

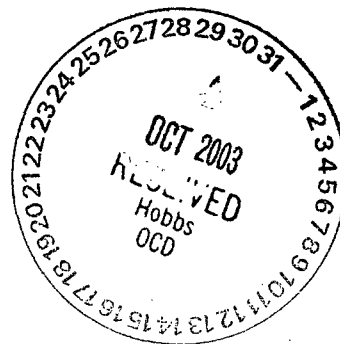


Highlander Environmental Corp.

Midland, Texas

October 14, 2003

Mr. Larry Johnson
Environmental Engineer Specialist
Oil Conservation Division- District I
1625 N. French Drive
P. O. Box 1980
Hobbs, New Mexico 88240



RE: Assessment and Closure Report for the Pogo Producing Company, Covington 18 Federal Tank Battery located in Section 25, Township 22 South, Range 32 East, Unit Letter M, Lea County, New Mexico

Dear Mr. Johnson:

Highlander Environmental Corp. (Highlander) was contacted by Pogo Producing Company (Pogo) to assess a spill on the Covington 18 Federal Tank Battery located in Unit letter M, Section 25, Township 22 South, Range 32 East, Lea County, New Mexico (Site). The State of New Mexico C-141 (Initial) is shown in Appendix A. The Site is shown in Figure 1.

Background

According to the State of New Mexico C-141 report, the spill occurred on September 23, 2003 from an overflow of a water tank located inside the tank battery firewalls. The overflow released 60 barrels of water and 15 barrels of oil. No fluids were recovered from the release. The fluids from the release pooled inside the tank battery firewall. The fluids breached the southeast corner of the firewall and flowed onto native soil. The impacted area inside the firewall measured approximately 40' x 130' and the area outside the firewall measured 270' long and 6' to 8' wide. The spill areas are shown on Figure 2.

Groundwater and Regulatory

According to published data from "Geology and Groundwater Resources of Lea County, New Mexico", dated 1952, no water wells were reported in Township 22 South, Range 32 East. The New Mexico State Engineer Office database did show two wells in Section 14 and 19, Township 22 South, Range 32 East with water levels of 350' and 280', respectively. The well records are shown in Appendix B.

Page 17891
Facility - PPAC0605330880
Incident - PPAC0605331012
1910 N. Big Spring
application - PPAC0605331350

Midland, Texas 79705

(915) 682-4559

Fax (915) 682-3946

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 5,000 mg/kg.

Corrective Action and Assessment

From September 23 to 24, 2003, the impacted soil from the tank battery and the southeast spill area was excavated to a depth of 6" to 1.0' below surface. The excavated soil was transported and disposed at Sundance Services Inc., located in Eunice, New Mexico.

On September 24, 2003, Highlander personnel installed a total of nine (9) auger holes using a stainless steel bucket-type hand auger to evaluate and attempt to delineate the extent of impacted soil. Five (5) auger holes were placed inside the tank battery firewall (AH-1 TB – AH-5 TB) and four (4) auger holes (AH-1 SA – AH-4 SA) were placed in the southeast spill area. Soil samples were collected at depths of 0-1' and 2-2.5' for TPH evaluation by method 8015M, BTEX by method 8021B and chloride by method SW 846-9252. The soil sample results are shown in Table 1. The laboratory reports and the chain of custody documentation are included in Appendix C.

Soil Sample Results

Referring to Table 1, the only TPH concentrations detected were from AH-3 TB, AH-4 TB and AH-5 TB at 0-1', which were below the RRAL. The southeast spill area showed TPH levels below the method detection limit. Two samples (AH-3 TB and AH-5 TB) were selected for BTEX analysis based upon the TPH concentrations and showed BTEX levels below the RRAL.

The tank battery area showed chloride concentration at 0-1' ranging from 744 mg/kg (AH-5 TB) to 8,510 mg/kg (AH-2 TB). The southeast spill area also showed chloride concentrations at 0-1' ranging from 408 mg/kg (AH-3 SA) to 14,200 mg/kg (AH-1 SA). The deeper samples do show a significant decline in the chloride concentrations in both areas.

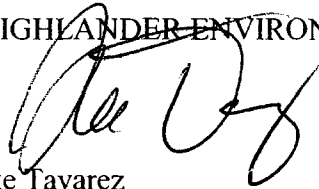
Conclusions and Recommendation

The hydrocarbon evaluation at the Site showed concentrations below the RRAL for TPH (5,000 mg/kg) and BTEX. The chloride concentrations were somewhat elevated, however, these levels were found in the shallow sandy soils and declined significantly with depth. Based on the depth of groundwater in the area, the chloride concentrations detected are not considered an environmental concern. The area in the tank battery has been backfilled with clean fill material and gravel. Based on the data, Pogo Producing Company proposes closure for the spill areas. The Final C-141 is enclosed in Appendix A.



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

HIGHLANDER ENVIRONMENTAL CORP,



Ike Tavaréz
Project Manager/Geologist

cc: Don Riggs – Pogo Producing Company
Barrett Smith – Pogo Producing Company



TABLE

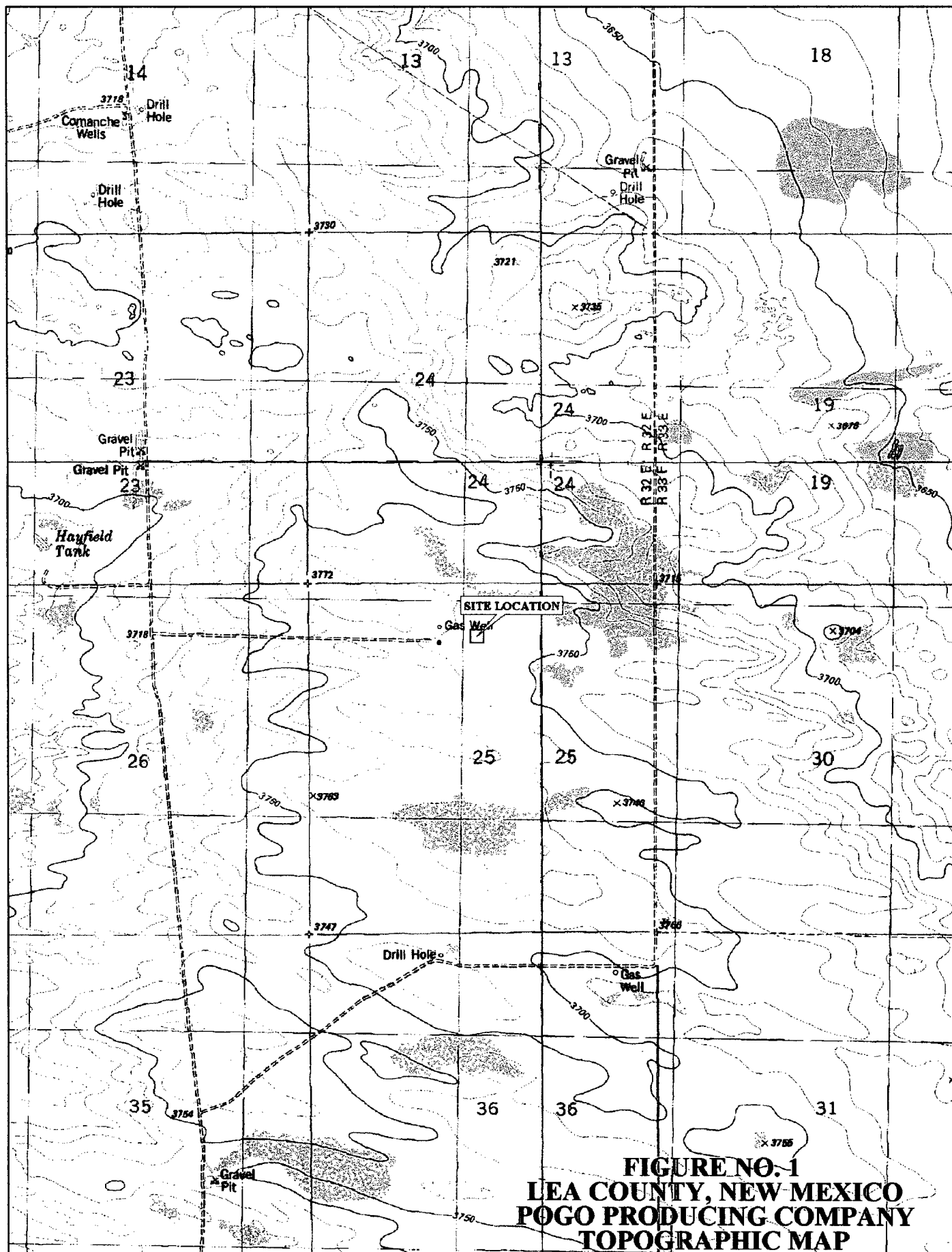
Table 1
Pogo Producing Company
Covington 18 Tank Battery
Summary of BTEX, TPH and Chloride Analysis of Soil Samples
Lea County, New Mexico

Sample ID	Sample Depth, feet BGL	Sample Date	TPH			Benzene mg/kg	Toluene mg/kg	Ethyl-benzene mg/kg	Xylene mg/kg	Total BTEX mg/kg	Chloride mg/kg
			GRO mg/kg	DRO mg/kg	Total mg/kg						
Tank Battery Area											
AH-1, TB	0-1'	9/24/03	<10.0	<10.0	<10.0	-	-	-	-	-	1,650
AH-1, TB	2-2.5'	9/24/03	-	-	-	-	-	-	-	-	70.9
						-	-	-	-	-	
AH-2, TB	0-1'	9/24/03	<10.0	<10.0	<10.0	-	-	-	-	-	8,510
AH-2, TB	2-2.5'	9/24/03	-	-	-	-	-	-	-	-	1,200
						-	-	-	-	-	
AH-3, TB	0-1'	9/24/03	<50.0	577	577	<0.025	<0.025	<0.025	<0.025	<0.025	1,650
AH-3, TB	2-2.5'	9/24/03	-	-	-	-	-	-	-	-	390
						-	-	-	-	-	
AH-4 TB	0-1'	9/24/03	42.8	319	362	-	-	-	-	-	7,090
AH-4, TB	2-2.5'	9/24/03	-	-	-	-	-	-	-	-	160
						-	-	-	-	-	
AH-5, TB	0-1'	9/24/03	241	3,250	3,491	<0.025	<0.025	0.106	0.199	0.305	744
AH-5, TB	2-2.5'	9/24/03	-	-	-	-	-	-	-	-	106
Southeast Spill Area											
AH-1, SA	0-1'	9/24/03	<10.0	<10.0	<10.0	-	-	-	-	-	14,200
AH-1, SA	2-2.5'	9/24/03	-	-	-	-	-	-	-	-	1,600
						-	-	-	-	-	
AH-2, SA	0-1'	9/24/03	<10.0	<10.0	<10.0	-	-	-	-	-	7,620
AH-2, SA	2-2.5'	9/24/03	-	-	-	-	-	-	-	-	70.9
						-	-	-	-	-	
AH-3, SA	0-1'	9/24/03	<10.0	<10.0	<10.0	-	-	-	-	-	408
AH-3, SA	2-2.5'	9/24/03	-	-	-	-	-	-	-	-	160
						-	-	-	-	-	
AH-4, SA	0-1'	9/24/03	<10.0	<10.0	<10.0	-	-	-	-	-	4,080
AH-4, SA	2-2.5'	9/24/03	-	-	-	-	-	-	-	-	2,570
AH-4, SA	3-3.5	9/24/03	-	-	-	-	-	-	-	-	106

(-) not analyzed

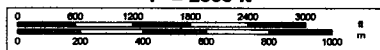
Depths - below excavation bottom

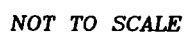
FIGURES



© 2002 DeLorme. 3-D TopoQuads®. Data copyright of content owner.
www.delorme.com

Scale 1 : 24,000
 1" = 2000 ft





HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

FILE:
C:\208J\POGO\
SITE

APPENDIX A

State of New Mexico Form C-141

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 South First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410
District IV - (505) 827-7131

Barrett
State of New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-141
Originated 2/13/97

Submit 2 copies to
Appropriate District
Office in accordance
with Rule 116 on
back side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name <i>Togo Producing Co.</i>	Contact <i>BARRETT Smith</i>	
Address <i>P.O. Box 10340, Midland TX</i>	Telephone No. <i>432-685-8100</i>	
Facility Name <i>COVINGTON 18 TANK BATTERY</i>	Facility Type <i>TANK BATTERY</i>	
Surface Owner <i>BLM</i>	Mineral Owner <i>BLM</i>	Lease No. <i>NM 2379</i>

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	<i>25</i>	<i>22 S</i>	<i>32 E</i>	<i>660</i>	<i>NORTH</i>	<i>1980</i>	<i>WEST</i>	<i>LEA</i>

NATURE OF RELEASE

Type of Release <i>SALT WATER & OIL</i>	Volume of Release <i>60 BBL WATER 15 BBL OIL</i>	Volume Recovered <i>— 0 —</i>
Source of Release	Date and Hour of Occurrence <i>9/23/03</i>	Date and Hour of Discovery <i>9/23/03 7:30 AM</i>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <i>MARY JOHNSON</i>	
By Whom? <i>CLAY OSBORN</i>	Date and Hour <i>8:20</i>	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully. (Attach Additional Sheets If Necessary)

NO

Describe Cause of Problem and Remedial Action Taken. (Attach Additional Sheets If Necessary)

ELECTRICAL POWER TO TRANS. PUMP DID NOT COME ON. RAN WATER TANK OVER. REPAIR ELECTRIC CONTROL TO PUMP.

Describe Area Affected and Cleanup Action Taken. (Attach Additional Sheets If Necessary)

SOIL AROUND TANK BATTERY DUG OUT CONTAMINATED SOIL & CLEAN OUT SIDE OF TANKS WITH A STEAM CLEANER.

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

Signature <i>Clay Osborn</i>	OIL CONSERVATION DIVISION		
Printed Name <i>CLAY OSBORN</i>	Approved by District Supervisor:	Expiration Date:	
Title <i>Field Foreman</i>	Approval Date:	Attached <input type="checkbox"/>	
Date <i>9/23/03</i>	Phone <i>432-631-0129</i>	Conditions of Approval:	

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised June 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company	Pogo Producing Company	Contact	Barritt Smith
Address	300 N. Marienfeld, Ste 600, Midland, Tx. 79701	Telephone No.	(432) 685-8100
Facility Name	Covington 18 Federal Tank Battery	Facility Type	Tank Battery
Surface Owner	BLM	Mineral Owner	BLM
		Lease No.	NM - 2379

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	25	22S	32E	660	North	1980	West	Lea

NATURE OF RELEASE

Type of Release	Oil and Water	Volume of Release	15 bbls of oil and 60 bbls of water	Volume Recovered	0
Source of Release	water tank over flow	Date and Hour of Occurrence	9/23/03	Date and Hour of Discovery	9/23/03 7:30 am
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Larry Johnson (NMOCD, Hobbs)		
By Whom?	Clay Osborn (Pogo)	Date and Hour	9/23/03 8:20 am		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Pump did not turn on and ran over the water tank. The electric control to the pump was repaired. The fluids released were all contained inside dike, except in the southeast corner of the dike breached and flowed southeast of the tank battery on native soil.

Describe Area Affected and Cleanup Action Taken.*

The spill area inside the tank battery dike measured approximately 40'x 130' and the southeast spill area measured approximately 6'x 270'. Both areas were excavated to a depth of 6" to 1.0' and the excavated soil was disposed at Sundance Services, Inc. in Eunice, NM. Soil samples were collected from the both spill areas and showed levels below the RRAL for TPH and BTEX. A Closure Report was prepared and submitted to the NMOCD for review.

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

Signature: <i>Ike Tavaréz (Agent for Pogo)</i>		OIL CONSERVATION DIVISION	
Printed Name: Ike Tavaréz		Approved by District Supervisor:	
Title: Senior Geologist		Approval Date:	Expiration Date:
E-mail Address: itavarez@hec-enviro.com		Conditions of Approval:	
Date: 10/9/03	Phone: (432) 682-4559	Attached <input type="checkbox"/>	

* Attach Additional Sheets If Necessary

APPENDIX B

Well Reports

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 22S Range: 32E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ☐ Non-Domestic ☐ Domestic ☒ All

Well / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

WATERS Menu

Help

AVERAGE DEPTH OF WATER REPORT 10/03/2003

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg
C	22S	32E	14				2	340	360	350
C	22S	32E	19				1	280	280	280

Record Count: 3

APPENDIX C

Analytical Results

ANALYTICAL REPORT

Prepared for:

**IKE TAVAREZ
HIGHLANDER ENVIRONMENTAL CORP.
1910 N. BIG SPRING STREET
MIDLAND, TX 79705**

Project: Pogo Producing Co./ Covington 18 TB

PO#:

Order#: G0307585

Report Date: 10/01/2003

Certificates

US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

HIGHLANDER ENVIRONMENTAL CORP.
1910 N. BIG SPRING STREET
MIDLAND, TX 79705
682-3946

Order#: G0307585
Project: 2063
Project Name: Pogo Producing Co./ Covington 18 TB
Location: Lea County, NM

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u> <u>Collected</u>	<u>Date / Time</u> <u>Received</u>	<u>Container</u>	<u>Preservative</u>
0307585-01	AH-1 (0-1'), SA	SOIL	9/24/03	9/26/03 17:00	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M Chloride	Rejected: No		Temp: 4.0 C		
0307585-02	AH-1 (2-2.5'), SA	SOIL	9/24/03	9/26/03 17:00	4 oz glass	Ice
	<u>Lab Testing:</u> Chloride	Rejected: No		Temp: 4.0 C		
0307585-04	AH-2 (0-1), SA	SOIL	9/24/03	9/26/03 17:00	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M Chloride	Rejected: No		Temp: 4.0 C		
0307585-05	AH-2 (2-2.5'), SA	SOIL	9/24/03	9/26/03 17:00	4 oz glass	Ice
	<u>Lab Testing:</u> Chloride	Rejected: No		Temp: 4.0 C		
0307585-07	AH-3 (0-1'), SA	SOIL	9/24/03	9/26/03 17:00	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M Chloride	Rejected: No		Temp: 4.0 C		
0307585-08	AH-3 (2-2.5'), SA	SOIL	9/24/03	9/26/03 17:00	4 oz glass	Ice
	<u>Lab Testing:</u> Chloride	Rejected: No		Temp: 4.0 C		
0307585-10	AH-4 (0-1), SA	SOIL	9/24/03	9/26/03 17:00	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M Chloride	Rejected: No		Temp: 4.0 C		

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

HIGHLANDER ENVIRONMENTAL CORP.
1910 N. BIG SPRING STREET
MIDLAND, TX 79705
682-3946

Order#: G0307585
Project: 2063
Project Name: Pogo Producing Co./ Covington 18 TB
Location: Lea County, NM

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time	Date / Time	Container	Preservative
			Collected	Received		
0307585-11	AH-4 (2-2.5'), SA	SOIL	9/24/03	9/26/03 17:00	4 oz glass	Ice
	<u>Lab Testing:</u> Chloride	Rejected: No		Temp: 4.0 C		
0307585-12	AH-4 (3-3.5'), SA	SOIL	9/24/03	9/26/03 17:00	4 oz glass	Ice
	<u>Lab Testing:</u> Chloride	Rejected: No		Temp: 4.0 C		
0307585-13	AH-1 (0-1'), TB	SOIL	9/24/03	9/26/03 17:00	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M Chloride	Rejected: No		Temp: 4.0 C		
0307585-15	AH-1 (2-2.5'), TB	SOIL	9/24/03	9/26/03 17:00	4 oz glass	Ice
	<u>Lab Testing:</u> Chloride	Rejected: No		Temp: 4.0 C		
0307585-16	AH-2 (0-1'), TB	SOIL	9/24/03	9/26/03 17:00	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M Chloride	Rejected: No		Temp: 4.0 C		
0307585-17	AH-2 (2-2.5'), TB	SOIL	9/24/03	9/26/03 17:00	4 oz glass	Ice
	<u>Lab Testing:</u> Chloride	Rejected: No		Temp: 4.0 C		
0307585-19	AH-3 (0-1'), TB	SOIL	9/24/03	9/26/03 17:00	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX Chloride	Rejected: No		Temp: 4.0 C		

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

HIGHLANDER ENVIRONMENTAL CORP.
1910 N. BIG SPRING STREET
MIDLAND, TX 79705
682-3946

Order#: G0307585
Project: 2063
Project Name: Pogo Producing Co./ Covington 18 TB
Location: Lea County, NM

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u> <u>Collected</u>	<u>Date / Time</u> <u>Received</u>	<u>Container</u>	<u>Preservative</u>
0307585-20	AH-3 (2-2.5'), TB	SOIL	9/24/03	9/26/03 17:00	4 oz glass	Ice
	<u>Lab Testing:</u> Chloride	Rejected: No		Temp: 4.0 C		
0307585-22	AH-4 (0-1'), TB	SOIL	9/24/03	9/26/03 17:00	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M Chloride	Rejected: No		Temp: 4.0 C		
0307585-23	AH-4 (2-2.5'), TB	SOIL	9/24/03	9/26/03 17:00	4 oz glass	Ice
	<u>Lab Testing:</u> Chloride	Rejected: No		Temp: 4.0 C		
0307585-25	AH-5 (0-1'), TB	SOIL	9/24/03	9/26/03 17:00	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX Chloride	Rejected: No		Temp: 4.0 C		
0307585-26	AH-5 (2-2.5'), TB	SOIL	9/24/03	9/26/03 17:00	4 oz glass	Ice
	<u>Lab Testing:</u> Chloride	Rejected: No		Temp: 4.0 C		

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

IKE TAVAREZ
HIGHLANDER ENVIRONMENTAL CORP.
1910 N. BIG SPRING STREET
MIDLAND, TX 79705

Order#: G0307585
Project: 2063
Project Name: Pogo Producing Co./ Covington 18 TB
Location: Lea County, NM

Lab ID: 0307585-01
Sample ID: AH-1 (0-1'), SA

8015M

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
		9/27/03	1	1	JLH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	104%	70	130
1-Chlorooctadecane	86%	70	130

Lab ID: 0307585-04
Sample ID: AH-2 (0-1), SA

8015M

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
		9/27/03	1	1	JLH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	124%	70	130
1-Chlorooctadecane	104%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

Page 1 of 6

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

IKE TAVAREZ
HIGHLANDER ENVIRONMENTAL CORP.
1910 N. BIG SPRING STREET
MIDLAND, TX 79705

Order#: G0307585
Project: 2063
Project Name: Pogo Producing Co./ Covington 18 TB
Location: Lea County, NM

Lab ID: 0307585-07
Sample ID: AH-3 (0-1'), SA

8015M

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
		9/29/03	1	1	JLH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	129%	70	130
1-Chlorooctadecane	103%	70	130

Lab ID: 0307585-10
Sample ID: AH-4 (0-1), SA

8015M

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
		9/29/03	1	1	JLH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	98%	70	130
1-Chlorooctadecane	75%	70	130

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

IKE TAVAREZ
HIGHLANDER ENVIRONMENTAL CORP.
1910 N. BIG SPRING STREET
MIDLAND, TX 79705

Order#: G0307585
Project: 2063
Project Name: Pogo Producing Co./ Covington 18 TB
Location: Lea County, NM

Lab ID: 0307585-13
Sample ID: AH-1 (0-1'), TB

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		9/29/03	1	1	JLH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	99%	70	130
1-Chlorooctadecane	74%	70	130

Lab ID: 0307585-16
Sample ID: AH-2 (0-1'), TB

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		9/29/03	1	1	JLH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	98%	70	130
1-Chlorooctadecane	74%	70	130

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

IKE TAVAREZ
HIGHLANDER ENVIRONMENTAL CORP.
1910 N. BIG SPRING STREET
MIDLAND, TX 79705

Order#: G0307585
Project: 2063
Project Name: Pogo Producing Co./ Covington 18 TB
Location: Lea County, NM

Lab ID: 0307585-19
Sample ID: AH-3 (0-1'), TB

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		9/29/03	1	5	JLH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<50.0	50.0
DRO, >C12-C35	577	50.0
TOTAL, C6-C35	577	50.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	20%	70	130
1-Chlorooctadecane	16%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0006995-02		9/30/03	1	25	RKT	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	<0.025	0.025
Ethylbenzene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	90%	80	120
Bromofluorobenzene	82%	80	120

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

IKE TAVAREZ
HIGHLANDER ENVIRONMENTAL CORP.
1910 N. BIG SPRING STREET
MIDLAND, TX 79705

Order#: G0307585
Project: 2063
Project Name: Pogo Producing Co./ Covington 18 TB
Location: Lea County, NM

Lab ID: 0307585-22
Sample ID: AH-4 (0-1'), TB

8015M

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
		9/29/03	1	1	JLH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	42.8	10.0
DRO, >C12-C35	319	10.0
TOTAL, C6-C35	362	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	98%	70	130
1-Chlorooctadecane	80%	70	130

Lab ID: 0307585-25
Sample ID: AH-5 (0-1'), TB

8015M

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
		9/29/03	1	1	JLH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	241	10.0
DRO, >C12-C35	3,250	10.0
TOTAL, C6-C35	3,491	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	101%	70	130
1-Chlorooctadecane	120%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

Page 5 of 6

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

IKE TAVAREZ
HIGHLANDER ENVIRONMENTAL CORP.
1910 N. BIG SPRING STREET
MIDLAND, TX 79705

Order#: G0307585
Project: 2063
Project Name: Pogo Producing Co./ Covington 18 TB
Location: Lea County, NM

Lab ID: 0307585-25
Sample ID: AH-5 (0-1'), TB

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0006995-02		9/30/03	1	25	RKT	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	<0.025	0.025
Ethylbenzene	0.106	0.025
p/m-Xylene	0.157	0.025
o-Xylene	0.042	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	100%	80	120
Bromofluorobenzene	92%	80	120

Approval:

Raland K. Tuttle, Lab Director, QA Officer
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

Date

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

IKE TAVAREZ
HIGHLANDER ENVIRONMENTAL CORP.
1910 N. BIG SPRING STREET
MIDLAND, TX 79705

Order#: G0307585
Project: 2063
Project Name: Pogo Producing Co./ Covington 18 TB
Location: Lea County, NM

Lab ID: 0307585-01
Sample ID: AH-1 (0-1'), SA

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	14200	mg/kg	1	20	9253	9/29/03	SB

Lab ID: 0307585-02
Sample ID: AH-1 (2-2.5'), SA

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	1600	mg/kg	1	20	9253	9/29/03	SB

Lab ID: 0307585-04
Sample ID: AH-2 (0-1'), SA

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	7620	mg/kg	1	20	9253	9/29/03	SB

Lab ID: 0307585-05
Sample ID: AH-2 (2-2.5'), SA

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	70.9	mg/kg	1	20	9253	9/29/03	SB

Lab ID: 0307585-07
Sample ID: AH-3 (0-1'), SA

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	408	mg/kg	1	20	9253	9/29/03	SB

Lab ID: 0307585-08
Sample ID: AH-3 (2-2.5'), SA

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	160	mg/kg	1	20	9253	9/29/03	SB

RL = Reporting Limit N/A = Not Applicable

Page 1 of 4

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

IKE TAVAREZ
HIGHLANDER ENVIRONMENTAL CORP.
1910 N. BIG SPRING STREET
MIDLAND, TX 79705

Order#: G0307585
Project: 2063
Project Name: Pogo Producing Co./ Covington 18 TB
Location: Lea County, NM

Lab ID: 0307585-10
Sample ID: AH-4 (0-1), SA

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	4080	mg/kg	1	20	9253	9/29/03	SB

Lab ID: 0307585-11
Sample ID: AH-4 (2-2.5'), SA

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	2570	mg/kg	1	20	9253	9/29/03	SB

Lab ID: 0307585-12
Sample ID: AH-4 (3-3.5'), SA

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	106	mg/kg	1	20	9253	9/29/03	SB

Lab ID: 0307585-13
Sample ID: AH-1 (0-1'), TB

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	1650	mg/kg	1	20	9253	9/29/03	SB

Lab ID: 0307585-15
Sample ID: AH-1 (2-2.5'), TB

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	70.9	mg/kg	1	20	9253	9/29/03	SB

Lab ID: 0307585-16
Sample ID: AH-2 (0-1'), TB

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	8510	mg/kg	1	20	9253	9/29/03	SB

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

IKE TAVAREZ
HIGHLANDER ENVIRONMENTAL CORP.
1910 N. BIG SPRING STREET
MIDLAND, TX 79705

Order#: G0307585
Project: 2063
Project Name: Pogo Producing Co./ Covington 18 TB
Location: Lea County, NM

Lab ID: 0307585-17
Sample ID: AH-2 (2-2.5'), TB

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	1200	mg/kg	1	20	9253	9/29/03	SB

Lab ID: 0307585-19
Sample ID: AH-3 (0-1'), TB

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	1650	mg/kg	1	20	9253	9/29/03	SB

Lab ID: 0307585-20
Sample ID: AH-3 (2-2.5'), TB

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	390	mg/kg	1	20	9253	9/29/03	SB

Lab ID: 0307585-22
Sample ID: AH-4 (0-1'), TB

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	7090	mg/kg	1	20	9253	9/29/03	SB

Lab ID: 0307585-23
Sample ID: AH-4 (2-2.5'), TB

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	160	mg/kg	1	20	9253	9/29/03	SB

Lab ID: 0307585-25
Sample ID: AH-5 (0-1'), TB

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	744	mg/kg	1	20	9253	9/29/03	SB

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

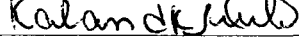
IKE TAVAREZ
HIGHLANDER ENVIRONMENTAL CORP.
1910 N. BIG SPRING STREET
MIDLAND, TX 79705

Order#: G0307585
Project: 2063
Project Name: Pogo Producing Co./ Covington 18 TB
Location: Lea County, NM

Lab ID: 0307585-26
Sample ID: AH-5 (2-2.5'), TB

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution</u> <u>Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date</u> <u>Analyzed</u>	<u>Analyst</u>
Chloride	106	mg/kg	1	20	9253	9/29/03	SB

Approval:  10-02-03
Raland K. Tuttle, Lab Director, QA Officer
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0307585

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0006973-02			<10.0		
TOTAL, C6-C35-mg/kg		0006990-02			<10.0		
CONTROL	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0006973-03		952	775	81.4%	
TOTAL, C6-C35-mg/kg		0006990-03		952	668	70.2%	
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0307565-01	79.9	952	889	85.5%	
TOTAL, C6-C35-mg/kg		0307585-07	0	952	803	84.3%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0307565-01	79.9	952	905	86.7%	1.8%
TOTAL, C6-C35-mg/kg		0307585-07	0	952	798	83.8%	0.6%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0006973-05		1000	1056	105.6%	
TOTAL, C6-C35-mg/kg		0006990-05		1000	960	96.0%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0307585

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0006995-02			<0.025		
Toluene-mg/kg		0006995-02			<0.025		
Ethylbenzene-mg/kg		0006995-02			<0.025		
p/m-Xylene-mg/kg		0006995-02			<0.025		
o-Xylene-mg/kg		0006995-02			<0.025		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0307590-02	0	2.5	2.65	106.%	
Toluene-mg/kg		0307590-02	0	2.5	2.61	104.4%	
Ethylbenzene-mg/kg		0307590-02	0.03	2.5	2.52	99.6%	
p/m-Xylene-mg/kg		0307590-02	0.05	5	5.08	100.6%	
o-Xylene-mg/kg		0307590-02	0	2.5	2.45	98.%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0307590-02	0	2.5	2.46	98.4%	7.4%
Toluene-mg/kg		0307590-02	0	2.5	2.45	98.%	6.3%
Ethylbenzene-mg/kg		0307590-02	0.03	2.5	2.42	95.6%	4.%
p/m-Xylene-mg/kg		0307590-02	0.05	5	4.91	97.2%	3.4%
o-Xylene-mg/kg		0307590-02	0	2.5	2.40	96.%	2.1%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0006995-05		0.1	0.110	110.%	
Toluene-mg/kg		0006995-05		0.1	0.108	108.%	
Ethylbenzene-mg/kg		0006995-05		0.1	0.100	100.%	
p/m-Xylene-mg/kg		0006995-05		0.2	0.202	101.%	
o-Xylene-mg/kg		0006995-05		0.1	0.095	95.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0307585

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0006982-01			<20.0		
Chloride-mg/kg		0006983-01			<20.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0307584-01	6380	500	6910	106.%	
Chloride-mg/kg		0307585-22	7090	500	7620	106.%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0307584-01	6380	500	6910	106.%	0.%
Chloride-mg/kg		0307585-22	7090	500	7620	106.%	0.%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0006982-04		5000	4960	99.2%	
Chloride-mg/kg		0006983-04		5000	4960	99.2%	

CASE NARRATIVE

ENVIRONMENTAL LAB OF TEXAS

Prepared for:

HIGHLANDER ENVIRONMENTAL CORP.
1910 N. BIG SPRING STREET
MIDLAND, TX 79705

Order#: G0307585

Project: Pogo Producing Co./
Covington 18 TB

The following samples were received as indicated below and on the attached Chain of Custody record. All analyses were performed within the holding time and with acceptable quality control results unless otherwise noted.

SAMPLE ID	LAB ID	MATRIX	Date Collected	Date Received
AH-1 (0-1'), SA	0307585-01	SOIL	09/24/2003	09/26/2003
AH-1 (2-2.5'), SA	0307585-02	SOIL	09/24/2003	09/26/2003
AH-1 (3-3.5'), SA	0307585-03	SOIL	09/24/2003	09/26/2003
AH-2 (0-1'), SA	0307585-04	SOIL	09/24/2003	09/26/2003
AH-2 (2-2.5'), SA	0307585-05	SOIL	09/24/2003	09/26/2003
AH-2 (3-3.5'), SA	0307585-06	SOIL	09/24/2003	09/26/2003
AH-3 (0-1'), SA	0307585-07	SOIL	09/24/2003	09/26/2003
AH-3 (2-2.5'), SA	0307585-08	SOIL	09/24/2003	09/26/2003
AH-3 (3-3.5'), SA	0307585-09	SOIL	09/24/2003	09/26/2003
AH-4 (0-1'), SA	0307585-10	SOIL	09/24/2003	09/26/2003
AH-4 (2-2.5'), SA	0307585-11	SOIL	09/24/2003	09/26/2003
AH-4 (3-3.5'), SA	0307585-12	SOIL	09/24/2003	09/26/2003
AH-1 (0-1'), TB	0307585-13	SOIL	09/24/2003	09/26/2003
AH-1 (1-1.5'), TB	0307585-14	SOIL	09/24/2003	09/26/2003
AH-1 (2-2.5'), TB	0307585-15	SOIL	09/24/2003	09/26/2003
AH-2 (0-1'), TB	0307585-16	SOIL	09/24/2003	09/26/2003
AH-2 (2-2.5'), TB	0307585-17	SOIL	09/24/2003	09/26/2003
AH-2 (3-3.5'), TB	0307585-18	SOIL	09/24/2003	09/26/2003
AH-3 (0-1'), TB	0307585-19	SOIL	09/24/2003	09/26/2003
AH-3 (2-2.5'), TB	0307585-20	SOIL	09/24/2003	09/26/2003
AH-3 (3-3.5'), TB	0307585-21	SOIL	09/24/2003	09/26/2003
AH-4 (0-1'), TB	0307585-22	SOIL	09/24/2003	09/26/2003
AH-4 (2-2.5'), TB	0307585-23	SOIL	09/24/2003	09/26/2003
AH-4 (3-3.5'), TB	0307585-24	SOIL	09/24/2003	09/26/2003
AH-5 (0-1'), TB	0307585-25	SOIL	09/24/2003	09/26/2003
AH-5 (2-2.5'), TB	0307585-26	SOIL	09/24/2003	09/26/2003
AH-5 (3-3.5'), TB	0307585-27	SOIL	09/24/2003	09/26/2003

CASE NARRATIVE

ENVIRONMENTAL LAB OF TEXAS

Prepared for:

HIGHLANDER ENVIRONMENTAL CORP.
1910 N. BIG SPRING STREET
MIDLAND, TX 79705

Order#: G0307585

Project: Pogo Producing Co./
Covington 18 TB

The following samples were received as indicated below and on the attached Chain of Custody record. All analyses were performed within the holding time and with acceptable quality control results unless otherwise noted.

Surrogate recoveries on the 8015M TPH are outside of control limits due to dilution (G0307585-19).

The enclosed results of analyses are representative of the samples as received by the laboratory. Environmental Lab of Texas makes no representations or certifications as to the methods of sample collection, sample identification, or transportation handling procedures used prior to our receipt of samples. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved By:


Environmental Lab of Texas I, Ltd.

Date:

10-02-03

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(915) 682-4559

Fax (915) 682-3946

CLIENT NAME: <u>Pogo Producing Co.</u>		SITE MANAGER: <u>KE Janner</u>		PRESERVATIVE METHOD	
PROJECT NO.: <u>2063</u>		PROJECT NAME: <u>Pogo/Coning for 18 TB.</u>		SAMPLE IDENTIFICATION	
LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP	GRAB
-11					
-12					
-13					
-14					
-15					
-16					
-17					
-18					

RELINQUISHED BY: (Signature) <u>[Signature]</u>	Date: <u>9/26/03</u>	Time: <u>1:00</u>	RECEIVED BY: (Signature) <u>[Signature]</u>	Date: <u>9/26/03</u>	Time: <u>1:00</u>
RELINQUISHED BY: (Signature) <u>[Signature]</u>	Date: <u>9/26/03</u>	Time: <u>1:00</u>	RECEIVED BY: (Signature) <u>[Signature]</u>	Date: <u>9/26/03</u>	Time: <u>1:00</u>
RELINQUISHED BY: (Signature) <u>[Signature]</u>	Date: <u>9/26/03</u>	Time: <u>1:00</u>	RECEIVED BY: (Signature) <u>[Signature]</u>	Date: <u>9/26/03</u>	Time: <u>1:00</u>
RECEIVING LABORATORY: <u>EnviroLab TX</u>	Address: <u>1910 N. Big Spring St.</u>	City: <u>Midland</u>	State: <u>TX</u>	Zip: <u>79705</u>	Phone: <u>(915) 682-4559</u>
SAMPLE CONDITION WHEN RECEIVED: <u>4,000</u>			REMARKS: <u>W-Fater A-Air SD-Solid S-Sol SL-Sludge O-Other</u>		

ANALYSIS REQUEST (Circle or Specify Method No.)														
GC/MS Vol. 8240/8260/824	GC/MS Semi Vol. 8270/825	PCB's 8080/806	pest. 808/806	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Alr)	PLM (Asbestos)							
RCI	TCIP Semi Volatiles	TCIP Volatiles	TCIP Metals Ag As Ba Cd Cr Pb Hg Se	TCIP Metals Ag As Ba Cd Cr Pb Hg Se	PAH 8270	TCIP 418.1	TCIP 8015 MOD.	TCIP 71006						
BTEX 8020/608	MTBE 8020/608	TPH												

SAMPLE SHIPPED BY: (Signature) <u>[Signature]</u>	Date: <u>9/26/03</u>	Time: <u>1:00</u>
SAMPLE SHIPPED BY: (Signature) <u>[Signature]</u>	Date: <u>9/26/03</u>	Time: <u>1:00</u>
SAMPLE SHIPPED BY: (Signature) <u>[Signature]</u>	Date: <u>9/26/03</u>	Time: <u>1:00</u>
RECEIVING LABORATORY: <u>EnviroLab TX</u>	Address: <u>1910 N. Big Spring St.</u>	City: <u>Midland</u>
State: <u>TX</u>	Zip: <u>79705</u>	Phone: <u>(915) 682-4559</u>
REMARKS: <u>W-Fater A-Air SD-Solid S-Sol SL-Sludge O-Other</u>		

