Highlander Environmental Corp.

Midland, Texas

February 24, 2006

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

RP 886

RE: Assessment and Closure Report for the Duke Energy Field Services, L.P., G-28-24-6-3 Pipeline Spill Located in the NW/4 of Section 2, Township 23 South, Range 36 East, Lea County, New Mexico.

Dear Mr. Johnson:

Highlander Environmental Corp. (Highlander) was contacted by Duke Energy Field Services, L.P. (Duke) to assess a spill on the G-28-24-6-3 Pipeline located in the NW/4 of Section 2, Township 23 South, Range 36 East, Lea County, New Mexico (Site). The site coordinates are N 32° 20' 22.8", W 103° 14' 39.3". The State of New Mexico C-141 (Initial) is included in Appendix C. The Site is shown on Figure 1.

Background

According to the State of New Mexico C-141 report, the spill occurred on June 30, 2005, from a rupture of a 4" low pressure steel pipeline. An oil operator was working on a heater treater, when electric power was lost and liquids were released into the pipeline. The release caused the low pressure line to rupture, spilling 8 barrels of condensate and produced water. The operator performed the repairs and removed impacted soils, however, the site was backfilled before Duke could obtain confirmatory samples. A work plan for installation of soil borings was submitted to the NMOCD on November 14, 2005.

Groundwater and Regulatory

Neither the New Mexico State Engineer Office database nor USGS database show wells in Section 2, however, wells in the vicinity of the section had reported depths to water ranging from 150' to 180' below ground surface. The New Mexico State Engineer and USGS well reports are shown in Appendix A. A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for

benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene and xylene). Based upon the depth to groundwater, the proposed RRAL for TPH is 5,000 mg/kg.

Assessment – Borehole Installation

On January 16-17, 2006, Highlander personnel supervised the installation of a total of five (5) soil borings to evaluate the vertical extent of any subsurface impact at this site. The soil borings were installed using an air-rotary type drilling rig. Soil samples were collected at 5 foot intervals to depths ranging from 16' to 26' below ground surface (bgs). Samples collected during drilling operations were field screened with an Organic Vapor Meter (OVM). The soil samples were placed into laboratory supplied containers and delivered to a laboratory under chain-of-custody control for TPH analysis by EPA method 8015 modified, BTEX by EPA method 8021B and chloride analysis by EPA method 300.0.

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

Soil Sample Results/Conclusions

The soil sample results are summarized in Table 1. Referring to Table 1, all TPH and BTEX samples were below the RRAL. Chloride concentrations were all below 1000 mg/kg, with the majority being below 250 mg/kg. In fact, the chloride concentrations were only elevated above 250 mg/kg in the perimeter boreholes #3 and #4 and not in the central spill area. The residual chloride impact to subsurface soils appears to be limited.

Based upon the results of the borings and investigation, no additional remediation work is required at this site. Copies of the laboratory reports and chain of custody documentation are included in Appendix B.

Considering the limited, extent of chloride impact and depth to groundwater, the residual chloride concentrations do not appear to be an imminent threat to groundwater. Based upon the investigation and remedial work performed at this facility, Duke Energy Field Services, L.P. requests closure of this site. If you concur, please provide a "No further activities needed" letter to Duke Energy Field Services, L.P. The State of New Mexico C-141 (Final) is included in Appendix C.

If you require any additional information or have any questions or comments, please call.

HIGHLANDER ENVIRONMENTAL CORP.

Timothy M. Reed, P.G.
Vice President

cc: Lynn Ward – DEFS

SITE INFORMATION

Type of Report: Assessment & Closure Report

Site:	**G-28-24-6-3 Pipeline**
Company:	**Duke Energy Field Services, LP**
Section, Township and Range	**Section 2, T23S, R36 E**
Unit Letter:	**D**
Lease Number:	**-**
County:	**Lea**
GPS:	32° 20' 22.8", 103° 14' 39.3"
Surface Owner:	State of New Mexico
Mineral Owner:	State of New Mexico
Directions:	From Eunice, New Mexico at the intersection of 234 and Main (207), go 4.9 miles south on
	207 and turn right (west) on King Road, go 5.7 miles on lease road, turn left (south),
	go 1.0 miles and turn left (east) and go 1.3 miles to Seven Rivers Queen Satelite,
	pipeline spill northeast of satelite.

Date Released:	6/30/2005
Type Release:	condensate
Source of Contamination:	Rupture of 4 inch low pressure line
Fluid Released:	8 barrels
Fluids Recovered:	5 barrels

Name:	**Lynn Ward**		Ike Tavarez
Company:	**Duke Energy Field Services, LP**		Highlander Environmental Corp.
Address:	**10 Desta Dr. Suite 400-W**		1910 N. Big Spring
P.O. Box			
City:	**Midland Texas, 79705**		Midland, Texas
Phone number:	**(432) 620-4207**		(432) 682- 4559
Fax:	**(432) 620-4162**		
Email:	**lcward@duke-energy.com**		itavarez@hec-enviro.com

Depth to Groundwater:	***Ranking Score***	***Site Data***
<50 ft	20	
50-99 ft	10	
>100 ft.	**0**	*Average Depth >100 BS*
WellHead Protection:	***Ranking Score***	***Site Data***
Water Source <1,000 ft., Private <200 ft.	*20*	*None*
Water Source >1,000 ft., Private >200 ft.	***0***	
Surface Body of Water:	***Ranking Score***	***Site Data***
<200 ft.	*20*	*None*
200 ft - 1,000 ft.	10	*None*
>1,000 ft.	**0**	
Total Ranking Score:	**0**	

Benzene	***Total BTEX***	***TPH***
10	**50**	**5,000**

Table 1
Duke Energy Field Services, L.P.
G-28-24-6-3 Line
Summary of BTEX, TPH and Chloride Analysis of Soil Samples
Lea County, New Mexico

Sample ID	Sample Depth, feet	Sample Date	TPH			Benzene mg/kg	Toluene mg/kg	Ethyl-benzene mg/kg	Xylene mg/kg	Total BTEX mg/kg	Chloride mg/kg
			GRO mg/kg	DRO mgkg	Total mg/kg						
BH-1	3-4	1/16/06	95.5	405.0	501.0	ND	0.219	0.361	1.794	2.374	134
	5-6	1/16/06	-	-	-	-	-	-	-	-	160
	7-8	1/16/06	ND	ND	ND	ND	ND	ND	ND	ND	223
	13-14	1/16/06	ND	ND	ND	ND	ND	ND	ND	ND	27.1
	18-19	1/16/06	ND	ND	ND	-	-	-	-	-	7.3
BH-2	3-4	1/16/06	ND	ND	ND	-	-	-	-	-	64.8
	5-6	1/16/06	ND	ND	ND	-	-	-	-	-	81
	7-8	1/16/06	ND	ND	ND	-	-	-	-	-	66.3
BH-3	2-3	1/17/06	ND	ND	ND	-	-	-	-	-	167
	5-6	1/17/06	ND	ND	ND	-	-	-	-	-	420
	7-8	1/17/06	ND	ND	ND	-	-	-	-	-	364
BH-4	2-3	1/17/06	ND	ND	ND	-	-	-	-	-	41.7
	5-6	1/17/06	ND	ND	ND	-	-	-	-	-	678
	7-8	1/17/06	ND	ND	ND	-	-	-	-	-	863
BH-5	3-4	1/17/06	ND	ND	ND	-	-	-	-	-	136
	5-6	1/17/06	ND	ND	ND	-	-	-	-	-	153
	7-8	1/17/06	ND	ND	ND	-	-	-	-	-	244

(-) Not Analyzed
ND - Analyte Not Detected at or Above Reporting Limits.

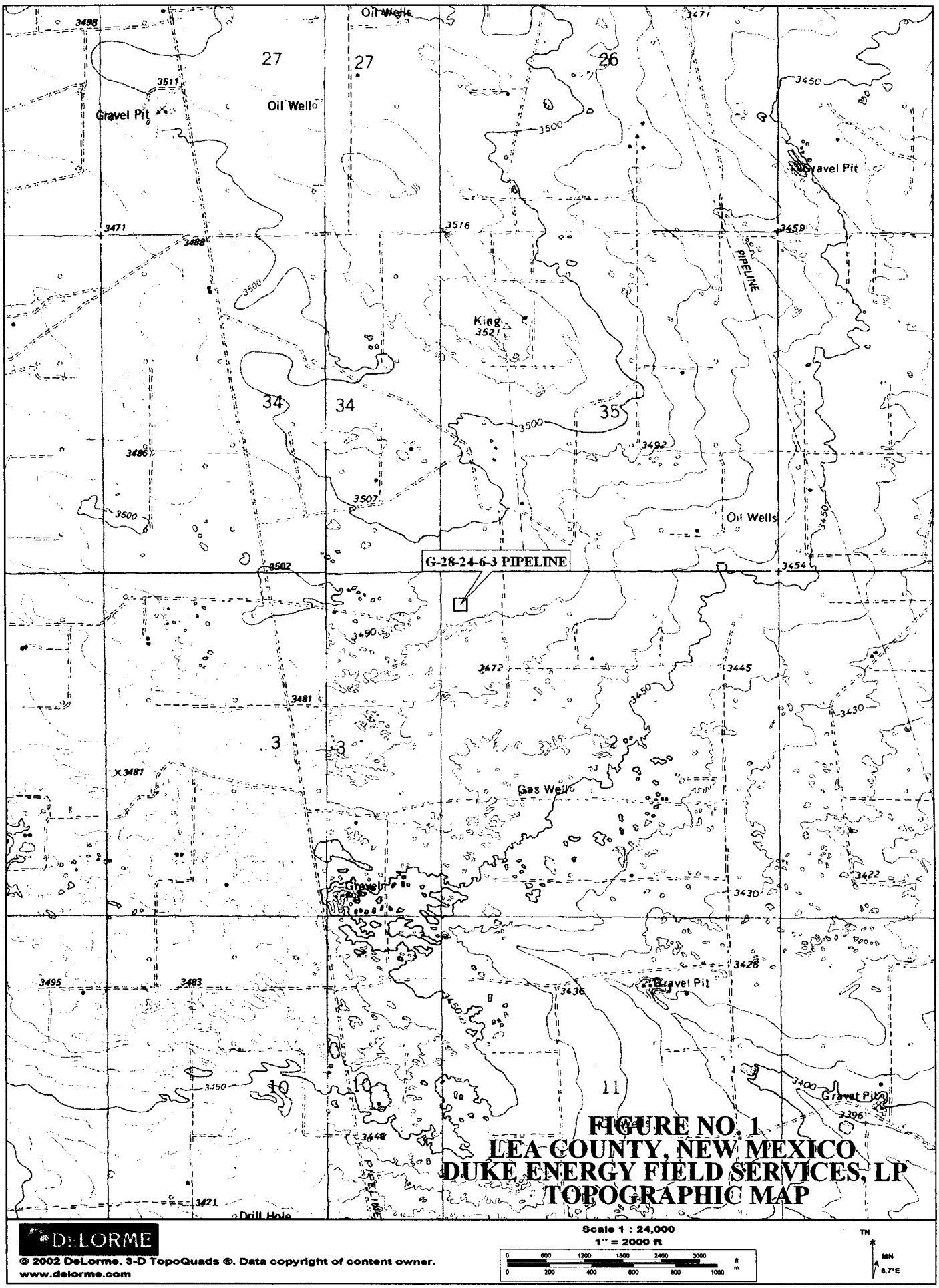
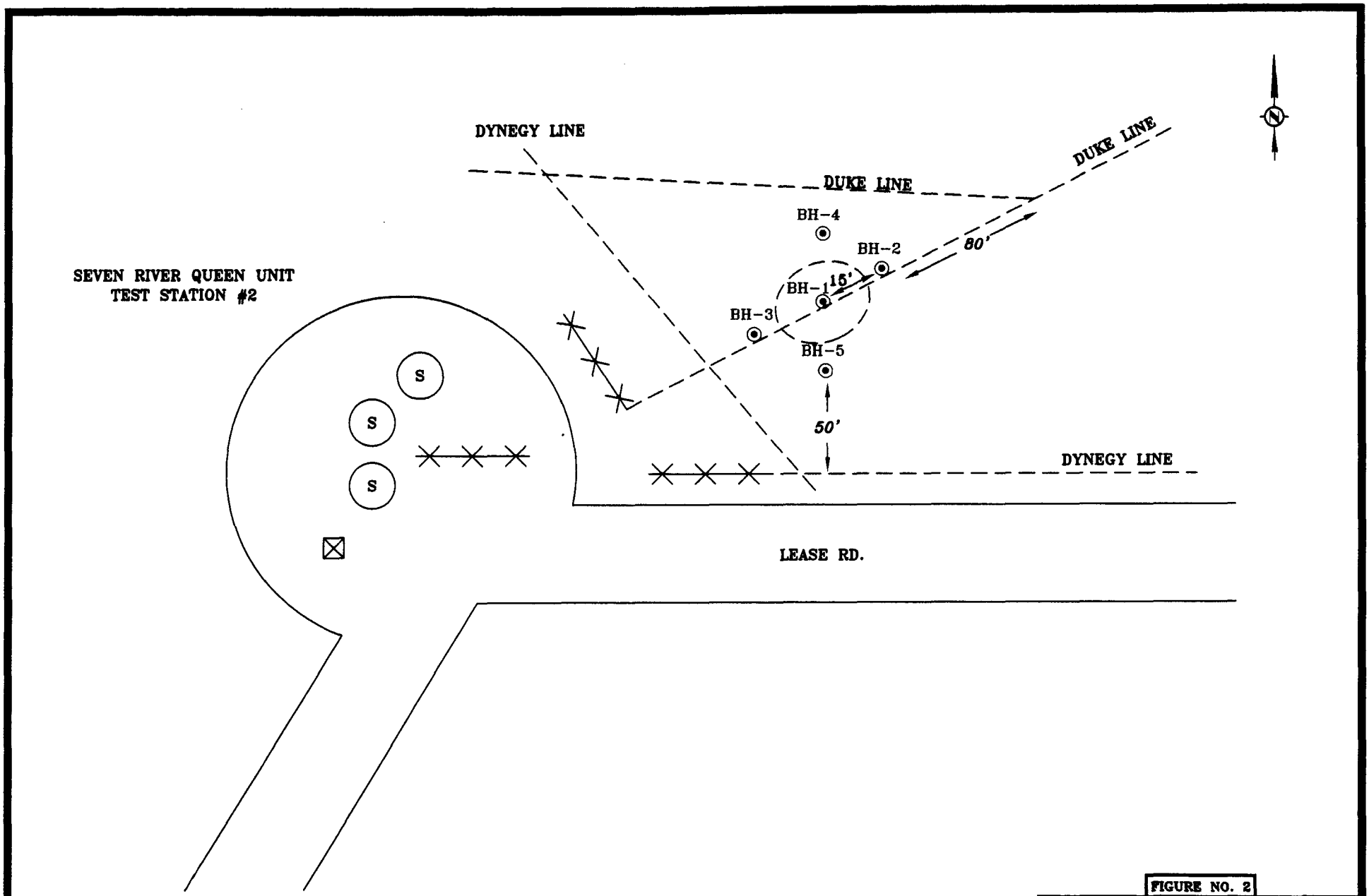


FIGURE NO. 1
LEA COUNTY, NEW MEXICO
DUKE ENERGY FIELD SERVICES, LP
TOPOGRAPHIC MAP



⊙ BOREHOLE LOCATIONS

NOT TO SCALE

FIGURE NO. 2

LEA COUNTY, NEW MEXICO

DUKE ENERGY FIELD SERVICES, L.P.
G-28-24-6-3

DATE: 3/2/06
DWN. BY: JJ
FILE: C:\DUKE\2400\G-28-24-6-3

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

Appendix A

New Mexico State Engineer and USGS Well Reports

Water Well - Average Depth to Groundwater

Duke - G-28-24-6-3, Lea County, New Mexico

22 South 35 East

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

22 South 36 East

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

22 South 37 East

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

23 South 35 East

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

23 South 36 East

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

23 South 37 East

6 102	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

24 South 35 East

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

24 South 36 East

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

24 South 37 East

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

150 Average depth to groundwater (ft) - New Mexico State Engineer Well Reports

56 Groundwater Depth (ft) - Geology and Groundwater Conditions in Southern Lea County, New Mexico (Report 6)

87 USGS

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 22S Range: 36E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

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

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

Clear Form | WATERS Menu | Help

AVERAGE DEPTH OF WATER REPORT 11/14/2005

								(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
CP	22S	36E	01				1	137	137	137
CP	22S	36E	05				1	212	212	212
CP	22S	36E	06				1	195	195	195
CP	22S	36E	16				1	170	170	170
CP	22S	36E	22				1	22	22	22
CP	22S	36E	27				1	160	160	160

Record Count: 6

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 23S Range: 36E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

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

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

Clear Form | WATERS Menu | Help

AVERAGE DEPTH OF WATER REPORT 11/14/2005

							(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
CP	23S	36E	15				1	149	149	149
CP	23S	36E	16				1	220	220	220
CP	23S	36E	22				1	400	400	400
CP	23S	36E	31				2	178	200	189
CP	23S	36E	36				5	123	133	127

Record Count: 10

Water Resources

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 = • 321936103154601

Save file of selected sites to local disk for future upload

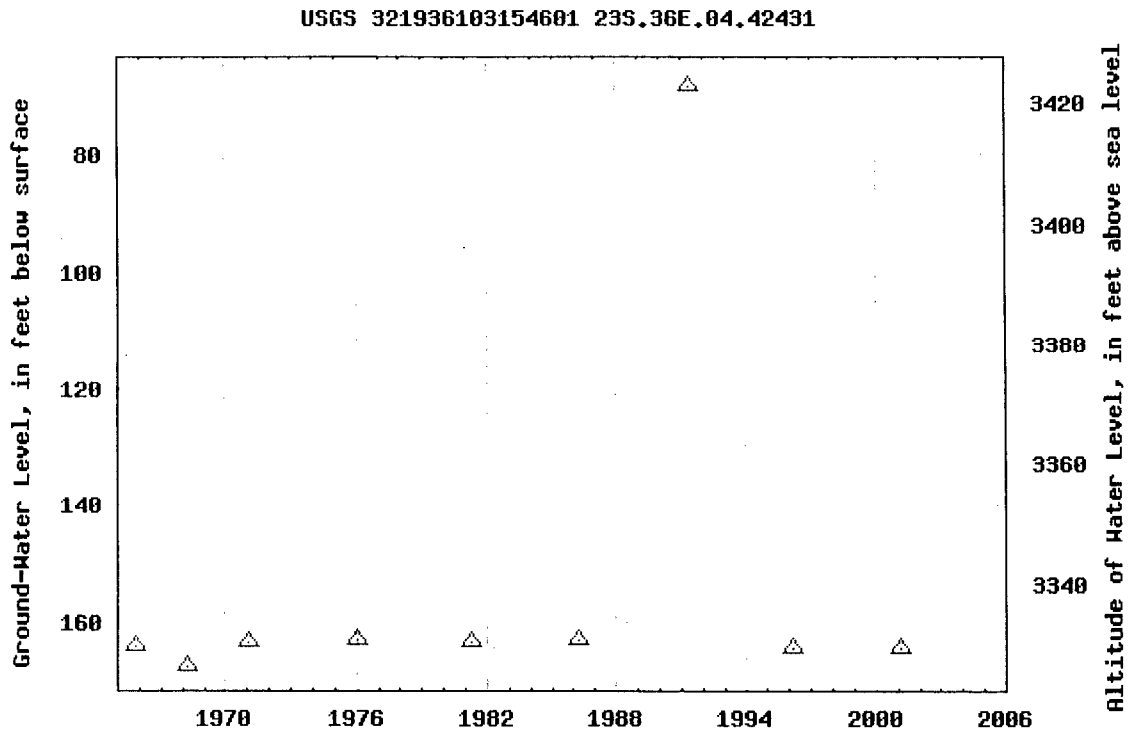
USGS 321936103154601 23S.36E.04.42431

Available data for this site Ground-water: Levels | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°19'36", Longitude 103°15'46" NAD27
Land-surface elevation 3,492.50 feet above sea level NGVD29
The depth of the well is 206 feet below land surface.
This well is completed in the OGALLALA FORMATION (121OGLL) local aquifer.

Output formats

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



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.
Download a presentation-quality graph

Questions about data New Mexico NWISWeb Data Inquiries
Feedback on this website New Mexico NWISWeb Maintainer

Top
Explanation of terms

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 322032103143101

Save file of selected sites to local disk for future upload

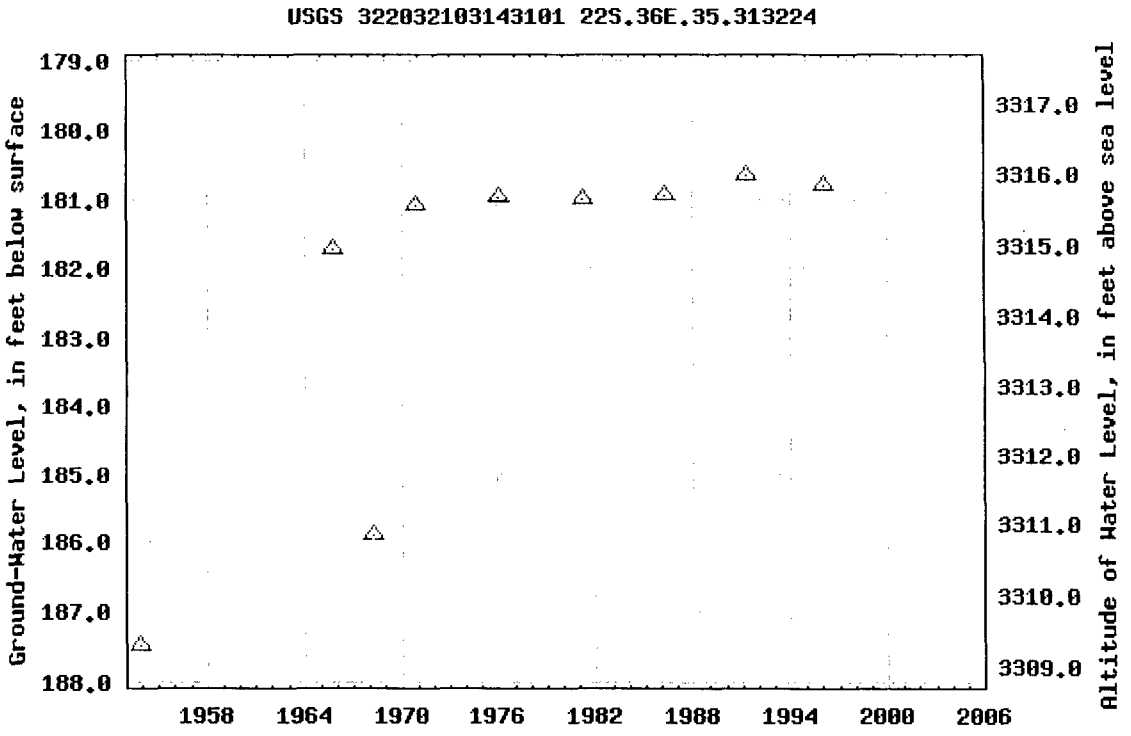
USGS 322032103143101 22S.36E.35.313224

Available data for this site Ground-water: Levels GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°20'32", Longitude 103°14'31" NAD27
Land-surface elevation 3,496.70 feet above sea level NGVD29
The depth of the well is 197 feet below land surface.
This well is completed in the OGALLALA FORMATION (121OGLL) local aquifer.

Output formats

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



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.
Download a presentation-quality graph

22.36.35.314	do.	To	197	3,490	187.4	11-23-53	—	—	Lw	S	—
1.132	G. Sims	Qal	—	3,350	47.6	10-14-53	—	—	N	N	Open, uncased hole.
1.440	do.	Qal	—	—	—	—	—	—	Lw	S	Chemical analysis in table 8.
2.442	Humble Oil Co.	Qal	86M	3,360	53.3	10- 9-53	—	7	N	N	Initial yield, 68 gpm.
3.133	Sinclair Oil and Gas Co.	To	120	3,425	90	/ —	1946	—	Je	D	—
3.134	do.	—	52M	3,420	Dry	9-28-53	—	—	N	N	—
3.440	Cities Service Oil Co.	To	—	3,390	75.8	9-29-53	—	7½	N	N	—
4.211	City of Eunice	To	155	3,445	110	1953	1953	10	Te	P	Well 12. Initial yield, 100 gpm; yield in 1953, 60 gpm.
4.213	do.	To	155	3,440	114.8	3- 6-54	1952	10	Te	P	Well 11. EY 60 gym.
4.214a	Eunice Cemetery Assoc.	To	115±M	3,435	108.2	9-29-53	—	6½	N	N	—
22.37.4.233	City of Eunice	To	155	3,435	110	1951	1951	8	Te	P	Well 9.
4.421	Sinclair Oil and Gas Co.	To	114±M	3,430	90.1	9-28-53	—	7⅝	N	N	—
4.424	Skelly Oil Co.	To	164	—	<139	—	1950	8⅝	Ti	In,D	Skelly Eunice Plant 1, well 13. Initial yield, 150 gpm; dropped to 20 gpm.
8.441	Shell Oil Co.	To	168	3,400	60	1953	1936	6⅝	Lw	D	—
9.313a	Humble Oil Co.	To	166M	3,400	72.7	9-29-53	1944	9½	N	N	Humble—J. L. Greenwood well 2.
9.331	do.	To	160	—	—	—	1945	7⅝	Te	D	Humble—J. L. Greenwood well 4.
9.333	do.	To	172	—	—	—	1946	4	Te	In	Humble—J. L. Greenwood well 5. Water used for oil well flooding.
22.37.9.441	Humble Oil Co.	To	104±M	3,410	85.5	9-29-53	1940	6⅝	N	N	Humble—J. L. Greenwood well 1.
10.213	Gulf Oil Corp.	To	220	3,400	100	1950	—	—	Lw	D	Gulf-Brunson lease well.
10.320	Skelly Oil Co.	To	—	3,395	81.0	9-29-53	—	11½	N	N	—
11.324	—	Qal	100M	3,350	45.3	10-16-53	1952	5	N	N	—
11.444	Leo Sims	Qal	—	3,345	58.7	10-16-53	—	8⅝	Lw	S	—
12.114	G. Sims	Qal	84M	3,340	53.9	10-14-53	—	7	N	N	—
12.443	do.	Qal	59M	3,335	53.9	10-14-53	—	15	N	N	—
12.443a	do.	Qal	59M	3,335	53.3	10-14-53	—	—	N	N	Uncased and open.
15.333	H. O. Sims	To	—	3,380	81.0	9- -53	—	4¾	Lw	D,S	—
16.432	Skelly Oil Co.	To	135	—	—	—	—	7	Ti	In,D	Skelly Eunice Plant 1, well 11. EY 40 gpm.
16.443	do.	To	136	3,385	80.9	9-28-53	1947	8⅝	Ti	In,D	Skelly Eunice Plant 1, well 10.
22.37.21.221	—	To(?)	—	3,380	76.5	9- -53	—	6⅝	N	N	—

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

Location No.	Owner	Aquifer	Depth of well (feet)	Altitude of well (feet)	Water level: Depth below land surface (feet)	Water level: Date measured	Year completed	Surface diameter of wells	Method of lift	Use of water	Remarks
21.37.33.210	City of Eunice	Tr	350	3,430	—	1944	—	6	N	N	Old public-supply well. WBZ 320-350 feet. Chemical analysis in table 8. EY 10 gpm.
33.211	—	To	103M	3,430	99.6	11-12-53	—	10¾	N	N	—
33.233	City of Eunice	To	135	3,435	100	1944	—	8	Te	P	City well 1. Perforated 100-130 feet. Chemical analysis in table 8.
35.423	Gulf Oil Corp.	Qal	110	3,375	61	5-17-50	—	10¾	Te	In,D	Gulf Eunice Plant, well 21.
35.442	do.	Qal	87	3,360	59	11-14-51	—	7	Te	In,D	Gulf Eunice Plant, well 17. WBZ sand and gravel, 65-74 feet.
21.37.36.144	P. Wallach	Qal	66±M	3,370	47.8	10- 9-53	—	6	Lw	S	—
36.344	do.	Qal	—	3,360	49.8	10- 9-53	—	8⅝	Lw	S	—
21.38.6.133	Ray McNeil	Qal	90+	3,550	79.4	12- 7-53	—	7	N	N	—
6.133a	do.	To	90?	—	—	—	—	—	Lw	—	Chemical analysis in table 8.
6.133b	do.	To	108	—	—	—	—	—	N	N	do.
8.144	Humble Oil Co.	—	133	3,565	Dry	—	—	—	—	—	Plugged and abandoned.
22.33.13.200	San Simon Ranch	Tr	508	3,510	—	—	—	—	Lw	S	WBZ 420-470 feet.
22.34.12.111	do.	Qal	62	3,530	48	—	1951	—	Lw	D,S	—
12.114	do.	Qal	16M	3,515	12.6	3-17-54	—	—	Lw	S	Is an infiltration tunnel about 70 feet long and 5 feet in diameter feeding 2 windmills, 1 centrifugal pump and 1 siphon.
22.36.1.333	Gulf Oil Co.	To	150	3,490	111.2	11-12-53	—	—	Li	L	Chemical analysis in table 8.
2.444	—	—	—	—	—	—	—	—	Lw	S	Chemical analysis in table 8.
8.443	United Carbon Co.	Tr	1,000±	3,580	700	—	—	8	Le	In,D	Three wells. EY 30 gpm each. Chemical analysis in table 8.
11.224	Texas-Pacific Coal and Oil Co.	To	120+	3,500	113.8	11-12-53	—	8	Lw	D	Chemical analysis in table 8.
13.222	Ohio Oil Co.	Tr(?)	—	3,455	Flowing	—	—	7	N	N	Capped and flowing.
25.434	R. L. Robinson	To	—	3,430	118.5	11-23-53	—	—	Li	S	—

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

Location No.	Owner	Aquifer	Depth of well (feet)	Altitude of well (feet)	Water level: Depth below land surface (feet)	Water level: Date measured	Year completed	Surface diameter of wells	Method of lift	Use of water	Remarks
22.37.21.421	—	To(?)	—	3,360	62.0	9- -53	—	4½	N	N	—
22.331	Skelly Oil Co.	To(?)	115±	3,350	69.0	9-29-53	1949	—	Ti	In,D	Skelly Eunice Plant 1, well 12. EY 40 gpm.
23.233	Leo Sims	Qal	77M	3,345	55.0	10-14-53	—	14	N	N	Open and uncased.
23.441	O. I. Boyd	Qal	70±	3,335	55.3	10-12-53	—	—	Lw	S	Dug.
23.441a	do.	Qal	70±	3,335	55.2	10-12-53	—	7½	N	N	—
24.133a	G. Sims	Qal	127M	3,322	59.3	4-21-55	—	10	Li	N	—
24.133b	do.	Qal	80	—	—	—	—	—	Lw	N	Chemical analysis in table 8.
25.313	Marshal Drinkard	Qal	69M	3,300	50.1	10-14-53	1945	13½	N	N	—
27.334b	Skelly Oil Co.	Qal	127M	3,335	54.4	9- -53	—	8½	N	N	Skelly Eunice Plant 1, well 9.
27.410	do.	To?	182	—	—	—	—	7	Te	In,D	EY 25 gpm. Perforations 150-170 feet.
22.37.28.323	Clower Drilling Co.	Qal	—	3,353	66.1	9- -53	—	9¼	N	N	—
34.221	Humble Oil Co.	Qal and Tr	229	3,520	—	—	<1938	—	—	In	WBZ 58-61 feet, 138-146 feet, 185-192 feet. EY 22 gpm.
36.141a	Tom Linebury	Qal	40	3,300	32.2	10-12-54	—	—	Lw	S	—
36.141b	do.	Qal	46	3,300	31.1	6- 3-55	—	6	N	N	—
22.38.18.234	The Texas Co.	Tr	386M	3,360	180	10- -53	1953	—	Li	In	WBZ gray sand, 325-380 feet. EY 20 gpm.
19.222	do.	Tr	—	3,365	146.0	10-14-53	—	7	N	N	—
23.32.4.222	C. H. and W. O. James	Tr	550	3,630	—	—	1931	8	Lw	S	EY 10 gpm.
21.222	Frank and Charles James	Tr	550	3,700	500	—	—	8	Li	S	—
23.33.12.322	San Simon Ranch	Tr	400	3,685	—	—	1953	—	Lw	S	WBZ 370-400 feet.
23.33.28.334	Brinninstool	Tr	575	3,675	500	—	—	—	Lw	D,S	EY 2.5 gpm.
23.34.1.444	San Simon Ranch	Qal	144±M	3,360	137.3	11-25-53	—	6	N	N	—
31.340	Continental Oil Co.	Tr	678	3,620	—	—	1953	8	Li	In	EY 47 gpm. Chemical analysis in table 8.

23.35.27.444	—	To	—	3,480	117.2	3- -53	—	7	N	N	—
23.36.15.414	J. E. Matkins	To(?)	230	3,390	148.4	12- 4-53	—	6	Lw	D,S	—
16.343	do.	Tr	1,100	3,465	150	1952	—	—	Lw	S	—
22.434	Texas Pacific Coal and Oil Co.	To	210±M	3,395	188.6	12- 1-53	—	8½	N	N	—
23.111	do.	To	—	3,370	143.6	12- 4-53	—	8	Li	In	—
31.233	J. Combass	To	—	—	—	—	—	—	Lw	S	Chemical analysis in table 8.
23.36.35.211	J. Combass	To	170	3,330	123.0	3- -53	—	6½	N	N	—
36.341	EPNG	To	250	3,330	124	—	—	10¾	Ti	In,D	Jal Plant 4, well 8.
36.342	EPNG	To	261	3,330	120	—	1952	—	Ti	In,D	Jal Plant 4, well 7.
23.37.2.133	—	To	—	3,304	62.8	10-16-53	—	—	N	N	—
2.422	—	Qal	—	3,295	64.1	6- 3-55	—	6	Lw	S	—
3.421	H. O. Sims	To	80	3,295	64.1	10-16-53	—	—	Lw	D,S	—
4.114	—	To	84—M	3,341	81.8	12- 3-53	—	5½	N	N	—
4.211	Skelly Oil Co.	Tr(?)	226	3,340	—	—	1947	10¾	Le	D	H. O. Sims Camp well 1. EY 10 gpm.
6.144	—	To	—	3,375	102.9	12- 3-53	—	6½	Lw	S	—
20.333	Bert Steeler	Qal(?)	177	3,300	117	—	1939	—	Lw	D,S	—
25.132	M. L. Goins	To(?)	—	3,215	28.3	10-15-53	—	7	Lw	S	—
27.441	—	Qal	—	3,270	78.3	3- 4-53	—	5½	Lw	S	—
23.37.31.442	EPNG	To(?)	173	3,300	118	1952	1952	12½	Te	In,D	Jal Plant 4, well 4.
32.122	—	To(?)	—	3,300	99.0	7-23-54	—	6	Lw	S	—
32.331	EPNG	To(?)	173	3,310	—	—	—	20	Te	In,D	Jal Plant 4, well 1. WBZ 115-171 feet. EY 40 gpm.
33.122	—	To(?)	120M	3,310	91.2	3- 4-53	—	9	N	N	—
23.38.5.233	Humble Oil Co.	Tr	400M	3,385	189.8	10-15-53	1943	7½	N	N	W. F. Scarbrough well 1. EY 14 gpm.
8.214	Tom Linebury	Tr	—	3,372	198.3	10-15-53	—	6½	Lw	D,S	—
24.32.3.322	Frank James	Tr	550	3,650	—	—	—	10	Lw	D,S	—
10.344	do.	Qal	60	3,588	31.1	6- 3-55	1910	6	Lw	S	Located in sink.
33.422	Richard Ritz	Tr	367M	3,510	313.4	2-18-58	—	12	Lw	S	EY 0.25 gpm.
24.33.10.113	Carl Johnson	Qal	36±M	3,595	24.6	11-27-53	—	6½	Lw	S	—
24.33.23.311	—	Tr	232M	3,565	208.6	11-27-53	—	9½	N	N	—
24.444	—	Qal	—	3,530	16.9	11-27-53	—	5½	Lw	S	—
33.231	Carl Johnson	Qal	—	3,460	93.2	3-17-54	—	6	Lw	D,S	—
24.34.4.111	—	To	—	3,570	51.3	6- 3-55	—	—	Lw	S	—
5.444	—	To	78(?)	3,590	66.6	4-21-55	—	—	Lw	N	—
10.112	Madera Ranch	To	83M	3,525	71.8	4-27-53	—	6	N	N	—
10.422	do.	To	94M	3,315	63.2	4-27-53	—	7½	N	N	—

Appendix B

Laboratory Analysis

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Ike Tavarez

Highlander Environmental Corp.

1910 N. Big Spring St.

Midland, TX 79705

Project: Duke/ G-28-24-6-3 (Line)

Project Number: 2495

Location: Lea County, NM

Lab Order Number: 6A19002

Report Date: 01/25/06

Highlander Environmental Corp.	Project: Duke/ G-28-24-6-3 (Line)	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 2495	**Reported:**
Midland TX, 79705	Project Manager: Ike Tavarez	01/25/06 16:55

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH-1 3-4	6A19002-01	Soil	01/16/06 00:00	01/18/06 17:15
BH-1 5-6	6A19002-02	Soil	01/16/06 00:00	01/18/06 17:15
BH-1 7-8	6A19002-03	Soil	01/16/06 00:00	01/18/06 17:15
BH-1 13-14	6A19002-05	Soil	01/16/06 00:00	01/18/06 17:15
BH-1 18-19	6A19002-07	Soil	01/16/06 00:00	01/18/06 17:15
BH-2 3-4	6A19002-10	Soil	01/16/06 00:00	01/18/06 17:15
BH-2 5-6	6A19002-11	Soil	01/16/06 00:00	01/18/06 17:15
BH-2 7-8	6A19002-12	Soil	01/16/06 00:00	01/18/06 17:15
BH-3 3-4	6A19002-16	Soil	01/17/06 00:00	01/18/06 17:15
BH-3 5-6	6A19002-17	Soil	01/17/06 00:00	01/18/06 17:15
BH-3 7-8	6A19002-18	Soil	01/17/06 00:00	01/18/06 17:15
BH-4 2-3	6A19002-21	Soil	01/17/06 00:00	01/18/06 17:15
BH-4 5-6	6A19002-22	Soil	01/17/06 00:00	01/18/06 17:15
BH-4 7-8	6A19002-23	Soil	01/17/06 00:00	01/18/06 17:15
BH-5 3-4	6A19002-26	Soil	01/17/06 00:00	01/18/06 17:15
BH-5 5-6	6A19002-27	Soil	01/17/06 00:00	01/18/06 17:15
BH-5 7-8	6A19002-28	Soil	01/17/06 00:00	01/18/06 17:15

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Highlander Environmental Corp.	Project: Duke/ G-28-24-6-3 (Line)	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 2495	**Reported:**
Midland TX, 79705	Project Manager: Ike Tavarez	01/25/06 16:55

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-1 3-4 (6A19002-01) Soil									
Benzene	**J [0.0205]**	0.0250	mg/kg dry	25	EA62021	01/20/06	01/24/06	EPA 8021B	J
Toluene	**0.219**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.361**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**1.34**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.454**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*120 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*136 %*	*80-120*		"	"	"	"	*S-04*
Gasoline Range Organics C6-C12	**95.5**	10.0	mg/kg dry	1	EA61912	01/19/06	01/19/06	EPA 8015M	
Diesel Range Organics >C12-C35	**405**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**501**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*108 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*97.0 %*	*70-130*		"	"	"	"	
BH-1 7-8 (6A19002-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA62021	01/20/06	01/24/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*89.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**ND**	10.0	mg/kg dry	1	EA61912	01/19/06	01/19/06	EPA 8015M	
Diesel Range Organics >C12-C35	**J [8.49]**	10.0	"	"	"	"	"	"	J
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*104 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*92.4 %*	*70-130*		"	"	"	"	
BH-1 13-14 (6A19002-05) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA62021	01/20/06	01/24/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*89.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*110 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA61912	01/19/06	01/19/06	EPA 8015M	
Diesel Range Organics >C12-C35	**J [5.17]**	10.0	"	"	"	"	"	"	J
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	

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Highlander Environmental Corp.	Project: Duke/ G-28-24-6-3 (Line)	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 2495	**Reported:**
Midland TX, 79705	Project Manager: Ike Tavarez	01/25/06 16:55

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-1 13-14 (6A19002-05) Soil									
Surrogate: 1-Chlorooctane		*119 %*	*70-130*		*EA61912*	*01/19/06*	*01/19/06*	*EPA 8015M*	
Surrogate: 1-Chlorooctadecane		*105 %*	*70-130*		"	"	"	"	
BH-1 18-19 (6A19002-07) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA61912	01/19/06	01/20/06	EPA 8015M	
Diesel Range Organics >C12-C35	**J [8.03]**	10.0	"	"	"	"	"	"	J
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*118 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*106 %*	*70-130*		"	"	"	"	
BH-2 3-4 (6A19002-10) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA61912	01/19/06	01/20/06	EPA 8015M	
Diesel Range Organics >C12-C35	**ND**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*121 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*108 %*	*70-130*		"	"	"	"	
BH-2 5-6 (6A19002-11) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA61912	01/19/06	01/20/06	EPA 8015M	
Diesel Range Organics >C12-C35	**J [6.07]**	10.0	"	"	"	"	"	"	J
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*101 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*90.2 %*	*70-130*		"	"	"	"	
BH-2 7-8 (6A19002-12) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA61912	01/19/06	01/20/06	EPA 8015M	
Diesel Range Organics >C12-C35	**ND**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*112 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*101 %*	*70-130*		"	"	"	"	

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Highlander Environmental Corp.	Project: Duke/ G-28-24-6-3 (Line)	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 2495	**Reported:**
Midland TX, 79705	Project Manager: Ike Tavarez	01/25/06 16:55

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-3 3-4 (6A19002-16) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA61912	01/19/06	01/20/06	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*111 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*98.8 %*	*70-130*		"	"	"	"	
BH-3 5-6 (6A19002-17) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA61912	01/19/06	01/20/06	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*123 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*109 %*	*70-130*		"	"	"	"	
BH-3 7-8 (6A19002-18) Soil									
Gasoline Range Organics C6-C12	**ND**	10.0	mg/kg dry	1	EA61912	01/19/06	01/20/06	EPA 8015M	
Diesel Range Organics >C12-C35	**J [9.79]**	10.0	"	"	"	"	"	"	J
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*118 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*104 %*	*70-130*		"	"	"	"	
BH-4 2-3 (6A19002-21) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA61912	01/19/06	01/20/06	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*114 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*102 %*	*70-130*		"	"	"	"	
BH-4 5-6 (6A19002-22) Soil									
Gasoline Range Organics C6-C12	**ND**	10.0	mg/kg dry	1	EA61912	01/19/06	01/20/06	EPA 8015M	
Diesel Range Organics >C12-C35	**J [8.99]**	10.0	"	"	"	"	"	"	J
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*107 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*96.2 %*	*70-130*		"	"	"	"	

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1910 N. Big Spring St.	Project Number: 2495	**Reported:**
Midland TX, 79705	Project Manager: Ike Tavarez	01/25/06 16:55

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-4 7-8 (6A19002-23) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA61912	01/19/06	01/20/06	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*114 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*101 %*	*70-130*		"	"	"	"	
BH-5 3-4 (6A19002-26) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA61912	01/19/06	01/20/06	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*115 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*102 %*	*70-130*		"	"	"	"	
BH-5 5-6 (6A19002-27) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA61912	01/19/06	01/20/06	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*125 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*111 %*	*70-130*		"	"	"	"	
BH-5 7-8 (6A19002-28) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA61912	01/19/06	01/20/06	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*118 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*105 %*	*70-130*		"	"	"	"	

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Highlander Environmental Corp.	Project: Duke/ G-28-24-6-3 (Line)	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 2495	**Reported:**
Midland TX, 79705	Project Manager: Ike Tavarez	01/25/06 16:55

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-1 3-4 (6A19002-01) Soil									
Chloride	**134**	10.0	mg/kg	20	EA62301	01/20/06	01/23/06	EPA 300.0	
% Moisture	**12.6**	0.1	%	1	EA62001	01/19/06	01/20/06	% calculation	
BH-1 5-6 (6A19002-02) Soil									
Chloride	**160**	10.0	mg/kg	20	EA62301	01/20/06	01/23/06	EPA 300.0	
BH-1 7-8 (6A19002-03) Soil									
Chloride	**223**	10.0	mg/kg	20	EA62301	01/20/06	01/23/06	EPA 300.0	
% Moisture	**11.7**	0.1	%	1	EA62001	01/19/06	01/20/06	% calculation	
BH-1 13-14 (6A19002-05) Soil									
Chloride	**27.1**	5.00	mg/kg	10	EA62301	01/20/06	01/23/06	EPA 300.0	
% Moisture	**8.2**	0.1	%	1	EA62001	01/19/06	01/20/06	% calculation	
BH-1 18-19 (6A19002-07) Soil									
% Moisture	**7.3**	0.1	%	1	EA62001	01/19/06	01/20/06	% calculation	
BH-2 3-4 (6A19002-10) Soil									
Chloride	**64.8**	5.00	mg/kg	10	EA62301	01/20/06	01/23/06	EPA 300.0	
% Moisture	**11.1**	0.1	%	1	EA62001	01/19/06	01/20/06	% calculation	
BH-2 5-6 (6A19002-11) Soil									
Chloride	**81.0**	10.0	mg/kg	20	EA62301	01/20/06	01/23/06	EPA 300.0	
% Moisture	**8.3**	0.1	%	1	EA62001	01/19/06	01/20/06	% calculation	
BH-2 7-8 (6A19002-12) Soil									
Chloride	**66.3**	10.0	mg/kg	20	EA62301	01/20/06	01/23/06	EPA 300.0	
% Moisture	**5.1**	0.1	%	1	EA62001	01/19/06	01/20/06	% calculation	
BH-3 3-4 (6A19002-16) Soil									
Chloride	**167**	10.0	mg/kg	20	EA62301	01/20/06	01/23/06	EPA 300.0	
% Moisture	**10.5**	0.1	%	1	EA62001	01/19/06	01/20/06	% calculation	

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Highlander Environmental Corp.	Project: Duke/ G-28-24-6-3 (Line)	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 2495	**Reported:**
Midland TX, 79705	Project Manager: Ike Tavarez	01/25/06 16:55

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-3 5-6 (6A19002-17) Soil									
Chloride	**420**	10.0	mg/kg	20	EA62301	01/20/06	01/23/06	EPA 300.0	
% Moisture	**10.5**	0.1	%	1	EA62001	01/19/06	01/20/06	% calculation	
BH-3 7-8 (6A19002-18) Soil									
Chloride	**364**	10.0	mg/kg	20	EA62301	01/20/06	01/23/06	EPA 300.0	
% Moisture	**6.7**	0.1	%	1	EA62001	01/19/06	01/20/06	% calculation	
BH-4 2-3 (6A19002-21) Soil									
Chloride	**41.7**	10.0	mg/kg	20	EA62301	01/20/06	01/23/06	EPA 300.0	
% Moisture	**17.1**	0.1	%	1	EA62001	01/19/06	01/20/06	% calculation	
BH-4 5-6 (6A19002-22) Soil									
Chloride	**678**	10.0	mg/kg	20	EA62301	01/20/06	01/23/06	EPA 300.0	
% Moisture	**9.8**	0.1	%	1	EA62001	01/19/06	01/20/06	% calculation	
BH-4 7-8 (6A19002-23) Soil									
Chloride	**863**	10.0	mg/kg	20	EA62302	01/21/06	01/23/06	EPA 300.0	
% Moisture	**14.7**	0.1	%	1	EA62001	01/19/06	01/20/06	% calculation	
BH-5 3-4 (6A19002-26) Soil									
Chloride	**136**	10.0	mg/kg	20	EA62302	01/21/06	01/23/06	EPA 300.0	
% Moisture	**15.2**	0.1	%	1	EA62001	01/19/06	01/20/06	% calculation	
BH-5 5-6 (6A19002-27) Soil									
Chloride	**153**	5.00	mg/kg	10	EA62302	01/21/06	01/23/06	EPA 300.0	
% Moisture	**10.6**	0.1	%	1	EA62001	01/19/06	01/20/06	% calculation	
BH-5 7-8 (6A19002-28) Soil									
Chloride	**244**	10.0	mg/kg	20	EA62302	01/21/06	01/23/06	EPA 300.0	
% Moisture	**11.6**	0.1	%	1	EA62001	01/19/06	01/20/06	% 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 EA61912 - Solvent Extraction (GC)										
Blank (EA61912-BLK1)				Prepared & Analyzed: 01/19/06						
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	*55.4*		*mg/kg*	*50.0*		*111*	*70-130*			
Surrogate: 1-Chlorooctadecane	*49.4*		*"*	*50.0*		*98.8*	*70-130*			
LCS (EA61912-BS1)				Prepared: 01/19/06 Analyzed: 01/20/06						
Gasoline Range Organics C6-C12	484	10.0	mg/kg wet	500		96.8	75-125			
Diesel Range Organics >C12-C35	599	10.0	"	500		120	75-125			
Total Hydrocarbon C6-C35	1080	10.0	"	1000		108	75-125			
Surrogate: 1-Chlorooctane	*63.7*		*mg/kg*	*50.0*		*127*	*70-130*			
Surrogate: 1-Chlorooctadecane	*55.2*		*"*	*50.0*		*110*	*70-130*			
Calibration Check (EA61912-CCV1)				Prepared: 01/19/06 Analyzed: 01/20/06						
Gasoline Range Organics C6-C12	486		mg/kg	500		97.2	80-120			
Diesel Range Organics >C12-C35	541		"	500		108	80-120			
Total Hydrocarbon C6-C35	1030		"	1000		103	80-120			
Surrogate: 1-Chlorooctane	*63.4*		*"*	*50.0*		*127*	*70-130*			
Surrogate: 1-Chlorooctadecane	*55.7*		*"*	*50.0*		*111*	*70-130*			
Matrix Spike (EA61912-MS1)	**Source: 6A19002-28**			Prepared & Analyzed: 01/19/06						
Gasoline Range Organics C6-C12	533	10.0	mg/kg dry	566	ND	94.2	75-125			
Diesel Range Organics >C12-C35	641	10.0	"	566	ND	113	75-125			
Total Hydrocarbon C6-C35	1170	10.0	"	1130	ND	104	75-125			
Surrogate: 1-Chlorooctane	*64.3*		*mg/kg*	*50.0*		*129*	*70-130*			
Surrogate: 1-Chlorooctadecane	*52.0*		*"*	*50.0*		*104*	*70-130*			
Matrix Spike Dup (EA61912-MSD1)	**Source: 6A19002-28**			Prepared & Analyzed: 01/19/06						
Gasoline Range Organics C6-C12	544	10.0	mg/kg dry	566	ND	96.1	75-125	2.04	20	
Diesel Range Organics >C12-C35	651	10.0	"	566	ND	115	75-125	1.55	20	
Total Hydrocarbon C6-C35	1200	10.0	"	1130	ND	106	75-125	2.53	20	
Surrogate: 1-Chlorooctane	*62.1*		*mg/kg*	*50.0*		*124*	*70-130*			
Surrogate: 1-Chlorooctadecane	*53.4*		*"*	*50.0*		*107*	*70-130*			

Highlander Environmental Corp.	Project: Duke/ G-28-24-6-3 (Line)	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 2495	**Reported:**
Midland TX, 79705	Project Manager: Ike Tavarez	01/25/06 16:55

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 EA62021 - EPA 5030C (GC)										
Blank (EA62021-BLK1)				Prepared: 01/20/06 Analyzed: 01/23/06						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	*37.9*		*ug/kg*	*40.0*		*94.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*36.8*		"	*40.0*		*92.0*	*80-120*			
LCS (EA62021-BS1)				Prepared: 01/20/06 Analyzed: 01/21/06						
Benzene	1.15	0.0250	mg/kg wet	1.25		92.0	80-120			
Toluene	1.15	0.0250	"	1.25		92.0	80-120			
Ethylbenzene	1.07	0.0250	"	1.25		85.6	80-120			
Xylene (p/m)	2.04	0.0250	"	2.50		81.6	80-120			
Xylene (o)	1.16	0.0250	"	1.25		92.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	*32.2*		*ug/kg*	*40.0*		*80.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*33.1*		"	*40.0*		*82.8*	*80-120*			
Calibration Check (EA62021-CCV1)				Prepared: 01/20/06 Analyzed: 01/24/06						
Benzene	44.3		ug/kg	50.0		88.6	80-120			
Toluene	44.5		"	50.0		89.0	80-120			
Ethylbenzene	40.2		"	50.0		80.4	80-120			
Xylene (p/m)	81.2		"	100		81.2	80-120			
Xylene (o)	41.9		"	50.0		83.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	*36.6*		"	*40.0*		*91.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*33.0*		"	*40.0*		*82.5*	*80-120*			
Matrix Spike (EA62021-MS1)		**Source: 6A18005-15**		Prepared: 01/20/06 Analyzed: 01/24/06						
Benzene	1.15	0.0250	mg/kg dry	1.35	ND	85.2	80-120			
Toluene	1.17	0.0250	"	1.35	ND	86.7	80-120			
Ethylbenzene	1.10	0.0250	"	1.35	ND	81.5	80-120			
Xylene (p/m)	2.21	0.0250	"	2.71	ND	81.5	80-120			
Xylene (o)	1.17	0.0250	"	1.35	ND	86.7	80-120			
Surrogate: a,a,a-Trifluorotoluene	*35.9*		*ug/kg*	*40.0*		*89.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*37.1*		"	*40.0*		*92.8*	*80-120*			

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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 EA62021 - EPA 5030C (GC)										
Matrix Spike Dup (EA62021-MSD1)	**Source: 6A18005-15**			Prepared: 01/20/06 Analyzed: 01/24/06						
Benzene	1.24	0.0250	mg/kg dry	1.35	ND	91.9	80-120	7.57	20	
Toluene	1.24	0.0250	"	1.35	ND	91.9	80-120	5.82	20	
Ethylbenzene	1.16	0.0250	"	1.35	ND	85.9	80-120	5.26	20	
Xylene (p/m)	2.31	0.0250	"	2.71	ND	85.2	80-120	4.44	20	
Xylene (o)	1.23	0.0250	"	1.35	ND	91.1	80-120	4.95	20	
Surrogate: a,a,a-Trifluorotoluene	*36.9*		*ug/kg*	*40.0*		*92.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*39.5*		*"*	*40.0*		*98.8*	*80-120*			

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 EA62001 - General Preparation (Prep)										
Blank (EA62001-BLK1)				Prepared: 01/19/06 Analyzed: 01/20/06						
% Solids	100		%							
Duplicate (EA62001-DUP1)	**Source: 6A18016-01**			Prepared: 01/19/06 Analyzed: 01/20/06						
% Solids	99.5		%		99.4			0.101	20	
Duplicate (EA62001-DUP2)	**Source: 6A19002-12**			Prepared: 01/19/06 Analyzed: 01/20/06						
% Solids	95.9		%		94.9			1.05	20	
Batch EA62301 - Water Extraction										
Blank (EA62301-BLK1)				Prepared: 01/20/06 Analyzed: 01/23/06						
Chloride	ND	0.500	mg/kg							
LCS (EA62301-BS1)				Prepared: 01/20/06 Analyzed: 01/23/06						
Chloride	8.62		mg/L	10.0		86.2	80-120			
Calibration Check (EA62301-CCV1)				Prepared: 01/20/06 Analyzed: 01/23/06						
Chloride	8.56		mg/L	10.0		85.6	80-120			
Duplicate (EA62301-DUP1)	**Source: 6A18017-01**			Prepared: 01/20/06 Analyzed: 01/23/06						
Chloride	810	25.0	mg/kg		818			0.983	20	
Batch EA62302 - Water Extraction										
Blank (EA62302-BLK1)				Prepared: 01/21/06 Analyzed: 01/23/06						
Chloride	ND	0.500	mg/kg							

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 EA62302 - Water Extraction										
LCS (EA62302-BS1)				Prepared: 01/21/06 Analyzed: 01/23/06						
Chloride	8.57		mg/L	10.0		85.7	80-120			
Calibration Check (EA62302-CCV1)				Prepared: 01/21/06 Analyzed: 01/23/06						
Chloride	8.72		mg/L	10.0		87.2	80-120			
Duplicate (EA62302-DUP1)		**Source: 6A19002-23**		Prepared: 01/21/06 Analyzed: 01/23/06						
Chloride	901	10.0	mg/kg		863			4.31	20	

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Raland K Tuttle Date: 1/25/2006

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.

Analysis Request and Chain of Custody Record

PAGE: 1 OF: 4

HIGHLANDER ENVIRONMENTAL CORP.

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

CLIENT NAME: Duke.
SITE MANAGER: IKE Tavarez
PROJECT NO.: 2495
PROJECT NAME: Duke/ G-28-24-6-3 (Line) Lea Co. NM

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	HCL	HNO3	ICE	NONE	BTEX (8020/602)	MTBE 8020/602	(TPH) 418.1 (8015 MOD.) TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Chloride
100201	1/16/06		S			BH-1 3-4	1				✓		X		X															X
-02	↓		S			BH-1 5-6	1				✓																			X
-03			S			BH-1 7-8	1				✓		X		X															X
-04			S			BH-1 10-11	1				✓																			
-05			S			BH-1 13-14	1				✓		X		X															X
-06			S			BH-1 15-16	1				✓																			
-07			S			BH-1 18-19	1				✓				X															
-08			S			BH-1 20-21	1				✓																			
-09	↓		S			BH-1 25-26	1				✓																			
			S																											

RELINQUISHED BY: (Signature) [signature] Date: 1-18-06 Time: 5:15
RECEIVED BY: (Signature) Date: Time:
SAMPLED BY: (Print & Sign) IKE Tavarez Date: Time:

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

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

RECEIVING LABORATORY: ECT
ADDRESS:
CITY: STATE: ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature) [signature]
DATE: 1-18-06 TIME: 1715

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

SAMPLE CONDITION WHEN RECEIVED: Rec 2.5°C
MATRIX: W-Water A-Air SD-Solid (S-Soil) SL-Sludge O-Other
REMARKS:

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

Analysis Request and Chain of Custody Record

PAGE: 2 OF: 4

HIGHLANDER ENVIRONMENTAL CORP.

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

CLIENT NAME: Duke

SITE MANAGER: Ike Tavarez

PROJECT NO.: 2495

PROJECT NAME: Duke / 6-28-24-6-3 (Lea Co. NM.)

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB I.D. NUMBER 6A19002	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	HCL	HNO3	ICE	NONE	BTEX 8020/602	MTBE 8020/602	TPH 418.1 (8015 MOD.) TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Chlorides
-10	1/16/06		S		✓	BH-2 3-4	1				✓				X															X
-11	↓		S		✓	BH-2 5-6	1				✓				X															X
-12			S		✓	BH-2 7-8	1				✓				X															X
-13			S		✓	BH-2 10-11	1				✓																			
-14			S		✓	BH-2 15-16	1				✓																			
-15	↓		S		✓	BH-2 20-21	1				✓																			
-16	1/17/06		S		✓	BH-3 3-4	1				✓				X															X
-17	↓		S		✓	BH-3 5-6	1				✓				X															X
-18			S		✓	BH-3 7-8	1				✓				X															X
-19	↓		S		✓	BH-3 10-11	1				✓																			

RELINQUISHED BY: (Signature) [signature] Date: 1-18-06 Time: 5:15

RECEIVED BY: (Signature) Date: Time:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

RECEIVING LABORATORY: EOT

ADDRESS:

CITY: STATE: ZIP:

CONTACT: PHONE:

RECEIVED BY: (Signature) [signature] DATE: 1-18-06 TIME: 1715

SAMPLED BY: (Print & Sign) Ike Tavarez Date: Time:

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

HIGHLANDER CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: Rec 2.5°C

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

REMARKS:

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

Analysis Request and Chain of Custody Record

PAGE: 3 OF: 4

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

ANALYSIS REQUEST (Circle or Specify Method No.)

CLIENT NAME: Duke

SITE MANAGER: Ike Tavarez

PROJECT NO.: 2495

PROJECT NAME: Duke 6-28-24-6-3 (line) Lea Co. NM.

LAB I.D. NUMBER 6A19002	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	HCL	HNO3	ICE	NONE	BTEX 8020/602	MTBE 8020/608	TPH 418.1 8015 MOD. TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Chloride
-20	1-17-06		S		✓	BH-3 (15-16)	1				✓																			
-21	↓		S		✓	BH-4 (2-3)	1				✓				X															X
-22			S		✓	BH-4 (5-6)	1				✓				X															X
-23			S		✓	BH-4 (7-8)	1				✓				X															X
-24			S		✓	BH-4 10-11	1				✓																			
-25			S		✓	BH-4 15-16	1				✓																			
-26			S		✓	BH-5 3-4	1				✓				X															X
-27			S		✓	BH-5 5-6	1				✓				X															X
-28			S		✓	BH-5 7-8	1				✓				X															X
-29	↓		S		✓	BH-5 10-11	1				✓																			

RELINQUISHED BY: (Signature) Ike Tavarez Date: 1-18-06 Time: 5:45
RECEIVED BY: (Signature) Date: Time:

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

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

RECEIVING LABORATORY: ETL
ADDRESS:
CITY: STATE: ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature) [illegible]
DATE: 1-18-06 TIME: 1515

SAMPLED BY: (Print & Sign) Ike Tavarez
Date: Time:

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

HIGHLANDER CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: Ice 2.5°C

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

REMARKS:

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

Analysis Request and Chain of Custody Record

PAGE: 4 OF: 4

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

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

CLIENT NAME: Duke SITE MANAGER: Mike Taylor

PROJECT NO.: 2495 PROJECT NAME: Duke / G-28-24-6-3 (Line)

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE
19002	1-17-06		S		✓	BH-5 (15-16)	1				✓	

ANALYSIS REQUEST (Circle or Specify Method No.)

BTEX 8020/602	MTBE 8020/602	TPH 418.1 8015 MOD. TX1006	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 608/808	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
		(Hold)														

RELINQUISHED BY: (Signature)	Date: 1-18-06 Time: 5:15	RECEIVED BY: (Signature) Date: Time:
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature) Date: Time:
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature) Date: Time:

SAMPLED BY: (Print & Sign) Mike Taylor Date: Time:

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

RECEIVING LABORATORY: Env. ADDRESS: CITY: STATE: ZIP: CONTACT: PHONE:

RECEIVED BY: (Signature) Kim Hicks DATE: 1-18-06 TIME: 1515

HIGHLANDER CONTACT PERSON: Mike Taylor

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: ice 2°C

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

REMARKS:

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

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

Client: Highlander

Date/Time: 1/13/06 17:15

Order #: 6A19002

Initials: UK

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	2.5 C
Shipping container/cooler in good condition?	Yes	No	
Custody Seals intact on shipping container/cooler?	Yes	No	Not present
Custody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?	Yes	No	
Sample Instructions complete on Chain of Custody?	Yes	No	
Chain of Custody signed when relinquished and received?	Yes	No	
Chain of custody agrees with sample label(s)	Yes	No	
Container labels legible and intact?	Yes	No	
Sample Matrix and properties same as on chain of custody?	Yes	No	
Samples in proper container/bottle?	Yes	No	
Samples properly preserved?	Yes	No	
Sample bottles intact?	Yes	No	
Preservations documented on Chain of Custody?	Yes	No	
Containers documented on Chain of Custody?	Yes	No	
Sufficient sample amount for indicated test?	Yes	No	
All samples received within sufficient hold time?	Yes	No	
VOC samples have zero headspace?	Yes	No	Not Applicable

Other observations:

Variance Documentation:

Contact Person: - Date/Time: Contacted by:

Regarding:

Corrective Action Taken:

Appendix C

C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-141
Revised March 17, 1999

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

Release Notification and Corrective Action

OPERATOR

✓ Initial Report Final Report

Name of Company DUKE ENERGY FIELD SERVICES, LP	Contact LYNN WARD/KENNITH WINN
Address 10 DESTA DRIVE, SUITE 400-W, MIDLAND, TX 79705	Telephone No. 432/620-4207
Facility Name G-28-24-6-3 PIPELINE	Facility Type PIPELINE

Surface Owner STATE OF NEW MEXICO	Mineral Owner STATE OF NEW MEXICO	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	NW4 of Sec. 2	23S	36E					Lea County

Latitude: 32.33968 Longitude: 103.24356

NATURE OF RELEASE

Type of Release CONDENSATE	Volume of Release 8 bbls	Volume Recovered 5 bbls
Source of Release RUPTURE OF 4" STEEL LOW PRESSURE PIPELINE	Date and Hour of Occurrence 6/30/05 @ 11:00 AM MST	Date and Hour of Discovery 6/30/05 @ 11:00 AM MST
Was Immediate Notice Given? Yes No ✓ Not Required	If YES, To Whom? IMMEDIATE NOTIFICATION NOT REQUIRED, <25 BBLS	
By Whom? NOT APPLICABLE	Date and Hour NOT APPLICABLE	
Was a Watercourse Reached? Yes ✓ No	If YES, Volume Impacting the Watercourse. NA	

If a Watercourse was Impacted, Describe Fully.*
NA

Describe Cause of Problem and Remedial Action Taken.*
Field Operations (David Stanfield) was notified by Arena Resources pumper (Steve Smith) that they had been working on the treater at the Arena Seven Rivers Queen Satelite when electrical power was lost and liquids were released into the gas pipeline. The release caused the low pressure line to rupture causing an 8 bbl release of crude/condensate & produced water. Arena Resources said since they had caused the release, they would clean up the impacted soils. Lynn Ward with DEFS contacted Steve Smith to request the excavated area not be backfilled until 7/5/05 in order to allow DEFS to conduct sampling activities to confirm appropriate cleanup levels had been achieved. When Lynn Ward arrived at the location on 7/5/05, the site of the release had been backfilled and back dragged, precluding sampling without additional equipment. DEFS concluded that further investigation activities were going to be necessary. The release was from a 4", low pressure steel line. The line was shutin and clamped. DEFS placed the line on the line replacement list.

Describe Area Affected and Cleanup Action Taken.*
DEFS estimates the impacted area to be larger than from an 8 bbl spill and include historical releases. DEFS intends to contact a third party to perform delineation and remediation activities. The RRALs according to OCD guidance document are TPH < 5,000 mg/kg, Benzene < 10 mg/kg, and BTEX < 50 mg/kg. Depth to groundwater according to the New Mexico Office of the State Engineer web database is greater than 100 feet below ground surface based on well data for Section 2, T23S, R36E. No water wells were visible in the vicinity.

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

Signature: Lynn Ward	OIL CONSERVATION DIVISION
Printed Name: Lynn Ward	Approved by District Supervisor:
Title: Environmental Specialist	Approval Date: / Expiration Date:
Date: 7/8/05 Phone: 432/620-4207	Conditions of Approval: / Attached

* Attach Additional Sheets If Necessary

cc: K. Winn, File 2.1.1.1

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised June 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: Duke Energy Field Services, LP	Contact: Lynn Ward
Address: 10 Desta Dr., Suite 400-W, Midland TX 79705	Telephone No. (432) 620-4207
Facility Name: G-28-24-6-3 Pipeline	Facility Type: Pipeline

Surface Owner State Of New Mexico	Mineral Owner State of New Mexico	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	NW/4 of Sec. 2	23S	36E					Lea

NATURE OF RELEASE

Type of Release Condensate	Volume of Release 8 barrels	Volume Recovered 5 barrels
Source of Release: Rupture of 4" steel low pressure pipeline	Date and Hour of Occurrence 6/30/05 11am MST	Date and Hour of Discovery 6/30/05 11am MST
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? Immediate notification not required, <25 BBLS	
By Whom? N/A	Date and Hour N/A	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
Field Operations (David Stanfield) was notified by Arena Resources pumper (Steve Smith) that they had been working on the heater treater at the Arena Seven Rivers Queen satellite when electrical power was lost and liquids were released into the gas pipeline. The release caused the low pressure line to rupture, causing an 8 bbl spill of crude/condensate & produced water. Arena Resources said that since they had caused the release, they would clean up the impacted soils. Lynn Ward with DEFS contacted Steve Smith to request the excavated area not be backfilled until 7/05/05 in order to allow DEFS to conduct sampling activities to confirm appropriate cleanup levels had been achieved. When Lynn Ward arrived at the location of 7/05/05, the site of the release had been backfilled and back dragged, precluding sampling without additional equipment. DEFS concluded that further investigation activities were going to be necessary. The release was from a 4" low pressure steel line. The line was shut in and clamped. DEFS placed the line on the line replacement list.

Describe Area Affected and Cleanup Action Taken.*
On January 16-17, Highlander Environmental Corp. supervised the installation of five (5) soil borings with an air rotary- type drilling rig. Sample analyses indicated no TPH or BTEX concentrations above RRAL. Chloride impact was very limited and not elevated sufficiently to be considered a threat to groundwater.

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

Signature: Lynn Ward	OIL CONSERVATION DIVISION
Printed Name: Lynn Ward	Approved by District ~~Supervisor~~: ENVIRENGR
Title: Environmental Specialist	Approval Date: 3-13-06 Expiration Date: —
E-mail Address: lcward@duke-energy.com	Conditions of Approval: — Attached ☐
Date: 2/24/06 Phone: (432) 620-4207	

* Attach Additional Sheets If Necessary

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