SITE INFORMATION

Report Type: CLOSURE REPORT

Site:							
		Plains Knight					
Company:		Pogo Produci	ing Company (Arc	h Petroleu	im)		
Section, Towns	hip and Range	Section 23, 12	24S, R37E		·····		
Unit Letter:		L					
Lease Number:		35033					
County: GPS:		Lea 32º 11' 59", 10	20 08' 16 2"				
Surface Owner:		Becky Doom	3 00 10.3		······································		
Mineral Owner:		Decky Doom	····		······································		
Directions:		- Francistana atia					
					co, go 6.3 miles north on Hwy 18, turn		
					end of paved road. Take cattle guard		
	<u></u>			iles which v	vill curve right (south), tank battery		
		located east of					
Release Data:							
Date Released:		3/14/2000					
Type Release:		Oil					
Source of Conta	mination:	Tank overflow					
Fluid Released:		7 barrels oil	·		·		
Fluids Recovere	d:	0			<u> </u>		
Official Commu	inication:						
Name:	Pat Ellis	and the standard stan	Don Riggs		lke Tavarez		
Company:	Pogo Producin	o Company	Pogo Producing Company		Highlander Environmental Corp.		
Address:	300 N. Marient		5 Greenway Plaza, Suite 2700				
P.O. Box	Box 10340						
		70704 7040		0.40			
City:	Midland Texas		Houston, Texas 77	046	Midland, Texas		
	, , , , , , , , , , , , , , , , , , ,			(432) 692- 4559			
Phone number:	(432) 685-810		(713) 297-5045	<u></u>			
Phone number: Email:	EllisP@pogop	roducing.com	riggsd@pogoprodu		(432) 692- 4559 itavarez@hec-enviro.com		
Phone number: Email: Ranking Criteri Depth to Ground	EllisP@pogopi	roducing.com	riggsd@pogoprodu	cing.com			
Phone number: Email: Ranking Criteri Depth to Ground <50 ft	EllisP@pogopi	roducing.com	riggsd@pogoprodu Ranking Score 20		itavarez@hec-enviro.com Site Data		
Phone number: Email: Ranking Criteri Depth to Ground <50 ft	EllisP@pogopi	roducing.com	riggsd@pogoprodu		itavarez@hec-enviro.com		
Phone number: Email: Ranking Criteri Depth to Ground <50 ft 50-99 ft >100 ft.	EllisP@pogopi a /water:	roducing.com	riggsd@pogoprodu Ranking Score 20 10 0		itavarez@hec-enviro.com Site Data Average Depth >50 BS		
Phone number: Email: Ranking Criteri Depth to Ground <50 ft 50-99 ft >100 ft. WellHead Protec	EllisP@pogopi a /water: tion:	roducing.com	riggsd@pogoprodu Ranking Score 20 10		itavarez@hec-enviro.com Site Data		
Phone number: Email: Ranking Criteri Depth to Ground <50 ft 50-99 ft >100 ft. WellHead Protec	EllisP@poqopi a /water: ///water: ////water: ///water: ///water: ///water: ////////water: ////////////water: ////////////////////////////////////	roducing.com	riggsd@pogoprodu Ranking Score 20 10 0 Ranking Score		itavarez@hec-enviro.com Site Data Average Depth >50 BS Site Data		
Phone number: Email: Ranking Criteri Depth to Ground <50 ft 50-99 ft >100 ft. WellHead Protec Water Source <1 Water Source >1	EllisP@pogopi a /water: /water: /ooo ft., Private ,000 ft., Private >/	roducing.com	riggsd@pogoprodu Ranking Score 20 10 0 Ranking Score 20 0		itavarez@hec-enviro.com Site Data Average Depth >50 BS Site Data None		
Phone number: Email: Ranking Criteri Depth to Ground <50 ft 50-99 ft >100 ft. WellHead Protec Water Source <1 Water Source >1	EllisP@pogopi a /water: /water: ////////////////////////////////////	roducing.com	riggsd@pogoprodu Ranking Score 20 10 0 Ranking Score 20		itavarez@hec-enviro.com Site Data Average Depth >50 BS Site Data		
Phone number: Email: Ranking Criteri Depth to Ground <50 ft 50-99 ft >100 ft. WellHead Protec Water Source <1 Water Source >1 Surface Body of <200 ft.	EllisP@pogopi a /water: /water: ////////////////////////////////////	roducing.com	riggsd@pogoprodu Ranking Score 20 10 0 0 Ranking Score 20 0 Ranking Score 20 0 Ranking Score 20 0 Ranking Score		itavarez@hec-enviro.com Site Data Average Depth >50 BS Site Data None Site Data None None		
Phone number: Email: Ranking Criteri Depth to Ground <50 ft 50-99 ft >100 ft. WellHead Protec Water Source <1 Water Source >1 Surface Body of	EllisP@pogopi a /water: /water: ////////////////////////////////////	roducing.com	riggsd@pogoprodu Ranking Score 20 10 0 Ranking Score 20 0 Ranking Score 20 0 Ranking Score 20 0 0 20 0 20 0 20 0 20 0 20		itavarez@hec-enviro.com Site Data Average Depth >50 BS Site Data None Site Data None None		
Phone number: Email: Ranking Criteri Depth to Ground <50 ft 50-99 ft >100 ft. WellHead Protec Water Source <1 Water Source <1 Water Source >1 Surface Body of <200 ft. 200 ft. >1,000 ft.	EllisP@poqopi a /water: /water: /000 ft., Private <br /000 ft., Private >/ Water:	roducing.com	riggsd@pogoprodu Ranking Score 20 0 8anking Score 20 20 0 8anking Score 20 20 0 8anking Score 20 10 0 10 0 10 0 0 0		itavarez@hec-enviro.com Site Data Average Depth >50 BS Site Data None Site Data None None		
Phone number: Email: Ranking Criteri Depth to Ground <50 ft 50-99 ft >100 ft. WellHead Protec Water Source <1 Water Source <1 Water Source >1 Surface Body of <200 ft. 200 ft. >1,000 ft.	EllisP@pogopi a /water: /water: ////////////////////////////////////	roducing.com	riggsd@pogoprodu Ranking Score 20 10 0 0 Ranking Score 20 0 Ranking Score 20 0 Ranking Score 20 0 Image: Colspan="2">Colspan="2" Colspan="2">Colspan="2" Colspan="2" Colspan="2" </td <td></td> <td>itavarez@hec-enviro.com Site Data Average Depth >50 BS Site Data None Site Data None None</td>		itavarez@hec-enviro.com Site Data Average Depth >50 BS Site Data None Site Data None None		
Phone number: Email: Ranking Criteri Depth to Ground <50 ft 50-99 ft >100 ft. WellHead Protec Water Source <1 Water Source <1 Water Source >1 Surface Body of <200 ft. 200 ft. >1,000 ft.	EllisP@poqopi a /water: /water: /000 ft., Private <br /000 ft., Private >/ Water:	roducing.com	riggsd@pogoprodu Ranking Score 20 10 0 0 Ranking Score 20 0 Ranking Score 20 20 0 0 0 Ranking Score 20 10 0 10 0 10 0		itavarez@hec-enviro.com Site Data Average Depth >50 BS Site Data None Site Data None None		
Phone number: Email: Ranking Criteri Depth to Ground <50 ft 50-99 ft >100 ft. WellHead Protec Water Source <1 Water Source <1 Water Source >1 Surface Body of <200 ft. 200 ft. >1,000 ft.	EllisP@poqopi a /water: /water: /000 ft., Private <br /000 ft., Private >/ Water:	roducing.com	riggsd@pogoprodu Ranking Score 20 0 8anking Score 20 20 0 8anking Score 20 20 0 8anking Score 20 10 0 10 0 10 0 0 0		itavarez@hec-enviro.com Site Data Average Depth >50 BS Site Data None Site Data None		



Highlander Environmental Corp.

Midland, Texas

October 14, 2005

Mr. Larry Johnson Environmental Engineer Specialist Oil Conservation Division- District I 1625 N. French Drive Hobbs, New Mexico 88240



1RP. 22205

RE: Assessment and Closure Report for the Spill located at the Pogo Plains Knight #1 Tank Battery, Lea County, New Mexico, Unit L, Section 23, T-24-S, R-37-E.

Dear Mr. Johnson:

Highlander Environmental Corp. (Highlander) was contacted by (Arch) Pogo Producing Company to assess a spill, which occurred at the Plains Knight #1 Tank Battery in Lea County, New Mexico. The Site is located in Unit-Letter-L, Section-23, Township 24 South, Range 37. (East., The State of New Mexico C-141 (Initial) is included in Appendix C. The Site is shown on Figure 1.

Background

On March 14, 2000, the <u>oil storage tank</u> at the facility ran over, impacting the surface soil around the storage tank. Approximately 7 barrels of <u>oil were reportedly spilled</u> and <u>none was</u> recovered.

On July 13, 2000, Highlander inspected the spill area and attempted to define the vertical extent of the hydrocarbon impact. The spill area measured approximately 80'x 5' and 30'x 5' inside the dike of the facility. The dike was breached, in the northeast corner of the facility, impacting areas outside the dike measuring 100' x 5' and 60' x 5'. The spill areas are shown on Figure 2. A total of five auger holes (AH-1 through AH-5) were installed at the Site to attempt to delineate the impact. The locations of the auger holes are shown in Figure 2. Deeper soil samples could not be collected due to a dense caliche layer encountered at a depth of approximately 1-2 feet below surface. The samples were analyzed for TPH by EPA 418.1 and chloride by method SW846-9252. The laboratory reports are shown in Appendix B. The results are shown in Table 1.

The TPH concentrations inside the tank battery dike ranged from 39,200 mg/kg to 47,250 mg/kg at 0-1' below surface. However, the samples taken at 1-2' decreased in all three-auger

holes (AH-1, AH-2 and AH-3) to 210 mg/kg, 10,800 mg/kg and 1,150 mg/kg, respectively. Two auger holes (AH-4 and AH-5) installed outside the dike showed elevated TPH levels from 0-1'ranging from 35,100 mg/kg to 93,500 mg/kg. Deeper samples could not be obtained, due to the shallow dense caliche layer.

All the soil samples collected from 0-1'and 1-2'exceeded the RRAL for TPH of 1,000 mg/kg, except for AH-1 at 1-2'below surface. AH-3 at 1-2' was near the RRAL with a level of 1,150 mg/kg. The chloride evaluation showed detectable levels ranging from 142 mg/kg to 328 mg/kg.

An original assessment report was submitted on August 7, 2000, and revised on January 14, 2002, which recommended working the impacted soil inside the tank battery dike. During the remediation, an attempt was to be made to collect deeper samples for confirmation in the area of AH-2. Additionally, the impacted area east of the tank battery was to be excavated and placed on plastic at the tank battery pad. Once the impacted soil was removed, confirmation soil samples were to be collected from the excavated area for TPH and BTEX. The impacted soil was to either be disposed of at an approved disposal facility or landfarmed onsite.

Groundwater and Regulatory

According to the New Mexico State Engineer Office database, there are water wells located in Sections 23, 24 and 25, Township 24 South, Range 37 East, with average depth to <u>groundwater of 94</u> (Section 23), 100' (Section 24) and 90' (Section 25). The well records are shown 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.

Remediation and Confirmation Sampling

The impacted soils inside the facility dike and outside the east end of the dike were excavated. Excavation began on February 17-18, 2005. Due to rain, and the landowner's desire not to drive equipment into the wet pasture, the excavation east of the dike was postponed until March 21, 2005. The area was segregated into five (5) areas for confirmation sampling. Areas #1 and #2 measured 6' x 55', Area #3 measured 3' x 20', Area #4 measured 10' x 30' and Area #5 measured 6' x 30'. Excavation depths ranged from 1.5 to 3.0' below excavation bottom (BEB). The excavated areas are shown on Figure 3. Composite samples were taken and analyzed for TPH by method EPA 8015M, BTEX by method 8021B and chloride by method EPA 300.0. The laboratory reports are shown in Appendix B. The results are shown in Table 1.

Referring to Table 1, BTEX and TPH concentrations were well below the RRAL for all five areas. Chloride concentrations in Area #1, Area #3 and Area #4, were 117 mg/kg, 404 mg/kg and 428 mg/kg respectively. Based upon the chloride results, test trenches were installed in Areas #2 and #5 on April 7, 2005 to collect additional subsurface samples. Chloride concentrations in these two areas appeared to remain elevated at depths of 6'-8' below excavation bottom.

On September 9, 2005, a drilling rig was utilized in order to better profile the soils beneath Areas #2 and #5 and to collect discreet soil samples for evaluation of subsurface chloride impact. Two boreholes were installed, with BH-1 being located in Area #5 and BH-2 being located in Areas #2. Soil samples were collected at five foot increments to a total depth of 15'-16' BEB. All of the samples collected were well below 250 mg/kg, and did not show deeper chloride impact in these areas.

Conclusion

All five areas have been excavated to depths ranging from 1.5' - 3.0'. Composite samples taken and analyzed for TPH and BTEX were well below the RRAL for all five areas. Chloride concentrations in Area #1, Area #3 and Area #4, were 117 mg/kg, 404 mg/kg and 428 mg/kg respectively. Samples from boreholes placed into the soils beneath Areas #2 and #5 were well below 250 mg/kg, and did not show deeper chloride impact in these areas. Based upon the work performed to date and the results of confirmation sampling, Pogo requests closure of this site. The State of New Mexico C-141 (Final) is included in Appendix C.

If you require any additional information or have any questions or comments concerning the assessment report, please call.

Highlander Environmental Corp.,

e Tavary pyrak

Ike Tavarez, P.G. Project Manager/Senior Geologist

cc:

Don Riggs – Pogo Producing Co. Pat Ellis – Pogo Producing Co.

FIGURES







TABLE

Table 1 Pogo Producing Company Arch/Plains Knight #1 Tank Battery Lea County, New Mexico

Sample	Date	Sample	TPH (mg/kg))	Benzene	Toluene	Ethlybenzene	Xylene	Chloride
ID	Sampled	Depth (ft)	C6-C12	C12-C35	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
					-					
Area #1	2/18/2005	2.0	42.2	301	343	<0.025	< 0.025	0.0386	0.1247	117
		· · · · · · · · · · · · · · · · · · ·								
Area #2	2/18/2005	2.5	<10.0	<10.0	<10.0	-	-	-	-	453
	3/22/2005	2.5 BEB	-	-		-	-	-	_	864
	4/7/2005	4.0 BEB	_	- ·	-	-	-	-	-	800
	4/7/2005	6.0 BEB	-	-	-	-		-	-	1180
Area #3	2/18/2005	1.5	<10.0	<10.0	<10.0					404
Alca #5	2/18/2003	1.3	<10.0	<10.0	<10.0	-	-	-	-	404
Area #4	3/22/2005	1.5	<10.0	15.0	15.0	<0.025	<0.025	<0.025	<0.025	428
Area #5	3/22/2005	2.0	<10.0	40.6	40.6	<0.025	<0.025	<0.025	<0.025	904
	4/7/2005	2.0 BEB	-	-	-	4	-	-	-	1570
	4/7/2005	4.0 BEB	-	-	-	-	-	-	- [2200
BH-1 (Area 5)	9/9/2005	5-6		-	_			-	-	14.0
	9/9/2005	10-11			-	-	-	_	-	9.31
	9/9/2005	15-16	-	-	-	-	-	-	-	9.73
BH-2 (Area 2)	9/9/2005	5-6	-		-	-				61.0
	9/9/2005	10-11	-	-	-	-	-	-	-	59.7
	9/9/2005	15-16	-	-	-	-	-	-		99.3
	212000						· · · · ·			

<10.0 and <0.025 - Analyte not detected at or above the reporting limit

BEB - Below Excavation Bottom

APPENDIX A



AVERAGE DEPTH OF WATER REPORT 10/24/2005

							(Depth	Water in	Feet)
Bsn	Tws	Rng Sec	Zone	x	Y	Wells	Min	Max	Avg
СР	24S	37E 05				1	106	106	106
СР	24S	37E 08				1	90	90	90
СР	24S	37E 23				1	94	94	94
CP	24S	37E 24				1	100	100	100
СР	24S	37E 25				1	90	90	90
СР	24S	37E 28				1	70	70	70

Record Count: 6

APPENDIX B

Analysis of Sampling 2/18/2005



Analytical Report

Prepared for:

Ike Tavarez Highlander Environmental Corp. 1910 N. Big Spring St. Midland, TX 79705

Project: Pogo/ Plains Knight #1 Tank Battery Project Number: 1469 Location: Lea County, N.M.

Lab Order Number: 5B18010

Report Date: 02/24/05

Highlander Environmental Corp. 1910 N. Big Spring St. Midland TX, 79705

Project: Pogo/ Plains Knight #1 Tank Battery Project Number: 1469 Project Manager: Ike Tavarez

Fax: (432) 682-3946 Reported:

02/24/05 09:52

ANALYTICAL REPORT FOR SAMPLES

Sample ID	 Laboratory ID	Matrix	Date Sampled	Date Received
Area #1 (2.0') Bottom Hole	5B18010-01	Soil	02/18/05 00:00	02/18/05 14:45
Area #2 (2.5') Bottom Hole	5B18010-02	Soil	02/18/05 00:00	02/18/05 14:45
Area #3 (2.0') Bottom Hole	5B18010-03	Soil	02/18/05 00:00	02/18/05 14:45

Highlander Environmental Corp.
1910 N. Big Spring St.
Midland TX, 79705

Project: Pogo/ Plains Knight #1 Tank Battery Project Number: 1469 Project Manager: Ike Tavarez

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
Area #1 (2.0') Bottom Hole (5B1801	0-01) Soil				<u> </u>				
Benzene	ND	0.0250	mg/kg dry	25	EB52402	02/22/05	02/23/05	EPA 8021B	
Toluene	J [0.0193]	0.0250	"	0	a	**	11	11	-
Ethylbenzene	0.0386	0.0250	ų	**	н	**	н	н	
Xylene (p/m)	0.0762	0.0250	11		и	0	. "	н	
Xylene (0)	0.0485	0.0250	11	"	н	11	u		
Surrogate: a,a,a-Trifluorotoluene		81.6%	80-1	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		110 %	80-1	20	"	"	"	"	
Gasoline Range Organics C6-C12	42.2	10.0	mg/kg dry	1	EB51901	02/18/05	02/19/05	EPA 8015M	
Diesel Range Organics >C12-C35	301	10.0	"	"	и	U	"	и	
Total Hydrocarbon C6-C35	343	10.0	11	"	"	"	н	U	
Surrogate: 1-Chlorooctane		79.6 %	70-1	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		77.8 %	70-1	30	"	"	"	"	
Area #2 (2.5') Bottom Hole (5B180)	0-02) Soil					_			
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EB51901	02/18/05	02/19/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0				п	n	н	
Total Hydrocarbon C6-C35	ND	10.0		"		"	"	н	
Surrogate: 1-Chlorooctane		92.4 %	70	130	,,	".	"	13	
Surrogate: 1-Chlorooctadecane		79.6 %	70	130	"	"	"	"	
0				÷.					
Area #3 (2.0') Bottom Hole (5B180)	10-03) Soil								
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EB51901	02/18/05	02/19/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	н	"	"	"		. "	
Total Hydrocarbon C6-C35	ND	10.0	н	n	11	n	"	"	
Surrogate: 1-Chlorooctane		90.0 %	70-	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		73.4 %	70-	130	"	"	"	"	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Highlander Environmental Corp. 1910 N. Big Spring St. Midland TX, 79705

- n

Project: Pogo/ Plains Knight #1 Tank Battery Project Number: 1469 Project Manager: Ike Tavarez

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Area #1 (2.0') Bottom Hole	(5B18010-01) Soil								
Chloride	117	10.0	mg/kg	20	EB52216	02/21/05	02/21/05	EPA 300.0	
% Moisture	14.8	0.1	%	1	EB52104	02/18/05	02/21/05	% calculation	
Area #2 (2.5') Bottom Hole	(5B18010-02) Soil								
Chloride	453	20.0	mg/kg	40	EB52216	02/21/05	02/21/05	EPA 300.0	
% Moisture	12.6	0.1	%	1	EB52104	02/18/05	02/21/05	% calculation	
Area #3 (2.0') Bottom Hole	(5B18010-03) Soil								
Chloride	404	20.0	mg/kg	40	EB52216	02/21/05	02/21/05	EPA 300.0	
% Moisture	11.9	0.1	%	1	EB52104	02/18/05	02/21/05	% calculation	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirely, with written approval of Environmental Lab of Texas.

Highlander Environmental Corp. 1910 N. Big Spring St. Midland TX, 79705	Project: Pogo/ Plains Knight #1 Tank Battery Project Number: 1469 Project Manager: Ike Tavarez						Fax: (432) 682-39 Reported: 02/24/05 09:52			
	÷	anics by Invironm	-	-						
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EB51901 - Solvent Extraction ((GC)									
Blank (EB51901-BLK1)				Prepared:	02/18/05	Analyzed	l: 02/19/05			
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet	• • • • •						
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	и							
Surrogate: 1-Chlorooctane	42.3		mg/kg	50.0		84.6	70-130	·		
Surrogate: 1-Chlorooctadecane	36.6		"	50.0		73.2	70-130			
LCS (EB51901-BS1)				Prepared:	02/18/05	Analyzed	l: 02/19/05			
Gasoline Range Organics C6-C12	442	10.0	mg/kg wet	500	02.10,00	88.4	75-125			
Diesel Range Organics >C12-C35	451	10.0	"	500		90.2	75-125			
Total Hydrocarbon C6-C35	893	10.0	11	1000		89.3	75-125			
Surrogate: 1-Chlorooctane	38.7	•	mg/kg	50.0		77.4	70-130			
Surrogate: 1-Chlorooctadecane	35.6		"	50.0		71.2	70-130			
Calibration Check (EB51901-CCV1)				Prepared	02/18/05	Analyzed	1: 02/19/05			
Gasoline Range Organics C6-C12	486		mg/kg	500		97.2	80-120			
Diesel Range Organics >C12-C35	550		"	500		110	80-120			
Total Hydrocarbon C6-C35	1040			1000		104	80-120			
Surrogate: 1-Chlorooctane	50.7		"	50.0		101	70-130		·	
Surrogate: 1-Chlorooctadecane	43.9		"	50.0		87.8	70-130			
Matrix Spike (EB51901-MS1)	So	urce: 5B180	09-03	Prepared	: 02/18/05	Analyzed	d: 02/19/05			
Gasoline Range Organics C6-C12	477	10.0	mg/kg dry	514	ND	92.8	75-125			
Diesel Range Organics >C12-C35	542	10.0		514	ND	105	75-125			
Total Hydrocarbon C6-C35	1020	10.0	n	1030	ND	99.0	75-125			
Surrogate: 1-Chlorooctane	48.0		mg/kg	50.0	<u>.</u>	96.0	70-130			
Surrogate: 1-Chlorooctadecane	37.9		"	50.0		75.8	70-130			
Matrix Spike Dup (EB51901-MSD1)	So	urce: 5B180	09-03	Prepared	: 02/18/05	Analyzed	d: 02/19/05			
Gasoline Range Organics C6-C12	450	10.0	mg/kg dry	514	ND	87.5	75-125	5.83	20	
Diesel Range Organics >C12-C35	502	10.0		514	ND	97.7	75-125	7.66	20	
Total Hydrocarbon C6-C35	952	10.0	n	1030	ND	92.4	75-125	6.90	20	
Surrogate: 1-Chlorooctane	45.7	·····	mg/kg	50.0		91.4	70-130			
Surrogate: I-Chlorooctadecane	36.7		"	50.0		73.4	70-130			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Highlander Environmental Corp. 1910 N. Big Spring St.		Pro Project Nur	-	go/ Plains I 59	Knight #1	Tank Batte	ery		Fax: (432) Repo	
Midland TX, 79705		Project Man							02/24/0	
	-	ganics by	-	•						
		Environm	ental L	ab of 1	exas	··				
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EB52402 - EPA 5030C (GC)	<u>.</u>							<u> </u>		
Blank (EB52402-BLK1)				Prepared	& Analyz	ed: 02/22/0	05			
Benzene	ND	0.0250	mg/kg wet	ū						
Toluene	ND	0.0250	n							
Ethylbenzene	ND	0.0250	"							
Xylene (p/m)	ND	0.0250	н							
Xylene (0)	ND	0.0250	н							
Surrogate: a,a,a-Trifluorotoluene	80.3		ug/kg	100		80.3	80-120			
Surrogate: 4-Bromofluorobenzene	85.6		"	100		85.6	80-120			
LCS (EB52402-BS1)				Prepared	& Analyz	ed: 02/22/	05			
Benzene	104		ug/kg	100		104	80-120			
Toluene	107		0	100		107	80-120			
Ethylbenzene	106			100		106	80-120			
Xylene (p/m)	239		**	200		120	80-120			
Xylene (0)	116		"	100		116	80-120			
Surrogate: a,a,a-Trifluorotoluene	98.3		"	100	<u></u>	98.3	80-120			
Surrogate: 4-Bromofluorobenzene	110		"	100		110	80-120			
Calibration Check (EB52402-CCV1)				Prepared	: 02/22/05	Analyzed	1: 02/23/05			
Benzene	101		ug/kg	100		101	80-120			
Toluene	104		11	100		104	80-120			
Ethylbenzene	105		н	100		105	80-120			
Xylene (p/m)	238		н	200		119	80-120			
Xylene (0)	118		11	100		118	80-120			
Surrogate: a,a,a-Trifluorotoluene	102		"	100		102	80-120			
Surrogate: 4-Bromofluorobenzene	116		11	100		116	80-120			
Matrix Spike (EB52402-MS1)		ource: 5B210					d: 02/23/05			
Benzene	2510		ug/kg	2500	54.0	98.2	80-120			
Toluene	2640		11	2500	48.1	104	80-120			
Ethylbenzene	2760		11	2500	132	105	80-120			
Xylene (p/m)	6180		"	5000	324	117	80-120			
Xylene (o)	3130			2500	222	116	80-120			
Surrogate: a,a,a-Trifluorotoluene	96.8		н	100		96.8	80-120			
Surrogate: 4-Bromofluorobenzene	112		"	100		112	80-120			

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 5 of 9

02/24/05 09:52

Organics by GC - Quality Control

Environmental Lab of Texas

•		Reporting		Spike	Source		%REC		RPD		ĺ
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	Ĺ

Batch EB52402 - EPA 5030C (GC)

Matrix Spike Dup (EB52402-MSD1)	Source:	Prepared: 02/22/05 Analyzed: 02/23/05							
Benzene	2550	ug/kg	2500	54.0	99.8	80-120	1.62	20	
Toluene	2690	11	2500	48.1	106	80-120	1.90	20	
Ethylbenzene	2880	**	2500	132	110	80-120	4.65	20	•
Xylene (p/m)	6250	11	5000	324	119	80-120	1.69	20	
Xylene (0)	3100	11	2500	222	115	80-120	0.866	20	
Surrogate: a,a,a-Trifluorotoluene	101	"	100		101	80-120			
Surrogate: 4-Bromofluorobenzene	119	"	100		119	80-120			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Highlander Environmental Corp. 1910 N. Big Spring St. Midland TX, 79705		Project: Pogo/ Plains Knight #1 Tank Battery Project Number: 1469 Project Manager: Ike Tavarez								Fax: (432) 682-3946 Reported: 02/24/05 09:52		
General Chen	•	neters by Environm				ods - Q	uality (Contro				
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes		
Batch EB52104 - General Preparat	ion (Prep)											
Blank (EB52104-BLK1)				Prepared:	02/18/05	Analyzed	1: 02/21/05					
% Moisture	ND	0.1	%	÷				··· <u>··</u> ··				
Duplicate (EB52104-DUP1)	So	urce: 5B1701	1-01	Prepared:	02/18/05	Analyzed	l: 02/21/05					
% Moisture	4.2	0.1	%		4.3			2.35	20			
Batch EB52216 - Water Extraction	l											
Blank (EB52216-BLK1)				Prepared	& Analyze	ed: 02/21/	05					
Chloride	ND	0.500	mg/kg									
Blank (EB52216-BLK2)				Prepared	& Analyze	ed: 02/21/	05					
Chloride	ND	0.500	mg/kg									
LCS (EB52216-BS1)				Prepared	& Analyze	ed: 02/21/	05					
Chloride	8.46		mg/L	10.0		84.6	80-120					
LCS (EB52216-BS2)				Prepared	& Analyz	ed: 02/21/	05					
Chloride	8.21		mg/L	10.0		82.1	80-120					
Calibration Check (EB52216-CCV1)				Prepared	& Analyz	ed: 02/21/	05					
Chloride	8.44		mg/L	10.0		84.4	80-120		·	ĸ		
Calibration Check (EB52216-CCV2)				Prepared	& Analyz	ed: 02/21/	05					
Chloride	8.16		mg/L	10.0		81.6	80-120					
Duplicate (EB52216-DUP1)	Sc	ource: 5B1800)4-01	Prepared	& Analyz	ed: 02/21/	05					
Chloride	23.3	5.00	mg/kg		22.5			3.49	20			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Highlander Environmental Corp.	Project: Pogo/ Plains Knight #1 Tank Battery	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 1469	Reported:
Midland TX, 79705	Project Manager: Ike Tavarez	02/24/05 09:52

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch EB52216 - Water Extraction

Duplicate (EB52216-DUP2)	Source:	5 B 2100	2-03	Prepared & Analyzed: 02/21/05		
Chloride	240	20.0	mg/kg	223	7.34	20

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike

Dup Duplicate

Report Approved By:	Rolandk Jul	_ Date: _	2-24-05	

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer Jeanne Mc Murrey, Inorg. Tech Director James L. Hawkins, Chemist/Geologist Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas. Page 9 of 9

	Ana	alysi	s R	ec	าบ	ıe	st	; a	n	d	С	h	ai	n	0	f	Cu	15	to	dy	·]	Re	eco	or	٠d									PA				T		01	?:	7		
		HIGI																									1_		 r		(Cir						QUE Met		<u>1 N</u>	<u>o.)</u>	- 			
		2) 682-				1 S M	91((id) N lar	l. 1d	Bi	g [ex	Sp	ori: s 7	ng 797	S '0	t. 5			Fax	(4	32)	68			46				> 13(1005		ස් 2 ප ද					5								
	CLIENT N	AME:	060)					5	ITE	MA	VAG	ER:	I	Ìle	. Ti	ūn	4/1	2	VERS		F	PRES M		VAT. HOD				GOIS MOD.		5 5 8 6	3			60/624	8270/625			Tore					
	PROJECT	NO.: 14	169	F	PRO	JE() (ст I 20	TA M E	PI	ajr	15	K	ni	rh+	- 7	41	Tu.	n¢,	EZ Butta	CONTAL	(11)						808	808	100		Ag As		Volatiles		8240/82	. Vol. Bi	/608	80	H, TDS,	10. (41-)				:
	LAB I.D. NUMBER	DATE	TIME	1.	COMP.							•		1+7 IFIC		• •				NUMBER OF		HCL	HNOS	ICE	NONE		BTEX 3020/	MTBE 8020/	Ten 418.1	PAH 6270	RCRA Métals Ag As Ba Cd Trub Vetals Ac As Ba Cd	TCLP Volati	TCLP Semi Volatiles	RCI	GC.MS Vol.	GC.MS Semi. Vol.	PCB's 8080,	Pest. 808/608	BOD. TSS. pH. TDS. Chloride	Gamma Spec. Alnha Rata (Atr)	PLM (Asbestos)			
51	8610-0	2/18/05		5	X			4 re	29	#	1		()	. · 0	')	ßo	Him	n Hó	;/ <i>*</i>	Ī				X	r l	ţ,	"X		X										X					T
	-02	2/18/05		5	X		4	r ec	a	Ħ	2		(2)	.5	')	Ac	110	~ }	to <i>le</i>	1				X		per	urk		χ									Ī	X					
	-03	2/18/05		5	X		4	reg	1 5	¥	3	[12	. O').	Bor	rto-	n Jr	to/e	1				X		Τ			Х		Τ								K	Τ	T			Τ
															-																									Τ				
																																						Τ						
																											Τ			•										Τ				
																								·								Τ												
											_			-																														
											~~~~	-																																
	RELEQUISING							to:	<u>y</u> :	40	5			EIVE								Dat Tin						_				(Pr		_					Dat Tim		2/	18.	201	
	<u> </u>	ELINQUISHED BY: (Signature) Date: RECEIVED B ELINQUISHED BY: (Signature) Date: RECEIVED B								<u></u>		Dan Tim Dan	16:				<u> </u>	j	EDE	X		PED	BI:	: (ເມ	BU DP	ĪS .			IRBII THEI	LL # R: _				_										
	RECEIVING LA ADDRESS: CITY: <u>Udt</u> CONTACT:	BORATORY	<u>Env</u>	ratt	-	7	, Tir	ne:	Ø₹ z∎		<u>x</u> a 5			devic	le ye	XI.	-	ire)	160		5	Tim	1e:	4-	2							con Ta							F	RUSE	ite by I Che orized	urges d:	No	
-	SAMPLE CONL	ITION WHE	N RECEI				5.0	T	MAT	RIX:		-Va	ter		-Air			SD-	-Solid Other			7	EMAI U N	RIKS:	(1)	B	TE,	X	on	1	hc	h	igh	les	†	T	Pf	4						

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

## Environmental Lab of Texas Variance / Corrective Action Report – Sample Log-In

	ighlander	
Date/Time:	2/18/05 2:45	5
Order #:	SB(8010	
Initials:	Cle	

# Sample Receipt Checklist

Temperature of container/cooler2	Vee	NI-	600
Temperature of container/cooler?	Yes	No	5,0 C
Shipping container/cooler in good condition?	Yes	No	na
Custody Seals intact on shipping container/cooler?	Yes	No	Not-present
Custody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?	()e	No	
Sample Instructions complete on Chain of Custody?	KES I	No	
Chain of Custody signed when relinquished and received?	(Ces	No	
Chain of custody agrees with sample label(s)	Yes	No	
Container labels legible and intact?	(res)	No	
Sample Matrix and properties same as on chain of custody?	res	No	
Samples in proper container/bottle?	(763	No	
Samples properly preserved?	Ves	No	
Sample bottles intact?	Tes	No	
Preservations documented on Chain of Custody?	(es)	No	
Containers documented on Chain of Custody?	(es	No	
Sufficient sample amount for indicated test?	Peg	No	
All samples received within sufficient hold time?	(e)	No	
VOC samples have zero headspace?	(Yes)	No	Not Applicable

Other observations:

Contact Person: Regarding:	Variance Documentation: Date/Time:	_ Contacted by:
Corrective Action Taken:		
		······

# Analysis of Sampling 3/22/2005



# Analytical Report.

#### **Prepared for:**

Ike Tavarez Highlander Environmental Corp. 1910 N. Big Spring St. Midland, TX 79705

Project: Pogo/ Plains Knight #1 Tank Battery Project Number: 1469 Location: Lea County, NM

Lab Order Number: 5C23016

Report Date: 03/28/05

Highlander Environmental Corp. 1910 N. Big Spring St. Midland TX, 79705

#### Project: Pogo/ Plains Knight #1 Tank Battery Project Number: 1469 Project Manager: Ike Tavarez

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Area #2 (2.5') BEB	5C23016-01	Soil	03/22/05 00:00	03/23/05 13:55
Area #4 (1.5') Bottom Hole	5C23016-02	Soil	03/22/05 00:00	03/23/05 13:55
Area #5 (2.0') Bottom Hole	5C23016-03	Soil	03/22/05 00:00	03/23/05 13:55

Highlander Environmental Corp.	Project:	Pogo/ Plains Knight #1 Tank Battery	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number:	1469	Reported:
Midland TX, 79705	Project Manager:	Ike Tavarez	03/28/05 11:40

Organics by GC

		Environr	nental L	ab of I	ſexas				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
Area #4 (1.5') Bottom Hole (5C23016	-02) Soil								
Benzene	ND	0.0250	mg/kg dry	25	EC52401	03/23/05	03/23/05	EPA 8021B	
Toluene	ND	0.0250	"	н	**	"	11		
Ethylbenzene	ND	0.0250		n	"	11	н	"	
Xylene (p/m)	ND	0.0250	"	"		"		"	
Xylene (o)	ND	0.0250	и	н	"	"	**	**	
Surrogate: a,a,a-Trifluorotoluene		92.3 %	80-	120	"	11	11	"	
Surrogate: 4-Bromofluorobenzene		84.5 %	80-	120	"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52312	03/23/05	03/25/05	EPA 8015M	
Diesel Range Organics >C12-C35	15.0	10.0	U			n	н	11	
Total Hydrocarbon C6-C35	15.0	10.0	и	"	n	11	н	"	
Surrogate: 1-Chlorooctane		76.6 %	67.6	-140	"	. "	"	"	
Surrogate: 1-Chlorooctadecane		90.6 %	70-	130	"	"	"	"	
Area #5 (2.0') Bottom Hole (5C23016	-03) Soil								
Benzene	ND	0.0250	mg/kg dry	25	EC52401	03/23/05	03/23/05	EPA 8021B	
Toluene	ND	0.0250		"	н	11	*	"	
Ethylbenzene	ND	0.0250		"	"	n	"	"	
Xylene (p/m)	ND	0.0250	н		"	14	"	"	
Xylene (o)	ND	0.0250	"	u	н	"	**	n	
Surrogate: a,a,a-Trifluorotoluene		88.3 %	80-	120	"	"	"	11	
Surrogate: 4-Bromofluorobenzene		83.1 %	80-	120	"	"	"	11	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52312	03/23/05	03/25/05	EPA 8015M	
Diesel Range Organics >C12-C35	40.6	10.0	"		и	"	"	н	
Total Hydrocarbon C6-C35	40.6	10.0	**	н	"	1/	н	n	
Surrogate: 1-Chlorooctane		73.8 %	67.6	5-140	"	"	"	11	
Surrogate: 1-Chlorooctadecane		. 86.6 %	i 70-	130	**	"	"	"	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Highlander Environmental Corp. 1910 N. Big Spring St. Midland TX, 79705

#### Project: Pogo/ Plains Knight #1 Tank Battery Project Number: 1469 Project Manager: Ike Tavarez

Fax: (432) 682-3946 Reported: 03/28/05 11:40

# General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

						······································			
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Area #2 (2.5') BEB (5C230	016-01) Soil								
Chloride	864	25.0	mg/kg	50	EC52801	03/25/05	03/25/05	EPA 300.0	
Area #4 (1.5') Bottom Hole	e (5C23016-02) Soil								
Chloride	428	20.0	mg/kg	40	EC52801	03/25/05	03/25/05	EPA 300.0	
% Moisture	12.9	0.1	%	1	EC52408	03/23/05	03/24/05	% calculation	
Area #5 (2.0') Bottom Hole	e (5C23016-03) Soil								
Chloride	904	25.0	mg/kg	50	EC52801	03/25/05	03/25/05	EPA 300.0	
% Moisture	11.7	0.1	%	1	EC52408	03/23/05	03/25/05	% calculation	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Highlander Environmental Corp. 1910 N. Big Spring St. Midland TX, 79705	Project: Pogo/ Plains Knight #1 Tank Battery Project Number: 1469 Project Manager: Ike Tavarez								Fax: (432) 682-394 Reported: 03/28/05 11:40		
	-	ganics by Environm	-	•							
		Reporting		Spike	Source		%REC		RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	
Batch EC52312 - Solvent Extraction	(GC)										
Blank (EC52312-BLK1)				Prepared:	03/23/05	Analyzed	I: 03/24/05		· · · · · · · · · · · · · · · · · · ·		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet								
Diesel Range Organics >C12-C35	ND	10.0	"		÷						
Total Hydrocarbon C6-C35	ND	10.0	W								
Surrogate: 1-Chlorooctane	36.7		mg/kg	50.0		73.4	67.6-140				
Surrogate: 1-Chlorooctadecane	39.0		"	50.0		78.0	70-130				
LCS (EC52312-BS1)				Prepared:	03/23/05	Analyzed	1: 03/24/05				
Gasoline Range Organics C6-C12	485	10.0	mg/kg wet	500		97.0	76.3-104				
Diesel Range Organics >C12-C35	479	10.0	"	500		95.8	76.1-118				
Total Hydrocarbon C6-C35	964	10.0	11	1000		96.4	81.8-105				
Surrogate: 1-Chlorooctane	39.9		mg/kg	50.0		79.8	67.6-140				
Surrogate: 1-Chlorooctadecane	39.9		"	50.0		79.8	70-130				
Calibration Check (EC52312-CCV1)				Prepared:	03/23/05	Analyze	d: 03/24/05				
Gasoline Range Organics C6-C12	464	·····	mg/kg	500	····	92.8	80-120				
Diesel Range Organics >C12-C35	495		"	500		99.0	80-120				
Total Hydrocarbon C6-C35	959		u	1000		95.9	80-120				
Surrogate: I-Chlorooctane	45.9		"	50.0		91.8	67.6-140				
Surrogate: 1-Chlorooctadecane	40.0		"	50.0		80.0	70-130				
Matrix Spike (EC52312-MS1)	So	urce: 5C230	10-01	Prepared	: 03/23/05	Analyze	d: 03/24/05				
Gasoline Range Organics C6-C12	577	10.0	mg/kg dry	583	6.88	97.8	75.9-114				
Diesel Range Organics >C12-C35	644	10.0	N	583	29.6	105	85.3-122				
Total Hydrocarbon C6-C35	1220	10.0	н	1170	29.6	102	84.4-115				
Surrogate: 1-Chlorooctane	58.4		mg/kg	50.0	·	117	67.6-140				
Surrogate: 1-Chlorooctadecane	50.3		"	50.0		101	70-130				
Matrix Spike Dup (EC52312-MSD1)	So	urce: 5C230	)10-01	Prepared	: 03/23/05	Analyze	d: 03/24/05				
Gasoline Range Organics C6-C12	548	10.0	mg/kg dry	583	6.88	92.8	75.9-114	5.16	10.4		
Diesel Range Organics >C12-C35	648	10.0	N	583	29.6	106	85.3-122	0.619	10.4		
Total Hydrocarbon C6-C35	1200	10.0	н	1170	29.6	100	84.4-115	1.65	7.6		
Surrogate: 1-Chlorooctane	45.9		mg/kg	50.0		91.8	67.6-140				
Surrogate: I-Chlorooctadecane	48.2		"	50.0		96.4	70-130				

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Highlander Environmental Corp. 1910 N. Big Spring St. Midland TX, 79705	Project: Pogo/ Plains Knight #1 Tank Battery Project Number: 1469 Project Manager: Ike Tavarez								Fax: (432) 682-39 Reported: 03/28/05 11:40		
	Or	ganics by	GC - Q	uality (	Control						
Environmental Lab of Texas											
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch EC52401 - EPA 5030C (GC)									<u> </u>		
Blank (EC52401-BLK1)				Prepared	& Analyz	ed: 03/23/	05				
Benzene	ND	0.0250	mg/kg wet								
Toluene	ND	0.0250	u								
Ethylbenzene	ND	0.0250	"								
Xylene (p/m)	ND	0.0250	"								
Xylene (o)	ND	0.0250	11								
Surrogate: a,a,a-Trifluorotoluene	96.2		ug/kg	100		96.2	80-120				
Surrogate: 4-Bromofluorobenzene	98.5		"	100		98.5	80-120				
LCS (EC52401-BS1)				Prepared	& Analyz	ed: 03/23/	05				
Benzene	105		ug/kg	100		105	80-120				
Toluene	117			100		117	80-120				
Ethylbenzene	117		11	100		117	80-120				
Xylene (p/m)	227			200		114	80-120				
Xylene (o)	120		u	100		120	80-120				
Surrogate: a,a,a-Trifluorotoluene	117		н	100		117	80-120				
Surrogate: 4-Bromofluorobenzene	115		"	100		115	80-120				
Calibration Check (EC52401-CCV1)				Prepared	& Analyz	ed: 03/23/	05				
Benzene	100		ug/kg	100	i	100	80-120				
Toluene	108		"	100		108	80-120				
Ethylbenzene	95.8		"	100		95.8	80-120				
Xylene (p/m)	205		"	200		102	80-120				
Xylene (o)	99.9		"	100		99.9	80-120				
Surrogate: a,a,a-Trifluorotoluene	107		"	100		107	80-120				
Surrogate: 4-Bromofluorobenzene	82.7		"	100		82.7	80-120				
Matrix Spike (EC52401-MS1)	So	ource: 5C230	16-03	Prepared	& Analyz	ed: 03/23/	05				
Benzene	106		ug/kg	100	ND	106	80-120			· · · · ·	
Toluene	118		н	100	ND	118	80-120				
Ethylbenzene	115		н	100	ND	115	80-120				
Xylene (p/m)	240		11	200	ND	120	80-120				
Xylene (o)	119		"	100	ND	119	80-120				
Surrogate: a,a,a-Trifluorotoluene	115		н	100		115	80-120				
Surrogate: 4-Bromofluorobenzene	110		н	100		110	80-120				

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 5 of 8

### **Organics by GC - Quality Control Environmental Lab of Texas**

· · · · · · · · · · · · · · · · · · ·											
		Reporting		Spike	Source		%REC		RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	

#### Batch EC52401 - EPA 5030C (GC)

Matrix Spike Dup (EC52401-MSD1)	Source:	Prepared	& Analyze	05				
Benzene	99.4	ug/kg	100	ND	99.4	80-120	6.43	20
Toluene	110	n	100	ND	110	80-120	7.02	20
Ethylbenzene	102	"	100	ND	102	80-120	12.0	20
Xylene (p/m)	225	"	200	ND.	112	80-120	6.90	20
Xylene (o)	107	н	100	ND	107	80-120	10.6	20
Surrogate: a,a,a-Trifluorotoluene	108	"	100		108	80-120		
Surrogate: 4-Bromofluorobenzene	104	"	100		104	80-120		

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Highlander Environmental Corp. 1910 N. Big Spring St. Midland TX, 79705	Project: Pogo/ Plains Knight #1 Tank Battery Project Number: 1469 Project Manager: Ike Tavarez							Fax: (432) 682-3946 Reported: 03/28/05 11:40		
General Chen	•	neters by Environm				ods - Q	uality	Contro	J	
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC52408 - General Preparat	tion (Prep)									
Blank (EC52408-BLK1)				Prepared:	03/23/05	Analyzed	: 03/24/05			
% Moisture	ND	0.1	%				·····			
Duplicate (EC52408-DUP1)	So	urce: 5C2200	9-01	Prepared: 03/23/05 Analyzed: 03/24/05						
% Moisture	2.9	0.1	%		3.0			3,39	20	
Batch EC52801 - Water Extraction	I									
Blank (EC52801-BLK1)				Prepared & Analyzed: 03/25/05						
Chloride	ND	0.500	mg/kg	<b>-</b>	<b></b>					
LCS (EC52801-BS1)				Prepared & Analyzed: 03/25/05						
Chloride	10.5		mg/L	10.0		105	80-120			
Calibration Check (EC52801-CCV1)				Prepared	& Analyz	ed: 03/25/	05			
Chloride	10.5		mg/L	10.0		105	80-120			
Duplicate (EC52801-DUP1)	So	urce: 5C220(	07-02	Prepared & Analyzed: 03/25/05						
Chloride	44700	2500	mg/kg	·	44800			0.223	20	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 7 of 8

#### Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Ralandk Juli Report Approved By: 3-28-05 Date:

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer Jeanne Mc Murrey, Inorg. Tech Director James L. Hawkins, Chemist/Geologist Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.
# Environmental Lab of Texas Variance / Corrective Action Report – Sample Log-In

Client: Highlander ENV. 3/23/05 2:00 Date/Time: Order #: 5023014 Initials:

### Sample Receipt Checklist

Yes	No	A.O CI
(TES)	Na I	1
I Yes I	Na I	Notpresend
i Yes i	No	(Ict present
1 PSI	No I	
1 GS	No 1	
1	Na	
Tes	No I	
Tes	No :	
Tes	No I	
1 200	No i	
	Nc	
	Ng :	:
1 Kesi	Na	
YED	No	
	Nc ·	
	No	· · · · · · · · · · · · · · · · · · ·
	No	Not Apolicasie
		33   No     Yes   No     Yes   No     Yes   No     No   No </td

Other observations:

. Variance Documentation: Contact Person: -_____ Date: Time: ______ Contacted by: _____ Regarding: ..... Corrective Action Taken:

	Ana	alysi	s R	eq	u	es	t	an	d	Cł	na	in	0	f	Cu	ıst	od	y	F	le	cc	or	d							AN	~~~	GE:					OF		Τ	
		HIG																							- 1			TT	rcle					Met)		No	.)	·	<u> </u>	<del></del>
		2) 682-			1	91 Mi	0 dla	N. nd	Bi , ]	g S Texa	Spr as	in 79	g S 970	5 5		F	ax	(43	52)			394	16			771005	.1	Cr Pb Hg Se	2				5		A	5				
	CLIENT NA	ame: p	°06	0					SITE	MANI K.	AGEI	R:	Įķ.	C	Tau	14/6	2	INERS		Pl		ERV CTH	ATTV OD	Æ		BOLE MOD		As Ba Cd	3			880/824	8270/625		Chlorida					
	PROJECT	NO.: 14	69	PR	кол 00	ест <u>60</u>		E P/a	in	i K	nie	-h+	#	1	Tank	E Dat	Her	CONTA	().)						808			8 Ag As	48 A9	188 Volatile		8240/8	1 - 1	1008	908 H		(FF)	tos)		
	LAB I.D. NUMBER	DATE	TDAE	MATRIX	COMP.	CLAD			SAL	(PLE	Le Dei	LA NTIF	<i>W</i> ICATI	in In	Y ./	VM	, 	NUMBER OF		HCL	BONH	ICE	NONE		10200	MIDE OUSU/ OUS	PAH 8270	RCRA Métals Ag	TCLP Metals A	TCLP Yolau	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol.	PCB's 8080/808	Pest. 808/808 BOD 735 nH	Gamma Spec.	Alpha Beta	PLM (Asbestos)		
50	23016	3/22/05	-	S	)		Are	:9	#	2	1	12	. 5	"	BE	B		1				X													X	$\langle$				
	-02	3/22/05		S	X	1.	1re				ĺ	(].	5'	1	Bo Hi	in H	ole	1				X			X	X	2								X					
	-03	3/22/05		5	X	ŀ	4/19	i	Ħ	5	[	2.	oʻ 1	ı I	& + <i>f</i>	in H	,e	1				X			X	X									X	$\left( \right)$				
																																	•							
																						-																		
								-		_,																									$\perp$					
			······				<u> </u>		<del>, 7</del>	105																												Ļ	, <u>,</u>	had
	REUNQUISTIC	Sig Sig					Date: _ lime: _	3/	Ś						(Signa	-				Date Time	e:				-		PLE My PLE							12	a:	Date Time	»: 9:	314 10	4	
1	RELINQUISHE		-			1	Date: _ <u>"ime: _</u> Date: _								(Signa (Signa)		·			Date l'ime Date	e:				_	SAN FEL (HA)	EX			_	r: (C	ircle BU UP	15			IBILI HER				
ŀ	RECEIVING LA ADDRESS: CITY: <u>6</u> df	BORATORY	:_ <u>En</u>	À TATE:		1 001	ïjmq: _	~	0F P:	TCA)		CEIV.	ED BY	: (S		ure)	rez			lime	<u>e:</u>				-	ĦІG	HIAN T/C	(DEF	: CO	NTAC		ERS	ON:			R R	lorult. RUSH	char Char	yes	
Ŀ	contact: sample cont 4.0°(	OTTON WHI		PHO VED:	DNE:				TRIX:		DA Water Sol	r	03- A-A SL-S	r		SD-S 00ti	olid	ME:			SS MAR	KS:			•												Yes		N.	0

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

Analysis of Sampling 4/7/2005



# Analytical Report

Prepared for: Ike Tavarez Highlander Environmental Corp. 1910 N. Big Spring St. Midland, TX 79705

Project: Pogo/ Plains Knight #1 Tank Battery Project Number: 1469 Location: Lea County, NM

Lab Order Number: 5D11010

Report Date: 04/15/05

Highlander Environmental Corp.Project:Pogo/ Plains Knight #1 Tank BatteryFax: (432) 682-39461910 N. Big Spring St.Project Number:1469Reported:Midland TX, 79705Project Manager:Ike Tavarez04/15/05 07:44

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Area #2 (4.0') BEB	5D11010-01	Soil	04/07/05 15:45	04/11/05 14:50
Area #2 (6.0') BEB	5D11010-02	Soil	04/07/05 15:50	04/11/05 14:50
Area #5 (2.0') BEB	5D11010-04	Soil	04/07/05 14:40	04/11/05 14:50
Area #5 (4.0') BEB	5D11010-05	Soil	04/07/05 14:45	04/11/05 14:50

Highlander Environmental Corp. 1910 N. Big Spring St. Midland TX, 79705

### Project: Pogo/ Plains Knight #1 Tank Battery Project Number: 1469 Project Manager: Ike Tavarez

**Reported:** 04/15/05 07:44

### General Chemistry Parameters by EPA / Standard Methods

### Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Area #2 (4.0') BEB (5D11010-01) Soil				<u> </u>				·····	
Chloride	800	25.0	mg/kg	50	ED51409	04/14/05	04/14/05	EPA 300.0	
Area #2 (6.0') BEB (5D11010-02) Soil									
Chloride	1180	50.0	mg/kg	100	ED51409	04/14/05	04/14/05	EPA 300.0	
Area #5 (2.0') BEB (5D11010-04) Soil									
Chloride	1570	50.0	mg/kg	100	ED51409	04/14/05	04/14/05	EPA 300.0	
Area #5 (4.0') BEB (5D11010-05) Soil									
Chloride	2220	50.0	mg/kg	100	ED51409	04/14/05	04/14/05	EPA 300.0	

Environmental Lab of Texas

Highlander Environmental Corp. 1910 N. Big Spring St. Midland TX, 79705 Project: Pogo/ Plains Knight #1 Tank Battery Project Number: 1469 Project Manager: Ike Tavarez Fax: (432) 682-3946

Reported: 04/15/05 07:44

### General Chemistry Parameters by EPA / Standard Methods - Quality Control

### **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED51409 - Water Extraction						_				
Blank (ED51409-BLK1)				Prepared &	Analyzed:	04/14/05				
Chloride	ND	0.500	mg/kg							
LCS (ED51409-BS1)				Prepared &	Analyzed:	04/14/05				
Chloride	10.9		mg/L	10.0		109	80-120			
Calibration Check (ED51409-CCV1)				Prepared &	Analyzed:	04/14/05				
Chloride	10.3		mg/L	10.0		103	80-120			
Duplicate (ED51409-DUP1)	Sou	rce: 5D11012	-01	Prepared &	2 Analyzed	04/14/05				
Chloride	23.2	5.00	mg/kg		20.0			14.8	20	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Highlander Environmental Corp.Project:Pogo/ Plains Knight #1 Tank BatteryFax: (432) 682-39461910 N. Big Spring St.Project Number:1469Reported:Midland TX, 79705Project Manager:Ike Tavarez04/15/05 07:44

### **Notes and Definitions**

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By:

Raland Kitub

4/15/2005

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer Jeanne Mc Murrey, Inorg. Tech Director James L. Hawkins, Chemist/Geologist Sandra Sanchez, Lab Tech.

Date:

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Ana	alvsi	s R	ear	ue	st an	d C	hai	n o	f (	Cust	ody	7	R	ec	or	d	-							PAG	s: I Re		1		OF:	7		
								******		~~************************************											(Cirr						hod	No.	)	·····	<del></del>	·····
	<b>AIG</b> . 2) 682-			19	ER E. 010 N. fidland	Big S	Spri	ing S	lt.		) L `ax (4					6			0. THI GOG		Cr PJ Re Se				8							
CLIENT N		POL	50	>	5	eite Man	uger.	Ik	e	Tava	622	CHEN			ERV ETH	ATTVI OD	5		BO15 NOD.		Ba Cd		ġ		939/0430		Chintola					
PROJECT	^{NO.:} 14	119	PR	lose Q	GOT PI			isht	T	Ta <i>va</i> B #1	2	C INN FU	(W/W)				808	/608	1		8 48 48 8 48 48	lea	Valatile	4 4 4 4	L Vol.	1	808/80A 793 of The	Spec.	(Akr)	tos)		
LAB I.D. NUMBER	DATE	TIME	MATRIX	GRAB	Leu	CouAt Sample	•	VM	ON		AV GARDELIN	371 10000045	PILITHER (	SONH	ICE	SNON	BDW/DZOR XXX	MTRE 8080/608	17PH 410.1	PAH BUTO	NURA METADS AN	TULP Volatiles	YCLP Sensi Valatileer	RCI	CC.MS Sent.	PCB'# 8080/908	Post. 808/606 ROD 793 of	Generoe So	Alpha Beta	PIN (Arbon		
01	4-7-05	3:45	5	X	Are	9 #	2	(4.	0']	BEB					X			-									X	4		<u> </u>	-	
-02		3:50	5	X	Are	14	2	16.0	<u>2']</u>	BEB	1				4		~~~~								-		X	1			-4	
-03		3:55	5	1	Area	# 2	) 	18.0	11	BEB	$\supset$		-		X													-				
704		2:40	5	X	Area	# 5		12.0	') [;	IEO					X										_		X	(			-	
-05		2:45	5	X	Aren	#5	-	14.0	12	TED	1				X												<u> </u>					
-06	$\checkmark$	2:50	X	¥	Area	#J	)	6.0	11	<i>TEB</i>		-			X						-											
												_	_																			
									~~~~~~					ļ				ļ										+				
				-+										ļ			_															
RELINGUISHE	D- FX: (Sid	mature)		_	Dats: 4	11-05	R	SCEIVED B	Y: (S	(gnature)			 	ite:					SAM	-120	J BY:	(Pr	ni e	1.54	 m)					4-1	10	<u>e</u>
RELINGUISHE					Time: 2	50		KCENTED B						ne:						ne i								Tim		<u>#:</u>	15	
RELINQUISHE					Time: Dats:			CEIVED B					p	119:					FED					j.	BUS UPS			IBILI HRR	÷			
RECEIVING 14 ADDRESS: CITY: CONTACT:	iboratch: d=\$\$4		ИЛ TATE: PHO		Time: Pida £ / / Y ZD		~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	EIVED BY	-	mar				n±:- 50						I.A.					130N:	1				s by: Charg rized:	er Ka	
SAMPLE CONT 3, 5		EN RECEI	VED:		HA7		-Water	A-41		SDS 0Oti	olid	*****		REVA	RRS:	40;	2 91	255	, c	201	ice	s w	15 11	ea or	IS > C 4	201	e/					

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

Environmental Lab of Texas Variance / Corrective Action Report - Sample Log-In

Client: <u>HighlanderEnv.</u>
Date/Time: 04-11-05 @ 1450
Order #: 5 D11010

JMM

Initials:

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	3.5	C
Shipping container/cooler in good condition?	TES	No		
Custody Seals intact on shipping container/cooler?	(Ces)	No	Not present	
Custody Seals intact on sample bottles?	Tes	No	Not present	
Chain of custody present?	res	No		
Sample Instructions complete on Chain of Custody?	THES	No		
Chain of Custody signed when relinquished and received?	res	No		
Chain of custody agrees with sample label(s)	Tes	No		
Container labels legible and intact?	res	No		
Sample Matrix and properties same as on chain of custody?	Mes	No		
Samples in proper container/bottle?	Mes	No	_	·
Samples properly preserved?	(Tes)	No I		
Sample bottles intact?	Reel	No		
Preservations documented on Chain of Custody?	res	No I		
Containers documented on Chain of Custody?	(res)	No		
Sufficient sample amount for indicated test?	(Cer	No		
All samples received within sufficient hold lime?	Keg	No		
VOC samples have zero headspace?	(Yes)	No I	Not Applicab	le

Other observations:

Variance Documentation:

Regarding:

Contact Person: -____ Date/Time: _____ Contacted by: _____

Corrective Action Taken:

Analysis of Sampling 9/09/2005



Analytical Report

Prepared for:

Ike Tavarez Highlander Environmental Corp. 1910 N. Big Spring St. Midland, TX 79705

Project: Pogo/ Plains Knight #1 Tank Battery Project Number: 1469 Location: Lea Co., NM

Lab Order Number: 5113013

Report Date: 09/15/05

Highlander Environmental Corp.Project:Pogo/ Plains Knight #1 Tank BatteryFax: (432) 682-39461910 N. Big Spring St.Project Number:1469Reported:Midland TX, 79705Project Manager:Ike Tavarez09/15/05 17:11

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH-1 (5.0'-6.0')	5113013-01	Soil	09/09/05 00:00	09/13/05 16:00
BH-1 (10.0'-11.0')	5113013-02	Soil	09/09/05 00:00	09/13/05 16:00
BH-1 (15.0'-16.0')	5113013-03	Soil	09/09/05 00:00	09/13/05 16:00
BH-2 (5.0'-6.0')	5113013-04	Soil	09/09/05 00:00	09/13/05 16:00
BH-2 (10.0'-11.0')	5113013-05	Soil	09/09/05 00:00	09/13/05 16:00
BH-2 (15.0'-16.0')	5113013-06	Soil	09/09/05 00:00	09/13/05 16:00

Highlander Environmental Corp. 1910 N. Big Spring St. Midland TX, 79705

Reported: 09/15/05 17:11

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

			<u> </u>						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-1 (5.0'-6.0') (5113013-01) Soil						·····			
Chloride	14.0	5.00	mg/kg	10	E151507	09/14/05	09/14/05	EPA 300.0	
BH-1 (10.0'-11.0') (5113013-02) Soil							_		
Chloride	9.31	5.00	mg/kg	10	EI51507	09/14/05	09/14/05	EPA 300.0	
BH-1 (15.0'-16.0') (5113013-03) Soil									
Chloride	9.73	5.00	mg/kg	10	E151507	09/14/05	09/14/05	EPA 300.0	
BH-2 (5.0'-6.0') (5113013-04) Soil									
Chloride	61.0	5.00	mg/kg	10	E151507	09/14/05	09/14/05	EPA 300.0	
BH-2 (10.0'-11.0') (5113013-05) Soil									
Chloride	59.7	5.00	mg/kg	10	EI51507	09/14/05	09/14/05	EPA 300.0	
BH-2 (15.0'-16.0') (5113013-06) Soil									
Chloride	99.3	5.00	mg/kg	10	EI51507	09/14/05	09/14/05	EPA 300.0	

Environmental Lab of Texas

Highlander Environmental Corp. 1910 N. Big Spring St. Midland TX, 79705

Reported: 09/15/05 17:11

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch E151507 - Water Extraction										
Blank (E151507-BLK1)				Prepared &	Analyzed:	09/14/05				
Chloride	ND	0.500	mg/kg							
LCS (E151507-BS1)				Prepared &	Analyzed:	09/14/05				
Chloride	8.62		mg/L	10.0		86.2	80-120			
Calibration Check (EI51507-CCV1)				Prepared &	Analyzed:	09/14/05				
Chloride	9.06		mg/L	10.0		90,6	80-120			
Duplicate (E151507-DUP1)	Sou	rce: 5109001-	01	Prepared &	Analyzed:	09/14/05				
Chloride	801	10.0	mg/kg		796			0.626	20	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Highlander Environmental Corp.Project:Pogo/ Plains Knight #1 Tank BatteryFax: (432) 682-39461910 N. Big Spring St.Project Number:1469Reported:Midland TX, 79705Project Manager:Ike Tavarez09/15/05 17:11

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By:

Raland K Julias

9/15/2005

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director LaTasha Cornish, Chemist Sandra Sanchez, Lab Tech.

Date:

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

An	alv	si	s R	ear	ue	si	t a	nd	C	ha	in	01	f	Cu	sto	bd	V	R	lec	co	rd									PAG			7		0	£:	7		
Analysis Request and Chain of Custody Record HIGHLANDER ENVIRONMENTAL CORP. PAGE: 1 OF: 1 (Circle or Specify Method No.)														~~ <u>~</u> ~~																									
(43	2) 6	82-	4559		1	91	0 N	. B	ig	Spi	rin	g S 9708	t.	V I F		L IX (4					946	•			121005		Cr Pd He Se	8						A					
CLIENT N	CLIENT NAME: POGO SITE MANAGER: The There is a started by the start of									6		120/024 0270/05			quaride																								
PROJECT NO.: 1469 PROJECT NAME: Plains Knight JCGO PCGO Plains Knight Lea county , Win									RUNU A	(M)					1808	/808	-		40 An An	lear	Volatile		B340/B		808	SUT ,Hq	142-1	(aut)											
LAB I.D. NUMBER 51(3013	DA	TE	TLÆ	MATRIX	CUMP.			-				74 TCATIC	ON				an systematic	MUTERED (Y/W)	HCI.	CONH	ICE	ANDN	BTRX 0020/803	MTBR 8020/002	1.812 418.1	PAR DEVU	TCLP Metals Ag	TCLP Volati	TCLP Serol Volatiles	IRCI	GC.MS Vol. 8340/8860/624 GC.MS Semit Vol. 6270/622	PCB's 8080/808	Peat. 808/800	BOD, 738, pH, 706,	Gamma Spec.	PLM (Asbestos)			
- 01	9/9	105		5	X		3 H -	7		15	.0	-6.	0')		۱					X													X					
~0Z				5	7	1	717-	1	i	[10	.01	- 1].	-0 ')		1					X													X					
-03				5	K	1	?H-	1	l	15	<u>.</u> 0'	- 16	.0'	7		1				,	X									ļ		T		X					
·· 0(5	K	B	H-	2	7	5.	0.	-61	0'1	1		1					X													X	ŀ				Τ
-05				5	X	11	°H -	2	[10.	.01 -	- 11.0	,1			1					K					T							Π	X					
26	ý	/		5	X	17	17 -	2	l	15.	<u>:0'-</u>	- 16	0')	1		1				,	X											 		X	_				Ţ
				+			<u>-</u>									_		-+					-									<u> </u>	+		+	-	┞╌┽		-
				+-+-								,. .		~				-	-	_		+													-	+	┝─┦		-
				┢╌┠╸																						_					+			-+	+	+		+	+
RELINGUISH						72	me:	1-17- 11:00	<u>, , , , , , , , , , , , , , , , , , , </u>			IVED B							Data: Tima	:				1	UMPI Her j	4in	122	-1	Ken	200	in	'			10: 215:	7/// 3%0	705		- -
RELINQUISH						Î. D	eto:					IVED B							Date: Date:						AMPI ADED IAND	£			9Y:	•	cle) BUS UPS			AIRSI OTHE					-
RECEIVING 1 ADDRESS: CITY: CONTACT:		(TOR)		TATE:			me:	ZIF:			RECRIVED BY: (Signature) Data: RECRIVED BY: (Signature) ZALAN TYTUNY DATE: 9-(3-OS TIME: / 6000							HIGHLANDER CONTACT PERSON: Results by: File File File File The Trans No																					
BAMPLE CON 3,0°C	UMPLE CONDITION THEN RECEIVED: UMATRIE B-Mater 4-Atr STD-Salld REMARKS:																																						

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

Environmental Lab of Texas Variance / Corrective Action Report – Sample Log-In

Client: <u>H</u>	<u>Ighlander</u>	
Date/Time:	9/13/05	14000
Order #:	<u>67 13013</u>	3
Initials:	CIA	

Sample Receipt Checkiist

Temperature of container/cooler?	Yes	No	<u>'3,0</u> C
Shipping container/cooler in good condition?	Yes	No	
Custody Seals intact on shipping container/cooler?	Yeş	No	Not present
Custody Seals intact on sample bottles?	Yas	No	Not present
Chain of custody present?	Yes	No	
Sample Instructions complete on Chain of Custody?	YES	No	
Chain of Custody signed when relinquished and received?	Yes	No	
Chain of custody agrees with sample label(s)	Yes	No	
Container labels legible and intact?	Yes	No	
Sample Matrix and properties same as on chain of custody?	Yes	No	
Samples in proper container/bottle?	1 Yes	No	
Samples properly preserved?	Yes	No	
Sample boitles intact?	Yes	No	
Preservations documented on Chain of Custody?	Xes	No	(
Containers documented on Chain of Custody?	Yes	No	
Sufficient sample amount for indicated test?	Yes	No	
All samples received within sufficient hold time?	VES	No	
VOC samples have zero headspace?	Yes?	No	Not Applicable

Other observations:

Variance Documentation:

Contact Person: Regarding:	Date/Time:	Contacted by:
Corrective Action Taken:		

APPENDIX C

	lew Mexico	Form C-
Hobbs, NM 88241-1980 Energy Minerals and Nat	ural Resources Departm	ent Originaud 2/1
	ation Division	
Arunia, NM \$8210 2040 South	Pacheco Street	Submit 2 cop Appropriate Di
	w Mexico 87505	Office in accord
Salee, NEW 87410	827-7131	with Rule 11 back side of
<u>District IV</u> - (\$05) 827-7131 Millionen automatika (\$05) 827-7131		aver 105.02
09	and Corrective Action ERATOR	Plainal Report DFinal Ri
ARCH Pot INC.	Conver GARYL	ietts
EUNICE NM.	Telephone Na 505-	394-2246
FACULTY HARTA PIDINS KNIGHT	Bally Type Br Hor	e Y
Sulface Owner Mineral Owner		
Bicky Job Doom		Lassie No. 35033
Unit Leiser Section Township Range Frei from the North South Line	OF RELEASE	OURLY .
L- 23 245 37-E		LEA
	OF RELEASE	
Type of Release OIL	Volume of Release	Volume Recovered
Source of Researce	Date and Hour of Conumence	Date and Hour of Distancery
KAN STORAGE TANKou	n 3-14-15-00	3/11 10:00 AM
Was Internet Nours Cliver 1	UYES, To Whom? GTAR	y Wind to
By Whom? GARY WETIS	Dave and How 3/14/	00 1:14 PM
When a Water Data Resched?	UYES, Volume Lagancing Live V	
If a Waterstame was Impreced, Describe Gally, (Actach Additional Sheets If NecessRey)	
	· · · ·	
If a Waterstaine was Impresed, Describe Pally (Actach Additions) Sheets If NecessRy Describe Cause of Problem and Remedial Action Diken. (Actach Additional Sheets If Ne	· · · ·	
	· · · ·	
Describe Cause of Problem and Remedial Action Taken. (Attach Additional Sharts If No	eccosary)	
Describe Cause of Problem and Recordial Acuser Diser. (Allach Additional Sharts If We LEFT EQUALIZEDE UP / UP ON TONK	(10 Sct) - @AGR)	IRIUF
· · · · · · · · · · · · · · · · · · ·	(10 Sct) - @AGR)	IALUS
Discribe Cause of Problem and Recorded Acum Dhan (Allach Additional Sharles If We LEFT EQUALIZEDE UP / UP ON TONK	(10 Sct) - @AGR)	I A / US
Describe Cause of Problem and Bestredial Action Daken. (Attach Additional Shorts If No. LGFT & QUA 112 DR UA 106: ON TANK Describe Area Allevied and Clearing Action Daken. (Attack Additional Sheats It Necessa	ecculary) (10 SCD - @AGRD 1 ary)	
Describe Cause of Problem and Rechedial Acusm Diser. (Accach Additional Sharts If No <u>LEFT EQUATIZEDE UP JUS</u> ON TENK Describe Area Allected and Clearny Acison Baket. (Astack Additional Sheets If Necesse <u>SO'Y 3' WIDE AREA TO EXcited Col</u> Thereby construct the information mere above is the and complete to the base of an	(10 SCD - OAFR) L 177) 7ANK - AU.C.IL	DROND FRISH Die
Describe Cause of Problem and Reconcilial Action Dates. (Attach Additional Sherts If No LEFT EQUALIZEDE UP 106: ON TANK Describe Area Affected and Cleanup Action Babes. (Attack Additional Sheats If Necessa So'X 3' WIDE AREA AREA TH EXcitat Cot Increby configuration the information gives above in the and complete to the basis of my know are required to report and/or Ale containing internation and complete to the basis of my know	ecessary) <u>(10 Scrib - @AGRD 1</u> ery) 7/9 MK - AU.C. i. L. <u>e</u> Medge and wedermand that purpleant is NR	DROAD FRUSH Dire
Describe Cause of Problem and Rectinedial Action Datas. (Accach Additional Sharts If No. <u>LGFT</u> <u>EQUATIZEDE UP JUS</u> ON TENK Describe Area Allected and Causery Action Balan. (Astach Additional Sherts If Nerrosa <u>SO'Y 3' WIDE AREA TO EXclude Cod</u> I hereby density that the information given above is the and complete to the base of my impor- re required to report and/or Ale certain release notifications and perform softward and any impor- re required to report and/or Ale certain release notifications and perform softward and any impor- re required to report and/or Ale certain release notifications and perform softward enditions of the optimized of the optimized in the optimized of the optimized and the softward of the optimized of the optimi	eccessary) <u>(10 ScD - 0AFA) (</u> ery) 7/2 NK - AU.C. (<u>c</u> Modge and understand that purpoint to NM to measure which may contanger public basis billity should their operation have failed to	DROAD FRESh Die 1000 notes and regulations all operators the or the epvironment. The secretation of
Describe Cause of Problem and Respectivel Acusen Daken. (Actach Additional Shorts If No. <u>LEFT</u> <u>EQUA 172 DR</u> <u>UA 106</u> <u>ON</u> <u>TANK</u> Describe Area Allected and Channyp Action Elder. (Actach Additional Sheets It Necess <u>SO'X 3' WIDE</u> <u>AREA</u> <u>TN France</u> Cost <u>Interesty conside</u> the information given allove is the and complete to the base of my know <u>Pre required to report and/or Alle consider a Billion and perform constructive estimate</u>	eccessary) (10 ScD - 2 AFR) (ery) $7\text{M} \text{M}^{-} \text{AU}_{\text{oC}} (1 \text{ C})$ Modge and undermand that purpose to NM to Please which may contange public basis bility should their operauses have failed so interes. In addition, NMOCD acceptance of regulations.	DROAD FRESh Die 1 1000 notes and regulations all operation there proving not the appropriate of
Describe Cause of Problem and Rectivedual Acuer Daken. (Attach Additional Shorts If No. <u>LCF7</u> <u>EQUA 152 DR</u> <u>UA 106</u> : <u>ON</u> <u>TENK</u> Describe Area Allected and Cleanup Action Edges. (Attack Additional Sheets II Necesse <u>SO'Y 3</u> <u>WID6</u> <u>AREA</u> <u>TN FROM COP</u> Increase doe report and/or alle certain melloan and marked a Final Report does not selling the openator of line period of report and/or alle certain and marked as Final Report does not effort any know of reports to the tops of the certain of the certain on the Report of the certain of the Action and The Report does not selling the of the certain of the certain on the sector of the certain the fill and the certain the certain of the ce	eccessary) (10 SCD - 2AGA) L ery) 7ANK - AU CIL 2 Modge and understand that purpoint to NM to release which may endangee public bead billity should their oper submo have failed to histor the addition, NMOCD acceptance of regulations. OIL CONSEL Approved by	SDRMD FRUSIN Die 1000 notes and reputations all operations to or the environment. The secretations adequately investigates and meriodiate of a C-144 report does ton relieve the
Describe Cause of Problem and Rethredial Action Dates. (Attach Additional Sharts If No. <u>LGFT</u> <u>EQUATION UNALLES</u> <u>LIA LUA</u> <u>ON</u> <u>TENK</u> Describe Area Affected and Causing Action Edges. (Astack Additional Sherts If Neresse <u>Services</u> <u>Structure</u> <u>Affected</u> and Causing Action Edges. (Astack Additional Sherts If Neresse <u>Services</u> <u>Affected</u> and Causing Action Edges. (Astack Additional Sherts If Neresse <u>Services</u> <u>Affected</u> and Causing Action Edges. (Astack Additional Sherts If Neresse <u>Services</u> <u>Affected</u> and Causing Networks and complete to the basis of my import as chaptered to report and/or Ale certain microson not finate and perform activities actions a <u>Constanting to the option of the provide</u> with any force most interpretation that provide a the provided of the appendent of the provide at the provide at the provide at the provide action of the appendent of the activities actions and perform activities actions and provide at the provide action of the appendent of the activities at the provide at the provide at the provide action of the activities actions and actions and provide action of the activities actions and action at the activities action of the activities at the provide action of action	eccessary) (10 ScD - 2AFA) (ery) 7/2 NK - AU.C.I.L. Modge and understand that purpoint to NN to release which may endanger public beak billity should their operations have failed to Intern. In addition, NMOCD acceptance of regulations. QIL CONSE	SDRMD FRUSIN Die 1000 notes and reputations all operations to or the environment. The secretations adequately investigates and meriodiate of a C-144 report does ton relieve the

i.

(

202 224 5424 ASY SALAR IT + 44 BORD BEDDOLINE CONDEMN. + 313126852346

<u>District I</u> 625 N. French <u>District II</u> 301 W. Grand .						New Mex					_	Form C-141 June 10, 2003				
<u>District III</u> 000 Rio Brazos <u>District IV</u> 220 S. St. Fran	Road, Azteo	c, NM 87410		Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505						Submit 2 Copies to appropr District Office in accorda with Rule 116 on b side of f						
			Rela	ease Notific				ction								
						OPERA	FOR		🗌 Initia	l Report	X	Final Report				
		ogo Produci		any Midland TX 79	701	Contact: Pa	t Ellis No. (432) 685-8	100				<u> </u>				
Facility Nat			une 600,		7/01		e: Tank Battery				_ <u> </u>					
Surface Ow	ner/Beck	y Doom 3	· · · · · · · · · · · · · · · · · · ·	Mineral C	Owner				Lease N	o. 35033						
			<u> </u>				FASE									
Unit Letter L	Section\ 23	Township 24S	Range 37E							County Lea	•					
	I	J	I	NAT		E OF REL	FASE	L								
Type of Rele Source of Re	lease Tank					Volume of Date and H 3/14/00	Release 7 barrel four of Occurrence			ecovered Hour of Dis 10:00 am						
Was Immedi	ate Notice		Yes [] No 🗌 Not R	eauirea	If YES, To Whom? d Gary Wink, NMOCD										
By Whom?	Gary Well					Date and Hour 3/14/00 1:14 pm										
Was a Water	course Rea] Yes [2 No		If YES, Volume Impacting the Watercourse.										
Describe Ca	use of Prob	lem and Reme	edial Actic	on Taken.*												
				closed. To stop o	overflo	w, the valve w	as opened.									
Released 7 b battery, the s excavated to showed TPH	arrels of oi oil impact remove so and BTEX	measured appr il exceeding th Clevels below	s recovere roximately ne RRAL. the RRAI	xd. Oil was contai y 55' x 4'. The in In addition, bore L. Assessment an	npacted sholes v id Closi	l area off-site r were installed t ure Report has	neasured approxin o define the chlor been submitted to	nately 1 ide exter o the NM	00' x 60'. ´ nts. The fin 10CD for r	The spill are al confirma eview.	ea was ation sa	assessed and mples				
regulations a public health should their or the enviro	Ill operators or the envo operations onment. In	s are required ironment. The have failed to	to report a e acceptan adequatel OCD acce	te is true and com and/or file certain ace of a C-141 rep y investigate and aptance of a C-141	release oort by remedi	notifications a the NMOCD n ate contaminat	and perform corre narked as "Final I tion that pose a th ve the operator of	ctive act Report" or reat to g respons	tions for rele does not reli round water ibility for c	eases which eve the ope , surface w ompliance	a may e crator o ater, hu with an	ndanger f liability 1man health				
Signature:	De l	avang				OIL CONSERVATION DIVISION										
Printed Nam	e: Ike Tav	varez (Ag	ent fo	r tugo)		Approved by	y District Supervi									
Title: Senior	Geologist					Approval Da	ate:		Expiration	Date:						
		ez@hec-envir		405 2050		Conditions of Approval: Attached										
Date: 1()/24/05	Pho	ne: (432) 4	425-38/8		1					<u> </u>					

* Attach Additional Sheets If Necessary

`