Highlander Environmental Corp.

Midland, Texas

August 27, 2007

Mr. Larry Johnson
Environmental Engineer Specialist
Oil Conservation Division, District 1
1625 North French Drive
Hobbs, New Mexico 88240

(2) EVA BLINEBRY FED # 1

Re: Assessment and Closure Report for the Pogo Producing Company, G.H. Mattix Transfer Line Release Located in Unit E, Section 34, Township 23 South, Range 37 East, Lea County, New Mexico.

RP # 1443

Dear Mr. Johnson:

Highlander Environmental Corp. (Highlander) was contacted by Pogo Producing Company (Pogo) to assess a spill from the G.H. Mattix Transfer Line, located in Unit E, Section 34, Township 23 South, Range 37 East, Lea County, New Mexico (Site). The spill site coordinates are N 32° 15.522', W 103° 08.656'. According to the State of New Mexico C-141 Initial Report, approximately 150 barrels (bbls) of produced water were released from a water transfer line rupture which occurred when a plugging unit ran over the line on April 8, 2007. A total of 135 bbls of water were recovered. The C-141 (Initial) listed the site as the Eva Blinebry Federal #1 well, which is the adjacent well location, when in fact the water transfer line originates at the G.H. Mattix lease. A copy of the State of New Mexico C-141 (Initial), a C- 141 (amended), and the C-141 (Final) are included in Appendix C. The Site is shown on Figure 1 and 2.

Groundwater and Regulatory

The New Mexico State Engineer's Office database showed no water wells located within Section 34, Township 23 South, Range 37 East. There was one well listed in Section 32 with a reported depth to water of 106'. Additionally, there were wells shown in Sections 28, 32 and 33 in the USGS groundwater database with reported depths to water of 117', 97' and 87' below ground surface (bgs). The New Mexico State Engineer water well reports and USGS groundwater database reports are included in Appendix A.

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil

Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the depth to groundwater, the proposed RRAL for TPH is 1,000 mg/kg.

Assessment and Results

On April 13, 2007, Highlander personnel inspected and sampled the spill area. The spill area measured approximately 25' x 40'. A total of three (3) auger holes (AH-1, AH-2, and AH-3) were installed using a stainless steel hand auger to assess the impacted soils. Samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Select samples were analyzed for BTEX by EPA Method 8021B. Of the samples collected, all of the TPH and BTEX concentrations were below the RRAL. The chloride concentrations ranged from 302 mg/kg (AH-2 at 0-1.0') to 5,180 mg/kg (AH-2 at 4'-4.5'). Copies of the laboratory analysis and chain-of-custody documentation are included in Appendix B. The auger hole locations are shown on Figure 2. The results of the sampling are summarized in Table 1.

Based upon the results, Highlander supervised the removal of approximately 4.5' of soil in the spill area between May 2 and May 14, 2007. The removal was performed over several days due to inclement weather. As an area was excavated, an additional auger has placed to further evaluate subsurface conditions. The soils were hauled to Sundance Services in Eunice, New Mexico for disposal. The three new auger holes (AH-1A, AH-2A, AH-3A) were advanced to 10.5' below excavation bottom (BEB) and samples were collected for chloride analysis. The Chloride concentrations in AH-1 and AH-2 decreased with depth to 313 mg/kg and 282 mg/kg, respectively. The vertical extent of chloride impact was not defined in AH-3. On June 6, 2007, a backhoe was used to collect samples from 12.0' to 14.5' BEB for delineation. The chloride concentrations decreased to 137 mg/kg at 14.5'. The sample results are summarized in Table 2. The auger hole locations are shown on Figure 3.

Conclusions

The impact was confined to 25' x 40' area south of the transfer line. The 4.5' of soil, representing the highest chloride concentrations was removed and hauled to disposal. The remaining chloride concentrations decline with depth. Based on the depth to groundwater, the limited aerial extent and chloride concentration decline, the residual chloride concentrations do not appear to be an imminent threat to groundwater. Additionally, the impacted soil has been removed well below the root zone.

Based upon the results of the work performed at this site, Pogo requests closure of this Site. If you require any additional information or have any questions or comments concerning the assessment/closure report, please call at (432) 682-4559.

Respectfully submitted,
Highlander Environmental Corp.

Tim Reed

Timothy M. Reed, P.G.
Vice President

cc: Pat Ellis – Pogo Producing Company
Don Riggs – Pogo Producing Company

SITE INFORMATION

RP # 1443

Report Type: CLOSURE REPORT

General Site Information:	
Site:	**G.H. Mattix Transfer Line** (8) EVA BLINEBRY FED #1
Company:	**Pogo Producing Company** (1) F
Line Location	**Section 34, T23S R37E**
Spill Location:	**Section 34, T23S R37E**
Unit Letter:	Unit E
Lease Number:	
County:	Lea
Spill GPS:	32° 15.522', 103° 08.656'
Surface Owner:	
Mineral Owner:	
Directions:	

Release Data:	
Date Released:	4/8/2007
Type Release:	Produced Water
Source of Contamination:	Pulling Unit ran over transfer line
Fluid Released:	150 bbls
Fluids Recovered:	135bbls

Official Communication:

Name:	Pat Ellis	Don Riggs	Ike Tavarez
Company:	Pogo Producing Company	Pogo Producing Company	Highlander Environmental Corp.
Address:	300 N. Marienfeld St.	5 Greenway Plaza, Suite 2700	1910 N. Big Spring
P.O. Box	Box 10340		
City:	Midland Texas, 79701-7340	Houston, Texas 77046	Midland, Texas
Phone number:	(432) 685-8100	(713) 297-5045	(432) 682- 4559
Email:	EllisP@pogoproducing.com	riggsd@pogoproducing.com	itavarez@hec-enviro.com

Ranking Criteria

Depth to Groundwater:	***Ranking Score***	***Site Data***
<50 ft	20	
50-99 ft	**10**	*Average Depth >50'<100' BS*
>100 ft.	0	

WellHead Protection:	***Ranking Score***	***Site Data***
Water Source <1,000 ft., Private <200 ft.	*20*	*None*
Water Source >1,000 ft., Private >200 ft.	***0***	

Surface Body of Water:	***Ranking Score***	***Site Data***
<200 ft.	*20*	*None*
200 ft - 1,000 ft.	10	*None*
>1,000 ft.	**0**	

Total Ranking Score: **10**

Acceptable Soil RRAL (mg/kg)		
Benzene	*Total BTEX*	*TPH*
10	**50**	**1,000**

FIGURES

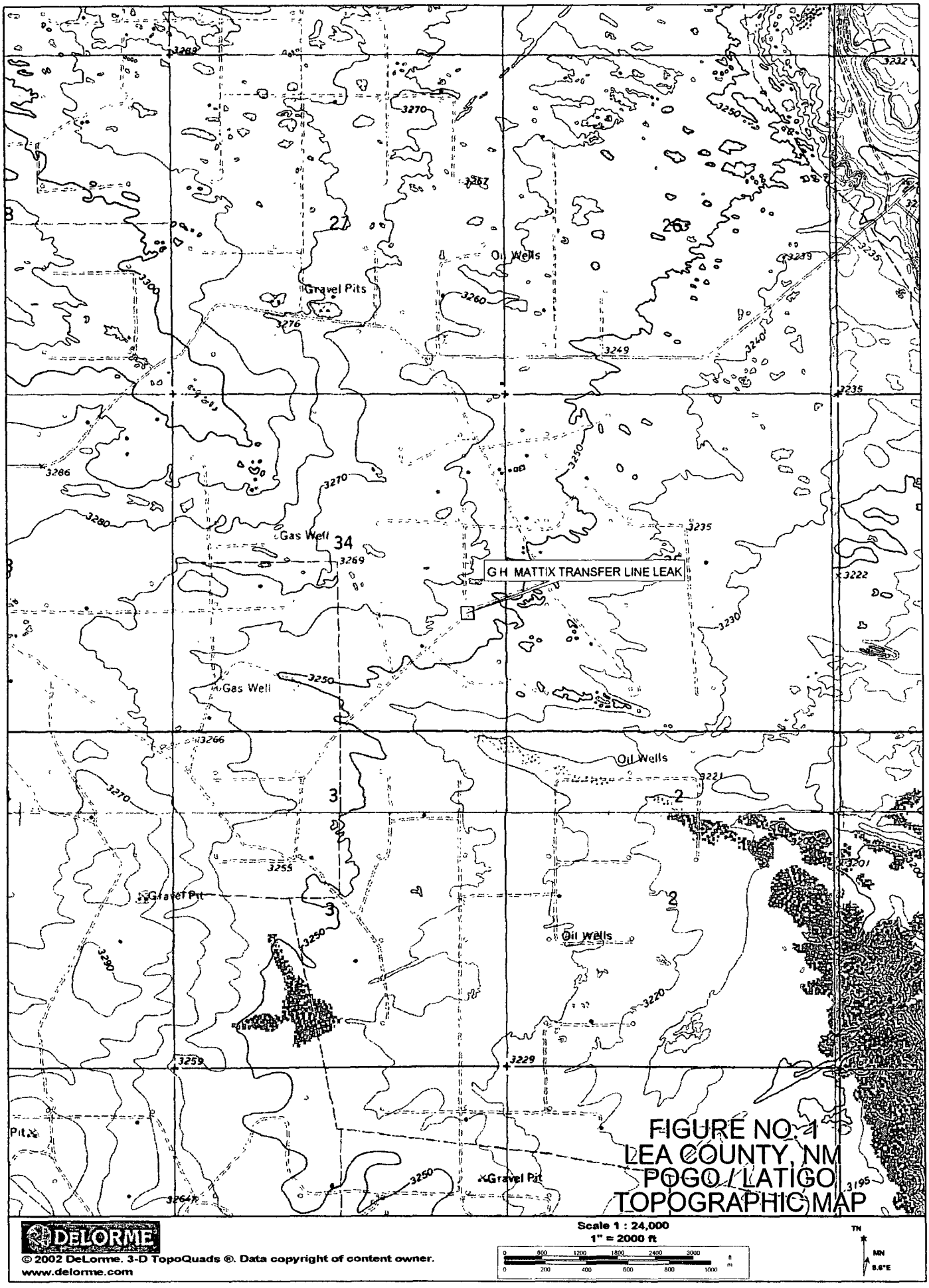
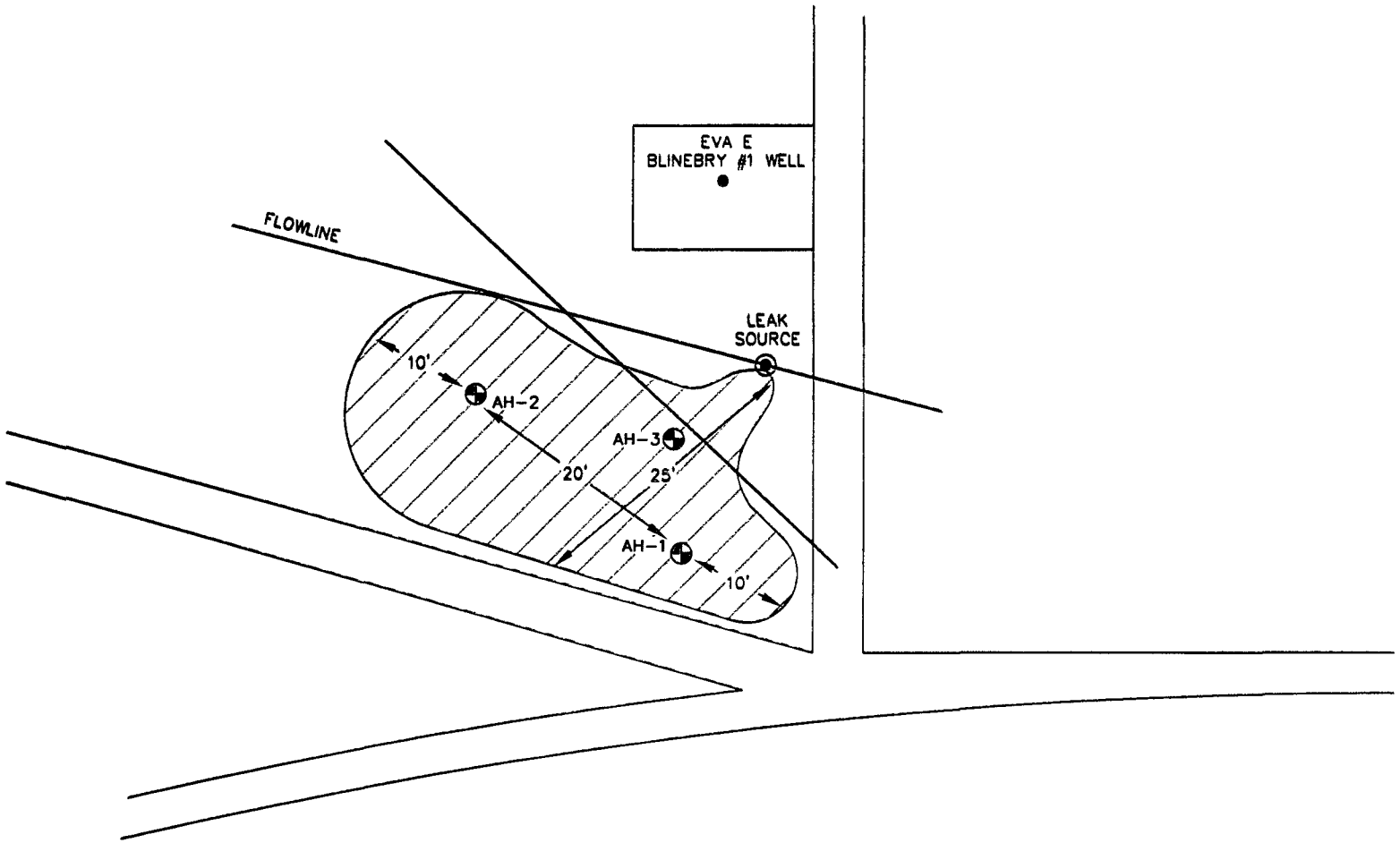


FIGURE NO. 1
LEA COUNTY, NM
POGO / LATIGO
TOPOGRAPHIC MAP

Scale 1 : 24,000
1" = 2000 ft

TN
MN
8.6°E



NOT TO SCALE

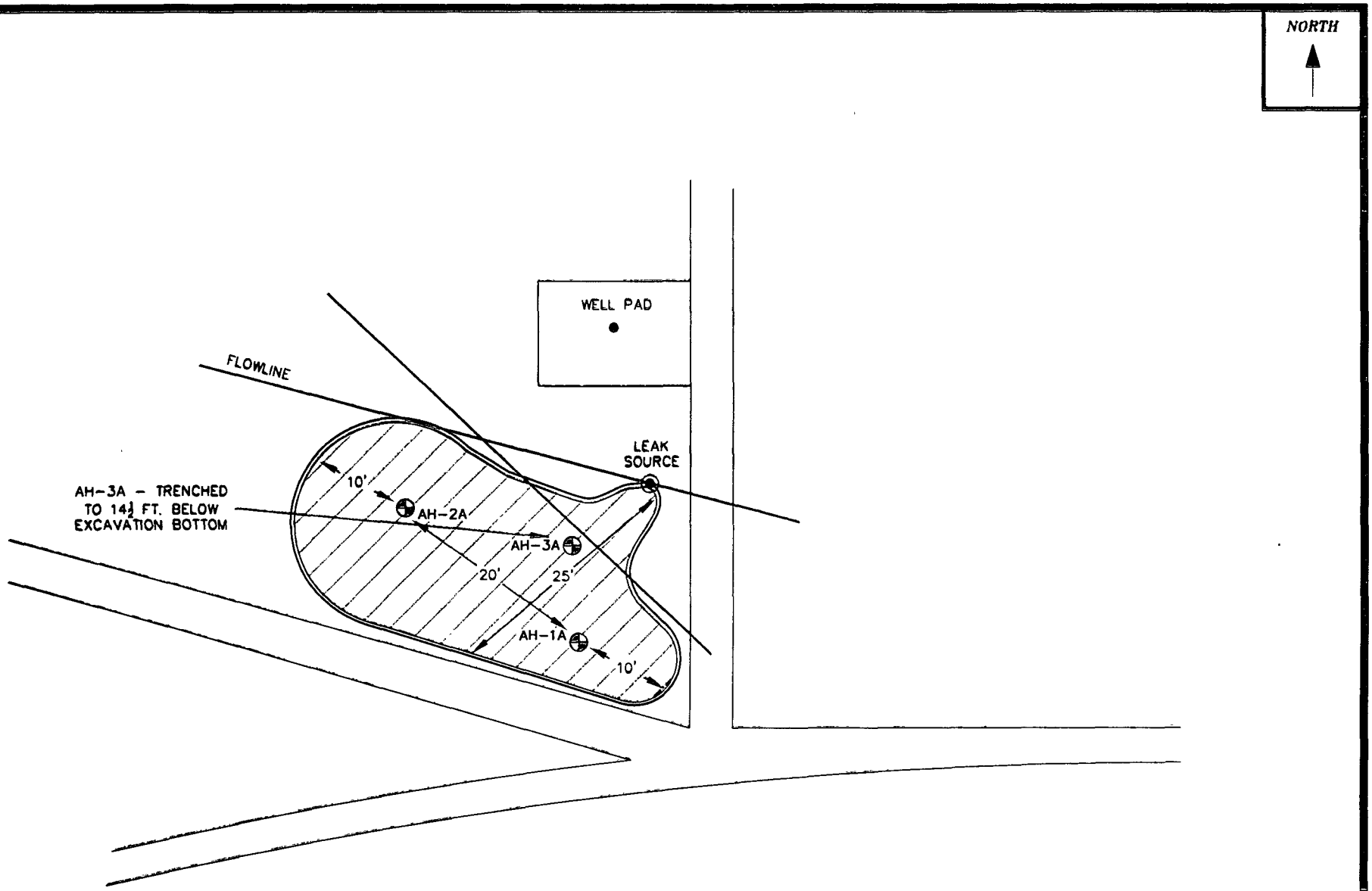
FIGURE NO. 2

LEA COUNTY, NEW MEXICO

POGO / LATIGO
G.H. MATTIX TRANS. LINE LEAK

DATE: 7/26/07
DWN. BY. RC
FILE. C:\POGO\2966 G.H. MATTIX

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS



NOT TO SCALE

DATE: 7/26/07
DWN. BY RC
FILE: C:\POGO\2906 G.H. MATTIX

FIGURE NO. 3

LEA COUNTY, NEW MEXICO

POGO / LATIGO
G.H. MATTIX TRANS. LINE LEAK

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

TABLES

Table 1
Pogo Producing Company
G.H. Mattix Transfer Line Leak
Lea County, New Mexico

Sample ID	Soils Status		Date Sampled	Sample Depth (ft)	TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
	Insitu	Removed			DRO	GRO	Total					
AH-1		X	4/13/2007	0-1.0'	<50.0	27.2	27.2	<0.0100	<0.0100	<0.0100	0.0310	607
AH-1		X	4/13/2007	1'-1.5'	-	-	-	-	-	-	-	1,160
AH-1		X	4/13/2007	2'-2.5'	-	-	-	-	-	-	-	1,200
AH-1		X	4/13/2007	4'-4.5'	-	-	-	-	-	-	-	5,250
AH-1	X		4/13/2007	6'-6.5'	-	-	-	-	-	-	-	2,460
AH-2		X	4/13/2007	0-1.0'	232	14.9	246.9	<0.0100	<0.0100	<0.0100	0.0478	302
AH-2		X	4/13/2007	1'-1.5'	-	-	-	-	-	-	-	1,140
AH-2		X	4/13/2007	2'-2.5'	-	-	-	-	-	-	-	1,310
AH-2		X	4/13/2007	4'-4.5'	-	-	-	-	-	-	-	5,180
AH-2	X		4/13/2007	6'-6.5'	-	-	-	-	-	-	-	4,870
AH-3		X	4/13/2007	0-1.0'	<50.0	10			-	-	-	891
AH-3		X	4/13/2007	1'-1.5'	-	-			-	-	-	1,020
AH-3		X	4/13/2007	2'-2.5'	-	-			-	-	-	1,020
AH-3		X	4/13/2007	4'-4.5'	-	-			-	-	-	2,370
AH-3	X		4/13/2007	6'-6.5'	-	-	-		-	-	-	4,440

281-370-6580
Allen Kane
w/ Apache ?

(-) Not Analyzed

Table 2
Pogo Producing Company
G.H. Mattix Transfer Line Leak
Lea County, New Mexico

Sample ID	Soils Status		Date Sampled	Depth of Excavation	Sample Depth (ft) Below Excavation Bottom	Chloride (mg/kg)
	Insitu	Removed				
AH-1A	X		5/8/2007	4.5	0-1.0' BEB	17.5
AH-1A	X		5/8/2007		2'-2.5' BEB	30.4
AH-1A	X		5/8/2007		4'-4.5' BEB	1760
AH-1A	X		5/8/2007		6'-6.5' BEB	2320
AH-1A	X		5/8/2007		8'-8.5' BEB	1720
AH-1A	X		5/8/2007		10'-10.5' BEB	313
AH-2A	X		5/2/2007	4.5	0-1.0' BEB	714
AH-2A	X		5/2/2007		2'-2.5' BEB	2260
AH-2A	X		5/2/2007		4'-4.5' BEB	584
AH-2A	X		5/2/2007		6'-6.5' BEB	1130
AH-2A	X		5/2/2007		8'-8.5' BEB	725
AH-2A	X		5/2/2007		10'-10.5' BEB	282
AH-3A	X		5/14/2007		0-1.0' BEB	10.8
AH-3A	X		5/14/2007		2'-2.5' BEB	639
AH-3A	X		5/14/2007		4'-4.5' BEB	2740
AH-3A	X		5/14/2007		6'-6.5' BEB	2000
AH-3A	X		5/14/2007		8'-8.5' BEB	1850
AH-3A	X		5/14/2007		10'-10.5' BEB	1190
T-1	X		6/6/2007		12.0' BEB	966
T-1	X		6/6/2007		14.0' BEB	226
T-1	X		6/6/2007		14.5' BEB	137

(-) Not Analyzed
(BEB) Below Excavation Bottom

APPENDIX A

Water Well Data
Average Depth to Groundwater (ft)
Pogo Producing Company - G.H. Mattix Transfer Line

22 South 36 East

6 **195**	5 **212**	4	3	2	1 **137**
7	8	9	10	11	12
18	17	16 **170**	15	14	13
19	20	21	22 **22**	23	24
30	29	28	27 **160**	26	25 **118**
31	32	33	34	35 **181** **187**	36

22 South 37 East

6	5 **85**	4	3	2	1
7	8	9 **90**	10	11	12
18 **190**	17	16	15 **125**	14 **65**	13
19	20	21 **65**	22	23	24 **60**
30	29	28	27 **53**	26 **65**	25
31	32	33	34	35	36

22 South 38

6	5
7	8
18	17
19	20
30	29
31	32

23 South 36 East

6	5	4 **160**	3	2	1
7	8	9	10	11	12
18	17	16 **220**	15 **149**	14	13
19	20	21	22 **400**	23 **143**	24
30	29	28	27	26	25
31 **189**	32	33	34	35	36 **127**

23 South 37 East

6 **102**	5	4	3 **70**	2 **64**	1
7	8	9 **100**	10 **66**	11 **68**	12
18	17	16 **115** **100**	15	14	13
19	20 **108**	21	22	23	24
30	29	28 **117**	27 **88**	26	25
31	32 **106** **97**	33 **87**	34 **Site**	35	36

23 South 38

6	5
7	8
18	17
19	20
30	29
31	32

24 South 36 East

6	5	4 **165**	3	2	1
7	8	9	10	11	12
18	17	16	15 **312**	14	13
19	20	21	22	23 **160**	24
30	29	28	27	26	25
31	32	33 **54** **53**	34	35	36

24 South 37 East

6	5 **111**	4	3	2	1
7 **119**	8 **90**	9	10 **120**	11 **64**	12 **18**
18 **124**	17	16 **67**	15	14	13
19	20	21 **69**	22	23 **94**	24 **100**
30	29	28 **70**	27 **41**	26	25 **89** **90**
31	32	33	34 **55**	35	36

24 South 38

6	5
7	8
18	17
19 **56**	20
30 **68** **30**	29
31 **97**	32

25 South 36 East

25 South 37 East

25 South 38

88 New Mexico State Engineers Well Reports

105 USGS Well Reports

90 Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)
Geology and Groundwater Resources of Eddy County, NM (Report 3)

34 NMOCD - Groundwater Data

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 23S Range: 37E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic ◉ All

POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

Clear Form | iWATERS Menu | Help

AVERAGE DEPTH OF WATER REPORT 08/27/2007

							(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
CP	23S	37E	09				1	100	100	100
CP	23S	37E	16				1	115	115	115
CP	23S	37E	32				1	106	106	106

Record Count: 3

News: Available Now in NWISWeb

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 321617103102901

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

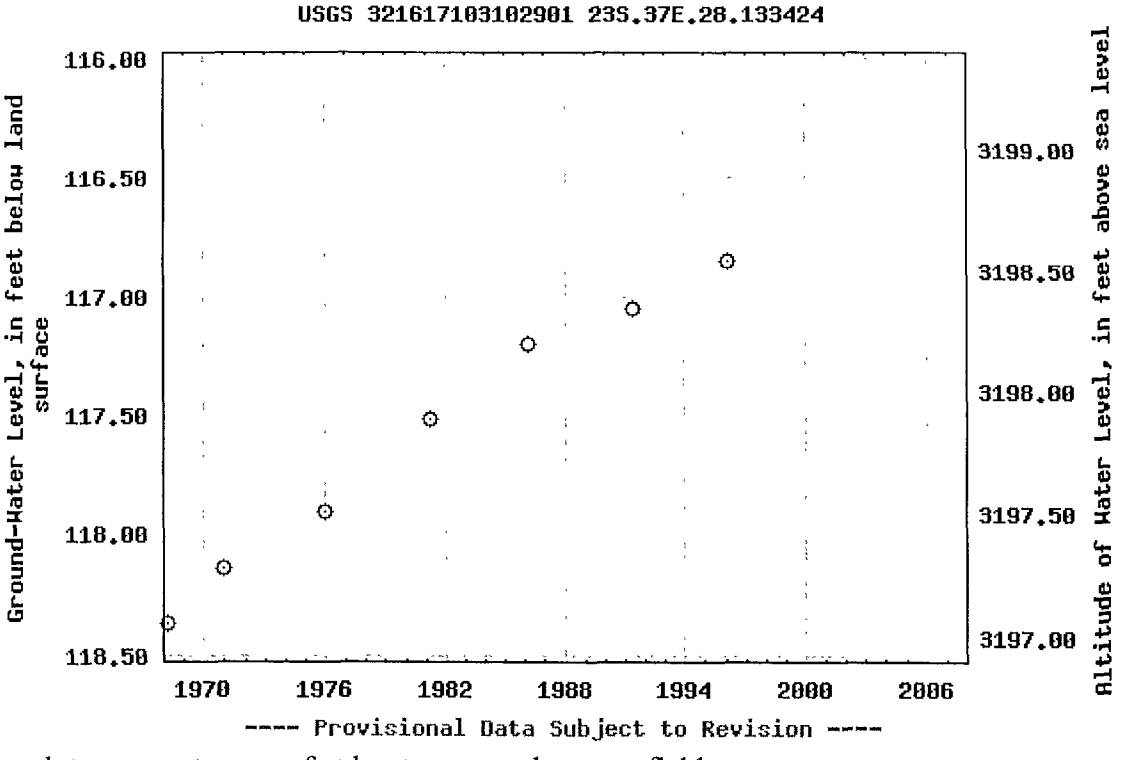
USGS 321617103102901 23S.37E.28.133424

Available data for this site Ground-water: Field measurements GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°16'17", Longitude 103°10'29" NAD27
Land-surface elevation 3,315.40 feet above sea level NGVD29
The depth of the well is 150 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats

- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

News: Available Now in NWISWeb

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 321543103110802

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

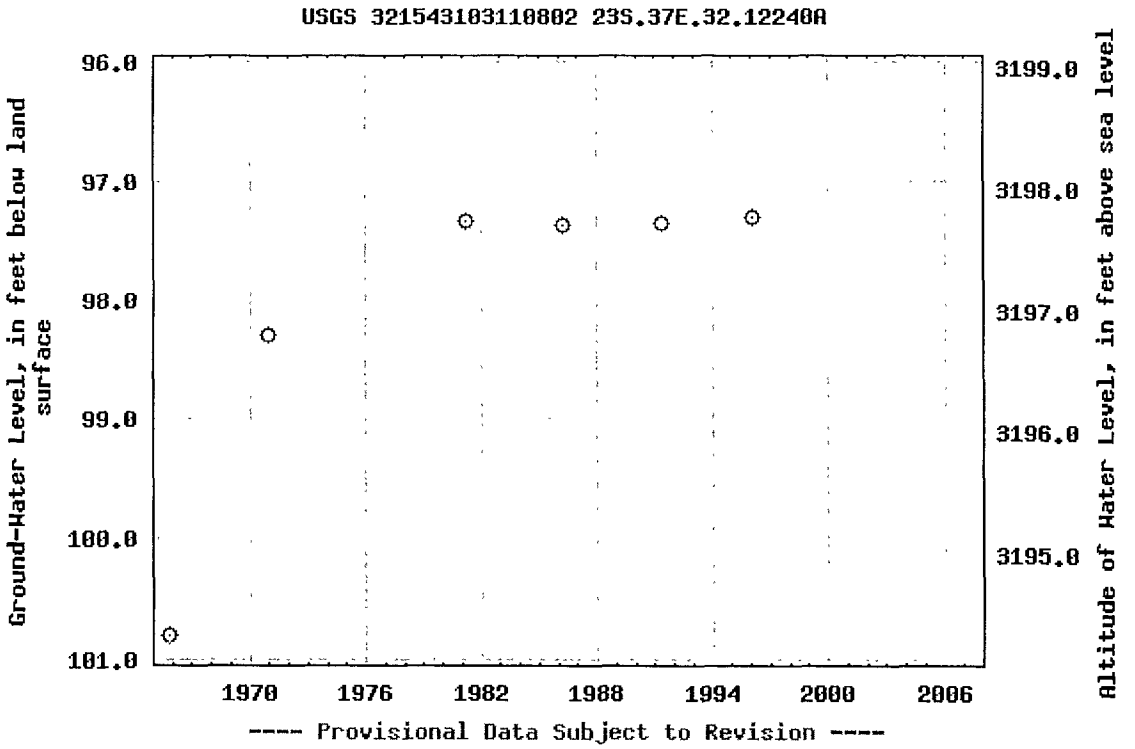
USGS 321543103110802 23S.37E.32.12240A

Available data for this site Ground-water: Field measurements GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°15'43", Longitude 103°11'08" NAD27
Land-surface elevation 3,295.10 feet above sea level NGVD29
The depth of the well is 220 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats

- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

News: Available Now in NWISWeb

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 321513103101501

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

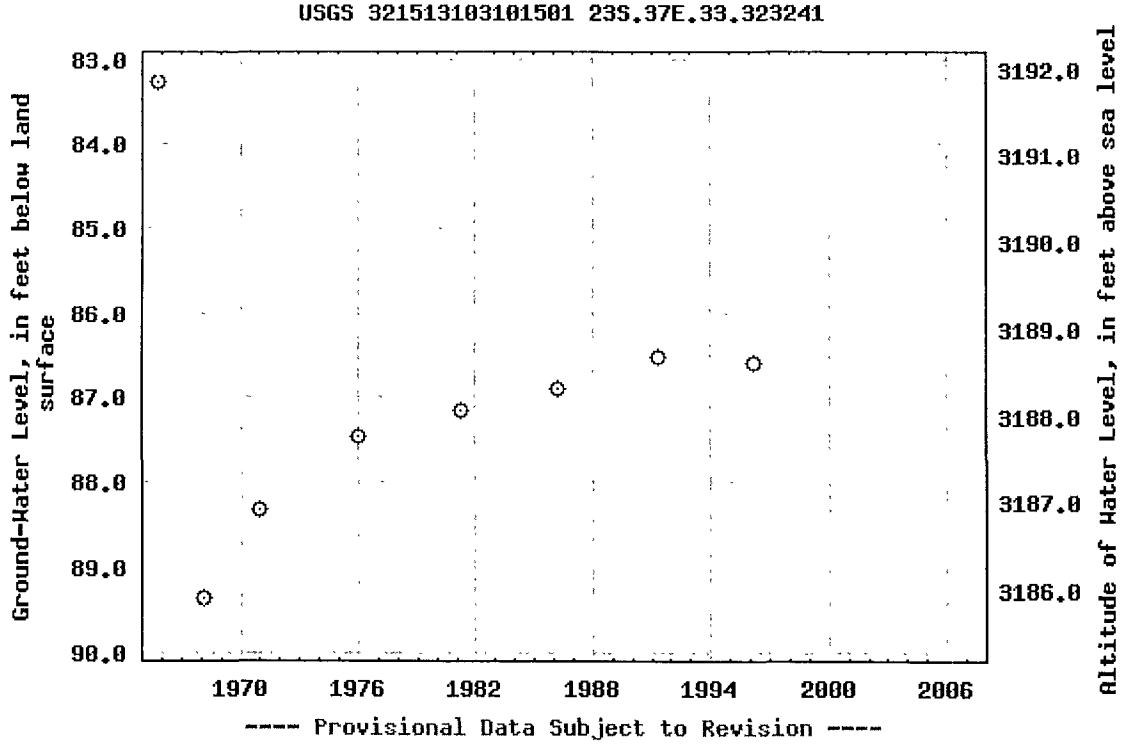
USGS 321513103101501 23S.37E.33.323241

Available data for this site Ground-water: Field measurements GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°15'13", Longitude 103°10'15" NAD27
Land-surface elevation 3,275.20 feet above sea level NGVD29
The depth of the well is 140 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats

- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

APPENDIX B

Summary Report

Ike Tavarez
Highlander Environmental Services
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: April 23, 2007

Work Order: 7041714

Project Location: Lea County, NM
Project Name: POGO/G.H. Mattix Transfer Lineleak
Project Number: 2986

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
121929	AH-1 (0-1.0')	soil	2007-04-13	00:00	2007-04-17
121930	AH-1 (1.0-1.5')	soil	2007-04-13	00:00	2007-04-17
121931	AH-1 (2.0-2.5')	soil	2007-04-13	00:00	2007-04-17
121932	AH-1 (4.0-4.5')	soil	2007-04-13	00:00	2007-04-17
121933	AH-1 (6.0-6.5')	soil	2007-04-13	00:00	2007-04-17
121934	AH-2 (0-1.0')	soil	2007-04-13	00:00	2007-04-17
121935	AH-2 (1.0-1.5')	soil	2007-04-13	00:00	2007-04-17
121936	AH-2 (2.0-2.5')	soil	2007-04-13	00:00	2007-04-17
121937	AH-2 (4.0-4.5')	soil	2007-04-13	00:00	2007-04-17
121938	AH-2 (6.0-6.5')	soil	2007-04-13	00:00	2007-04-17
121939	AH-3 (0-1.0')	soil	2007-04-13	00:00	2007-04-17
121940	AH-3 (1.0-1.5')	soil	2007-04-13	00:00	2007-04-17
121941	AH-3 (2.0-2.5')	soil	2007-04-13	00:00	2007-04-17
121942	AH-3 (4.0-4.5')	soil	2007-04-13	00:00	2007-04-17
121943	AH-3 (6.0-6.5')	soil	2007-04-13	00:00	2007-04-17

BTEX

Sample - Field Code	TPH DRO DRO (mg/Kg)	TPH GRO GRO (mg/Kg)
121929 - AH-1 (0-1.0')	<50.0	**27.2**
121934 - AH-2 (0-1.0')	**232**	**14.9**
121939 - AH-3 (0-1.0')	<50.0	**10.5**

Sample: 121929 - AH-1 (0-1.0')

Param	Flag	Result	Units	RL
Chloride		**607**	mg/Kg	1.00

Sample: 121930 - AH-1 (1.0-1.5')

Param	Flag	Result	Units	RL
Chloride		**1160**	mg/Kg	1.00

Sample: 121931 - AH-1 (2.0-2.5')

Param	Flag	Result	Units	RL
Chloride		**1200**	mg/Kg	1.00

Sample: 121932 - AH-1 (4.0-4.5')

Param	Flag	Result	Units	RL
Chloride		**5250**	mg/Kg	1.00

Sample: 121933 - AH-1 (6.0-6.5')

Param	Flag	Result	Units	RL
Chloride		**2460**	mg/Kg	1.00

Sample: 121934 - AH-2 (0-1.0')

Param	Flag	Result	Units	RL
Chloride		**302**	mg/Kg	1.00

Sample: 121935 - AH-2 (1.0-1.5')

Param	Flag	Result	Units	RL
Chloride		**1140**	mg/Kg	1.00

Sample: 121936 - AH-2 (2.0-2.5')

Param	Flag	Result	Units	RL
Chloride		**1310**	mg/Kg	1.00

Sample: 121937 - AH-2 (4.0-4.5')

Param	Flag	Result	Units	RL
Chloride		**5180**	mg/Kg	1.00

Sample: 121938 - AH-2 (6.0-6.5')

Param	Flag	Result	Units	RL
Chloride		**4870**	mg/Kg	1.00

Sample: 121939 - AH-3 (0-1.0')

continued ...

sample 121939 continued ...

Param	Flag	Result	Units	RL

Param	Flag	Result	Units	RL
Chloride		**891**	mg/Kg	1.00

Sample: 121940 - AH-3 (1.0-1.5')

Param	Flag	Result	Units	RL
Chloride		**1020**	mg/Kg	1.00

Sample: 121941 - AH-3 (2.0-2.5')

Param	Flag	Result	Units	RL
Chloride		**1020**	mg/Kg	1.00

Sample: 121942 - AH-3 (4.0-4.5')

Param	Flag	Result	Units	RL
Chloride		**2370**	mg/Kg	1.00

Sample: 121943 - AH-3 (6.0-6.5')

Param	Flag	Result	Units	RL
Chloride		**4440**	mg/Kg	1.00

Summary Report

Ray Taylor
Highlander Environmental Services
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: April 25, 2007

Work Order: 7041714

Project Location: Lea County, NM
Project Name: POGO/G.H. Mattix Transfer Lineleak
Project Number: 2986

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
121929	AH-1 (0-1.0')	soil	2007-04-13	00:00	2007-04-17
121934	AH-2 (0-1.0')	soil	2007-04-13	00:00	2007-04-17

	BTEX				MTBE
Sample - Field Code	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	MTBE (mg/Kg)
121929 - AH-1 (0-1.0')	<0.0100	<0.0100	<0.0100	**0.0310**	<0.0100
121934 - AH-2 (0-1.0')	<0.0100	<0.0100	<0.0100	**0.0478**	<0.0100

Summary Report

Ike Tavarez
Highlander Environmental Services
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: May 11, 2007

Work Order: 7050913

Project Location: Lea County, NM
Project Name: POGO/G.H. Mattix Transfer Lineleak
Project Number: 2986

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
123669	AH-1A (0-1.0) BEB	soil	2007-05-08	00:00	2007-05-09
123670	AH-1A (2.0-2.5) BEB	soil	2007-05-08	00:00	2007-05-09
123671	AH-1A (4.0-4.5) BEB	soil	2007-05-08	00:00	2007-05-09
123672	AH-1A (6.0-6.5) BEB	soil	2007-05-08	00:00	2007-05-09
123673	AH-1A (8.0-8.5) BEB	soil	2007-05-08	00:00	2007-05-09
123674	AH-1A (10.0-10.5) BEB	soil	2007-05-08	00:00	2007-05-09

Sample: 123669 - AH-1A (0-1.0) BEB

Param	Flag	Result	Units	RL
Chloride		**17.5**	mg/Kg	1.00

Sample: 123670 - AH-1A (2.0-2.5) BEB

Param	Flag	Result	Units	RL
Chloride		**30.4**	mg/Kg	1.00

Sample: 123671 - AH-1A (4.0-4.5) BEB

Param	Flag	Result	Units	RL
Chloride		**1760**	mg/Kg	1.00

Sample: 123672 - AH-1A (6.0-6.5) BEB

Param	Flag	Result	Units	RL
Chloride		**2320**	mg/Kg	1.00

Sample: 123673 - AH-1A (8.0-8.5) BEB

Param	Flag	Result	Units	RL
Chloride		**1720**	mg/Kg	1.00

Sample: 123674 - AH-1A (10.0-10.5) BEB

Param	Flag	Result	Units	RL
Chloride		**313**	mg/Kg	1.00

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft Worth, Texas 76132 817•201•5260
E-Mail lab@traceanalysis.com

Analytical and Quality Control Report

Ike Tavarez
Highlander Environmental Services
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: May 11, 2007

Work Order: 7050913

Project Location: Lea County, NM
Project Name: POGO/G.H. Mattix Transfer Lineleak
Project Number: 2986

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
123669	AH-1A (0-1.0) BEB	soil	2007-05-08	00:00	2007-05-09
123670	AH-1A (2.0-2.5) BEB	soil	2007-05-08	00:00	2007-05-09
123671	AH-1A (4.0-4.5) BEB	soil	2007-05-08	00:00	2007-05-09
123672	AH-1A (6.0-6.5) BEB	soil	2007-05-08	00:00	2007-05-09
123673	AH-1A (8.0-8.5) BEB	soil	2007-05-08	00:00	2007-05-09
123674	AH-1A (10.0-10.5) BEB	soil	2007-05-08	00:00	2007-05-09

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

Dr. Blair Leftwich, Director

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project POGO/G.H. Mattix Transfer Lineleak were received by TraceAnalysis, Inc. on 2007-05-09 and assigned to work order 7050913. Samples for work order 7050913 were received intact at a temperature of 3 deg C.

Samples were analyzed for the following tests using their respective methods.

Test	Method
Chloride (IC)	E 300.0

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 7050913 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB) These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 123669 - AH-1A (0-1.0) BEB

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	37121	Date Analyzed:	2007-05-10	Analyzed By:	AR
Prep Batch:	32195	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride	B	**17.5**	mg/Kg	5	1.00

Sample: 123670 - AH-1A (2.0-2.5) BEB

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	37121	Date Analyzed:	2007-05-10	Analyzed By:	AR
Prep Batch:	32195	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**30.4**	mg/Kg	5	1.00

Sample: 123671 - AH-1A (4.0-4.5) BEB

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	37121	Date Analyzed:	2007-05-10	Analyzed By:	AR
Prep Batch:	32195	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**1760**	mg/Kg	100	1.00

Sample: 123672 - AH-1A (6.0-6.5) BEB

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	37121	Date Analyzed:	2007-05-10	Analyzed By:	AR
Prep Batch:	32195	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**2320**	mg/Kg	100	1.00

Sample: 123673 - AH-1A (8.0-8.5) BEB

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	37121	Date Analyzed:	2007-05-10	Analyzed By:	AR
Prep Batch:	32195	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1720**	mg/Kg	100	1.00

Sample: 123674 - AH-1A (10.0-10.5) BEB

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	37121	Date Analyzed:	2007-05-10	Analyzed By:	AR
Prep Batch:	32195	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**313**	mg/Kg	50	1 00

Matrix Blank (1) QC Batch: 37121

QC Batch:	37121	Date Analyzed:	2007-05-10	Analyzed By:	AR
Prep Batch:	32195	QC Preparation:	2007-05-09	Prepared By:	AR

Parameter	Flag	MDL Result	Units	RL
Chloride		3.16	mg/Kg	1

Laboratory Control Spike (LCS-1)

QC Batch:	37121	Date Analyzed:	2007-05-10	Analyzed By:	AR
Prep Batch:	32195	QC Preparation:	2007-05-09	Prepared By:	AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	14.9	mg/Kg	1	12.5	2.1652	102	90 - 110

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	14.9	mg/Kg	1	12.5	2.1652	102	90 - 110	0	

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

Matrix Spike (MS-1) Spiked Sample: 123673

QC Batch:	37121	Date Analyzed:	2007-05-10	Analyzed By:	AR
Prep Batch:	32195	QC Preparation:	2007-05-09	Prepared By:	AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	910	mg/Kg	50	625	312.766	96	90 - 110

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	939	mg/Kg	50	625	312.766	100	90 - 110	3	

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

Standard (ICV-1)

QC Batch: 37121 Date Analyzed: 2007-05-10 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.4	99	90 - 110	2007-05-10

Standard (CCV-1)

QC Batch: 37121 Date Analyzed: 2007-05-10 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.3	98	90 - 110	2007-05-10

work order: 705013

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(432) 682-4559 Fax (432) 682-3946

PAGE: 1 OF: 1

CLIENT NAME: Pogo

SITE MANAGER: Ike Tavarez

PROJECT NO.: 2986

PROJECT NAME: Pogo / 6.H. Mattix Transfer Line Leak Lea Co, NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8020/602	MTBE 8020/602	TPH 418.1 8015 MOD. TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
123669	5/08/07		S		X	AH-1A (0-1.0') BEB	1				X															X			
670			S		X	AH-1A (2.0'-2.5') BEB	1				X															X			
671			S		X	AH-1A (4.0'-4.5') BEB	1				X															X			
672			S		X	AH-1A (6.0'-6.5') BEB	1				X															X			
673			S		X	AH-1A (8.0'-8.5') BEB	1				X															X			
674	"		S		X	AH-1A (10.0'-10.5') BEB	1				X															X			

ANALYSIS REQUEST (Circle or Specify Method No.)

RELINQUISHED BY: (Signature) Robert Arrego — Date: 5/9/07 Time: 11:05

RECEIVED BY: (Signature) — Date: — Time:

SAMPLED BY: (Print & Sign) Jeremy Jones / Kit Harrison — Date: 5/09/07 Time:

RELINQUISHED BY: (Signature) — Date: — Time:

RECEIVED BY: (Signature) — Date: — Time:

SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #
HAND DELIVERED UPS OTHER:

RELINQUISHED BY: (Signature) — Date: — Time:

RECEIVED BY: (Signature) — Date: — Time:

RECEIVING LABORATORY: Trace
ADDRESS:
CITY: Midland STATE: Texas ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature)
DATE: 5.9.07 TIME: 11:05

HIGHLANDER CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 3°C intact/ice

MATRIX: W-Water A-Air SD-Solid S-Soil SL-Sludge O-Other

REMARKS: 3°C intact/ice

AR

Please Fill out all copies – Laboratory retains yellow copy – Return original copy to Highlander Enviromental Corp. – Project Manager retains pink copy – Accounting receives Gold copy.

Work order: F050913

Analysis Request and Chain of Custody Record

PAGE: 1 OF: 1

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 Fax (432) 682-3946

CLIENT NAME: Pogo
SITE MANAGER: Ike Tavarez
PROJECT NO.: 2986
PROJECT NAME: Pogo / G.H. Mattix Transfer Line Leak
Lea Co, NM

ANALYSIS REQUEST (Circle or Specify Method No.): BTEX 8020/602; MTBE 8020/602; TPH 418.1 8015 MOD. TX1005; PAH 8270; RCRA Metals Ag As Ba Cd Cr Pb Hg Se; TCLP Metals Ag As Ba Cd Cr Pd Hg Se; TCLP Volatiles; TCLP Semi Volatiles; RCI; GC.MS Vol. 8240/8260/624; GC.MS Semi. Vol. 8270/625; PCB's 8080/608; Pest. 808/608; BOD, TSS, pH, TDS, Chloride (circled); Gamma Spec.; Alpha Beta (Air); PLM (Asbestos)

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	HCL	HNO3	ICE	NONE	Chloride
123669	5/08/07		S		X	AH-1A (0-1.0') BEB	1				X		X
670			S		X	AH-1A (2.0'-2.5') BEB	1				X		X
671			S		X	AH-1A (4.0'-4.5') BEB	1				X		X
672			S		X	AH-1A (6.0'-6.5') BEB	1				X		X
673			S		X	AH-1A (8.0'-8.5') BEB	1				X		X
674			S		X	AH-1A (10.0'-10.5') BEB	1				X		X

RELINQUISHED BY: (Signature) [signature] Date: 5/9/07 Time: 11:05
RECEIVED BY: (Signature) Date: Time:
SAMPLED BY: (Print & Sign) Jeremy Jones / Kdt Harrison Date: 5/09/07 Time:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:
SAMPLE SHIPPED BY: (Circle) FEDEX BUS AIRBILL #: HAND DELIVERED (circled) UPS OTHER:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:

RECEIVING LABORATORY: Trace
ADDRESS:
CITY: Midland STATE: Texas ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature) [signature]
DATE: 5.9.07 TIME: 11:05

HIGHLANDER CONTACT PERSON: Ike Tavarez
Results by:
RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 3°C intact/on ice
MATRIX: W-Water A-Air SD-Solid S-Soil (circled) SL-Sludge O-Other
REMARKS: 3°C intact/on ice

Please Fill out all copies – Laboratory retains yellow copy – Return original copy to Highlander Enviromental Corp. – Project Manager retains pink copy – Accounting receives Gold copy.

PFE 5/11/07

Summary Report

Ike Tavarez
Highlander Environmental Services
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: May 7, 2007

Work Order: 7050313

Project Location: Lea County, NM
Project Name: POGO/G.H. Mattix Transfer Lineleak
Project Number: 2986

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
123280	AH-2A (0-1.0') BEB	soil	2007-05-02	00:00	2007-05-03
123281	AH-2A (2.0-2.5') BEB	soil	2007-05-02	00:00	2007-05-03
123282	AH-2A (4.0-4.5') BEB	soil	2007-05-02	00:00	2007-05-03
123283	AH-2A (6.0-6.5') BEB	soil	2007-05-02	00:00	2007-05-03
123284	AH-2A (8.0-8.5') BEB	soil	2007-05-02	00:00	2007-05-03
123285	AH-2A (10.0-10.5') BEB	soil	2007-05-02	00:00	2007-05-03

Sample: 123280 - AH-2A (0-1.0') BEB

Param	Flag	Result	Units	RL
Chloride		**714**	mg/Kg	1.00

Sample: 123281 - AH-2A (2.0-2.5') BEB

Param	Flag	Result	Units	RL
Chloride		**2260**	mg/Kg	1.00

Sample: 123282 - AH-2A (4.0-4.5') BEB

Param	Flag	Result	Units	RL
Chloride		**584**	mg/Kg	1.00

Sample: 123283 - AH-2A (6.0-6.5') BEB

Param	Flag	Result	Units	RL
Chloride		**1130**	mg/Kg	1.00

Sample: 123284 - AH-2A (8.0-8.5') BEB

Param	Flag	Result	Units	RL
Chloride		**725**	mg/Kg	1.00

Sample: 123285 - AH-2A (10.0-10.5') BEB

Param	Flag	Result	Units	RL
Chloride		**282**	mg/Kg	1.00

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Ike Tavarez
Highlander Environmental Services
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: May 7, 2007

Work Order: 7050313

Project Location: Lea County, NM
Project Name: POGO/G.H. Mattix Transfer Lineleak
Project Number: 2986

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
123280	AH-2A (0-1.0') BEB	soil	2007-05-02	00:00	2007-05-03
123281	AH-2A (2.0-2.5') BEB	soil	2007-05-02	00:00	2007-05-03
123282	AH-2A (4.0-4.5') BEB	soil	2007-05-02	00:00	2007-05-03
123283	AH-2A (6.0-6.5') BEB	soil	2007-05-02	00:00	2007-05-03
123284	AH-2A (8.0-8.5') BEB	soil	2007-05-02	00:00	2007-05-03
123285	AH-2A (10.0-10.5') BEB	soil	2007-05-02	00:00	2007-05-03

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

Blair Leftwich

Dr. Blair Leftwich, Director

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Analytical Report

Sample: 123280 - AH-2A (0-1.0') BEB

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36960	Date Analyzed:	2007-05-03	Analyzed By:	AR
Prep Batch:	32064	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**714**		mg/Kg	50	1.00

Sample: 123281 - AH-2A (2.0-2.5') BEB

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36960	Date Analyzed:	2007-05-03	Analyzed By:	AR
Prep Batch:	32064	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**2260**		mg/Kg	100	1.00

Sample: 123282 - AH-2A (4.0-4.5') BEB

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36960	Date Analyzed:	2007-05-03	Analyzed By:	AR
Prep Batch:	32064	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**584**		mg/Kg	10	1.00

Sample: 123283 - AH-2A (6.0-6.5') BEB

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36960	Date Analyzed:	2007-05-03	Analyzed By:	AR
Prep Batch:	32064	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**1130**		mg/Kg	50	1.00

Sample: 123284 - AH-2A (8.0-8.5') BEB

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36980	Date Analyzed:	2007-05-04	Analyzed By:	AR
Prep Batch:	32081	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**725**	mg/Kg	50	1.00

Sample: 123285 - AH-2A (10.0-10.5') BEB

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36980	Date Analyzed:	2007-05-04	Analyzed By:	AR
Prep Batch:	32081	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**282**	mg/Kg	10	1.00

Matrix Blank (1) QC Batch: 36960

QC Batch:	36960	Date Analyzed:	2007-05-03	Analyzed By:	AR
Prep Batch:	32064	QC Preparation:	2007-05-03	Prepared By:	AR

Parameter	Flag	MDL Result	Units	RL
Chloride		3.27	mg/Kg	1

Matrix Blank (1) QC Batch: 36980

QC Batch:	36980	Date Analyzed:	2007-05-04	Analyzed By:	AR
Prep Batch:	32081	QC Preparation:	2007-05-04	Prepared By:	AR

Parameter	Flag	MDL Result	Units	RL
Chloride		3.18	mg/Kg	1

Laboratory Control Spike (LCS-1)

QC Batch:	36960	Date Analyzed:	2007-05-03	Analyzed By:	AR
Prep Batch:	32064	QC Preparation:	2007-05-03	Prepared By:	AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	15.0	mg/Kg	1	12.5	2.1955	102	90 - 110

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	14.9	mg/Kg	1	12.5	2.1955	102	90 - 110	1	

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

Laboratory Control Spike (LCS-1)

QC Batch: 36980 | Date Analyzed: 2007-05-04 | Analyzed By: AR
Prep Batch: 32081 | QC Preparation: 2007-05-04 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	14.9	mg/Kg	1	12.5	2.0971	102	90 - 110

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	14.9	mg/Kg	1	12.5	2.0971	102	90 - 110	0	

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

Matrix Spike (MS-1) Spiked Sample: 123281

QC Batch: 36960 | Date Analyzed: 2007-05-03 | Analyzed By: AR
Prep Batch: 32064 | QC Preparation: 2007-05-03 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	3490	mg/Kg	100	1250	2259.43	98	90 - 110

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	3540	mg/Kg	100	1250	2259.43	102	90 - 110	1	

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

Matrix Spike (MS-1) Spiked Sample:

QC Batch: 36980 | Date Analyzed: 2007-05-04 | Analyzed By: AR
Prep Batch: 32081 | QC Preparation: 2007-05-04 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride [1]	3800	mg/Kg	100	1250	2428.91	110	90 - 110

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride [2]	3610	mg/Kg	100	1250	2428.91	94	90 - 110	5	

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

[1] MS/MSD for sample 121915, not reported in this batch. •
[2] MS/MSD for sample 121915, not reported in this batch. •

Standard (ICV-1)

QC Batch: 36960 | Date Analyzed: 2007-05-03 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.4	99	90 - 110	2007-05-03

Standard (CCV-1)

QC Batch: 36960 | Date Analyzed: 2007-05-03 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.4	99	90 - 110	2007-05-03

Standard (ICV-1)

QC Batch: 36980 | Date Analyzed: 2007-05-04 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.2	97	90 - 110	2007-05-04

Standard (CCV-1)

QC Batch: 36980 | Date Analyzed: 2007-05-04 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.4	99	90 - 110	2007-05-04

7050313

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 Fax (432) 682-3946

PAGE: 1 OF: 1

CLIENT NAME: Pogo

SITE MANAGER: Ike Tavarez

PROJECT NO.: 2986

PROJECT NAME: Pogo / G.H. Mattix Transfer Line leak Lea County, NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8020/602	MTBE 8020/602	TPH 418.1 8015 MOD. TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	BOD, TSS, pH, TDS, (Chloride)	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
123280	5/2/07		S		X	AH-2A(0-1.0') BEB	1				X															X			
81			S		X	AH-2A(2.0'-2.5') BEB	1				X															X			
82			S		X	AH-2A(4.0'-4.5') BEB	1				X															X			
83			S		X	AH-2A(6.0'-6.5') BEB	1				X															X			
84			S		X	AH-2A(8.0'-8.5') BEB	1				X															X			
85			S		X	AH-2A(10.0'-10.5') BEB	1				X															X			
~~86~~																													
87																													

ANALYSIS REQUEST (Circle or Specify Method No.)

RELINQUISHED BY: (Signature) Matt Dubose Date: 5/03/07 Time: 1103

RECEIVED BY: (Signature) ARCHER Date: 5-3-07 Time: 1103

SAMPLED BY: (Print & Sign) Kolt Harrison / Matt Dubose Date: 5/03/07 Time:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

SAMPLE SHIPPED BY: (Circle) FEDEX BUS AIRBILL #:
HAND DELIVERED UPS OTHER:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

RECEIVING LABORATORY: Trace

ADDRESS:

CITY: Midland STATE: Texas ZIP:

CONTACT: PHONE:

RECEIVED BY: (Signature)

DATE: TIME:

HIGHLANDER CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 4°

MATRIX: W-Water A-Air SD-Solid (S-Soil) SL-Sludge O-Other

REMARKS:

Please Fill out all copies - Laboratory retains yellow copy - Return original copy to Highlander Enviromental Corp. - Project Manager retains pink copy - Accounting receives Gold copy.

Summary Report

Ike Tavarez
Highlander Environmental Services
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: May 23, 2007

Work Order: 7051625

Project Location: Lea County, NM
Project Name: POGO/G.H. Mattix Transfer Lineleak
Project Number: 2986

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
124246	AH-3A 0-1'	soil	2007-05-14	00:00	2007-05-16
124247	AH-3A 2'-2.5'	soil	2007-05-14	00:00	2007-05-16
124248	AH-3A 4'-4.5'	soil	2007-05-14	00:00	2007-05-16
124249	AH-3A 6'-6.5'	soil	2007-05-14	00:00	2007-05-16
124250	AH-3A 8'-8.5'	soil	2007-05-14	00:00	2007-05-16
124251	AH-3A 10'-10.5'	soil	2007-05-14	00:00	2007-05-16

Sample: 124246 - AH-3A 0-1'

Param	Flag	Result	Units	RL
Chloride		**10.8**	mg/Kg	1.00

Sample: 124247 - AH-3A 2'-2.5'

Param	Flag	Result	Units	RL
Chloride		**639**	mg/Kg	1.00

Sample: 124248 - AH-3A 4'-4.5'

Param	Flag	Result	Units	RL
Chloride		**2740**	mg/Kg	1.00

Sample: 124249 - AH-3A 6'-6.5'

Param	Flag	Result	Units	RL
Chloride		**2000**	mg/Kg	1.00

Sample: 124250 - AH-3A 8'-8.5'

Param	Flag	Result	Units	RL
Chloride		**1850**	mg/Kg	1.00

Sample: 124251 - AH-3A 10'-10.5'

Param	Flag	Result	Units	RL
Chloride		**1190**	mg/Kg	1.00

TRACEANALYSIS, INC.

6701 Aberdeen Avenue Suite 9 | Lubbock, Texas 79424 | 800•378•1296 | 806•794•1296 | FAX 806•794•1298
200 East Sunset Road, Suite E | El Paso, Texas 79922 | 888•588•3443 | 915•585•3443 | FAX 915•585•4944
5002 Basin Street Suite A1 | Midland, Texas 79703 | | 432•689•6301 | FAX 432•689•6313
6015 Harris Parkway Suite 110 | Ft Worth, Texas 76132 | | 817•201•5260 |
E Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Ike Tavarez
Highlander Environmental Services
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: May 23, 2007

Work Order: 7051625

Project Location: Lea County, NM
Project Name: POGO/G.H. Mattix Transfer Lineleak
Project Number: 2986

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
124246	AH-3A 0-1'	soil	2007-05-14	00:00	2007-05-16
124247	AH-3A 2'-2.5'	soil	2007-05-14	00:00	2007-05-16
124248	AH-3A 4'-4.5'	soil	2007-05-14	00:00	2007-05-16
124249	AH-3A 6'-6.5'	soil	2007-05-14	00:00	2007-05-16
124250	AH-3A 8'-8.5'	soil	2007-05-14	00:00	2007-05-16
124251	AH-3A 10'-10.5'	soil	2007-05-14	00:00	2007-05-16

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

Dr. Blair Leftwich, Director

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Analytical Report

Sample: 124246 - AH-3A 0-1'

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	37432	Date Analyzed:	2007-05-23	Analyzed By:	ER
Prep Batch:	32458	Sample Preparation:	2007-05-22	Prepared By:	ER

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**10.8**	mg/Kg	5	1.00

Sample: 124247 - AH-3A 2'-2.5'

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	37429	Date Analyzed:	2007-05-22	Analyzed By:	ER
Prep Batch:	32456	Sample Preparation:	2007-05-22	Prepared By:	ER

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**639**	mg/Kg	50	1.00

Sample: 124248 - AH-3A 4'-4.5'

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	37429	Date Analyzed:	2007-05-22	Analyzed By:	ER
Prep Batch:	32456	Sample Preparation:	2007-05-22	Prepared By:	ER

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**2740**	mg/Kg	500	1.00

Sample: 124249 - AH-3A 6'-6.5'

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	37429	Date Analyzed:	2007-05-22	Analyzed By:	ER
Prep Batch:	32456	Sample Preparation:	2007-05-22	Prepared By:	ER

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**2000**	mg/Kg	100	1.00

Sample: 124250 - AH-3A 8'-8.5'

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	37429	Date Analyzed:	2007-05-22	Analyzed By:	ER
Prep Batch:	32456	Sample Preparation:	2007-05-22	Prepared By:	ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1850**	mg/Kg	100	1.00

Sample: 124251 - AH-3A 10'-10.5'

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	37429	Date Analyzed:	2007-05-22	Analyzed By:	ER
Prep Batch:	32456	Sample Preparation:	2007-05-22	Prepared By:	ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1190**	mg/Kg	100	1.00

Method Blank (1) QC Batch: 37429

QC Batch:	37429	Date Analyzed:	2007-05-22	Analyzed By:	ER
Prep Batch:	32456	QC Preparation:	2007-05-22	Prepared By:	ER

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.140	mg/Kg	1

Method Blank (1) QC Batch: 37432

QC Batch:	37432	Date Analyzed:	2007-05-23	Analyzed By:	ER
Prep Batch:	32458	QC Preparation:	2007-05-22	Prepared By:	ER

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.140	mg/Kg	1

Laboratory Control Spike (LCS-1)

QC Batch:	37429	Date Analyzed:	2007-05-22	Analyzed By:	ER
Prep Batch:	32456	QC Preparation:	2007-05-22	Prepared By:	ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	12.2	mg/Kg	1	12.5	<0.140	98	90 - 110

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	12.9	mg/Kg	1	12.5	<0.140	103	90 - 110	6	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 37432 | Date Analyzed: 2007-05-23 | Analyzed By: ER
Prep Batch: 32458 | QC Preparation: 2007-05-22 | Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	12.3	mg/Kg	1	12.5	<0.140	98	90 - 110

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	12.0	mg/Kg	1	12.5	<0.140	96	90 - 110	2	20

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

Matrix Spike (MS-1) Spiked Sample: 124255

QC Batch: 37429 | Date Analyzed: 2007-05-22 | Analyzed By: ER
Prep Batch: 32456 | QC Preparation: 2007-05-22 | Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride [1]	388	mg/Kg	5	62.5	169.283	350	75.6 - 117

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride [2]	275	mg/Kg	5	62.5	169.283	169	75.6 - 117	34	20

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

Matrix Spike (MS-1) Spiked Sample: 124333

QC Batch: 37432 | Date Analyzed: 2007-05-23 | Analyzed By: ER
Prep Batch: 32458 | QC Preparation: 2007-05-22 | Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride [3]	549	mg/Kg	50	625	224.831	52	75.6 - 117

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride [4]	540	mg/Kg	50	625	224.831	50	75.6 - 117	2	20

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

[1]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[2]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[3]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[4]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

Standard (ICV-1)

QC Batch: 37429 | Date Analyzed: 2007-05-22 | Analyzed By: ER

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	11.8	94	90 - 110	2007-05-22

Standard (CCV-1)

QC Batch: 37429 | Date Analyzed: 2007-05-22 | Analyzed By: ER

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	11.9	95	90 - 110	2007-05-22

Standard (ICV-1)

QC Batch: 37432 | Date Analyzed: 2007-05-23 | Analyzed By: ER

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	11.8	94	90 - 110	2007-05-23

Standard (CCV-1)

QC Batch: 37432 | Date Analyzed: 2007-05-23 | Analyzed By: ER

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	11.8	94	90 - 110	2007-05-23

work order: 7051875

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 Fax (432) 682-3946

PAGE: 1 OF: 1

CLIENT NAME: Pogo

SITE MANAGER: Ike Tavarez

PROJECT NO.: 2986

PROJECT NAME: G.H. Mattix Transfer Line Lea Co. NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8020/602	MTBE 8020/602	TPH 418.1 8015 MOD. TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8050/608	Pest. 608/608	BOD, TSS, pH, TDS, (Chloride)	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
124246	5-14-07		S		X	AH-3A 0-1'	1				X															X			
124247			S		X	AH-3A 2'-2.5'	1				X															X			
248			S		X	AH-3A 4'-4.5'	1				X															X			
249			S		X	AH-3A 6'-6.5'	1				X															X			
250			S		X	AH-3A 8'-8.5'	1				X															X			
251			S		X	AH-3A 10'-10.5'	1				X															X			

RELINQUISHED BY: (Signature) Date: 05-16-07 Time: 8:30

RECEIVED BY: (Signature) Date: Time:

SAMPLED BY: (Print & Sign) JEREMY & KOLT Date: 5-14-07 Time:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

SAMPLE SHIPPED BY: (Circle) FEDEX BUS AIRBILL #
HAND DELIVERED UPS OTHER:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

RECEIVING LABORATORY: TRACE

ADDRESS:

CITY: STATE: ZIP:

CONTACT: PHONE:

RECEIVED BY: (Signature)

DATE: 5-16-07 TIME: 8:30

HIGHLANDER CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 4°C intact

MATRIX: W-Water A-Air SD-Solid (S-Soil) SL-Sludge O-Other

REMARKS: all tests - Basic Lubbock

Please Fill out all copies - Laboratory retains yellow copy - Return original copy to Highlander Enviromental Corp. - Project Manager retains pink copy - Accounting receives Gold copy.

Summary Report

Ike Tavarez
Highlander Environmental Services
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: June 12, 2007

Work Order: 7060723

Project Location: Lea County, NM
Project Name: POGO/G.H. Mattix Transfer Lineleak
Project Number: 2986

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
126734	T-1 12.0'	soil	2007-06-06	00:00	2007-06-07
126735	T-1 14.0'	soil	2007-06-06	00:00	2007-06-07
126736	T-1 14.5'	soil	2007-06-06	00:00	2007-06-07

Sample: 126734 - T-1 12.0'

Param	Flag	Result	Units	RL
Chloride		**966**	mg/Kg	2.00

Sample: 126735 - T-1 14.0'

Param	Flag	Result	Units	RL
Chloride		**226**	mg/Kg	2.00

Sample: 126736 - T-1 14.5'

Param	Flag	Result	Units	RL
Chloride		**137**	mg/Kg	2.00

APPENDIX C

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

☑ Initial Report ☐ Final Report

Name of Company Latigo Petroleum, Inc	Contact Patrick Ellis
Address P.O. Box 10340 Midland, Texas 79702	Telephone No. 432 685-8148
Facility Name Eva E Blinebry Federal # 1	Facility Type Well - injection transfer line

Surface Owner	Mineral Owner	Lease No. NMLC064118

LOCATION OF RELEASE 30025109360000

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	34	23S	37E	1980	FSL	660	FEL	Lea

Latitude_____ Longitude_____

WTR 70'

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 150 BBLS / Volume Recovered 135 BBLS
Source of Release Transfer Line	Date and Hour of Occurrence / Date and Hour of Discovery 4-8-07
Was Immediate Notice Given? ☑ Yes ☐ No ☐ Not Required	If YES, To Whom? 4-8-07 Left voice message with OCD + BLM.
By Whom? Frank Underwood	Date and Hour 7:00pm 4-8-07
Was a Watercourse Reached? ☐ Yes ☑ No	If YES, Volume Impacting the Watercourse.

If a Watercourse was Impacted, Describe Fully.*

N/A

Describe Cause of Problem and Remedial Action Taken.*

Produced water transfer line was ruptured when plugging unit ran over line. Transfer line originated from G.H. Mattix injection station.

Describe Area Affected and Cleanup Action Taken.*

All free fluid was picked up. Highlander Environmental was contacted to evaluate spill area. Will send remediation plans for approval after evaluations.

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: Patrick L. Ellis	OIL CONSERVATION DIVISION
Printed Name: Patrick L. Ellis	Approved by District Supervisor: Environ Engr
Title: EH+S Supervisor	Approval Date: 6.27.07 / Expiration Date: 8.27.07
E-mail Address: ellisp@pogoproducing.com	Conditions of Approval: Final Due By / Attached ☐
Date: 4-26-07 Phone: (432) 685-8148	

* Attach Additional Sheets If Necessary

RP#1443

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 June 10, 2003

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

Release Notification and Corrective Action

(AMENDED)

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Pogo Producing Company	Contact: Pat Ellis
Address: P.O. Box 10340 Midland, Texas 79702-7340	Telephone No. (432) 685-8100
Facility Name: State G.H. Mattix Transfer Line	Facility Type: Transfer Line

Surface Owner	Mineral Owner	Lease No. NMLC064118

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	34	23S	37E	1980'	FSL	660'	FEL	Lea

Latitude 32° 15.522' Longitude 103° 08.656'

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 150BW	Volume Recovered 135 BW
Source of Release Transfer Line	Date and Hour of Occurrence 04/08/07	Date and Hour of Discovery 04/08/07
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Left Voice Message	
By Whom? Frank Underwood	Date and Hour 04/08/07 7:00 PM	
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.*
Produced water transfer line was ruptured when plugging unit ran over line. Transfer line originated from G.H. Mattix Injection Station.

Describe Area Affected and Cleanup Action Taken.*
All free oil was picked up. Highlander Environmental was contacted to evaluate spill. Samples were collected and spill was excavated to 4.5' below ground surface. Additional delineation samples taken. Soil hauled to Sundance in Eunice for disposal

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: Don A. Riggs	OIL CONSERVATION DIVISION
Printed Name: Don Riggs	Approved by District Supervisor:
Title: Environmental Health and Safety Manager	Approval Date: / Expiration Date:
E-mail Address: riggsd@pogoproducing.com	Conditions of Approval: / Attached ☐
Date: 9/14/07 Phone: (713) 297-5045	

* Attach Additional Sheets If Necessary

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 June 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

☐ Initial Report ☒ Final Report

Name of Company: Pogo Producing Company	Contact: Pat Ellis
Address: P.O. Box 10340 Midland, Texas 79702-7340	Telephone No. (432) 685-8100
Facility Name: State G.H. Mattix Transfer Line (2) EVA E. BLINEBRY FED #1	Facility Type: Transfer Line

Surface Owner	Mineral Owner	Lease No. NMLC064118

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	34	23S	37E	1980'	FSL	660'	FEL	Lea

Latitude 32° 15.522' Longitude 103° 08.656'

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release: 150BW	Volume Recovered: 135 BW
Source of Release: Transfer Line	Date and Hour of Occurrence: 04/08/07	Date and Hour of Discovery: 04/08/07
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Left Voice Message	
By Whom? Frank Underwood	Date and Hour: 04/08/07 7:00 PM	
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.*
Produced water transfer line was ruptured when plugging unit ran over line. Transfer line originated from G.H. Mattix Injection Station.

Describe Area Affected and Cleanup Action Taken.*
All free oil was picked up. Highlander Environmental was contacted to evaluate spill. Samples were collected and spill was excavated to 4.5' below ground surface. Additional delineation samples taken. Soil hauled to Sundance in Eunice for disposal

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: Don A. Riggs	OIL CONSERVATION DIVISION
Printed Name: Don Riggs	Approved by District Supervisor: ENVIRONMENTAL ENGINEER
Title: Environmental Health and Safety Manager	Approval Date: 11.9.07 Expiration Date:
E-mail Address: riggsd@pogoproducing.com	Conditions of Approval: Attached ☐ RP # 1443
Date: 9/14/07 Phone: (713) 297-5045	

* Attach Additional Sheets If Necessary