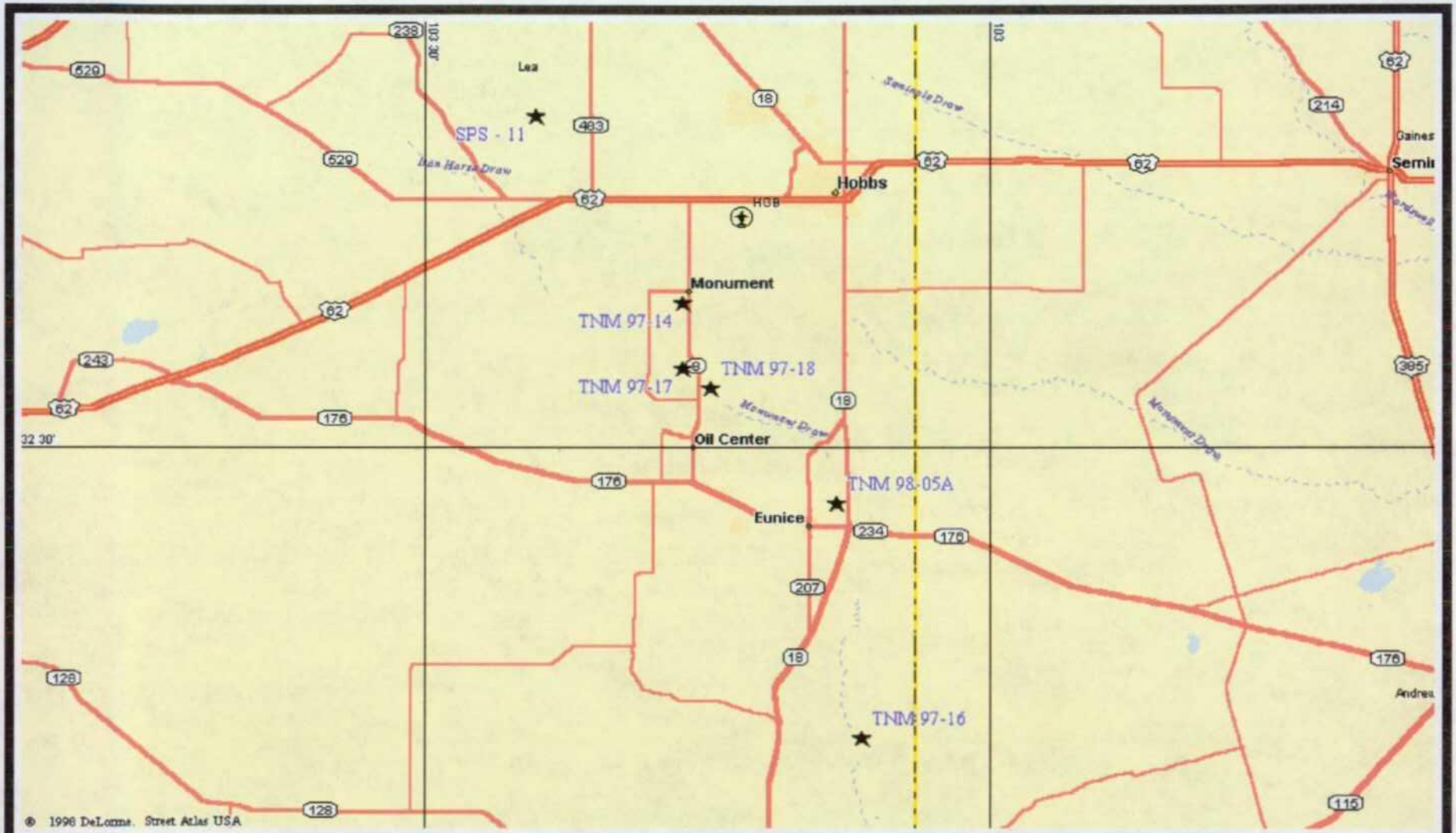
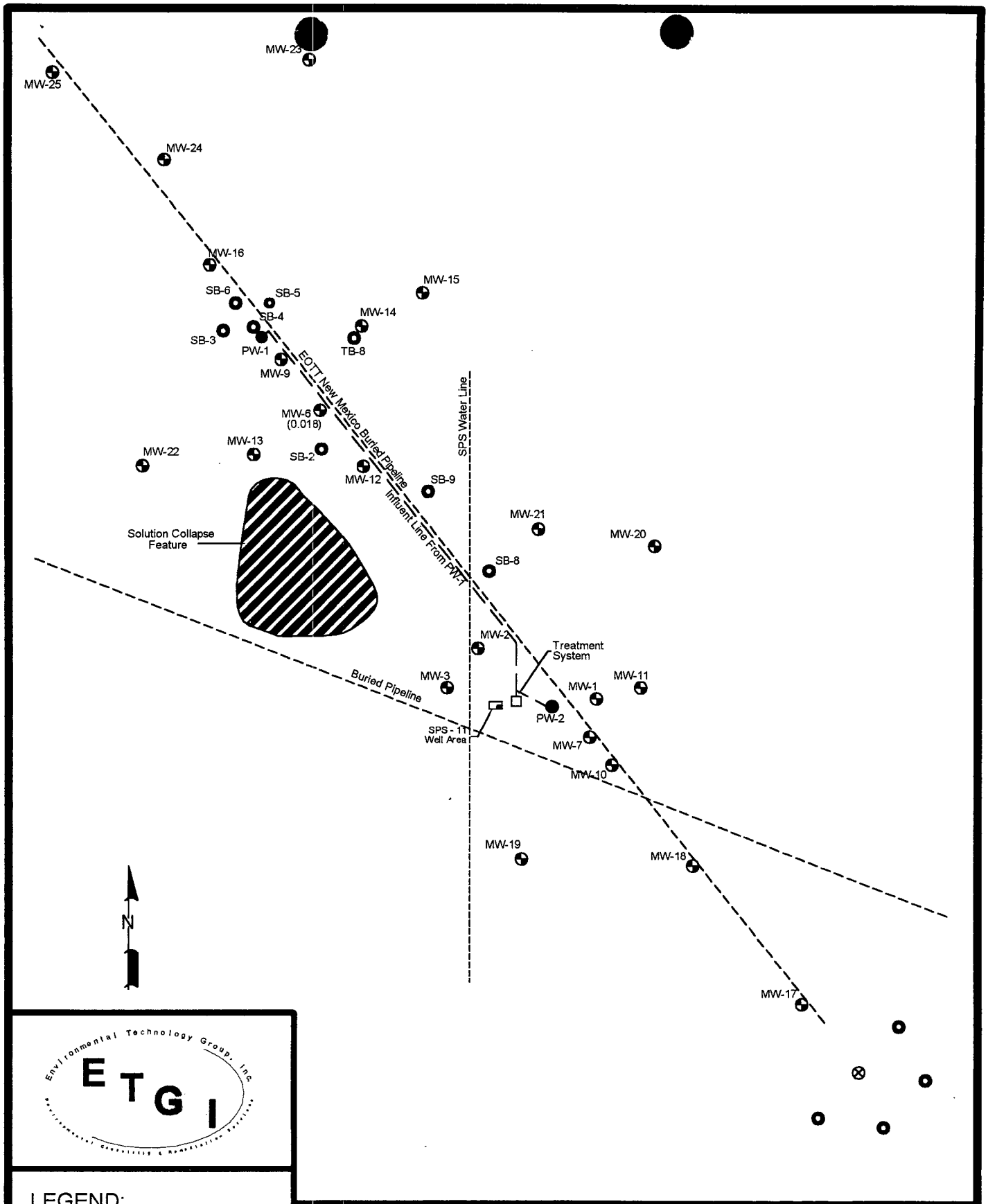


FIGURE 1	Referenced Site Locations	Environmental Technology Group, INC.
Not To Scale	Lea County, NM	9 - 28 - 99 RS



Environmental Technology Group, Inc.

ETGI

LEGEND:

- Exsiting Ground Water Monitoring Well.
- Subsequent Proposed Ground Water Monitoring well Locations (Actual Locations May Vary).
- Initial Proposed Ground Water Monitoring Well Lcation.

Figure 2
Site Map

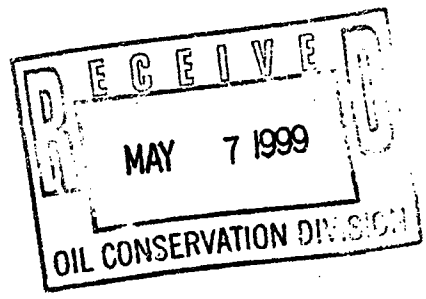
SPS - 11
Lea County, NM

Environmental Technology Group, INC.

Scale: 1" = 300'	Prep By: RS	Checked By:
September 28,1999	ETGI Project #	

EOTT ENERGY Pipeline Limited Partnership

P.O. BOX 1660
5805 E. BUSINESS 20
MIDLAND, TEXAS 79702
(915) 687-2040



BY CERTIFIED MAIL

May 5, 1999

State of New Mexico
Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505
Attn: William Olson

RE: Abatement Plan for Site HDO-90-23,
Discharge Plan GW-294 and Discharge Plan GW-140
Formerly Texas New Mexico Pipeline

Dear Mr. Olson:

This letter is to notify the NMOCD that EOTT Energy Pipeline Limited Partnership has acquired the above mentioned remediation projects from Texas New Mexico Pipeline effective May 1, 1999. It is the intent of EOTT to operate under the terms and conditions of the approved discharge plans.

I look forward to working with you on these projects. If you have any questions or need additional information, please don't hesitate to call me at 915/684-3467.

Sincerely,

Lennah Frost

Lennah Frost
Sr. Environmental Engineer

/ld

cc: Al Hugh - Environmental File
Neil Stidham

k·e·i
5309 Wurzbach, Suite 100
San Antonio, Texas 78238
(210) 680-3767
(210) 680-3763 FAX

February 8, 1999

Mr. Tony Savoie
TEXAS - NEW MEXICO PIPE LINE COMPANY
3330 Executive Drive
P.O. Box 60028
San Angelo, Texas 76906

Re: Annual Monitoring Report
SPS-11
Lea County, New Mexico
Job No. 610099-1

Dear Mr. Savoie:

Transmitted with this letter is the copy of the final annual report for SPS-11, located in Lea County, New Mexico. One copy has been submitted to each of the Oil Conservation Division offices in Santa Fe and Hobbs, New Mexico.

Please contact me or Theresa Nix at (210) 680-3767 if you have any questions or comments.

Respectfully,

for Paul B. Hartnett, P.E.
Senior Engineer

Enclosure

cc: Marc Oler, Equilon
Oil Conservation Division - Santa Fe, NM
Oil Conservation Division - Hobbs, NM

tln\p:\tnmp\610099\annual\annual98.doc

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

February 4, 1999

CERTIFIED MAIL
RETURN RECEIPT NO. Z-274-520-615

Mr. John A. Savoie
Texas-New Mexico Pipe Line Company
P.O. Box 1030
Jal, New Mexico 88252

RE: SPS-11 GROUND WATER INVESTIGATIONS
LEA, COUNTY, NEW MEXICO

Dear Mr. Savoie:

The New Mexico Oil Conservation Division (OCD) has reviewed the following Texas-New Mexico Pipe Line Company (TNMPLC) documents which were submitted on behalf of TNMPLC by their consultant KEI:

- January 4, 1999 "GROUNDWATER MONITORING EVENT, TEXAS - NEW MEXICO PIPELINE COMPANY, SPS-11, SECTION 18, TOWNSHIP 18 SOUTH, RANGE 36 EAST, LEA COUNTY, NEW MEXICO, JOB NO. 610099-1".

- October 29, 1998 "GROUNDWATER MONITORING EVENT, TEXAS - NEW MEXICO PIPELINE COMPANY, SPS-11, SECTION 18, TOWNSHIP 18 SOUTH, RANGE 36 EAST, LEA COUNTY, NEW MEXICO, JOB NO. 610099-1".

These documents contain the results of TNMPLC's recent remediation and monitoring of ground water contamination resulting from a crude oil pipeline spill adjacent to the SPS-11 water well.

A review of the OCD's file on this site shows that on June 2, 1998 the OCD required that TNMPLC submit a work plan for additional investigation of the downgradient extent of ground water by July 31, 1998. To date the OCD has no record of receiving this work plan. To correct this deficiency, the OCD requires that TNMPLC submit a ground water remediation and monitoring work plan by April 5, 1999. The work plan will be submitted to the OCD Santa Fe Office with a copy provided to the OCD Hobbs District Office.

In addition, the OCD could not find the following information in the 1998 monitoring reports:

1. The total volume of product recovered in the treatment system that year and the total volume recovered to date.

2. The total volume of fluid pumped from each well that year and the total volume pumped to date.

3. The total volume of treated water injected into the SPS water line that year and the total volume injected to date.

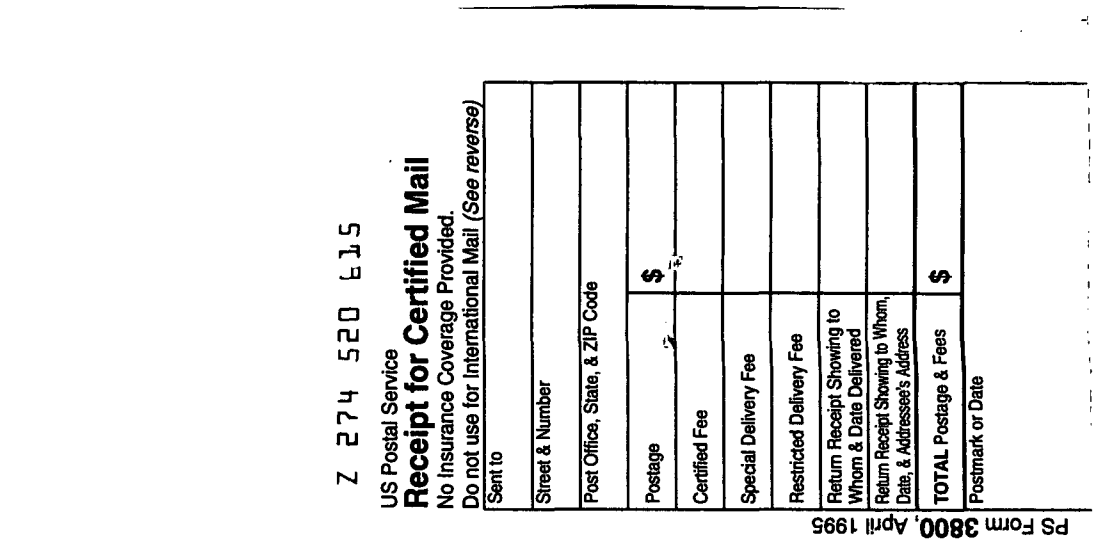
The OCD required that the above information be submitted in annual reports as a condition of the OCD's January 23, 1997 approval of the site discharge plan. Please submit this information to the OCD by April 5, 1999. The OCD also requires that all future ground water monitoring reports be submitted to the OCD in a single comprehensive annual report as required in the OCD's January 23, 1997 discharge plan approval.

If you have any questions, please contact me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office
Robert Gallegos, NMED Drinking Water and Community Services Bureau
Robert Garrett, NMED Hobbs Office
Mike Matush, New Mexico State Land Office



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

June 2, 1998

CERTIFIED MAIL
RETURN RECEIPT NO. Z-235-437-277

Mr. John A. Savoie
Texas-New Mexico Pipe Line Company
P.O. Box 1030
Jal, New Mexico 88252

RE: SPS-11 GROUND WATER INVESTIGATIONS
LEA, COUNTY, NEW MEXICO

Dear Mr. Savoie:

The New Mexico Oil Conservation Division (OCD) has reviewed Texas-New Mexico Pipe Line Company's (TNMPLC) February 12, 1998 "ENV - ANNUAL MONITORING REPORT, SPS-11, LEA COUNTY, NEW MEXICO, KEI JOB NO. 61099"; March 12, 1998 "SUPPLEMENTAL SUBSURFACE INVESTIGATION REPORT, TEXAS-NEW MEXICO PIPE LINE COMPANY, SPS-11, LEA COUNTY, NEW MEXICO" and April 14, 1998 "GROUND WATER MONITORING REPORT, SPS-11, LEA COUNTY, NEW MEXICO". These documents contain the results of TNMPLC's recent ground water investigation and monitoring actions at the SPS-11 site.

The investigation and monitoring actions conducted to date are satisfactory. However, a review of the above referenced documents shows that the investigation of the downgradient extent of ground water contamination has not been completed. Therefore, the OCD requires that TNMPLC submit a work plan for completing the definition of the extent of ground water contamination. Please submit the work plan to the OCD Santa Fe Office by July 31, 1998 with a copy provided to the OCD Hobbs District Office.

If you have any questions, please contact me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc: Wayne Price, OCD Hobbs District Office
Robert Gallegos, NMED Drinking Water and Community Services Bureau
Robert Garrett, NMED Hobbs Office
Mike Matush, New Mexico State Land Office

Z 235 437 277

US Postal Service

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TOTAL Postage & Fees	$
Postmark or Date	

PS Form **3800**, April 1995

5309 Wurzbach, Suite 100
San Antonio, Texas 78238
(210) 680-3767
(210) 680-3763 FAX

April 14, 1998

Mr. Tony Savoie
TEXAS - NEW MEXICO PIPE LINE COMPANY
P. O. Box 1030
Jal, New Mexico 88252

Re: Groundwater Monitoring Event
Texas - New Mexico Pipe Line Company
SPS-11
Lea County, New Mexico
Job No. 610099

Dear Mr. Savoie:

Transmitted with this letter is the ground water binder for all ground water monitoring events conducted at SPS-11 located in Lea County, New Mexico.

After each ground water monitoring and sampling event, you will receive a packet containing the following:

- Updated gauging tables
- Updated ground water laboratory results tables
- Updated figures
- A copy of the laboratory ground water results and chain-of-custody documentation
- A dated "tab" for each new event

When you receive each packet, please remove and replace the former tables. Add the new dated tab and place the updated figures, laboratory reports, and chain-of-custody documentation behind this tab.

Please call me at (210) 680-3767 if you have any questions or comments.

Respectfully,

Theresa Nix

Theresa Nix
Project Manager

Enclosure

cc: Marc Oler, TTTI
J. Michael Hawthorne, KEI

tln\p:\tnmpl\610099\monitor\rgwbindr.doc

TEXAS-NEW MEXICO PIPE LINE COMPANY

EDWIN H. GRIPP
DISTRICT MANAGER

P.O. BOX 60028
SAN ANGELO, TX 76906
915/949-7019
915/944-2721 FAX

February 12, 1998

State of New Mexico
Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505

State of New Mexico
Oil Conservation Division
1000 West Broadway
Hobbs, NM 88240

RE: **ENV-ANNUAL MONITORING REPORT**
SPS-11
LEA COUNTY, NEW MEXICO
KEI JOB NO. 61099

Enclosed is the final annual report for SPS-11 located in Lea County, New Mexico.

Sincerely,

Ed Gripp /mod/

AER
Enc.

JAS MCO w/enc.

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

January 14, 1998

CERTIFIED MAIL
RETURN RECEIPT NO. Z-235-437-217

Mr. John A. Savoie
Texas-New Mexico Pipeline Company
P.O. Box 60028
San Angelo, Texas 76906

RE: GROUND WATER CONTAMINATION
SPS-11 SITE

Dear Mr. Savoie:

The New Mexico Oil Conservation Division (OCD) has completed a review of Texas-New Mexico Pipe Line Company's (TNMPLC) September 24, 1997 "TEXAS-NEW MEXICO PIPELINE COMPANY PIPELINE RELEASE SITE SPS-11, LEA COUNTY, NEW MEXICO, JOB NO. 610099" and September 24, 1997 "SUBSURFACE INVESTIGATION REPORT, TEXAS-NEW MEXICO PIPE LINE COMPANY, SPS-11, LEA COUNTY, NEW MEXICO".

The investigation actions conducted to date are satisfactory. However, a review of the above referenced documents shows that the investigation of the extent of ground water contamination has not been completed. Therefore, the OCD requires that TNMPLC submit a work plan for completing the definition of the extent of ground water contamination. Please submit the work plan to the OCD Santa Fe Office by March 13, 1998 with a copy provided to the OCD Hobbs District Office.

If you have any questions, please contact me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrogeologist
Environmental Bureau

xc: Wayne Price, OCD Hobbs District Office
Robert Gallegos, NMED Drinking Water and Community Services Bureau
Robert Garrett, NMED Hobbs Office
David Deardorff, New Mexico State Land Office

Z 235 437 217

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PS Form **3800**, April 1995

k·e·i
5309 Wurzbach, Suite 100
San Antonio, Texas 78238
(210) 680-3767
(210) 680-3763 FAX

September 24, 1997

Mr. Roger Anderson
STATE OF NEW MEXICO
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Re: Texas-New Mexico Pipe Line Company
Pipe Line Release Site SPS-11
Lea County, New Mexico
Job No. 610099

Dear Mr. Anderson:

Enclosed is a final copy of the Subsurface Investigation Report for the referenced site dated September 24, 1997. Mr. Tony Savoie of Texas – New Mexico Pipeline Co. requested that we send this report to you to satisfy the requirements of your letter concerning the subject site.

We are currently awaiting receipt of authorization from NMED to begin operation of the remediation system.

If you have any questions please contact me at (210) 680-3767.

Respectfully,

J. Michael Hawthorne, P.G., REM
Senior Geologist

cc: TNMPL, Tony Savoie
OCD Hobbs District Office, Wayne Price

tnmpl\610099\ccvrltr.doc

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

July 30, 1997

CERTIFIED MAIL
RETURN RECEIPT NO. P-410-431-201

Mr. John A. Savoie
Texas-New Mexico Pipeline Company
P.O. Box 60028
San Angelo, Texas 76906

RE: GROUND WATER CONTAMINATION
SPS-11 SITE

Dear Mr. Savoie:

A review of the OCD's file on this site shows that, pursuant to condition 5 of the OCD's January 22, 1997 discharge plan approval, a soil and ground water investigation work plan was to have been submitted to the OCD by March 28, 1997. Since TNMPLC has already been conducting additional investigations at the site outside of a work plan, the OCD requires that TNMPLC submit a report on these investigations to the OCD by September 26, 1997. The report will contain:

1. A description of all activities which occurred and the procedures used during the investigation including conclusions and recommendations.

2. A site map showing the locations of all new soil borings and monitor wells in relation to other pertinent site features.

3. A summary of all laboratory analytic results of soil and water quality sampling including copies of the laboratory analyses and associated quality assurance/quality control data.

4. A water table elevation map using the water table elevation of the ground water in all site monitor wells.

5. A geologic log and well completion diagram for each monitor well.

6. Any other information obtained which is pertinent to the investigation of the extent of contamination.

In addition, enclosed you will find copies of the New Mexico Oil Conservation Division's (OCD) laboratory analyses of ground water samples from monitor wells at Texas-New Mexico Pipeline Company's (TNMPLC) SPS-11 ground water remediation site that the OCD split with TNMPLC on May 1, 1997.

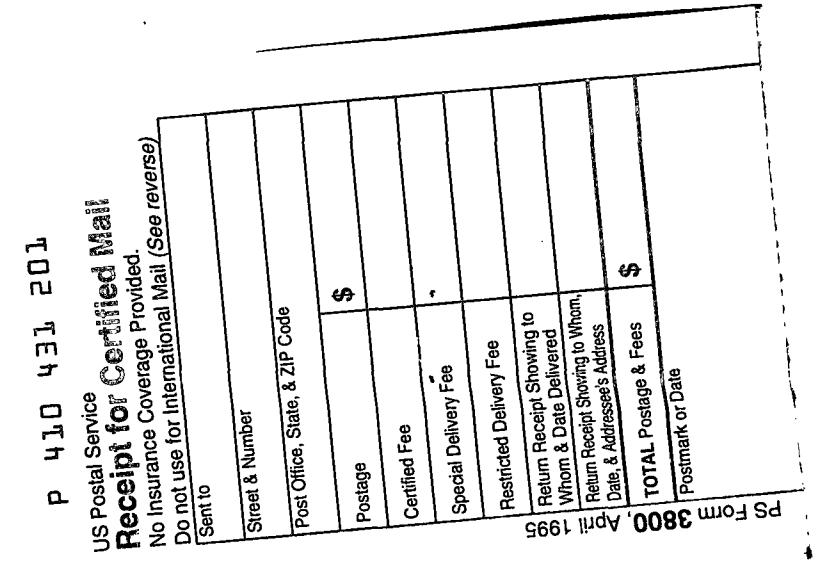
If you have any questions, please contact me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrogeologist
Environmental Bureau

enclosure

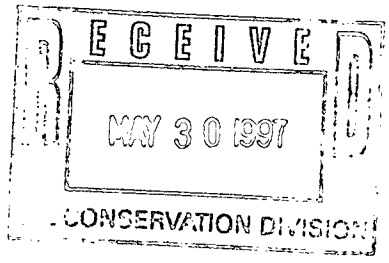
xc: Chris Williams, OCD Hobbs District Supervisor
Wayne Price, OCD Hobbs District Office
Robert Gallegos, NMED Drinking Water and Community Services Bureau
Robert Garrett, NMED Hobbs Office
David Deardorff, New Mexico State Land Office



American Environmental Network, Inc.

AEN I.D. 705315

May 28, 1997



NM OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NM 87505

Project Name TEX-MEX SPS-11
Project Number (none)

Attention: BILL OLSON

On 5/2/97 American Environmental Network (NM), Inc. (ADHS License No. AZ0015), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

EPA method 8020 was performed by American Environmental Network (NM) Inc., Albuquerque, NM.

EPA method 8310 was performed by American Environmental Network (FL) Inc., 11 East Olive Road, Pensacola, FL.

All other analyses were performed by American Environmental Network (AZ) Inc., 9830 S. 51st Street, Suite B-113, Phoenix, AZ.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: mt

2709-D Pan American Freeway, NE • Albuquerque, NM 87107 • (505) 344-3777 • Fax (602) 344-4413

American Environmental Network Inc

CLIENT	: NM OIL CONSERVATION DIVISION	AEN I.D.	: 705315
PROJECT #	: (none)	DATE RECEIVED	: 5/2/97
PROJECT NAME	: TEX-MEX SPS-11	REPORT DATE	: 5/28/97

AEN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	(MW-12) 9705011315	AQ	5/1/97
02	(MW-13) 9705011335	AQ	5/1/97
03	(MW-16) 9705011350	AQ	5/1/97
04	(MW-15) 9705011400	AQ	5/1/97
05	(MW-14) 9705011435	AQ	5/1/97
06	(MW-9) 9705011440	AQ	5/1/97
07	(MW-1) 9705011515	AQ	5/1/97
08	(MW-11) 9705011550	AQ	5/1/97
09	(MW-10) 9705011605	AQ	5/1/97

American Environmental Network Inc

CLIENT : AMERICAN ENV. NETWORK OF NM, INC.
PROJECT # : 705315
PROJECT NAME : N.M.-OCD

ATI I.D. : 705065

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	705315-06	AQUEOUS	05/01/97
02	705315-07	AQUEOUS	05/01/97

----- TOTALS -----

MATRIX	# SAMPLES
AQUEOUS	2

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

American Environmental Network Inc

GENERAL CHEMISTRY RESULTS

ATI I.D. : 705065

CLIENT : AMERICAN ENV. NETWORK OF NM, INC.
PROJECT # : 705315
PROJECT NAME : N.M.-OCD

PARAMETER	UNITS	01	02
CARBONATE (CACO3)	MG/L	<1	<1
BICARBONATE (CACO3)	MG/L	649	460
HYDROXIDE (CACO3)	MG/L	<1	<1
TOTAL ALKALINITY (AS CACO3)	MG/L	649	460
BROMIDE (EPA 300.0)	MG/L	0.7	0.7
CHLORIDE (EPA 325.2)	MG/L	32	30
CONDUCTIVITY, (UMHOS/CM)		1160	853
FLUORIDE (EPA 340.2)	MG/L	0.60	0.67
PH (EPA 150.1)	UNITS	7.1	7.1
SULFATE (EPA 375.2)	MG/L	9	8
T. DISSOLVED SOLIDS (160.1)	MG/L	780	580

American Environmental Network Inc

GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT : AMERICAN ENV. NETWORK OF NM, INC.
PROJECT # : 705315
PROJECT NAME : N.M.-OCD ATI I.D. : 705065

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
CARBONATE	MG/L	70506302	<1	<1	NA	NA	NA	NA
BICARBONATE	MG/L		134	132	2	NA	NA	NA
HYDROXIDE	MG/L		<1	<1	NA	NA	NA	NA
TOTAL ALKALINITY	MG/L		134	132	2	NA	NA	NA
CARBONATE	MG/L	70506410	<1	<1	NA	NA	NA	NA
BICARBONATE	MG/L		400	403	0.7	NA	NA	NA
HYDROXIDE	MG/L		<1	<1	NA	NA	NA	NA
TOTAL ALKALINITY	MG/L		400	403	0.7	NA	NA	NA
BROMIDE	MG/L	70506301	20	20	0	31	10	110
BROMIDE	MG/L	70506901	<0.3	<0.3	NA	1.0	1.0	100
CHLORIDE	MG/L	70506301	10000	10000	0	20000	10000	100
CONDUCTIVITY(UMHOS/CM)		70505501	462	466	0.9	NA	NA	NA
FLUORIDE	MG/L	70506301	0.12	0.11	9	0.48	0.50	72
PH	UNITS	70504401	8.6	8.6	0	NA	NA	NA
PH	UNITS	70506502	7.1	7.2	1	NA	NA	NA
SULFATE	MG/L	70504401	250	250	0	450	200	100
TOTAL DISSOLVED SOLIDS	MG/L	70599905	640	630	2	NA	NA	NA

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

American Environmental Network Inc

METALS RESULTS

ATI I.D. : 705065

CLIENT : AMERICAN ENV. NETWORK OF NM, INC.
PROJECT # : 705315
PROJECT NAME : N.M.-OCD

PARAMETER	UNITS	01	02
SILVER (EPA 200.7/6010)	MG/L	<0.050	<0.050
ALUMINUM (EPA 200.7/6010)	MG/L	0.41	1.74
ARSENIC (EPA 206.2/7060)	MG/L	0.042	0.068
BORON (EPA 200.7/6010)	MG/L	0.2	0.2
BARIUM (EPA 200.7/6010)	MG/L	0.721	1.14
BERYLLIUM (EPA 200.7/6010)	MG/L	<0.004	<0.004
CALCIUM (EPA 200.7/6010)	MG/L	168	128
CADMIUM (EPA 213.2/7131)	MG/L	<0.0005	<0.0005
COBALT (EPA 200.7/6010)	MG/L	<0.010	<0.010
CHROMIUM (EPA 200.7/6010)	MG/L	<0.010	<0.010
COPPER (EPA 200.7/6010)	MG/L	<0.010	<0.010
IRON (EPA 200.7/6010)	MG/L	9.66	3.92
POTASSIUM (EPA 200.7/6010)	MG/L	2.6	2.1
MAGNESIUM (EPA 200.7/6010)	MG/L	59.9	30.8
MANGANESE (EPA 200.7/6010)	MG/L	0.592	0.333
MOLYBDENUM (EPA 200.7/6010)	MG/L	<0.02	<0.02
SODIUM (EPA 200.7/6010)	MG/L	36.2	32.0
NICKEL (EPA 200.7/6010)	MG/L	<0.020	<0.020
LEAD (EPA 239.2/7421)	MG/L	<0.002	<0.002
ANTIMONY (EPA 200.7/6010)	MG/L	<0.06	<0.06
SELENIUM (EPA 270.2/7740)	MG/L	<0.005	<0.005
SILICON (EPA 200.7/6010)	MG/L	23.7	22.6
THALLIUM (EPA 279.2/7841)	MG/L	<0.005	<0.005
VANADIUM (EPA 200.7/6010)	MG/L	<0.020	<0.020
ZINC (EPA 200.7/6010)	MG/L	<0.050	<0.050

American Environmental Network Inc

METALS - QUALITY CONTROL

CLIENT : AMERICAN ENV. NETWORK OF NM, INC.
PROJECT # : 705315
PROJECT NAME : N.M.-OCD ATI I.D. : 705065

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
SILVER	MG/L	70508901	<0.010	<0.010	NA	0.466	0.500	93
ALUMINUM	MG/L	70599910	0.33	0.33	0	1.35	1.00	102
ARSENIC	MG/L	70510501	<0.003	0.003	NA	0.058	0.050	116
BORON	MG/L	70508901	0.5	0.4	22	1.4	1.0	90
BARIUM	MG/L	70599910	0.093	0.095	2	1.03	1.00	94
BERYLLIUM	MG/L	70508901	<0.004	<0.004	NA	0.493	0.500	99
CALCIUM	MG/L	70510502	60.4	59.1	2	104	50.0	87
CADMIUM	MG/L	70510501	<0.0005	<0.0005	NA	0.0050	0.0050	100
COBALT	MG/L	70599910	<0.010	<0.010	NA	0.924	1.00	92
CHROMIUM	MG/L	70508901	<0.010	<0.010	NA	0.976	1.00	98
COPPER	MG/L	70508901	<0.010	<0.010	NA	0.500	0.500	100
IRON	MG/L	70599910	<0.050	<0.050	NA	0.998	1.00	100
POTASSIUM	MG/L	70510502	15.8	15.7	0.6	68.6	50.0	106
MAGNESIUM	MG/L	70510502	19.7	19.4	2	43.2	25.0	94
MANGANESE	MG/L	70508901	<0.010	<0.010	NA	0.968	1.00	97
MOLYBDENUM	MG/L	70508901	<0.02	<0.02	NA	1.02	1.00	102
SODIUM	MG/L	70510502	343	342	0.3	624	250	112
NICKEL	MG/L	70508901	<0.020	<0.020	NA	0.951	1.00	95
LEAD	MG/L	70510501	<0.002	<0.002	NA	0.052	0.050	104
ANTIMONY	MG/L	70599910	<0.06	<0.06	NA	1.03	1.00	103
SELENIUM	MG/L	70510501	<0.005	<0.005	NA	0.027*W	0.050	54*W
SILICON	MG/L	70599909	10.4	10.2	2	19.6	10.0	92
THALLIUM	MG/L	70599901	<0.005	<0.005	NA	0.023*W	0.050	46*W
VANADIUM	MG/L	70599910	<0.020	<0.020	NA	0.984	1.00	98
ZINC	MG/L	70508901	<0.050	<0.050	NA	0.485	0.500	97

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

* Result out of limits due to sample matrix interference

American Environmental Network Inc

DATE: 05-20-97

ION BALANCE

AEN ACCESSION NUMBER: 70506501
SAMPLE IDENTIFICATION: 705315-06
CLIENT: AMERICAN ENV. NETWORK OF NM., INC.

ANIONS	RESULT MG/L	FACTOR ME/L	TOTAL	
ALKALINITY (AS $CaCO_3$)	649.000	0.02000	12.98000	
CHLORIDE	32.000	0.02821	0.90272	
FLUORIDE	0.600	0.05264	0.03158	
NITRATE AS N (NO_3(NO_3-N X 4.43))	NA	0.01613	0.00000	
SiO_3 (SILICON X 2.71)	NA	0.02629	0.00000	
SULFATE	9.000	0.02082	0.18738	
		TOTAL ANIONS		14.10168
CATIONS	RESULT	FACTOR	TOTAL	
CALCIUM	168.000	0.04990	8.3832	
POTASSIUM	2.600	0.02558	0.06651	
MAGNESIUM	59.900	0.08229	4.92917	
SODIUM	36.200	0.04350	1.57470	
		TOTAL CATIONS		14.95358
		%RPD (<10%)*		-5.86
TOTAL ANIONS/CATIONS	(CALCULATED)	697.700		
TOTAL DISSOLVED SOLIDS	(ANALYZED)	780	%RPD (<15%)*	-11.14
ELECTRICAL COND.		1160	TDS/EC RATIO (0.65+/-0.10)	0.67

* If either Total Cations or Total Anions <10, then the %RPD Limit is not applicable.

American Environmental Network, Inc.

DATE: 05-20-97

ION BALANCE

AEN ACCESSION NUMBER: 70506502
SAMPLE IDENTIFICATION: 705315-07
CLIENT: AMERICAN ENV. NETWORK OF NM., INC.

ANIONS	RESULT MG/L	FACTOR ME/L	TOTAL	
ALKALINITY (AS $CaCO_3$)	460.000	0.02000	9.20000	
CHLORIDE	30.000	0.02821	0.84630	
FLUORIDE	0.670	0.05264	0.03527	
NITRATE AS N (NO_3(NO_3-N X 4.43)	NA	0.01613	0.00000	
SiO_3 (SILICON X 2.71)	NA	0.02629	0.00000	
SULFATE	8.000	0.02082	0.16656	
		TOTAL ANIONS		10.24813

CATIONS	RESULT	FACTOR	TOTAL	
CALCIUM	128.000	0.04990	6.3872	
POTASSIUM	2.100	0.02558	0.05372	
MAGNESIUM	30.800	0.08229	2.53453	
SODIUM	32.000	0.04350	1.39200	
		TOTAL CATIONS		10.36745
		%RPD (<10%)*		-1.16
TOTAL ANIONS/CATIONS	(CALCULATED)	507.570		
TOTAL DISSOLVED SOLIDS	(ANALYZED)	580	%RPD (<15%)*	-13.32
ELECTRICAL COND.		853	TDS/EC RATIO (0.65+/-0.10)	0.68

* If either Total Cations or Total Anions <10, then the %RPD Limit is not applicable.

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : NM OIL CONSERVATION DIVISION AEN I.D.: 705315
PROJECT # : (none)
PROJECT NAME : TEX-MEX SPS-11

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	(MW-12) 9705011315	AQUEOUS	5/1/97	NA	5/6/97	1
02	(MW-13) 9705011335	AQUEOUS	5/1/97	NA	5/6/97	1
03	(MW-16) 9705011350	AQUEOUS	5/1/97	NA	5/6/97	1

PARAMETER	DET. LIMIT	UNITS	01	02	03
BENZENE	0.5	**UG/L**	**150**	< 0.5	**69**
TOLUENE	0.5	**UG/L**	**110**	< 0.5	**82**
ETHYLBENZENE	0.5	**UG/L**	**110**	< 0.5	**27**
TOTAL XYLENES	0.5	**UG/L**	**120**	< 0.5	**33**
SURROGATE:					
BROMOFLUOROBENZENE (%)			104	109	117
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : NM OIL CONSERVATION DIVISION AEN I.D.: 705315
PROJECT # : (none)
PROJECT NAME : TEX-MEX SPS-11

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	(MW-15) 9705011400	AQUEOUS	5/1/97	NA	5/6/97	1
05	(MW-14) 9705011435	AQUEOUS	5/1/97	NA	5/7/97	10
06	(MW-9) 9705011440	AQUEOUS	5/1/97	NA	5/7/97	10

PARAMETER	DET. LIMIT	UNITS	04	05	06
BENZENE	0.5	**UG/L**	**0.5**	**8300 D(50)**	**3600**
TOLUENE	0.5	**UG/L**	**0.5**	**1500**	**10**
ETHYLBENZENE	0.5	**UG/L**	< 0.5	**2000**	**1400**
TOTAL XYLENES	0.5	**UG/L**	**0.5**	**2000**	**960**
SURROGATE:					
BROMOFLUOROBENZENE (%)			115	110	110
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
D(50) SAMPLE DILUTED 50X, ANALYZED 5/7/97.

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : NM OIL CONSERVATION DIVISION AEN I.D.: 705315
PROJECT # : (none)
PROJECT NAME : TEX-MEX SPS-11

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	(MW-1) 9705011515	AQUEOUS	5/1/97	NA	5/7/97	10
08	(MW-11) 9705011550	AQUEOUS	5/1/97	NA	5/7/97	10
09	(MW-10) 9705011605	AQUEOUS	5/1/97	NA	5/7/97	1

PARAMETER	DET. LIMIT	UNITS	07	08	09
BENZENE	0.5	**UG/L**	**5300 D(25)**	**1200**	**140**
TOLUENE	0.5	**UG/L**	**480**	**6.4**	**240**
ETHYLBENZENE	0.5	**UG/L**	**1000**	**25**	**190**
TOTAL XYLENES	0.5	**UG/L**	**640**	**24**	**190**
SURROGATE:					
BROMOFLUOROBENZENE (%)			107	116	107
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
D(25) SAMPLE DILUTED 25X, ANALYZED 5/7/97.

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS
REAGENT BLANK

TEST	: BTEX, (EPA 8020)	AEN I.D.	: 705315
BLANK I. D.	: 050697	DATE EXRACTED	: NA
CLIENT	: NM OIL CONSERVATION DIVISION	DATE ANALYZED	: 5/6/97
PROJECT #	: (none)	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: TEX-MEX SPS-11		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		119
SURROGATE LIMITS:	(80 - 120)	

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS
REAGENT BLANK

TEST	: BTEX, (EPA 8020)	AEN I.D.	: 705315
BLANK I. D.	: 050797	DATE EXRACTED	: NA
CLIENT	: NM OIL CONSERVATION DIVISION	DATE ANALYZED	: 5/7/97
PROJECT #	: (none)	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: TEX-MEX SPS-11		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		110
SURROGATE LIMITS:	(80 - 120)	

CHEMIST NOTES:
N/A

GAS CHROMOTOGRAPHY QUALITY CONTROL
MSMSD

TEST	: BTEX, (EPA 8020)		
MSMSD #	: 705315-02	AEN I.D.	: 705315
CLIENT	: NM OIL CONSERVATION DIVISION	DATE EXRACTED	: NA
PROJECT #	: (none)	DATE ANALYZED	: 5/7/97
PROJECT NAME	: TEX-MEX SPS-11	SAMPLE MATRIX	: AQUEOUS
		UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	10.0	9.6	96	10.7	107	11	(80 - 120)	20
TOLUENE	<0.5	10.0	9.6	96	10.4	104	8	(80 - 120)	20
ETHYLBENZENE	<0.5	10.0	10.1	101	11.0	110	9	(80 - 120)	20
TOTAL XYLENES	<0.5	30.0	30.3	101	33.2	111	9	(80 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

American Environmental Network, Inc.

"FINAL REPORT FORMAT - SINGLE"

Accession:	705045
Client:	AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
Project Number:	705315
Project Name:	N.M. OIL CONS. DIV.
Project Location:	TEX-MEX SPS-11
Test:	POLYNUCLEAR AROMATICS BY 8310
Analysis Method:	8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Extraction Method:	3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Matrix:	WATER
QC Level:	II

Lab Id:	001		Sample Date/Time:	01-MAY-97 1440
Client Sample Id:	705315-06		Received Date:	06-MAY-97
Batch: PAW094			Extraction Date:	07-MAY-97
Blank: B	Dry Weight %:	N/A	Analysis Date:	13-MAY-97

Parameter:	Units:	Results:	Rpt Lmts:	Q:
ACENAPHTHENE	UG/L	ND	1	
ACENAPHTHYLENE	UG/L	ND	1	
ANTHRACENE	UG/L	ND	1	
BENZO(a)ANTHRACENE	UG/L	ND	1	
BENZO(a)PYRENE	UG/L	ND	1	
BENZO(b)FLUORANTHENE	UG/L	ND	1	
BENZO(g,h,i)PERYLENE	UG/L	ND	1	
BENZO(k)FLUORANTHENE	UG/L	ND	1	
CHRYSENE	UG/L	ND	1	
DIBENZO(a,h)ANTHRACENE	UG/L	ND	1	
FLUORANTHENE	UG/L	ND	1	
FLUORENE	UG/L	2	1	
INDENO(1,2,3-cd)PYRENE	UG/L	ND	1	
NAPHTHALENE	UG/L	83	1	
PHENANTHRENE	UG/L	ND	1	
PYRENE	UG/L	ND	1	
1-METHYLNAPHTHALENE	UG/L	59	1	
2-METHYLNAPHTHALENE	UG/L	76	1	
2-CHLOROANTHRACENE	%REC/SURR	100	28-138	
ANALYST	INITIALS	JBT		

Comments:
SAMPLE WAS NOT DILUTED AND RE-ANALYZED BECAUSE COMPOUND IS NOT PART OF METHOD LIST.

American Environmental Network, Inc.

"FINAL REPORT FORMAT - SINGLE"

Accession:	705045
Client:	AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
Project Number:	705315
Project Name:	N.M. OIL CONS. DIV.
Project Location:	TEX-MEX SPS-11
Test:	POLYNUCLEAR AROMATICS BY 8310
Analysis Method:	8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Extraction Method:	3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Matrix:	WATER
QC Level:	II

Lab Id:	002	Sample Date/Time:	01-MAY-97 1515
Client Sample Id:	705315-07	Received Date:	06-MAY-97
Batch: PAW094		Extraction Date:	07-MAY-97
Blank: B	Dry Weight %: N/A	Analysis Date:	13-MAY-97

Parameter:	Units:	Results:	Rpt Lmts:	Q:
ACENAPHTHENE	UG/L	ND	1	
ACENAPHTHYLENE	UG/L	ND	1	
ANTHRACENE	UG/L	ND	1	
BENZO(a)ANTHRACENE	UG/L	ND	1	
BENZO(a)PYRENE	UG/L	ND	1	
BENZO(b)FLUORANTHENE	UG/L	ND	1	
BENZO(g,h,i)PERYLENE	UG/L	ND	1	
BENZO(k)FLUORANTHENE	UG/L	ND	1	
CHRYSENE	UG/L	ND	1	
DIBENZO(a,h)ANTHRACENE	UG/L	ND	1	
FLUORANTHENE	UG/L	ND	1	
FLUORENE	UG/L	ND	1	
INDENO(1,2,3-cd)PYRENE	UG/L	ND	1	
NAPHTHALENE	UG/L	41	1	
PHENANTHRENE	UG/L	1	1	
PYRENE	UG/L	2	1	
1-METHYLNAPHTHALENE	UG/L	44	1	
2-METHYLNAPHTHALENE	UG/L	36	1	
2-CHLOROANTHRACENE	%REC/SURR	97	28-138	
ANALYST	INITIALS	JBT		

Comments:

American Environmental Network, Inc.

"Method Report Summary"

Accession Number: 705045
Client: AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
Project Number: 705315
Project Name: N.M. OIL CONS. DIV.
Project Location: TEX-MEX SPS-11
Test: POLYNUCLEAR AROMATICS BY 8310

Client Sample Id:	Parameter:	Unit:	Result:
705315-06	FLUORENE	UG/L	2
	NAPHTHALENE	UG/L	83
	1-METHYLNAPHTHALENE	UG/L	59
	2-METHYLNAPHTHALENE	UG/L	76
705315-07	NAPHTHALENE	UG/L	41
	PHENANTHRENE	UG/L	1
	PYRENE	UG/L	2
	1-METHYLNAPHTHALENE	UG/L	44
	2-METHYLNAPHTHALENE	UG/L	36

"QC Report"

Title: Water Blank
Batch: PAW094
Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Extraction Method: 3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.

Blank Id: B Date Analyzed: 13-MAY-97 Date Extracted: 07-MAY-97

Parameters:	Units:	Results:	Reporting Limits:
ACENAPHTHENE	UG/L	ND	1
ACENAPHTHYLENE	UG/L	ND	1
ANTHRACENE	UG/L	ND	1
BENZO(a)ANTHRACENE	UG/L	ND	1
BENZO(a)PYRENE	UG/L	ND	1
BENZO(b)FLUORANTHENE	UG/L	ND	1
BENZO(g,h,i)PERYLENE	UG/L	ND	1
BENZO(k)FLUORANTHENE	UG/L	ND	1
CHRYSENE	UG/L	ND	1
DIBENZO(a,h)ANTHRACENE	UG/L	ND	1
FLUORANTHENE	UG/L	ND	1
FLUORENE	UG/L	ND	1
INDENO(1,2,3-cd)PYRENE	UG/L	ND	1
NAPHTHALENE	UG/L	ND	1
PHENANTHRENE	UG/L	ND	1
PYRENE	UG/L	ND	1
1-METHYLNAPHTHALENE	UG/L	ND	1
2-METHYLNAPHTHALENE	UG/L	ND	1
2-CHLOROANTHRACENE	%REC/SURR	97	28-138
ANALYST	INITIALS	JBT	

Comments:

American Environmental Network, Inc.

"QC Report"

Title: Water Reagent
Batch: PAW094
Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Extraction Method: 3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.

RS Date Analyzed: 08-MAY-97 RS Date Extracted: 06-MAY-97
RSD Date Analyzed: 08-MAY-97 RSD Date Extracted: 06-MAY-97

Parameters:	Spike Added	Sample Conc	RS Conc	RS %Rec	RSD Conc	RSD %Rec	RPD	RPD Lmts	Rec Lmts
ACENAPHTHYLENE	10.0	<1	7.5	75	7.7	77	3	35	45-127
BENZO(k)FLUORANTHENE	10.0	<1	7.3	73	7.5	75	3	23	68-131
CHRYSENE	10.0	<1	9.7	97	9.9	99	2	24	69-131
PHENANTHRENE	10.0	<1	9.8	98	11.0	110	12	26	63-124
PYRENE	10.0	<1	8.7	87	9.1	91	4	25	61-126
Surrogates:									
2-CHLOROANTHRACENE				83		88			28-138

Comments:

Notes:
N/S = NOT SUBMITTED N/A = NOT APPLICABLE D = DILUTED OUT
UG/L = PARTS PER BILLION. < = LESS THAN REPORTING LIMIT.
* = VALUES OUTSIDE OF QUALITY CONTROL LIMITS.
SOURCES FOR CONTROL LIMITS ARE INTERNAL LABORATORY QUALITY ASSURANCE PROGRAM AND REFERENCED METHOD.

American Environmental Network, Inc.

"QC Report"

Title: Water Matrix
Batch: PAW094
Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Extraction Method: 3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.

Dry Weight %: N/A
Sample Spiked: 705045-2

MS Date Analyzed: 13-MAY-97
MSD Date Analyzed: 13-MAY-97

MS Date Extracted: 06-MAY-97
MSD Date Extracted: 06-MAY-97

Parameters:	Spike Added	Sample Conc	MS Conc	MS %Rec	MSD Conc	MSD %Rec	RPD	RPD Lmts	Rec Lmts
ACENAPHTHYLENE	10.0	<1	2.3	23	3.0	30	26	51	18-146
BENZO(k)FLUORANTHENE	10.0	<1	9.2	92	8.7	87	6	40	26-137
CHRYSENE	10.0	<1	11.8	118	11.7	117	1	69	16-156
PHENANTHRENE	10.0	1.4	9.4	80	9.1	77	4	36	30-145
PYRENE	10.0	1.9	9.6	77	8.7	68	12	41	39-137
Surrogates:									
2-CHLOROANTHRACENE				113		104			28-138

Comments:

Notes:
N/S = NOT SUBMITTED N/A = NOT APPLICABLE D = DILUTED OUT
UG/L = PARTS PER BILLION. < = LESS THAN REPORTING LIMIT.
* = VALUES OUTSIDE OF QUALITY CONTROL LIMITS.
SOURCES FOR CONTROL LIMITS ARE INTERNAL LABORATORY QUALITY ASSURANCE PROGRAM AND REFERENCED METHOD.

American Environmental Network, Inc.

Common notation for Organic reporting

N/S = NOT SUBMITTED
N/A = NOT APPLICABLE
D = DILUTED OUT
UG = MICROGRAMS
UG/L = PARTS PER BILLION.
UG/KG = PARTS PER BILLION.
MG/M3 = MILLIGRAM PER CUBIC METER.
PPMV = PART PER MILLION BY VOLUME.
MG/KG = PARTS PER MILLION.
MG/L = PARTS PER MILLION.
< = LESS THAN DETECTION LIMIT.
* = VALUES OUTSIDE OF QUALITY CONTROL LIMITS
Y = IMPROPER PRESERVATION, NO PRESERVATIVE PRESENT IN SAMPLE UPON RECEIPT.

SOURCES FOR CONTROL LIMITS ARE INTERNAL LABORATORY QUALITY ASSURANCE PROGRAM AND REFERENCED METHOD.

ORGANIC SOILS ARE REPORTED ON A DRYWEIGHT BASIS.

ND = NOT DETECTED ABOVE REPORTING LIMIT.

RPT LIMIT = REPORTING LIMITS BASED ON METHOD DETECTION LIMIT STUDIES.

RPD = RELATIVE PERCENT DIFFERENCE (OR DEVIATION)

AEN/GC/FID
AEN GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH FLAME IONIZATION DETECTOR (FID).

AEN/GC/FIX
AEN GAS CHROMATOGRAPHIC METHOD FOR ANALYSIS OF FIXED GASES EMPLOYING DIRECT INJECTION ON COLUMN WITH THERMAL CONDUCTIVITY DETECTOR (TCD) AND FLAME IONIZATION DETECTOR (FID).

AEN/GC/FPD
AEN GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH FLAME PHOTOMETRIC DETECTOR (FPD) IN SULFUR-SPECIFIC MODE.

AEN/GC/PID
AEN GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH PHOTOIONIZATION DETECTOR (PID).

AEN/GC/TCD
AEN GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH THERMAL CONDUCTIVITY DETECTOR (TCD).

SW-846 METHOD 9020
PARTICULATE MATTER IS REMOVED BY ALLOWING PARTICULATES TO SETTLE IN THE SAMPLE CONTAINER AND DECANTING THE SUPERNATANT LIQUID. EXCESSIVE PARTICULATES ARE REMOVED BY FILTRATION OF THE SUPERNATANT LIQUID.

AEN-PN USES THE MOST CURRENT PROMULGATED METHODS CONTAINED IN THE REFERENCE MANUALS.

SW = STEVE WILHITE
PL = PAUL LESCHENSKY
RW = ROBERT WOLFE
KS = KENDALL SMITH
KL = KERRY LEMONT
RP = ROB PEREZ
JBT = JENNIFER TORRANCE
LP = LAVERNE PETERSON
PLD = PAULA DOUGHTY

PLEASE FILL THIS FORM IN COMPLETELY. SHADED AREAS ARE FOR LAB USE ONLY.

American Environmental Network (NM), Inc.
Albuquerque • Phoenix • Pensacola • Portland • Pleasant Hills • Columbia

CHAIN OF COUSTODY

DATE: 05-02-97 PAGE: 1 OF 1~~2~~ (BP 05-02-97)

AEN LAB I.D. 705315

PROJECT MANAGER: Bill Olson
COMPANY: NM Oil Conservation Division
ADDRESS: 2040 S. Pacheco
Santa Fe, NM 87505
PHONE: (505) 827-7154
FAX: (505) 827-8177
BILL TO: Same
COMPANY:
ADDRESS:

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.
MW-12 9705011315	5/1/97	1315	water	-01
MW-13 9705011335	5/1/97	1335	"	-02
MW-16 9705011350	5/1/97	1350	"	-03
MW-15 9705011400	5/1/97	1400	"	-04
MW-14 9705011435	5/1/97	1435	"	-05
MW-9 9705011440	5/1/97	1440	"	-06
MW-1 9705011515	5/1/97	1515	"	-07
MW-11 9705011550	5/1/97	1550	"	-08
MW-10 9705011605	5/1/97	1605	"	-09

ANALYSIS REQUEST

SAMPLE ID	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct/Inject	(M8015) Gas/Purge & Trap	Gasoline/BTEX & MTBE (M8015/8020)	BTXE/MTBE (8020)	BTEX & Chlorinated Aromatics (602/8020)	BTEX/MTBE/EDC & EDB (8020/8010/Short)	Chlorinated Hydrocarbons (601/8010)	504 EDB ☐ / DBCP ☐	Polynuclear Aromatics (610/8310)	Volatile Organics (624/8240) GC/MS	Volatile Organics (8260) GC/MS	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)	General Chemistry: Item #25	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals: ICAP 6010	Hg by AA	NUMBER OF CONTAINERS
MW-12						2																	2
MW-13						2																	2
MW-16						2																	2
MW-15						2																	2
MW-14						2																	2
MW-9						2	[illegible]			2						1					1		6
MW-1						2	[illegible]			2						1					1		6
MW-11						2																	2
MW-10						2																	2

PROJECT INFORMATION

PROJ. NO.:
PROJ. NAME: Tex-Mex SPS-11
P.O. NO.:
SHIPPED VIA:

SAMPLE RECEIPT

NO. CONTAINERS	26
CUSTODY SEALS	Y/N/NA
RECEIVED INTACT	yes
BLUE ICE/ICE	8°

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

From Field

RELINQUISHED BY: 1.
Signature: Will Olson Time: 1820
Printed Name: William Olson Date: 5/2/97
Company: NMOCD

RELINQUISHED BY: 2.
Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: 1.
Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: (LAB) 2.
Signature: [signature] Time: 1822
Printed Name: Brian Price Date: 05-02-97
American Environmental Network (NM), Inc.

American Environmental Network of Florida

PROJECT SAMPLE INSPECTION FORM

Lab Accession #: 705045 Date Received: 06-May-97

1.	Was there a Chain of Custody?	(Yes)	No*		8.	Were samples checked for preservative? *(Check pH of all H_2O requiring preservative except VOA vials that require zero headspace)*+	(Yes)	No* N/A
2.	Was Chain of Custody properly filled out and relinquished?	(Yes)	No*		9.	Is there sufficient volume for analysis requested?	(Yes)	No*
3.	Were samples received cold? (Criteria: 1° - 4°C: AEN-SOP 1055)	(Yes)	No*	N/A	10.	Were samples received within Holding Time? (REFER TO AEN-SOP 1040)	(Yes)	No*
4.	Were all samples properly labeled and identified?	(Yes)	No*		11.	Is Headspace visible > ¼" in diameter in VOA vials?* If any headspace is evident, comment in out-of-control section.	Yes*	No (N/A)
5.	Did samples require splitting? Req By: PM Client Other*	Yes*	(No)		12.	If sent, were matrix spike bottles returned?	Yes	No* (N/A)
6.	Were samples received in proper containers for analysis requested?	(Yes)	No*		13.	Was Project Manager notified of problems? (initials:_____)	Yes	No* (N/A)
7.	Were all sample containers received intact?	(Yes)	No*					

Airbill Number(s): 185 6689064 Shipped By: FEDEX

Cooler Number(s): #5 Shipping Charges: N/A

Cooler Weight(s): N/A Cooler Temp(s) (°C): 1°c - CCF3

(LIST THERMOMETER NUMBER(S) FOR VERIFICATION)

Out of Control Events and Inspection Comments:

(USE BACK OF PSIFFOR ADDITIONAL NOTES AND COMMENTS)

Inspected By: PJE Date: 5/6/97 Logged By: PJE Date: 5/6/97

\+ *Note all Out-of-Control and/or questionable events on Comment Section of this form.*

* *Note who requested the splitting of samples on the Comment Section of this form.*

\+ *All preservatives for the State of North Carolina, the State of New York, and other requested samples are to be recorded on the sheet provided to record pH results (AEN-SOP 938, section 2.2.9).*

* *According to EPA, ¼" of headspace is allowed in 40 ml vials requiring volatile analysis, however, AEN makes it policy to record any headspace as out-of-control (AEN-SOP 938, section 2.2.12).*

American Environmental Network
Albuquerque, New Mexico

Interlab Chain of Custody

DATE: 05-05-97 PAGE: 1 OF 1

NETWORK PROJECT MANAGER: KIMBERLY D. McNEILL

COMPANY: American Environmental Network
ADDRESS: 2709-D Pan American Freeway, NE
Albuquerque, NM 87107

705045

CLIENT PROJECT MANAGER:

Kim McNeill

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID
705315-06	05-01	14:40	AQ	1
1 -07	05-01	15:15	1	2

SAMPLE ID	Metals - TAL	Metals - PP List	Metals - RCRA	RCRA Metals by TCLP (1311)			TOX	TOC	Gen Chemistry			Oil and Grease	BOD	COD	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral Acid Compounds GC/MS (625/8270)	Volatile Organics GC/MS (624/8240)	Polynuclear Aromatics (610/8310)	8240 (TCLP 1311) ZHE	8270 (TCLP 1311)			TO-14	Gross Alpha/Beta				NUMBER OF CONTAINERS
705315-06																			X										1
1 -07																			X										2

PROJECT INFORMATION

PROJECT NUMBER: 705315
PROJECT NAME: Tex-Mex SPS-11
QC LEVEL: STD IV
QC REQUIRED: MS MSD BLANK
TAT: STANDARD RUSH!

SAMPLE RECEIPT

TOTAL NUMBER OF CONTAINERS:
CHAIN OF CUSTODY SEALS:
INTACT?:
RECEIVED GOOD COND./COLD:
LAB NUMBER:

DUE DATE: 05-16-97
RUSH SURCHARGE:
CLIENT DISCOUNT:
SPECIAL CERTIFICATION REQUIRED: ☐YES ☐NO

SAMPLES SENT TO:

SAN DIEGO	
Paragon	
RENTON	
PENSACOLA	X
PORTLAND	
PHOENIX	

RELINQUISHED BY: 1.
Signature: Time: 1700
Printed Name: Brian Price Date: 05-05-97
Albuquerque

RECEIVED BY: 1.
Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 2.
Signature: Time: 5/6/97
Printed Name: Date:
Company:

RECEIVED BY: (LAB) 2.
Signature: Time: 0830
Printed Name: Date:
R. ELSPERMAN 5/6/97
Company: AENL

American Environmental Network (NM), Inc.

Albuquerque • Phoenix • Pensacola • Portland • Pleasant Hills • Columbia

CHAIN OF CUSTODY

DATE: 05-02-97 PAGE: 1 OF 1

AEN LAB ID: [illegible]

PLEASE FILL THIS FORM IN COMPLETELY. SHADED AREAS ARE FOR LAB USE ONLY.

PROJECT MANAGER: Bill Olson

COMPANY: NM Oil Conservation Division

ADDRESS: 2040 S. Pacheco, Santa Fe, NM 87505

PHONE: (505) 827-7154

FAX: (505) 827-8177

BILL TO: Same

COMPANY:

ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct/Inject	(M8015) Gas/Purge & Trap	Gasoline/BTEX & MTBE (M8015/8020)	BTXE/MTBE (8020)	BTEX & Chlorinated Aromatics (602/8020)	BTEX/MTBE/EDC & EDB (8020/8010/Short)	Chlorinated Hydrocarbons (601/8010)	504 EDB ☐ / DBCP ☐	Polynuclear Aromatics (610/8310)	Volatile Organics (624/8240) GC/MS	Volatile Organics (8260) GC/MS	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)	General Chemistry: Item #25	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals: ICAP 6010 Hg by AA	NUMBER OF CONTAINERS
(MW-12) 9705011315	5/1/97	1315	water	-01						2																2
(MW-13) 9705011335	5/1/97	1335	"	-02						2																2
(MW-16) 9705011350	5/1/97	1350	"	-03						2																2
(MW-15) 9705011400	5/1/97	1400	"	-04						2																2
(MW-14) 9705011435	5/1/97	1435	"	-05						2																2
(MW-9) 9705011440	5/1/97	1440	"	-06						2				2						1					1	6
(MW-1) 9705011515	5/1/97	1515	"	-07						2				2						1					1	6
(MW-11) 9705011550	5/1/97	1550	"	-08						2																2
(MW-10) 9705011605	5/1/97	1605	"	-09						2																2

PROJECT INFORMATION

PROJ. NO.:

PROJ. NAME: Tex-Mex SPS-11

P.O. NO.:

SHIPPED VIA:

SAMPLE RECEIPT

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

From Field

RELINQUISHED BY: 1.

Signature: Will Olson Time: 1820

Printed Name: William Olson Date: 5/2/97

Company: NMOCD

RECEIVED BY: 1.

Signature: Time:

Printed Name: Date:

Company:

RELINQUISHED BY: 2.

Signature Time

Printed Name Date

Company:

RECEIVED BY (LAB): 2.

4/1/96 AEN Inc.: American Environmental Network (NM), Inc. • 2709-D Pan American Freeway, NE • Albuquerque, New Mexico 87107

DISTRIBUTION: White, Canary - AEN Pink - ORIGINATOR

American Environmental Network
Albuquerque, New Mexico

Interlab Chain of Custody

DATE: 05-05-97 PAGE: 1 OF 1

NETWORK PROJECT MANAGER: KIMBERLY D. McNEILL

COMPANY: American Environmental Network
ADDRESS: 2709-D Pan American Freeway, NE
Albuquerque, NM 87107

CLIENT PROJECT MANAGER:

Kim McNeill

SAMPLE ID	DATE	TIME	MATRIX	LAB ID
705315 -06	05-01-97	1440 1515	AQ	1
-07	5-1-97	1515	AQ	2

ANALYSIS REQUEST

Metals - TAL	Metals - PP List	Metals - RCRA	RCRA Metals by TCLP (1311)	Anion / cation	Metals Icap 6010	TOX	TOC	Gen Chemistry		Oil and Grease	BOD	COD	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral Acid Compounds GC/MS (625/8270)	Volatile Organics GC/MS (624/8240)	Polynuclear Aromatics (610/8310)	8240 (TCLP 1311) ZHE	8270 (TCLP 1311)			TO-14	Gross Alpha/Beta				NUMBER OF CONTAINERS
				X	X																						2

PROJECT INFORMATION

PROJECT NUMBER: 705315
PROJECT NAME: N.M. - OCD
QC LEVEL: STD IV
QC REQUIRED: MS MSD BLANK
TAT: STANDARD RUSH!

SAMPLE RECEIPT

TOTAL NUMBER OF CONTAINERS: 4
CHAIN OF CUSTODY SEALS: N/A
INTACT?: Y
RECEIVED GOOD COND./COLD: BLUE
LAB NUMBER: 705065

DUE DATE: 05-26-97
RUSH SURCHARGE: _____
CLIENT DISCOUNT: _____
SPECIAL CERTIFICATION REQUIRED: ☐YES ☐NO

SAMPLES SENT TO:

SAN DIEGO	
Paragon	
RENTON	
PENSACOLA	
PORTLAND	
PHOENIX	X

RELINQUISHED BY: 1.
Signature: [signature] Time: 1700
Printed Name: Brian Price Date: 05-05-97
Company: Albuquerque NM

RECEIVED BY: 1.
Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 2.
Signature: Time
Printed Name: Date
Company:

RECEIVED BY: (LAB) 2.
Signature: [signature] Time:
Printed Name: Heather Loescher Date: 5/5/97
Company:

American Environmental Network (NM), Inc.
Albuquerque • Phoenix • Pensacola • Portland • Pleasant Hills • Columbia

CHAIN OF CUSTODY

DATE: 05-02-97 PAGE: 1 OF 1 ~~2~~

AEN LAB I.D. [illegible]

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Bill Olson
COMPANY: NM Oil Conservation Division
ADDRESS: 2040 S. Pacheco
Santa Fe, NM 87505
PHONE: (505) 827-7154
FAX: (505) 827-8177
BILL TO: Same
COMPANY:
ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct/Inject	(M8015) Gas/Purge & Trap	Gasoline/BTEX & MTBE (M8015/8020)	BTXE/MTBE (8020)	BTEX & Chlorinated Aromatics (602/8020)	BTEX/MTBE/EDC & EDB (8020/8010/Short)	Chlorinated Hydrocarbons (601/8010)	504 EDB ☐ / DBCP ☐	Polynuclear Aromatics (610/8310)	Volatile Organics (624/8240) GC/MS	Volatile Organics (8260) GC/MS	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)	General Chemistry: Item #2	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals: ICAP 6010	Hg by AA	NUMBER OF CONTAINERS
MW-12 9705011315	5/1/97	1315	water	-01						2																	2
MW-13 9705011335	5/1/97	1335	"	-02						2																	2
MW-16 9705011350	5/1/97	1350	"	-03						2																	2
MW-15 9705011400	5/1/97	1400	"	-04						2																	2
MW-14 9705011435	5/1/97	1435	"	-05						2																	2
MW-9 9705011440	5/1/97	1440	"	-06						2	[illegible]	[illegible]		2						1					1		6
MW-1 9705011515	5/1/97	1515	"	-07						2	[illegible]	[illegible]		2						1					1		6
MW-11 9705011550	5/1/97	1550	"	-08						2																	2
MW-10 9705011605	5/1/97	1605	"	-09						2																	2

PROJECT INFORMATION

PROJ. NO.:
PROJ. NAME: Tex-Mex SPS-11
P.O. NO.:
SHIPPED VIA:

SAMPLE RECEIPT [illegible]

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

From Field

RELINQUISHED BY: 1.
Signature: Will Olson Time: 1820
Printed Name: William Olson Date: 5/2/97
Company: NMOCD

RECEIVED BY: 1.
Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 2.
Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY (LAB): 2.
[illegible]
American Environmental Network (NM), Inc.

4/1/96 AEN Inc.: American Environmental Network (NM), Inc. • 2709-D Pan American Freeway, NE • Albuquerque, New Mexico 87107

DISTRIBUTION: White, Canary - AEN Pink - ORIGINATOR

5309 Wurzbach, Suite 100
San Antonio, Texas 78238
(210) 680-3767
(210) 680-3763 FAX

April 7, 1997

Mr. Robert L. Garrett
STATE OF NEW MEXICO ENVIRONMENT DEPARTMENT
District IV
726 E. Michigan, Suite 165
Hobbs, New Mexico 88240

Re: Compliance Sampling
Texas-New Mexico Pipe Line Company
Work Plan SPS-11, Wells PW1 and PW2
Job No. 510099

Dear Mr. Garrett:

KEI plans to initiate start-up of the ground water recovery and treatment system at Texas-New Mexico Pipe Line Company (TNMPL) SPS 11 project site on April 9, 1997. Per our recent telephone conversations, KEI will perform a closed loop test of the system by pumping ground water from the recovery wells, through the treatment system, and into a plastic lined 480 barrel storage tank located on-site. We will allow the system to operate approximately four hours prior to collecting our samples. KEI personnel will collect water samples from the source (PW1 and PW2) and post treatment. Parameters to be sampled include all listed in Attachment 1 of your letter dated November 8, 1996, and the complete Secondary Group contained in your letter dated February 12, 1997. Radiological parameters and asbestos will not be required for testing by your department. The samples will be properly labeled and packed, and expressed mailed to Soil and Water and Air Testing Lab in Los Cruces, New Mexico. Following collection of the samples, the recovery pumps and the treatment system will be turned off until analytical results are received and evaluated.

We appreciate your assistance in this project and please contact me at (210) 680-3767 if you have any questions.

Respectfully,

Paul B. Hartnett, P.E.

Attachment

cc: Gene Bernhardt, SPS Plant Manager
Bill Olson, OCD
Wayne Price, OCD
Tony Savoie, TNMPL
Edwin Gripp, TNMPL
Mark Oler, TTTI

pbh\p:\tnmpl\610099\cnmed.doc

CC: JERRY SEXTON
BILL OLSON

NEW MEXICO OIL CONSERVATION COMMISSION
FIELD TRIP REPORT

INSPECTION	CLASSIFICATION	FACILITY	HOURS	QUARTER HOURS

Name WAYNE PRICE Date 3-11-97 Miles _____ District I

Time of Departure 7 AM Time of Return 4 PM Car No. G 047

In the space below indicate the purpose of the trip and the duties performed, listing wells or leases visited and any action taken.

Signature [signature]

TEXAS-NM P.L. - SPS #11

WITNESSED MW #11 DRILLING - SEE ATTACHED

Mileage		Per Diem		Hours	
UIC		UIC		UIC	
RFA		RFA		RFA	
Other		Other		Other	

TYPE INSPECTION PERFORMED

H = Housekeeping
P = Plugging
C = Plugging Cleanup
T = Well Test
R = Repair/Workover
F = Waterflow
M = Mishap or Spill
W = Water Contamination
O = Other

INSPECTION CLASSIFICATION

U = Underground Injection Control - Any inspection of or related to injection project, facility, or well or resulting from injection into any well. (SWD, 2ndry injection and production wells, water flows or pressure tests, surface injection equipment, plugging, etc.)
R = Inspections relating to Reclamation Fund Activity
O = Other - Inspections not related to injection or The Reclamation Fund

E = Indicates some form of enforcement action taken in the field (show immediately below the letter U, R or O)

NATURE OF SPECIFIC WELL OR FACILITY INSPECTED

D = Drilling
P = Production
I = Injection
C = Combined prod. inj. operations
S = SWD
U = Underground Storage
G = General Operation
F = Facility or location
M = Meeting
O = Other

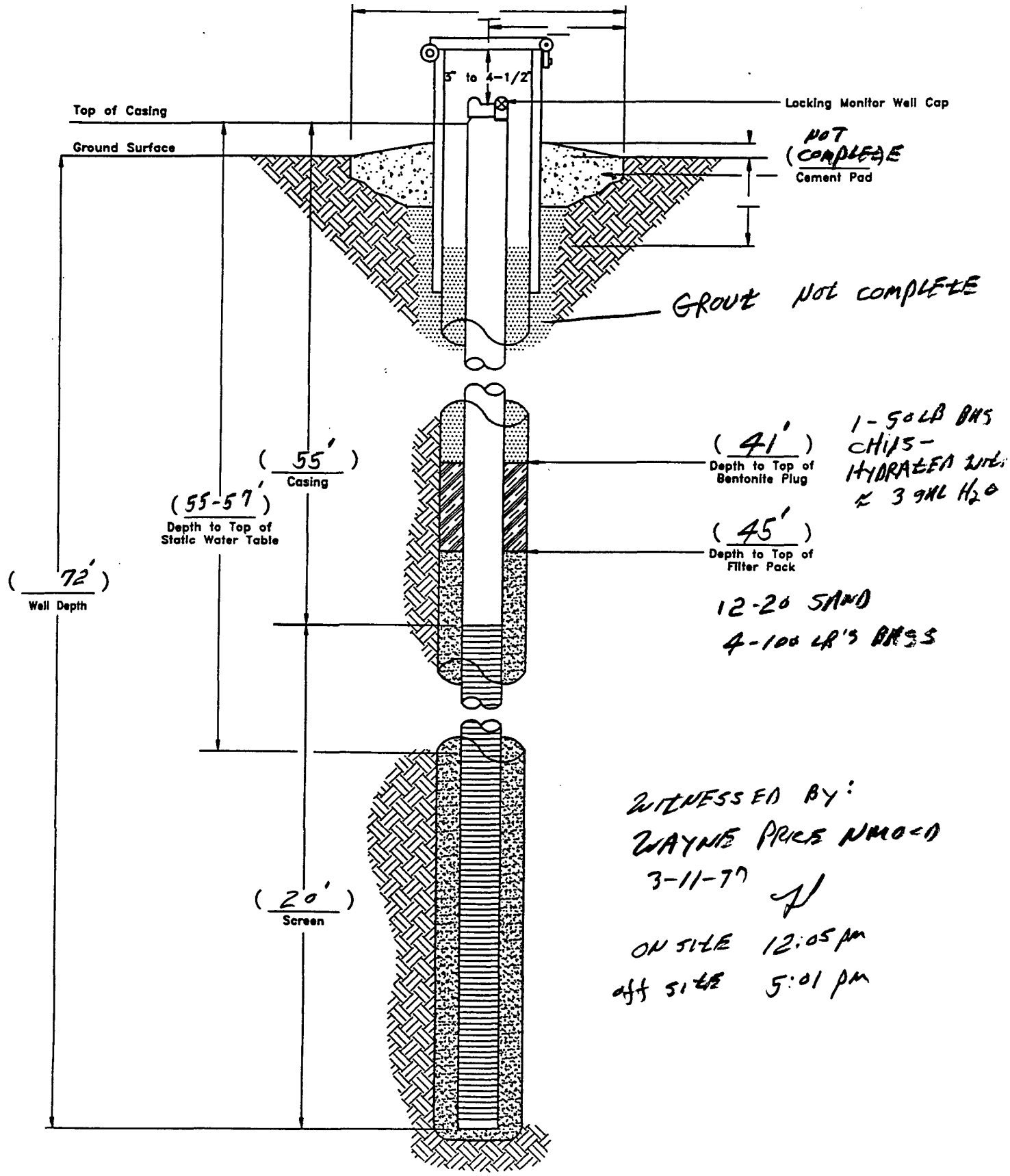
Company Drilled for: TNMPL

Location: SPS #11 MW#11
90' E-SE of MW#1

Monument Type Monitor Well Diagram

Job Number:	Installation Date:	Monitor Well Number:
	3-11-97	MW #11

Depth:	Bore Size:	Casing Size:	Casing Elevation:	Screen Size:	Top of Water Elevation:
72'	6" Bit	4 SCH40 2" PVC		.010"	55-57'



WITNESSED BY:
WAYNE PRICE NMOCD
3-11-97

ON SITE 12:05 PM
OFF SITE 5:01 PM

Company Drilled for: TUMPL - EAMES DRILLING CO.

Location: SRS #11

WITNESSED BY W. PRICE - USGS

Drilling Log

Well/Bore Number:	Date Drilled:	Driller:	Logged By:
MW #11	3-11-77	EAMES	KEI

Drilling Method:	Depth of Boring:	Depth of Well:	Length of Casing:	Length of Screen:
ROTARY-AIR	72'	≈ 70'	75'	20'

Bore Diameter:	Casing Diameter:	Screen Diameter:	Slot Size:	Well Material:
6"	2"	2"	.010"	SCH 40 PVC-S

Depth	Lithology	Sample Type	OVA (PPM)	Remarks	Well Design	Depth
0	SPLIT SPOON SAMPLING		KEI	- JESS MCANN		0
5						5
10						10
15	LWP ON SITE :					15
20	VOID (CAVITY) 20'-22'	AIR		DRY STALE AIR		20
25						25
30	SANDSTONE CHIPS CALICHIE F-M GRAIN SAND	SOIL	0	NO ODOR, NO VISUAL		30
35	SANDSTONE / CALICHIE	"	0	" "		35
40	DRY FINE SAND -	"	0	NO ODOR, TAN		40
45	≈ 1% MOIST - S.A.B	"	0	" "		45
50	SAB					50
55	MOIST SAND - LT BROWN (WATER SAND)	"	0-	SLIGHT HYDRO-CARBON ODOR		55
60	SAT SAND		0-4	"		60
65						65
70	SAT RED SAND	SAND WET	-	BOTTOM HOLE		70
75						75
80						80
85						85
90						90
95						95
100						100
105						105

ATTACHMENT TO THE DISCHARGE PLAN GW-140
TNMPLC
SPS-11 GROUND WATER REMEDIATION
DISCHARGE PLAN APPROVAL CONDITIONS
(January 22, 1997)

1. **Payment of Discharge Plan Fees:** The $50 filing fee and $1,380 flat fee shall be submitted upon receipt of this approval. The required flat fee may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the plan, with the first payment due upon receipt of this approval.

2. **TNMPLC Commitments:** TNMPLC will abide by all commitments submitted in the discharge plan application dated January 25, 1993 and TNMPLC's subsequent document dated October 23, 1996.

3. **Underground Process/Wastewater Lines:** All underground piping for the recovery system shall be positive pressure tested, to at least 3 psi above normal operating pressure, to demonstrate mechanical integrity prior to operation. The OCD will be notified at least 72 hours prior to all testing so that an OCD representative may witness the tests.

4. **Product and Waste Disposal:** All recovered product, waste filters or treatment system waste products will be recycled and/or disposed of at an OCD approved facility. If the wastes are not exempt from RCRA Subtitle C requirements, the wastes will be tested for hazardous constituents, and after receiving OCD approval, will be disposed of at an OCD approved site.

5. **Soil and Ground Water Investigations:** TNMPLC will determine the extent of contamination related to their activities. A detailed investigation work plan will be submitted to the OCD by March 28, 1997. The work plan will address:

   a. Additional monitor wells and boreholes to determine the extent of soil and ground water contamination.

   b. Proposed monitor well construction and completion diagrams.

   c. Proposed soil and ground water sampling plan

   d. Proposed schedule for completion of the work elements and submission of an investigation report.

6. **Treatment System Monitoring:** Ground water effluent from the treatment system which is injected into the Southwestern Public Service water line will be sampled and analyzed in accordance with all drinking water requirements set forth by the New Mexico Environment Department.

7. **Ground Water Monitoring:** Ground water from all monitor wells will be sampled and analyzed using EPA approved methods according to the following schedule:

   a. **Quarterly** for benzene, toluene, ethylbenzene and xylene (BTEX).

   b. **Annually** for polynuclear aromatic hydrocarbons (PAH) and WQCC metals.

8. **Annual Reports:** Annual reports will be submitted to OCD on February 15 of each respective year. Annual reports will contain:

   a. A description of all activities during the past calendar year including conclusions and recommendations.

   b. A summary of past and present laboratory analytic results of all ground water quality and treatment system sampling and copies of the laboratory analyses and associated quality assurance/quality control data.

   d. Ground water quality isoconcentration maps for contaminants of concern in the aquifer (ie. benzene, BTEX, PAH, metals).

   e. Quarterly water table elevation maps using the water table elevation of ground water in all site monitor wells.

   f. The product thickness in each well.

   g. The total volume of product recovered in the treatment system that year and the total volume recovered to date.

   h. The total volume of fluid pumped from each well that year and the total volume pumped to date.

   i. The total volume of water injected into the SPS water line that year and the total volume injected to date.

   i. The volume, nature and disposition of any other wastes generated at the site

9. **Notification:** TNMPLC will notify the OCD at least 1 week in advance of all scheduled activities such that the OCD has the opportunity to witness the events and/or split samples.

10. **Above Ground Tanks:** All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks.

11. **Labeling:** All tanks, drums and containers should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill, or ignite.

12. **Housekeeping:** All systems designed for spill collection/prevention should be inspected to ensure proper operation and to prevent overtopping or system failure.

13. **Spill Reporting:** All spills/releases shall be reported pursuant to OCD Rule 116 and WQCC 1203 to the OCD Hobbs District Office.

14. **Transfer of Discharge Plan:** The OCD will be notified prior to any transfer of ownership, control, or possession of a facility with an approved discharge plan. A written commitment to comply with the terms and conditions of the previously approved discharge plan must be submitted by the purchaser and approved by the OCD prior to transfer.

15. **Certification:** TNMPLC, by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein.TNMPLC further acknowledges that these conditions and requirements of this permit modification may be changed administratively by the Division for good cause shown as necessary to protect fresh water, human health and the environment.

Accepted:

TNMPLC

by _____
Name

District Manager
Title

State of New Mexico
ENVIRONMENT DEPARTMENT
District IV
726 E. Michigan, Suite 165
Hobbs, New Mexico 88240
(505) 393-4302

GARY E. JOHNSON
GOVERNOR

MARK E. WEIDLER
SECRETARY

EDGAR T. THORNTON, III
DEPUTY SECRETARY

February 12, 1997

J. Michael Hawthorne, P.G., REM
KEI
5309 Wurzbach, Suite 100
San Antonio, Texas 78238

Re: Compliance Sampling: Texas-New Mexico Pipe Line Company
Wells PW1 and PW2. Work Plan SPS-11.

Dear Mr. Hawthorne:

In addition to the contaminants listed in the New Mexico Environment Department (NMED) letter of November 8, 1996, attachment #1, Wells PW1 and PW2 must be sampled for the Complete Secondary Group (#860, list attached).

It is the understanding of the NMED that KEI tentatively plans to collect the required samples in April, 1997.

If I can help you in any way, please do not hesitate to call me.

Sincerely,

Robert L. Garrett
Environmentalist

RLG/amh

Attachment

xc: Gene Bernhardt, S.P.S. Plant Manager
J. T. Janica, Jr., Engineer, Texas-New Mexico Pipe Line Co.
Bill Olson, OCD, 2040 S. Pacheco, Santa Fe, NM 87505
Art Mason, District IV Engineer, NMED, Roswell
Gary McCaslin, HPM II, NMED, Roswell
James Smith, Acting HPM I, NMED, Carlsbad
File

Analysis	Value	D. Lmt.	Units
calcium			mG/L
magnesium			mG/L
potassium			mG/L
sodium			mG/L
hardness			mG/L
alkalinity			mG/L
bicarbonate			mG/L
carbonate			mG/L
chloride			mG/L
sulfate			mG/L
color test			Units
conductivity			uS/cm
odor			Units
pH			pH units

Complete Secondary Group (860)

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

January 23, 1997

CERTIFIED MAIL
RETURN RECEIPT NO. P-269-269-240

Mr. Eddie Gripp
Texas-New Mexico Pipe Line Co.
P.O. Box 60028
San Angelo, Texas 76906

Re: DISCHARGE PLAN GW-140
GROUND WATER REMEDIATION
SPS-11 WATER WELL
LEA COUNTY, NEW MEXICO

Dear Mr. Gripp,

The groundwater remediation discharge plan, GW-140, for the Texas-New Mexico Pipe Line Co. (TNMPLC) SPS-11 ground water remediation located in the NW/4 NW/4 SE/4, Section 18, Township 18 South, Range 36 East, NMPM, Lea County, New Mexico, **is hereby approved** under the conditions contained in the enclosed attachment. The discharge plan consists of TNMPLC's original application dated January 25, 1993 and TNMPLC's subsequent document dated October 23, 1996. **Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within 10 working days of receipt of this letter.**

The discharge plan was submitted pursuant to Section 3106 of the New Mexico Water Quality Control Commission (WQCC) Regulations. It is approved pursuant to Section 3109.A. Please note Sections 3109.E and 3109.F., which provide for possible future amendments or modifications of the plan.

Please note that Section 3104 of the regulations require "When a facility has been approved, discharges must be consistent with the terms and conditions of the plan." Pursuant to Section 3107.C. TNMPLC is required to notify the Director of any facility expansion, production increase, or process modification that would result in any change in the discharge of water quality, volume or location.

Pursuant to Section 3109.G.4., this plan is for a period of five years. This approval will expire on January 23, 2002, and TNMPLC should submit an application in ample time before this date. Note that under Section 3106.F. of the regulations, if a discharger submits a discharge plan renewal application at least 120 days before the discharge plan expires and is in compliance with the approved plan, then the existing discharge plan will not expire until the application for renewal has been approved or disapproved. It should be noted that

all discharge plan facilities are required to submit plans for, or the results of, an underground drainage testing program as a requirement for discharge plan renewal.

The discharge plan application for the TNMPLC SPS-11 ground water remediation is subject to WQCC Regulation 3114. Every billable facility submitting a discharge plan will be assessed a fee equal to the filing fee of $50 plus a flat fee of $1,380 for ground water remediations. The $50 filing fee and $1,380 flat fee are due upon receipt of this approval. The flat fee may be paid in a single payment due on the date of the discharge plan approval or in five equal installments over the expected duration of the discharge plan. Installment payments shall be remitted yearly, with the first installment due on the date of the discharge plan approval.

Please make all checks payable to: **NMED-Water Quality Management** and addressed to the OCD Santa Fe Office.

Please be advised that approval of this plan does not relieve TNMPLC of liability should their operation fail to adequately investigate and remediate contamination related to their operations. In addition, OCD approval does not relieve TNMPLC of responsibility for compliance with any other federal, state or local laws and/or regulations.

On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge plan review. If you have any questions, please contact Bill Olson of my staff at (505)827-7154

Sincerely,

William J. LeMay
Director

WJL/wco

Attachment

xc: Jerry Sexton, OCD Hobbs District Supervisor
Wayne Price, OCD Hobbs District Office
Ed Murray, President, Texas-New Mexico Pipe Line Co.
Michael Hawthorne, KEI

P 269 269 240

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

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Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	

PS Form **3800**, April 1995

ATTACHMENT TO THE DISCHARGE PLAN GW-140
TNMPLC
SPS-11 GROUND WATER REMEDIATION
DISCHARGE PLAN APPROVAL CONDITIONS
(January 22, 1997)

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Accepted:

TNMPLC

by_____
Name

_____
Title

State of New Mexico
ENVIRONMENT DEPARTMENT
District IV
726 E. Michigan, Suite 165
Hobbs, New Mexico 88240
(505) 393-4302

GARY E. JOHNSON
GOVERNOR

MARK E. WEIDLER
SECRETARY

EDGAR T. THORNTON, III
DEPUTY SECRETARY

November 8, 1996

J. Michael Hawthorne, P.G., REM
KEI
5309 Wurzbach, Suite 100
San Antonio, Texas 78238

Re: Compliance Sampling: Texas-New Mexico Pipe Line Company
Wells PW1 and PW2. Work Plan SPS-11.

Dear Mr. Hawthorne:

Thank you for your recent submittal of Work Plan SPS-11. This plan is very accurate and detailed, however, there are a few corrections which need to be made.

All comments and corrections contained in this or any correspondence from this office will pertain only to the New Mexico Environment Department (NMED) Drinking Water Regulations (the Regulations). Compliance with this correspondence will not relieve Texas-New Mexico Pipe Line Company (T-NMPLC) and/or Southwestern Public Service Company (SPS) of compliance with any other applicable regulations. Accordingly, my comments will primarily address Appendix B of Work Plan SPS-11.

SAMPLING CONSTITUENTS:

Attachment #1 to this letter sets forth the sampling which is required by the Regulations on Wells PW1 and PW2 as well as sampling of the effluent from the treatment unit. As per my letter to W. T. Miller, Environmentalist for SPS, of September 5, 1996, sampling for fluoride is not required. A correction to that letter is that sampling for radiological contaminants is also not required. Sampling requirements for Synthetic Organic Compounds (SOC's) have been waived from January 1, 1996 through December 31, 1998.

Your request for a waiver for asbestos sampling is noted and will be referred to Jim Edwards, Environmental Specialist, for proper action. Hopefully, this waiver will be issued and asbestos sampling will not be required.

SAMPLING SCHEDULE:

Table 2 is correct and agrees with attachment #1 (except as noted above) with the exception that the Regulations require at least one source sample for all contaminants. Therefore, source sampling (at the well head), as well as effluent sampling, for VOC's will be required and shall be conducted for an as yet undetermined duration.

SAMPLING POINT:

Commingling of ground water produced from other wells for sampling purposes (entry point sampling, Section 304.3 of the Regulations) is contingent upon the analytical results of the source samples and cannot be determined at this time.

Personnel of the NMED will amend a recently completed Sanitary Survey to include PW1, PW2 and the treatment unit.

Only after the initial round of sampling is completed, the results received and reviewed by the NMED and upon written authorization from the NMED, may ground water produced from PW1 and/or PW2 be introduced into a Public Water Supply System.

Sincerely,

Robert L. Garrett

Robert L. Garrett
Environmentalist

RLG/amh

Attachment

xc: Gene Bernhardt, S.P.S. Plant Manager
J. T. Janica, Jr., Engineer, Texas-New Mexico Pipe Line Co.
Bill Olson, OCD, 2040 S. Pacheco, Santa Fe, NM 87505
Art Mason, District IV Engineer, NMED, Roswell
Gary McCaslin, HPM II, NMED, Roswell
Tom Burt, HPM I, NMED, Carlsbad
File

NEW MEXICO ENVIRONMENT DEPARTMENT October 31, 1996

Attachment #1

SAMPLING SCHEDULE: TEXAS-NEW MEXICO PIPE LINE COMPANY
WELLS PW1 AND PW2

Contaminant:	Nitrate	Nitrite	Asbestos	Heavy Metals	Cyanide	Sulfate	Voc1's
Initial sample date	1/1-3/31/97	1/1-3/31/97	1/1-3/31/97 Waiver Requested	1/1-3/31/97	1/1-3/31/97	1/1-3/31/97	1/1-3/31/97
Sampling Frequency *	Annual	1 Sample	1 Sample every 3 years	1 Sample every 3 years	1 Sample every 3 years	1 Sample	SOURCE Monthly POST TRT Daily Weekly Monthly Quarterly
Sample ** Location	Source	Source	Distrib. (Source Use Waiver Issued)	Source	Source	Source	Source & Post Treatment
EPA Method	353.2	353.2		Series 200	335.2	300.0	502.2

All samples must be collected by a person possessing a current Sampling Certificate issued by the Secretary and sample analysis must be done by a laboratory certified by the New Mexico Environment Department pursuant to Section 309 of the Regulations.

* Must conform to Standardized Monitoring Framework compliance periods.

** All samples should be collected on the same date.

Sampling requirements are subject to change in accordance with NMED Drinking Water Regulations 301C.1

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

October 2, 1996

CERTIFIED MAIL
RETURN RECEIPT NO. P-269-269-203

Mr. Ed Murray
President
Texas-New Mexico Pipe Line Co.
P.O. Box 4464
Houston, Texas 77210-4464

RE: GROUND WATER REMEDIATION
SPS WATER WELL #11
LEA COUNTY, NEW MEXICO

Dear Mr. Murray:

The New Mexico Oil Conservation Division (OCD) has recently learned that the Texas-New Mexico Pipe Line Company (TNMPLC) has been discharging treated effluent in violation of state regulations. The effluent is the result of treatment of petroleum contaminated ground water from TNMPLC's SPS-11 ground water remediation project which was discharged into a public water supply system. It is also OCD's understanding that treated effluent was discharged on the surface into an adjacent buffalo wallow. The remediation project is the result of a spill of crude oil from a TNMPLC pipeline which contaminated Southwestern Public Service Company's (SPS) water well SPS-11 located in the NW/4, NW/4, SE/4, Section 18, Township 18 South, Range 36 East, NMPM, Lea County, New Mexico.

A review of the OCD's file on this case shows that pursuant to New Mexico Water Quality Control Commission (WQCC) regulations, the Director of the OCD required a discharge plan for this activity on August 21, 1992. In compliance with this requirement, TNMPLC submitted a site investigation and remediation plan to the OCD on February 10, 1993. On March 5, 1993, the OCD requested additional information and commitments from TNMPLC regarding the site investigation and remediation plan which needed to be supplied to the OCD prior to issuing discharge plan approval. This correspondence was received by TNMPLC on March 9, 1993. To date TNMPLC has not responded to this document. By discharging treated effluent to the SPS water supply system without a plan approved by the OCD, TNMPLC violated state regulations.

The OCD's correspondence clearly stated that WQCC regulations require a discharge plan be approved prior to commencement of the remedial activities. In order to resolve the permitting and compliance issues in this matter, the OCD requires that TNMPLC submit the following information to the OCD by October 25, 1996:

1. A detailed description of all ground water remediation, treatment, discharge and monitoring activities conducted to date.

2. A map showing the location of the remediation facilities and the location of all discharges to the surface, subsurface and public water supply system.

3. The duration and volume of all discharges from the remediation system to date.

4. The laboratory analytical results of all ground water and discharge water quality monitoring conducted to date.

5. A response to the OCD's March 5, 1993 correspondence (enclosed) requesting additional information and commitments regarding the investigation and remediation activities.

The New Mexico Environment Department recently required SPS to disconnect the discharge line from the public water supply system. TNMPLC will not conduct any further unauthorized discharges at the site until an approved WQCC discharge plan has been approved.

If you have any questions, please contact Bill Olson of my staff at (505) 827-7154.

Sincerely,

Roger C. Anderson
Environmental Bureau Chief

xc: Jerry Sexton, OCD Hobbs District Supervisor
Wayne Price, OCD Hobbs District Office
Robert Gallegos, NMED Drinking Water and Community Services Bureau
Robert Garrett, NMED Hobbs
Dwain Glidewell, New Mexico State Land Office

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OFFICE OF THE SECRETARY
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-5950

Jennifer A. Salisbury
CABINET SECRETARY

96 SE 18 AM 8 52

Sept. 11, 1996

To: Roger Anderson
From: Jerry Sexton

Subject: SPS water contamination

Texas- New Mexico Pipeline is going to start clean up of SPS water well. Since it is a public drinking water source the ED is going to have it cleaned up to these standards.

ED is requiring a new set of test before clean up will start. You will be copied on all correspondence, but Ed will be in charge of test since it is much more stringent than that of the OCD's. The testing will be done on a very frequent basis to start out.

The pipeline will work thru ED and copy the OCD. They figure this will take years to clean up. If any additional information is needed let me know or contact Bob Garrett with the Hobbs ED.

cc. Bill Olson
Wayne Price

NMOCD INTER-OFFICE CORRESPONDENCE

TO: File of SPS/TNMPL ground water contamination

From: Wayne Price-Environmental Engineer

Date: Sept. 6, 1996 1996

Reference: Ground Water Contamination of SPS well #11.

Subject: Meeting called by Robert Garrett -NMED

Attendance: Wayne Price, Jerry Sexton NMOCD
Bob Garrett,Art Manson, Ron Carson-NMED
Gene Burkhart, WT Miller- SPS
Tony Savoie, Ernest Richarte, M.Hawthorn-TNMPL

Meeting was called by NMED to address concerns of the TNMPL remedial action plan and more specifically the quality of treated water that was suppose to be injected into SPS fresh water system. SPS water system qualifies as a public water supply and must adhere to NM-EPA SDWA standards for water quality, which are more stringent than NM WQCC (ground water) standards.

TNMPL has agreed to perform certain initial and routine sampling and testing of the treated water to ensure it meets the required standards.

It was agreed by all parties that the ground water abatement issue will be best served if TNMPL and SPS can make this system work. Apparently there has been very little progress as of to date due to a problem in permitting, water quality experienced at the plant, and operating problems with the pump and treat system.

SPS is very interested in TNMPL abating the ground water, so as they may return their water well to full service. They foresee an increase in water usage in the near future due to new power plant additions in the area.

NMED/SPS/TNMPL will cc NMOCD on significate events and correspondence.

end of meeting:

There was a later question on which agency will handle the ground water abatement. Jerry Sexton will advise NMOCD Bureau on this issue.

cc: Jerry Sexton-NMOCD District I Supervisor
Bill Olson-NMOCD Hydrogeologist-Environmental Bureau

State of New Mexico
ENVIRONMENT DEPARTMENT
District IV
726 E. Michigan, Suite 165
Hobbs, New Mexico 88240
(505) 393-4302

GARY E. JOHNSON
GOVERNOR

MARK E. WEIDLER
SECRETARY

EDGAR T. THORNTON, III
DEPUTY SECRETARY

September 5, 1996

W. T. Miller, Environmentalist
Southwestern Public Service Company - Cunningham Station
P. O. Box 99
Hobbs, NM 88240

RE: Texas-New Mexico Pipe Line Company Water Wells
Letter of August 27, 1996

Dear Mr. Miller:

In accordance with the New Mexico Environment Department (NMED) letter of August 27, 1996, and prior to the connection of Texas-New Mexico Pipe Line Company wells to the Southwestern Public Service Company (SPS) public water supply system (PWS), the following conditions must be met.

1. Sample each well for the following contaminants in accordance with NMED Drinking Water Regulations (the Regulations):

   a. Nitrate

   b. Nitrite

   d. Synthetic Organic Compounds

   e. Asbestos

   f. Heavy Metals

   g. Cyanide

   h. Sulfate (unregulated)

   i. Radiological Contaminants

   j. Volatile Organic Compounds
   The sampling frequency for volatile organic compounds (VOC's) may be increased to assure that the stripper unit and charcoal filter are adequate to remove VOC's.

2. The results of the analysis of the samples must be received by the NMED prior to connection of the wells to the public water supply system. Results of these

analysis may result in further requirements prior to connection of the wells to the system and the results may trigger increased sampling frequencies.

3. The Sanitary Survey conducted June 8, 1995 by personnel of the NMED must be amended to include all wells, treatment systems, storage tanks and etc. connected to the PWS.

These requirements pertain only to compliance sampling of the wells and the Sanitary Survey of the PWS. Further conditions on the wells, piping, stripper unit, charcoal filter and etc. may be imposed by the NMED District IV Engineer.

Sincerely,

Robert Garrett

Robert Garrett
Environmentalist

RG/amh

xc: Gene Bernhardt, S.P.S. Plant Manager
J. T. Janica, Jr., Engineer, Texas-New Mexico Pipe Line Co.
Gary McCaslin, HPM II, NMED, Roswell
Tom Burt, HPM I, NMED, Carlsbad
File
Art Mason, Dist. III Engineer, NMED, Roswell
Bill Olson, OCD, Santa Fe

State of New Mexico
ENVIRONMENT DEPARTMENT
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726 E. Michigan, Suite 165
Hobbs, New Mexico 88240
(505) 393-4302

GARY E. JOHNSON
GOVERNOR

MARK E. WEIDLER
SECRETARY

EDGAR T. THORNTON, III
DEPUTY SECRETARY

August 27, 1996

W. T. Miller, Environmentalist
Southwestern Public Service
P. O. Box 99
Hobbs, NM 88240

RE: Public Water Supply (PWS) WSS #932-13
Southwestern Public Service, Cunningham Station
Well #11, Remediation Wells, VOC Stripper Unit

Dear Mr. Miller:

Personnel of the New Mexico Environment Department (NMED) recently reviewed the files on and made an onsite inspection of a portion of the Southwestern Public Service-Cunningham Station (SPS) public water supply system (PWS), WSS 932-13. This investigation was concerned, primarily, with two (2) water wells owned and operated by Texas-New Mexico Pipeline Company, which were drilled in an attempt to remediate SPS well #11, the VOC stripper unit associated with the wells and with SPS well #11.

Discussions with W. T. Miller, Environmentalist for SPS, and the onsite visit revealed that water from the two (2) wells has been used by SPS to replace the water lost by the deactivation of SPS well #11. The water from the two new wells has been introduced into the SPS public water supply system.

Operation of all public drinking water supply systems in New Mexico is regulated by the NMED Drinking Water Regulations (the Regulations). (copy enclosed)

Subpart I, Section 103, B.A., defines a public water supply system. According to this definition the two wells above, if connected to the PWS, are included as a part of the PWS, regardless of ownership of the wells.

Subpart II, Section 201, A, of the Regulations places the responsibility upon SPS to "control, manage or operate a public water supply system" (which includes the two (2) wells above, if connected to the system) in compliance with the Regulations.

At the present time these two wells do not comply with the Regulations and, therefore, constitute a water supply source not regulated by the NMED. This is a violation of Subpart II, Section 208, I, of the Regulations and these two wells must be immediately physically disconnected from the PWS and cannot be reconnected until such time as they meet all of the requirements of the Regulations.

The NMED appreciates that both SPS and Texas-New Mexico Pipeline Company have cooperated with the NMED in the past on this matter and have attempted to comply with Regulations in every possible way. The NMED believes that it will be possible to bring the wells into compliance with the Regulations and will be happy to assist SPS in doing so.

If you have any questions please do not hesitate to call me.

Sincerely,

Robert Garrett

Robert Garrett
Environmentalist

RG/amh

Enclosure

xc: Gene Bernhardt, S.P.S. Plant Manager
J. T. Janica, Jr., Engineer, Texas-New Mexico Pipe Line Co.
Gary McCaslin, HPM II, NMED, Roswell
Tom Burt, HPM I, NMED, Carlsbad
File
Art Mason, Dist. III Engineer, NMED, Roswell
Bill Olson, OCD, Santa Fe

D. Security and Protection of the water supply. All water system facilities such as spring junction boxes, well houses, storage reservoirs, and treatment facilities shall be constructed and maintained to prevent unauthorized entry, and to protect the supply from contamination.

E. Protection of the water supply well. All water supply wells shall have installed a sanitary seal on the wellhead. All cracks and crevices shall be adequately sealed to prevent entry of vermin, flooding or other contaminants. Well vents shall be screened with a fine corrosion- resistant screen (24 mesh or smaller). All penetrations to the casing at or near the surface shall be tightly sealed.

F. Treatment. The requirements in this subsection apply to public water supply systems which use a surface water source until June 29, 1993. In order to give reasonable assurance that water supplied will not exceed the maximum contaminant levels, systems using surface water in whole or in part, must filter and disinfect all surface water before it enters the distribution system.

G. Finished water storage facilities. All water storage facilities shall be protected from flooding, or infiltration of non-potable water. All vents shall be screened with a corrosion-resistant material. All overflow pipes must be similarly screened or be fitted with an acceptable flap valve.

H. Emergency Operation.

1. Whenever bacterial contamination is determined to persist in a public water supply, as demonstrated by microbiological analysis results, the supplier of water shall notify all consumers to boil all water used for drinking or culinary purposes until microbiological samples demonstrate that the water is safe for domestic use, or until appropriate corrective action approved by the Department is taken. If the supplier of water fails to take such action on his own, or at the recommendation of the Department, the Department may issue a boil order directly to the consumers affected.

2. Whenever the safety of a supply is endangered for any reason, the Department shall be notified immediately by the supplier of water. The supplier of water shall then take appropriate action to protect the supply. The supplier of water shall notify all consumers of appropriate action to protect themselves against any waterborne hazards. If the supplier of water fails to take such action on his own, or at the direction of the Department, the Department shall notify directly the consumers involved.

I. Cross-Connections.

1. No physical connection shall be permitted between a public water supply as defined in this art and any water supply source not regulated by the Department, unless the public water supply system is protected by a backflow prevention device reviewed by the Department and listed by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California or another listing agency, acceptable to the Department, which has equivalent backflow prevention assembly laboratory and field evaluation capabilities.

2. There shall be no piping arrangement or connection by which an unsafe substance may enter a public water supply.

3. Control of all cross-connections to a public water supply is the responsibility of the owner or operator of the supply.

JIM BACA
COMMISSIONER

State of New Mexico

OFFICE OF THE

Commissioner of Public Lands

Santa Fe

P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148

March 31, 1993

William J. Lemay, Director
Oil Conservation Division
State Land Office Building
Santa Fe, New Mexico 87504-2088

Re: Discharge Plans: GW-140 - Texas-New Mexico Pipeline Company and GW-133 - Williams Field Service

This is a letter to advise that surface and mineral ownership of the above two plan sites are held by the State Land Office. The Commissioner of Public Lands requests notification upon approval of these two plans, and requests to receive any relative correspondence involving these two plans for inclusion in the lease files.

Thank you for the opportunity to review and comment.

Sincerely,

Dennis Garcia

Dennis Garcia
Director, State Land Office Field Division

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
Ecological Services
Suite D, 3530 Pan American Highway, NE
Albuquerque, New Mexico 87107

March 23, 1993

Permit #GW93009

Mr. William J. Lemay
Director, State of New Mexico
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Dear Mr. Lemay:

This responds to the notice of publication received by the U.S. Fish and Wildlife Service (Service) on March 3, 1993, regarding the Oil Conservation Division (OCD) discharge plan applications on fish, shellfish, and wildlife resources in New Mexico.

The Service has determined there are no wetlands or other environmentally sensitive habitats, plants, or animals that will be adversely affected by the discharge plan application submitted by Texas-New Mexico Pipeline Company for the remediation of petroleum contaminated groundwater located in the NW/4, NW/4, SE/4, Section 18, T18S, R36E, NMPM, Lea County.

If you have any questions concerning our comments, please contact Mary Orms at (505) 883-7877.

Sincerely,

for Jennifer Fowler-Propst
Field Supervisor

cc:
Director, New Mexico Department of Game and Fish, Santa Fe, New Mexico
Regional Administrator, U.S. Environmental Protection Agency, Dallas, Texas
Regional Director, U.S. Fish and Wildlife Service, Ecological Services, Albuquerque, New Mexico

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The Lovington Daily LEADER

The Oldest Newspaper In Lea County... ...Serving Since 1909

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Statement of Account For

- State Of New Mexico
- Energy, Minerals And Natural Resources Department
- Oil Conservation Division
- P. O. Box 2088

Santa Fe, NM 87504

Month of March 19 93

DISPLAY ADVERTISING:		
_____ inches @ _____		
CLASSIFIED ADVERTISING:		
_____ words @ _____		
_____ inches @ _____		
OTHER CHARGES:		
Legal Notice		
Notice Of Publication		
Total.....	29	70
Tax.....		
Total this month.....	29	70
Previous Balance.....		
PLEASE PAY THIS AMOUNT.....		

Affidavit of Publication

OIL CONSERVATION DIVISION
RECEIVED
'93 MAR 24 AM 9 06

STATE OF NEW MEXICO)
) ss.
COUNTY OF LEA)

Joyce Clemens being first duly sworn on oath deposes and says that he is Adv. Director of THE LOVINGTON DAILY LEADER, a daily newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled

Notice Of Publication

and numbered ..... in the

Court of Lea County, New Mexico, was published in a regular and entire issue of THE LOVINGTON DAILY LEADER and not in any supplement thereof, once each week on the same day of the week, for one (1) day consecutive weeks, beginning with the issue of

March 10, 19 93

and ending with the issue of

March 10, 19 93

And that the cost of publishing said notice is the sum of $ 29.70

which sum has been (Paid) (Assessed) as Court Costs

Joyce Clemens

Subscribed and sworn to before me this 17th day of March, 19 93

Mrs. Jean Henson

Notary Public, Lea County, New Mexico

My Commission Expires Sept. 28, 19 94

LEGAL NOTICE
NOTICE OF PUBLICATION
STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to the New Mexico Water Quality Control Commission Regulations, the following discharge plan application has been submitted to the Director of the Oil Conservation Division, State Land Office Building, P.O. Box 2088, Santa Fe, New Mexico 87504-2088, Telephone (505) 827-5800:

(GW-140) - Texas - New Mexico Pipeline Co., Douglas Beu, Assistant District Manager, P.O. Box 2528, Hobbs, New Mexico, 88241-2528, has submitted a discharge plan application for the remediation of petroleum contaminated groundwater located in the NW/4 NW/4 SE/4, Section 18, Township 18 South, Range 36 East, NMPM, Lea County, New Mexico. Approximately 100 gallons per minute of contaminated groundwater is proposed to be treated to drinking water standards and discharged to the Southwestern Public Service Co. distribution system. Groundwater most likely to be affected in the event of an accidental discharge is at a depth of approximately 55 feet with a total dissolved solids concentration ranging from 290 mg/1 to 324 mg/1. The discharge plan addresses monitoring of the groundwater remediation system and how spills, leaks, and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 5:00 p.m., Monday thru Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of a the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Request for public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the director determines that there is significant public interest.

If no hearing is held, the Director will approve or disapprove the plan based on the information available. If a public hearing is held, the Director will approve the plan based on the information in the plan and information presented at the hearing.

GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 2nd day of March, 1993.
STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
WILLIAM J. LEMAY, Director
SEAL
Published in the Lovington Daily Leader March 10, 1993.

Affidavit of Publication

STATE OF NEW MEXICO)
) ss.
COUNTY OF LEA)

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Joyce Clemens

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Notary Public, Lea County, New Mexico

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Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 5:00 p.m., Monday thru Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of a the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Request for public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the director determines that there is significant public interest.

If no hearing is held, the Director will approve or disapprove the plan based on the information available. If a public hearing is held, the Director will approve the plan based on the information in the plan and information presented at the hearing.

GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 2nd day of March, 1993.
STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
WILLIAM J. LEMAY, Director
SEAL
Published in the Lovington Daily Leader March 10, 1993.

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

March 5, 1993

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-667-242-323

Mr. Douglas D. Beu
Texas-New Mexico Pipe Line Co.
P.O. Box 2528
Hobbs, New Mexico 88241-2528

RE: SPS WATER WELL #11 REMEDIATION
LEA COUNTY, NEW MEXICO

Dear Mr. Beu:

The New Mexico Oil Conservation Division (OCD) is in the process of reviewing the Texas-New Mexico Pipe Line Company's (TNMPLC) discharge plan application contained in TNMPLC's January 25, 1993 "SPS SITE INVESTIGATION AND REMEDIAL ACTION PLAN - HOBBS, NEW MEXICO" and February 10, 1993 correspondence. Public notice of the discharge plan application was issued on March 2, 1993.

The OCD has the following comments and requests for additional information and/or commitments regarding the above referenced application:

1. Appendix A did not contain the well logs for monitor wells MW-1 through MW-4. Please provide OCD with these well logs.

2. Appendix B did not contain the laboratory analytical results of the May 6 and May 7, 1992 influent and effluent samples from the air sparge unit. Please provide OCD with these analyses.

3. As a point of clarification, the capture zone depicted in Figure 11 of Appendix E is not oriented correctly. The stagnation point should be located 240 feet downgradient instead of 240 feet upgradient and the open end of the capture zone parabola should be facing upgradient instead of downgradient.

4. The OCD requires that underground waste water lines be pressure tested to 3 psi above operating pressure prior to operation and annually thereafter. Please provide a commitment to perform these tests and submit the results to OCD.

5. The ground water investigation work to date is satisfactory. However, the investigation has not defined the full extent of contamination at the site. Please provide a commitment and time schedule for submission of a work plan to complete the definition of the extent of contamination.

6. The remediation proposal does not address the remediation of contaminated soils identified during the investigation. Complete remediation of ground water will be difficult if contaminated soils remain as a source of future leaching of contaminants. Please provide a commitment and time schedule for submission of either a work plan to address remediation of these source areas or a risk analysis demonstrating that such remediation is not necessary.

7. Prior to discharging treated ground water into the SPS distribution system, the OCD requires a one time sample be taken of the effluent and analyzed for all New Mexico Water Quality Commission drinking water constituents. The results of this sample will be submitted to OCD for approval. Please supply a commitment to comply with this requirement.

8. The OCD requires that a quarterly report be submitted to OCD containing the results of all water quality sampling which has occurred during the respective quarter. Reports will be due on January 1, April 1, July 1 and October 1 of the calendar year. Please supply a commitment to provide these reports.

9. The proposed sampling plan for the monitor wells is acceptable at this time. Please be aware that OCD may require modification of the sampling plan based upon the results of future investigation of the complete extent of contamination.

10. Section 4.3, page 9 sets out proposed criteria for termination of remedial actions. The OCD defers approval of criteria for termination of remediation until OCD reviews the results of additional investigations into the complete extent of contamination.

The above information and commitments to meet discharge plan requirements must be received before the OCD can complete a review of your discharge plan application.

If you have any questions, please contact me at (505) 827-5885.

Sincerely,

William C. Olson
Hydrogeologist
Environmental Bureau

xc: Jerry Sexton, OCD Hobbs District Supervisor
Myra Myers, NMED Hobbs
William Weber, NMED Roswell

NOTICE OF PUBLICATION

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to the New Mexico Water Quality Control Commission Regulations, the following discharge plan application has been submitted to the Director of the Oil Conservation Division, State Land Office Building, P.O. Box 2088, Santa Fe, New Mexico 87504-2088, Telephone (505) 827-5800:

(GW-140) - Texas-New Mexico Pipeline Co., Douglas Beu, Assistant District Manager, P.O. Box 2528, Hobbs, New Mexico, 88241-2528,has submitted a discharge plan application for the remediation of petroleum contaminated groundwater located in the NW/4 NW/4 SE/4, Section 18, Township 18 South, Range 36 East, NMPM, Lea County, New Mexico. Approximately 100 gallons per minute of contaminated groundwater is proposed to be treated to drinking water standards and discharged to the Southwestern Public Service Co. distribution system. Groundwater most likely to be affected in the event of an accidental discharge is at a depth of approximately 55 feet with a total dissolved solids concentration ranging from 290 mg/l to 324 mg/l. The discharge plan addresses monitoring of the groundwater remediation system and how spills, leaks, and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 5:00 p.m., Monday thru Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Request for public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the director determines that there is significant public interest.

If no hearing is held, the Director will approve or disapprove the plan based on the information available. If a public hearing is held, the Director will approve the plan based on the information in the plan and information presented at the hearing.

GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 2nd day of March, 1993.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

SEAL

WILLIAM J. LEMAY,
Director

TEXAS-NEW MEXICO PIPE LINE COMPANY

DOUGLAS D. BEU
ASSISTANT DISTRICT MANAGER

PO BOX 2528
HOBBS NM 88241-2528
505-393-2135

February 10, 1993

William J. Lemay
NMOCD
P. O. Box 2088
Santa Fe NM 87504

Re: Site Investigation and Remedial Action Plan
SPS11 Site - Hobbs, NM

Dear Mr. Lemay:

Enclosed is a copy of the SPS 11 - Site Investigation and Remedial Action Plan. This action plan address our treating program and water discharge plans. It is submitted as our Water Discharge Plan as required by New Mexico Water Quality Control Commission Regulations.

We are moving forward with project implementation and hope to have the system in operation the first quarter of this year. If you have any questions, please contact J. T. Janica at 505-393-2135.

Sincerely,

Douglas D. Beu

Enclosures

JTJ:JJ

xc: Chrono
File
B. Olsen - NMOCD
xm5.txt

State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
Santa Fe, New Mexico 87505

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☑ Telephone ☐ Personal	Time 0815	Date 2/3/93

Originating Party	Other Parties
Jay Janica - Tex Mex Pipeline	Bill Olson - OCD

Subject

SPS Well # 11

Discussion

Report on investigation & remediation proposal is being finished

Conclusions or Agreements

Report will be sent out next week

Distribution

Signed Bill Olson

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

August 21, 1992

CERTIFIED MAIL
RETURN RECEIPT NO. P-667-242-289

Mr. Douglas Beu
Texas-New Mexico Pipe Line Co.
P.O. Box 2528
Hobbs, New Mexico 88241-2528

RE: SPS WATER WELL #11 REMEDIATION
LEA COUNTY, NEW MEXICO

Dear Mr. Beu:

The New Mexico Oil Conservation Division (OCD) is in receipt of the August 13, 1992 Texas-New Mexico Pipe Line Co. (TNMPLC) "SPS WATER WELL GROUND WATER REMEDIATION, SEC 18, T-18S, R-36-E, NMPM, LEA COUNTY, NEW MEXICO. This document details TNMPLC's proposed design specifications for a remediation system to treat petroleum contaminated ground water pumped from recovery wells in the vicinity of Southwestern Public Service Co. (SPS) water well #11.

The information provided constitutes notification of intent to discharge under the provisions of the New Mexico Water Quality Control Commission (WQCC) Regulations. You are hearby notified that the filing of a discharge plan is required for your ground water remedial activities in the vicinity of SPS water well #11 located in Section 18, Township 18 South, Range 36 East, (NMPM), Lea County, New Mexico.

This notification of discharge plan requirement is pursuant to Part 3-104 and Part 3-106 of the WQCC Regulations. The discharge plan covers all discharges of effluent at or adjacent to the site. Included in the application should be plans for operation of the system, monitoring effluent quality and the effectiveness of the remediation, controlling spills and accidental discharges (including detection of leaks in below grade sumps, buried underground process tanks and/or piping) and closure plans.

A copy of the regulations is enclosed for your convenience. Three copies of your discharge plan should be submitted for review purposes. Section 3-106.A. of the regulations requires a submittal of the discharge plan within 120 days of receipt of this notice

unless an extension of this time period is sought and approved for good cause.

Part 3-106.B. also provides that, for good cause shown, the director may allow a discharge to occur without an approved discharge plan for a period not to exceed 120 days. Due to the importance of initiating a remedial action, the OCD would consider approval of a temporary discharge while the permitting action is ongoing, if requested by TNMPLC. Please be advised that no discharge can occur without either an approved discharge plan or temporary discharge authorization.

The OCD considers the above referenced correspondence as the initial discharge plan application for the site. The treatment design specifications provided appear to satisfy part of the discharge requirements however, the OCD has not received a copy of the investigation report detailing hydrogeologic and water quality conditions at the site. This information and commitments to meet other pertinent discharge plan requirements must be received before the OCD can continue evaluating the discharge plan application.

If there are any questions on this matter, please feel free to contact Roger Anderson, the Environmental Bureau Chief at (505) 827-5812, or William Olson at (505) 827-5885.

Sincerely,

William J. LeMay
Director

WJL/WCO

Enclosure

xc: Jerry Sexton, OCD Hobbs District Supervisor
Chris Eustice, OCD Hobbs Office

TEXAS-NEW MEXICO PIPE LINE COMPANY

DOUGLAS D. BEU
ASSISTANT DISTRICT MANAGER

PO BOX 2528
HOBBS NM 88241-2528
505-393-2135

August 13, 1992

Mr. Bill Olsen
NMOCD
PO Box 2088
Santa Fe NM 87504-2088

Re: SPS Water Well
Ground Water Remediation
Sec 18, T-18-S, R-36-E, NMPM
Lea County, New Mexico

Dear Mr. Olsen:

Attached is a copy of our design specifications for the ground water treatment system to be installed near the SPS water well #11. Please send any comments to the undersigned by the end of August. If you have any questions, contact J. T. Janica at 505-393-2135.

Sincerely,

Douglas D. Beu

JTJ:JJ

xc: Chrono
File
BDC
JBH-PAR&D
DLC-PAR&D
JTS-NMOCD

SPECIFICATIONS FOR TNMPLCO-HOBBS GROUNDWATER RECOVERY AND TREATMENT SYSTEM

I. DESCRIPTION

The pumping and treatment system shall include two submersible pumps which will feed groundwater into an air stripper. The air stripper effluent will be pumped through an optional cartridge filter and then into an activated carbon vessel. The treated water will be discharged to an existing pressurized water distribution system. With the exception of the submersible pumps, all equipment will be mounted on a skid.

II. SUBMERSIBLE PUMPS

A submersible pump will be installed in each well, PW1 and PW2, details in Figures 1 and 3. Each of these pumps will be capable of producing approximately 50 gpm against 150 feet of head (TDH). Refer to Figure 1 for estimated pipe sizes. The pumps will be suspended 130 feet below ground level (static water level is about 55 to 60 feet below ground level). Each pump will be protected from running dry (excessive drawdown) by a motor protection device, such as "Coyote" or "Motor Saver". As an alternative, a water level probe connected to the main control panel, may be used in the well. This is the less desirable alternative. The pump control wires will be buried. Also, access to the well will be through a pitless adapter. These constraints will make adjusting the probe depth difficult.

III. AIR STRIPPER / TRANSFER PUMP

The packed tower air stripper shall be designed to treat a nominal groundwater flow of 100 gpm. Actual pump test water analyses (inorganics) are included in Table I. The design concentrations are 100 ug/L benzene in the influent and 0.5 ug/L benzene in the effluent with an air to water volumetric ratio of at least 30. The base of the tower will serve as a sump for the transfer pump. The transfer pump will be controlled primarily by high-level and low-level switches in the stripper sump. To allow the transfer pump to operate continuously (or nearly so), a small-diameter bypass line from the pump discharge to the sump will be installed. Inside the sump, the recycle flow will be controlled by a float valve. Details are shown in Figure 2. The pump will provide sufficient pressure and flow to transfer the nominal 100 gpm flow (not including the maximum 10 gpm recycle) through the downstream equipment and into the pressurized distribution line.

A third level switch in the sump will shut down the pumps and blower upstream of the stripper if downstream flow is interrupted of restricted. Other flow or pressure sensors shall be installed to monitor the blower air flow and the water flow from the wells. System shutdown should be initiated if any of these components fail.

IV. CARTRIDGE FILTER / ACTIVATED CARBON

To insure that no dissolved organics are discharged from the treatment system, the stripped water will be pumped through a bed of activated carbon. An appropriately-sized cartridge filter may be included upstream of the carbon if the supplier anticipates a high concentration of suspended solids. The elements in this filter should provide at least two weeks of service before changing is necessary. The activated carbon bed shall be designed to provide a minimum of 6 months of service. The source and method for replacing the carbon shall be recommended by the supplier in the proposal. The carbon vessel shall be pressure rated for 35 psig. This is the maximum anticipated pressure of the downstream distribution piping system. If the supplier can justify the modification as a cost-saving measure, a non-pressure-rated carbon vessel followed by a holding tank and additional transfer pump may be specified. Appropriate failsafe controls must be included with this modification.

V. MISCELLANEOUS REQUIREMENTS

The control system shall be wired to a single control panel containing motor switches, status lights, and control circuits. The control panel shall be protected from direct sunlight and rain by a small canopy. All piping on the skid will be schedule 40, galvanized steel. Piping will be terminated with flanged fittings. All electrical components will be rated for NEMA 4 service.

TABLE I.

AIR STRIPPER DESIGN SPECIFICATIONS / INORGANIC WATER ANALYSES

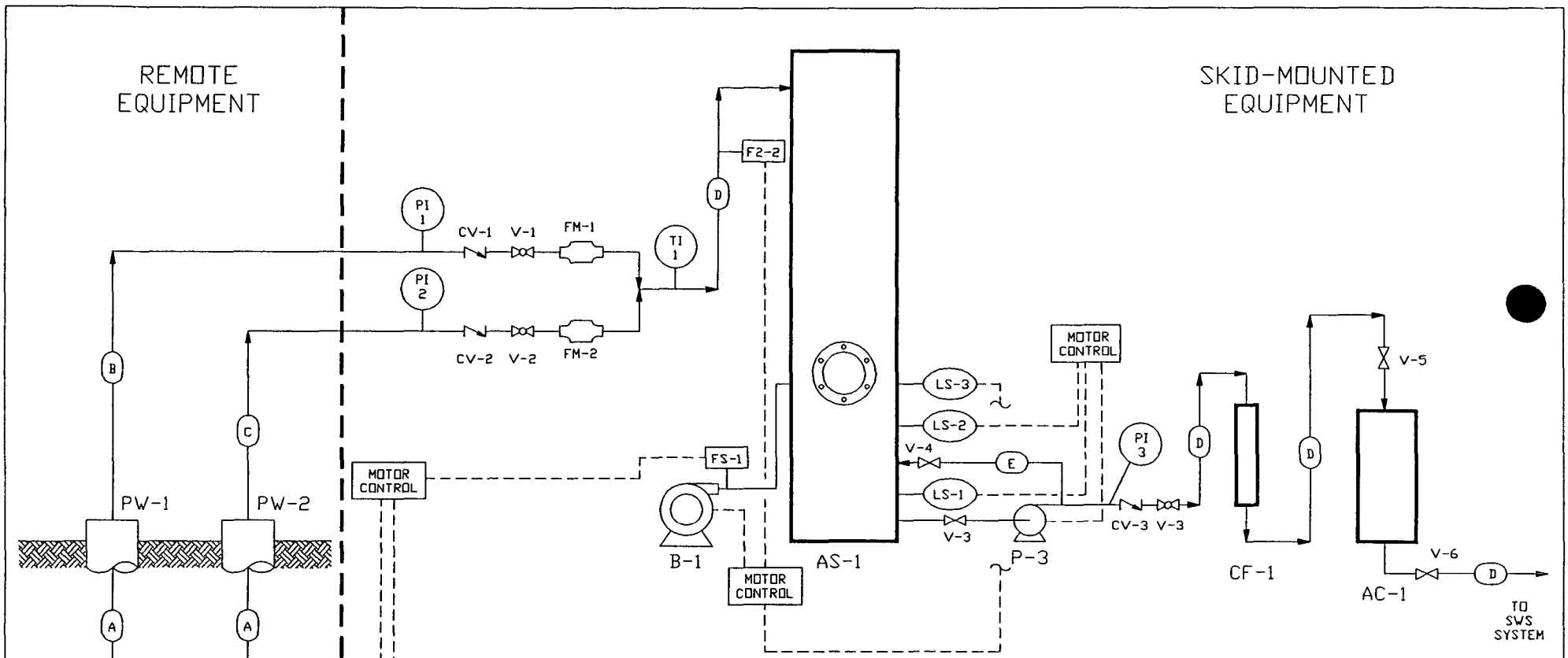
INFLUENT

Nominal flow:	100 gpm
Assumed water temperature:	60 F
Maximum BTEX concentration:	150 ug/L
Maximum benzene concentration:	100 ug/L
Calcium:	60 mg/L
Magnesium:	16 mg/L
Sodium:	35 mg/L
Potassium:	3 mg/L
Iron:	< 0.1 mg/L
Bicarbonate:	210 mg/L
Chloride:	50 mg/L
Total dissolved solids:	300 mg/L
Total hardness as $CaCO_3$:	210 mg/L
pH:	7.3
Total suspended solids:	2 mg/L

EFFLUENT

Estimated stripper effluent benzene concentration:	0.5 ug/L

Treated water must be discharged into a distribution system with a maximum pressure of 35 psig.



LEGEND

AS-1	AIR STRIPPER, 3' ø, APPROX. 20' PACKING HEIGHT, APPROX. 25' OVERALL HEIGHT.
AC-1	ACTIVATED CARBON VESSEL,
CF-1	CARTRIDGE FILTER, OPTIONAL.
B-1	AIR STRIPPER BLOWER, APPROX. 500 cfm
P-1, P-2	SUBMERSIBLE PUMPS, NOMINAL FLOW- 50 gpm ea., SET AT ABOUT 130' BELOW GRADE. 3 HP, 230 VAC, THREE PHASE
P-3	CENTRIFUGAL TRANSFER PUMP, NOMINAL FLOW 110 gpm @ 150 ft. OF HEAD
FM-1, FM-2	MECHANICAL, DIAL-TYPE FLOW METERS, 10-100 gpm RANGE
PW-1, PW-2	GROUNDWATER PRODUCTION WELLS

(A)	(B)	(C)	(D)	(E)
2" SCH 40 GALVANIZED STEEL	3" SCH 40 PVC	2" SCH 40 PVC	3" SCH 40 GALVANIZED STEEL	1" SCH 40 GALVANIZED STEEL

PI-1 PRESSURE INDICATOR

TI-1 TEMPERATURE INDICATOR

FS-1 FLOW SWITCH

LS-1 LEVEL SWITCH

REVISIONS				APPROVED	
BY	DATE	DESCRIPTION		BY	DATE

FIGURE 1

TEXACO
PORT ARTHUR RESEARCH LABORATORIES
PORT ARTHUR, TEXAS

TNMPLCo. - HOBBS GROUNDWATER TREATMENT SYSTEM

	INITIALS	DATE	B M	SCALE NONE
DRAWN BY	DLH	6/18/92	CHG.	SECT.
CHK'D. BY	DLC	6/18/92		REVISION

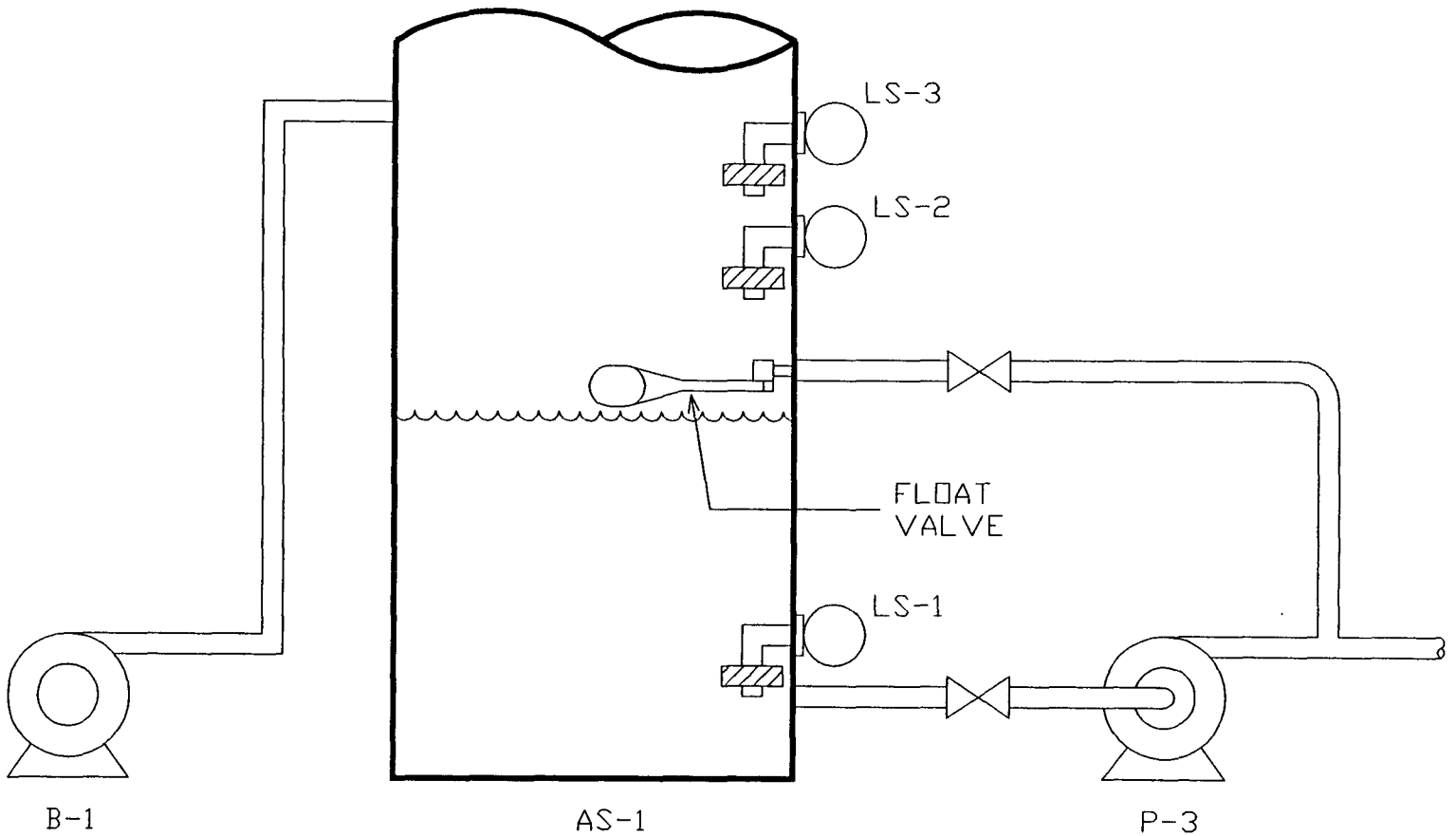


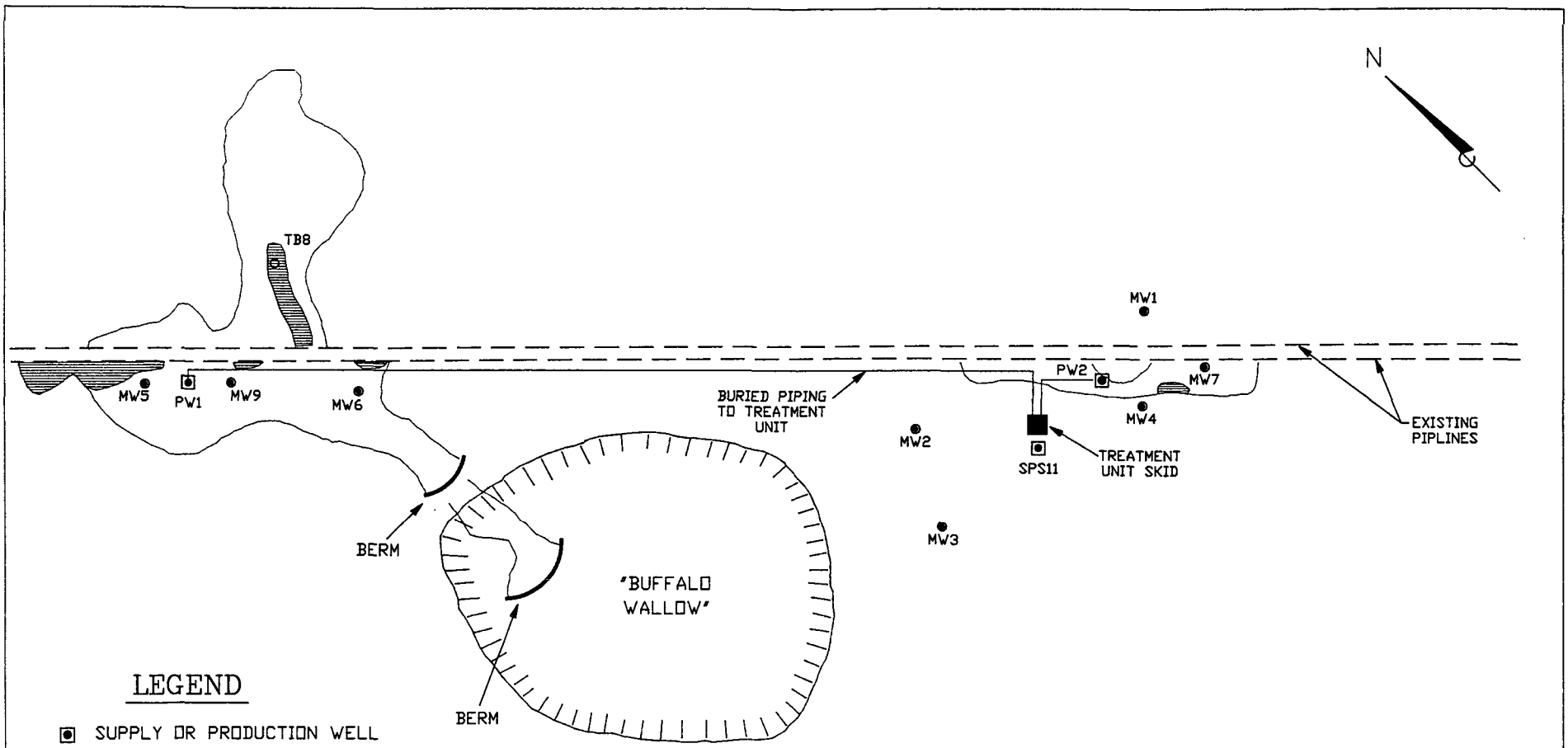
FIGURE 2

REVISIONS				APPROVED	
BY	DATE	DESCRIPTION		BY	DATE

TEXACO
RESEARCH & DEVELOPMENT - PORT ARTHUR
PORT ARTHUR, TEXAS

AIR STRIPPER
SUMP LEVEL CONTROLS

	INITIALS	DATE	B M	SCALE NONE
DRAWN BY	DLH	7/15/92	CHG.	SECT.
CHK'D. BY	DLC	7/15/92		REVISION



LEGEND

- SUPPLY OR PRODUCTION WELL
- MONITORING WELL
- TEST BORING
- PETROLEUM PIPE LINE
- HYDROCARBON STAINED SOIL
- EXTENT OF AREA APPARENTLY IMPACTED

0 100 200 300

GRAPHIC SCALE IN FEET

REVISIONS				APPROVED	
BY	DATE	DESCRIPTION		BY	DATE

FIGURE 3

TEXACO
RESEARCH & DEVELOPMENT - PORT ARTHUR
PORT ARTHUR, TEXAS

SITE MAP

	INITIALS	DATE	B M	SCALE GRAPHIC
DRAWN BY	DLH	7/15/92	CHG.	SECT.
CHK'D. BY	DLC	7/15/92		REVISION

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT DIVISION
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

BRUCE KING
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

MEMORANDUM

MEMO TO: Jerry Sexton

FROM: Chris Eustice CEE

SUBJECT: EVALUATION OF TEXAS-NEW MEXICO PIPELINE WORK PLAN FOR SPS WELL #11 REMEDIATION

DATE: May 8, 1992

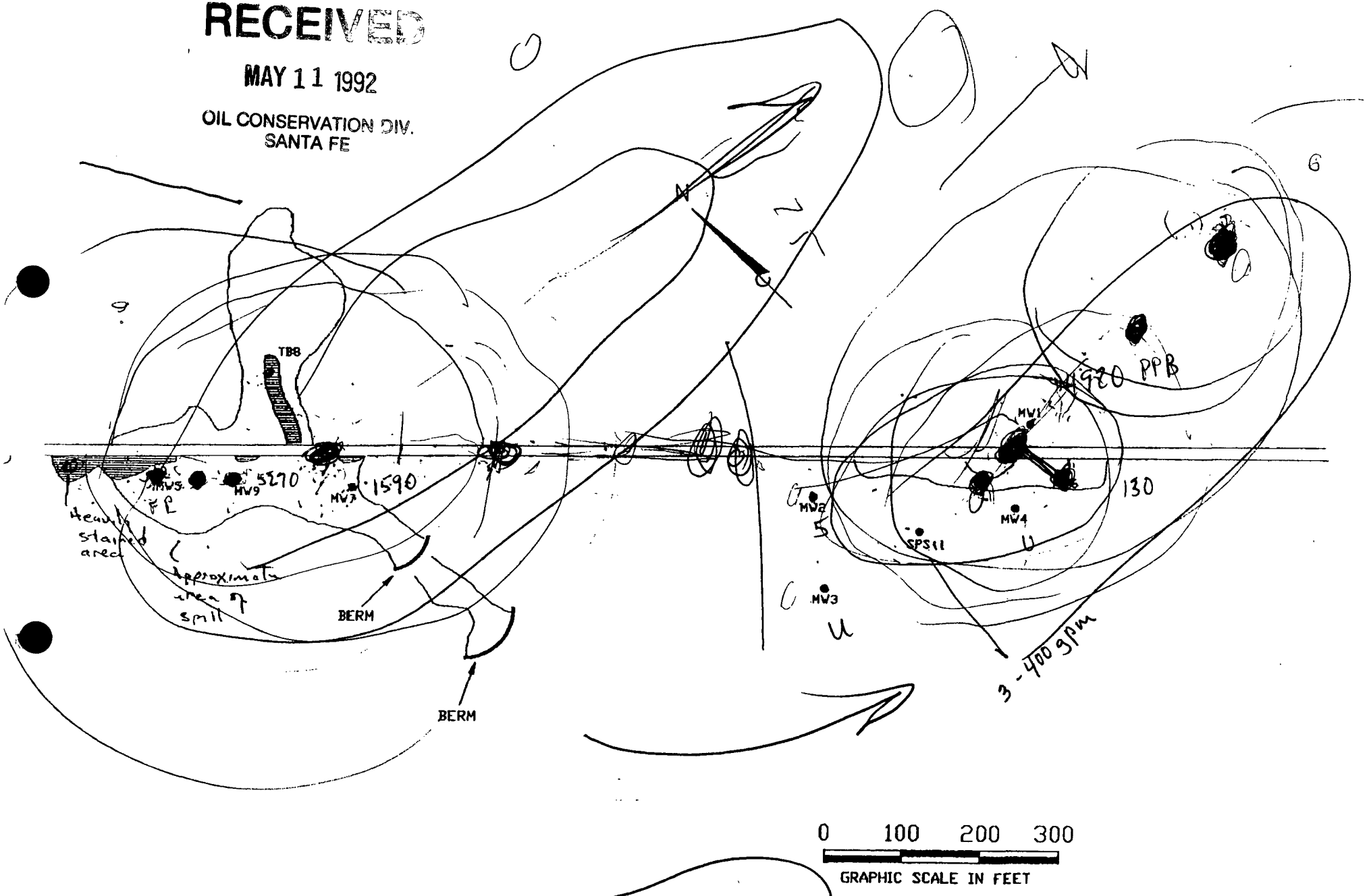
After our meeting with Jay Janica, Engineer for Texas-New Mexico Pipeline Company (TNMPC), to review his remediation proposal, I would like to make a few suggestions.

The elevated benzine content in monitor wells #1 and #7 leads me to believe the extent of the contamination was not defined during the investigation phase of the work. Additional wells drilled would indicate the extent of the benzine contamination and assist all interested parties. It would also be helpful to have a gradient map to indicate if the gradient is localized or if it is regional. This would help determine if more or any additional investigation is needed and what effect the Southwestern Public Service wells have had on the local aquifer gradient and parameters.

It could also benefit the operator if we could further discuss their sampling procedures to convey to them that initial sampling would need to include sampling for heavy metals and major cations and anions. This discussion could ultimately be a cost and time saver.

CE/sad

cc: Roger Anderson



SEO - Johnny Hernandez

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

New Mexico DRUG FREE It's a State of Mind!

BRUCE KING
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

MEMORANDUM

TO: Roger Anderson
Acting Environmental Bureau Chief

FROM: William C. Olson
Geologist III

DATE: March 31, 1992

RE: **EVALUATION OF TEXAS-NEW MEXICO PIPELINE COMPANY WORK PLAN FOR SOUTHWESTERN PUBLIC SERVICE CONTAMINATED WELL**

I have completed a review of the "Texas-New Mexico Pipeline Company Work Plan, Lea County, New Mexico" which the Santa Fe OCD office received from the OCD Hobbs District Office on March 30, 1992. The work plan details the Texas-New Mexico Pipeline Company (TNMPC) proposal for additional investigations of contaminated ground water which has rendered inoperable a Southwestern Public Service utility/drinking water well. According to the document, during the summer and fall of 1991 TNMPC installed four monitor wells and sampled ground water around the contaminated water well. Apparently, the 1991 investigation failed to determine the source of contamination and consequently TNMPC prepared this work plan to expand the investigation to address past TNMPC pipeline spill sites in the vicinity.

Conceptually, the work plan is good. However, there is information lacking in the work plan and many items in the plan need to be clarified. The following is a list of comments, questions and additional information that must be addressed prior to issuance of OCD approval:

1. The work plan references the previous 1991 TNMPC investigation but OCD has no information on file regarding either the referenced July 1991 work plan or the results of this study.

2. The work plan assumes that one recovery well and two injection wells will be required to remediate the aquifer. It is premature for OCD to comment on final remediation requirements

work plan & results

prior to a documentation of the source and extent of these contaminants.

It is unclear whether TNMPC will conduct the aquifer performance test during the phase I investigation or during the Phase II treatment system design. If the test is to be performed during the phase I activities, OCD approval of the treatment system, discharge quality and injection well design will be required. This information is not provided in the work plan. Aquifer characteristics

3. The proposed use of injection wells will require the submission of a WQCC discharge plan for OCD approval prior to operation of the system. GIVE GUIDLINES — part 3 of WQCC rules how will it be operated

4. The proposed use of a recovery well will require approval from the State Engineer Office (SEO) for withdrawal of ground water. TAKEN CARE OF

Additionally, the SEO should be contacted prior to monitor well installation to ascertain if any permits are required for the monitor wells. provided w/ copies for

5. Section 3.1.1. of the work plan states that "The number of borings and wells in Area 1 may be expanded to three if warranted by field conditions". What does this mean? IF DATA IS NOT CONCLUSIVE WILL DRILL ADDITIONAL

6. Section 4.2 states that "Rock samples will be taken continuously or at discrete intervals". Which method will be used?

Section 4.2 also states that "Where practical rock samples will be subjected to head space analysis". What criteria will be used to make this determination? (i.e. OVM, or whatever

7. The headspace analyses of soil and rock samples should be conducted using procedures outlined in OCD's Guidelines For Surface Impoundment Closure.

8. No information is provided regarding the laboratory methods to be used for analyzing soil and water samples for BTEX and TPH. What standard EPA methods are to be used when analyzing for these constituents? 601 & 602 EPA methods

TNMPC only proposes analyzing ground water samples for BTEX. First round water quality laboratory analyses also must be conducted for heavy metals and major cations and anions.

No jurisdiction
DONE BY EID

they do this w/ ecoride

TNMPC water quality sampling must also document measurable field parameters such as pH and specific conductivity.

9. Section 4.5 references Figure 2 for monitor well construction details. No such figure was provided in the work plan.

Section 4.5 also states that "Well screens will be positioned so that several feet of screen extend above the water table". OCD standard monitor well construction practice requires a minimum of five feet of well screen above the water table.

get copy of this gravel pack, ~~grout~~ bentonite 3', grout to surface

10. The work plan does not include a timetable for submission of the report to OCD containing the results of the investigation. Such a report should be submitted to OCD within 6 weeks of receipt of soil and water laboratory analytical results.

OCD personnel will witness this [KEEP 40 WITH — THAT WHAT CHRIS WAS HIRED TO DO.

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
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10. The work plan does not include a timetable for submission of the report to OCD containing the results of the investigation. Such a report should be submitted to OCD within 6 weeks of receipt of soil and water laboratory analytical results.

Presented 2-25-92 900 AM
@ T-NM PL Co. office

TEXAS-NEW MEXICO PIPELINE COMPANY
WORK PLAN
LEA COUNTY, NEW MEXICO

1.0 BACKGROUND

The site is located in the NW ¼, NW ¼, SE ¼, Section 18, Township 18S and Range 36E, Lea County, New Mexico, approximately 15 miles west of Hobbs, New Mexico and 14 miles south of Lovington, New Mexico. Texas-New Mexico Pipe Line Company (TNMPLCO) has two crude oil pipe lines that pass through the area.

On April 2, 1991, water from a utility well (SPS 11) belonging to Southwestern Public Service was tested and found to contain 28.3 parts per billion (ppb) benzene. The maximum contaminant level (MCL) for drinking water set by USEPA for benzene is 5 ppb. The well was re-sampled on April 23, 1991, and the water was found to contain 24.8 ppb benzene. The well was taken out of service in April 1991. Since a crude oil pipe line belonging to TNMPLCO appeared to be a potential source of contamination, TNMPLCO was advised of the problem.

Texaco R&D (Research and Development) developed a work plan in July 1991 which included the installation of four monitor wells, ground water sampling, and analysis. The four monitor wells (MW1 through MW4) were installed in August 1991. The wells are 70 feet deep and are screened from 50 to 70 feet (SPS 11 is screened from 65 to 215 feet). No free hydrocarbon was encountered in the monitor wells. Soils containing hydrocarbon residuals were found in MW1 and MW4. The residuals found in the soil around MW1 extend into the screened zone of the well. Ground-water samples were taken from the monitor wells on August 27, September 12, October 1 and October 28, 1991 and from SPS 11 on September 12 and October 28, 1991. These were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX). Samples taken on October 28, 1991, were also analyzed for pH, iron, manganese, chloride, total hardness, alkalinity, and total dissolved solids.

2.0 OBJECTIVE

The objective of this project is to design and operate a ground-water recovery and treatment system to remove dissolved hydrocarbon residuals from the ground water at the site of a utility well SPS 11.

3.0 WORK PLAN

The proposed work plan involves the following activities which will be performed in three phases:

- PHASE 1. -

- Selection of a drilling contractor,
- Making four soil borings,
- Installing four monitor wells,
- Analyzing soil samples for TPH and BTEX (total of 21 samples),
- Sampling water from the monitor wells and analyzing for BTEX (total of 14 samples),
- Installing one recovery well and two injection wells,
- Performance testing of the recovery and injection wells,

- PHASE 2. -

- Treatment system design,

- PHASE 3. -

- Selection of an engineering and construction contractor, and
- System installation.

In the preparation of this work plan the following assumptions have been made:

- The recovery system will consist of one recovery well and two injection wells,
- Ground water treatment will remove volatile compounds,
- There will be no free hydrocarbon recovery,
- Ground water recovery and treatment will be at a rate of 50 to 100 gpm, and
- No off-gas treatment will be required.

3.1 Phase I Well Installation

3.1.1 Task 1. Soil Borings, Monitor Well Installation, and Sampling

Purpose:

- Better define the dissolved hydrocarbon plume.

Three borings will be made and three monitor wells installed in Areas 2 and 3 and one boring and one monitor well in Area 1. The number of borings and wells in Area 1 may be expanded to three if warranted by field conditions. Well locations are shown in Figure 1.

Soil and rock samples will be collected, placed in containers, and the organic vapor content of the headspace in the container analyzed with a PID. Three soil samples will be taken from each boring for laboratory analysis of TPH and BTEX. Following installation, the monitor wells will be developed, purged, and sampled. Ground-water samples will be analyzed for BTEX.

3.1.2 Task 2. Recovery Well and Injection Well Installation

Purpose:

- Determine the well construction and pumping rate of the recovery wells to be used in the remediation system.
- Determine the construction of injection wells.

In order to determine the well depth necessary to obtain 50 to 100 gpm it is necessary to review existing literature and well logs. These will be obtained from federal and state agencies and from local drillers. Site specific information will be obtained by drilling a pilot hole and taking soil samples in an attempt to locate the more permeable zones of the upper part of the aquifer. The recovery well will be installed in the pilot hole to the determined depth and the pumping rate verified by test pumping. It is estimated that the recovery well (and injection wells) will have to be installed to a depth of 100 feet.

Based on the results of Task 1 and the preliminary part of Task 2 injection wells will be sited and installed. These will be test pumped to verify their capacity and will be sampled to ensure that they are outside of the dissolved hydrocarbon plume.

3.1.3 Task 3. Aquifer Performance Test

Purpose:

- Verify the ability of the recovery well to maintain the design pumping rate.
- Verify the operation of the injection wells.
- Characterize the cone of depression and capture zone created by the recovery well.

A 24-hour pumping test will be run on the recovery well to determine the pumping rate that can be maintained and define the cone of influence due to pumping. Water levels will be monitored in all monitor wells during the test. Ground-water samples will be taken and analyzed for BTEX at the beginning and near the end of the test. Data from the test will be reduced and analyzed for aquifer and well parameters.

A temporary treatment system will be installed to treat the ground water during the test. The treated water will be discharged to the injection wells. Two effluent samples, one after a few hours operation and a second at the end of the test, will be collected

and analyzed for BTEX.

3.2 Phase II. System Design

The majority of the aboveground equipment will be associated with the treatment and injection of the produced ground water. Usually the most economical system to remove low concentrations of volatile organic compounds from ground water is air stripping. The air stripper will be sized to handle the highest expected flow rate and reduce the organic constituents in the ground water to acceptable levels. It is assumed that treatment of the stripper discharge gas will not be required. The results of the Phase I will determine the actual configuration of the treatment and injection system. Texaco R&D will develop the system design and recommend equipment vendors.

3.3 Phase III. System Installation

The remediation equipment will be installed by a qualified contractor. Texaco R&D will provide supervision during the construction. When all operating permits have been obtained, the system will be started up.

4.0 METHODOLOGY

4.1 SOIL/ROCK BORINGS

Soil and rock borings will be made using standard drilling techniques. These are anticipated to include air rotary and hollow stem auger. Soil samples will be collected continuously using either a continuous core barrel or a split spoon sampler. Rock samples will be collected by coring intervals of interest using a rock core barrel.

Geologic data will be collected in the field on a geologic log form. The geologic logs will include the following information as appropriate:

- Well/Boring Number
- Date and Time
- Drilling Method
- Well Construction
- Well Development Data
- Sample Number
- Sample Depth
- Blow Counts
- Sample Recovery
- Sample Type
- Name of Sediment/Rock
- Color
- Description

- PID/FID Organic Vapor Concentration

4.2 SOIL AND ROCK SAMPLING

Soil samples will be collected continuously to the total depth of the boring. Discrete samples will be taken at one to three foot intervals for head space analysis. Samples will be containerized in either metal split spoon liners or in glass jars. Rock samples will be taken continuously or at discrete intervals. Where practical rock samples will be subjected to head space analysis.

4.3 HEADSPACE ANALYSES

Soil and rock samples will be taken from the sampling device and placed in glass jars or plastic bags and allowed to equilibrate to ambient temperature. A photoionization detector (PID) or a flame ionization detector (FID) will be used to determine the organic vapor concentration of the air in the containers.

4.4 LABORATORY ANALYSES FOR SOILS

Based on field observations and head space analyses, soil samples will be selected for laboratory analyses. At least one sample will be taken from each boring. Where hydrocarbon concentrations are found above background two samples will be taken from each boring for analysis. One sample will be taken at the point at which the headspace analysis is the highest. A second sample will be taken from a point of interest to be determined by the geologist. In the absence of organic vapors samples may be chosen from distinctly stained or impacted zones.

Samples will be containerized, labeled, and preserved. Analyses for BTEX and TPH will be performed by a contract lab.

4.5 MONITOR WELL INSTALLATION

Monitor wells will be installed in the borings using 4-inch schedule 40 threaded (flush joint) PVC well casing and screen. A typical well construction is illustrated in Figure 2. Well screens will be positioned so that several feet of screen extend above the water table, to allow liquid hydrocarbon, if present, to flow into the well. Following installation, the wells will be developed by appropriate means such as overpumping, bailing, or surging.

4.6 SURVEYING

A land surveyor, licensed in the state of New Mexico will be contracted to survey all wells and borings constructed as a part of this program. Relative elevations of the top of well casings,

referenced to the concrete slab at SPS 11, will be measured to the nearest 0.01 foot.

4.7 FLUID LEVEL MONITORING

All wells will be gauged for fluid level depth and elevation. Wells will be gauged using an oil/water interface probe or graduated steel tape. If free hydrocarbon is found the thickness will be determined. This information will be evaluated to produce water level elevation maps.

4.8 WATER QUALITY SAMPLING

Following construction, the monitor wells will be sampled. The wells will be pumped or bailed to remove a minimum of three well volumes of water. Samples will be collected using a bailer. Samples will be labelled, preserved and shipped to the analytical laboratory. Purging, sampling procedures, and chain of custody will be documented. Ground-water samples will be analyzed for BTEX.

Quality assurance (QA) samples will be collected to aid in verifying the results of the sampling program. QA samples will consist of trip blanks, equipment blanks, rinse water blanks, and duplicates as appropriate to the sampling event.

4.9 AQUIFER PERFORMANCE TESTING

The recovery well will be pumped at a constant rate for about 24 hours. Water levels will be measured in all of the monitoring wells to determine the radius of influence of the pumped well. Water levels in selected wells will be periodically monitored for drawdown and recovery. Samples of the produced water will be collected and analyzed for BTEX. Water level data from the test will be reduced and analyzed for well and aquifer parameters such as specific capacity, transmissivity, and storage. Water analyses will be examined for changes in water quality during the test.

4.10 DECONTAMINATION PROCEDURES

Sampling and drilling equipment will be decontaminated to eliminate cross contamination. These procedures may include, but will not be limited to, steam cleaning, washing with phosphate-free detergent, and rinsing with deionized water. Procedures will be recorded.

4.11 REPORT PREPARATION

A report will be prepared to document the results of the testing and to present the engineering design for the ground-water treatment system. The report will include the following sections:

Table of Contents, List of Figures, Tables and Appendices
Executive Summary
Introduction
Background
    Site Identification
    Authorization
    Scope of Work
Methods and Procedures
Hydrogeology
    Regional
    Site
Water and Soil Analyses
Hydrocarbon Occurrence
Extraction, Treatment, and Injection System Design
Findings and Conclusions
References
Appendices

Figures are anticipated to include:

- Site Location Map
- Site Map
- Boring, Monitor Well, and Sample Location Map
- Geologic Cross Sections
- Potentiometric Surface Maps

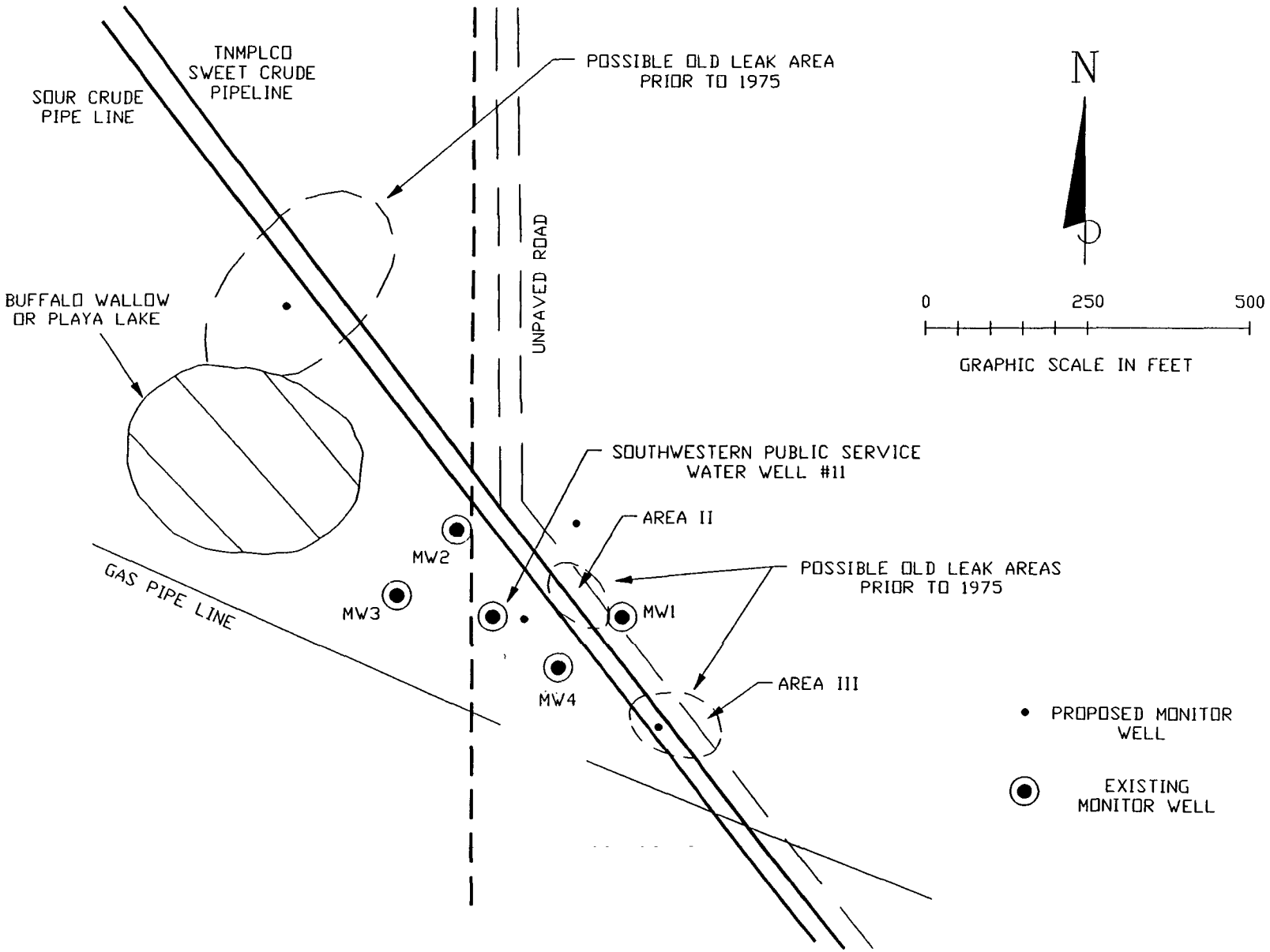
Tables will include, as appropriate:

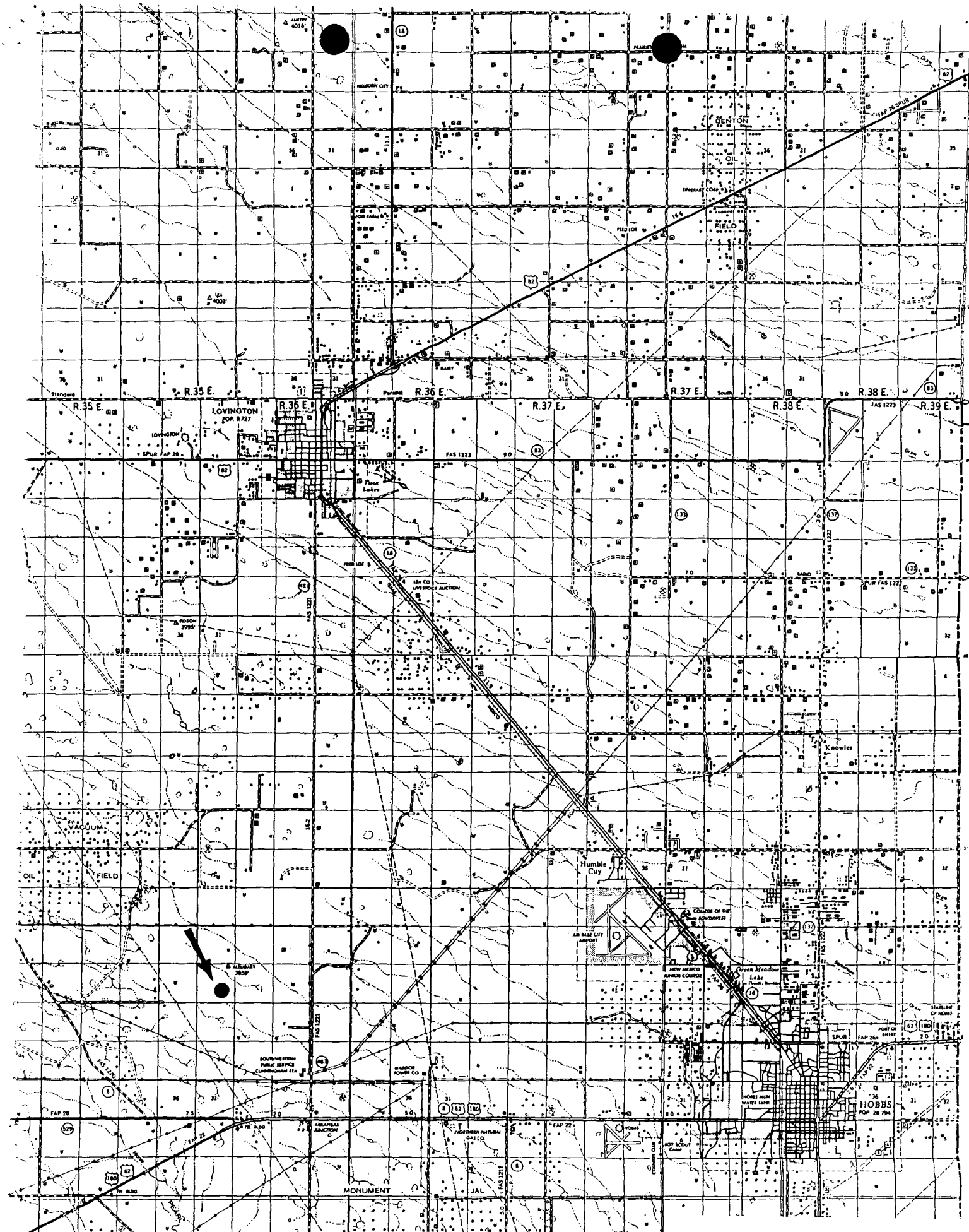
- Well Construction Information
- Fluid Levels
- Summary of Analytical Data

Appendices will include:

- Boring Logs and Well Construction Diagrams
- Laboratory Analyses and Chain of Custody Forms
- Photographs (if appropriate)
- Permits and Correspondence with Regulatory Agencies

FIGURE 1
TEXAS – NEW MEXICO PIPE LINE COMPANY
SITE INVESTIGATION PLOT PLAN
SOUTHWESTERN PUBLIC SEVICE WATER WELL NUMBER 1




LOVINGTON
POP. 9,727
DENTON
FIELD
VACUUM
OIL
FIELD
Humble City
Knowles
HOBBS
POP. 28,794
MONUMENT
JAL
R.35 E.
R.36 E.
R.37 E.
R.38 E.
R.39 E.
Location of
SPS Water Well #11

TNMPL - Hob

Jerry Sexton	OCD	Hobbs
[illegible]	TNMPLCO	[illegible]
Doug Ben[illegible]	TNMPLCo	HOBBS
Jim Ho[illegible]	Texaco R&D PA	Port Arthur
Ernest J Richarte	T.N.M.P.L.CO.	Lovington
[illegible]	TNMPLCo	Hobbs
Ken Lindemann	SPS	Amarillo
Gene Bernhardt	SPS	Hobbs
Chris EUSTICE	OCD	Hobbs

State of New Mexico
ENVIRONMENT DEPARTMENT
Hobbs Field Office
726 E. Michigan Ave. - Suite 165
Hobbs, New Mexico 88240
Phone (505) 393-4302

M E M O R A N D U M

DATE: March 10, 1992

TO: File

FROM: Myra Meyers, Environmental Supervisor, Hobbs mm

SUBJECT: SPS-Cunningham Well #11

Gene Bernhardt, Plant Manager, SPS-Cunningham Station, contacted our office requesting guidelines which NMED would require if Well #11 was put back on line after being sent through an air stripper. There would be approximately 50-100 gpm coming from Well #11 into the system along with 4 or 5 other wells which would be running at the same time. After consulting with Robert Gallegos, DWS, Santa Fe, and Bill Weber, District IV Engineer, Roswell, it was agreed that SPS-Cunningham would have to submit and follow a sample monitoring schedule as follows:

Samples would need to be collected at the following points.

1. Before the stripper.
2. After the stripper-before entering the line.
3. From the Distribution tank.

Samples will need to be collected at a frequency...

1. The first month samples would need to be collected weekly.
2. If the tests results for the first month are fine, the system may go to a quarterly sampling frequency. The quarterly frequency would continue until the pollutants were cleaned up at Well #11 or the test results show that the benzene level is above the maximum contaminant level.

Gene Bernhardt was advised of the requirements and asked for an agreement in writing before putting Well #11 back on line.

cc: G. McCaslin, NMED, HPM II, Roswell
T. Burt, NMED, HPM I, Carlsbad
File

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal	Time 0840	Date 12/3/91

Originating Party	Other Parties
Robert McCasland 394-2553	Bill Olson - OCD Santa Fe

Subject

Tex - Mex Pipeline Spill

Discussion

He called to report that a previous spill by Tex-Mex Pipeline in approx. Feb March 1990 has never been adequately cleaned up. They vacuumed up liquids but large amounts of contaminated soils were never addressed. He is concerned about ground water contamination since he has a stock windmill approx. 1/2 mile from spill area. Spill was in Monument Draw 5 miles north of Eunice on Hobbs Highway and approx 3 miles up the draw from the old Carbon Black Plant

Conclusions or Agreements

Chris Eustice will visit site next week to sample to determine contaminant levels remaining. Action by OCD will be based on sample results

Distribution

Chris Eustice
RCA

Signed Bill Olson

R&D

Making the future happen

RECEIVED
MAY 11 1992
OIL CONSERVATION DIV.
SANTA FE

FAX TRANSMITTAL COVER SHEET

DATE: 10/14/91 ___ URGENT ___ ROUTINE NO. OF PAGES 3 + COVER

MESSAGE TO: Mr. B. L. Lednicky
Hobbs, NM

TELEPHONE NO. _____ FAX MACHINE NO. I/N 676-3486

DEPT./DIV./SUBS. _____

LOCATION _____

MESSAGE FROM: Jim Holley

TELEPHONE NO. 409-989-6007 FAX MACHINE NO. 409-989-6826

DEPARTMENT Texaco Research & Development

LOCATION Port Arthur, Texas

SENDING DEPT. APPROVAL _____ TIME TRANSMITTED ___ : ___ AM PM

CONFIRMING NO. 409-989-6359 TEXNET 652-6359

COMMENTS:

Texaco

HOBBS OFFICE FILE

OCT 14 1991

☒ HANDLE ☐ NOTE

BLL			LEL		
JBH			JTJ		
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JPT			KLB		
MMC			CSJ		

DATE: October 14, 1991

TO: Mr. B. L. Lednicky
Hobbs, NM

FROM: Dr. R. B. Borey
Port Arthur, TX

SUBJECT: RES-02-08 Texas-New Mexico Pipeline Company
Southwestern Public Service Water Well No. 11

As requested we are sending you a progress report on the analytical data from water samples taken from the four monitor wells that were installed surrounding Southwestern Public Service well no. 11 and from a sample taken from the annular space of well no. 11. A summary and discussion of the data are attached. Please contact Mr. James Holly (409 989 6007 - Texnet 652 6007) if you have any questions or if we can be of any further assisstance.

R B Borey

JH/dbh

Attachments

J. T. Nolan

Texas-New Mexico Pipeline, Southwestern Public Service well no. 11. Progress Report - 10/10/91

Four monitor wells were installed by Texas-New Mexico Pipe Line Company (TNMPLCO) staff on August 19 through 21, 1991. The wells are approximately 70 feet deep and were constructed with 20 feet of 4 inch PVC screen and 50 feet of 4 inch PVC casing. Depth to water is approximately 45 feet. The wells have been surveyed to establish relative ground-water elevations.

There have been three sampling events to date: one each in August, September and October 1991. On August 27 MW1 and MW2 were sampled. On September 12 all four monitor wells and the supply well (SPS 11) were sampled. The supply well was sampled from the access pipe that leads into the annular space between the well casing and pump column; the pump was not running at the time. On October 1 the four monitor wells were again sampled. All samples were analyzed for BTEX. The samples from the September sampling event were analyzed a second time in order to obtain a lower detection limit. Results are summarized in Table 1.

Results of the analyses have not been consistent. The variation has been the greatest in MW1. MW1 had a reported benzene content of 4.71 mg/L for the August sample, 3.43 mg/L for the September sample, and 0.0027 mg/L for the October sample. The reason for this discrepancy is not apparent.

Initial water level information indicates that the ground water gradient is to the south or southeast.

Additional sampling and well gauging is planned to verify the analyses and water levels.

Table 1. BETX Analyses of Ground-Water Samples; Hobbs, New Mexico.

	MW1	MW2	MW3	MW4	SPS 11
Benzene					
8/27/91	4.71	--	--	ND /1	--
9/12/91	3.43	0.01	ND /1	ND /1	--
9/12/91A	--	0.0015	ND /2	0.0011	0.0011
10/01/91	0.0027	0.0043	ND /2	0.0023	--
Toluene					
8/27/91	3.94	--	--	ND /1	--
9/12/91	2.09	ND /1	ND /1	ND /1	ND /1
9/12/91A	--	0.0009	ND /2	0.0006	0.0042
10/01/91	0.0011	0.0004	ND /2	0.0013	--
Ethylbenzene					
8/27/91	1.59	--	--	ND /1	--
9/12/91	1.05	ND /1	ND /1	ND /1	ND /1
9/12/91A	--	0.0004	ND /2	ND /2	0.0004
10/01/91	0.0008	0.0005	ND	0.0003	--
Xylenes					
8/27/91	1.83	--	--	ND /1	
9/12/91	1.16	ND /1	ND /1	ND /1	ND /1
9/12/91A	--	ND /2	ND /2	ND /2	0.0003
10/01/91	0.0007	ND /2	ND /2	0.0004	--

9/12/91A Sample rerun at a lower detection limit

-- Not Sampled or Analyzed

/1 Detection limit = 0.01 mg/L

/2 Detection limit = 0.0003 mg/L

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

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May 21, 1991

BRUCE KING
GOVERNOR

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(505) 393-6161

MEMO TO: David Boyer
OCD Environmental Bureau Chief

FROM: Jerry Sexton
OCD District I, Supervisor JS

SUBJECT: Southwestern Public Service Co.
Fresh Water Well contaminated with Benzene
NW/4, NW?4, SE/4, 18-18-36

I meet with the Environmental Improvement Division and Southwestern Public Service Co. on May 17, 1991. To discuss a water well of Southwestern Public Service contaminated with Benzene. This is the first time the wells were tested for Benzene.

The contaminated well is probably 1 to 2 miles from any oil production, but an oil pipe line of Texas-New Mexico Pipeline goes within an estimated 200 feet of the well. There is also a Northern Natural Gas Line close to the well, but I would rather think the oil line was the problem instead of the gas line.

The Environmental Improvement Division and Southwestern Public Service Co. and I agreed that the problem was related to the oil field.

On May 20, 1991, I met with Texas-New Mexico Pipeline personnal at the site of the contaminated well and discussed what had been found in the water analysis.

An estimated 15 to 20 years ago there had been a couple of leaks within an estimated 300 yards of the fresh water well. Three miles of the pipeline had been replaced in 1976 and no leaks had occurred in this area since that time. This may be the source of the Benzene, but oil has never been noticed at the well.

Texas-New Mexico Pipeline will get back to me within an estimated 3 weeks to give the Oil Conservation Division a recommendation on how they would like to proceed with the problem. This procedure was satisfactory with Southwestern Public Service.

I will notify you of the next meeting which will involve Texas-New Mexico Pipeline, Southwestern Public Service, State Engineer's Office and Oil Conservation Division-Hobbs Office. I hope you are able to make the meeting to add your expertise.

The above also confirms the phone calls between us on the contamination problem and brings you up to date as where we stand.

CC: Bill LeMay
Attachments: Benzene Analysis, SPS Well #11

Controls for Environmental Pollution, Inc.
P.O. BOX 5351 • Santa Fe, New Mexico 87502
IN STATE 505/982-9841
OUT OF STATE 800/545-2188 • FAX - 505-982-9289

TEST RESULTS BY SAMPLE

Sample: 01A Well #11 By: T.A. Collected: 04/23/91 14:30

Test Description	Result	D.L.	Units	Analyzed	By
EPA - method 524					
Benzene	24	0.10	ug/liter	04/26/91	MG
Bromobenzene	<0.12	0.12	ug/liter	04/26/91	MG
Bromochloromethane	<0.20	0.20	ug/liter	04/26/91	MG
Bromodichloromethane	<0.20	0.20	ug/liter	04/26/91	MG
Bromoform	<0.66	0.66	ug/liter	04/26/91	MG
Bromomethane	<1.00	1.00	ug/liter	04/26/91	MG
sec-Butylbenzene	<0.30	0.30	ug/liter	04/26/91	MG
tert-Butylbenzene	<0.30	0.30	ug/liter	04/26/91	MG
Carbon Tetrachloride	<0.28	0.28	ug/liter	04/26/91	MG
Chlorobenzene	<0.14	0.14	ug/liter	04/26/91	MG
Chloroethane	<1.00	1.00	ug/liter	04/26/91	MG
Chloroform	<0.24	0.24	ug/liter	04/26/91	MG
Chloromethane	<1.00	1.00	ug/liter	04/26/91	MG
2-Chlorotoluene	<1.00	1.00	ug/liter	04/26/91	MG
4-Chlorotoluene	<1.00	1.00	ug/liter	04/26/91	MG
Dibromochloromethane	<0.30	0.30	ug/liter	04/26/91	MG
1,2-Dibromo-3-chloropropane	<1.80	1.80	ug/liter	04/26/91	MG
1,2-Dibromoethane	<0.36	0.36	ug/liter	04/26/91	MG
Dibromomethane	<0.30	0.30	ug/liter	04/26/91	MG
1,2-Dichlorobenzene	<1.00	1.00	ug/liter	04/26/91	MG
1,3-Dichlorobenzene	<1.00	1.00	ug/liter	04/26/91	MG
1,4-Dichlorobenzene	<1.00	1.00	ug/liter	04/26/91	MG
Dichlorodifluoromethane	<0.33	0.33	ug/liter	04/26/91	MG
1,1-Dichloroethane	<0.17	0.17	ug/liter	04/26/91	MG
1,2-Dichloroethane	0.6	0.22	ug/liter	04/26/91	MG
1,1-Dichloroethene	<1.00	1.00	ug/liter	04/26/91	MG
cis-1,2-Dichloroethene	<1.00	1.00	ug/liter	04/26/91	MG
trans-1,2-Dichloroethene	<1.00	1.00	ug/liter	04/26/91	MG

Test Description	Result	D.L.	Units	Analyzed	By
1,2-Dichloropropane	<0.17	0.17	ug/liter	04/26/91	MG
1,3-Dichloropropane	<0.10	0.10	ug/liter	04/26/91	MG
2,2-Dichloropropane	<1.00	1.00	ug/liter	04/26/91	MG
1,1-Dichloropropene	<0.20	0.20	ug/liter	04/26/91	MG
Ethylbenzene	2.4	1.00	ug/liter	04/26/91	MG
Hexachlorobutadiene	<1.00	1.00	ug/liter	04/26/91	MG
Isopropylbenzene	0.2	0.30	ug/liter	04/26/91	MG
Methylene Chloride	0.4	0.13	ug/liter	04/26/91	MG
n-Propylbenzene	0.2	0.30	ug/liter	04/26/91	MG
Styrene	<0.20	0.20	ug/liter	04/26/91	MG
1,1,1,2-Tetrachloroethane	<0.40	0.40	ug/liter	04/26/91	MG
1,1,2,2-Tetrachloroethane	<0.41	0.41	ug/liter	04/26/91	MG
Tetrachloroethene	<0.29	0.29	ug/liter	04/26/91	MG
Toluene	<0.12	0.12	ug/liter	04/26/91	MG
1,1,1-Trichloroethane	<1.00	1.00	ug/liter	04/26/91	MG
1,1,2-Trichloroethane	<1.00	1.00	ug/liter	04/26/91	MG
Trichloroethene	<0.36	0.36	ug/liter	04/26/91	MG
Trichlorofluoromethane	<0.21	0.21	ug/liter	04/26/91	MG
1,2,3-Trichloropropane	<1.00	1.00	ug/liter	04/26/91	MG
Vinyl Chloride	<0.31	0.31	ug/liter	04/26/91	MG
o-Xylene	0.4	0.20	ug/liter	04/26/91	MG
m-Xylene	<0.20	0.20	ug/liter	04/26/91	MG
p-Xylene	0.2	0.13	ug/liter	04/26/91	MG
1,3-Dichloropropene	<0.5	0.5	ug/liter	04/26/91	MG
1,2,4-Trimethylbenzene	0.3	0.2	ug/liter	04/26/91	MG
1,2,4-Trichlorobenzene	<0.2	0.2	ug/liter	04/26/91	MG
1,2,3-Trichlorobenzene	<0.2	0.2	ug/liter	04/26/91	MG
n-Butylbenzene	<0.2	0.2	ug/liter	04/26/91	MG
Naphthalene	<0.5	0.5	ug/liter	04/26/91	MG
1,3,5-Trimethylbenzene	<0.2	0.2	ug/liter	04/26/91	MG
p-Isopropyltoluene	<0.2	0.2	ug/liter	04/26/91	MG