1R - 248

GENERAL CORRESPONDENCE

YEAR(S):

Price, Wayne, EMNRD

From: Price, Wayne, EMNRD
Sent: Friday, April 28, 2006 2:27 PM
To: Sharon Hall (shall@arcadis-us.com)
Subject: 1R0248 Sunoco Lea Crude Station

Dear Mr. Gates:

OCD is in receipt of the closure request dated April 06, 2006 for the above subject site. The report indicates there is chloride levels that exceed the groundwater standard are a result of a regional issue. In order for OCD to issue closure please provide information on the chloride regional issue.

Wayne Price
Oil Conservation Div.
1220 S. Saint Francis
Santa Fe New Mexico 87505

phone: 505-476-3490
fax: 505-476-3462

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

July 5, 2001

CERTIFIED MAIL
RETURN RECEIPT NO: 3771-7408

Mr. David M. Minielly
Sunoco, Inc.
P.O. Box 2039
Tulsa, Oklahoma 74102-2039

RE: LEA CRUDE OIL STATION
LEA COUNTY, NEW MEXICO

Dear Mr. Minielly:

The New Mexico Oil Conservation Division (OCD) has reviewed Sunoco, Inc.'s (Sunoco) February 19, 2001 "ADDITIONAL SAMPLING & EXCAVATION ACTIVITIES, SUNOCO, INC. (R&M) LEA CRUDE OIL STATION, LEA COUNTY, NEW MEXICO". This document contains the results of Sunoco's recent investigation of the extent of contamination related to Sunoco's Lea Crude Oil Station and requests closure of the investigation and remediation actions.

The investigation and remediation actions conducted to date are satisfactory. However, a review of the above referenced report shows that ground water downgradient of the station is contaminated with chloride and total dissolved solids in concentrations in excess of New Mexico Water Quality Control Commission ground water standards and background ground water quality. Therefore, final closure approval cannot be issued at this time and the OCD requires that Sunoco:

1. Sample and analyze ground water from each monitor well on an annual basis for concentrations of benzene, toluene, ethylbenzene and xylene (BTEX); total dissolved solids; and major cations and anions using EPA approved methods and quality assurance/quality control (QA/QC) procedures.

2. Submit an annual report to the OCD by April 1 of each year. The report shall be submitted to the OCD Santa Fe with a copy provided to the OCD Hobbs District Office and shall contain:

   a. A description of the sampling activities which occurred during the past calendar year.

b. A water table map showing the location of the station, excavated areas, monitor wells, and any other pertinent site features as well as the direction and magnitude of the hydraulic gradient created using the water table elevation from each monitor well.

c. Summary tables of all ground water quality sampling results and copies of all recent laboratory analytical data sheets and associated QA/QC data.

d. The disposition of all wastes generated.

If you have any questions or comments, please contact me at (505) 476-3491.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office

February 19, 2001

Sunoco, Inc.
PO Box 2039
Tulsa OK 74102-2039

Mr. William Olson
Hydrologist
Environmental Bureau
New Mexico Energy, Mineral & Natural Resources Department
Oil Conservation Division
Santa Fe, NM 87505

RE: Additional Sampling & Excavation Activities
Sunoco, Inc. (R&M) Lea Crude Oil Station
Lea County, New Mexico

Dear Mr. Olson:

Sunoco, Inc. (R&M) operates a crude trucking station, referred to as the "Lea Truck Station", consisting of approximately 0.13 acres located in the SE ¼ NW1/4 of Section 28, Township 20 South, Range 37 East, Lea County, New Mexico. On 12/5/00 ARCADIAS Geraghty & Miller on behalf of Sun conducted additional sampling and excavation activities at the above referenced facility. A brief description of the site history and investigative/remedial activities is as follows:

Background

On August 31, 1998 SPL received a request from the New Mexico Energy, Oil Conservation Division (NMOCD) to conduct a soil and groundwater investigation at the above referenced facility. The NMOCD request was prompted by groundwater contamination in a monitoring well near Lea Station.

April 1999 Phase II Environmental Site Assessment

During April 1999 Hall Geologic Services on behalf of Sun conducted a Phase II environmental Assessment of the Lea Truck Station. The Phase II investigation consisted of the following:

- Soil Characterization – Installation and sediment sampling of four borings from the ground surface to the approximate depth of groundwater. Sediment samples from each boring were collected at five-foot intervals and sent for laboratory analysis of BTEX, TPH-GRO/DRO.
- Groundwater Characterization – Three monitoring wells were installed along the perimeter of Lea Station. All monitoring wells were gauged and sampled. Sample analysis included BTEX, TPH-GRO/DRO.

In general, the April 1999 Phase II investigation concluded the following:

- The Lea Station was not the source of the LNAPL in a monitoring well located about 57 feet of Sun's Well MW99-3 based on groundwater flow direction (Figure 1), and the absence of LNAPL in any of Sun's three monitoring wells.
- Hydrocarbon constituents in groundwater samples from the three monitoring wells were below laboratory detection limits or present only at trace concentrations.
- Soils at each boring/well location were impacted with hydrocarbons mostly in the TPH-DRO range.

As a result of the findings from the Phase II Investigation, Sun requested sit closure from the NMOCD.

NMOCD Response

Following review of the Phase II Investigation, the NMOCD denied Sun site closure for the Lea Station and requested additional site information. In general, the NMOCD requested general chemistry water quality samples from each site monitoring well and additional site activities to address surface and subsurface soil contamination.

December 2000 Additional Site Activities

On December 5th and 6th, 2000 ARCADIS Geraghty & Miller on behalf of Sun conducted additional site activities at the Lea Station. Additional site activities included measuring depth to groundwater in each site monitoring well, collecting groundwater samples, and excavating impacted surface soils.

Groundwater Gauging

Each site monitoring well was gauged with an electronic interface probe to accurately measure depth to groundwater and detect liquid hydrocarbons, if present. Groundwater gauging activities indicated:

- Depth to groundwater at is approximately 31 feet below ground surface;
- Liquid hydrocarbons were not present in any site monitoring well; and
- Groundwater flow remains to the east-southeast (Figure 1).

Groundwater Sampling

All groundwater samples were submitted to STL Laboratory for general chemistry (major cations & ions), BTEX, & TPH-GRO/DRO analysis. Inorganic and organic groundwater sample results are summarized on Tables 1 and 2, respectively. Groundwater sample results are summarized as follows:

- Hydrocarbon constituents were detected in trace amounts in two of the three site monitoring wells (MW-2 & MW-3).
- Detectable BTEX concentrations in groundwater samples were all below New Mexico Water Quality Control Commission groundwater standards.

Soil Excavation

In order at address NMOCD concerns regarding surface contamination and possible groundwater contamination, Sun excavated soil in areas east and west of the crude oil storage tanks (Figure 2). The east excavation was approximately 45 by 20-ft with an average depth of six feet below ground surface (BGS). The west excavation was approximately 45 by 15-ft. with an average depth of 2 ft BGS. A total of 424 yd^3 of soil was excavated at Lea Station. All excavated soil was transported to J& L Landfarm, Inc. in Hobbs New Mexico. The excavated areas were backfilled with clean soil.

Prior to backfilling the excavated areas, composite soil samples were collected and submitted to STL Laboratory for BTEX & TPH-GRO/DRO analysis. Soil sample analytical results (Table 3) are summarized as follows:

- BTEX constituents were not detected above the NMOCD's soil remediation guidance levels;
- Detectable TPH GRO concentrations in excavation soil samples ranged from below laboratory detection limits to 1000 ppm;
- Detectable TPH DRO concentration in excavation soil samples ranged from 120 to 1,800 ppm.

Conclusions

The December 2000 site activities are interpreted as follows:

- Groundwater flow direction remains to the east southeast, and is not the source of contamination in the well located 57 ft. south of the MW-3;
- Product was not detected in any of the site monitoring wells and hydrocarbons dissolved in groundwater at Sun's three monitoring wells are only present in trace concentrations;

- Dissolved hydrocarbons in groundwater samples have not significantly increased as compared to the April 1999 analytical results;
- All detectable hydrocarbon constituents in groundwater samples remain below NMWQCC standards;
- Impacted surface and subsurface soil, which were feasibly accessible, were excavated and transported to a permitted landfarm for treatment.
- All soil samples collected from the excavated areas were below the NMOCD's soil remediation guidance levels for BTEX constituents.

With this submittal, Sun believes the NMOCD request for additional information has been satisfied and asks, once again, for NMOCD to grant closure for this site. During the process of considering this site for closure, please note the following:

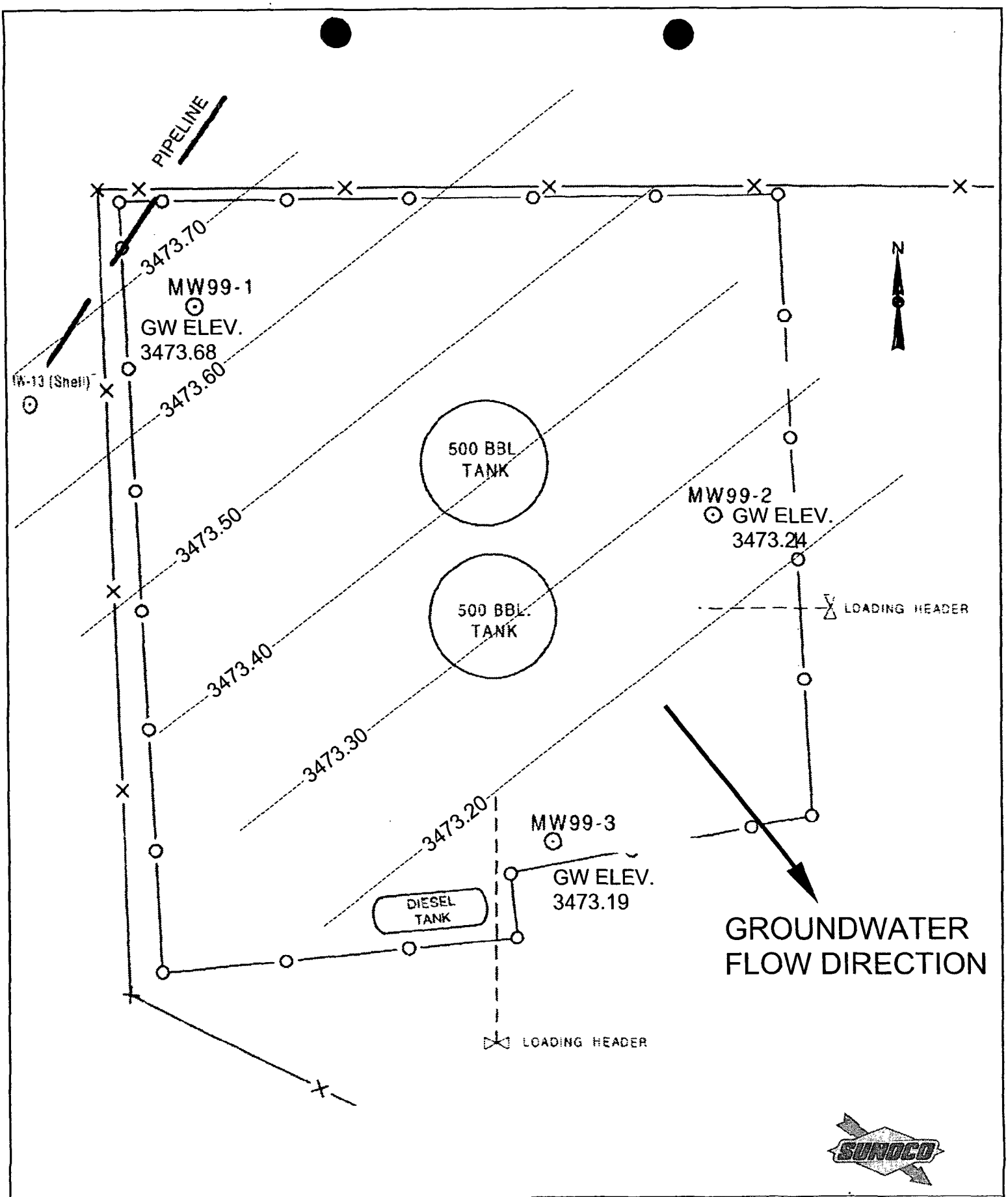
- During the excavation of impacted soil along the east side of the storage tanks, the west sidewall began to sluff . Additional excavation activities would jeopardize tank foundation integrity.
- The majority or "source" of impacted soil at the Leas Station was excavated. Hydrocarbons in soil remaining at the site appear to have been absorbed, degraded, or otherwise attenuated at depth before reaching groundwater.
- The source of the minimal groundwater impacts at Sun's Lea Station is not certain, given the number of potential sources in the area, such as oil-encrusted soils adjacent to the facility, dripping valves, numerous pipelines, product in nearby monitoring well etc.

If you have any questions or require any additional information please contact me at (918) 586-6394.

Sincerely,

David M. Minielly
Sr. Environmental Specialist

cc: (w/attachments)
E. Coen
D. Johnson
C. Rutland
Chris Williams – OCD Hobbs District Office
1625 North French Drive
Hobbs, New Mexico 88240



REVISIONS				
NO	DATE	DESCRIPTION	BY	CHK

SUN PIPE LINE COMPANY

LEA CRUDE OIL STATION
LEA CO. NEW MEXICO
GROUNDWATER ELEV. MAP

DRAWN | SHEET OF

SCALE: NONE | NO. 02-1201

Figure 1.

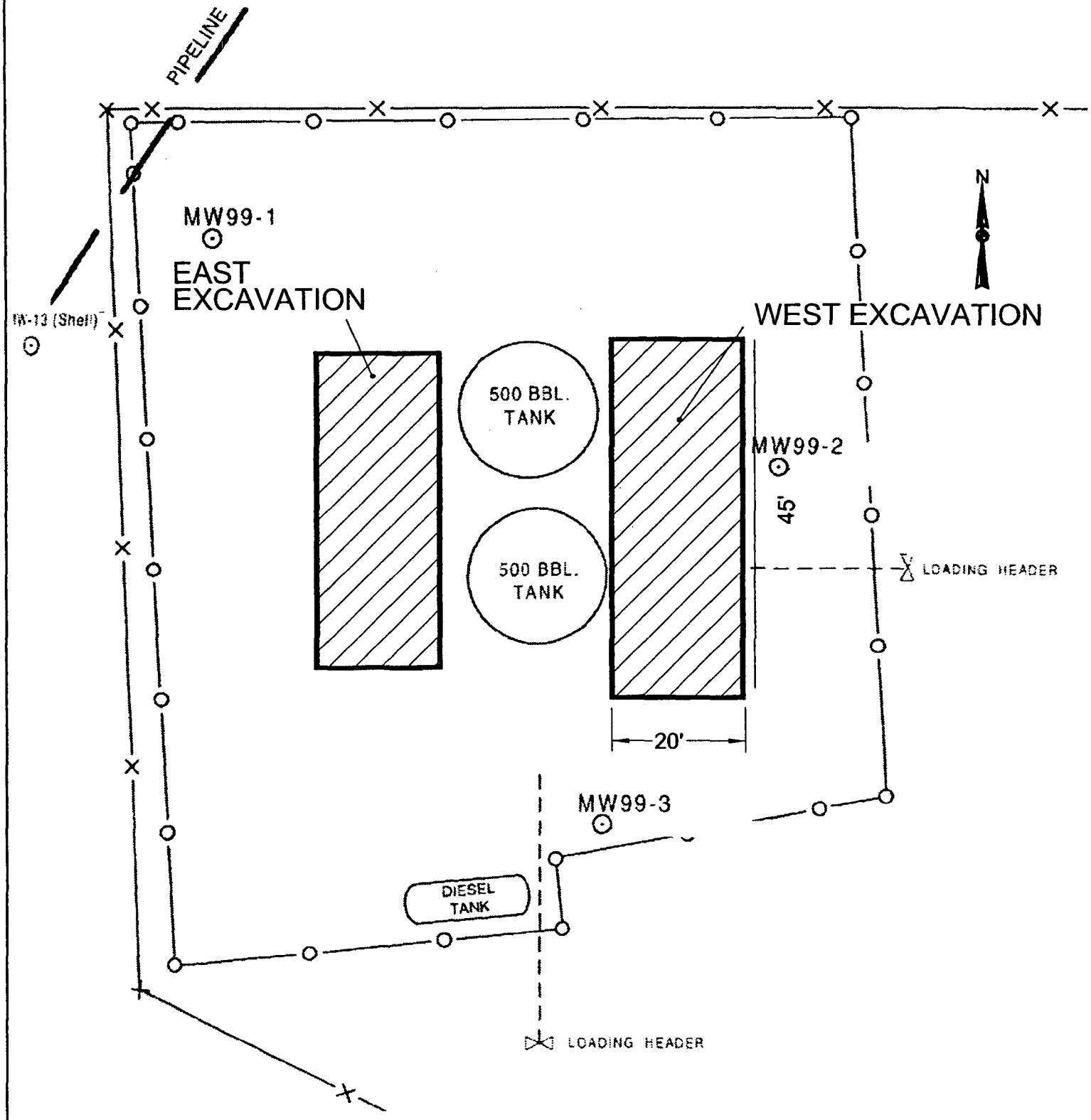


Figure 2.

REVISIONS				
NO	DATE	DESCRIPTION	BY	CHK

SUN PIPE LINE COMPANY

LEA CRUDE OIL STATION
LEA CO. NEW MEXICO

DRAWN | SHEET OF

SCALE: NONE | NO. 02-0901

TABLE 1. GENERAL CHEMISTRY and TOTAL METALS, SUNOCO, Inc., LEA TRUCK STATION, DECEMBER 5, 2000

Parameter	MW99-1 (mg/l)	MW99-2 (mg/l)	MW99-3 (mg/l)
Bicarbonate Alkalinity	185	227	445
Bromide	3.4	3.2	9.9
Carbonate Alkalinity	ND	ND	ND
Chloride	344	344	1210
Ferrous Iron	ND	ND	3
Fluoride	4.6	5.1	3.6
Nitrate	46.4	48.6	45.6
Sulfate	237	245	367
Total Dissolved Solids	1530	1580	3460
Calcium	80.5	93.8	288
Iron	2.79	13.1	52.6
Potassium	14.2	17.9	70
Magnesium	65.5	72.5	301
Sodium	285	295	550
Silica	88	104	71.5

Notes:
ND : Parameter not detected above laboratory detection limits.

TABLE 2. GROUNDWATER ANALYTICAL RESULTS, DECEMBER 5, 2000, SUNOCO, Inc., LEA CRUDE OIL STATION, LEA COUNTY, NEW MEXICO

Sample ID	Benzene mg/L	Toluene mg/L	Ethyl-Benzene mg/L	Total Xylenes mg/L	TPH-GRO mg/L	TPH-DRO mg/L
MW99-1	ND	ND	ND	ND	ND	ND
MW99-2	0.0026	0.0015	0.0037	ND	ND	ND
MW99-3	ND	ND	0.022	ND	0.28	ND

TABLE 3. SOIL ANALYTICAL RESULTS, DECEMBER 5, 2000, SUNOCO, Inc., LEA CRUDE OIL STATION, LEA COUNTY, NEW MEXICO

Sample ID	Benzene mg/kg	Toluene mg/kg	Ethyl-Benzene mg/kg	Total Xylenes mg/kg	TPH-GRO mg/kg	TPH-DRO mg/kg
East Excavation Pit Wall	ND	0.005	1.4	1.7	1000	1000
East Excavation Pit Bottom	ND	0.076	2.4	5.3	170	1800
West Excavation Pit Bottom	ND	0.003	ND	ND	ND	120

Notes

mg/kg : milligrams per kilogram
mg/L : milligrams per liter
ND : Parameter not detected above laboratory detection limits.
GRO : Gasoline Range Organics
DRO : Diesal Range Organics

(Laboratory Analytical Results)

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: MW99-1

GC Volatiles

Lot-Sample #...: I0L070143-001	**Work Order #...:** DQ0741AV		**Matrix.....:** WATER
Date Sampled...: 12/05/00 14:30	**Date Received..:** 12/07/00		**MS Run #.....:** 0351080
Prep Date.....: 12/15/00	**Analysis Date..:** 12/16/00		
Prep Batch #...: 0351202	**Analysis Time..:** 08:12		
Dilution Factor: 1			
	Method.....: SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	100	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	98	(75 - 125)

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: MW99-1

GC Semivolatiles

Lot-Sample #...: I0L070143-001	**Work Order #...:** DQ0741AU	**Matrix.....:** WATER
Date Sampled...: 12/05/00 14:30	**Date Received..:** 12/07/00	**MS Run #.....:**
Prep Date.....: 12/08/00	**Analysis Date..:** 12/14/00	
Prep Batch #...: 0343300	**Analysis Time..:** 14:56	
Dilution Factor: 1		
	Method.....: SW846 8015B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	ND	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	90	(28 - 131)
Dotriacontane	94	(37 - 139)

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: MW99-1

GC Volatiles

Lot-Sample #...: I0L070143-001	**Work Order #...:** DQ0741AT	**Matrix.....:** WATER
Date Sampled...: 12/05/00 14:30	**Date Received..:** 12/07/00	**MS Run #.....:** 0351079
Prep Date.....: 12/15/00	**Analysis Date..:** 12/16/00	
Prep Batch #...: 0351198	**Analysis Time..:** 08:12	
Dilution Factor: 1		
	Method.....: SW846 8021B	

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

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(70 - 130)
a,a,a-Trifluorotoluene (TFT)	103	(77 - 128)

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: MW99-1

General Chemistry

Lot-Sample #...: I0L070143-001 Work Order #...: DQ074 Matrix.....: WATER
Date Sampled...: 12/05/00 14:30 Date Received..: 12/07/00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	185	5.0	mg/L	MCAWW 310.1	12/21/00	0357258
		Dilution Factor: 1		Analysis Time..: 11:00	MS Run #.....:	
Bromide	3.4	0.20	mg/L	MCAWW 300.0A	12/07/00	0346294
		Dilution Factor: 1		Analysis Time..: 11:34	MS Run #.....: 0346266	
Carbonate Alkalinity	ND	5.0	mg/L	MCAWW 310.1	12/21/00	0357260
		Dilution Factor: 1		Analysis Time..: 11:00	MS Run #.....:	
Chloride	344 Q	60.0	mg/L	MCAWW 300.0A	12/07/00	0346292
		Dilution Factor: 20		Analysis Time..: 12:35	MS Run #.....: 0346261	
Ferrous Iron	ND	0.050	mg/L	SM18 3500-FE D	12/07/00	0346537
		Dilution Factor: 1		Analysis Time..: 17:00	MS Run #.....: 0346306	
Fluoride	4.6	1.0	mg/L	MCAWW 300.0A	12/07/00	0346295
		Dilution Factor: 1		Analysis Time..: 11:34	MS Run #.....: 0346259	
Nitrate	46.4 Q	10.0	mg/L	MCAWW 300.0A	12/07/00	0346291
		Dilution Factor: 20		Analysis Time..: 12:35	MS Run #.....: 0346268	
Sulfate	237 Q	100	mg/L	MCAWW 300.0A	12/07/00	0346293
		Dilution Factor: 20		Analysis Time..: 12:35	MS Run #.....: 0346270	
Total Dissolved Solids	1530	40.0	mg/L	MCAWW 160.1	12/12/00	0348231
		Dilution Factor: 1		Analysis Time..: 19:00	MS Run #.....: 0350099	

NOTE(S):

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: MW99-1

TOTAL Metals

Lot-Sample #...: I0L070143-001 Matrix.....: WATER
Date Sampled...: 12/05/00 14:30 Date Received..: 12/07/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0347331						
Calcium	80500	200	ug/L	SW846 6010B	12/15-12/17/00	DQ0741AJ
		Dilution Factor: 1		Analysis Time..: 12:23	MS Run #.....: 0347160	
Iron	2790	100	ug/L	SW846 6010B	12/15-12/17/00	DQ0741AP
		Dilution Factor: 1		Analysis Time..: 12:23	MS Run #.....: 0347160	
Potassium	14200	3000	ug/L	SW846 6010B	12/15-12/17/00	DQ0741AK
		Dilution Factor: 1		Analysis Time..: 12:23	MS Run #.....: 0347160	
Magnesium	65500	200	ug/L	SW846 6010B	12/15-12/17/00	DQ0741AL
		Dilution Factor: 1		Analysis Time..: 12:23	MS Run #.....: 0347160	
Sodium	285000	5000	ug/L	SW846 6010B	12/15-12/17/00	DQ0741AM
		Dilution Factor: 1		Analysis Time..: 12:23	MS Run #.....: 0347160	
Silica	88000	500	ug/L	SW846 6010B	12/15-12/17/00	DQ0741AN
		Dilution Factor: 1		Analysis Time..: 12:23	MS Run #.....: 0347160	

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: MW99-2

GC Semivolatiles

Lot-Sample #...:	I0L070143-002	**Work Order #...:**	DQ0761AU	**Matrix.....:**	WATER
Date Sampled...:	12/05/00 15:00	**Date Received..:**	12/07/00	**MS Run #.....:**	
Prep Date.....:	12/08/00	**Analysis Date..:**	12/14/00		
Prep Batch #...:	0343300	**Analysis Time..:**	15:33		
Dilution Factor:	1				
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	ND	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	86	(28 - 131)
Dotriacontane	88	(37 - 139)

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: MW99-2

GC Volatiles

Lot-Sample #...: I0L070143-002	**Work Order #...:** DQ0761AV		**Matrix.....:** WATER
Date Sampled...: 12/05/00 15:00	**Date Received..:** 12/07/00		**MS Run #.....:** 0351080
Prep Date.....: 12/15/00	**Analysis Date..:** 12/16/00		
Prep Batch #...: 0351202	**Analysis Time..:** 08:54		
Dilution Factor: 1			
	Method.....: SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	100	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(75 - 125)

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: MW99-2

GC Volatiles

Lot-Sample #...: I0L070143-002	**Work Order #...:** DQ0761AT	**Matrix.....:** WATER
Date Sampled...: 12/05/00 15:00	**Date Received..:** 12/07/00	**MS Run #.....:** 0351079
Prep Date.....: 12/15/00	**Analysis Date..:** 12/16/00	
Prep Batch #...: 0351198	**Analysis Time..:** 08:54	
Dilution Factor: 1		
	Method.....: SW846 8021B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	**2.6**	**1.0**	**ug/L**
Toluene	**1.5**	**1.0**	**ug/L**
Ethylbenzene	**3.7**	**1.0**	**ug/L**
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	103	(70 - 130)
a,a,a-Trifluorotoluene (TFT)	99	(77 - 128)

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: MW99-2

General Chemistry

Lot-Sample #...: I0L070143-002 Work Order #...: DQ076 Matrix.....: WATER
Date Sampled...: 12/05/00 15:00 Date Received..: 12/07/00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	227	5.0	mg/L	MCAWW 310.1	12/21/00	0357258
		Dilution Factor: 1		Analysis Time..: 11:00	MS Run #.....:	
Bromide	3.2	0.20	mg/L	MCAWW 300.0A	12/07/00	0346294
		Dilution Factor: 1		Analysis Time..: 13:37	MS Run #.....: 0346266	
Carbonate Alkalinity	ND	5.0	mg/L	MCAWW 310.1	12/21/00	0357260
		Dilution Factor: 1		Analysis Time..: 11:00	MS Run #.....:	
Chloride	344 Q	60.0	mg/L	MCAWW 300.0A	12/07/00	0346292
		Dilution Factor: 20		Analysis Time..: 14:08	MS Run #.....: 0346261	
Ferrous Iron	ND	0.050	mg/L	SM18 3500-FE D	12/07/00	0346537
		Dilution Factor: 1		Analysis Time..: 17:00	MS Run #.....: 0346306	
Fluoride	5.1	1.0	mg/L	MCAWW 300.0A	12/07/00	0346295
		Dilution Factor: 1		Analysis Time..: 13:37	MS Run #.....: 0346259	
Nitrate	48.6 Q	10.0	mg/L	MCAWW 300.0A	12/07/00	0346291
		Dilution Factor: 20		Analysis Time..: 14:08	MS Run #.....: 0346268	
Sulfate	245 Q	100	mg/L	MCAWW 300.0A	12/07/00	0346293
		Dilution Factor: 20		Analysis Time..: 14:08	MS Run #.....: 0346270	
Total Dissolved Solids	1580	40.0	mg/L	MCAWW 160.1	12/12/00	0348231
		Dilution Factor: 1		Analysis Time..: 19:00	MS Run #.....: 0350099	

NOTE(S):

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: MW99-2

TOTAL Metals

Lot-Sample #...: I0L070143-002 Matrix.....: WATER
Date Sampled...: 12/05/00 15:00 Date Received..: 12/07/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0347331						
Calcium	93800	200	ug/L	SW846 6010B	12/15-12/17/00	DQ0761AJ
		Dilution Factor: 1		Analysis Time..: 12:35	MS Run #.....: 0347160	
Iron	13100	100	ug/L	SW846 6010B	12/15-12/17/00	DQ0761AP
		Dilution Factor: 1		Analysis Time..: 12:35	MS Run #.....: 0347160	
Potassium	17900	3000	ug/L	SW846 6010B	12/15-12/17/00	DQ0761AK
		Dilution Factor: 1		Analysis Time..: 12:35	MS Run #.....: 0347160	
Magnesium	72500	200	ug/L	SW846 6010B	12/15-12/17/00	DQ0761AL
		Dilution Factor: 1		Analysis Time..: 12:35	MS Run #.....: 0347160	
Sodium	295000	5000	ug/L	SW846 6010B	12/15-12/17/00	DQ0761AM
		Dilution Factor: 1		Analysis Time..: 12:35	MS Run #.....: 0347160	
Silica	104000	500	ug/L	SW846 6010B	12/15-12/17/00	DQ0761AN
		Dilution Factor: 1		Analysis Time..: 12:35	MS Run #.....: 0347160	

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: MW99-3

GC Semivolatiles

Lot-Sample #...:	I0L070143-003	Work Order #...:	DQ0781AU	Matrix.....:	WATER
Date Sampled...:	12/05/00 16:00	Date Received..:	12/07/00	MS Run #.....:	
Prep Date.....:	12/08/00	Analysis Date..:	12/14/00		
Prep Batch #...:	0343300	Analysis Time..:	16:10		
Dilution Factor:	1				
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	310	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	84	(28 - 131)
Dotriacontane	79	(37 - 139)

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: MW99-3

GC Volatiles

Lot-Sample #...: I0L070143-003	**Work Order #...:** DQ0781AV	**Matrix.....:** WATER
Date Sampled...: 12/05/00 16:00	**Date Received..:** 12/07/00	**MS Run #.....:** 0351080
Prep Date.....: 12/15/00	**Analysis Date..:** 12/16/00	
Prep Batch #...: 0351202	**Analysis Time..:** 09:35	
Dilution Factor: 1		
	Method.....: SW846 8015B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	**280**	**100**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	110	(75 - 125)

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: MW99-3

GC Volatiles

Lot-Sample #...: I0L070143-003	**Work Order #...:** DQ0781AT	**Matrix.....:** WATER
Date Sampled...: 12/05/00 16:00	**Date Received..:** 12/07/00	**MS Run #.....:** 0351079
Prep Date.....: 12/15/00	**Analysis Date..:** 12/16/00	
Prep Batch #...: 0351198	**Analysis Time..:** 09:35	
Dilution Factor: 1		
	Method.....: SW846 8021B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Ethylbenzene	**22**	**1.0**	**ug/L**
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	103	(70 - 130)
a,a,a-Trifluorotoluene (TFT)	101	(77 - 128)

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: MW99-3

General Chemistry

Lot-Sample #...: I0L070143-003 Work Order #...: DQ078 Matrix.....: WATER
Date Sampled...: 12/05/00 16:00 Date Received..: 12/07/00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	445	5.0	mg/L	MCAWW 310.1	12/21/00	0357258
		Dilution Factor: 1		Analysis Time..: 11:00	MS Run #.....:	
Bromide	9.9 G	0.40	mg/L	MCAWW 300.0A	12/07/00	0346294
		Dilution Factor: 2		Analysis Time..: 14:39	MS Run #.....: 0346266	
Carbonate Alkalinity	ND	5.0	mg/L	MCAWW 310.1	12/21/00	0357260
		Dilution Factor: 1		Analysis Time..: 11:00	MS Run #.....:	
Chloride	1210 Q	150	mg/L	MCAWW 300.0A	12/07/00	0346292
		Dilution Factor: 50		Analysis Time..: 15:10	MS Run #.....: 0346261	
Ferrous Iron	3.0	0.050	mg/L	SM18 3500-FE D	12/07/00	0346537
		Dilution Factor: 1		Analysis Time..: 17:00	MS Run #.....: 0346306	
Fluoride	3.6 G	2.0	mg/L	MCAWW 300.0A	12/07/00	0346295
		Dilution Factor: 2		Analysis Time..: 14:39	MS Run #.....: 0346259	
Nitrate	45.6 Q	5.0	mg/L	MCAWW 300.0A	12/07/00	0346291
		Dilution Factor: 10		Analysis Time..: 14:54	MS Run #.....: 0346268	
Sulfate	367 Q	50.0	mg/L	MCAWW 300.0A	12/07/00	0346293
		Dilution Factor: 10		Analysis Time..: 14:54	MS Run #.....: 0346270	
Total Dissolved Solids	3460	40.0	mg/L	MCAWW 160.1	12/12/00	0348231
		Dilution Factor: 1		Analysis Time..: 19:00	MS Run #.....: 0350099	

NOTE(S):

RL Reporting Limit

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: MW99-3

TOTAL Metals

Lot-Sample #...: I0L070143-003 Matrix.....: WATER
Date Sampled...: 12/05/00 16:00 Date Received..: 12/07/00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0347331						
Calcium	288000	200	ug/L	SW846 6010B	12/15-12/17/00	DQ0781AJ
		Dilution Factor: 1		Analysis Time..: 12:39	MS Run #.....: 0347160	
Iron	52600	100	ug/L	SW846 6010B	12/15-12/17/00	DQ0781AP
		Dilution Factor: 1		Analysis Time..: 12:39	MS Run #.....: 0347160	
Potassium	70000	3000	ug/L	SW846 6010B	12/15-12/17/00	DQ0781AK
		Dilution Factor: 1		Analysis Time..: 12:39	MS Run #.....: 0347160	
Magnesium	301000	200	ug/L	SW846 6010B	12/15-12/17/00	DQ0781AL
		Dilution Factor: 1		Analysis Time..: 12:39	MS Run #.....: 0347160	
Sodium	550000	5000	ug/L	SW846 6010B	12/15-12/17/00	DQ0781AM
		Dilution Factor: 1		Analysis Time..: 12:39	MS Run #.....: 0347160	
Silica	71500	500	ug/L	SW846 6010B	12/15-12/17/00	DQ0781AN
		Dilution Factor: 1		Analysis Time..: 12:39	MS Run #.....: 0347160	

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: E.WALL

GC Semivolatiles

Lot-Sample #...:	I0L070143-004	**Work Order #...:**	DQ2DN1AC	**Matrix.....:**	SOLID
Date Sampled...:	12/05/00 16:30	**Date Received..:**	12/07/00	**MS Run #.....:**	0347227
Prep Date.....:	12/12/00	**Analysis Date..:**	12/15/00		
Prep Batch #...:	0347435	**Analysis Time..:**	14:27		
Dilution Factor:	5				
% Moisture.....:	16	**Method.....:**	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	**1000000**	**8500**	**ug/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	NC,DIL	(40 - 144)
Dotriacontane	142	(42 - 159)

NOTE(S):

NC The recovery and/or RPD were not calculated.

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: E.WALL

GC Volatiles

Lot-Sample #...:	I0L070143-004	**Work Order #...:**	DQ2DN1AD	**Matrix.....:**	SOLID
Date Sampled...:	12/05/00 16:30	**Date Received..:**	12/07/00	**MS Run #.....:**	0350133
Prep Date.....:	12/14/00	**Analysis Date..:**	12/14/00		
Prep Batch #...:	0350359	**Analysis Time..:**	21:49		
Dilution Factor:	1				
% Moisture.....:	16	**Method.....:**	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	**100000**	**5000**	**ug/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	92	(14 - 165)

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: E.WALL

GC Volatiles

Lot-Sample #...:	I0L070143-004	**Work Order #...:**	DQ2DN1AA	**Matrix.....:**	SOLID
Date Sampled...:	12/05/00 16:30	**Date Received..:**	12/07/00	**MS Run #.....:**	0350135
Prep Date.....:	12/14/00	**Analysis Date..:**	12/15/00		
Prep Batch #...:	0350363	**Analysis Time..:**	21:49		
Dilution Factor:	1				
% Moisture.....:	16	**Method.....:**	SW846 8021B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	50	ug/kg
Toluene	**50**	**50**	**ug/kg**
Ethylbenzene	**1400**	**50**	**ug/kg**
Xylenes (total)	**1700**	**150**	**ug/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	63	(40 - 159)

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: E.WALL

General Chemistry

Lot-Sample #...: I0L070143-004 **Work Order #...:** DQ2DN **Matrix.....:** SOLID
Date Sampled...: 12/05/00 16:30 **Date Received..:** 12/07/00
% Moisture.....: 16

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	**15.7**	**0.50**	**%**	**ASTM D 2216-90**	**12/18-12/19/00**	**0353521**
	Dilution Factor: 1			Analysis Time..: 15:41	MS Run #.....: 0353282	

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: W.BTTM

GC Semivolatiles

Lot-Sample #...:	I0L070143-006	**Work Order #...:**	DQ2DW1AC	**Matrix.....:**	SOLID
Date Sampled...:	12/06/00 19:30	**Date Received..:**	12/07/00	**MS Run #.....:**	0347227
Prep Date.....:	12/12/00	**Analysis Date..:**	12/18/00		
Prep Batch #...:	0347435	**Analysis Time..:**	13:06		
Dilution Factor:	1				
% Moisture.....:	9.8	**Method.....:**	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	**120000**	**1700**	**ug/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	99	(40 - 144)
Dotriacontane	113	(42 - 159)

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: W.BTTM

GC Volatiles

Lot-Sample #...:	I0L070143-006	**Work Order #...:**	DQ2DW1AD	**Matrix.....:**	SOLID
Date Sampled...:	12/06/00 19:30	**Date Received..:**	12/07/00	**MS Run #.....:**	0352015
Prep Date.....:	12/16/00	**Analysis Date..:**	12/16/00		
Prep Batch #...:	0352109	**Analysis Time..:**	13:18		
Dilution Factor:	1				
% Moisture.....:	9.8	**Method.....:**	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	100	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	77	(14 - 165)

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: W.BTTM

GC Volatiles

Lot-Sample #...:	I0L070143-006	**Work Order #...:**	DQ2DW1AA	**Matrix.....:**	SOLID
Date Sampled...:	12/06/00 19:30	**Date Received..:**	12/07/00	**MS Run #.....:**	0352014
Prep Date.....:	12/16/00	**Analysis Date..:**	12/16/00		
Prep Batch #...:	0352108	**Analysis Time..:**	13:18		
Dilution Factor:	1				
% Moisture.....:	9.8	**Method.....:**	SW846 8021B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/kg
Toluene	**30**	**1.0**	**ug/kg**
Ethylbenzene	ND	1.0	ug/kg
Xylenes (total)	ND	3.0	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	89	(70 - 130)
a,a,a-Trifluorotoluene (TFT)	95	(40 - 159)

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: W.BTTM

General Chemistry

Lot-Sample #...: I0L070143-006 **Work Order #...:** DQ2DW **Matrix.....:** SOLID
Date Sampled...: 12/06/00 19:30 **Date Received..:** 12/07/00
% Moisture.....: 9.8

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	9.8	0.50	%	ASTM D 2216-90	12/18-12/19/00	0353521

Dilution Factor: 1 Analysis Time..: 15:41 MS Run #.....: 0353282

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: E.BTTM

GC Semivolatiles

Lot-Sample #...:	I0L070143-005	Work Order #...:	DQ2DV1AC	Matrix.....:	SOLID
Date Sampled...:	12/05/00 16:50	Date Received..:	12/07/00	MS Run #.....:	0347227
Prep Date.....:	12/12/00	Analysis Date..:	12/15/00		
Prep Batch #...:	0347435	Analysis Time..:	16:23		
Dilution Factor:	5				
% Moisture.....:	18	Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	1800000	8500	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
o-Terphenyl	NC,DIL	(40 - 144)
Dotriacontane	NC,DIL	(42 - 159)

NOTE(S):

NC The recovery and/or RPD were not calculated.

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: E.BTTM

GC Volatiles

Lot-Sample #...:	I0L070143-005	**Work Order #...:**	DQ2DV1AD	**Matrix.....:**	SOLID
Date Sampled...:	12/05/00 16:50	**Date Received..:**	12/07/00	**MS Run #.....:**	0350133
Prep Date.....:	12/14/00	**Analysis Date..:**	12/14/00		
Prep Batch #...:	0350359	**Analysis Time..:**	23:12		
Dilution Factor:	1				
% Moisture.....:	18	**Method.....:**	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	**170000**	**5000**	**ug/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	103	(75 - 125)
Bromofluorobenzene	128	(14 - 165)

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: E.BTTM

GC Volatiles

Lot-Sample #...: I0L070143-005	Work Order #...: DQ2DV1AA	Matrix.....: SOLID
Date Sampled...: 12/05/00 16:50	Date Received..: 12/07/00	MS Run #.....: 0350135
Prep Date.....: 12/14/00	Analysis Date..: 12/15/00	
Prep Batch #...: 0350363	Analysis Time..: 23:12	
Dilution Factor: 1		
% Moisture.....: 18	Method.....: SW846 8021B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	50	ug/kg
Toluene	**76**	**50**	**ug/kg**
Ethylbenzene	**2400**	**50**	**ug/kg**
Xylenes (total)	**5300**	**150**	**ug/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	47	(40 - 159)

ARCADIS GERAGHTY & MILLER, INC

Client Sample ID: E.BTTM

General Chemistry

Lot-Sample #...: I0L070143-005 Work Order #...: DQ2DV Matrix.....: SOLID
Date Sampled...: 12/05/00 16:50 Date Received..: 12/07/00
% Moisture.....: 18

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	17.8	0.50	%	ASTM D 2216-90	12/18-12/19/00	0353521

Dilution Factor: 1 Analysis Time..: 15:41 MS Run #.....: 0353282

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

September 15, 1999

CERTIFIED MAIL
RETURN RECEIPT NO: Z-274-520-708

Mr. Scott A. Christensen
Sun Pipe Line Company
P.O. Box 2039
Tulsa, Oklahoma 74102-2039

RE: LEA CRUDE OIL STATION
LEA COUNTY, NEW MEXICO

Dear Mr. Christensen:

The New Mexico Oil Conservation Division (OCD) has reviewed Sun Pipe Line Company's (SUNOCO) June 30, 1999 "PHASE II ENVIRONMENTAL ASSESSMENT REPORT, SUNOCO, INC. (R&M) LEA TRUCK STATION, LEA COUNTY, NEW MEXICO". This document contains the results of Sunoco's investigation of the extent of contamination related to Sunoco's Lea Crude Oil Station and requests closure of the investigative actions.

The OCD has the following comments and requests for information regarding the above referenced document:

1. The report contains observations of surface contamination adjacent to Sunoco's facility. However there is no mention of surface contamination around Sunoco's tanks. Prior 1998 inspections by the OCD showed that the surface soils inside the berm around Sunco's tanks were highly saturated with oil from leaks and spills. Puddled fluid was also observed in these contaminated areas. This contamination was the basis for the OCD's August 31, 1998 requirement that Sunoco investigate contamination at the site. Were these contaminated soils covered up or remediated prior to conducting the investigations? Please explain this discrepancy, and if the soils were remediated, please provide the OCD with a report containing the results of all remedial actions and the disposition of the remediated materials.

2. It is not clear whether the monitor wells were developed upon completion of their construction. Was the well purging prior to water quality sampling considered as development of the monitor wells?

3. The report does not contain general chemistry (ie. total dissolved solids and major cations and anions) water quality sample results from each monitor well. These water quality analyses were required as part of the OCD's November 25, 1998 approval of Sunoco's investigation work plan.

4. A number of the soil samples show contaminated soils in the vertical soil profile well in excess of the OCD's soil remediation guidance levels. Monitor wells MW99-1 and MW-99-2 also show that these hydrocarbons have currently leached through the soil from the surface down to 12 to 22 feet in depth. The report does not contain a plan to remediate these soils nor does the report address whether these contaminants will cause future exceedances of the New Mexico Water Quality Control Commission ground water standards.

Please provide the above information to the OCD by November 16, 1999 with a copy provided to the OCD Hobbs District Office. Submission of this information will allow the OCD to complete a review of Sunoco's closure request.

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

Sun Pipe Line Company
PO Box 2039
Tulsa OK 74102-2039
918 586 6000

June 30, 1999

Certified Mail- Return Receipt Requested
Receipt Number Z 583 126 840

Wayne Price, Environmental Engineer
New Mexico Energy, Minerals & Natural Resources Department
Oil Conservation Division
2040 S. Pacheco St.
Santa Fe, NM 87505

RE: Phase II Environmental Assessment Report
Sunoco, Inc. (R&M) Lea Truck Station, Lea County, NM

Dear Mr. Price:

Enclosed are 2 copies of the final Phase II Environmental Assessment Report for the Sunoco, Inc. (R&M) Lea Truck Station, Lea County, New Mexico. This report establishes that hydrocarbon concentrations in groundwater at Lea Truck Station do not exceed New Mexico Water Quality Control Commission Groundwater Standards.

In addition, no phase separated hydrocarbons were detected in any of the monitoring wells installed. As such, Sunoco, Inc. (R&M) requests closure of site investigation activities with no further action.

If you have any questions, you may contact me at (918) 586-6394.

Very truly yours,

Scott A. Christensen
Senior Environmental Specialist

Enclosure

Project- Lea Station, NM

Cc: Lennah Frost- EOTT Energy Pipeline
Donna Williams- w/encl.
New Mexico Oil Conservation Division
1625 N. French Dr.
Hobbs, NM 88240

HALL GEOLOGICAL SERVICES, LLC

5615 East 80th Place
Tulsa, OK 74136
(918) 481-5866 Fax: (918) 492-3184

04/21/99

Wayne Price, Environmental Engineer
New Mexico Energy, Minerals & Natural Resources Department
Oil Conservation Division
Santa Fe, NM 87505

Re: Sun Trucking, Inc. (R&M) 5/1/99 DEADLINE MET
Lea Truck Station
Sec. 28, T20S, R37E
Lea County, NM

Dear Mr. Price:

On behalf of Sun Pipe Line Company (Sun), Hall Geological Services, LLC (HGS) has completed the field phase of the hydrogeological investigation at the Lea Truck Station. On April 13 and 14, 1999, three groundwater monitoring wells were installed around the perimeter of Sun's facility and a soil boring was drilled and plugged with cement near the center of the facility. Ms. Donna Williams from the NMOCD field office in Hobbs was present to observe a part of the drilling activity. This work was completed prior to the 5/1/99 deadline for the field phase of the project.

At each of these four locations, soil and groundwater sampling were performed according to your instructions. The soil sampling was performed on April 13 and 14, 1999, during the drilling. The groundwater sampling was performed on April 15, 1999. The soil and groundwater samples were shipped by overnight courier to Severn Trent Laboratories, Pensacola, Florida. The analytical results will be reported to Sun by mid-May, and the hydrogeological report will be prepared and submitted prior to the 7/1/99 reporting deadline.

Sincerely,
Hall Geological Services, LLC

R. Vance Hall

R. Vance Hall

XC: Jeff Brown, Tony Smith, Scott Christensen, Donna Williams

HALL GEOLOGICAL SERVICES, LLC

5615 East 80th Place
Tulsa, OK 74136
(918) 481-5866 Fax: (918) 492-3184

04/21/99

Wayne Price, Environmental Engineer
New Mexico Energy, Minerals & Natural Resources Department
Oil Conservation Division
Santa Fe, NM 87505

Re: Sun Trucking, Inc. (R&M)
Lea Truck Station
Sec. 28, T20S, R37E
Lea County, NM

5/1/99 DEADLINE MET

Dear Mr. Price:

On behalf of Sun Pipe Line Company (Sun), Hall Geological Services, LLC (HGS) has completed the field phase of the hydrogeological investigation at the Lea Truck Station. On April 13 and 14, 1999, three groundwater monitoring wells were installed around the perimeter of Sun's facility and a soil boring was drilled and plugged with cement near the center of the facility. Ms. Donna Williams from the NMOCD field office in Hobbs was present to observe a part of the drilling activity. This work was completed prior to the 5/1/99 deadline for the field phase of the project.

At each of these four locations, soil and groundwater sampling were performed according to your instructions. The soil sampling was performed on April 13 and 14, 1999, during the drilling. The groundwater sampling was performed on April 15, 1999. The soil and groundwater samples were shipped by overnight courier to Severn Trent Laboratories, Pensacola, Florida. The analytical results will be reported to Sun by mid-May, and the hydrogeological report will be prepared and submitted prior to the 7/1/99 reporting deadline.

Sincerely,
Hall Geological Services, LLC

R. Vance Hall

R. Vance Hall

XC: Jeff Brown, Tony Smith, Scott Christensen, Donna Williams

HALL GEOLOGICAL SERVICES, LLC
5615 East 80th Place
Tulsa, OK 74136
(918) 481-5866 Fax: (918) 492-3184
02/25/99

Wayne Price, Environmental Engineer
New Mexico Energy, Minerals & Natural Resources Department
Oil Conservation Division
Santa Fe, NM 87505

Re: Sun Trucking, Inc. (R&M) RESCHEDULE INVESTIGATION
Lea Truck Station
Sec. 28, T20S, R37E
Lea County, NM

Dear Mr. Price:

On behalf of Sun Pipe Line Company (Sun), Hall Geological Services, LLC (HGS) requests a change in the project schedule and deadlines as set forth in your letter dated November 23, 1998 to Scott Christensen of Sun. Over the past month, we have discussed several scheduling problems, including a requirement to obtain access from the property owner, EOTT Energy Pipeline Limited Partnership (EOTT). Sun requests a change in the project schedule and your written confirmation.

EOTT has recently granted Sun permission to conduct the investigation outlined in your letter of November 25, 1999. Sun requests a revision of the start date for the investigation to May 1, 1999. In addition, Sun requests that you revise the due date for the investigation report to July 1, 1999. These are the dates that we discussed by telephone earlier this week.

Please advise me and Mr. Scott Christensen, Sun Pipe Line Company, regarding your approval of the described change in the project timetables, and any related issues. Mr. Christensen's address is:

Sun Pipe Line Company
907 S. Detroit
Tulsa, OK 74120

Sincerely,
Hall Geological Services, LLC

R. Vance Hall

R. Vance Hall

OCD APPROVES OF START DATE MAY 1, 1999 & DUE DATE FOR REPORT JULY 1, 1999. OK for W PRICE 3/8/99

XC: Jeff Brown, Scott Christensen, Lennah Frost, Donna Williams

HALL GEOLOGICAL SERVICES, LLC

5615 East 80th Place
Tulsa, OK 74136
(918) 481-5866 Fax: (918) 492-3184

02/11/99

RECEIVED
FEB 17 1999

Wayne Price, Environmental Engineer
New Mexico Energy, Minerals & Natural Resources Department
Oil Conservation Division
Santa Fe, NM 87505

Re: Sun Trucking, Inc. (R&M) RESCHEDULE DRILLING
Lea Truck Station
Sec. 28, T20S, R37E
Lea County, NM

Dear Mr. Price:

Several days ago, I requested your assistance in gaining access to the Sun Pipe Line Company Lea Truck Station for the purpose of conducting an environmental assessment. Sun has determined that the Lea Truck Station is owned by and leased from EOTT. Scott Christensen copied you on a February 4, 1999 letter to Ms. Lenna Frost regarding Sun's formal request to EOTT. Ms. Frost has forwarded Sun's request to legal counsel, and no response has been received at this time. The project has been postponed pending EOTT's approval to proceed with the project.

As we discussed, one result of these developments is the need to set aside the March 1 and May 1 deadlines set forth in your letter dated November 25, 1998 to Scott Christensen. Assuming that EOTT will grant its permission to conduct this investigation, Scott or I will contact you upon receipt of their permission to proceed. At that time, we propose to establish new timetables.

Please advise Sun and me regarding your approval of the described indefinite delay in the project timetables, and any related issues.

Sincerely,
Hall Geological Services, LLC

R. Vance Hall

XC: Jeff Brown, Scott Christensen, Donna Williams

February, 4, 1999

Sun Pipe Line Company
P O Box 2039
Tulsa OK 74102-2039
Phone 918 586 6000
Fax 918 586 6955

VIA Facsimile
(915) 687-2713

Ms. Lennah Frost
EOTT
P.O. Box 1660
Midland, TX 79702

RE: Soil and Groundwater Investigation
Sunoco, Inc. (R&M) Lea Truck Station, Lea County, NM

Dear Ms. Frost:

Mr. Wayne Price with the New Mexico Oil Conservation Division (OCD) is requiring that Sunoco, Inc. (R&M) conduct an investigation of soil and groundwater conditions at it's Lea Truck Station in Lea County, New Mexico. It is my understanding that Sunoco, Inc. (R&M) leases this property from EOTT.

To meet the OCD's requirement, Sunoco, Inc. (R&M) is planning to drill several soil borings, which may become monitoring wells, within the boundaries of the truck station property. Attached is a plot plan showing EOTT's Lea Station and the approximate location of the Sunoco, Inc. (R&M) Lea Truck Station.

Sunoco, Inc. (R&M) requests EOTT's permission to access the property and conduct the investigation required by the New Mexico Oil Conservation Division. We would appreciate you expediting approval of this request, as we would like to begin work as soon as possible. If you have any questions, you may contact me at (918) 586-6394.

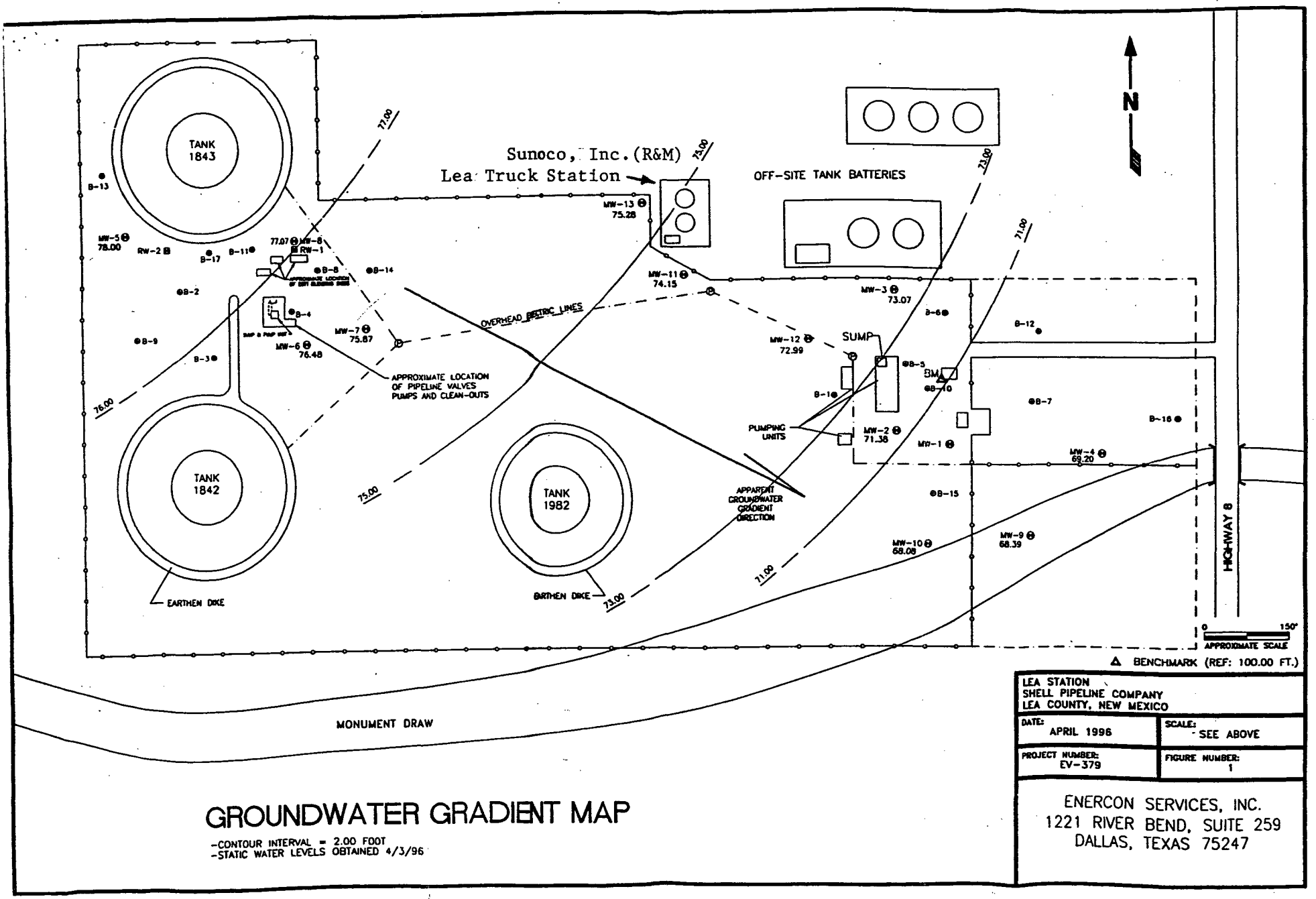
Very truly yours,

Scott A. Christensen
Senior Environmental Specialist

Att.

Cc: Wayne Price- OCD
Vance Hall- HGS

~ME2705.doc



GROUNDWATER GRADIENT MAP

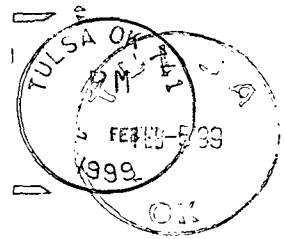
-CONTOUR INTERVAL = 2.00 FOOT
-STATIC WATER LEVELS OBTAINED 4/3/96

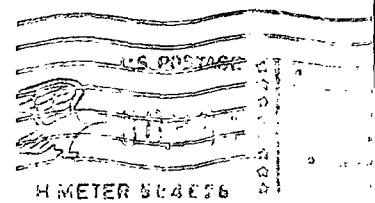
LEA STATION
SHELL PIPELINE COMPANY
LEA COUNTY, NEW MEXICO

DATE: APRIL 1996	SCALE: SEE ABOVE
PROJECT NUMBER: EV-379	FIGURE NUMBER: 1

ENERCON SERVICES, INC.
1221 RIVER BEND, SUITE 259
DALLAS, TEXAS 75247

Sun Pipe Line Company
PO Box 2039
Tulsa OK 74102-2039





Mr. Wayne Price
Oil Conservatiuon Division
Environmental Bureau
2040Pacheo Street
Sante Fe, NM 87504

87504/9999

HALL GEOLOGICAL SERVICES, LLC

5615 East 80th Place
Tulsa, OK 74136
(918) 481-5866 Fax: (918) 492-3184

01/25/99

Wayne Price, Environmental Engineer
New Mexico Energy, Minerals & Natural Resources Department
Oil Conservation Division
Santa Fe, NM 87505

Re: Sun Trucking, Inc. (R&M)
Lea Truck Station
Sec. 31-T19S-R37E
Lea County, NM

Dear Mr. Price:

This afternoon we discussed the upcoming drilling and monitoring well installation at the referenced site. Sun plans to begin drilling on Tuesday, February 2, 1999. The drilling and monitoring well installation should require from two to three days. The groundwater sampling will take place on the day following the completion of all monitoring wells. I anticipate that groundwater sampling may take place on Thursday, February 4 or Friday, February 5.

At your request, I left a telephone message for Ms. Donna Williams in your Hobbs office. I will coordinate with her to ensure that she can be present during the drilling and sampling if she wishes.

Sincerely,
Hall Geological Services, LLC

R. Vance Hall

R. Vance Hall

XC: Jeff Brown, Scott Christensen

Vance Hall
Hall Geological Services

Scott's letter follows

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

November 25, 1998

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

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

Dear Mr. Christensen:

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

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

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

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

Sincerely Yours,

Wayne Price

Wayne Price-Environmental Engineer

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

file:o/wp/sunlea

Sun Company, Inc.
PO Box 2039
Tulsa OK 74102-2039

October 23, 1998

Called 11/17/98 WP

Certified Mail- Return Receipt Requested
Return Receipt Number: Z 346 037 791

Mr. Wayne Price
Environmental Engineer
New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, NM 88241-1980

Re: Sun Company, Inc. (R&M)
Lea Truck Station, Sec. 31-T19S-R37E, Lea County, NM

Dear Mr. Price:

MUST INCLUDE SOIL BORINGS IN-SIDE BERM OR CHECK VERTICAL EXTENT SOMEHOW

In response to your request for a soil and groundwater investigation plan to evaluate the impact of Sun's operations at the above reference facility, Sun proposes the following plan:

1. Drill and continuously core at least one soil boring from the ground surface to 10' below the highest encountered water table (total depth) with powered rotary drilling equipment. Soil boring(s) will be drilled down gradient from Sun's tanks outside the containment berm.
2. Soil core samples will be screened with a photo-ionization detector (calibrated daily with a 100 ppm isobutylene gas standard) and record the results.
3. Select a minimum of one soil sample per 5 feet interval, exhibiting the apparent highest hydrocarbon concentrations based on screening results, for TPH GRO/ DRO (EPA Method 8021/8015M) and BTEX (EPA Method 8021) analysis, provided sample recovery is adequate for sampling.
4. Install at least one 2" ground water monitoring well, constructed of threaded, flush joint, schedule 40 PVC pipe with o-ring seals at each joint and using machine slotted PVC well screen extending approximately 5 feet above and ten feet below the apparent water level. Well screen slot and sand pack size will be determined based on the site conditions encountered. Sand pack will installed from total depth to at least 2 feet above the well screen. A 5 feet thick bentonite seal will be installed above the sandpack. A concrete and sand

— DOWN-GRADIENT

(redimix type) seal will be installed from the top of the bentonite seal to the ground surface. A protective steel cover with locking hasp and 3 feet concrete apron will be installed at the surface.

5. The well(s) will be purged and developed by removing a minimum of 3 well volumes. Temperature, pH and conductivity will be measured and recorded during well purging.
6. Groundwater samples will be obtained using a clean, disposable polyethylene bailer. In the event phase separated hydrocarbons are encountered no water samples will be collected for analysis. – WHAT ANALYSIS?
7. Groundwater/fluid levels will be measured with an electronic oil/water interface probe and recorded.
8. All soil and water samples selected for laboratory analysis will be place in the appropriate containers, labeled, placed on ice, and shipped to the laboratory with chain-of-custody documents.
9. Drill cuttings will be spread out on the inside the tank berm.
10. Purge water will be contained and returned to the crude oil tanks for introduction into the crude oil stream.
11. A report summarizing the field activities, screening results, geological data and analytical laboratory results will be prepare and submitted to the New Mexico Oil Conservation Division. The report will include soil boring log(s), site sketch maps showing the location of monitoring well(s) with site features, analytical data tables, and copies of the laboratory reports. – CONCLUSIONS –

MUST CONTAIN CONTAMINATED CUTTINGS!

VOL 8260
SVOC 8270
METALS
GEN CHEM
MAJ CAT ANS
pH
TDS
COND

I believe this plan addresses the issues we discussed on June 18, 1998 and I would be happy to review this plan with you at your convenience.. You may contact me at (918) 586-6394. Thank you for your consideration.

Very truly yours,

Scott A. Christensen

Scott A. Christensen
Senior Environment Specialist

CC: J.E. Brown
E.F. Coen

March 1, 1999

May 1, 1999

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
DISTRICT I HOBBS
PO BOX 1980, Hobbs, NM 88241
(505) 393-6161
FAX (505) 393-0720

Jennifer A. Salisbury
CABINET SECRETARY

August 31, 1998

Evelyn L. Wootten
Sun Pipe Line Company (SPLC)
907 South Detroit
Tulsa Ok 74120

Re: Sun Trucking Station
Sec 31-Ts19s-R37e
Lea Co., NM

Dear Ms Wootten:

On June 18, 1998 the New Mexico Oil Conservation Division (NMOCD) and SPLC representatives met at the above referenced site and toured the facility. Due to the fact that groundwater contamination is present in a nearby down-gradient monitor well operated by Shell/Eott operations and the fact that SPLC has had recent and past leaks and spills at the site, the NMOCD is hereby requesting that SPLC submit a soil and groundwater investigation plan to the NMOCD for approval.

Please submit this plan within 60 days of receipt of this letter. The NMOCD will approve as is or with conditions. NMOCD can allow additional time for a good cause shown.

If you require any further information or assistance please do not hesitate to call (505-393-6161) or write this office.

Sincerely Yours,

Wayne Price-Environmental Engineer

cc: Chris Williams-NMOCD District I Supervisor
Bill Olson-Environmental Bureau, Santa Fe, NM

file: wp98/suntruck

Olson, William

From: Price, Wayne
Sent: Friday, May 29, 1998 2:00 PM
To: Bill Olson
Cc: Chris Williams
Subject: EOTT Lea St. Ground Water Problem

Dear Bill:

Per your request I have contacted the Sun Trucking Environmental personnel and have plans on meeting them on June 17, 1998 to discuss the possible problem from their site. Will send you a report.

Their contact is Evelyn Wootten in OKLa at 918-586-6942

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 1015	Date 5/21/98

Originating Party	Other Parties
Bill Olson - Envir. Bureau	Wayne Price - OCD Hobbs

Subject

Sun Refining Lea Station

Discussion

Requested that Hobbs District work on soil remediation & investigation.
If turns into GW case, Santa Fe will work on it.

Sun Refining Contact - Randy Smith
(915) 453-2218

Conclusions or Agreements

Hobbs will have Sun copy Santa Fe on all documents

Distribution

Signed Bill Olson

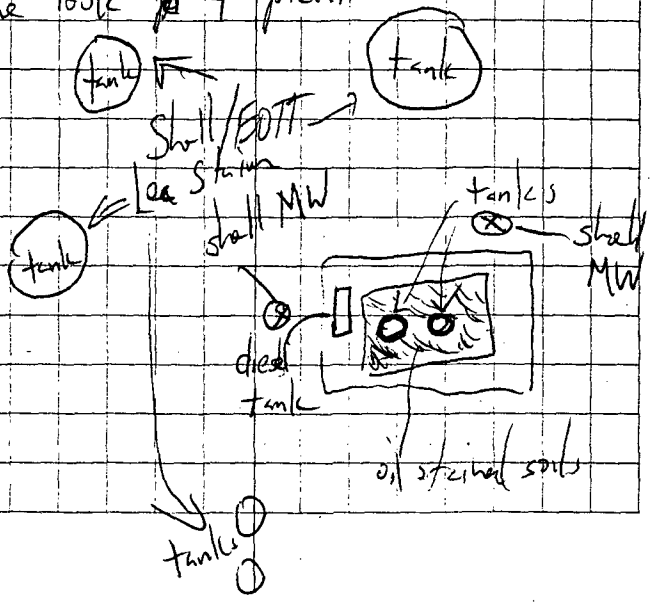
Sun Refining - Lea Station 3/18/98

Arrived at 1640 with Martyne Kieling

2 tanks in battery
oil stained soils throughout area inside tank berm
Shell monitor well just downgradient (Shell Lea Crude Station)
Water puddled on oily soil in berm area

Sign - Sun Refining & Marketing Co.
Lea Station
(800) 688-7074

Martyne took @ 4 pictures

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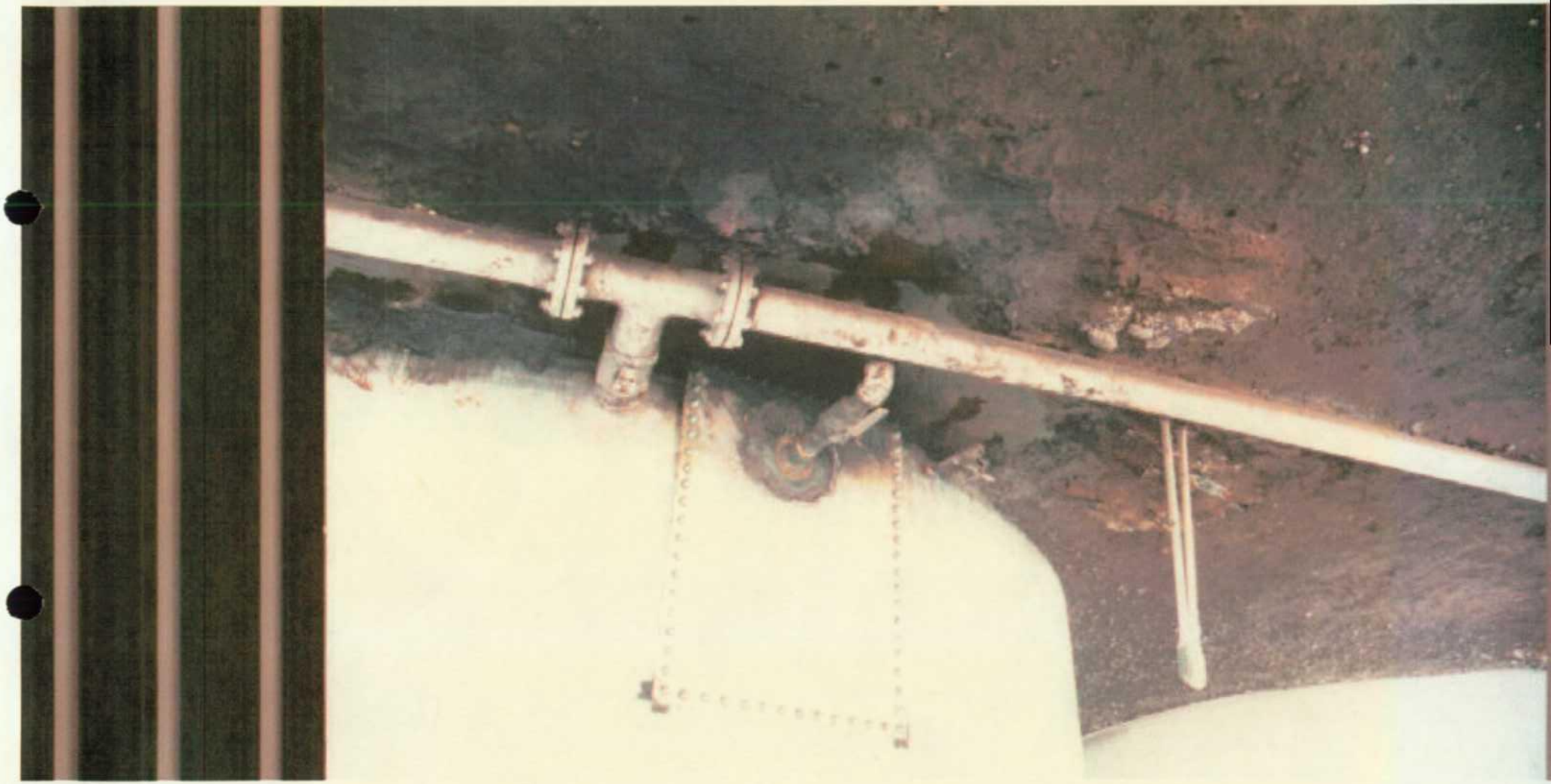
SUN
SUN Sun Refining & Marketing Co.
LEA STATION


SU




320101
SUN
Sun Refining
& Marketing Co.
LEA STATION
(800) 688-7074

NMOCD: ID#. 796945 By: W Price
Date/Time: June 18, 1998 2pm
Site/Co. Sun Trucking-Lea Station
Location: aprx. 5 mi. S of Monument
Subject: Field inspection- Located
near Shell/EOTT Lea Oil Pump St.


SUN

NMOCD: ID#. 796945 By: W Price
Date/Time: June 18, 1998 2pm
Site/Co. Sun Trucking-Lea Station
Location: aprx. 5 mi. S of Monument
Subject: Two 500 bbls crude oil Tks.
looking NW.

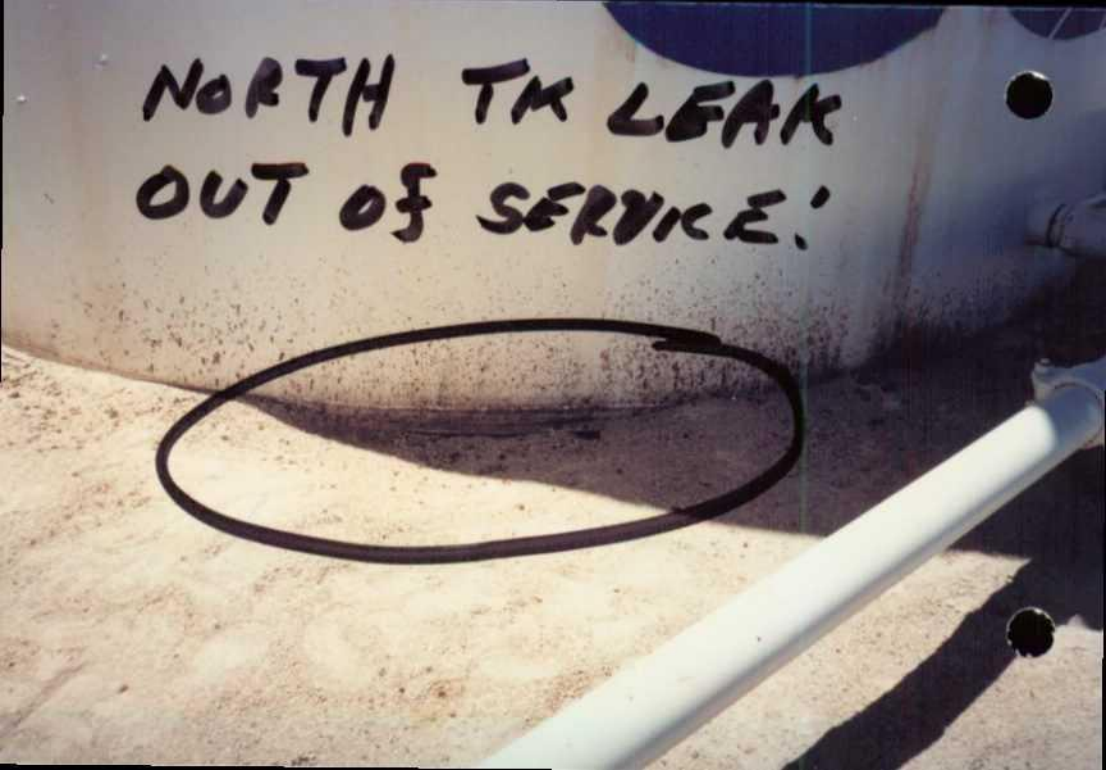

SHELL
MW-13

NMOCD: ID#. 796945 By: W Price
Date/Time: June 18, 1998 2pm
Site/Co. Sun Trucking-Lea Station
Location: aprx. 5 mi. S of Monument
Subject: Shell Pipe line MW-13
looking WNW from Sun Facility.

NMOCD: ID#. 796945 By: W Price
Date/Time: June 18, 1998 2pm
Site/Co. Sun Trucking-Lea Station
Location: aprx. 5 mi. S of Monument
Subject: South Tk. leak area-
Oil picked up-no remediation


N
S
LEAK
NO-C191

NMOCD: ID#. 796945 By: W Price
Date/Time: June 18, 1998 2pm
Site/Co. Sun Trucking-Lea Station
Location: aprx. 5 mi. S of Monument
Subject: Two 500 bbls crude oil Tks.
looking S. N. Tk out of Service-Leak


NORTH TK LEAK
OUT OF SERVICE!

NMOCD: ID#. 796945 By: W Price
Date/Time: June 18, 1998 2pm
Site/Co. Sun Trucking-Lea Station
Location: aprx. 5 mi. S of Monument
Subject: Two 500 bbls crude oil Tks.
looking NW. N. Tk out of Service-Leak


320101
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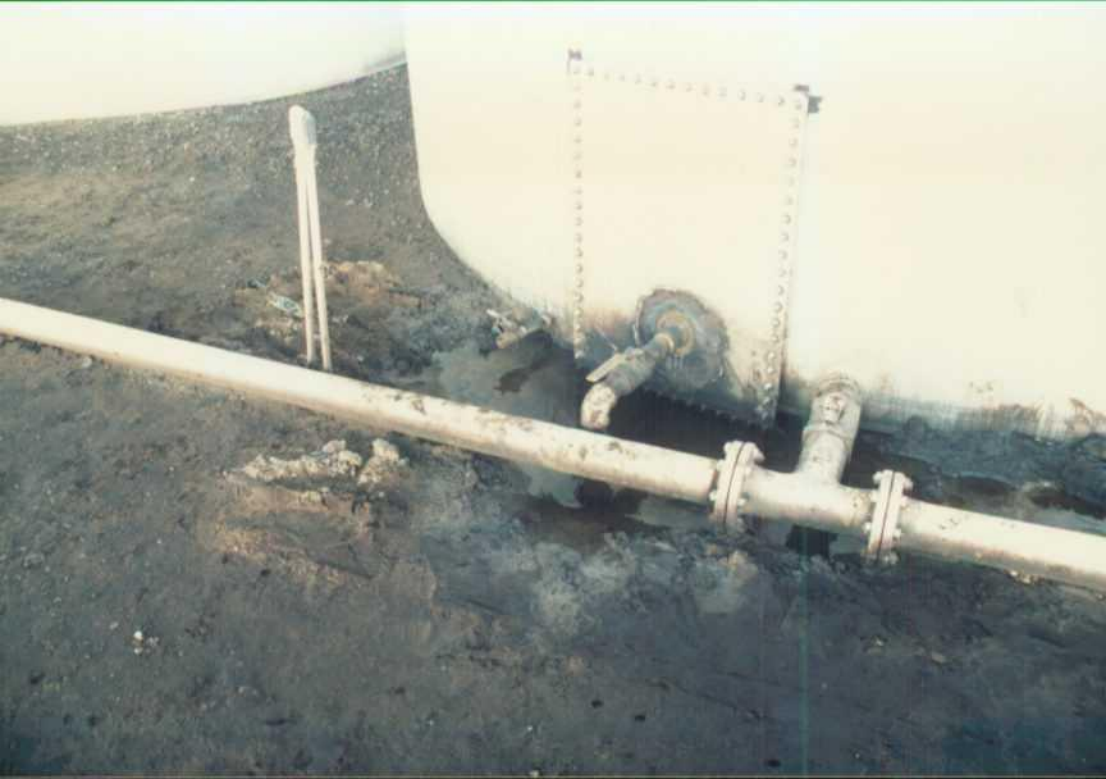
SUN
SUN Sun Refining & Marketing Co.
LEA STATION
(800) 688-7074




SU

Shell Oil Products Company

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

December 1, 1997

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

SUBJECT: **POTENTIAL HYDROCARBON IMPACTS ON LEA STATION FROM OFF-SITE SOURCE**

Dear Mr. Olson,

For the past four years we have been monitoring the groundwater on a quarterly basis at the subject site. Groundwater levels fluctuate very little and the groundwater gradient is from northwest to southeast. North of the station are tank batteries that, at least when Shell owned the station, delivered into the station. I believe that the years of monitoring data and the location of known station piping raises the concern that the Phase Separated Hydrocarbon (PSH) in MW-11 may be from the tank battery immediately to the north, or it's associated piping. As shown on the enclosed map, MW-13 located immediately up-gradient of the Sun Tank Battery has had neither PSH nor dissolved hydrocarbon contaminants. Whereas the PSH impacted MW-11 is located immediately downgradient of this facility. Enclosed are two gas chromatograph scans of samples of MW-11 PSH from December 1996 and September 1997. Both scans are identical and show weathered crude oil with no n-alkanes remaining (a result of biodegradation). Furthermore a crude oil release in the MW-11 area could also have provided the source of the BTEX now being detected in the down gradient wells MW-3 and MW-12. Any assistance you could provide in determining the possible off-site contamination migrating onto Lea Station would be greatly appreciated.

Sincerely,

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

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