

Highlander Environmental Corp.

Midland, Texas

June 28, 2004

Mr. Larry Johnson **Environmental Bureau** New Mexico Oil Conservation Division 1625 N. French Drive P.O. Box 1980 Hobbs, New Mexico 88240



Subsurface Investigation and Work Plan for the Pogo Producing Company, E.C. Hill Re: "A, B and C" Tank Battery, Located in Section 27, Township 23 South, Range 37 East, Lea County New Mexico.

Dear Mr. Johnson:

Highlander Environmental Corp. (Highlander) has prepared a work plan for the E.C. Hill "A, B and C" Tank Battery in Lea County, New Mexico, Lea County New Mexico (Site) located in Section 27, Township 23 South, Range 37 East. The Site is shown in Figure 1. This facility is an old battery, which has had numerous spills from previous operators. Prior to Pogo Producing Company, the tank battery was operated by Chevron and Midcontinent.

Previous Correspondence

A New Mexico Oil Conservation Division (NMOCD) response letter, dated August 14, 2003, approved the work plan with some requirements to defer the assessment work until the facility was inactive. Highlander submitted a revised work plan and responses, dated August 29, 2003, to the NMOCD in Hobbs, New Mexico. This work plan summarizes the NMOCD responses and the proposed activities to assess the soils.

Background

Under Pogo, several documented spills have occurred over older spills at the facility. The majority of the spills have occurred around production equipment and active underground lines. Several attempts have been made define the extents of the impact using a stainless steel bucket-type hand auger. A shallow, dense, caliche layer has been encountered from 6" to 1.0' below surface, which causes auger refusal. These spill areas are not accessible for equipment, such as a backhoe or drilling rig.

Initially, Pogo Producing Company had proposed to defer all inaccessible assessment and major cleanup activities until abandonment of the tank battery. Once inactive, Pogo had proposed to remove all production equipment and lines, perform an environmental assessment to vertically define the extents, and properly address the impacted soil at the facility. In November 2003, Pogo shut down all production to the tank battery and removed all tanks, vessels, equipment and lines making

Родо – 17891 1910 N. Big Spring • Midland, Texas 79705 Да Синиј – ФРАС 0603838 7.30

Incident - NPAC 0603838849 (432) 682-4559 • Fax (432) 682-3946 application - pPAC 0603 838937

the former tank battery location accessible to perform an assessment.

Groundwater and Regulatory

According to the New Mexico State Engineer Office W.A.T.E.R.S. database, Average Depth to Water Report, water wells are located in Section 9, 16 and 32, Township 23 South, Range 37 East, with an average depth to water of 100', 115' and 106', respectively. The well reports are shown in Appendix A. A static water level was collected from a windmill located in Section 34, Township 23 South, Range 37 East. The windmill showed a static water level of 82' below surface. Based on the water level and surface elevation, the depth of groundwater is projected to be around 95' to 100' below surface.

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.

SOIL ASSESSMENT

Once the facility was dismantled, the impacted soils were excavated in the areas of the tanks, vessels and lines. The soil was excavated to a depth of approximately 5.0' below surface. The excavation is shown in Figure 2. A total of 4,640 cubic yards of material was transported and disposed at Sundance Services Inc, located in Eunice, New Mexico.

Trench Installation and Results

On February 20, 2004, Highlander supervised the installation of 15 test trenches in the bottom of the excavation using a backhoe. Prior to the installation of the test trenches, the excavation was segregated into fifteen (15) areas for sampling. The trench locations are shown in Figure 2. Soil samples were collected at 2.0' foot intervals, placed into laboratory supplied containers and properly preserved during transport. Soil samples were analyzed for Total Petroleum Hydrocarbons (TPH) by method SW 846 8015B, selected samples for Benzene, Toluene, Ethylbenzene and Xylenes (BTEX) by EPA method 602/8021B, and chloride by method SW 846 9253 in Area #1. The soil sample results are summarized in Table 1. The laboratory report and chain of custody are enclosed in Appendix B.

Referring to Table 1, areas #3, #6, # 10 and #13 were not vertically defined and showed a hydrocarbon impact to a depth of 9.0 below excavation bottom. Area #1 did not show any detectable hydrocarbon impact, however, did exhibit chloride concentrations of 2,280 mg/kg at 0-1' to 1,040 mg/kg at 9.0' below excavation bottom. Areas #4, #5 and #7 did show TPH concentrations decreasing with depth below 1,000 mg/kg at a depth of 3.0' and 5.0' below excavation bottom.

Based on the results, Highlander installed boreholes in the areas of #1, #3, #6, # 10 and #13 to attempt to define the vertical extents of soil impact.



Borehole Installation

On May 13, 2004, Highlander supervised the installation of eight (8) boreholes (BH-1 through BH-8). Boreholes were installed in the excavation in areas #1, #3, #6, #10 and #13. Three (3) additional boreholes (BH-7, BH-8 and BH-9) were installed north of the excavation for horizontal extents. The borehole locations are shown in Figure 3.

Boreholes were installed using an air-rotary type drilling rig. Soil samples were collected at 5 and 10 foot intervals during rotary drilling operations using a split spoon sampler and core barrel sampler. During sample collection, a portion of each soil sample was placed into a clean plastic sample bag and sealed. After a short period of time at ambient temperature storage, the concentration of organic vapors in the headspace of the sample bag were measured with a Thermo Environmental Instruments, Model 580B, Organic Vapor Meter (OVM).

The splitspoon and core barrel samplers were washed between boreholes and sampling events using potable water and laboratory grade detergent. All down hole equipment (i.e., drill rods, drill bits, etc.) were thoroughly decontaminated between each use with a high-pressure hot water wash and rinse. Soil cuttings from drilling were stockpiled adjacent to the borehole. Following the completion of the drilling activities, all boreholes were grouted to surface.

Soil Analysis and Results

All of the samples were collected in laboratory supplied containers and properly preserved during transport. Soil samples from each borehole were submitted under chain-of-custody control and analyzed for Total Petroleum Hydrocarbons (TPH) by method SW 846 8015B, Benzene, Toluene, Ethylbenzene and Xylenes (BTEX) by EPA method 602/8021B, and chloride by method SW 846 9253. The soil sample results are summarized in Table 2. The laboratory report and chain of custody are enclosed in Appendix B.

Referring to Table 2, the boreholes BH-1, BH-2, BH-3 and BH-4, installed in the bottom of the excavation, did not vertically define the hydrocarbon impact at the Site. The depths of the boreholes ranged from 30' to 80' below excavation bottom. The deepest borehole BH-2 showed increasing TPH concentrations depth and traces of BTEX at 80' below excavation bottom. BH-3 and BH-4 drilled to a total depth of 70' showed a slight TPH decrease with depth to 6,780 mg/kg (70') and 5,480 mg/kg (70'), respectively. The hydrocarbon impact in BH-5 was vertically defined with a TPH level of 432 mg/kg at 30' below excavation bottom. In addition, the chloride concentrations decreased with depth and does not appear to an environmental concern. The boreholes (BH-6, BH-7 and BH-8) were installed for additional horizontal extents to a depth of 30.0' below surface. The samples from BH-6 and BH-7 did show a hydrocarbon impact to a depth of 30' below surface. BH-8 did not showed TPH levels above 100 mg/kg.

Conclusions/Work Plan

Based on the soils assessment, the hydrocarbon impact appears to have migrated deep into the subsurface soils. Boreholes BH-1, BH-2, BH-3 and BH-4, installed in the bottom of the excavation, did not vertically define the hydrocarbon impact at the Site. The impacted soils are near groundwater depth, which is estimated at 95' to 100' below surface.



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Due to the depth of the soil impact, Pogo proposes one (1) monitor well to be installed to check the groundwater qualities. Once the groundwater qualities have been evaluated, a work plan will be submitted to address the impacted subsurface soils. Based on the groundwater evaluation, additional monitor wells may be installed to further assess or define the extent of the groundwater plume.

Highlander will supervise the installation of one (1) groundwater monitoring well at the Site. The well will be installed in the excavated area. The monitor well will be drilled using air/water rotary drilling or hollow stem techniques, and constructed using two (2) inch diameter schedule 40 PVC threaded casing and factory slotted screen. The well will be constructed with approximately twenty (20) feet of well screen. The wells will be drilled to depths of approximately 115 to 120' feet below ground surface (BGS), and the well screen will be installed with about five (5) feet of screen above and fifteen (15) feet below the groundwater, to evaluate groundwater quality for light hydrocarbon compounds. The well screens will be surrounded with a graded silica sand to a depth approximately 2 feet above the screen. A layer of bentonite pellets, approximately 2-3 feet thick, will be placed in the borehole above the sand. The remainder of the borehole will be filled with cement and bentonite grout to about one (1) foot below ground. The well will be secured with locking steel protectors anchored in a concrete pad measuring approximately 3 feet by 3 feet. If more than well is installed, a land surveyor licensed in the State of New Mexico will survey the wells for location and elevation.

Following installation, the wells will be developed by bailing with a rig or hand bailer, or pumped with an electric submersible pump to remove fine grained sediment disturbed during drilling and to ensure collection of representative groundwater samples. Water removed from the wells will be placed in appropriate containers (i.e., 55-gallon drums, portable tank, etc.) and retained at the Sites until disposal is arranged. A groundwater sample will be collected following well development and analyzed for BTEX, anions, cations, and total dissolved solids (TDS). The well will be inspected for the presence of phase-separated hydrocarbons (PSH) and, if present, a sample will be collected and analyzed by gas chromatography (GC) to determine composition and origin. If PSH is detected, a groundwater sample will not be collected from that well. All samples will be delivered to the laboratory under chain of custody control.

Upon receipt of analytical data from the laboratory, Highlander will prepare a report/work plan that discusses the field investigations and remedial activities for the Site. Please call me at (432) 682-4559 if you have questions.

Respectfully submitted, Highlander Environmental Corp.

Ike Tavary by rup

Ike Tavarez Project Manager/Geologist

cc: Rex Jasper – Pogo Don Riggs - Pogo

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Johnson, Larry, EMNRD

Sent: Mon 12/5/2005 8:12 AM

From:Ike T [itavarez@hec-enviro.com]To:Johnson, Larry, EMNRDCc:Pat EllisSubject:Notification - Soil Capping of the Pogo, E.C. Hill Tank BatteryAttachments:

Pogo Producing Company (Arch Petroleum)

E.C. Hill A and B Tank Battery

Section 27, T23S, R37E

Lea County, New Mexico

We are scheduled to cap the Site on Wednesday (12/7/05). As approved by NMOCD in Santa Fe, NM, the Site has been prepared for the installation of a 40 mil liner (cap). Once the cap is installed, the excavation will be backfilled with clean fill material to grade. If you need additional information please call me, Thanks.

Highlander Environmental Corp.

Ike Tavarez, PG

Senior Geologist

FIGURES







TABLES

TABLE NO. 1

Pogo Producing Company E.C. Hill A & B TANK BATTERY Lea County, New Mexico

ANALYTICAL DATA

Xylene Sample Sample TPH (mg/kg) Toluene Ethlybenzene Chloride Sample Benzene (mg/kg) C12-C35 (mg/kg (mg/kg) Date ID C6-C-12 (mg/kg) Depth (ft) Total (mg/kg)2280 T-1 0'-1' <10.0 19.9 2/20/2004 19.9 ----2550 T-1 3.0' -------2020 T-1 7.0' ----~ --T-1 9.0' 1040 --... ----T-2 0'-1' 17.1 17.1 71 2/20/2004 <10.0 ----142 T-3 1,730 2/20/2004 356 2,090 0'-1' ----T-3 3.0' 2,570 7,470 10,000 -----T-3 5.0' 1,500 5,600 4,090 -----T-3 7.0' 3,770 5,310 1.540 -----9.0' T-3 1,520 3,970 5,490 -------2/20/2004 201 3480 142 T-4 0'-1' 3860 ----T-4 3.0' <10.0 80.9 80.9 ---. -2/20/2004 T-5 0'-1' 249 2,260 298 2.010 ----T-5 3.0' <10.0 10.4 10.4 --• --T-6 0'-1' 6.27 1,540 8,410 9,950 404 2/20/2004 0.569 0.271 1.91 T-6 3.0' 1,430 8,150 9,580 -----T-6 5.0' 1,800 8,830 10,600 -----T-6 7.0' 916 4,070 4,980 -----**T-**6 9.0' 1,350 7,350 6.000 -----T-7 0'-1' 383 2/20/2004 148 4,430 4,580 --~ -T-7 3,860 3,950 3.0' 85.2 • ----T-7 5.0' <10.0 779 779 -----99 2/20/2004 T-8 0'-1' <10.0 16.8 16.8 ----

0&G/1746/Table 1

TABLE NO. 1

Pogo Producing Company E.C. Hill A & B TANK BATTERY Lea County, New Mexico

ANALYTICAL DATA

Sample Ethlybenzene Xylene Chloride Sample Sample TPH (mg/kg) Toluene Benzene C6-C-12 C12-C35 (mg/kg) Date Depth (ft) Total (mg/kg (mg/kg) ID (mg/kg) (mg/kg) 2/20/2004 T-9 234 0'-1' <10.0 <10.0 <10.0 ----2/20/2004 T-10 276 1,180 3,500 0.635 2.28 0'-1' 4,680 0.173 7.39 T-10 3.0' 1,390 4,060 5,450 -----T-10 5.0' 2,150 6,880 9,030 -----7.0' T-10 943 3,410 4,350 -----T-10 9.0' 795 3,080 3,880 -----2/20/2004 T-11 0'-1' <10.0 <10.0 142 <10.0 ---<u> -</u> 2/20/2004 T-12 0'-1' <10.0 11.1 11.1 99 ----2/20/2004 T-13 0'-1' 213 1,170 5,520 6,690 0.285 0.607 1.35 3.28 T-13 3.0' 1.320 5,030 6,350 -----T-13 5.0' 1,850 6,290 8,140 -----T-13 7.0' 1,410 4,440 5,850 -----T-13 9.0' 1,740 4,880 6,620 -----2/20/2004 T-14 0'-1' 596 <10.0 84.3 84.3 ---2/20/2004 T-15 0'-1' 36.8 36.8 574 <10.0 ---

(-) = Not Analyzed

T = Trench

Sample Depth = below excavation bottom

0&G/1746/Table 1

Table 2Pogo Producing CompanyE. C. Hill A&B Tank BatteryLea County, New Mexico

TPH (mg/kg)		ne Toluene Ethylbenz	Chloride
C6-C12 C12-C35	r) (mg/kg)	(mg/kg) (mg/kg	(mg/kg)
	_	-	-
	-		-
1,100 3,490	-		-
	-		-
	-		-
872 3,420	-		-
	-		-
	-		-
	-		-
7,730 14,100	48.1	20.8 15.7	
	-		-
	-		-
432 2,230	-		-
	-		-
516 1,560	-		-
	•		-
779 2,440	-		-
	-		-
	-		-
1,670 4,770	1.367	7 0.227 1.307	-
1,	670 4,770 6,440 0.157 0.227 1.307	670 4,770 6,440 0.15	670 4,770 6,440 0.157 0.227 1.307 1.367

(-) Not Analyzed

Table 2Pogo Producing CompanyE. C. Hill A&B Tank BatteryBorehole InstallationLea County, New Mexico

Date	Sample	Depth	OVM	149249257	PH (mg/kg	g)	Benzene		Ethylbenzene		Chloride
Sampled	ID	(ft)	(ppm)	C6-C12	C12-C35	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	. (mg/kg)
5/14/2004	BH-3 (T-6)	5-6	260	-	-	-	-	-	-	-	-
5/14/2004		10-11	541	-	-	-	-	-	-	-	-
5/14/2004		15-16	720	2,020	7,250	9,270	-	-	-	-	-
5/14/2004		20-21	836	-	-	-	-	-	-	-	-
5/14/2004		30-31	561	623	3,140	3,760	-	-	-	-	-
5/14/2004		40-41	1022	-	-	-	-	-	-	-	-
5/14/2004		50-51	450	1,010	5,290	6,300	-	•	-	-	_
5/14/2004		60-61	567	-	-	-	-	-	-	-	-
5/14/2004		70-71	554	1,280	5,500	6,780	0.110	1.05	1.54	6.77	_
5/14/2004	BH-4 (T-3)	5-6	1800	-	-	-	-		-	-	-
5/14/2004		10-11	1811	-	-	-		-	-	-	-
5/14/2004		15-16	2100	2,710	5,460	8,170	1.94	22.50	23.20	62.80	-
5/14/2004		20-21	1941	-	-	-	-	-	-	-	-
5/14/2004		30-31	2131	1,490	3,340	4,830	-	-	-	-	-
5/14/2004		50-51	1395	-	-	-	-	-	-	-	-
5/14/2004		70-71	960	1,090	4,390	5,480		-	-	-	-
5/14/2004	BH-5 (T-1)	10-11	400	644	2,800	3,440	-	•	-	-	2,760
5/14/2004		15-16	200	586	3,020	3,610	< 0.025	0.0616	0.0705	0.4776	744
5/14/2004		20-21	340	-	-	-	-	-	-	-	723
5/14/2004		30-31	39	36.8	386	423	-	-	-	-	304
				1					1		

(-) Not Analyzed

Table 2Pogo Producing CompanyE. C. Hill A&B Tank BatteryBorehole InstallationLea County, New Mexico

Date	Sample	Depth	OVM	$\mathbb{T}_{\mathbb{R}}$, where \mathbb{R}	PH (mg/kg)		Benzene	Toluene	Ethylbenzene	Xylene	Chloride
Sampled	ID	(ft)	(ppm)	C6-C12	C12-C35	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
5/14/2004	BH-6	5-6	500	1,610	4,420	6,030	-	•	-	-	~
5/14/2004		10-11	962	1,870	3,490	5,360	-	-	-	-	-
5/14/2004		20-21	1081	-	-	-	-	-	-	-	-
5/14/2004		30-31	1131	3,220	6,770	9,990	0.0386	5.09	5.32	20.6	-
5/17/2004	BH-7	5-6	5	<10.0	2,070	2,070		•	-	-	-
5/17/2004		10-11	390	521	1,760	2,280	-	-	-	-	-
5/17/2004		20-21	659	-	-	-	-	-		-	-
5/17/2004		30-31	556	843	2,530	3,370	<0.025	0.194	0.116	3.33	-
5/17/2004	BH-8	5-6	2	<10.0	42.5	42.5	-		-	-	-
5/17/2004		10-11	2	<10.0	<10.0	<10.0	-		-	-	-
5/17/2004		20-21	1	•	-	-	-	-	-	-	-
5/17/2004		30-31	1	_	· · ·		_		_	_	-

•

(-) Not Analyzed

APPENDIX A

Well Report

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Page 3	l of l
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	<i>New Mexico O</i> Well Rep	<i>Office of the St</i> ports and Dov	•	ineer
Township: 23S	Range: 37E	Sections:		· · · ·
NAD27 X:	Y:	Zone:		Search Radius:
County: B	asin:	an Na Na Jac	Numb	er: Suffix:
Owner Name: (First)	(La	est) All		○Non-Domestic ○Domestic
(Well / Sur	face Data Report Wat Clear Form	er Column Rep WATERS M	ort	to Water Report

		AVER	AGE D	EPTH OF	WATER 1	REPORT (6/28/200	04		
								(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
СР	23S	37E	32				1	106	106	106
Reco	rd Co	unt:	3							

APPENDIX B

Analytical Report



12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

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

Project: Pogo/ E.C. Hill A & B TB Project Number: 1746 Location: Lea Co. NM

Lab Order Number: 4E21002

Report Date: 05/27/04

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

Project: Pogo/ E.C. Hill A & B TB Project Number: 1746 Project Manager: Ike Tavarez

Fax: (432) 682-3946 Reported: 05/27/04 11:42

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH-1 (15-16')	4E21002-02	Soil	05/13/04 00:00	05/20/04 17:20
BH-1 (30-31')	4E21002-05	Soil	05/13/04 00:00	05/20/04 17:20
BH-1 (50-51')	4E21002-09	Soil	05/13/04 00:00	05/20/04 17:20
BH-2 (15-16')	4E21002-11	Soil	05/13/04 00:00	05/20/04 17:20
BH-2 (30-31')	4E21002-13	Soil	05/13/04 00:00	05/20/04 17:20
BH-2 (50-51')	4E21002-15	Soil	05/13/04 00:00	05/20/04 17:20
BH-2 (80-81')	4E21002-18	Soil	05/13/04 00:00	05/20/04 17:20
BH-3 (15-16')	4E21002-19	Soil	05/14/04 00:00	05/20/04 17:20
BH-3 (30-31')	4E21002-21	Soil	05/14/04 00:00	05/20/04 17:20
BH-3 (50-51')	4E21002-23	Soil	05/14/04 00:00	05/20/04 17:20
BH-3 (70-71')	4E21002-25	Soil	05/14/04 00:00	05/20/04 17:20
BH-4 (15-16')	4E21002-26	Soil	05/14/04 00:00	05/20/04 17:20
BH-4 (30-31')	4E21002-28	Soil	05/14/04 00:00	05/20/04 17:20
BH-4 (70-71')	4E21002-30	Soil	05/14/04 00:00	05/20/04 17:20
BH-5 (10-11')	4E21002-31	Soil	05/14/04 00:00	05/20/04 17:20
BH-5 (15-16')	4E21002-32	Soil	05/14/04 00:00	05/20/04 17:20
BH-5 (20-21')	4E21002-33	Soil	05/14/04 00:00	05/20/04 17:20
BH-5 (30-31')	4E21002-34	Soil	05/14/04 00:00	05/20/04 17:20
BH-6 (5-6')	4E21002-35	Soil	05/14/04 00:00	05/20/04 17:20
BH-6 (10-11')	4E21002-36	Soil	05/14/04 00:00	05/20/04 17:20
BH-6 (30-31')	4E21002-38	Soil	05/14/04 00:00	05/20/04 17:20
BH-7 (5-6')	4E21002-39	Soil	05/17/04 00:00	05/20/04 17:20
BH-7 (10-11')	4E21002-40	Soil	05/17/04 00:00	05/20/04 17:20
BH-7 (30-31')	4E21002-42	Soil	05/17/04 00:00	05/20/04 17:20
BH-8 (5-6')	4E21002-43	Soil	05/17/04 00:00	05/20/04 17:20
BH-8 (10-11')	4E21002-44	Soil	05/17/04 00:00	05/20/04 17:20

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

Project: Pogo/ E.C. Hill A & B TB Project Number: 1746 Project Manager: Ike Tavarez

Reported: 05/27/04 11:42

Organics by GC Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-1 (15-16') (4E21002-02) Soil									
Gasoline Range Organics C6-C12	1100	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M	
Diesel Range Organics >C12-C35	3490	10.0		"	H	"		n	
Total Hydrocarbon C6-C35	4590	10.0		**	Ħ	Ħ	n	n	
Surrogate: 1-Chlorooctane	****==	111%	70-1	30	"	"	"	11	
Surrogate: 1-Chlorooctadecane		115 %	70-1	30	"	"	"	"	
BH-1 (30-31') (4E21002-05) Soil									
Gasoline Range Organics C6-C12	872	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M	
Diesel Range Organics >C12-C35	3420	10.0	*		n	n	*	H	
Total Hydrocarbon C6-C35	4290	10.0	*	n	n	n	*	*	
Surrogate: 1-Chlorooctane		112 %	70-1	130	"	".	"	"	
Surrogate: 1-Chlorooctadecane		119 %	7 0- -	130	n	"	"	"	
BH-1 (50-51') (4E21002-09) Soil									
Benzene	5.14	0.0250	mg/kg dry	25	EE42701	05/25/04	05/26/04	EPA 8021B	
Toluene	20.8	0.0250		n	n	*	"		
Ethylbenzene	15.7	0.0250	W	н	"	"	"	**	
Xylene (p/m)	31.2	0.0250	"	"				**	
Xylene (0)	16.9	0.0250	**	"	"	"	**	n	
Surrogate: a,a,a-Trifluorotoluene		1150 %	80-	120	n	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		85.5 %	80	120	"	"	"	"	
Gasoline Range Organics C6-C12	7730	50.0	mg/kg dry	5	EE42101	05/21/04	05/22/04	EPA 8015M	
Diesel Range Organics >C12-C35	14100	50.0	**		11	"	n	"	
Total Hydrocarbon C6-C35	21800	50.0	"	n	11		"	n	
Surrogate: 1-Chlorooctane		25.2 %	7 0- .	130	"	"	"	"	S-06
Surrogate: 1-Chlorooctadecane		38.4 %	70	130	"	"	"	"	S-06

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

05/27/04 11:42

		Or	ganics l	by GC					
		Environr	nental I	Lab of T	Texas				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
BH-2 (15-16') (4E21002-11) Soil									
Gasoline Range Organics C6-C12	432	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M	
Diesel Range Organics >C12-C35	2230	10.0	11	υ.	n	*	**	7	
Total Hydrocarbon C6-C35	2660	10.0	n	"	۳.	*		**	
Surrogate: 1-Chlorooctane	4	91.4 %	70-	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		109 %	70-	130	"	"	"	"	
BH-2 (30-31') (4E21002-13) Soil									
Gasoline Range Organics C6-C12	516	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M	
Diesel Range Organics >C12-C35	1560	10.0	н	"	11	17	**	*	
Total Hydrocarbon C6-C35	2080	10.0	н	"	п	**	**	n	
Surrogate: 1-Chlorooctane		125 %	70-	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		113 %	70-	130	"	"	**	"	
BH-2 (50-51') (4E21002-15) Soil									
Gasoline Range Organics C6-C12	779	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M	
Diesel Range Organics >C12-C35	2440	10.0	*	**	n	n	n	n	
Total Hydrocarbon C6-C35	3220	10.0	н	Ħ	"	"	H	H	
Surrogate: 1-Chlorooctane		112 %	70-	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		123 %	70-	130	"	"	"	"	
BH-2 (80-81') (4E21002-18) Soil						·			
Benzene	ND	0.0250	mg/kg dry	25	EE42701	05/25/04	05/26/04	EPA 8021B	
Toluene	0.157	0.0250	"	"	n	10	v	**	
Ethylbenzene	0.227	0.0250	"	n	n	n	.,	*	
Xylene (p/m)	0.822	0.0250	n	"		Ħ		*	
Xylene (o)	0.485	0.0250	**	"	*	*	1+	n	
Surrogate: a,a,a-Trifluorotoluene		97.5 %	80-	120	"	"	"	11	
Surrogate: 4-Bromofluorobenzene		99.4 %	80-	120	"	"	"	"	
Gasoline Range Organics C6-C12	1670	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M	
Diesel Range Organics >C12-C35	4770	10.0	0		, H	**	11	**	
Total Hydrocarbon C6-C35	6440	10.0	۳	n	н	"	**		
Surrogate: 1-Chlorooctane		125 %	70-	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		126 %	70-	130	"	"	"	"	

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Organics by GC **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
BH-3 (15-16') (4E21002-19) Soil			· · · · ·		<u> </u>				
Gasoline Range Organics C6-C12	2020	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M	
Diesel Range Organics >C12-C35	7250	10.0	"	n	n	"		- 11	
Total Hydrocarbon C6-C35	9270	10.0	."	"	11	"	n	"	
Surrogate: 1-Chlorooctane		120 %	70-	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		126 %	70-	130	"	"	"	"	
BH-3 (30-31') (4E21002-21) Soil									
Gasoline Range Organics C6-C12	623	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M	
Diesel Range Organics >C12-C35	3140	10.0	*	н		"	۳	"	
Total Hydrocarbon C6-C35	3760	10.0	**	"	"	11	"	"	
Surrogate: 1-Chlorooctane		112 %	70-	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		128 %	70-	130	"	"	"	"	
BH-3 (50-51') (4E21002-23) Soil									
Gasoline Range Organics C6-C12	1010	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M	
Diesel Range Organics >C12-C35	5290	10.0	11	n	H	n	"	11	
Total Hydrocarbon C6-C35	6300	10.0	"	"	**	"	"	"	
Surrogate: 1-Chlorooctane		127 %	70-	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		126 %	70-	130	"	"	"	"	
BH-3 (70-71') (4E21002-25) Soil									
Benzene	0.110	0.0250	mg/kg dry	25	EE42701	05/25/04	05/26/04	EPA 8021B	
Toluene	1.05	0.0250	n	"	H	n	n	11	
Ethylbenzene	1.54	0.0250	м	**	"	H	11	Ħ	
Xylene (p/m)	4.38	0.0250	"	n	"	"	"	19	
Xylene (o)	2.39	0.0250	"	"	н	**	N	"	
Surrogate: a,a,a-Trifluorotoluene		153 %	80-	120	"	"	"	"	S-0
Surrogate: 4-Bromofluorobenzene		111 %	80-	120	"	"	"	"	
Gasoline Range Organics C6-C12	1280	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M	
Diesel Range Organics >C12-C35	5500	10.0	**	"	"	"	"	"	
Total Hydrocarbon C6-C35	6780	10.0	Ħ	*	17		"	17	
Surrogate: 1-Chlorooctane		100 %	70-	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		125 %	70-	130	"	"	"	"	

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
BH-4 (15-16') (4E21002-26) Soil		······································							
Benzene	1.94	0.100	mg/kg dry	100	EE42701	05/25/04	05/26/04	EPA 8021B	
Toluene	22.5	0.100		17	*	"		•	
Ethylbenzene	23.2	0.100	"	"	n	"	"		
Xylene (p/m)	46.2	0.100	"	11	n	"	11	"	
Xylene (o)	16.6	0.100	"	"		"	**	11	
Surrogate: a,a,a-Trifluorotoluene		362 %	80-1	20	"	"	"	н	S-0
Surrogate: 4-Bromofluorobenzene		95.1 %	80-1	20	"	"	"	"	
Gasoline Range Organics C6-C12	2710	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M	
Diesel Range Organics >C12-C35	5460	10.0	"		n	n	н	"	
Total Hydrocarbon C6-C35	8170	10.0	"	"	н	н	"	"	
Surrogate: 1-Chlorooctane		139 %	70-1	30	"	"	"	"	S-0
Surrogate: 1-Chlorooctadecane		152 %	70-1	30	"	"	"	"	S-0
BH-4 (30-31') (4E21002-28) Soil									
Gasoline Range Organics C6-C12	1490	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M	
Diesel Range Organics >C12-C35	3340	10.0		"		*	*	W	
Total Hydrocarbon C6-C35	4830	10.0	*			H	**	"	
Surrogate: 1-Chlorooctane		110 %	70-1	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		128 %	70-1	30	n	"	"	1 .	
BH-4 (70-71') (4E21002-30) Soil									
Gasoline Range Organics C6-C12	1090	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M	
Diesel Range Organics >C12-C35	4390	10.0	н			н	Ħ		
Total Hydrocarbon C6-C35	5480	10.0	и	"	**	н		"	
Surrogate: 1-Chlorooctane		125 %	70-1	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		127 %	70-1	20	"	"	"	"	

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-5 (10-11') (4E21002-31) Soil								· · · · · · · · · · · · · · · · · · ·	
Gasoline Range Organics C6-C12	644	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M	
Diesel Range Organics >C12-C35	2800	10.0	"				п	"	
Total Hydrocarbon C6-C35	3440	10.0	"		"	"	n	"	
Surrogate: 1-Chlorooctane	×	116 %	70-1	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		125 %	70-1	30	"	"	"	"	
BH-5 (15-16') (4E21002-32) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE42701	05/25/04	05/26/04	EPA 8021B	
Toluene	0.0616	0.0250	"	"	11	۳	**	"	
Ethylbenzene	0.0705	0.0250	*		**	"	"	n	
Xylene (p/m)	0.397	0.0250	n		u.	"	"	"	
Xylene (0)	0.0806	0.0250	H		**	"	"	n	
Surrogate: a,a,a-Trifluorotoluene	**************************************	101 %	80-1	20	"	"	"	"	uu
Surrogate: 4-Bromofluorobenzene		114 %	80-1	20	"	"	"	"	
Gasoline Range Organics C6-C12	586	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M	
Diesel Range Organics >C12-C35	3020	10.0	*	"	N	n	"		
Total Hydrocarbon C6-C35	3610	10.0	"		P	n	н	"	
Surrogate: 1-Chlorooctane	,	122 %	70-1	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		124 %	70-1	30	"	"	"	"	
BH-5 (30-31') (4E21002-34) Soil									
Gasoline Range Organics C6-C12	36.8	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M	
Diesel Range Organics >C12-C35	386	10.0		19	11	"	*	Ħ	
Total Hydrocarbon C6-C35	423	10.0			"		**	11	
Surrogate: 1-Chlorooctane	1 1 10 10	88.6 %	70-1	130	н	11	"	"	
Surrogate: 1-Chlorooctadecane		92.8 %	70-1	130	"	"	"	"	

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
BH-6 (5-6') (4E21002-35) Soil									B	
Gasoline Range Organics C6-C12	1610	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M	•	
Diesel Range Organics >C12-C35	4420	10.0	n	"		n	"			
Total Hydrocarbon C6-C35	6030	10.0	н			n	Ħ	"		
Surrogate: 1-Chlorooctane		95.8 %	70-1	130	"	"	"	"		
Surrogate: 1-Chlorooctadecane		123 %	70-1	30	"	"	17	"		
BH-6 (10-11') (4E21002-36) Soil										
Gasoline Range Organics C6-C12	1870	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M	·	
Diesel Range Organics >C12-C35	3490	10.0	H		"	"	"			
Total Hydrocarbon C6-C35	5360	10.0	"	"			**	"		
Surrogate: 1-Chlorooctane	······	112 %	70-1	130	"	n	"	"		
Surrogate: 1-Chlorooctadecane		121 %	70-1	130	"	"	"	"		
BH-6 (30-31') (4E21002-38) Soil										
Benzene	0.386	0.0250	mg/kg dry	25	EE42701	05/25/04	05/26/04	EPA 8021B		
Toluene	5.09	0.0250	**	n	**	n	"	17		
Ethylbenzene	5.32	0.0250	"	"	n	*		**		
Xylene (p/m)	13.5	0.0250	**	"		n	"			
Xylene (0)	7.10	0.0250	"	н	n	n	· •	*		
Surrogate: a,a,a-Trifluorotoluene		362 %	80-1	120	"	"	"	"	S-04	
Surrogate: 4-Bromofluorobenzene		92.0 %	80-1	120	"	"	"	"		
Gasoline Range Organics C6-C12	3220	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M		
Diesel Range Organics >C12-C35	6770	10.0	"	"	н	H				
Total Hydrocarbon C6-C35	9990	10.0	**	••	n	11	n	**		
Surrogate: 1-Chlorooctane		114 %	70-1	130	n	"	"	"		
Surrogate: 1-Chlorooctadecane		125 %	70-1	130	"	"	"	"		

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Organics by GC **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
BH-7 (5-6') (4E21002-39) Soil									
Gasoline Range Organics C6-C12	J [9.53]	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M	
Diesel Range Organics >C12-C35	2070	10.0	"	"	*	n	**	*	
Total Hydrocarbon C6-C35	2070	10.0	"	"		n	17	Π	
Surrogate: 1-Chlorooctane		99.0 %	70-1	30	"	"	"	11	
Surrogate: 1-Chlorooctadecane		108 %	70-1	30	"	"	"	"	
BH-7 (10-11') (4E21002-40) Soil									
Gasoline Range Organics C6-C12	521	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M	
Diesel Range Organics >C12-C35	1760	10.0	"	*	"	"	н	P	
Total Hydrocarbon C6-C35	2280	10.0	11	**		n		н	
Surrogate: 1-Chlorooctane		126 %	70-1	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		116 %	70-1	30	"	"	"	"	
BH-7 (30-31') (4E21002-42) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE42701	05/25/04	05/26/04	EPA 8021B	
Toluene	0.194	0.0250	n		"	10			
Ethylbenzene	0.116	0.0250	н	"	**	**	"	H	
Xylene (p/m)	2.32	0.0250	н	н		"	H.	H	
Xylene (0)	1.01	0.0250	n	**	*	**	m	Ħ	
Surrogate: a,a,a-Trifluorotoluene		107 %	80-1	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		109 %	80-1	20	"	"	"	"	
Gasoline Range Organics C6-C12	843	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M	
Diesel Range Organics >C12-C35	2530	10.0	"	**	"	11	H	n	
Total Hydrocarbon C6-C35	3370	10.0	"	**		**	*	H	
Surrogate: 1-Chlorooctane		121 %	70-1	30	"	"	"	"	· · ·
Surrogate: 1-Chlorooctadecane		128 %	70-1	30	"	"	"	"	

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Highlander Environmental Corp.	Project:	Pogo/ E.C. Hill A & B TB	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number:	1746	Reported:
Midland TX, 79705	Project Manager:	Ike Tavarez	05/27/04 11:42

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
BH-8 (5-6') (4E21002-43) Soil				<u></u>		<u> </u>			
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M	
Diesel Range Organics >C12-C35	42.5	10.0	n	и		"	н	n	
Total Hydrocarbon C6-C35	42.5	10.0	"	н	"	n	H	"	
Surrogate: 1-Chlorooctane		93.2 %	70-1	30	"	"	"	11	
Surrogate: 1-Chlorooctadecane		99.2 %	70-1	30	"	"	"	"	
BH-8 (10-11') (4E21002-44) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE42101	05/21/04	05/22/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	n	11	"	n	**	*	
Total Hydrocarbon C6-C35	ND	10.0	n	*	"	"		**	
Surrogate: 1-Chlorooctane		96.0 %	70-1	30	"	"	"	**	
Surrogate: 1-Chlorooctadecane		100 %	70-1	30	"	"	"	**	

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General Chemistry Parameters by EPA / Standard Methods

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-1 (15-16') (4E21002-02) Soil]
% Solids	92.0		%	1	EE42402	05/21/04	05/21/04	% calculation	<u>.</u>
BH-1 (30-31') (4E21002-05) Soil									
% Solids	96.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
BH-1 (50-51') (4E21002-09) Soil									
% Solids	89.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
BH-2 (15-16') (4E21002-11) Soil									
% Solids	94.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
BH-2 (30-31') (4E21002-13) Soil									
% Solids	96.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
BH-2 (50-51') (4E21002-15) Soil									
% Solids	93.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
BH-2 (80-81') (4E21002-18) Soil									
% Solids	93.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
BH-3 (15-16') (4E21002-19) Soil									
% Solids	93.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
BH-3 (30-31') (4E21002-21) Soil									
% Solids	92.0		%	1	EE42402	05/21/04	05/21/04	% calculation	

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General Chemistry Parameters by EPA / Standard Methods **Environmental Lab of Texas**

Analyte	Result	Reporting Limit Uni	ts Dilution	Datah	Proposed	Analyzet	Method	Neta
BH-3 (50-51') (4E21002-23) Soil				Batch	Prepared	Analyzed	Memoa	Note
			··· <u>···</u> ·····					
% Solids	92.0	%	1	EE42402	05/21/04	05/21/04	% calculation	
BH-3 (70-71') (4E21002-25) Soil								
% Solids	95.0	%	1	EE42402	05/21/04	05/21/04	% calculation	
BH-4 (15-16') (4E21002-26) Soil								
% Solids	92.0	%	1	EE42402	05/21/04	05/21/04	% calculation	
BH-4 (30-31') (4E21002-28) Soil								
% Solids	96.0	%	1	EE42402	05/21/04	05/21/04	% calculation	
BH-4 (70-71') (4E21002-30) Soil								
% Solids	96.0	%	1	EE42402	05/21/04	05/21/04	% calculation	
BH-5 (10-11') (4E21002-31) Soil								
Chloride	2760	20.0 mg/kg	Wet 2	EE42405	05/21/04	05/22/04	SW 846 9253	
% Solids	92.0	%	1	EE42402	05/21/04	05/21/04	% calculation	
BH-5 (15-16') (4E21002-32) Soil		,						
Chloride	744	20.0 mg/kg	Wet 2	EE42405	05/21/04	05/22/04	SW 846 9253	
% Solids	95.0	%	1	EE42402	05/21/04	05/21/04	% calculation	
BH-5 (20-21') (4E21002-33) Soil								
Chloride	723	20.0 mg/kg	Wet 2	EE42405	05/21/04	05/22/04	SW 846 9253	

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Quality Assurance Review

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit Units	Dilution	Batch	Prepared	Analyzed	Method	Note
BH-5 (30-31') (4E21002-34) Soil					×			
Chloride	304	20.0 mg/kg Wet	2	EE42405	05/21/04	05/22/04	SW 846 9253	
% Solids	96.0	%	1	EE42402	05/21/04	05/21/04	% calculation	
BH-6 (5-6') (4E21002-35) Soil								
% Solids	94.0	%	1	EE42402	05/21/04	05/21/04	% calculation	
BH-6 (10-11') (4E21002-36) Soil								
% Solids	93.0	%	1	EE42402	05/21/04	05/21/04	% calculation	
BH-6 (30-31') (4E21002-38) Soil								
% Solids	98.0	%	1	EE42402	05/21/04	05/21/04	% calculation	
BH-7 (5-6') (4E21002-39) Soil								
% Solids	93.0	%	1	EE42402	05/21/04	05/21/04	% calculation	
BH-7 (10-11') (4E21002-40) Soil								
% Solids	94.0	%	1	EE42402	05/21/04	05/21/04	% calculation	
BH-7 (30-31') (4E21002-42) Soil								
% Solids	97.0	%	1	EE42402	05/21/04	05/21/04	% calculation	
BH-8 (5-6') (4E21002-43) Soil								
% Solids	90.0	%	1	EE42402	05/21/04	05/21/04	% calculation	
BH-8 (10-11') (4E21002-44) Soil								
% Solids	94.0	%	1	EE42402	05/21/04	05/21/04	% calculation	

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<u>KalondkJuu</u> Quality Assurance Review

Reported: 05/27/04 11:42

Organics by GC - Quality Control Environmental Lab of Texas Reporting Spike %REC RPD Source Analyte Result Limit Units Level Result %REC Limits RPD Limit Notes Batch EE42101 - Solvent Extraction (GC) Blank (EE42101-BLK1) Prepared: 05/21/04 Analyzed: 05/22/04 Gasoline Range Organics C6-C12 ND 10.0 mg/kg wet Diesel Range Organics >C12-C35 ND 10.0 ND n Total Hydrocarbon C6-C35 10.0 Surrogate: 1-Chlorooctane 36.2 50.0 72.4 70-130 mg/kg Surrogate: 1-Chlorooctadecane 40.0 " 50.0 80.0 70-130 Blank (EE42101-BLK2) Prepared: 05/21/04 Analyzed: 05/22/04 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 38.6 Surrogate: 1-Chlorooctane mg/kg 50.0 77.2 70-130 Surrogate: 1-Chlorooctadecane 37.8 50.0 75.6 70-130 LCS (EE42101-BS1) Prepared: 05/21/04 Analyzed: 05/22/04 Gasoline Range Organics C6-C12 408 81.6 75-125 10.0 mg/kg wet 500 Diesel Range Organics >C12-C35 482 10.0 500 96.4 75-125 11 890 10.0 1000 89.0 Total Hydrocarbon C6-C35 75-125 46.8 50.0 93.6 70-130 Surrogate: 1-Chlorooctane mg/kg 36.3 ,, 50.0 72.6 70-130 Surrogate: 1-Chlorooctadecane LCS (EE42101-BS2) Prepared: 05/21/04 Analyzed: 05/22/04 Gasoline Range Organics C6-C12 406 81.2 75-125 10.0 mg/kg wet 500 Diesel Range Organics >C12-C35 478 10.0 500 95.6 75-125 Total Hydrocarbon C6-C35 884 10.0 11 1000 88.4 75-125 48.8 50.0 97.6 70-130 Surrogate: 1-Chlorooctane mg/kg Surrogate: 1-Chlorooctadecane 36.2 50.0 72.4 70-130 Prepared: 05/21/04 Analyzed: 05/22/04 LCS Dup (EE42101-BSD1) Gasoline Range Organics C6-C12 408 10.0 mg/kg wet 75-125 0.00 20 500 81.6 20 Diesel Range Organics >C12-C35 494 10.0 500 98.8 75-125 2.46 " 902 20 Total Hydrocarbon C6-C35 10.0 1000 90.2 75-125 1.34 Surrogate: 1-Chlorooctane 46.5 50.0 93.0 70-130 mg/kg 37.7 70-130 Surrogate: 1-Chlorooctadecane 50.0 75.4

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05/27/04 11:42

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
									1.1111t	110103
Batch EE42101 - Solvent Extraction (GC)	<u>-</u>								
Calibration Check (EE42101-CCV1)				Prepared:	05/21/04	Analyzed	: 05/22/04			
Gasoline Range Organics C6-C12	420		mg/kg	500		84.0	80-120	11/14		
Diesel Range Organics >C12-C35	482		n	500		96.4	80-120			
Total Hydrocarbon C6-C35	902		n	1000		90.2	80-120			
Surrogate: I-Chlorooctane	52.6		"	50.0		105	70-130	<u> </u>		
Surrogate: 1-Chlorooctadecane	45.0		"	50.0		90.0	7 0-130			
Matrix Spike (EE42101-MS2)	Sou	ırce: 4E210	02-44	Prepared:	05/21/04	Analyzed	: 05/22/04			
Gasoline Range Organics C6-C12	467	10.0	mg/kg dry	532	ND	87.8	75-125			
Diesel Range Organics >C12-C35	532	10.0	"	532	ND	100	75-125			
Total Hydrocarbon C6-C35	999	10.0	n	1060	ND	94.2	75-125			
Surrogate: 1-Chlorooctane	59.0		mg/kg	50.0		118	70-130			
Surrogate: 1-Chlorooctadecane	46.4		"	50.0		<i>92.8</i>	70-130			
Matrix Spike Dup (EE42101-MSD2)	Sou	ırce: 4E210	02-44	Prepared:	05/21/04	Analyzed	: 05/22/04			
Gasoline Range Organics C6-C12	500	10.0	mg/kg dry	532	ND	94.0	75-125	6.83	20	
Diesel Range Organics >C12-C35	555	10.0	n	532	ND	104	75-125	4.23	20	
Total Hydrocarbon C6-C35	1060	10.0	"	1060	ND	100	75-125	5.93	20	
Surrogate: 1-Chlorooctane	62.2		mg/kg	50.0		124	70-130			
Surrogate: 1-Chlorooctadecane	47.9		"	50.0		95.8	70-130			
Batch EE42701 - EPA 5030C (GC)										
Blank (EE42701-BLK1)				Prepared	& Analyz	ed: 05/25/	04			·
Benzene	ND	0.0250	mg/kg wet							
Toluene	ND	0.0250								
Ethylbenzene	ND	0.0250	Ħ							
Xylene (p/m)	ND	0.0250	Ħ							
Xylene (0)	ND	0.0250	"							
Surrogate: a,a,a-Trifluorotoluene	102		ug/kg	100		102	80-120			
Surrogate: 4-Bromofluorobenzene	104		"	100		104	80-120			

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Quality Assurance Review

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Reported: 05/27/04 11:42

Organics by GC - Quality Control Environmental Lab of Texas

		Reporting	TT 1 .	Spike	Source	A/RE2	%REC	DEC	RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EE42701 - EPA 5030C (GC)										
LCS (EE42701-BS1)				Prepared	& Analyza	ed: 05/25/	04			
Benzene	89.2		ug/kg	100		89.2	80-120			
Toluene	86.9		11	100		86.9	80-120			
Ethylbenzene	86.3			100		86.3	80-120			
Xylene (p/m)	170			200		85.0	80-120			
Xylene (0)	85.6		"	100		85.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	106		н	100		106	80-120			
Surrogate: 4-Bromofluorobenzene	110		"	100		110	80-120			
Calibration Check (EE42701-CCV1)				Prepared:	05/25/04	Analyzed	1: 05/26/04			
Benzene	84.9		ug/kg	100		84.9	80-120			
Toluene	82.9		11	100		82.9	80-120			
Ethylbenzene	82.4		"	100		82.4	80-120			
Xylene (p/m)	163			200		81.5	80-120			
Xylene (0)	81.9		"	100		81.9	80-120			
Surrogate: a,a,a-Trifluorotoluene	103	,	"	100		103	80-120			
Surrogate: 4-Bromofluorobenzene	99.8		n	100		99 .8	80-120			
Matrix Spike (EE42701-MS1)	So	urce: 4E2101	10-04	Prepared:	05/25/04	Analyzed	1: 05/26/04			
Benzene	87.4		ug/kg	100	ND	87.4	80-120			
Toluene	86.1			100	ND	86.1	80-120			
Ethylbenzene	88.0		11	100	ND	88.0	80-120			
Xylene (p/m)	175		"	200	ND	87.5	80-120			
Xylene (0)	85.0		"	100	ND	85.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	110			100		110	80-120			
Surrogate: 4-Bromofluorobenzene	107		"	100		107	80-120			
Matrix Spike Dup (EE42701-MSD1)	So	urce: 4E2101	0-04	Prepared:	05/25/04	Analyzed	l: 05/26/04			
Benzene	80.3		ug/kg	100	ND	80.3	80-120	8.47	20	
Toluene	80.3		17	100	ND	80.3	80-120	6.97	20	
Ethylbenzene	82.1		13	100	ND	82.1	80-120	6.94	20	
Xylene (p/m)	163		"	200	ND	81.5	80-120	7.10	20	
Xylene (0)	82.0		51	100	ND	82.0	80-120	3.59	20	
Surrogate: a,a,a-Trifluorotoluene	92.3		"	100		92.3	80-120			
Surrogate: 4-Bromofluorobenzene	97.0		"	100		97.0	80-120			

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General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit Uni	Spike ts Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE42402 - General Preparation	(Prep)		<u> </u>						
			Prepared	l & Analyz	ed: 05/21/	04		· · · ·	
% Solids	100	%	· · · · · · · · · · · · · · · · · · ·		. <u></u> m				
Duplicate (EE42402-DUP1)	So	urce: 4E21001-01	Prepared	t & Analyz	ed: 05/21/	04			
% Solids	86.0	%		86.0		·····	0.00	20	
Batch EE42405 - Water Extraction									
Blank (EE42405-BLK1)			Prepareo	1: 05/21/04	Analyzed	1: 05/22/04			
Chloride	ND	20.0 mg/kg	Wet		to delive	<u></u>			
Matrix Spike (EE42405-MS1)	So	urce: 4E20002-42	Prepared	1: 05/21/04	Analyzed	1: 05/22/04			
Chloride	1360	20.0 mg/kg	Wet 500	936	84.8	80-120			
Matrix Spike Dup (EE42405-MSD1)	So	urce: 4E20002-42	Prepared	1: 05/21/04	Analyzed	I: 05/22/04			
Chloride	1380	20.0 mg/kg	Wet 500	936	88.8	80-120	1.46	20	
Reference (EE42405-SRM1)			Prepared	1: 05/21/04	Analyzed	1: 05/22/04			
Chloride	5000	mg/	kg 5000		100	80-120		••••••	

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Quality Assurance Review

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Highlander Environmental Corp.	Project: Pogo/ E.C. Hill A & B TB	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 1746	Reported:
Midland TX, 79705	Project Manager: Ike Tavarez	05/27/04 11:42

Notes and Definitions

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- 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

Environmental Lab of Texas

Quality Assurance Review

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Analytical Report

Prepared for:

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

Project: Pogo/ E.C. Hill A & B TB Project Number: 1746 Location: Lea Co. NM.

Lab Order Number: 4C09001

Report Date: 03/17/04

Highlander Environmental Corp.Project:Pogo/ E.C. Hill A & B TBFax: (432) 682-39461910 N. Big Spring St.Project Number:1746Reported:Midland TX, 79705Project Manager:Ike Tavarez03/17/04 09:12

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
T-1 (9.0)	4C09001-04	Soil	02/20/04 00:00	02/24/04 16:50

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General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
T-1 (9.0) (4C09001-04)									
Chloride	1040	20.0	mg/kg Wet	2	EC41502	03/15/04	03/16/04	SW 846 9253	<u> </u>

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.

Quality Assurance Review

Page 2 of 4

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit U	nits	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EC41502 - Water Extraction										
Blank (EC41502-BLK1)				Prepared:	03/15/04	Analyzed:	03/16/04			
Chloride	ND	20.0 mg/l	cg Wet							
Matrix Spike (EC41502-MS3)	Sou	rce: 4C12017-1	8	Prepared:	03/15/04	Analyzed:	03/16/04			
Chloride	510	20.0 mg/l	cg Wet	500	0.00	102	80-120			
Matrix Spike Dup (EC41502-MSD3)	Sou	rce: 4C12017-1	8	Prepared:	03/15/04	Analyzed:	03/16/04			
Chloride	500	20.0 mg/l	(g Wet	500	0.00	100	80-120	1.98	20	
Reference (EC41502-SRM1)				Prepared:	03/15/04	Analyzed:	03/16/04			
Chloride	5050	m	g/kg	5000		101	80-120	~~ .		

Environmental Lab of Texas

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Quality Assurance Review

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

Environmental Lab of Texas

n Quality Assurance Review

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 4 of 4



Analytical Report

Prepared for:

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

Project: Pogo/ E.C. Hill A & B TB Project Number: 1746 Location: Lea Co. NM.

Lab Order Number: 4C09001

Report Date: 03/11/04

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
T-1 (3.0')	4C09001-01	Soil	02/20/04 00:00	02/24/04 16:50
T-1 (7.0')	4C09001-02	Soil	02/20/04 00:00	02/24/04 16:50
T-9 (0-1')	4C09001-03	Soil	02/20/04 00:00	02/24/04 16:50

Project: Pogo/ E.C. Hill A & B TB Project Number: 1746 Project Manager: Ike Tavarez Fax: (432) 682-3946 Reported:

03/11/04 16:56

Organics by GC Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
T-9 (0-1') (4C09001-03)			· · · ·					<u> </u>	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC40903	03/09/04	03/09/04	EPA 8015M	1-02
Diesel Range Organics >C12-C35	ND	10.0	*			"	17	н	1-02
Total Hydrocarbon C6-C35	ND	10.0	**	"		"	"	м	I-02
Surrogate: 1-Chlorooctane		97.2 %	70-1	30	"	"	"	"	<i>I-0.</i>
Surrogate: 1-Chlorooctadecane		94.6 %	70-1	30	"	"	"	"	I-0.

Environmental Lab of Texas

Quality Assurance Review

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.

Project: Pogo/ E.C. Hill A & B TB Project Number: 1746 Project Manager: Ike Tavarez

Fax: (432) 682-3946 **Reported:**

03/11/04 16:56

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

		Reporting		~					
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
T-1 (3.0') (4C09001-01)									
Chloride	2550	20.0	mg/kg Wet	2	EC41101	03/09/04	03/11/04	SW 846 9253	
T-1 (7.0') (4C09001-02)									
Chloride	2020	20.0	mg/kg Wet	2	EC41101	03/09/04	03/11/04	SW 846 9253	
T-9 (0-1') (4C09001-03)									
Chloride	234	20.0	mg/kg Wet	2	EC41101	03/09/04	03/11/04	SW 846 9253	
% Solids	89.0		%	1	EC41004	03/09/04	03/10/04	% calculation	

Environmental Lab of Texas

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Quality Assurance Review

Project: Pogo/ E.C. Hill A & B TB Project Number: 1746 Project Manager: Ike Tavarez

Reported: 03/11/04 16:56

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC40903 - Solvent Extraction	(GC)	·								
Blank (EC40903-BLK1)				Prepared	& Analyze	ed: 03/09/	04			
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	n							
Surrogate: 1-Chlorooctane	38.9		mg/kg	50.0		77.8	70-130			.
Surrogate: 1-Chlorooctadecane	38.4		"	50.0		7 6.8	70-130			
Blank (EC40903-BLK2)				Prepared:	03/09/04	Analyzed	l: 03/10/04			
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	н							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	40.4		mg/kg	50.0		80.8	70-130			
Surrogate: 1-Chlorooctadecane	42.8		"	50.0		85.6	70-130			
LCS (EC40903-BS1)				Prepared:	03/09/04	Analyzed	l: 03/10/04			
Gasoline Range Organics C6-C12	396		mg/kg	500	<u> </u>	79.2	75-125			
Diesel Range Organics >C12-C35	504		"	500		101	75-125			
Total Hydrocarbon C6-C35	900		"	1000		90.0	75-125			
Surrogate: 1-Chlorooctane	53.8		"	50.0		108	70-130			
Surrogate: 1-Chlorooctadecane	44.2		"	50.0		88.4	70-130			
LCS (EC40903-BS2)				Prepared:	: 03/09/04	Analyzed	1: 03/10/04			
Gasoline Range Organics C6-C12	408	10.0	mg/kg wet	500	••••	81.6	75-125			
Diesel Range Organics >C12-C35	473	10.0	н	500		94.6	75-125			
Total Hydrocarbon C6-C35	881	10.0	н	1000		88.1	75-125			
Surrogate: 1-Chlorooctane	54.7		mg/kg	50.0		109	70-130			
Surrogate: 1-Chlorooctadecane	44.6		"	50.0		89.2	70-130			
Calibration Check (EC40903-CCV1)				Prepared	& Analyz	ed: 03/09/	04			
Gasoline Range Organics C6-C12	443		mg/kg	500		88.6	80-120			
Diesel Range Organics >C12-C35	519		"	500		104	80-120			
Total Hydrocarbon C6-C35	962		Ħ	1000		96.2	80-120			
Surrogate: 1-Chlorooctane	59.8		<i>n</i>	50.0		120	70-130			
Surrogate: 1-Chlorooctadecane	48.1		"	50.0		<i>96.2</i>	70-130			

Environmental Lab of Texas

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Quality Assurance Review

Page 4 of 7

Reported: 03/11/04 16:56

Organics by GC - Quality Control

Environmental Lab of Texas

	b	Reporting	Spike	Source	4/222	%REC		RPD	
Analyte	Result	Limit Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EC40903 - Solvent Extraction ((GC)								
Calibration Check (EC40903-CCV2)			Prepared	& Analyze	ed: 03/09/	04			
Gasoline Range Organics C6-C12	437	mg/kg	500		87.4	80-120			
Diesel Range Organics >C12-C35	527		500		105	80-120			
Total Hydrocarbon C6-C35	964	"	1000		96.4	80-120			
Surrogate: 1-Chlorooctane	59.2	"	50.0		118	70-130			
Surrogate: 1-Chlorooctadecane	48.4	"	50.0		96.8	70-130			
Matrix Spike (EC40903-MS1)	Sou	rce: 4C09001-03	Prepared	03/09/04	Analyzed	l: 03/10/04			
Gasoline Range Organics C6-C12	496	mg/kg	500	ND	99.2	75-125			
Diesel Range Organics >C12-C35	518	n	500	ND	104	75-125			
Total Hydrocarbon C6-C35	1010	п	1000	ND	101	75-125			
Surrogate: 1-Chlorooctane	55.2	····· // // // // // // // // // // // /	50.0		110	70-130			
Surrogate: 1-Chlorooctadecane	49.9	"	50.0		<i>99.8</i>	70-130			
Matrix Spike (EC40903-MS2)	Sou	rce: 4C09008-01	Prepared	: 03/09/04	Analyzed	I: 03/10/04			
Gasoline Range Organics C6-C12	527	10.0 mg/kg d	y 538	ND	98.0	75-125			
Diesel Range Organics >C12-C35	774	10.0 "	538	203	106	75-125			
Total Hydrocarbon C6-C35	1300	10.0 "	1080	203	102	75-125			
Surrogate: 1-Chlorooctane	57.6	mg/kg	50.0		115	70-130			·······
Surrogate: 1-Chlorooctadecane	50.2	"	50.0		100	70-130			
Matrix Spike Dup (EC40903-MSD1)	Sou	rce: 4C09001-03	Prepared	03/09/04	Analyzed	I: 03/10/04			
Gasoline Range Organics C6-C12	476	mg/kg	500	ND	95.2	75-125	4.12	20	
Diesel Range Organics >C12-C35	537	11	500	ND	107	75-125	3.60	20	
Total Hydrocarbon C6-C35	1010		1000	ND	101	75-125	0.00	20	
Surrogate: 1-Chlorooctane	55.2		50.0		110	70-130			
Surrogate: 1-Chlorooctadecane	49.9	"	50.0		99.8	70-130			
Matrix Spike Dup (EC40903-MSD2)	Sou	rce: 4C09008-01	Prepared	: 03/09/04	Analyzed	I: 03/10/04			
Gasoline Range Organics C6-C12	522	10.0 mg/kg da	y 538	ND	97.0	75-125	0.953	20	
Diesel Range Organics >C12-C35	777	10.0 "	538	203	107	75-125	0.387	20	
Total Hydrocarbon C6-C35	1300	10.0 "	1080	203	102	75-125	0.00	20	
Surrogate: 1-Chlorooctane	57.0	mg/kg	50.0		114	70-130			
Surrogate: 1-Chlorooctadecane	50.2	"	50.0	1	100	70-130			

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Quality Assurance Review

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 EC41004 - % Solids										
Blank (EC41004-BLK1)				Prepared:	03/09/04	Analyzed:	03/10/04			
% Solids	100		%							
Duplicate (EC41004-DUP1)	Sou	ırce: 4C0800	7-03	Prepared	03/09/04	Analyzed:	03/10/04			
% Solids	90.0		%		90.0			0.00	20	
Batch EC41101 - Water Extraction										
Blank (EC41101-BLK1)				Prepared	03/09/04	Analyzed:	03/11/04			
Chloride	ND	20.0 1	ng/kg Wet							
Matrix Spike (EC41101-MS1)	Sou	irce: 4C0900	1-01	Prepared	03/09/04	Analyzed:	03/11/04			
Chloride	3010	20.0 1	ng/kg Wet	500	2550	92.0	80-120			
Matrix Spike Dup (EC41101-MSD1)	Sou	urce: 4C0900	1-01	Prepared	: 03/09/04	Analyzed:	03/11/04			
Chloride	3020	20.0 1	ng/kg Wet	500	2550	94.0	80-120	0.332	20	

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Quality Assurance Review

Notes and Definitions

I-02	This result was analyzed outside of the EPA recommended holding time.
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

Environmental Lab of Texas

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Quality Assurance Review

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CLIENT, WAME: Foducing C	SITE MANAGER: MARANEZ			PR	NESER METI	VATTV HOD	E			8	3		860/62	19/04.31		TDS, Chloride			
PROJECT NO .: 1746 PROJECT N	AMES SITE MANAGER: IMANOZ AMES OF E.C. If OF A = B GC CO. N SAMPLE IDENTIFICATION	TB.	(Y/N)	\square			809	808	2	0 Ag Ao		Volatilo	8240/8	L Vol. 8	808	Щ 201 201 201 201 201 201 201 201 201 201	(4 19)		
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Leboratory retains yellow copy - Return original copy to Highlander Enviromental Corp. ntal Corp. – Project Manager retains pink copy – Accounting receives Gold copy.

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Midland, Texas FAX			
TO: `	Jeanne		
WITH:	Environmental Lab of Texas		
FAX:	1-(432) 563-1713		
FROM:	lke Tavarez	an	
WITH:	Highlander Environmental Corp. Midland, Texas		
PAGES: (including-Fax co			
Description	<u>a:</u>		

Request additional analysis: Lab. Order # 4B25003

Pogo Producing Company - (1746) E.C. Hill Tank Battery, Lea County, New Mexico

Run: T-9 (0-1') - TPH and chloride

Run: $T-1(3.0^{\circ})$ - chloride $T-1(7.0^{\circ})$ - chloride

Please call me if you have any questions, Thanks

HIGHLANDER ENVIRONMENTAL CORP. 1910 N. BIG SPRING MIDLAND, TEXAS 79705 (432) 682-4559 e-mail: <u>itayarez@bee-enviro.com</u>