Highlander Environmental Corp.

Midland, Texas

March 10, 2005

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

RE: Assessment and Closure Report for the Duke Energy Field Services, L.P., C-16 Pipeline Spill Located in the N/2, SW/4 of Section 29, Township 17 South, Range 33 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 C-16 Pipeline located in the N/2, SW/4 of Section 29, Township 17 South, Range 33 East, Lea County, New Mexico (Site). The site coordinates are N 32° 48.188', W 103° 41.425'. The State of New Mexico C-141 (Initial) is shown in Appendix A. The Site is shown in Figure 1.

Background

According to the State of New Mexico C-141 report, the spill occurred on January 11, 2005 from a rupture of a 4" low pressure pipeline. Duke was notified of the spill by an employee of Ron's Welding, Inc (Ron's). Ron's was working on a release at the adjacent XTO Energy, SE Maljamar Grayburg San Andres Unit Tank Battery at the time. Ron's had excavated a small area to contain the released fluid at the point of release. The spill released 9 barrels of condensate and 9 barrels of fluid were recovered by a vacuum truck. The impacted area measured 20' x 20' with an additional area of light overspray to the north/northeast. Duke supervised the excavation of a 20' x 25' x 5' area at the point of release. A total of 128 yds^3 of excavated soil was taken to Artesia Aeration , LLC of Hobbs, New Mexico for disposal. The spill areas are shown on Figure 2.

Groundwater and Regulatory

The New Mexico State Engineer Office database shows a well in Section 20, Township 17 South, Range 33 East, with a depth to water of 190'. The New Mexico State Engineer well reports are shown in Appendix B. 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

Duke - 229153
facility - fPAC0603728646
Inspect - ePAC0603728815
incident - nPAC0603728852
application - pPAC0603729329

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

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.

Soil Sampling and Results

On January 28, 2005, Highlander personnel inspected the site and took confirmation samples from the excavation. Composite soil samples were taken from all four side walls and the bottom hole. The samples were analyzed for TPH by method TX 1005 and chloride by method SW 846 9253. Additionally, the bottom hole sample was analyzed for BTEX by method EPA 8021B. The results are summarized in Table 1. The laboratory reports and chain of custody are shown in Appendix C.

Referring to Table 1, none of the five TPH samples exceeded the method detection limits. The BTEX sample from the bottom hole exhibited xylene only at levels well below the RRAL. Chloride levels ranged from below detection limits to 596 mg/kg and would not be considered an environmental concern.

Conclusions

The TPH and BTEX sampling of the excavation did not show any significant residual hydrocarbon impact. The chloride concentrations do not appear to be an environmental concern. Based upon the results of sampling and work performed on this Site, Duke requests closure of this spill issue. The State of New Mexico C-141 (Final) is shown in Appendix A.

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

HIGHLANDER ENVIRONMENTAL CORP.

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

cc: Lynn Ward – Duke

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

April 7, 2005

Lynn Ward lcward@duke-energy.com
Duke Energy Field Services
3300 North A St. Bldg. 7
Midland, TX 79705

Re: Remediation Closure: LP C-16 Site
Site Reference: UL- L, Sec. 29 T-17S R-33E
Initial C-141 Spill Date: 1-15-05
Closure Report Date: 3-10-05

Dear Mrs. Ward,

The referenced **closure report** submitted to the New Mexico Oil Conservation Division (NMOCD) by Highlander Environmental Services as agent for Duke Energy Field Services, is **hereby approved.** Based on the information provided no further action is required at this time.

Please be advised that NMOCD approval of this plan does not relieve Duke Energy Field Services of responsibility should remaining contaminants pose a future threat to ground water, surface water, human health or the environment. Additionally, NMOCD approval does not relieve Duke Energy Field Services of responsibility for compliance with any other federal, state, or local laws and/or regulations.

If you have any questions or need assistance, please call me at (505) 393-6161, x111 or email lwjohnson@state.nm.us

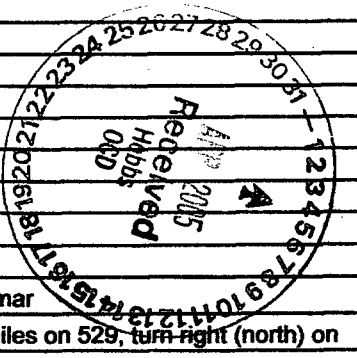
Sincerely,

Larry Johnson - Environmental Engineer

Cc:
Chris Williams - District I Supervisor
Ed Martin – Environmental Bureau
Paul Sheeley-Environmental Engineer
Lynn Ward – Duke Energy Field Services
Ike Tavarez – Highlander Environmental itavarez@hec-enviro.com

SITE INFORMATION

General Site Information:	
Site:	C-16 Pipeline
Company:	Duke Energy Field Services, LP
Section, Township and Range	Section 29, T17S, R33 E
Unit Letter:	L
Lease Number:	
County:	Lea
GPS:	32° 48' 11.4", 103° 41' 25.3"
Surface Owner:	State of New Mexico
Mineral Owner:	State of New Mexico
Directions:	Site located approx. 5.0 miles southwest of Maljamar
	From intersection of 238 and 529, go west 17.4 miles on 529, turn right (north) on
	Doglake road (paved road), go 0.7 miles to CR125, turn left go 0.4 miles, XTO Energy TB
	located on left side of road. Spill area is located south of the TB fenceline (behind the TB).



Release Data:	
Date Released:	1/11/2005
Type Release:	condensate
Source of Contamination:	Pipeline failure
Fluid Released:	Estimated 9 barrels
Fluids Recovered:	Estimated 9 barrels

Official Communication:			
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		682
Email:	lcward@duke-energy.com		itavarez@hec-enviro.com

Ranking Criteria		
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	

Acceptable Soil RRAL (mg/kg):		
Benzene	*Total BTEX*	*TPH*
10	50	5,000

FIGURES

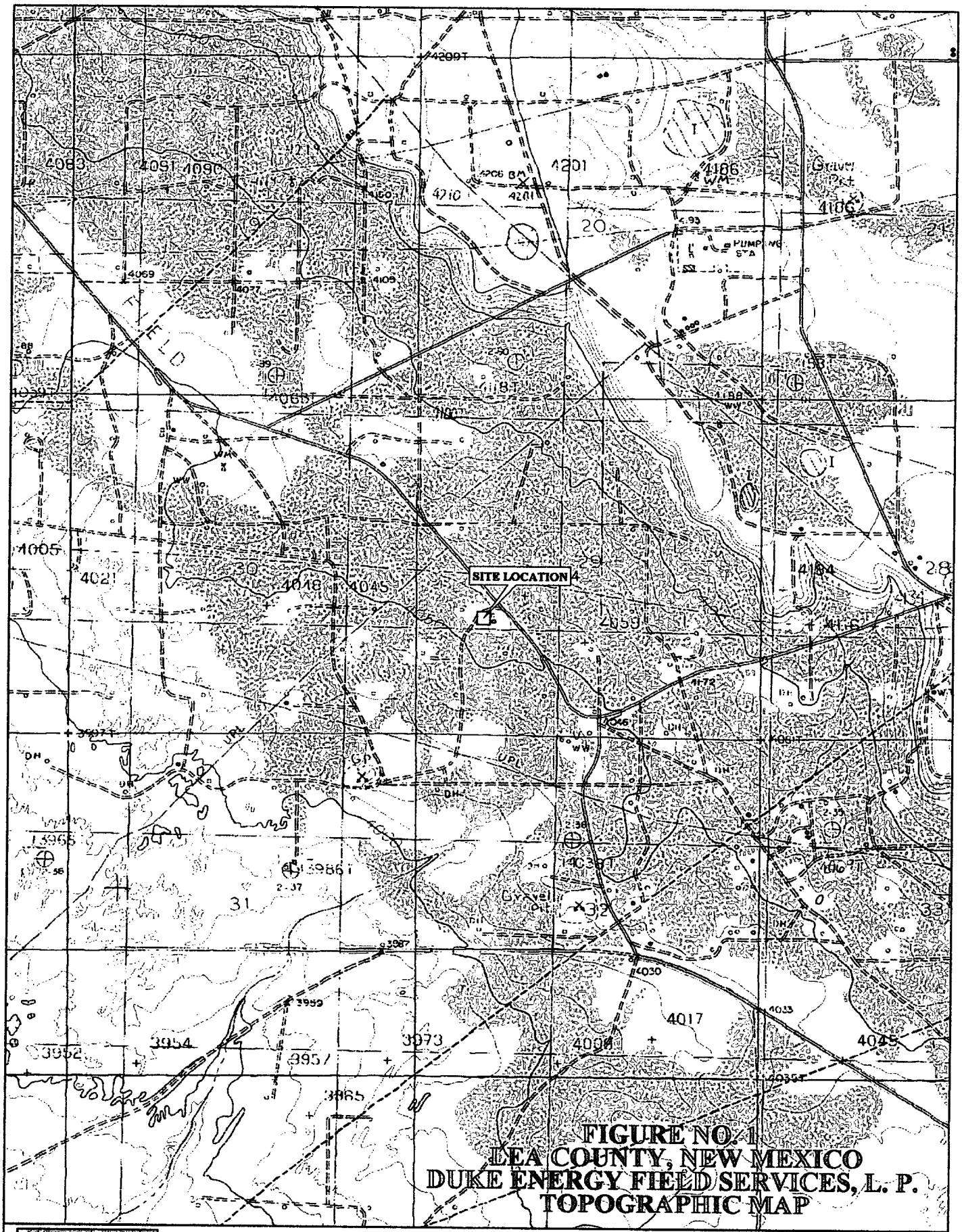
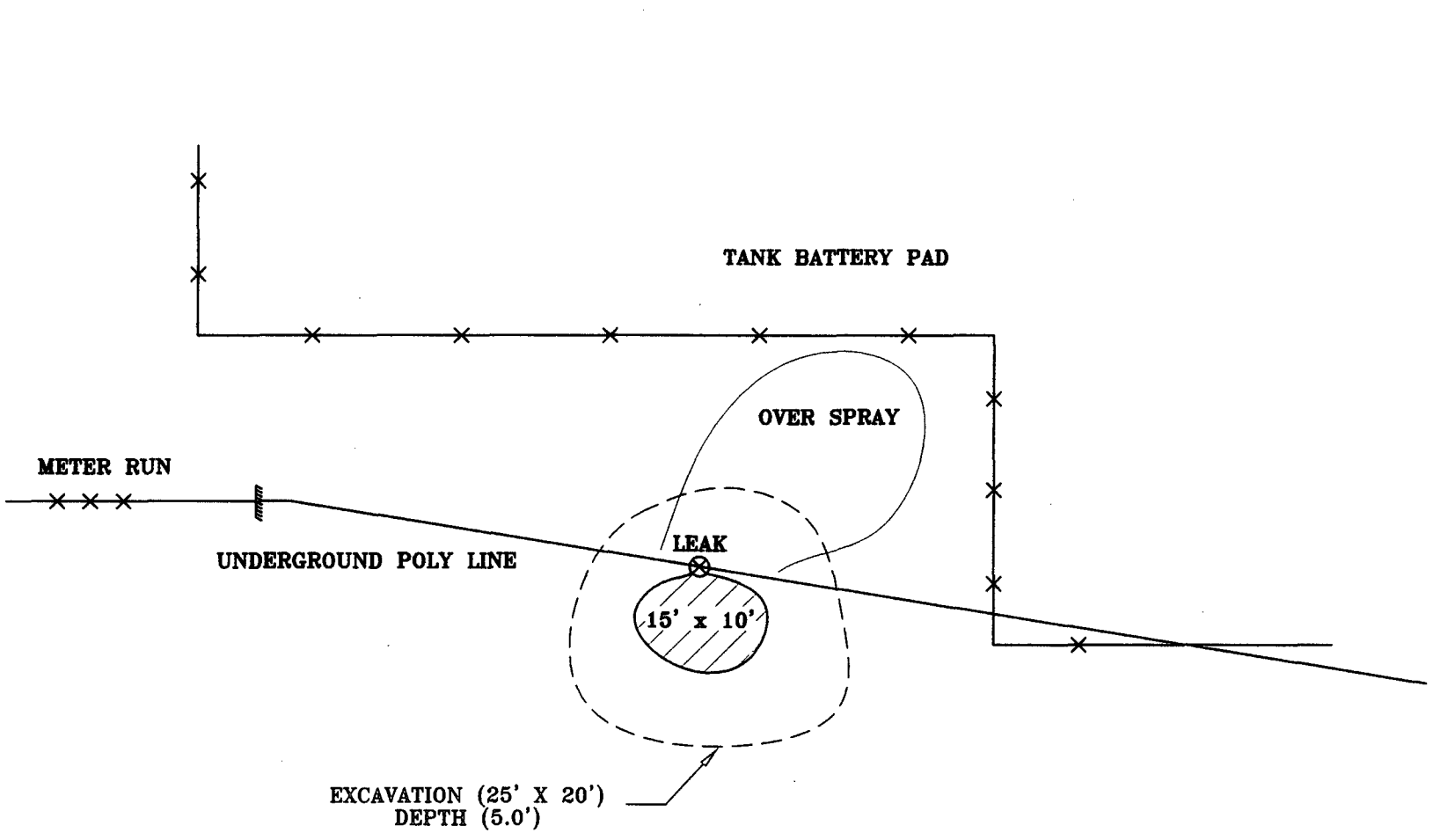


FIGURE NO. 1
LEA COUNTY, NEW MEXICO
DUKE ENERGY FIELD SERVICES, L. P.
TOPOGRAPHIC MAP

Scale 1 : 24,000
1" = 2000 ft

TN
MN
8.9°E



SPILL AREA

NOT TO SCALE

FIGURE NO. 2

LEA COUNTY, NEW MEXICO

DUKE ENERGY FIELD SERVICES, L.P.
C-16

DATE: 2/3/05
DWN. BY: JJ
FILE:

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

TABLE

Table 1
Duke Energy Field Service, L.P
C-16 Line Leak
Lea County, New Mexico

Sample ID	Date Sampled	Sample Depth (ft)	TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
			C6-C12	C12-C35	Total					
Bottom	1/21/2005	5.0'	<25.0	<25.0	<25.0	<0.025	<0.025	<0.025	0.1779	596
Northwall	1/21/2005	-	<25.0	<25.0	<25.0	-	-	-	-	255
Southwall	1/21/2005	-	<25.0	<25.0	<25.0	-	-	-	-	<20.0
East Wall	1/21/2005	-	<25.0	<25.0	<25.0	-	-	-	-	<20.0
West Wall	1/21/2005	-	<25.0	<25.0	<25.0	-	-	-	-	510

(-) Not Analyzed

APPENDIX A

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 **C-16 Pipeline**	Facility Type **Pipeline**

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

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	N/2, SW/4 of 29	**17S**	**33E**					**Lea**

NATURE OF RELEASE

Type of Release **Condensate**	Volume of Release **9bbls**	Volume Recovered **9 bbls**
Source of Release **Rupture of a 4" low pressure pipeline**	Date and Hour of Occurrence **1/11/05, 11:00 AM MST**	Date and Hour of Discovery **1/11/05 11:00 AM MST**
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? **Snot Required, <25 BBLS. Called Larry Johnson on 1/11/05 @1:00 PM MST**	
By Whom? **Lynn Ward**	Date and Hour **1/11/05 1:00 PM MST**	
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 was notified by Ron's Welding, Inc. that there was a leak in the SW/4, Section 29, T17S, R33E, adjacent to the XTO Energy operated SE Maljamar Grayburg San Andres Unit Tank Battery. Ron's Welding had been working on a release at the battery. DEFS field personnel investigated and found that Ron's had also excavated a small area to contain the released liquids at the point of the release from the DEFS line, C-16. Evidence onsite suggested a possible line strike as the cause of the release. A vacuum truck was called to pick up liquids. The line was shut-in and clamped to stop the release. The affected line is a 4' low pressure poly line. No fire, no evacuations, no injuries.

Describe Area Affected and Cleanup Action Taken.*
The impacted area measured 20' x 20' with an additional area of light overspray to the north/northeast. Duke supervised the excavation of a 20' x 25' x 5' area at the point of release. A total of 128 yds^3 of excavated soil was taken to Artesia Aeration , LLC of Hobbs, New Mexico for disposal. TPH and BTEX sampling of the excavation did not show any significant residual hydrocarbon impact. The chloride concentrations do not appear to be an environmental concern.

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:	OIL CONSERVATION DIVISION
Printed Name: Ike Tavarez (Agent for Duke Energy Field Services, LP)	Approved by District Supervisor:
Title: Senior Geologist	Approval Date: / Expiration Date:
E-mail Address: itavarez@hec-enviro.com	Conditions of Approval: / Attached ☐
Date: Phone: (432) 682-4559	

* Attach Additional Sheets If Necessary

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

Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 8750

FAXED 1/14/05

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/RONNIE GILCHREST
Address 10 DESTA DRIVE, SUITE 400-W, MIDLAND, TX 79705	Telephone No. 432/620-4207
Facility Name C-16 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
	N2, SW4 of 29	17S	33E					Lea County

Latitude: 32° 48.188' Longitude: 103° 41.425'

NATURE OF RELEASE

Type of Release CONDENSATE	Volume of Release 9 bbls	Volume Recovered 9 bbls
Source of Release RUPTURE OF 4" LOW PRESSURE PIPELINE	Date and Hour of Occurrence 1/11/05 @ 11:00 AM MST	Date and Hour of Discovery 1/11/05 @ 11:00 AM MST
Was Immediate Notice Given? Yes No ☑ Not Required	If YES, To Whom? NOT REQUIRED, <25 BBLS. Called Larry Johnson on 1/11/05 @ 1:00 pm MST.	
By Whom? LYNN WARD	Date and Hour 1/11/05 @ 1:00 pm MST.	
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 was notified by Ron's Welding Inc. that there was a leak in the SW4, Section 29, T17S, R33E, adjacent to XTO Energy operated SE Maljamar Grayburg San Andres Unit Tank Battery. Ron's Welding had been working on a release at the battery. DEFS field personnel investigated and found that Ron's had also excavated a small area to contain the released liquids at the point of the release from the DEFS line, C-16. Evidence onsite suggested a possible line strike as the cause of the release. A vacuum truck was called to pick up liquids. The line was shutin and clamped to stop the release. The affected line is a 4" low pressure poly line. No fire, no evacuations, no injuries.

Describe Area Affected and Cleanup Action Taken.*
The impacted soils are a 20' x 20' area near the point of release. DEFS will remove impacted soils and collect samples to be analyzed for TPH, BTEX. 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 20, T17S, R33E (Well No. L02875).

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: 1/12/05 Phone: 432/620-4207	Conditions of Approval: / Attached

* Attach Additional Sheets If Necessary

cc: R. Gilchrest
Env. File: Gathering Plan 2.1.1.2 Cert. original

APPENDIX B

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 17S Range: 33E 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 03/14/2005

							(Depth Water in Feet)		
Bsn	**Tws**	**Rng**	**Sec**	**Zone**	**X**	**Y**	**Wells**	**Min**	**Max**	**Avg**
L	17S	33E	01				2	150	150	150
L	17S	33E	02				4	151	168	158
L	17S	33E	03				2	155	155	155
L	17S	33E	06				2	90	90	90
L	17S	33E	07				2	114	214	164
L	17S	33E	08				2	173	173	173
L	17S	33E	09				2	160	161	161
L	17S	33E	13				2	165	165	165
L	17S	33E	17				2	180	180	180
L	17S	33E	18				2	188	188	188
L	17S	33E	20				3	190	190	190
L	17S	33E	23				2	70	160	115
L	17S	33E	35				4	150	160	155

Record Count: 31

Water Well - Average Depth to Groundwater

South 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

South 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

South 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

South 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

17 South 33 East

6 90	5	4	3 155	2 158	1 150
7 167	8 173	9 161	10	11	12
18 188	17 180	16	15	14	13 165
19	20 190	21	22	23 115	24
30	29 **site**	28	27	26	25
31	32	33	34	35 155	36

South 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

South 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

South 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

South 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)

APPENDIX C

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/ C-116 Line
Project Number: 2313
Location: Lea Co., NM

Lab Order Number: 5A25017

Report Date: 01/31/05

Highlander Environmental Corp.	Project: Duke/ C-116 Line	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 2313	**Reported:**
Midland TX, 79705	Project Manager: Ike Tavarez	01/31/05 10:07

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Bottom Excavation (5.0')	5A25017-01	Soil	01/21/05 00:00	01/24/05 17:20
North Wall	5A25017-02	Soil	01/21/05 00:00	01/24/05 17:20
South Wall	5A25017-03	Soil	01/21/05 00:00	01/24/05 17:20
East Wall	5A25017-04	Soil	01/21/05 00:00	01/24/05 17:20
West Wall	5A25017-05	Soil	01/21/05 00:00	01/24/05 17:20

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

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bottom Excavation (5.0') (5A25017-01) Soil									
Gasoline Range Organics C6-C12	ND	25.0	mg/kg dry	1	EA52503	01/25/05	01/28/05	TX 1005	
Diesel Range Organics >C12-C35	ND	25.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	25.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*92.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*98.8 %*	*70-130*		"	"	"	"	
North Wall (5A25017-02) Soil									
Gasoline Range Organics C6-C12	ND	25.0	mg/kg dry	1	EA52503	01/25/05	01/28/05	TX 1005	
Diesel Range Organics >C12-C35	ND	25.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	25.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*94.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*95.2 %*	*70-130*		"	"	"	"	
South Wall (5A25017-03) Soil									
Gasoline Range Organics C6-C12	ND	25.0	mg/kg dry	1	EA52504	01/25/05	01/28/05	TX 1005	
Diesel Range Organics >C12-C35	ND	25.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	25.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*89.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*86.4 %*	*70-130*		"	"	"	"	
East Wall (5A25017-04) Soil									
Gasoline Range Organics C6-C12	ND	25.0	mg/kg dry	1	EA52504	01/25/05	01/28/05	TX 1005	
Diesel Range Organics >C12-C35	ND	25.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	25.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*90.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*95.0 %*	*70-130*		"	"	"	"	
West Wall (5A25017-05) Soil									
Gasoline Range Organics C6-C12	ND	25.0	mg/kg dry	1	EA52504	01/25/05	01/28/05	TX 1005	
Diesel Range Organics >C12-C35	ND	25.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	25.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*86.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*92.4 %*	*70-130*		"	"	"	"	

Highlander Environmental Corp.	Project: Duke/ C-116 Line	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 2313	**Reported:**
Midland TX, 79705	Project Manager: Ike Tavarez	01/31/05 10:07

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bottom Excavation (5.0') (5A25017-01) Soil									
Chloride	**596**	20.0	mg/kg Wet	2	EA52704	01/25/05	01/26/05	SW 846 9253	
% Moisture	**8.6**		%	1	EA52506	01/25/05	01/26/05	% calculation	
North Wall (5A25017-02) Soil									
Chloride	**255**	20.0	mg/kg Wet	2	EA52704	01/25/05	01/26/05	SW 846 9253	
% Moisture	**9.3**		%	1	EA52506	01/25/05	01/26/05	% calculation	
South Wall (5A25017-03) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EA52704	01/25/05	01/26/05	SW 846 9253	
% Moisture	**8.2**		%	1	EA52506	01/25/05	01/26/05	% calculation	
East Wall (5A25017-04) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EA52704	01/25/05	01/26/05	SW 846 9253	
% Moisture	**8.2**		%	1	EA52506	01/25/05	01/26/05	% calculation	
West Wall (5A25017-05) Soil									
Chloride	**510**	20.0	mg/kg Wet	2	EA52704	01/25/05	01/26/05	SW 846 9253	
% Moisture	**7.0**		%	1	EA52506	01/25/05	01/26/05	% calculation	

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

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 EA52503 - Solvent Extraction (GC)										
Blank (EA52503-BLK1)				Prepared: 01/25/05 Analyzed: 01/27/05						
Gasoline Range Organics C6-C12	ND	25.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	25.0	"							
Total Hydrocarbon C6-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*35.4*		*mg/kg*	*50.0*		*70.8*	*70-130*			
Surrogate: 1-Chlorooctadecane	*35.1*		*"*	*50.0*		*70.2*	*70-130*			
Blank (EA52503-BLK2)				Prepared: 01/25/05 Analyzed: 01/27/05						
Gasoline Range Organics C6-C12	ND	25.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	25.0	"							
Total Hydrocarbon C6-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*37.7*		*mg/kg*	*50.0*		*75.4*	*70-130*			
Surrogate: 1-Chlorooctadecane	*42.1*		*"*	*50.0*		*84.2*	*70-130*			
LCS (EA52503-BS1)				Prepared: 01/25/05 Analyzed: 01/27/05						
Gasoline Range Organics C6-C12	447	25.0	mg/kg wet	500		89.4	75-125			
Diesel Range Organics >C12-C35	508	25.0	"	500		102	75-125			
Total Hydrocarbon C6-C35	955	25.0	"	1000		95.5	75-125			
Surrogate: 1-Chlorooctane	*42.5*		*mg/kg*	*50.0*		*85.0*	*70-130*			
Surrogate: 1-Chlorooctadecane	*39.4*		*"*	*50.0*		*78.8*	*70-130*			
LCS (EA52503-BS2)				Prepared: 01/25/05 Analyzed: 01/27/05						
Gasoline Range Organics C6-C12	483	25.0	mg/kg wet	500		96.6	75-125			
Diesel Range Organics >C12-C35	493	25.0	"	500		98.6	75-125			
Total Hydrocarbon C6-C35	976	25.0	"	1000		97.6	75-125			
Surrogate: 1-Chlorooctane	*44.5*		*mg/kg*	*50.0*		*89.0*	*70-130*			
Surrogate: 1-Chlorooctadecane	*40.9*		*"*	*50.0*		*81.8*	*70-130*			
Calibration Check (EA52503-CCV1)				Prepared: 01/25/05 Analyzed: 01/27/05						
Gasoline Range Organics C6-C12	447		mg/kg	500		89.4	80-120			
Diesel Range Organics >C12-C35	564		"	500		113	80-120			
Total Hydrocarbon C6-C35	1010		"	1000		101	80-120			
Surrogate: 1-Chlorooctane	*50.3*		*"*	*50.0*		*101*	*70-130*			
Surrogate: 1-Chlorooctadecane	*46.2*		*"*	*50.0*		*92.4*	*70-130*			

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 EA52503 - Solvent Extraction (GC)										
Calibration Check (EA52503-CCV2)				Prepared: 01/25/05 Analyzed: 01/27/05						
Gasoline Range Organics C6-C12	429		mg/kg	500		85.8	80-120			
Diesel Range Organics >C12-C35	532		"	500		106	80-120			
Total Hydrocarbon C6-C35	961		"	1000		96.1	80-120			
Surrogate: 1-Chlorooctane	*46.7*		*"*	*50.0*		*93.4*	*70-130*			
Surrogate: 1-Chlorooctadecane	*43.3*		*"*	*50.0*		*86.6*	*70-130*			
Matrix Spike (EA52503-MS1)	**Source: 5A25007-01**			Prepared: 01/25/05 Analyzed: 01/27/05						
Gasoline Range Organics C6-C12	662	25.0	mg/kg dry	762	ND	86.9	75-125			
Diesel Range Organics >C12-C35	897	25.0	"	762	52.2	111	75-125			
Total Hydrocarbon C6-C35	1560	25.0	"	1520	52.2	99.2	75-125			
Surrogate: 1-Chlorooctane	*47.9*		*mg/kg*	*50.0*		*95.8*	*70-130*			
Surrogate: 1-Chlorooctadecane	*44.5*		*"*	*50.0*		*89.0*	*70-130*			
Matrix Spike (EA52503-MS2)	**Source: 5A25015-01**			Prepared: 01/25/05 Analyzed: 01/28/05						
Gasoline Range Organics C6-C12	544	25.0	mg/kg dry	546	ND	99.6	75-125			
Diesel Range Organics >C12-C35	599	25.0	"	546	20.6	106	75-125			
Total Hydrocarbon C6-C35	1140	25.0	"	1090	ND	105	75-125			
Surrogate: 1-Chlorooctane	*51.1*		*mg/kg*	*50.0*		*102*	*70-130*			
Surrogate: 1-Chlorooctadecane	*50.2*		*"*	*50.0*		*100*	*70-130*			
Matrix Spike Dup (EA52503-MSD1)	**Source: 5A25007-01**			Prepared: 01/25/05 Analyzed: 01/27/05						
Gasoline Range Organics C6-C12	685	25.0	mg/kg dry	762	ND	89.9	75-125	3.41	20	
Diesel Range Organics >C12-C35	911	25.0	"	762	52.2	113	75-125	1.55	20	
Total Hydrocarbon C6-C35	1600	25.0	"	1520	52.2	102	75-125	2.53	20	
Surrogate: 1-Chlorooctane	*48.1*		*mg/kg*	*50.0*		*96.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*45.7*		*"*	*50.0*		*91.4*	*70-130*			
Matrix Spike Dup (EA52503-MSD2)	**Source: 5A25015-01**			Prepared: 01/25/05 Analyzed: 01/28/05						
Gasoline Range Organics C6-C12	524	25.0	mg/kg dry	546	ND	96.0	75-125	3.75	20	
Diesel Range Organics >C12-C35	600	25.0	"	546	20.6	106	75-125	0.167	20	
Total Hydrocarbon C6-C35	1120	25.0	"	1090	ND	103	75-125	1.77	20	
Surrogate: 1-Chlorooctane	*51.8*		*mg/kg*	*50.0*		*104*	*70-130*			
Surrogate: 1-Chlorooctadecane	*49.1*		*"*	*50.0*		*98.2*	*70-130*			

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 EA52504 - Solvent Extraction (GC)										
Blank (EA52504-BLK1)				Prepared: 01/25/05 Analyzed: 01/28/05						
Gasoline Range Organics C6-C12	ND	25.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	25.0	"							
Total Hydrocarbon C6-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*36.6*		*mg/kg*	*50.0*		*73.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*36.0*		*"*	*50.0*		*72.0*	*70-130*			
LCS (EA52504-BS1)				Prepared: 01/25/05 Analyzed: 01/28/05						
Gasoline Range Organics C6-C12	464	25.0	mg/kg wet	500		92.8	75-125			
Diesel Range Organics >C12-C35	515	25.0	"	500		103	75-125			
Total Hydrocarbon C6-C35	979	25.0	"	1000		97.9	75-125			
Surrogate: 1-Chlorooctane	*36.6*		*mg/kg*	*50.0*		*73.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*37.9*		*"*	*50.0*		*75.8*	*70-130*			
Calibration Check (EA52504-CCV1)				Prepared: 01/25/05 Analyzed: 01/28/05						
Gasoline Range Organics C6-C12	483		mg/kg	500		96.6	80-120			
Diesel Range Organics >C12-C35	491		"	500		98.2	80-120			
Total Hydrocarbon C6-C35	974		"	1000		97.4	80-120			
Surrogate: 1-Chlorooctane	*50.7*		*"*	*50.0*		*101*	*70-130*			
Surrogate: 1-Chlorooctadecane	*50.8*		*"*	*50.0*		*102*	*70-130*			
Matrix Spike (EA52504-MS1)	**Source: 5A25017-03**			Prepared: 01/25/05 Analyzed: 01/28/05						
Gasoline Range Organics C6-C12	501	25.0	mg/kg dry	545	ND	91.9	75-125			
Diesel Range Organics >C12-C35	537	25.0	"	545	ND	98.5	75-125			
Total Hydrocarbon C6-C35	1040	25.0	"	1090	ND	95.4	75-125			
Surrogate: 1-Chlorooctane	*47.3*		*mg/kg*	*50.0*		*94.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*47.8*		*"*	*50.0*		*95.6*	*70-130*			
Matrix Spike Dup (EA52504-MSD1)	**Source: 5A25017-03**			Prepared: 01/25/05 Analyzed: 01/28/05						
Gasoline Range Organics C6-C12	514	25.0	mg/kg dry	545	ND	94.3	75-125	2.56	20	
Diesel Range Organics >C12-C35	585	25.0	"	545	ND	107	75-125	8.56	20	
Total Hydrocarbon C6-C35	1100	25.0	"	1090	ND	101	75-125	5.61	20	
Surrogate: 1-Chlorooctane	*47.1*		*mg/kg*	*50.0*		*94.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*47.8*		*"*	*50.0*		*95.6*	*70-130*			

Highlander Environmental Corp.	Project: Duke/ C-116 Line	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 2313	**Reported:**
Midland TX, 79705	Project Manager: Ike Tavarez	01/31/05 10:07

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 EA52506 - General Preparation (Prep)										
Blank (EA52506-BLK1)				Prepared: 01/25/05 Analyzed: 01/26/05						
% Moisture	0.003		%							
Duplicate (EA52506-DUP1)		**Source: 5A24010-01**		Prepared: 01/25/05 Analyzed: 01/26/05						
% Moisture	17.0		%		16.7			1.78	20	
Batch EA52704 - Water Extraction										
Blank (EA52704-BLK1)				Prepared: 01/25/05 Analyzed: 01/26/05						
Chloride	ND	20.0	mg/kg Wet							
Matrix Spike (EA52704-MS1)		**Source: 5A25008-01**		Prepared: 01/25/05 Analyzed: 01/26/05						
Chloride	489	20.0	mg/kg Wet	500	0.00	97.8	80-120			
Matrix Spike Dup (EA52704-MSD1)		**Source: 5A25008-01**		Prepared: 01/25/05 Analyzed: 01/26/05						
Chloride	500	20.0	mg/kg Wet	500	0.00	100	80-120	2.22	20	
Reference (EA52704-SRM1)				Prepared & Analyzed: 01/26/05						
Chloride	5000		mg/kg	5000		100	80-120			

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

Notes and Definitions

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

Report Approved By: Raland K Tuttle Date: 1-31-05

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

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

Client: Highlander Env.

Date/Time: 01-24-05 @ 1720

Order #: 5A 25017

Initials: JMM

Sample Receipt Checklist

Temperature of container/cooler?	(Yes)	No	4.0 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:

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

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

PAGE: 1 OF: 1

CLIENT NAME: Duke | SITE MANAGER: Ike Tavarez

PROJECT NO.: 2313 | PROJECT NAME: Duke/C-116 Line, Lea Co. NM.

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8021/602	MTBE 8020/602	418.1 8015 MOD. TX1005 TPH	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
SA25017																													
-01	1/21/05		S		X	Bottom excavation (5.0')	1				✓		X		X														X
-02	1/21/05		S		X	North wall.	1				✓				X														X
-03	1/21/05		S		X	South wall.	1				✓				X														X
-04	1/21/05		S		X	East wall.	1				✓				X														X
-05	1/21/05		S		X	West wall.	1				✓				X														X

RELINQUISHED BY: (Signature) Date: 1/24/05 Time: 5:20 | 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) Date: Time:

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

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

RECEIVED BY: (Signature)
DATE: 1-24-05 TIME: 1720

HIGHLANDER CONTACT PERSON: IKE T

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: Ice 4°C

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

REMARKS: Run (2) BTEX w/ Light TPH.
*Run BTEX per Ike 1-31-05 MT

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.

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/ C-116 Line
Project Number: 2313
Location: Lea Co., NM

Lab Order Number: 5A25017

Report Date: 02/01/05

Highlander Environmental Corp.	Project: Duke/ C-116 Line	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 2313	**Reported:**
Midland TX, 79705	Project Manager: Ike Tavarez	02/01/05 10:42

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Bottom Excavation (5.0')	5A25017-01	Soil	01/21/05 00:00	01/24/05 17:20

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

Highlander Environmental Corp.	Project: Duke/ C-116 Line	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 2313	**Reported:**
Midland TX, 79705	Project Manager: Ike Tavarez	02/01/05 10:42

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bottom Excavation (5.0') (5A25017-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EB50104	01/28/05	01/31/05	EPA 8021B	
Toluene	**J [0.0220]**	0.0250	"	"	"	"	"	"	J
Ethylbenzene	**J [0.0209]**	0.0250	"	"	"	"	"	"	J
Xylene (p/m)	**0.109**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.0689**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*129 %*	*80-120*		"	"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*83.1 %*	*80-120*		"	"	"	"	

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

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 EB50104 - EPA 5030C (GC)										
Blank (EB50104-BLK1)			Prepared & Analyzed: 01/28/05							
Benzene	ND	0.0250	mg/kg wet							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
Xylene (p/m)	ND	0.0250	"							
Xylene (o)	ND	0.0250	"							
Surrogate: a,a,a-Trifluorotoluene	*99.9*		*ug/kg*	*100*		*99.9*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*85.9*		"	*100*		*85.9*	*80-120*			
LCS (EB50104-BS1)			Prepared & Analyzed: 01/28/05							
Benzene	93.7		ug/kg	100		93.7	80-120			
Toluene	93.1		"	100		93.1	80-120			
Ethylbenzene	109		"	100		109	80-120			
Xylene (p/m)	240		"	200		120	80-120			
Xylene (o)	118		"	100		118	80-120			
Surrogate: a,a,a-Trifluorotoluene	*114*		"	*100*		*114*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*107*		"	*100*		*107*	*80-120*			
Calibration Check (EB50104-CCV1)			Prepared: 01/28/05 Analyzed: 01/31/05							
Benzene	96.8		ug/kg	100		96.8	80-120			
Toluene	93.3		"	100		93.3	80-120			
Ethylbenzene	96.0		"	100		96.0	80-120			
Xylene (p/m)	212		"	200		106	80-120			
Xylene (o)	105		"	100		105	80-120			
Surrogate: a,a,a-Trifluorotoluene	*114*		"	*100*		*114*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*102*		"	*100*		*102*	*80-120*			
Matrix Spike (EB50104-MS1)	**Source: 5A27007-10**		Prepared & Analyzed: 01/28/05							
Benzene	2300		ug/kg	2500	ND	92.0	80-120			
Toluene	2290		"	2500	ND	91.6	80-120			
Ethylbenzene	2690		"	2500	ND	108	80-120			
Xylene (p/m)	5420		"	5000	27.5	108	80-120			
Xylene (o)	2790		"	2500	ND	112	80-120			
Surrogate: a,a,a-Trifluorotoluene	*116*		"	*100*		*116*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*95.4*		"	*100*		*95.4*	*80-120*			

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 EB50104 - EPA 5030C (GC)										
Matrix Spike Dup (EB50104-MSD1)	**Source: 5A27007-10**		Prepared & Analyzed: 01/28/05							
Benzene	2330		ug/kg	2500	ND	93.2	80-120	1.30	20	
Toluene	2270		"	2500	ND	90.8	80-120	0.877	20	
Ethylbenzene	2430		"	2500	ND	97.2	80-120	10.5	20	
Xylene (p/m)	5400		"	5000	27.5	107	80-120	0.930	20	
Xylene (o)	2580		"	2500	ND	103	80-120	8.37	20	
Surrogate: a,a,a-Trifluorotoluene	*116*		"	*100*		*116*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*93.2*		"	*100*		*93.2*	*80-120*			

Highlander Environmental Corp.	Project: Duke/ C-116 Line	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 2313	**Reported:**
Midland TX, 79705	Project Manager: Ike Tavarez	02/01/05 10:42

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: 2-01-05

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