SITE INFORMATION

Type of Report: Closure Report

Site:		Farnsworth Fed	eral B:#5 and Fa	rnsworth l	Federal B Tank Battery
Company:	na series en	Southwest Roya	lties, Inc.	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	
Well Location:		Section 7, T26S	R37E, Unit Lett	erL 🗛	PI#30.025 11961
Tank Battery Lo	cation:	Section 7, T26S	R37E, Unit Lett	er L	
Lease Number:	· · · · · · · · · · · · · · · · · · ·	LC 030180B			
County:	-	Lea	-		
Spill Area GPS:		32.05586, 103.20)828		
Surface Owner:		El Paso			
Mineral Owner:					
Directions:		At Jal, New Mexico	, intersection of 3 I	Rd. Street ar	nd Hwy. 128, go 6.1 miles (south) on
		3rd. Street. Turn le	ft (east) into lease	road and go	1.5 miles to Y, at Y turn left (south) and
· · · · · · · · · · · · · · · · · · ·		go 1.4 miles to tan	k battery on right si	ide or 1.6 mi	les to well #5 on left side
Release Data: 🐇		i a transfer in allo a set by the			
Date Released:		8/23/2006			<u>an an a</u>
Type Release:		oil			
Source of Conta	mination:	well blowout at w	ell #5 and tank ba	attery tank	overflowed
Fluid Released:		unknown			
Fluids Recovere	d:	125 barrels (well	and 145 barrels	(tank batte	ry)
Official Commu	nication: 🖾				
Name:	Dawn M. How	vard			lke Tavarez
Company:	Southwest Ro	yaties, Inc.	Highlander Environmental Corr		
Address:	6 Desta Dr., S	St 2100	1910 N. Big Spring		1910 N. Big Spring
P.O. Box			•		
Citv:	Midland Texa	 s. 79705		····	Midland, Texas
Phone number:	(432) 688-326	<u>-</u>			(432) 682- 4559
Fax	(432) 688-32	50			(432) 682- 3946
Email:	dhoward@c	avtonwilliams.com			itavarez@bec-enviro.com
Ranking Gritoria		aytommano.com		1.4.1	
Denth to Groundy	lator:		Ranking Score	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Sito Data
<50 ft			20		ono butu
50-99 ft			10		
>100 ft.			0		Greater 100'
WellHead Protecti	on:		Ranking Score		Site Data
Water Source <1,0	000 ft., Private <	<200 ft.	20		None
vvater Source >1,0	100 ft., Private >	>200 ft.	0	<u> </u>	None
Surface Body of V	Vater:		Ranking Score		Site Data
<200 ft.			20		None
0.0.0.4		·····	10		None
200 ft - 1,000 ft.			U		None
200 ft - 1,000 ft. >1,000 ft.				ł	
200 ft - 1,000 ft. >1,000 ft.	al Ranking Se	core:	0	8	
200 ft - 1,000 ft. >1,000 ft. Tota	al Ranking So	core:	0	1	RECEIVE
200 ft - 1,000 ft. >1,000 ft. Tot a	al Ranking So	core: Acceptab	e Soil RRAL (mo	J g/kg)	RECEIVE
200 ft - 1,000 ft. >1,000 ft. Tot	al Ranking So	core: Acceptab Benzene	0 e Soil RRAL (mg Total BTEX	l g/kg) <i>TPH</i>	RECEIVE



Highlander Environmental Corp.

Midland, Texas

December 31, 2007



Mr. Larry Johnson Environmental Engineer Specialist Oil Conservation Division- District I 1625 N. French Drive Hobbs, New Mexico 88240 FEB 1 1 2008

1RP#1007

RE: Closure Report for the Spill at the Southwest Royalties, Inc., Farnsworth Federal B #5 Well and Tank Battery, Unit Letter L, Section 7, Township 26 South, Range 37 East, Lea County, New Mexico.

Dear Mr. Johnson:

Highlander Environmental Corp. (Highlander) was contacted by Southwest Royalties, Inc. (Southwest) to assess and to remediate the soil impact from a well blow out that occurred at the Farnsworth Federal B #5 Well and the Farnsworth Federal Tank Battery, located in Unit Letter L, Section 7, Township 26 South, Range 37 East, Lea County, New Mexico. The well site coordinates are N 32.05586°, W 103.20828°. The State of New Mexico C-141 (Initial and Final) are included in Appendix C. The well and the tank battery location are shown on Figure 1.

Background

On August 23, 2006, the well apparently pressured up and the fluids flowed up the backside of the well. A gas pocket or air bubbles may have caused the connection to blow off the wellhead. At the time of the release, the oil tanks at the tank battery were full and the tanks overflowed. The volume released at the well and the tank battery was unknown. An estimated 125 barrels of oil was recovered at the well and 145 barrels at the tank battery.

The release at the well impacted an area estimated at 2 to 4 acres with the majority of the impact being overspray. At the tank battery, oil was observed on the pad, drive area and out into the pasture. The impacted areas are further discussed in the Assessment and Sample Results Section of the report. The spill locations are shown on Figures 2 and 3.

Groundwater and Regulatory

The spill areas are located in Section 7, Township 26 South, Range 37 East. The USGS data base reported a depth to water at 196' in Section 7, Township 26 South, Range 37 East. The State of New Mexico Well Reports did not show any water wells in Section 7. However, there were water wells shown in Sections 29 and 35, Township 25 South, Range 37 East with average groundwater depths of approximately 219' to 185' below surface. In addition, published data, from the Geology and Groundwater Conditions in Southern New Mexico, shows wells in Section 2, 12 and 14, Township 26 South, Range 37 East with reported depths of 103', 102' and 100', respectively. The State of New Mexico Well Reports, USGS report and published reports are included in Appendix A.

A risk-based evaluation was performed for the Site in accordance with the 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 on the regional groundwater data, the proposed RRAL for TPH is 5,000 mg/kg.

Previous Assessment and Sample Results Well #5

On August 24 2006, Highlander personnel inspected and sampled the spill areas. At Well #5, the majority of the surface staining was due to overspray northeast of the well. The impacted area where fluids accumulated north of the well measured approximately 85' x 180'. The impacted areas are shown on Figure 2. A total of four (4) auger holes were installed in this area to assess the impacted soils. Soil samples were analyzed for Total Petroleum Hydrocarbon (TPH) by method modified 8015 DRO/GRO and chloride by EPA method 300.0. Selected samples were analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) by EPA method 8021B. The sample results are presented in Table 1.

On August 25, 2006, Highlander personnel applied a Micro-Blaze product to the overspray area. The treatment was applied to the vegetation to wash oil residue from the foliage. This area will be inspected for further applications and growth of the vegetation.

Referring to Table 1, the hydrocarbon impact to the soils appears to be shallow. AH-2, AH-3 and AH-4 exceeded the TPH RRAL of 5,000 mg/kg at 0-1', however, the deeper samples at 1-1.5' were all below the RRAL. The BTEX concentrations did not exceed the RRAL. Chloride concentrations were elevated in the shallow soil samples at 0-1' ranging from 1,480 mg/kg to 8,510 mg/kg. The area of AH-3 did show a deeper impact to a depth of 2.0' below surface, with a chloride concentration decreasing from 12,100 mg/kg at 1.0' below surface to <5.0 mg/kg at 3.0' below surface.

Tank Battery

On August 25, 2006, Highlander personnel inspected and sampled the spill areas. The area north of the tanks did show oil staining where the tanks overflowed. The impacted area inside the facility fence line measured approximately 45' x 90'. The impacted area in the drive area measured approximately 20' x 150' and the area off the facility pad measured approximately 20' x 60'. The impacted areas are shown on Figure 3. A total of five (5) auger holes were installed in the impacted area to assess the soils. Soil samples were analyzed for Total Petroleum Hydrocarbon (TPH) by method modified 8015 DRO/GRO and chloride by EPA method 300.0. Selected samples were analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) by EPA method 8021B. The sample results are presented in Table 2.

Referring to Table 2, AH-1, AH-3 and AH-4 exceeded the TPH RRAL at 0-1'. The TPH exceeded the RRAL to approximately 3.0' in the area of AH-2. BTEX concentrations did not exceed the RRAL. The chloride detected in the auger holes did not show a significant impact to the Site. The chlorides in the shallow soils 0-1' ranged from 369 mg/kg to 523 mg/kg. The deeper samples showed a declining chloride with depth, with the exception of AH-3 where the chloride concentration remained the consistent approximately 500 mg/kg.

Remedial Work Performed

A work plan was submitted to the NMOCD dated October 11, 2006. The work plan was implemented as follows.

Well #5

The hydrocarbon impact at the Site was limited to the shallow soils at 0-1' below surface. Chloride concentrations were elevated to depths ranging from 1'-3' below surface. The surface owner, El Paso Natural Gas did not want the area excavated. To properly remediate the impacted area, the soils with levels exceeding the RRAL for TPH and elevated chloride were periodically tilled to a depth of 3.0' to blend the soil to reduce concentrations. The areas, designated #1 (AH-2), #2 (AH-3) and #3 (AH-4) were also periodically sampled to evaluate the tilling. The overspray areas were monitored to evaluate the Micro Blaze treatments. As shown on Table 3, the TPH concentrations eventually remediated to below the RRAL, and chloride concentrations were reduced significantly.

Tank Battery

The hydrocarbon impact in the area was limited to 1'-3' below surface. Based on the results, the chloride concentrations do not appear to an environmental concern. The areas exceeding the TPH RRAL at 1-3' were excavated and worked below the RRAL. Confirmation samples were collected from the excavation and the remediated soils (stockpile) for evaluation. The results are summarized in Table 4. Based upon the results, all but one of the stockpiles was placed back into the excavation. The remaining stockpile #2 was hauled to Sundance Services for disposal. Based upon the results of the remediation and sampling performed at this facility, Southwest Royalties requests closure of this site. If you require any additional information or have any questions or comments, please call.

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Highlander Environmental Corp. mkee

Timothy M. Reed, P.G. Vice President

cc: Matt Swierc - SWR











NOT TO SCALE

• SAMPLE LOCATIONS

SPILL AREA

HIGHLANDER ENVIRONMENTAL CORP. MIDLAND, TEXAS



TABLES

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Table 1Southwest Royaties, Inc.Farnsworth Federal B #5 WellLea County, New Mexico

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Sample 🐄	Date	Soil S	tatus 🗐	Sample		TPH	(mg/kg)	ان بر این از مرکز میکرد. بر این از مرکز میکرد از م	Benzene	Toluene	Ethlybenzene	Xylene (m/p)	Xylene (o)	🐔 Chloride 📝
ID S	Sampled	🐁 insitu 🖓	removed	Depth (ft)	- C6-C12	C12-C28.	- C28-C35	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg).	; ≆(mg/kg) *≛	(mg/kg)
AH-1	08/24/06	X		0-1.0	205	1,270	178	1,650	< 0.05	0.059	0.114	0.289	0.113	2540
	08/24/06	x		1-1.5	<50	973.0	277	1,250	<0.025	< 0.025	<0.025	<0.025	<0.025	273
AH-2	08/24/06	x		0-1.0'	4,810	18,300	1,550	24,700	0.205	1.58	1.26	3.28	1.46	6,890
	08/24/06	X		1-1.5	<50	466.0	155	621	<0.025	< 0.025	< 0.025	< 0.025	< 0.025	406
AH-3	08/24/06	x		0-1.0'	1,970	6,650	665	9,280	0.113	0.992	0.724	1.92	0.808	8,510
	08/24/06	X		1-1.5	<10	<10	<10	<10	< 0.025	< 0.025	<0.025	< 0.025	< 0.025	12,100
	08/24/06	Х		2-2.5	-	-	-	-	-	-	-	-	-	3,200
	08/24/06	x		3-3.5		-	-	-	-	-	_	-		<5
AH-4	08/24/06	X		0-1.0'	5,960	21,100	1,670	28,700	0.225	1.83	1.30	3.63	1.31	1,480
	08/24/06	x		1-1.5	<50	475.0	129	604	< 0.025	< 0.025	< 0.025	< 0.025	<0.025	8.34
													ų	

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(-) Not Analyzed

Table 2Southwest Royaties, Inc.Farnsworth Federal B Tank BatteryLea County, New Mexico

Sample	Date	Soil S	status	Sample		Start TPH:(1	ng/kg)		Benzene	Toluene	Ethlybenzene	Xŷlēne (m/p)	Xylene (0),	Chloride
₹ <u>5</u> <u>₹</u> ID, ₁ 57,	Sampled	Winsitu C	removed	"Depth (ft)	C6-C12	C12-C28	C28-C35	Total	् (mg/kg)	(mg/kg)	(mg/kg)	:::*'(mg/kg)_?	te (mg/kg)Er	柔(mg/kg)没
AH-1	08/25/06		X	0-1.0	379	12,300	1,910	14,600	< 0.025	0.079	0.0839	0.365	0.103	429
	08/25/06	X		1-1.5	<10	239	78.3	317	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	62
	08/25/06	X		2-2.5	<50	1,040.0	285	1,320	-	-	-	-	-	40
	08/25/06	X		3-3.5	-	-	-		-	-	-	-	-	43.8
AH-2	08/25/06		Х	0-1.0'	1,590	19,100	3,160	23,800	0.0435	0.589	0.371	1.76	0.45	408
	08/25/06		Х	1-1.5	160.0	16,900	3,400	20,500	-	-	-	-	-	176
	08/25/06		Х	2-2.5	163.0	6,330	1,300	7,790	-	-	-	-	-	81.9
	08/25/06	X		4-4.5	<50	530	243	773	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	26
	08/25/06	Х		5-5.5	-	-	-	-	-	-	-	-	-	41
AH-3	08/25/06		X	0-1.0'	50.9	4,220	1,010	5,280	<0.025	<0.025	< 0.025	0.0463	< 0.025	523
	08/25/06	х		1-1.5	<10	<10	<10	<10	<0.025	< 0.025	<0.025	< 0.025	< 0.025	541
	08/25/06	x		2-2.5	-	-	-	-	-	-	_	-	-	508
AH-4	08/25/06		Х	0-1.0'	3,540	10,300	963	14,800	0.762	3.94	2.55	9.05	2.04	369
	08/25/06	x		1-1.5	<10	208	73	281	<0.025	< 0.025	<0.025	< 0.025	< 0.025	36.3
	08/25/06	x		2-2.5	-	-	-	-	-	-	-	-	-	45.5
AH-5	08/25/06	X		0-1.0'	560.0	1,460	108	2,130	0.340	2.09	1.49	3.08	1.17	244
	08/25/06	Х		1-1.5	<10	<10	<10	<10	<0.025	<0.025	<0.025	< 0.025	<0.025	47.5
	08/25/06	X		2-2.5	-	-	-	-	-	-	-	-	-	197

(-) Not Analyzed

Table 3 Southwest Royaties, Inc. Farnsworth Federal B #5 Well Lea County, New Mexico

Sample	Date	Soil S	tatus	Sample		TPH (r	nĝ/kg)		Benzene	Toluêne	Ethlybenzene	Xylène (m/p)	Xylene (õ)	Chloride .
$\mathbf{\hat{p}} \in \mathbf{\hat{D}}^{(n)}$	Sampled	: insitu	removed	Depth (ft)	C6-C12	C12-C28	C28-C35	L Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
#1	11/13/06	X		0-1.0'	3,030	14,700	936	18,700	0.0118	0.247	0.263	0.492	0.313	893
	01/11/07	x		0-1.0'	155	4,930	317	5,400	-	-	-	-	-	-
	03/14/07	x		0-1.0'	20	372	64	456	-	-	-	-	-	-
#2	11/13/06	x		0-1.0'	1,900	9,200	569	11,700	0.0153	0.102	0.177	0.339	0.247	372
	01/11/07	x		0-1.0'	978	7,130	434	8,540	-	-	-	-	-	-
	03/14/07	x		0-1.0'	84	570	63	717	-	-	-	-	-	-
	•													
#3	11/13/06	X		0-1.0'	864	5,190	344	6,390	<0.0250	0.0541	0.127	0.240	0.184	787
	01/11/07	x		0-1.0'	910	8,140	561	9,610	-	-	-	-	-	
	03/14/07	X		0-1.0'	1,040	3,980	477	5,500	-	-	-	-	-	-
	05/15/07	х		0-1.0'	2,480	9,290	859	12,600	-	-	-	-	-	-
	8/1/2007	X		0-1.0'	82	1670	1050	2802	_	-	-	-	-	

(-) Not Analyzed

Table 4 Southwest Royaties, Inc. Farnsworth Federal B Tank Battery Lea County, New Mexico

Sample	Date	Soil	Status	Sample	14. (* * 8 2 ⁴ - 14. (* * 8	TPH	(mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene (p/m);	X vlene (o)	Chloride
ID .	Sampled	insitu	removed	Depth (ft)	C6-C12	C12-C28	C28-C35	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
AH-1	11/10/06	X		0-1.0' BEB	<10.0	25.2	<10.0	25.2	< 0.025	< 0.025	< 0.025	< 0.025	<0.025	-
<u>AH-2</u>	11/10/06	x		0-1.0' BEB	<10.0	<10.0	<10.0	<10.0	-		-	-	-	-
AH-3	11/10/06	X		0-1.0' BEB	<10.0	<10.0	<10.0	<10.0			-			
								ļ		ļ				
<u>AH-4</u>	11/10/06	x		0-1.0' BEB	<10.0	<10.0	<10.0	<10.0	-		-			
									1					
АН-5	11/10/06	x		0-1.0' BEB	<10.0	<10.0	<10.0	<10.0	-			<u> </u>		
		 		<u> </u>		 						<u></u>		
AH-6	11/10/06	<u> </u>		0-1.0' BEB	23.4	1,880	164	2,040	< 0.025	<0.025	< 0.025	<0.025	< 0.025	
<u>AH-7</u>	11/10/06	<u> </u>		0-1.0' BEB	55.5	216	9.38	272	< 0.025	< 0.025	0.029	0.0714	0.0848	-
										<u> </u>				
AH-8	11/10/06	<u> </u>		0-1.0' BEB	<10.0	<10.0	<10.0	<10.0	-					
Q. 1 11 111	11/10/07						72.0	702						
Stockpile #1	11/10/06	<u> </u>			44.3	675	73.8	/93		-	-			
St. 1. 11. #2	11/10/06		v		1.420	4.620	282	6 2 2 0	0.205	2.20	1.01	2.04	2.08	
Stockpile #2	01/11/07				1,430	4,620	282	5,530	0.295	2.20	1.01	2.04	2.08	-
	05/23/07		x X		725	4,020	405	5,000	-	-	_	-		
	08/01/07		x X		332	3 760	1 530	5,000	-	-			-	
	08/01/07		<u></u>			5,700	1,550	5,022	_					
Stockpile #3	11/10/06	x			286	2.860	246	3,390	< 0.100	0.105	0.123	0.273	0.242	-
Brookpine #B						2,000								
Stockpile #4	11/10/06	x			281	2,330	187	2,800	-	-	-	-		-
· · · · · · · · · · · · · · · · · · ·														
Stockpile #5	11/10/06	Х			261	2,760	247	3,270	-	-	-	-	-	-
Stockpile #6	11/10/06	Х			191	1,880	166	2,240	_	-	-	-		-
Stockpile #7	11/10/06	Х			1,100	3,460	252	4,810	0.243	1.83	0.802	1.60	1.48	-
Stockpile #8	11/10/06	X			1,090	3,030	217	4,340	0.320	2.59	1.43	2.41	2.90	

(-) Not Analyzed

APPENDIX A

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Groundwater Data

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Southwest Royalties Farnsworth Fed #5 Average Depth to Groundwater (ft)

	25 SC	buth	36	East	
6 295	5	4	3	2	1
7	8	9	10 180	11	12
18	17	16	15 120	14	13
19	20	21	22	23 53.7	24
30	29	28	27	26	25
31	32	33	34	35	36

	25 Sc	outh	37	East	
6	5	4	3	2	1
					60
7	8	9	10 50	11	12
18	17 62	16	15	14	13 73
51			59.2		81
19 44	20 65	21	22	23	24
62	34		26		255
30	29	28	27	26	25
	219			75	55
31	32	33 86	34	35 185	36

25 Sou	ith 3	38	East	t _
6	5		4	
60				
7	8		9 95	
			88	
18	17		16	
58				
19	20	78	21	87
69				
30	29	51	28	
31	32		33	
1				

	26 Sc	outh	36	East	
6	5	4	3	2	1
7	8	9 175 177	10	11	12
18 220	17	16	15	14	13
19 198	20	21	22	23 151	24
30	29	28	27	26	25
31	32	33	34	35	36

	26 Sc	outh	37	East	
3	5	4	3	2 100	1
				103	
7 ŞITE	8	9 85	10	11	12 9 7
196					102
18	17	16	15	14 100	13
				95	
19	20	21	22	23	24
185					
30	29 86	28	27	26	25
			120		
31	32	33	34	35	36

26 South 3	38 East
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6	5	4
7	8	9
18	17	16
19	20	21
30	29	28
31	32	33

- 88 New Mexico State Engineers Well Reports
- 105 USGS Well Reports
- 90 Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)



TABLE 6. RECORDS OF WELLS IN SOUTHERN LEA COUNTY, N. MEX. (continued)

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					Wate	r level					
Location No.	Owner	Aquifer	Depth of well (feet)	Altitude of well (feet)	Depth be- low land surface (feet)	Date meas- ured	Year com- pleted	Surface diam- eter of wells	Method of lift	Use of water	Remarks
25.38.19.342	Pure Oil Co.	To(?)	133	3,061	68	1952	_	_		In	Dollarhide Gasoline Plant well 2.
21.121	Tom Linebury	To	110	3,103	87.7	2-12-53	-	7	Lw	S	
29.131	-	Qal		3,040	69.9	2-15-53	-	6	Lw	N	_
26.32.21.322	Battle Ax Ranch	Tr(?)	253	3,140	180	7-23-54	_		Li	D,S	-
26.33.3.444	W. D. Dinwiddie	e Qal	180	3,315	102.8	7-23-54	_	6	N	N	_
3.444 a	do.	Qal	-	3,315	-		-	6(?)	Lw	S	Chemical analysis in table 8. Located 50 feet west of 26.33.3.444.
9.443	-	Qal(?)	_	3,280	106.6	7-26-54	-		Lw	S	
22.433	Battle Ax Ranch	Qal	200(?)	3,270	79.7	7-26-54		6	Lw	S	-
26.34.6.213		Ťr	360	3,330	141.9	7-23-54	~	8	Lw	S	-
6.35.13.222	~	Qal		2,990	229.1	12-12-58	-	7	Lw	S	Chemical analysis in table 8.
26.36.9.440	Frank Antheys	Qal	184M	2,940	177.8	12-12-58	-	7	Lw	D,S	MWP
18.311	City of Jal	Qal	559	2,981	220.8	3-17-60	1960	24	Te(?)	Р	Yield 453 gpm. Gravel packed. WBZ 275-300, 400-465, 500-530 feet.
19.233	do.	Qal	700	2,950	198.0	-	1960	24	Te(?)	P	Yield 408 gpm. Gravel packed. WBZ 270-280, 400-480, 550-600, 670-680 feet.
21.443	-	_	137(?)	2,900	Dry	12-11-58		11	N	N	_
26.37.2.133	Clyde Cooper	Qal(?)	119	3,000	103.4	2-16-53	1937	8	Lw	S	-
7.331	EPNG	Tr	476	2,960		_	1937	85/8	Te	In.D	Ial Plant I, well I.
12.314	-	Qal	_	3,010	102.3	2-16-53		91⁄2	N	N	
12.331		Qal	$103 \pm M$	3,000	99.9	2-17-53		3	N	N	Cased shothole.
12.441	Humble Oil Co.	Qal	175	_	-	-	1944		_	-	WBZ 125-150 feet, EY 68 gpm
14.122	-	Qal	131M	2,985	100.6	2-17-53		3	N	N	Cased shothole.
26.38.7.244	Tom Linebury	Qal	73	3,000	57.1	2-24-53		81/2	N	N	
8.444	do.	Qal	66	3,000	64.5	2-24-53		61/2	Lw	S	
17.414	do.	Qal		2,975	39.4	2-24-53	-	51/2	Lw	S	-
21.344	do.	Qal	_	2,955	29.0	2-13-53		3	N	N	Cased shothole.
32.141	do.	Ťr(?)	_	2,950	142.4	2-13-53		26	N	N	_

			Explanat	tions of s	ymbols are	included	l in the	headnot	es of T	able 6.	
					Wate	r level					
Location No.	Owner	D o: Aquifer (Depth of well (feet)	Altitude of well (feet)	Depth be- low land surface (feet)	Date meas- ured	Year com- pleted	Surface Year diam- com- eter pleted of wells	Method of lift	Use of water	Remarks
				Gai	nes County I	ſex.					
A-12.25.341	-	To	50(?)	3,545	40.8	12- 9-53	—	6	Lw	N	-
A-28.3.413	Greenwood		- ``	3,485	35.1	12- 9-53	-	-	Lw	S	_
				Andr	ews County,	Tex.					
A-29.17.320	H. O. Sims	To(?)	82	3,510	79.4	7-28-40		-	Lw	S	-
A-39.4.420	do.	Το΄	81	3,478	72.4	10-9-53	_	61⁄2	Lw	S	_
A-39.14.111	Humble Oil Co.	-	215	3,410	Dry	—			-		
4-40.16.330	M. L. Goins	То	80	3,305	74.1	10-15-53			Lw	D,S	_

2-13-53

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Winkler County, Tex.

2,940

45.0

TABLE 7. RECORDS OF SELECTED WELLS IN TEXAS ADJACENT TO SOUTHERN LEA COUNTY, N. MEX.

87

Tom Linebury

Qal

C-22.6

LEA COUNTY

GROUND WATER



Water Resources National Water Information System: Web Interface

Data Category: Ground Water Geographic Area: New Mexico

GO GO

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site no list = • 320104103120301

Save file of selected sites to local disk for future upload



Water Resources National Water Information System: Web Interface

Geographic Area: New Mexico

GO GO

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site no list = • 320251103071401

Save file of selected sites to local disk for future upload



Page 1 of 2

Water Resources National Water Information System: Web Interface

Geographic Area: New Mexico

GO



Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site no list = • 320259103122201

Save file of selected sites to local disk for future upload



Available data for this site Ground-water: Field measurements





Water Resources National Water Information System: Web Interface Data Category: Ground Water Geographic Area: New Mexico

GO GO

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site no list = • 320042103103901

Save file of selected sites to local disk for future upload



GO

Geographic Area:

New Mexico

Water Resources	National Water Information System: Web Interface	Data Category: Ground Water
Grou	nd-water levels for N	ew Mexico
Search K	esuns 1 sites iound Criteria	
Search		

Save file of selected sites to local disk for future upload





2878.0

http://nwis.waterdata.usgs.gov/nm/nwis/gwlevels/?site no=320303103100901&

1985 1988 1991 1994 1997

- Provisional Data Subject to Revision ----

2000

2003

2006

92.0

1976 1979

1982

. . 21:1

Water Resources

National Water Information System: Web Interface

Data Category: Ground Water **Geographic Area:** New Mexico

GO

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

• 320401103082901 site no list =

Save file of selected sites to local disk for future upload





Water Resources National Water Information System: Web Interface Data Category: Ground Water Geographic Area: New Mexico

GO

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site no list = • 320149103134201

Save file of selected sites to local disk for future upload



Water Resources National Water Information System: Web Interface

Data Category: Ground Water Geographic Area: New Mexico

GO

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site no list = • 320251103154201

Save file of selected sites to local disk for future upload



USGS 320251103154201 26S.36E.09.44421B



New Mexico Office of the State Engineer

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	New Mexico (POD Re	<i>Office of the St</i> eeports and Dov	<i>ate Engi</i> vnloads	neer	
Township: 26S	Range: 37E	Sections:			
NAD27 X:	Y:	Zone:		Search Radius:	
County:	Basin:		Ŕ	Number:	Suffix:
Owner Name: (First)	(L	.ast) () All		○ Non-Domestic	⊙ Domestic
POD / S	urface.Data-Repo	nt A	vg Depth. ort	to Water Report	
	Clear Form	WATERS N	<u>/enu</u>	Help	
			1994 - Landel an bitana da an ang		

		AVERA	AGE	DEPTH	OF V	WATER	REPORT	0	8/28/200	06		
										(Depth	Water in	n Feet)
Bsn	Tws	Rng	Sec	Zone	1	х		Y	Wells	Min	Max	Avg
No R	ecord	ls fou	ınd,	try a	gai	n						

http://iwaters.ose.state.nm.us: 7001/iWATERS/WellAndSurfaceDispatcher

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New Mexico Office of the State Engineer

New Mexico Office of the State Engineer POD Reports and Downloads										
Township: 25S	Range: 37E	Sections:								
NAD27 X:	Y:	Zone:	Search Radius:							
County:	Basin:		Number:	Suffix:						
Owner Name: (First)	(La	∎st) @ All	○ Non-Domestic	○ Domestic						
POD / Surface Data Report Avg Depth to Water Report Water Column Report										
Clear Form iWATERS Menu Help										

AVERAGE DEPTH OF WATER REPORT 08/28/2006

								(Depth	Water in	Feet)
Bsn	Tws	Rng	Sec	Zone	х	Y	Wells	Min	Max	Avg
СР	25S	37E	19				9	27	63	44
CP.	25S	37E	20				6	23	60	34
СР	25S	37E	29				5	187	250	219
СР	25S	37E	35				1	185	185	185

Record Count: 21

New Mexico Office of the State Engineer POD Reports and Downloads											
Township: 26S	Range: 36E	Sections:									
NAD27 X:	Y:	Zone:	Search Radius:								
County:	Basin:		。 違 Number:	Suffix:							
Owner Name: (First)	(La	st) (All	○ Non-Domestic	○ Domestic							
POD./ Surface Data Report Avg Depth to Water Report.											

AVERAGE DEPTH OF WATER REPORT 08/28/2006 (Depth Water in Feet) Bsn Tws Rng Sec Zone X Y Wells Min Max Avg No Records found, try again

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Page	1	of	1
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New Mexico Office of the State Engineer POD Reports and Downloads									
Township: 25S	Range: 36E	Sections:							
NAD27 X:	Y:	Zone:	Search Radius:						
County:	Basin:		Number:	Suffix:					
Owner Name: (First)	(La	ast) (O Non-Domest	ic O Domestic					
POD / S	urface Data Repor	ter Column Rep	vg Depth to Water Report						
	Clear Form	WATERS N	Menu Help						
AVERAGE DEPT	H OF WATER REP	ORT 08/28/20	06 (Dopth Wator in For						

							(Depth	Water in	feet)
Bsn	Tws	Rng Sec	Zone	х	Y	Wells	Min	Max	Avg

No Records found, try again

APPENDIX B

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Analytical Reports



Analytical Report

Prepared for:

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

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Project: SWR/ Farnsworth Fed. B Tank Battery Project Number: 2724 Location: Lea County, NM

Lab Order Number: 6K15013

Report Date: 11/21/06
Highlander Environmental Corp.	Project	SWR/ Farnsworth Fed. B Tank Battery	Fax: (432) 682-3946
1910 N. Big Spring St	Project Number	2724	
Midland TX, 79705	Project Manager:	Ike Tavarez	

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ANALYTICAL REPORT FOR SAMPLES

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Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
AH-1 0-1 0' BEB	6K15013-01	Soil	11/10/06 00 00	11-15-2006 14 00
AH-2 0-1 0' BEB	6K15013-02	Soil	11/10/06 00 00	11-15-2006 14 00
AH-3 0-1 0' BEB	6K15013-03	Soil	11/10/06 00.00	11-15-2006 14 00
AH-4 0-1 0' BEB	6K15013-04	Soil	11/10/06 00 00	11-15-2006 14 [.] 00
AH-5 0-1 0' BEB	6K15013-05	Soil	11/10/06 00 00	11-15-2006 14:00
AH-6 0-1 0' BEB	6K15013-06	Soil	11/10/06 00 00	11-15-2006 14.00
AH-7 0-1 0' BEB	6K15013-07	Soil	11/10/06 00:00	11-15-2006 14 00
AH-8 0-1 0' BEB	6K15013-08	Soil	11/10/06 00:00	11-15-2006 14 00
Stockpile #1	6K15013-09	Soil	11/10/06 00.00	11-15-2006 14 00
Stockpile #2	6K15013-10	Soil	11/10/06 00 00	11-15-2006 14.00
Stockpile #3	6K15013-11	Soil	11/10/06 00 00	11-15-2006 14 00
Stockpile #4	6K15013-12	Soil	11/10/06 00.00	11-15-2006 14 00
Stockpile #5	6K15013-13	Soil	11/10/06 00 00	11-15-2006 14:00
Stockpile #6	6K15013-14	Soil	11/10/06 00 00	11-15-2006 14.00
Stockpile #7	6K15013-15	Soil	11/10/06 00 00	11-15-2006 14 00
Stockpile #8	6K15013-16	Soil	11/10/06 00 00	11-15-2006 14 00

Highlander Environmental Corp	Project
1910 N Big Spring St	Project Number
Midland TX, 79705	Project Manager

roject SWR/ Farnsworth Fed. B Tank Battery mber 2724

ject Manager Ike Tavarez

Organics by GC

Environmental Lab of Texas

Analus	Popult	Reporting	Unita		D . 1				
	Kesuit			Dilution	Batch	Prepared	Analyzed	Method	Notes
AH-1 0-1.0' BEB (6K15013-01) Soil						<u> </u>			
Benzene	ND	0 0250	mg/kg dry	25	EK61904	11/19/06	11/20/06	EPA 8021B	
Toluene	ND	0 0250	"	11		н	"	n	
Ethylbenzene	ND	0.0250	11	"	**	n	n	"	
Xylene (p/m)	ND	0 0250	"	"	**	n	u	11	
Xylene (o)	ND	0.0250	"	11		11	R	11	
Surrogate. a,a,a-Trifluorotoluene		112 %	80-12	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.8 %	80-12	20	"	"	"	"	
Carbon Ranges C6-C12	ND	10 0	mg/kg dry	1	EK61509	11/15/06	11/16/06	EPA 8015M	
Carbon Ranges C12-C28	25.2	100	н	"	н	"	11	**	
Carbon Ranges C28-C35	ND	10 0	n	"	"	"	n	n	
Total Hydrocarbons	25.2	10.0		"	n	n	"	'n	
Surrogate: 1-Chlorooctane		94.0 %	70-13	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		128 %	70-12	30	"	"	"	n	
AH-2 0-1.0' BEB (6K15013-02) Soil				_					
Carbon Ranges C6-C12	ND	10 0	mg/kg dry	1	EK61509	11/15/06	11/16/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10 0	11	"	**	"	**	11	
Carbon Ranges C28-C35	ND	10 0	**	"	н	"	n		
Total Hydrocarbons	ND	10 0		н		"	0	0	
Surrogate, 1-Chlorooctane		97.6 %	70-1	30	,,	n	n	"	
Surrogate: 1-Chlorooctadecane		126 %	70-1	30	"	"	"	n	
AH-3 0-1.0' BEB (6K15013-03) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EK61509	11/15/06	11/16/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10 0	"	"	и	**	"		
Carbon Ranges C28-C35	ND	10 0	n		н	•	н	"	
Total Hydrocarbons	ND	10 0	"	"	H	"	"	Ħ	

968%

124 %

70-130

70-130

Surrogate: 1-Chlorooctane

Surrogate: 1-Chlorooctadecane

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

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Fax: (432) 682-3946

Highlander Environmental Corp 1910 N. Big Spring St Midland TX, 79705		Project SWR/Farnsworth Fed B Tank Battery Project Number: 2724 Project Manager. Ike Tavarez						Fax. (432) 682-3946			
		 01	ganics by	y GC							
Environmental Lab of Texas											
Analyte	Result	Reporting Lunit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
AH-4 0-1.0' BEB (6K15013-04) Soil											
Carbon Ranges C6-C12	ND	10.0	ıng/kg dry	1	EK61509	11/15/06	11/16/06	EPA 8015M			
Carbon Ranges C12-C28	ND	10 0	**	n	н	п	11	н			
Carbon Ranges C28-C35	ND	10.0	"		"	11		"			
Total Hydrocarbons	ND	10 0	*1	"		n	"	n			
Surrogate: 1-Chlorooctane		70.5 %	70-1	30	"	"	"	"			
Surrogate: 1-Chlorooctadecane		82.8 %	70-1	30	"	n	"	n			
AH-5 0-1.0' BEB (6K15013-05) Soil											
Carbon Ranges C6-C12	ND	10 0	mg/kg dry	1	EK61509	l 1/15/06	11/16/06	EPA 8015M			
Carbon Ranges C12-C28	ND	10.0	**		"	"	n	rr			
Carbon Ranges C28-C35	ND	10 0	"	"	н	"	11	11			
Total Hydrocarbons	ND	10 0	n		u	"	и	"			
Surrogate [•] 1-Chlorooctane		97.8 %	70-1	30	"	"	"	"			
Surrogate: 1-Chlorooctadecane		126 %	70-1	30	"	"	n	"			
AH-6 0-1.0' BEB (6K15013-06) Soil											
Benzene	ND	0 0250	mg/kg dry	25	EK61904	11/19/06	11/20/06	EPA 8021B			
Тојиеле	ND	0 0250	"		"	"	н	"			
Ethylbenzene	, ND	0 0250	н	"	"	"	11	"			
Xylene (p/m)	ND	0 0250	n	"	"	"	"	"			
Xylene (0)	ND	0 0250	и	**	"	н	"	"			
Surrogate: a,a,a-Trifluorotoluene		116 %	80-1	20	"	"	"	"			
Surrogate [.] 4-Bromofluorobenzene		102 %	80-1	20	"	"	"	"			
Carbon Ranges C6-C12	J [23.4]	50 0	mg/kg dry	5	EK61509	11/15/06	11/16/06	EPA 8015M	J		
Carbon Ranges C12-C28	1880	50.0	"	"	84	w	"	"			
Carbon Ranges C28-C35	164	50 0	n		*	"	"				
Total Hydrocarbons	2040	50 0	at	31	"	"	"	н			
Surrogate. 1-Chlorooctane		16.9 %	70-1	30	"	"	и	"	S-06		
Surrogate [.] 1-Chlorooctadecane		24.8 %	70-1	30	"	"	"	n	S-06		

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Highlander Environmental Corp 1910 N Big Spring St Midland TX, 79705		l Project N Project M	Project SWI umber 2724 anager Ike	R/ Farnswo I Favarez	orth Fed B 1	fank Battery		Fax. (432) 6	582-3946 ,
		Or	ganics by	GC			<u></u>		
r		Environi	mental La	ib of Te	xas				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AH-7 0-1.0' BEB (6K15013-07) Soil	<u></u>	<u> </u>	<u> </u>						
Benzene	ND	0 0250	mg/kg dry	25	EK61904	11/19/06	11/20/06	EPA 8021B	
Toluene	ND	0 0250			"		н	"	
Ethylbenzene	0.0290	0 0250	п	n		"		"	
Xylene (p/m)	0.0714	0.0250	"	н	"		"	"	
Xylene (0)	0.0848	0.0250	"	**	н	"	u	n	
Surrogate: a,a,a-Trifluorotoluene	,	100 %	80-1.	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.5 %	80-12	20	"	"	"	n	
Carbon Ranges C6-C12	55.5	10.0	mg/kg dry	ł	EK61509	11/15/06	11/16/06	EPA 8015M	
Carbon Ranges C12-C28	216	10 0	"	"	"	n	и	"	
Carbon Ranges C28-C35	J [9.38]	10.0	n		11	n	"	"	J
Total Hydrocarbons	272	10 0	н	"	n	11	**	"	
Surrogate: 1-Chlorooctane		102 %	70-1.	30	"	N	16	11	
Surrogate: 1-Chlorooctadecane		126 %	70-1.	30	"	"	n	"	
AH-8 0-1.0' BEB (6K15013-08) Soil									
Carbon Ranges C6-C12	ND	10 0	mg/kg dry	1	EK61509	11/15/06	11/16/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10 0		11	"	"	ų	"	
Carbon Ranges C28-C35	ND	10 0	н		11	n	н	н	
Total Hydrocarbons	ND	10 0	11	"		н	"	н	
Surrogate 1-Chlorooctane		90.4 %	70-1	30	t	"	"	"	
Surrogate: 1-Chlorooctadecane		115 %	70-1	30	"	"	"	n	
Stockpile #1 (6K15013-09) Soil									
Carbon Ranges C6-C12	44.3	10 0	mg/kg dry	1	EK61509	11/15/06	11/16/06	EPA 8015M	
Carbon Ranges C12-C28	675	10 0	"	11		n	"	H	
Carbon Ranges C28-C35	73.8	10 0	"	"		н	•		
Total Hydrocarbons	793	10 0	"	11	"	"	u	"	
Surrogate: 1-Chlorooctane		99.6 %	70-1	30	"	"	"	"	
Surrogate [,] I-Chlorooctadecane		127 %	70-1	30	"	"	"	"	

Environmental Lab of Texas

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

Highlander Environmental Corp		I	Fax (432) 682-3946						
1910 N Big Spring St		Project N	umber 272						
wildiand TX, 79705		Project M	anager ike	Tavalez		······		······································	
		Oı	rganics b	y GC					
		Environ	mental L	ab of Te	exas				
		Reporting							
Analyte	Result	Lunit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile #2 (6K15013-10) Soil		·							
Benzene	0.295	0 100	mg/kg dry	100	EK61904	11/19/06	11/20/06	EPA 8021B	
Toluene	2.20	0 100	11	"		**	п		
Ethylbenzene	1.01	0 100	n	"	"	"	"	*	
Xylene (p/m)	2.04	0 100		h	"	11	**	n	
Xylene (o)	2.08	0 100	"	"	"	ir		11	
Surrogate a,a,a-Trifluorotoluene		155 %	80-	120	"	"	"	"	5-0-
Surrogate: 4-Bromofluorobenzene		131 %	80-	120	"	"	"	"	S-0-
Carbon Ranges C6-C12	1430	50 0	mg/kg dry	5	EK61509	11/15/06	11/16/06	EPA 8015M	
Carbon Ranges C12-C28	4620	50 0	и		"	п	н	**	
Carbon Ranges C28-C35	282	50 0		u	**		п	*	
Total Hydrocarbons	6330	50 0	"		и	н		"	
Surrogate. 1-Chlorooctane	,	22 8 %	70-	130	"	n	"	"	S-0
Suirogate 1-Chloiooctadecane		26 2 %	70-	130	"	"	"	"	8-0
Staalmila #3 (61/15013-11) Sail									
		0.100							
Benzene	ND	0100	mg/kg ary	100	EK61904	11/19/06	11/20/06	EPA 8021B	
Toluene	0.105	0 100		и	ч	"	"		
Ethylbenzene V. Jane (a.t.)	0.123	0 100			"	11	"		
Xylene (p/m)	0.273	0 100		"	"	"	"		
	0.242	0 100			"	"	"		
Suriogate a.a.a-Trifluorotoluene		111%	80-	120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		88.2%	80-	120	"	"	"	"	
Carbon Ranges C6-C12	286	50 0	mg/kg dry	5	EK61509	11/15/06	11/16/06	EPA 8015M	
Carbon Ranges C12-C28	2860	50 0			"		n		
Carbon Ranges C28-C35	246	50 0			"	"	н		
Total Hydrocarbons	3390	50 0		"		H	»		
Surrogate 1-Chlorooctane		179%	70-	130	"	"	"	"	S-0
Suri ogate [®] 1-Chlorooctadecane		23.8%	/()-	130	"	"	"	n	S-0
Stockpile #4 (6K15013-12) Soil		·····-							
Carbon Ranges C6-C12	281	50 0	mg/kg dry	5	EK61511	11/15/06	11/16/06	EPA 8015M	
Carbon Ranges C12-C28	2330	50 0	4		и	"	н	"	
Carbon Ranges C28-C35	187	50 0	н	••		•		п	
Total Hydrocarbons	2800	50 0	11	н	*1	и	11	11	
Surrogate 1-Chlorooctane		190%	70-	130	"	"	"	"	S-0
Surrogate 1-Chlorooctadecane		28 0 %	70-	130	"	"	"	"	S-0(

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Highlander Environmental Corp. 1910 N. Big Spring St Midland TX, 79705		l Project N Project M	Project: SW umber 272 anager: Ike	R/ Farnswo 4 Tavarez	orth Fed. B	fank Battery		Fax ⁻ (432) 6	82-3946	
		Oı	ganics b	y GC						
Environmental Lab of Texas										
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
Stockpile #5 (6K15013-13) Soil						_				
Carbon Ranges C6-C12	261	50.0	mg/kg dry	5	EK61511	11/15/06	11/16/06	EPA 8015M		
Carbon Ranges C12-C28	2760	50 0	"	11	п	н	"	"		
Carbon Ranges C28-C35	247	50.0	*	"		"	"	n		
Total Hydrocarbons	3270	50 0	••		"	н	н	*		
Surrogate: 1-Chlorooctane		17.8 %	70-1	30	"	"	"	"	S-0	
Surrogate: 1-Chlorooctadecane		24.4 %	70-1	30	"	"	"	"	S-0	
Stockpile #6 (6K15013-14) Soil										
Carbon Ranges C6-C12	191	50 0	mg/kg dry	5	EK61511	11/15/06	11/16/06	EPA 8015M		
Carbon Ranges C12-C28	1880	50.0	Ħ	**	"	u	**	n		
Carbon Ranges C28-C35	166	50.0	"		"		"	"		
Total Hydrocarbons	2240	50 0	u	"		н	н	"		
Surrogate: I-Chlorooctane		17.7 %	70-1	30	"	, "	"	n		
Surrogate: 1-Chlorooctadecane		24.4 %	70-1	30	IJ	"	"	"	S-0	
Stockpile #7 (6K15013-15) Soil										
Benzene	0.243	0.100	mg/kg dry	100	EK61904	11/19/06	11/20/06	EPA 8021B		
Toluene	1.83	0 100	11	н	"	н	и	н		
Ethylbenzene	0.802	0 100	"	"	н	н	n	"		
Xylene (p/m)	1.60	0,100		, n	•	**	н	11		
Xylene (o)	1.48	0,100	n	"	и	**	n	"		
Surrogate: a,a,a-Trifluorotoluene		155 %	80-1	20	"	"	"	"	S-0	
Surrogate: 4-Bromofluorobenzene		114 %	80-1	20	"	"	"	"		
Carbon Ranges C6-C12	1100	50.0	mg/kg dry	5	EK61511	11/15/06	11/16/06	EPA 8015M		
Carbon Ranges C12-C28	3460	50 0	n	и	11			u		
Carbon Ranges C28-C35	252	50.0	"	"	"		4			
Total Hydrocarbons	4810	50 0	n	"	"	"	н	"		
Surrogate: 1-Chlorooctane		22.8 %	70-1	130	"	"	"	"	S-0	
Surrogate: 1-Chlorooctadecane		25.0 %	70-1	130	"	"	"	n	S-0	

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Highlander Environmental Corp.	Project	SWR/ Farnsworth Fed. B Tank Battery	Fax: (432) 682-3946
1910 N. Big Spring St	Project Number	2724	
Midland TX, 79705	Project Manager.	Ike Tavarez	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	- Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile #8 (6K15013-16) Soil									
Benzene	0.320	0.100	mg/kg dry	100	EK61904	11/19/06	11/20/06	EPA 8021B	
Toluene	2.59	0 100	"	"	"	11	"	n	
Ethylbenzene	1.43	0 100	"	"	"	"	n	"	
Xylene (p/m)	2.41	0 100	"	н ,		11	н	11	
Xylene (0)	2.90	0 100	н	"	"	"	n	11	
Surrogate: a,a,a-Trifluorotoluene		178 %	80-1	20	"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		125 %	80-1	20	"	"	v	"	S-04
Carbon Ranges C6-C12	1090	50 0	mg/kg dry	5	EK61511	11/15/06	11/16/06	EPA 8015M	
Carbon Ranges C12-C28	3030	50 0	n	"	"	н	**	n	
Carbon Ranges C28-C35	217	50 0	"	"	"	19	"	п	
Total Hydrocarbons	4340	50 0	"	۳	n	и	н	*1	
Surrogate: 1-Chlorooctane		21.0 %	70-1	30	"	"	"	"	S-06
Surrogate: 1-Chlorooctadecane		24.8 %	70-1	30	n	"	"	"	S-06

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

General Chemistry Parameters by EPA / Standard Methods

		Environn	nental I	Lab of To	exas				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AH-1 0-1.0' BEB (6K15013-01) Soil									
% Moisture	6.9	0.1	%	1	EK61603	11/15/06	11/15/06	% calculation	
AH-2 0-1.0' BEB (6K15013-02) Soil									
% Moisture	4.9	0 1	%	1	EK61603	11/15/06	11/15/06	% calculation	
AH-3 0-1.0' BEB (6K15013-03) Soil								<u></u>	
% Moisture	8.2	01	%	I	EK61603	11/15/06	11/15/06	% calculation	
AH-4 0-1.0' BEB (6K15013-04) Soil									
% Moisture	6.6	01	%	۱	EK61603	11/15/06	11/15/06	% calculation	
AH-5 0-1.0' BEB (6K15013-05) Soil									
% Moisture	8.2	01	%	l	EK61603	11/15/06	11/15/06	% calculation	
AH-6 0-1.0' BEB (6K15013-06) Soil									
% Moisture	7.5	01	%	l	EK61603	11/15/06	11/15/06	% calculation	
AH-7 0-1.0' BEB (6K15013-07) Soil			<u> </u>						
% Moisture	12.1	0.1	%	1	EK61603	11/15/06	11/15/06	% calculation	
AH-8 0-1.0' BEB (6K15013-08) Soil									
% Moisture	8.7	0.1	%	1	EK61603	11/15/06	11/15/06	% calculation	
Stockpile #1 (6K15013-09) Soil									
% Moisture	8.6	0 1	%	1	EK61603	11/15/06	11/15/06	% calculation	
Stockpile #2 (6K15013-10) Soil					-				
% Moisture	10.2	0.1	%	l	EK61603	11/15/06	11/15/06	% calculation	
Stockpile #3 (6K15013-11) Soil					<u> </u>				
% Moisture	7.9	0.1	%	1	EK61603	11/15/06	11/15/06	% calculation	

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

ProjectSWR/ Farnsworth Fed. B Tank BatteryProject Number2724Project ManagerIke Tavarez

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas									
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile #4 (6K15013-12) Soil								· · · · · · · · · · · · · · · · · · ·	
% Moisture	9.6	01	%	I	EK61603	11/15/06	11/15/06	% calculation	
Stockpile #5 (6K15013-13) Soil									
% Moisture	8.1	0 1	%	1	EK61603	11/15/06	11/15/06	% calculation	
Stockpile #6 (6K15013-14) Soil									
% Moisture	6.3	0.1	%	1	EK61603	11/15/06	11/15/06	% calculation	
Stockpile #7 (6K15013-15) Soil									
% Moisture	9.4	0.1	%	1	EK61603	11/15/06	11/15/06	% calculation	
Stockpile #8 (6K15013-16) Soil									
% Moisture	9.5	0 1	%	1	EK61603	11/15/06	11/15/06	% calculation	

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Midland TX, 79705		Project Ma	anager Ike	Tavarez						
	0	rganics by	/ GC - Q	uality Co	ontrol					
Environmental Lab of Texas										
Analyte	Result	Reporting Lunit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK61509 - Solvent Extraction (GC)										
Blank (EK61509-BLK1)				Prepared &	Analyzed	11/15/06				
Carbon Ranges C6-C12	ND	10 0	mg/kg wet			~~~~				
Carbon Ranges C12-C28	ND	10,0	"							
Carbon Ranges C28-C35	ND	10 0	n							
Total Hydrocarbons	ND	10 0	n							
Surrogate: 1-C'hlorooctane	46 0		mg kg	50 0		92.0	70-130			
Surrogate [•] 1-Chlorooctadecane	61 6		"	50.0		123	70-130			
LCS (EK61509-BS1)				Prepared &	. Analyzed	. 11/15/06				
Carbon Ranges C6-C12	454	10 0	mg/kg wet	500	<u>-</u>	90 8	75-125			
Carbon Ranges C12-C28	434	10 0	н	500		86 8	75-125			
Carbon Ranges C28-C35	ND	10.0	n	0.00			75-125			
Total Hydrocarbons	888	10 0	"	1000		88.8	75-125			
Surrogate: 1-Chlorooctane	57.3		mg, kg	50 0		115	70-130			
Surrogate 1-Chlorooctadecane	63 1		"	50.0		126	70-130			
Calibration Check (EK61509-CCV1)				Prepared 1	1/15/06 A	nalyzed 1	/16/06			
Carbon Ranges C6-C12	214		mg/kg	250		85.6	80-120			
Carbon Ranges C12-C28	261			250		104	80-120			
Total Hydrocarbons	475		н	500		95 0	80-120			
Surrogate: 1-Chlorooctane	559		"	50 0		112	70-130			·· ·· · · · · · · · · · · · · · · · ·
Surrogate 1-Chlorooctadecane	64 1		"	50 0		128	70-130			
Matrix Spike (EK61509-MS1)	Sou	rce: 6K1501	3-02	Prepared 1	1/15/06 A	nalyzed. 1	/16/06			
Carbon Ranges C6-C12	502	10 0	mg/kg đry	526	ND	95 4	75-125			
Carbon Ranges C12-C28	493	10 0	"	526	ND	93 7	75-125			
Carbon Ranges C28-C35	ND	10 0	"	0.00	ND		75-125			
Total Hydrocarbons	995	10 0	"	1050	ND	94 8	75-125			
Surrogate 1-Chlorooctane	60 6		mg/kg	50 0		121	70-130			·····
Surrogate 1-Chlorooctadecane	583		"	50.0		117	70-130			

Project Number 2724

Project SWR/ Farnsworth Fed B Tank Battery

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Highlander Environmental Corp

1910 N Big Spring St

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Fax (432) 682-3946

Highlander Environmental Corp 1910 N Big Spring St. Midland TX, 79705		P Project Nu Project Ma	roject SW imber 272 nager. Ike	'R/ Farnswoi 24 Tavarez	rth Fed BT	ank Batter	у		Fax: (432)) 682-3946
	0	rganics by	GC - Q	uality Co	ontrol					
Environmental Lab of Texas										
Analyte	Result	Reporting Lumit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Lımit	Notes
Batch EK61509 - Solvent Extraction (GC)										
Matrix Spike Dup (EK61509-MSD1)	Sou	rce: 6K15013	-02	Prepared	11/15/06 A	nalyzed 11	/16/06			
Carbon Ranges C6-C12	501	10 0	mg/kg dry	526	ND	95 2	75-125	0 199	20	
Carbon Ranges C12-C28	490	10 0		526	ND	93 2	75-125	0.610	20	
Carbon Ranges C28-C35	ND	10 0	*	0.00	ND		75-125		20	
Total Hydrocarbons	990	10 0	"	1050	ND	94 3	75-125	0.504	20	
Surrogate. 1-Chlorooctane	61 2		mg/kg	50.0		122	70-130			
Surrogate: 1-Chlorooctadecane	64 6		"	500		129	70-130			
Batch EK61511 - Solvent Extraction (GC)										
Blank (EK61511-BLK1)				Prepared	11/15/06 A	nalyzed [,] 11	/16/06			
Carbon Ranges C6-C12	ND	10 0	mg/kg wet							
Carbon Ranges C12-C28	ND	10 0	н							
Carbon Ranges C28-C35	ND	10 0	11							
Total Hydrocarbons	ND	10 0	"							
Surrogate 1-Chlorooctane	46.6		mg kg	50 0		93.2	70-130	···		
Surrogate ⁻ 1-Chlorooctadecane	619		"	500		124	70-130			
LCS (EK61511-BS1)				Prepared	11/15/06 A	nalyzed 1	1/16/06			
Carbon Ranges C6-C12	458	10.0	mg/kg wet	500		916	75-125			
Carbon Ranges C12-C28	441	10 0	11	500		88 2	75-125			
Carbon Ranges C28-C35	ND	10 0	"	0 00			75-125			
Total Hydrocarbons	899	10 0	*	1000		89.9	75-125			
Surrogate: 1-Chlorooctane	58 0		mg kg	50 0		116	70-130			· · · · · · · · · · · · · · · · · · ·
Surrogate ⁻ 1-Chlorooctadecane	64 5		"	50 0		129	70-130			
Calibration Check (EK61511-CCV1)				Prepared	11/15/06 A	nalyzed 1	1/16/06			
Carbon Ranges C6-C12	214		mg/kg	250		85 6	80-120			
Carbon Ranges C12-C28	275		"	250		110	80-120			
Total Hydrocarbons	488		"	500		97 6	80-120			
Surrogate. 1-Chlorooctane	578		"	500		116	70-130			
Surrogate 1-Chlorooctadecane	63 4		"	50.0		127	70-130			

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	Organics by GC - Quality Contr	ol
Midland TX, 79705	Project Manager Ike Tavarez	
1910 N Big Spring St	Project Number 2724	
Highlander Environmental Corp	Project. SWR/ Farnsworth Fe	d B Tank Battery Fax (432) 682-3946

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

Batch EK61511 - Solvent Extraction (GC)

Matrix Spike (EK61511-MS1)	Sourc	e: 6K15015	5-03	Prepared	: 11/15/06	Analyzed:	11/16/06			
Carbon Ranges C6-C12	571	10 0	mg/kg dry	602	6 12	93 8	75-125			
Carbon Ranges C12-C28	585	10 0	"	602	55 5	88 0	75-125			
Carbon Ranges C28-C35	ND	10.0	11	0 00	ND		75-125			
Total Hydrocarbons	1160	10 0	"	1200	55 5	92 0	75-125			
Surrogate 1-Chlorooctane	60 5		mg/kg	50 0		121	70-130			
Surrogate · 1-Chlorooctadecane	65.0		"	500		130	70-130			
Matrix Spike Dup (EK61511-MSD1)	Sourc	e: 6K15015	5-03	Prepared	11/15/06	Analyzed	11/16/06			
Carbon Ranges C6-C12	566	10 0	mg/kg dry	602	6 12	93 0	75-125	0.880	20	
Carbon Ranges C12-C28	561	10 0	п	602	55 5	84 0	75-125	4 19	20	
Carbon Ranges C28-C35	ND	10 0	н	0 00	ND		75-125		20	
Total Hydrocarbons	1130	10 0	н	1200	55 5	89 5	75-125	2 62	20	
Surrogate. 1-C'hlorooctane	59.8		mg/kg	50 0		120	70-130			
Surrogate. 1-Chlorooctadecane	64 5		"	50 0		129	70-130			

Batch EK61904 - EPA 5030C (GC)

Blank (EK61904-BLK1)				Prepared 11/19	/06 Analyzed. 11	/20/06	
Benzene	ND	0.0250	mg/kg wet				
Toluene	ND	0.0250	"				
Ethylbenzene	ND	0.0250	н				
Xylene (p/m)	ND	0.0250	n				
Xylene (o)	ND	0 0250	11				
Surrogate a,a,a-Trifluorotoluene	46 2		ug kg	40.0	116	80-120	······
Surrogate. 4-Bromofluorobenzene	35.5		"	40 0	88.8	80-120	
LCS (EK61904-BS1)				Prepared 11/19	/06 Analyzed 11	1/20/06	
Benzene	1.33	0 0250	mg/kg wet	1 25	106	80-120	/=== /=== /===
Toluene	1.24	0 0250		1 25	99 2	80-120	
Ethylbenzene	1.29	0 0250	u	1 25	103	80-120	
Xylene (p/m)	2 25	0.0250	"	2 50	90.0	80-120	
Xylene (o)	1.07	0.0250	"	1 25	85 6	80-120	
Surrogate. a,a,a-Trifluorotoluene	36 5		ug kg	40.0	912	80-120	
Surrogate · 4-Bromofluorobenzene	44.6		"	40 0	112	80-120	

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Highlander Environmental Corp 1910 N. Big Spring St Midland TX, 79705		P Project Ni Project Ma	Project SW umber 272 anager Ike	/R/ Farnswoi 24 Tavarez	rth Fed. B 1	l'ank Batter	ý		Fax (432)	682-3946
L	0	rganics by	/ GC - O	uality Co	ontrol				<u> </u>	
Environmental Lab of Texas										
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK61904 - EPA 5030C (GC)										
Calibration Check (EK61904-CCV1)				Prepared: 1	11/19/06 A	nalyzed: 11	/20/06			
Benzene	50 3		ug/kg	50 0		101	80-120			
Toluene	45.5		"	50 0		91.0	80-120			
Ethylbenzene	40 1		"	50 0		80 2	80-120			
Xylene (p/m)	80 2		"	100		80 2	80-120			
Xylene (0)	41 5			50 0		83.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	42 6		n	40 0		106	80-120			
Surrogate 4-Bromofluorobenzene	42 7		n	40 0		107	80-120			
Matrix Spike (EK61904-MS1)	Sou	rce: 6K1601()-04	Prepared:	11/19/06 A	nalyzed 11	/20/06			
Benzene	1 39	0 0250	mg/kg dry	1 28	ND	109	80-120			
Toluene	1.33	0.0250	"	1 28	ND	104	80-120			
Ethylbenzene	1 44	0 0250	"	1 28	ND	112	80-120			
Xylene (p/m)	2 41	0 0250	ч	2.57	ND	93.8	80-120			
Xylene (o)	1.18	0 0250	"	1 28	ND	92 2	80-120			
Surrogate a,a,a-Trifluorotoluene	44 7		ugʻkg	40 0		112	80-120			
Surrogate 4-Bromofluorobenzene	42 9		"	40.0		107	80-120			
Matrix Spike Dup (EK61904-MSD1)	Sou	rce: 6K16010	0-04	Prepared.	11/19/06 A	nalyzed: 11	/20/06			
Benzene	1.13	00100 0	mg/kg dry	1 28	ND	88 3	80-120	21 0	20	R2
Toluene	1 09	0 00100	"	1 28	ND	85 2	80-120	199	20	
Ethylbenzene	1.11	0.00100	"	1.28	ND	86 7	80-120	25 5	20	R2
Xylene (p/m)	2 06	0 00100	"	2.57	ND	80.2	80-120	156	20	
Xylene (o)	1 05	0 00100	"	1 28	ND	82 0	80-120	11.7	20	
Surrogate: a,a,a-Trifluorotoluene	37 2		ug·kg	40 0		93.0	80-120	-		
Surrogate 4-Bromofluorohenzene	44 5		"	40 0		111	80-120			

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Highlander Environmental Corp	Project	SWR/ Farnsworth Fed. B Tank Battery	Fax (432) 682-3946
1910 N. Big Spring St	Project Number	2724	
Midland TX, 29705	Project Manager	Ike Tayarez	
General Chem	Project Manager. istry Parameters by EPA	Ike Tavarez A / Standard Methods - Quality Cont	trol

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK61603 - General Preparation (Prep)						·····	····			
Blank (EK61603-BLK1)				Prepared &	Analyzed	11/15/06				
% Solids	100		%							
Duplicate (EK61603-DUP1)	Sour	rce: 6K15007-	02	Prepared &	. Analyzed	11/15/06				
% Solids	89.0		%		89 5			0 560	20	
Duplicate (EK61603-DUP2)	Sou	rce: 6K15013-	12	Prepared 8	a Analyzed	. 11/15/06				
% Solids	914		%		90.4			1.10	20	

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Highlander 1910 N. Big Midland TX	Environmental Corp Project g Spring St Project Number g, 79705 Project Manager	SWR/ Farnsworth Fed. B Tank Battery 2724 Ike Tavarez	Fax (432) 682-3946					
	Notes and De	finitions						
S-06	6 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							
R2	The RPD exceeded the acceptance limit.							
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							
đry	Sample results reported on a dry weight basis							
RPD	Relative Percent Difference							
LCS	Laboratory Control Spike							
MS	Matrix Spike							
Dup	Duplicate							

Report Approved By:

Raland K Juik

. 11/21/2006

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer Jeanne Mc Murrey, Inorg. Tech Director LaTasha Cornish, Chemist Sandra Sanchez, Lab Tech.

Date:

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

lient:	Highlander
ate/ Time:	1150le 2:00
ab 1D # :	6/1/50
itials:	Cir

Sample Receipt Checklist

Olimat Initials

					entuniais
1	Temperature of container/ cooler?	Yes	No	2.0 °C	
2	Shipping container in good condition?	Hes	No		
3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
5	Chain of Custody present?	(eş	No		
6	Sample instructions complete of Chain of Custody?	Yes	No		
7	Chain of Custody signed when relinquished/ received?	Yeş	No		
3	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
P	Container label(s) legible and intact?	Xes	No	Not Applicable	
10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
11	Containers supplied by ELOT?	Yes	No		
12	Samples in proper container/ bottle?	Yes	No	See Below	
13	Samples properly preserved?	¥êş	No	See Below	
14	Sample bottles intact?	Yes	No		
15	Preservations documented on Chain of Custody?	Yes	No		
6	Containers documented on Chain of Custody?	¥es.	No		
17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
18	All samples received within sufficient hold time?	Ves	No	See Below	
9	Subcontract of sample(s)?	Yes	No	Not Applicable	
20	VOC samples have zero headspace?	Yes	No	Not Applicable	



Analytical Report

Prepared for:

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

Project: SWR/ Farnsworth Fed. B Tank Battery Project Number: 2724 Location: Lea Co., NM

Lab Order Number: 7A12023

Report Date: 01/18/07

	Highlander Environmental Corp	Project	SWR/ Farnsworth Fed B Tank Battery	Fax: (432) 682-3946
	1910 N. Big Spring St.	Project Number.	2724	
	Midland TX, 79705	Project Manager	Ike Tavarez	
L	a terre a series de la construcción			····

ANALYTICAL REPORT FOR SAMPLES

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Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Stockpile #2	7A12023-01	Soil	01/11/07 00 00	01-12-2007 16 30

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Highlander Environmental Corp 1910 N Big Spring St. Midland TX, 79705		Project Nu Project Ma	roject [.] SW mber 272 nager. Ike	R/ Farnswo 4 Tavarez	orth Fed. B 1	fank Battery		Fax: (432)	682-3946
		Org	ganics by iental La	y GC ab of Te	exas				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile #2 (7A12023-01) Soil									
Carbon Ranges C6-C12	661	100	mg/kg dry	10	EA71509	01/15/07	01/17/07	EPA 8015M	
Carbon Ranges C12-C28	4620	100	"	и	н	"	н	"	
Carbon Ranges C28-C35	403	100	н	11	"	"	"	H	
Total Hydrocarbons	5680	100	н	"	11		ч	"	

Surrogate:

Surrogate: 1-Chlorooctadecane

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.

S-06

S-06

	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	
2 (7A12023-01) Soil									
inges C6-C12	661	100	mg/kg dry	10	EA71509	01/15/07	01/17/07	EPA 8015M	
inges C12-C28	4620	100	"	и	н	"	H	*	
inges C28-C35	403	100	н	"	11	"	"		
rocarbons	5680	100	H	u	11		"	51	
1-Chlorooctane		104%	70-13	80	"	"	"	"	

70-130

12.6 %

Hıghlander Envıronmental Corp
1910 N Big Spring St
Midland TX, 79705

Project WR/ Farnsworth Fed. B Tank Battery Project Number 2724 Project Manager Ike Tavarez

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Lunit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile #2 (7A12023-01) Soil									
% Moisture	6.8	01	%	1	EA71607	01/15/07	01/16/07	% calculation	

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Environmental Lab of Texas

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1910 N Big Spring St. Midland TX, 79705		Project N Project Ma	umber 272 mager Ike	4 Tavarez						
		unanias ha				<u> </u>	_ _			
	0	rganics by Environi	7 GC - Q nental L	uanty Co ab of Te:	ontrol xas					
		Reporting		Souke	Source		%PEC			
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EA71509 - Solvent Extraction (GC)						·····				
Blank (EA71509-BLK1)				Prepared (01/15/07 A	nalyzed 01	/17/07			
Carbon Ranges C6-C12	ND	10 0	mg/kg wet							
Carbon Ranges C12-C28	ND	10 0	"							
Carbon Ranges C28-C35	ND	10.0	"							
Total Hydrocarbons	ND	10.0	n							
Surrogate: 1-Chlorooctane	49.4		mg/kg	50 0		98.8	70-130			
Surrogate 1-Chlorooctadecane	48 3		"	50 0		96 6	70-130			
LCS (EA71509-BS1)				Prepared: (01/15/07 A	nalyzed 01	/17/07			
Carbon Ranges C6-C12	561	10.0	mg/kg wet	500		112	75-125			
Carbon Ranges C12-C28	473	10 0	"	500		94 6	75-125			
Carbon Ranges C28-C35	ND	10 0	"	0 00			75-125			
Total Hydrocarbons	1030	10 0	"	1000		103	75-125			
Surrogate: 1-Chlorooctane	58.4		mg/kg	50 0		117	70-130			
Surrogate [•] 1-Chlorooctadecane	49 5		"	50 0		99 O	70-130			
Calibration Check (EA71509-CCV1)				Prepared:	01/15/07 A	nalyzed 0	1/17/07			
Carbon Ranges C6-C12	228		mg/kg	250		91.2	80-120			
Carbon Ranges C12-C28	251		"	250		100	80-120			
Total Hydrocarbons	479		"	500		95 8	80-120			
Surrogate 1-Chlorooctane	51.3		"	50.0		103	70-130			
Surrogate 1-Chlorooctadecane	47 1		"	50 0		94.2	70-130			
Matrix Spike (EA71509-MS1)	So	urce: 7A1202	6-04	Prepared	01/15/07 A	nalyzed 0	1/17/07			
Carbon Ranges C6-C12	639	10.0	mg/kg dry	525	ND	122	75-125			
Carbon Ranges C12-C28	534	10.0	н	525	ND	102	75-125			
Carbon Ranges C28-C35	ND	10 0	u	0 00	ND		75-125			
Total Hydrocarbons	1170	10 0	"	1050	ND	111	75-125			
Surrogate. 1-Chlorooctane	62.5		mg kg	50 0		125	70-130			
Surrogate: 1-Chlorooctadecane	62 5		"	50 0		125	70-130			

Project SWR/ Farnsworth Fed. B Tank Battery

Environmental Lab of Texas

Highlander Environmental Corp

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Fax (432) 682-3946

Highlander Environmental Corp.	, Project:	SWR/ Farnsworth Fed. B Tank Battery	Fax (432) 682-3946
1910 N Big Spring St	Project Number	2724	
Midland TX, 79705	Project Manager	Ike Tavarez	

Organics by GC - Quality Control

Environmental Lab of Texas

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

Batch EA71509 - Solvent Extraction (GC)

Matrix Spike Dup (EA71509-MSD1)	Sourc	Prepared 01/15/07 Analyzed 01/17/07								
Carbon Ranges C6-C12	632	10 0	mg/kg dry	525	ND	120	75-125	1 65	20	
Carbon Ranges C12-C28	509	10.0		525	ND	97 0	75-125	5.03	20	
Carbon Ranges C28-C35	ND	10 0	н	0.00	ND		75-125		20	
Total Hydrocarbons	1140	10 0	н	1050	ND	109	75-125	1 82	20	
Surrogate. 1-Chlorooctane	511		mg/kg	50.0		102	70-130			
Surrogate 1-Chlorooctadecane	52 1		"	50 0		104	70-130			

Environmental Lab of Texas

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General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Lumit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA71607 - General Preparation (Prep)										
Blank (EA71607-BLK1)				Prepared: 0	1/15/07	Analyzed 0	1/16/07			
% Solids	99.8		%							
Duplicate (EA71607-DUP1)	Sou	rce: 7A12022-	01	Prepared [.] C	1/15/07	Analyzed 0	1/16/07			
% Solids	96.4		%		94 6	~~~~~		1.88	20	
Duplicate (EA71607-DUP2)	Sou	rce: 7A12022-	32	Prepared [,] 0	1/15/07	Analyzed 0	1/16/07			
% Solids	95 2		%		95 1			0.105	20	
Duplicate (EA71607-DUP3)	Sou	rce: 7A12024-	20	Prepared. 0	1/15/07	Analyzed 0	1/16/07			
% Solids	97 7		%		97.8			0 102	20	
Duplicate (EA71607-DUP4)	Sou	rce: 7A12027-	12	Prepared: 0	1/15/07	Analyzed 0	1/16/07			
% Solids	92.4		%		92 0			0 434	20	
Duplicate (EA71607-DUP5)	Sou	rce: 7A15002-	03	Prepared (1/15/07	Analyzed 0	1/16/07			
% Solids	83.9		%		85 9			2.36	20	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas Page 6 of 7

Highlan 1910 N Midlanc	der Environmental Corp. Big Spring St F FX, 79705	Project Project Number: Project Manager	SWR/ Farnsworth Fed. B Tank Battery 2724 Ike Tavarez	Fax (432) 682-3946
L		Notes and D	efinitions	
5-06	The recovery of this surrogate is out matrix interference's	side control limits due to sa	imple dilution required from high analyte conce	ntration and/or
DET	Analyte DETECTED			
ND	Analyte NOT DEFECTED at or above t	he reporting limit		
NR	Not Reported			
dry	Sample results reported on a dry weight	basis		
RPD	Relative Percent Difference			
LCS	Laboratory Control Spike			
MS	Matrix Spike			
Dap	Duplicate			

Report Approved By

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer Jeanne Mc Murrey, Inorg. Tech Director LaTasha Cornish, Chemist Sandra Sanchez, Lab Tech.

Date

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Environmental Lab of Texas

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Page 7 of 7

12600 West 1-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

ER ENVIRONMENTAL CORP. ER ENVIRONMENTAL CORP. 910 N. Big Spring St. addada, Texas 79705 Fax (432) 682-394 addadad, Texas 79705 Fax (432) 682-394 addatent J Furns Longth Federal B Tank Bath Of Romand B Hand J Furns Longth Federal B Tank Bath Of Romand B Hand J Furns Leq County Not Struct County Not Struct County Not Bate (12) Date Date	PAGE: 0 ANALYSIS REQUEST Irinde or Sherit Wethod No.	(Circle or Specify Method No.)	== जैम । == जैम २ == जैम २ == जिम २	۵۵ میل میل میل میل میل میل میل میل میل میل	CD1041	(101) (11) (11) (11) (11) (11) (11) (11)	PLM (Албез PLM (Албез ROD, 1753, 1 Peal, 3008, Peal, 3						SAMPLED BY: (Print & Sign) Date:	SAMPLE SHIPPED BY: (Cr-ds) FEDEX BUS ARCBUL #	HAND DELLYBRED UP9 OTHER.	Indextander Confact Person:	The lock CZ Authorizat		rp. – Project Manager rotains pink sopy – Accounting receives
Iysis Reque IIGHLANDI 11: 0.2724 Scole 0.2724 Scole 0.2724 Scole 11: 0.2724 Scole 11: 11: 11: 11: 11: 11: 11: 11: 11: 11	lysis Request and Chain of Custody Record	TICHLANDER ENVIRONMENTAL CORP.	1910 N. Big Spring St.) 682-4559 Farmer (432) 682-394(LE: Lest Revaltics STTE MANAGER: PRESERVA	10:2724 PROJECT NAME: 2724 Scuff Farns worth Federal B Twar Batter &	DATE DATE DATE DATE OF LEG COUNTY / WM MUNITRIC (NUMBER OF COUNTY / WM MUNITRICATION NUMBER OF COUNTRICATION NUMBER OF COUNTRI	1/1/67 5/X 5/00/1/2 # 2 1 1 X					BY: (Signature) Date: // [3./() RECEIVED BY: (Signature) Dete:	BY: (Signature) Date:RECEIVED BY: (Signature) Date: Time:	BY: (Signaturo) Data:RECENTED BY: (Signature) Data:	JORATORY: ELT THUE: INC. BECEVED BY: (Signature) / / / / / / / / / / / /	14 STATES IN 2019. 11/2/07 TARE 11/2/07	TION FIEN REVENTED: MATRIX: F-Fator A-AF 2D-Solid REWARKS: C N. A a by C E-Sall E-Sall ALARKS:	1. W [[M. C. I.] out ell copies - Labaratory retains yellow copy - Return original copy to Highlander Arrivamental Car

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

Client:	Highlander Environmental
Date/ Time:	01-12-070 1630
Lab ID # :	7A 12023
Initials:	JMM

Sample Receipt Checklist

				(lient Initials
#1	Temperature of container/ cooler?	(Tes)	No	1'Z °C	
#2	Shipping container in good condition?	Yes	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Presenb	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5	Chain of Custody present?	(Yes')	No		
#6	Sample instructions complete of Chain of Custody?	Yes	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	Yes	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	Tes	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	Yes2	No		
#16	Containers documented on Chain of Custody?	Yes	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	Yes	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	Yes	No	Not Applicable	

		Variance Documentation	n	
Contact:		Contacted by:	Date/ Time:	·
Regarding:		······································		
Corrective Action Taken	:			
		₩~~~ ``````````````````````````````````		······
Check all that Apply		See attached e-mail/ fax		
		Client understands and would like to p	proceed with analysis	
_		Cooling process had begun shortly af	ter sampling event	
1				



A Xenco Laboratories Company

Analytical Report

Prepared for:



Lab Order Number: 7C19009

Report Date: 03/22/07

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

I

ProjectSWR/ Farnsworth FedB #5 Tank BatteryProject Number2724Project ManagerIke Tavarez

Fax: (432) 682-3946

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
AH-1 0-1 0'	7C19009-01	Soil	03/14/07 00 00	03-19-2007 10.45
AH-2 0-1 0'	7C19009-02	Soil	03/14/07 00 00	03-19-2007 10 [.] 45
AH-3 0-1 0'	7C19009-03	Soil	03/14/07 00 00	03-19-2007 10 45

Highlander Environmental Corp 1910 N Big Spring St Midland TX, 79705		I Project N Project Ma	Project SW umber 272 anager Ike	/R/ Farnswo 24 Tavarez	orth Fed B #	5 Tank Batte	гу	Fax: (432) 6	82-3946
		01	ganics b	y GC					
		Environ	mental L	ab of Te	exas				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AH-1 0-1.0' (7C19009-01) Soil									
Carbon Ranges C6-C12	19.9	10 0	mg/kg dry	1	EC72004	03/20/07	03/20/07	EPA 8015M	
Carbon Ranges C12-C28	372	10.0	"	"		"	11	U	
Carbon Ranges C28-C35	64.4	10 0	н	n	н	"	H	11	
Total Hydrocarbons	456	10.0	"	"		"	11	u	
Surrogate: 1-Chlorooctane		131 %	70	130	"	"	"	"	S-04
Surrogate: 1-Chlorooctadecane		135 %	70-	130	"	"	"	"	S-04
AH-2 0-1.0' (7C19009-02) Soil		-							
Carbon Ranges C6-C12	83.8	10.0	mg/kg dry	1	EC72004	03/20/07	03/20/07	EPA 8015M	
Carbon Ranges C12-C28	570	10 0		"	"	"		"	
Carbon Ranges C28-C35	63.4	10 0	**	"	41	"	"	**	
Total Hydrocarbons	717	10.0	"	"	"	n	n	"	
Surrogate: 1-Chlorooctane		120 %	70-	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		127 %	70-	130	"	"	"	n	
AH-3 0-1.0' (7C19009-03) Soil									
Carbon Ranges C6-C12	1040	50 0	mg/kg dry	5	EC72004	03/20/07	03/20/07	EPA 8015M	
Carbon Ranges C12-C28	3980	50 0	н	"	11	"		н	
Carbon Ranges C28-C35	477	50 0	*1	н	"	*1	"	n	
Total Hydrocarbons	5500	50.0	н	"	11	"	n	11	
Surrogate: 1-Chlorooctane		21.8 %	70-	130	"	"	"	"	S-06
Surrogate: 1-Chlorooctadecane		24.8 %	70-	130	"	n	n	"	S-06

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

Project · SWR/ Farnsworth Fed B #5 Tank Battery Project Number 2724 Project Manager: Ike Tavarez

General Chemistry Parameters by EPA / Standard Methods

Environmental	Lab	of	Texas
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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AH-1 0-1.0' (7C19009-01) Soil									
% Moisture	ND	0 1	%	1	EC72006	03/19/07	03/19/07	% calculation	
AH-2 0-1.0' (7C19009-02) Soil									
% Moisture	5.9	0 1	%	1	EC72006	03/19/07	03/19/07	% calculation	
AH-3 0-1.0' (7C19009-03) Soil									
% Moisture	17.2	0 1	%	1	EC72006	03/19/07	03/19/07	% calculation	

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1910 N Big Spring St										
Midiand 1X, 19705	<u> </u>	Project Ma	inager ike	Tavarez						
	0	rganics by	/ GC - Q	uality Co	ontrol					
		Environn	nental L	ab of Te	xas					
		Reporting	······	Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EC72004 - Solvent Extraction (GC)										
Blank (EC72004-BLK1)				Prepared &	k Analyzed	03/20/07				
Carbon Ranges C6-C12	ND	10 0	mg/kg wet							
Carbon Ranges C12-C28	ND	10 0	"							
Carbon Ranges C28-C35	ND	10 0	н							
Total Hydrocarbons	ND	10.0	"							
Surrogate: 1-C'hlorooctane	50.8	·····	mg'kg	50 0		102	70-130			···
Surrogate 1-Chlorooctadecane	46 7		n	50 0		93.4	70-130			
LCS (EC72004-BS1)				Prepared &	k Analyzed	03/20/07				
Carbon Ranges C6-C12	617	10 0	ing/kg wet	500		123	75-125			
Carbon Ranges C12-C28	477	10 0	**	500		95.4	75-125			
Carbon Ranges C28-C35	ND	10 0	ĸ	0 00			75-125			
Total Hydrocarbons	1090	10 0	11	1000		109	75-125			
Surrogate 1-C'hlorooctane	615		mg 'kg	50.0		123	70-130			
Surrogate 1-Chlorooctadecane	523		"	500		105	70-130			
LCS Dup (EC72004-BSD1)				Prepared [.]	03/20/07 A	nalyzed 0.	3/21/07			
Carbon Ranges C6-C12	539	10 0	mg/kg wet	500		108	75-125	13.0	20	
Carbon Ranges C12-C28	476	10.0	"	500		95 2	75-125	0 2 1 0	20	
Carbon Ranges C28-C35	ND	10.0	"	0 00			75-125		20	
Total Hydrocarbons	1010	10.0	"	1000		101	75-125	7.62	20	
Surrogate 1-C'hlorooctane	52 3		mg·kg	50 0		105	70-130			
Surrogate 1-Chlorooctadecane	38.5		"	50.0		77 0	70-130			
Calibration Check (EC72004-CCV1)				Prepared &	& Analyzed	03/20/07				
Carbon Ranges C6-C12	243		mg/kg	250		97 2	80-120			
Carbon Ranges C12-C28	238		н	250		95 2	80-120			
Total Hydrocarbons	481		34	500		96 2	80-120			
Surrogate: 1-C'hlorooctane	648		"	50 0		130	70-130		····.	
Surrogate 1-Chlorooctadecane	63 1		"	50 0		126	70-130			

Project SWR/ Farnsworth Fed. B #5 Tank Battery

Environmental Lab of Texas

Highlander Environmental Corp

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Fax (432) 682-3946

Highlander Environmental Corp.	Project	SWR/ Farnsworth Fed. B #5 Tank Battery
1910 N. Big Spring St	Project Number	2724
Midland TX, 79705	Project Manager	Ike Tavarez

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

			****							and the second s
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC72006 - General Preparation (Prep)										
Blank (EC72006-BLK1)				Prepared &	Analyzed	03/19/07				
% Solids	100		%							
Duplicate (EC72006-DUP1)	Sour	ce: 7C19003-	01	Prepared &	Analyzed	03/19/07				
% Solids	89.1		%		89 5			0 448	20	
Duplicate (EC72006-DUP2)	Sour	ce: 7C19009-	03	Prepared &	Analyzed	03/19/07				
% Solids	82.9		%		82.8		····	0 121	20	

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Highlande 1910 N B Midland T	r Environmental Corp. ig Spring St X, 79705	Project Project Number: Project Manager:	SWR/ Farnsworth Fed. B #5 Tank Battery 2724 Ike Tavarez	-Fax: (432) 682-3946				
		Notes and De	finitions					
S-06	The recovery of this surrogate is outside control I matrix interference's	mits due to sample di	ution required from high analyte concentration and/or					
S-04	04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect							
DET	Analyte DETECTED							
ND	Analyte NOT DETECTED at or above the reporting lin	nıt						
NR	Not Reported							
dry	Sample results reported on a dry weight basis							
RPD	Relative Percent Difference							
LCS	Laboratory Control Spike							
MS	Matrix Spike							
Dup	Duplicate							

Report Approved By:

Bur Barron

Date: 3/22/2007

Brent Barron, Laboratory Director/Corp. Technical Director Celey D. Keene, Org. Tech Director Raland K. Tuttle, Laboratory Consultant James Mathis, QA/QC Officer Jeanne Mc Murrey, Inorg. Tech Director

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

Variance/	Corrective	Action	Report-	Sample	Log-In
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Client	Highlander
Date/ Time.	3/19/07 10:45
Lab ID #	1019009
Initials.	Ľ.

Sample Receipt Checklist

				Client	Initials
#1	Temperature of container/ cooler?	Yes	No	2,6 °C	
#2	Shipping container in good condition?	Xes	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present,	
#4	Custody Seals intact on sample bottles/ container?	des l	No	Not Present	
#5	Chain of Custody present?	Yes	No		
#6	Sample instructions complete of Chain of Custody?	Yes	No		
#7	Chain of Custody signed when relinquished/ received?	Xes	No		
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	Yes	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11	Containers supplied by ELOT?	Yes	No		
/#12	Samples in proper container/ bottle?	YES	No	See Below	
#13	Samples properly preserved?	XES)	No	See Below	
#14	Sample bottles intact?	Tes	No		
#15	Preservations documented on Chain of Custody?	Xes	No		
#16	Containers documented on Chain of Custody?	Yes	No		
#17	Sufficient sample amount for indicated test(s)?	Xes	No	See Below	
#18	All samples received within sufficient hold time?	Tes	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

Contact:		Contacted by:		Date/ Time ⁻	
Regarding [.]					
		1	·····		
/ Corrective Action Taken	ł				
Check all that Apply.		See attached e-mail/ fax Client understands and wou Cooling process had begun	ld like to proceed with an shortly after sampling ev	nalysis vent	



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Analytical Report

Prepared for:

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

Project: SWR/ Farnsworth Fed. B Tank Battery Project Number: 2724 Location: Lea County, NM

Lab Order Number: 7E18006

Report Date: 05/23/07

Highlander Environmental Corp. 1910 N. Big Spring St. Midland TX, 79705 Project: SWR/ Farnsworth Fed. B Tank Battery Project Number: 2724 Project Manager: Ike Tavarez

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Stockpile # 2	7E18006-01	Soil	05/15/07 00:00	05-18-2007 15:18

Organics by GC Environmental Lab of Texas									
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile # 2 (7E18006-01) Soil									
Carbon Ranges C6-C12	725	50.0	mg/kg dry	5	EE71811	05/18/07	05/21/07	EPA 8015M	
Carbon Ranges C12-C28	4690	50.0	*1	"	"	N	n	11	
Carbon Ranges C28-C35	465	50.0	"	**	"	11	"	11	
Total Hydrocarbons	5880	50.0	H	**	It	"	11	11	
Surrogate 1-Chlorooctane		15.5 %	70-1	130	"	"	"	"	S-06
Surrogate 1-Chlorooctadecane		21.6 %	70-1	130	"	"	"	"	S-06

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile # 2 (7E18006-01) Soil								· · · · · · · · · · · · · · · · · · ·	
% Moisture	14.1	0.1	%	1	EE71901	05/18/07	05/19/07	% calculation	

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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 EE71811 - Solvent Extraction (GC)									
Blank (EE71811-BLK1)	/			Prepared:	05/18/07	Analyzed	: 05/21/07			
Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0								
Carbon Ranges C28-C35	ND	10.0	"							
Total Hydrocarbons	ND	10.0	"							
Surrogate: 1-Chlorooctane	45.6		mg/kg	50.0		91.2	70-130			
Surrogate. 1-Chlorooctadecane	47.8		"	50.0		95.6	70-130			
LCS (EE71811-BS1)				Prepared:	05/18/07	Analyzed	: 05/21/07			
Carbon Ranges C6-C12	569	10.0	mg/kg wet	500		114	75-125			
Carbon Ranges C12-C28	457	10.0	ĸ	500		91.4	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00			75-125			
Total Hydrocarbons	1030	10.0	**	1000		103	75-125			
Surrogate: 1-Chlorooctane	58.5		mg/kg	50.0		117	70-130			
Surrogate 1-Chlorooctadecane	52.2		"	50.0		104	70-130			
Calibration Check (EE71811-CCV1)				Prepared:	05/18/07	Analyzed	l: 05/22/07			
Carbon Ranges C6-C12	223		mg/kg wet	250		89.2	80-120			
Carbon Ranges C12-C28	227		11	250		90.8	80-120			
Total Hydrocarbons	450		"	500		90.0	80-120			
Surrogate 1-Chlorooctane	57.0		mg/kg	50.0		114	70-130			
Suriogate 1-Chlorooctadecane	59.6		"	50.0		119	70-130			
Matrix Spike (EE71811-MS1)	So	urce: 7E180	104-03	Prepared:	05/18/07	Analyzed	l: 05/22/07			
Carbon Ranges C6-C12	627	10.0	mg/kg dry	562	ND	112	75-125			
Carbon Ranges C12-C28	495	10.0		562	ND	88.1	75-125			
Carbon Ranges C28-C35	ND	10.0	п	0 00	ND		75-125			
Total Hydrocarbons	1120	10.0	"	1120	ND	100	75-125			
Surrogate. 1-Chlorooctane	49.0		mg/kg	50.0		98.0	70-130		<u> </u>	
Surrogate 1-Chlorooctadecane	<i>49</i> . <i>9</i>		"	50 0		99.8	70-130			

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Organics by GC - Quality Control

Environmental Lab of Texas

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

Batch EE71811 - Solvent Extraction (GC)

Matrix Spike Dup (EE71811-MSD1)	Sour	ce: 7E180	04-03	Prepared	05/18/07	Analyzed	: 05/22/07		
Carbon Ranges C6-C12	572	100	mg/kg dry	562	ND	102	75-125	9.35	20
Carbon Ranges C12-C28	452	10.0	"	562	ND	80.4	75-125	914	20
Carbon Ranges C28-C35	ND	10.0	11	0.00	ND		75-125		20
Total Hydrocarbons	1020	10.0	11	1120	ND	91.1	75-125	9.31	20
Surrogate. 1-Chlorooctane	44.0		mg/kg	50.0		88 0	70-130		
Surrogate I-Chlorooctadecane	45.2		"	50.0		90 4	70-130		

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General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE71901 - General Prepar	ation (Prep)									
Blank (EE71901-BLK1)				Prepared	& Analyze	ed: 05/19/	07			
% Solids	100		%							
Duplicate (EE71901-DUP1)	Soi	urce: 7E1700	9-01	Prepared	& Analyze	ed: 05/19/	07			
% Solids	99.2		%		99.2			0.00	20	

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		Notes and Definitions
i	Midland TX, 79705	Project Manager: Ike Tavarez
	Highlander Environmental Corp. 1910 N. Big Spring St.	Project: SWR/ Farnsworth Fed. B Tank Battery Project Number: 2724

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

Report Approved By:

Brent Barron, Laboratory Director/Corp. Technical Director Celey D. Keene, Org. Tech Director Raland K. Tuttle, Laboratory Consultant

Date:

James Mathis, QA/QC Officer Jeanne Mc Murrey, Inorg. Tech Director

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

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

(1947、44、49年4月24日、4月二日、1947年1月1日、4月二月二日、1947年1月1日)

Client.	Highlander Env.	
Date/ Time:	5-18-07 3:18	
Lab ID # ·	7E18006	
Initials:	al	

Sample Receipt Checklist

Client Initials °C Yes) No #1 Temperature of container/ cooler? Ò Yes No Shipping container in good condition? #2 Yes #3 Custody Seals intact on shipping container/ cooler? No Not Present Not Present Custody Seals intact on sample bottles/ container? Yes No #4 Yes No Chain of Custody present? #5 (Yes) No #6 Sample instructions complete of Chain of Custody? Chain of Custody signed when relinquished/ received? (Yes) No #7 Chain of Custody agrees with sample label(s)? Ves) No ID written on Cont./ Lid #8 Container label(s) legible and intact? des No Not Applicable #9 Yes No #10 Sample matrix/ properties agree with Chain of Custody? NO #11 Containers supplied by ELOT? Yes (es) No #12 Samples in proper container/ bottle? See Below × ltt NO Yes #13 Samples properly preserved? 10 See Below Yes? #14 Sample bottles intact? No Ves #15 Preservations documented on Chain of Custody? No œ #16 Containers documented on Chain of Custody? No (es) #17 Sufficient sample amount for indicated test(s)? No See Below Ves #18 All samples received within sufficient hold time? No See Below Yes No #19 Subcontract of sample(s)? Not Applicable VOC samples have zero headspace? les No Not Applicable #20

Variance Documentation

Contact:		Contacted by:		Date/ Time:	
Regarding: # <u>13 Not</u>	cat en	orgh			
		<u> </u>			<u></u>
Corrective Action Take	en:				
					
		······································			
Check all that Apply:	\sim	See attached e-mail/ fax			
	Z	Client understands and wou	Id like to proceed with ar	nalysis	
		Cooling process had begun	shortly after sampling ev	vent	
]					

Analytical Report 287212

for

Highlander Environmental Corp.

Project Manager: Ike Tavarez SWR / Farnsworth Fed. B # 5 2724

13-AUG-07



12600 West I-20 East Odessa, Texas 79765

A Xenco Laboratories Company

NELAC certification numbers: Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America



13-AUG-07



Project Manager: Ike Tavarez Highlander Environmental Corp. 1910 N. Big Spring Street Midland, TX 79705

Reference: XENCO Report No: 287212 SWR / Farnsworth Fed. B # 5 Project Address: Lea Co., NM

Ike Tavarez:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 287212. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 287212 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron Odessa Laboratory Director

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America



Certificate of Analysis Summary 287212

Highlander Environmental Corp., Midland, TX

Project Name: SWR / Farnsworth Fed. B # 5



Project Id: 2724 Contact: Ike Tavarez Project Location: Lea Co, NM

Date Received in Lab: Fri Aug-03-07 09 11 am Report Date: 13-AUG-07

Project Manager: Brent Barron, II

	Lab Id:	287212-001				4
Analysis Requested	Field Id:	AH-3 (0-1 0')				
Analysis Requested	Depth:		1			
	Matrix:	SOIL				
	Sumpled:	Aug-01-07 00 00			 	
Percent Moisture	Extracted:					
	Analyzed:	Aug-08-07 09 28				
	Units/RL:	% RL			 	
Percent Moisture		14.9 1 00				
TPH by SW8015 Mod	Extracted:	Aug-06-07 13 43				
	Analyzed:	Aug-08-07 12 53				
	Units/RL:	mg/kg RL				
C6-C12 Gasoline Range Hydrocarbons	-	82 3 50 3		-		
C12-C28 Diesel Range Hydrocarbons		1670 50 3				
C28-C35 Oil Range Hydrocarbons		1050 50 3				
Total TPH		2802 3				

This analytical report and the entire data package it represents has been nude for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories XENCO Laboratories assumes no responsibility and makes no warranty to the end use of like data hereby presented Our liability is limited to the amount invoced for this work order unless otherwise agreed to in writing

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Mianu - Latin America

Brent Barron

Odessa Laboratory Director



- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the MQL and above the SQL.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K Sample analyzed outside of recommended hold time.

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	Phone	Fax
11381 Meadowglen Lane Suite L Houston, Tx 77082-2647	(281) 589-0692	(281) 589-0695
9701 Harry Hines Blvd, Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, Suite 104, San Antonio, TX 78238	(210) 509-3334	(201) 509-3335
2505 N. Falkenburg Rd., Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St, Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555



Form 2 - Surrogate Recoveries



Project Name: SWR / Farnsworth Fed. B # 5

Vork Order #: 287212			Project ID	:2724		
Lab Batch #: 701919	Sample: 287085-006 S / N	1S Bat	ch: 1 Matri	x: Soil		
Units: mg/kg		SU	RROGATE RE	COVERY S	STUDY	
TPH by SW	8015 Mod	Amount Found ĮAį	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1 Chloroostadecane		62.3	50.0	175	70.135	
1-Chlorooctane	<u></u>	69.5	50.0	139	70-135	*
Lab Batch #: 701919	Samula: 287085-006 SD /	MSD Bat	ahi 1 Matri	Soil	<u> </u>	<u></u>
Units: mg/kg	Sample: 207005-000 527	SU	RROGATE RE	COVERY	STUDY	
TPH by SW	8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	·····	64 5	50.0	129	70-135	
1-Chlorooctane		64 5	50.0	129	70-135	
Lab Batch #: 701919	Sample: 287212-001 / SM	IP Bat	ch: ¹ Matri	x: Soil	<u></u>	
Units: mg/kg	•	SU	RROGATE RE	COVERY	STUDY	
TPH by SW	8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Allary		<u> </u>				
1-Chlorooctadecane	<u></u>	54.4	50.3	117	70-135	
			50.5	100	70-135	<u> </u>
Lab Batch #: 701919	Sample: 497953-1-BK57	BKS Bat	tch: Matri	x: Solid		
		50	KKUGATE Kr	COVERY		
TPH by SW Analy	8015 Mod /tes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	<u></u>	53 2	50.0	106	70-135	
1-Chlorooctane		58 0	50.0	116	70-135	
Lab Batch #: 701919	Sample: 497953-1-BLK /	BLK Ba	tch: ¹ Matri	x: Solid		
Units: mg/kg		SU	RROGATE RE	COVERY	STUDY	
TPH by SW Analy	8015 Mod /tes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane		54 5	50.0	109	70-135	
1-Chlorooctane		51.9	50.0	104	70-135	

** Surrogates outside limits, data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / BAll results are based on MDL and validated for QC purposes.





Project Name: SWR / Farnsworth Fed. B # 5

Work Order #: 287212	Project ID:										
Lab Batch #: 701919	Sample: 497953	-1-BKS	Matr	ix: Solid							
Date Analyzed: 08/08/2007	Date Prepared: 08/06/2	007	Analy	st: CELK	EE						
Reporting Units: mg/kg	Batch #: 1	BLANK /	BLANK SPI	IKE REC	COVERY S	STUDY					
TPH by SW8015 Mod	Biank Result	Spike Added	Blank Spike	Blank Spike	Control Limits	Flags					
Analytes		(8)	Result [C]	%R [D]	%R						
C6-C12 Gasoline Range Hydrocarbons	ND	500	568	114	70-135						
C12-C28 Diesel Range Hydrocarbons	ND	500	484	97	70-135						

Blank Spike Recovery [D] = 100*[C]/[B] All results are based on MDL and validated for QC purposes.





Form 3 - MS / MSD Recoveries

Project Name: SWR / Farnsworth Fed. B # 5



Work Order # : 287212						Project II	D: 2724				
Lab Batch ID: 701919 Question Date Analyzed: 08/08/2007 D	C- Sample ID: Date Prepared:	287085- 08/06/2	-006 S 007	Ba An	tch #: alyst:	l Matri: CELKEE	k: Soil				
Reporting Units: mg/kg		Μ	ATRIX SPIKI	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY 9	STUDY		
TPH by SW8015 Mod	Parent Sample Result	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample Result (F)	Spiked Dup. %P	RPD	Control Limits %B	Control Limits % RPD	Flag
Analytes	[A]	[B]		(D)	[E]	Kesun [r]	[G]				
C6-C12 Gasoline Range Hydrocarbons	ND	724	850	117	724	869	120	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	48 3	724	696	89	724	713	92	3	70-135	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B Relative Percent Difference RPD = 200*(D-G)/(D+G) Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable N = See Narrative, EQL = Estimated Quantitation Limit



Sample Duplicate Recovery



Project Name: SWR / Farnsworth Fed. B # 5

Work Order #: 287212

Lab Batch #: ⁷⁰²⁰⁴⁶ Date Analyzed: 08/08/2007 OC- Sample ID: 287443-001 D	Date Prepared: 08/0 Batch #: 1	8/2007	Project I Analy Matr	D: 2724 st: IRO ix: Soil	
Reporting Units: %	SAMPLE	SAMPLE	DUPLIC	ATE REC	OVERY
Percent Moisture	Parent Sample Result {A]	Sample Duplicate Result	RPD	Control Limits %RPD	Flag
Analyte		[B]			
Percent Moisture	5.95	5.83	2	20	1

Spike Relative Difference RPD 200 * | (B-A)/(B+A) | All Results are based on MDL and validated for QC purposes

An	alvei	s R	ean	69	t p	nd	Cł	nai	in	of	Fr	1118	tod	v	Ŧ	20	00		7	T							PAC	E.	1				OF:			
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CLIENT N	WIE: S	UR				SITE L	MANA	AGER Tau	: /ar4	07				VERS		P	RES	ERV.	ATTVI DD	5				33				HE19/00	20/01							
PROJECT	*°: 27	24	PRO	IECT Vra	NAME	worth	L Fe	ed.	B	<u>#5</u>	5			CONTAB	(w)					- eoe	908/	100	1			Volatiloe		6840/83	Aoi. Bi	2 3	19 19 19 19 19	g	E	3		
LAB I.D NUMBER	DATE	TIME	KATTRIX COMP.	CRAB	hea	(5) 18 28	יאא פיניפ 12 ו	1 IDEN 1 7	DEALTH	CATIO.	N			NUMBER OF) CINELLI	HCL.	EONH	ICE	NONE	BTEC 60201	MTBE 8020.	110 410	OLUN HIVE	RCRA Matal	TCLP Volati	TCLP Bend	128	CC.MS Vol.	GC.MS Sam	Part 608/1	BOD. 733, J	Gemma Sp	Alpha Beta	PLN (Arbon		
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Flease Fill out all copies - laboratory rotains yallow copy - Return arginal copy to Highlander Environmental Corp. - Project Manager rotains pick copy - Accounting receives Gold copy

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

Client	Highlander
Date/ Time	8307 911
Lab ID #	287212
Initials	(4)

Sample Receipt Checklist

•			Client Initial
#1 Temperature of container/ cooler?	(es)	No	ho ·cl
#2 Shipping container in good condition?	(es)	No	
#3 Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present
#4 Custody Seals intact on sample bottles/ container?	Yes	No	Not Present
#5 Chain of Custody present?	Yes	No	
#6 Sample instructions complete of Chain of Custody?	Ves	No	
#7 Chain of Custody signed when relinquished/ received	? (es)	No	
#8 Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid
#9 Container label(s) legible and intact?	YES	No	Not Applicable
#10 Sample matrix/ properties agree with Chain of Custo	dy? Kes	No	
#11 Containers supplied by ELOT?	Xes)	No	
#12 Samples in proper container/ bottle?	Yes'	No	See Below
#13 Samples properly preserved?	Yes)	No	See Below
#14 Sample bottles intact?	Yes)	No	
#15 Preservations documented on Chain of Custody?	Yes	No	
#16 Containers documented on Chain of Custody?	Yes	No	
#17 Sufficient sample amount for indicated test(s)?	YES	No	See Below
#18 All samples received within sufficient hold time?	Yes	No	See Below
#19 Subcontract of sample(s)?	Yes	No	(Not Applicable)
#20 VOC samples have zero headspace?	YEP	No	Not Applicable

Variance Documentation

Contact Contacted by. Date/ Time Regarding Corrective Action Taken Check all that Apply See attached e-mail/ fax

Client understands and would like to proceed with analysis Cooling process had begun shortly after sampling event

Analytical Report 287215

for

Highlander Environmental Corp.

Project Manager: Ike Tavarez

SWR / Farnsworth Fed. B Tank Battery 2724

13-AUG-07



12600 West I-20 East Odessa, Texas 79765

A Xenco Laboratories Company

NELAC certification numbers: Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America



13-AUG-07



Project Manager: Ike Tavarez Highlander Environmental Corp. 1910 N. Big Spring Street Midland, TX 79705

Reference: XENCO Report No: 287215 SWR / Farnsworth Fed. B Tank Battery Project Address: Lea Co., NM

Ike Tavarez:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 287215. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 287215 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron Odessa Laboratory Director

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Certificate of Analysis Summary 287215

Highlander Environmental Corp., Midland, TX

Project Name: SWR / Farnsworth Fed. B Tank Battery



Project Id: 2724 Contact: Ike Tavarez Project Location: Lea Co., NM

Date Received in Lab: Fri Aug-03-07 09-11 am Report Date: 13-AUG-07

Project Manager: Brent Barron, II

-	Lab Id:	287215-001			
Analysis Requested	Field Id:	Stockpile # 2			
Апигузіз Кециезіей	Depth:				
	Matrix:	SOIL			
	Sampled:	Aug-01-07 00 00			
Percent Moisture	Extracted:				
	Analyzed:	Aug-08-07 09 27			
	Units/RL:	% RL			
Percent Moisture		12 0 1 00			
TPH by SW8015 Mod	Extracted:	Aug-06-07 13.43			
	Analyzed:	Aug-08-07 13 19			
	Units/RL:	mg/kg RL			
C6-C12 Gasoline Range Hydrocarbons		332 50 1			
C12-C28 Diesel Range Hydrocarbons		3760 50 1			
C28-C35 Oil Range Hydrocarbons		1530 50 1			
Total TPH		5622			· · · · · · · · · · · · · · · · · · ·

This analytical report, and the entire data package it represents has been made for your evclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories XENCO Laboratories assumes no responsibility and makes no warratily to the end use of the data hereby presented Our liability is limited to the amount invoced for this work order unless otherwise agreed to in writing.

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Brent Barron

Odessa Laboratory Director



- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the MQL and above the SQL.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K Sample analyzed outside of recommended hold time.

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(305) 823-8500	(305) 823-8555
	Phone (281) 589-0692 (214) 902 0300 (210) 509-3334 (813) 620-2000 (305) 823-8500



Form 2 - Surrogate Recoveries



Project Name: SWR / Farnsworth Fed. B Tank Battery

/ork Order #: 287215		Project II	D: 2724		
Lab Batch #: 701919 Sample: 287085-006 S / 1	MS Bat	tch: 1 Matr	ix: Soil		
Units: mg/kg	SU	RROGATE R	ECOVERY	STUDY	
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes					
1-Chlorooctadecane	62.3	50.0	125	70-135	*
	().(7)			70-155	
Lab Batch #: 701919 Sample: 287085-006 SD Units: mg/kg	/ MSD Bat	tch: ¹ Matr RROGATE R	ix: Soil ECOVERY	STUDY	<u>w</u> .
TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	64.5	50.0	129	70-135	
1-Chlorooctane	64.5	50.0	129	70-135	
Lab Batch #: 701919 Sample: 287215-001 / SN	ИР Ва	tch: 1 Matr	ix: Soil	ب	
Units: mg/kg	SU	RROGATE R	ECOVERY	STUDY	
TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R D	Control Limits %R	Flags
1-Chlorooctadecane	59 2	50.1	118	70-135	
1-Chłorooctane	55.7	50.1	111	70-135	
Lab Batch #: 701919 Sample: 497953-1-BKS	BKS Ba	tch: ¹ Matr	ix: Solid		
Units: mg/kg	SU	RROGATE R	ECOVERY	STUDY	
TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R {D}	Control Limits %R	Flags
1-Chlorooctadecane	53.2	50 0	106	70-135	
1-Chlorooctane	59.0	50.0	116	70-135	
•	58.0	500		10.00	
Lab Batch #: 701919 Sample: 497953-1-BLK	/ BLK Ba	tch: <u>1</u> Matr	ix: Solid		· · · · · · · · · · · · · · · · · · ·
Lab Batch #: 701919 Sample: 497953-1-BLK Units: mg/kg	/ BLK Ba	tch: 1 Matr	ix: Solid ECOVERY	STUDY	
Lab Batch #: 701919 Sample: 497953-1-BLK Units: mg/kg TPH by SW8015 Mod Analytes	/ BLK Ba Amount Found [A]	tch: 1 Matr RROGATE R True Amount [B]	ix: Solid ECOVERY Recovery %R [D]	STUDY Control Limits %R	Flags
Lab Batch #: 701919 Sample: 497953-1-BLK Units: mg/kg TPH by SW8015 Mod Analytes 1-Chlorooctadecane	/ BLK Ba Amount Found A]	tch: 1 Matr RROGATE R Amount [B] 50.0	ix: Solid ECOVERY Recovery %R [D] 109	STUDY Control Limits %R 70-135	Flags

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.





Project Name: SWR / Farnsworth Fed. B Tank Battery

Work Order #: 287215		P	roject ID:			2724
Lab Batch #: 701919	Sample: 497953	-1-BKS	Matu	ix: Solid		
Date Analyzed: 08/08/2007	Date Prepared: 08/06/20	EE				
Reporting Units: mg/kg	Batch #: 1	BLANK /	BLANK SP	IKE REC	COVERY S	STUDY
TPH by SW8015 Mod	Blank Result	Spike Added	Blank Spike	Blank Spike	Control Limits	Flags
Analytes		[B]	Result [C]	%R [D]	%R	
C6-C12 Gasoline Range Hydrocarbons	ND	500	568	114	70-135	
C12-C28 Diesel Range Hydrocarbons	ND	500	484	97	70-135	

Blank Spike Recovery [D] = 100*[C]/[B] All results are based on MDL and validated for QC purposes.





Form 3 - MS / MSD Recoveries

Project Name: SWR / Farnsworth Fed. B Tank Battery



Work Order #: 287215						Project II	D: 2724				
Lab Batch ID: 701919 Date Analyzed: 08/08/2007 Reporting Units: mg/kg	QC- Sample ID: Date Prepared:	287085 08/06/2	-006 S 2007 1ATRIX SPIK	Ba An E / MAT	tch #: alyst: RIX SPI	I Matrix CELKEE KE DUPLICA	c: Soil	OVERY	STUDY		
TPH by SW8015 Mod	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	-
C6-C12 Gasoline Range Hydrocarbons	ND	724	850	117	724	869	120	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	48 3	724	696	89	724	713	92	3	70-135	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B Relative Percent Difference RPD = 200*(D-G)/(D+G) Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative. EQL = Estimated Quantitation Limit



Sample Duplicate Recovery



Project Name: SWR / Farnsworth Fed. B Tank Battery

Work Order #: 287215

Lab Batch #: 702046 Date Analyzed: 08/08/2007 QC- Sample ID: 287443-001 D	Date Prepared: 08/0 Batch #: 1	08/2007	Project I Analy Matr	D: ²⁷²⁴ /st: IRO ix: Soil	
Reporting Units: %	SAMPLE	/ SAMPLE	DUPLIC	ATE REC	OVERY
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result	RPD	Control Limits %RPD	Flag
Analyte		(B)			
Percent Moisture	5.95	5.83	2	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) | All Results are based on MDL and validated for QC purposes

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

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

Client	Highlander
Date/ Time	8307 911
Lab ID #	287215
Initials	<u>a</u> L

Sample Receipt Checklist

				Client Initials
#1	Temperature of container/ cooler?	69	No).Q °C
#2	Shipping container in good condition?	(es)	No	
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present
#4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present
#5	Chain of Custody present?	Yes	No	
#6	Sample instructions complete of Chain of Custody?	Ves)	No	
#7	Chain of Custody signed when relinquished/ received?	res	No	
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont / Lid
#9	Container label(s) legible and intact?	YES	No	Not Applicable
#10	Sample matrix/ properties agree with Chain of Custody?	Yes.	No	
#11	Containers supplied by ELOT?	Kes)	No	
#12	Samples in proper container/ bottle?	Yes	No	See Below
#13	Samples properly preserved?	Yes)	No	See Below
#14	Sample bottles intact?	Yes	No	
#15	Preservations documented on Chain of Custody?	Yes	No	
#16	Containers documented on Chain of Custody?	Yes	No	
#17	Sufficient sample amount for indicated test(s)?	YES	No	See Below
#18	All samples received within sufficient hold time?	Yes	No	See Below
#19	Subcontract of sample(s)?	Yes	No	(Not Applicable)
#20	VOC samples have zero headspace?	YES	No	Not Applicable

Variance Documentation

Contact	 Contacted by.	Date/ Time
Regarding		
Corrective Action Taken.	 	· · · · · · · · · · · · · · · · · · ·
Check all that Apply	See attached e-mail/ fax Client understands and would like to proceed with an Cooling process had begun shortly after sampling evi	alysis ent

APPENDIX C

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State of New Mexico Energy Minerals and Natural Resources

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

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

1220 S. St. Francis Dr., Santa Fe, NM 87505 Santa F	e, NM 87505	side of form
Release Notificatio	n and Corrective Acti	on
	OPERATOR	X Initial Report 🗍 Final Report
Name of Company SOUTHWEST ROYALTIES, INC.	Contact DAWN M. HOWAI	U
Address 6 DESTA DR, ST 2100, MIDLAND, TX 79705	Telephone No. 432/688-3267	
Facility Name FARNSWORTH FEDERAL B #5	Facility Type OIL WELL	
Surface Owner VARIOUS -SEE ATTACHED Mineral Owner		Lease No. LC030180B
LOCATIO	N OF RELEASE	
Unit Letter Section Township Range Feet from the North	/South Line Feet from the Ea	ast/West Line County
L 7 26S 37E 1980 S	660 W	LEA
Latitude	Longitude	
		-
	Volume of Paleose Unknown	Volume Paceyared 125 (well)+145 (hure)
Source of Release Well blow out at well head, tanks overflowed &	Date and Hour of Occurrence	Date and Hour of Discovery
small leaks in tanks	8/23/06 11:30 A.M. CT	8/23/06 11:30 A.M. CT
Was Immediate Notice Given? X Yes No Not Required	PAT'S VOICEMAIL 505/390-0	0720 EXT 109
By Whom? DAWN HOWARD	Date and Hour 8/23/06 11:30 A	A.M. CT
Was a Watercourse Reached?	If YES, Volume Impacting the	Watercourse.
If a Watercourse was Imported Describe Fully *		
If a watercourse was impacted, Describe Funy.		
Describe Cause of Problem and Remedial Action Taken.*		
The well does not produce daily, but builds up enough pressure to flow t	p the backside. A pocket of gas or	an air bubble may have caused the connection
to blow off the well at the wellhead. The tanks were also full and overfl contamination being 1) approximately 2 to 4 acres of over spay from the	owed and were found to have small wellhead and 2) the battery -on the	leaks. There were actually two areas of e pad, overdrive area and extending into the
pasture.	in the satisfy on the	
Describe Area Affected and Cleanup Action Taken.*	<u></u>	
fluid in tanks drained. Highlander Environmental was contacted and is	ing oil was vacuumed up (125 BF as currently on location assessing dama	t the well site and 145 BF at the battery). All ages, taking samples and will be providing their
recommended remedial actions. Clean up will strictly adhere to NMOC	D Guidelines for Remediation of Le	eaks, Spills and Releases.
I hereby certify that the information given above is true and complete to	the best of my knowledge and under	erstand that pursuant to NMOCD rules and
regulations all operators are required to report and/or file certain release	notifications and perform corrective	e actions for releases which may endanger
should their operations have failed to adequately investigate and remedi	ate 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 resp	consibility for compliance with any other
federal, state, or local laws and or regulations.	OIL CONSE	RVATION DIVISION
Signature:	Approved by District Sumamisson	
Printed Name: Dawn M. Howard	Approved by District Supervisor:	
Title: Operations Assistant	Approval Date:	Expiration Date:
F-mail Address: dhoward@claytonwilliams.com	Conditions of Approval	_
		Attached
Date: 8/24/06 Phone: 432/688-3267	<u> </u>	

* Attach Additional Sheets If Necessary

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> 1301 W. Grand Avenue, Artesia, NM 88210 <u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410 <u>District IV</u> 1220 S. St Francis Dr., Santa Fe, NM 87505				State of New Mexico Energy Minerals and Natural Registers Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505									
			Rele	ease Notific	eatio	n and Co	rrecting	ction	1		\sim		
Name of Commence Southwest Develting Inc							OPERATOR Initia					inal Repor	
Address 6 I	Desta Driv	Telephone No. 432-688-3267					<u> </u>						
Facility Nar	ne Farnsw	orth Federal	B #5 We	ell and Tank Bat	itery	Facility Typ	e Tank Battery	& Wel	1				
Surface Ow	ner Vario	Lease No. LC030180B											
				LOCA	ATIO	N OF REI	LEASE		APL .	3002	51191	٩	
Unit Letter	Unit Letter Section Township			Feet from the North/		South Line Feet from the		East/West Line		County			
L	7	26S	37E	1980	S		660	w		Lea			
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			La	titude		Longitud	e					-	
Tune of Dala				NAT	URF	COF RELI	EASE		Volume I	Dessured	125 (mall	1145	
							(Bty)				ecovered 125 (wcll)+145		
Source of Release Well Blowout at wellhead, tanks overflowed & small leaks in tanks						Date and Hour of Occurrence 8/23/06 11:30 am. CT			Date and Hour of Discovery				
Was Immedia	ate Notice (If YES, To Whom?											
Yes L No L Not Required							Pate and Hour 9/02/06						
Was a Watercourse Reached?							If YES, Volume Impacting the Watercourse.						
□ Yes ⊠ No						N/A							
N/A Describe Cau The well docs to blow off th contamination pasture.	ise of Probl s not produ te well at th n being 1) a	em and Reme ce daily, but b e wellhead. 5 approximately	dial Actio puilds up e The tanks 2 to 4 act	n Taken.* mough pressure to were also full and res of overspray fi	o flow u l overfl rom the	ip the backside owed and were wellhead and	 A pocket of ga found to have sr the battery – o 	s or an a nall lead n the pa	air bubble r ks. There v ad, drive are	nay have ca vere actuall ea and exte	aused the o by two area nding into	connection as of the	
Describe Are The well was areas were tre	a Affected brought ur eated, areas	and Cleanup A ider control by around the w	Action Tal y choke in ell wcre ti	ken.* stallation. A vact lled and areas at t	uum tru the tank	ick picked up f a battery where	luids. Highlande TPH exceeded th	r Envir hc RRA	onmental C L were exc	orp. evalua avated.	ited site. (Over spray	
1 hereby certi regulations al public health should their c or the environ federal, state,	fy that the il operators or the envi operations h nment. In a or local la	information g are required to conment. The nave failed to addition, NMC ws and/or reg	iven abov o report a acceptan adequately OCD accep ulations.	e is true and comp nd/or file certain ce of a C-141 rep y investigate and ptance of a C-141	olete to release ort by t remedia report	the best of my notifications a he NMOCD m ate contaminati does not reliev	knowledge and u nd perform corre- arked as "Final R ion that pose a thu- re the operator of	understa ctive ac Ceport" reat to g respons	and that pur tions for re does not re ground wate sibility for o	suant to NI leases whic lieve the op er, surface v compliance	MOCD rul h may enco perator of l water, hun with any	les and langer liability nan health other	
Signature: Stewart M. Howard							OIL CONSERVATION DIVISION						
Printed Name	: Dawn M	Approved by District ENGINER											
Title: Operati	ions Assista		Approval Da	te: 12.12.0	8	Expiration	Date: -						
E-mail Address: dhoward@claytonwilliams.com						Conditions of Approval:					₫,[]		
Date:	1/29/08	Phone: 432/6	88-3267				···			1'R1	1	101	

Attach Additional Sheets If Necessary

1.