



# Highlander Environmental Corp.

Midland, Texas

October 20, 2003

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



**RE: Request for Closure for the Pipeline Leak Located at the Duke G-28, Section 9, Township 22 South, Range 36 East Lea County, New Mexico.**

Dear Mr. Sheeley:

Highlander Environmental Corp. (Highlander) was contacted by Duke Energy Field Services, LP (Duke) to assess a pipeline leak, which occurred at the Duke G-28 in Lea County, New Mexico. The Site is located in Section 9, Township 22 South, Range 36 East at location ~~32° 24' 07" N, 103° 15' 58.6" W~~. The Site location is shown in Figure 1. Highlander submitted an assessment report to the New Mexico Oil Conservation Division (NMOCD) dated January 10, 2002.

200'

### Groundwater & Regulatory

A risk-based evaluation was performed for the Site in accordance with the NMOCD Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. Based upon the depth to groundwater, as discussed in the January 10, 2002 assessment report, the recommended remediation action levels (RRAL) were determined to be 10 mg/kg for benzene, 50 ppm for total BTEX and 5,000 mg/kg for TPH.

### Background

On August 24, 2001, a leak occurred from a gas-gathering line and released pipeline liquids into the surrounding soils. The leak released approximately 210 gallons (5 barrels) of petroleum oils and liquids. Approximately 42 gallons (1 barrel) of liquids were recovered and the pipeline leak was immediately repaired. A copy of the C-141 (Initial) is included in Appendix A. No remedial action was taken for the impacted soil, other than breaking and mixing the soil during the line repair. The spill area was allowed to naturally degrade.

### Previous Assessment

On September 5, 2001, Highlander inspected the leak area and collected soil samples using a stainless steel bucket-type hand auger. A total of five (5) auger holes were installed near the release point to define the extent of the impact. One auger hole location (AH-1) exceeded the

Duke-229153

facility - FPAC0605343689

1910 N. Big Spring

Midland, Texas 79705

incident - nPAC0605343792

application - nPAC0605345636

(915) 682-4559

Fax (915) 682-3946

RRAL for TPH of 5,000 mg/kg. The soil sample at 0-1' showed a TPH level of 10,500 mg/kg, which decreased to 3,120 mg/kg at 3.0' below surface. The remaining auger holes (AH-2, AH-3, AH-4 and AH-5) did not show TPH levels above the RRAL. The benzene and the total BTEX levels in the auger holes did not exceed the RRAL of 10 mg/kg and 50 mg/kg, respectively. The chloride impact did not appear to be an environmental concern.

### **Confirmation Sampling**

On October 1, 2003, the area around AH-1 was sampled to evaluate the natural attenuation. As shown on Figure 2, a three spot composite sample was taken from 0'-1' around AH-1. The sample was analyzed for TPH by Method 8015M and the concentration was well below the RRAL of 5,000 mg/kg.

### **Sampling Protocol**

All samples were collected with either a stainless steel bucket-type hand auger or stainless steel trowel. All samples for laboratory analysis were collected and preserved according to EPA protocols, and analyzed within appropriate holding times. The laboratory reports are shown in Appendix B. All sampling equipment was washed between sampling events using distilled water and laboratory grade detergent.

### **Conclusions**

Based upon the sample results of the confirmation sampling, the remediation of the spill area has reduced TPH below 5,000 mg/kg. Duke requests closure for this Site. A copy of the C-141 (Final) is enclosed in Appendix A.

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

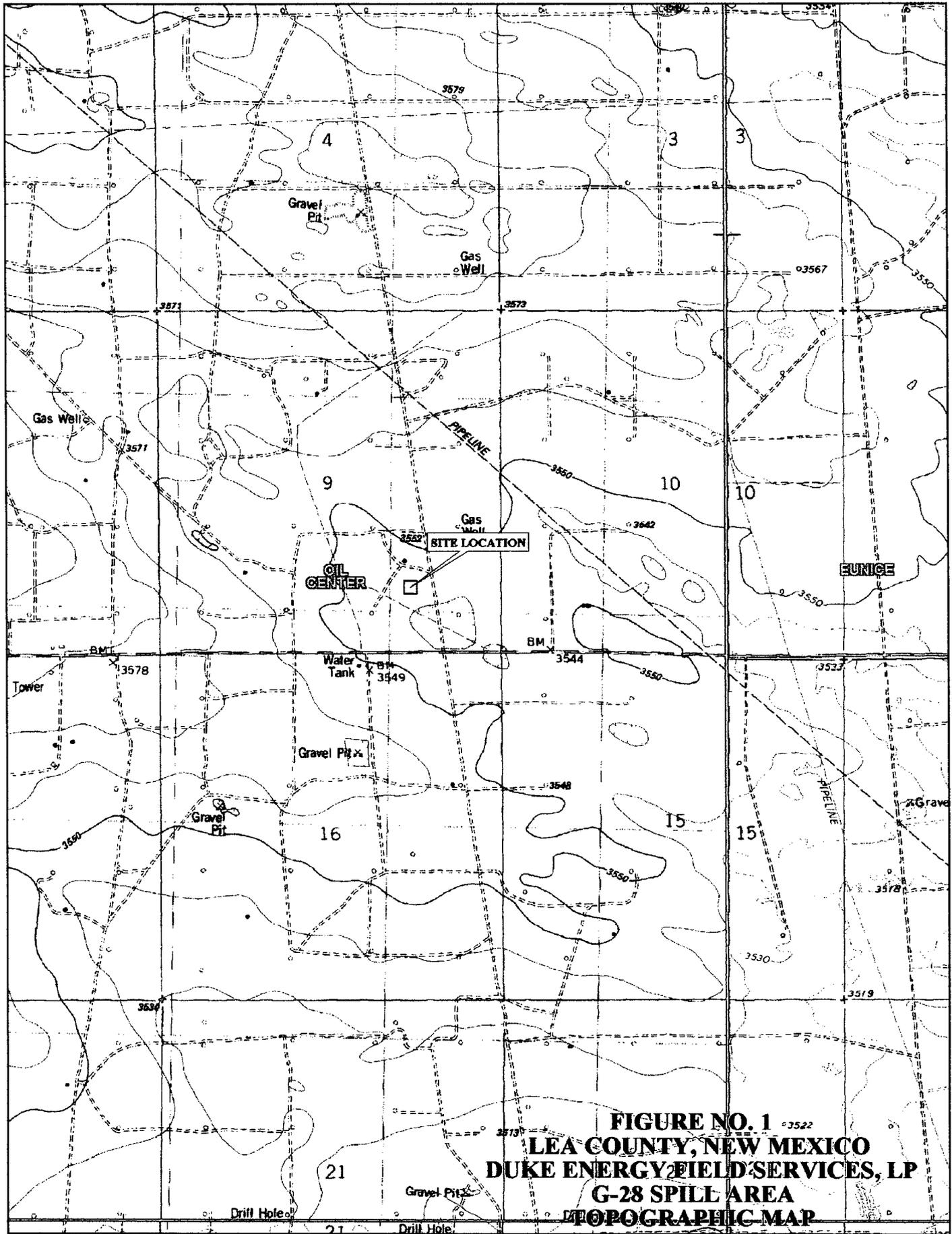
Very truly yours,

  
Timothy M. Reed, REM  
Vice President

cc: Steve Weathers - Duke Energy Field Services



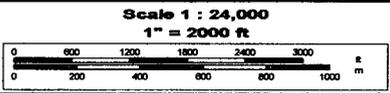
**FIGURES**

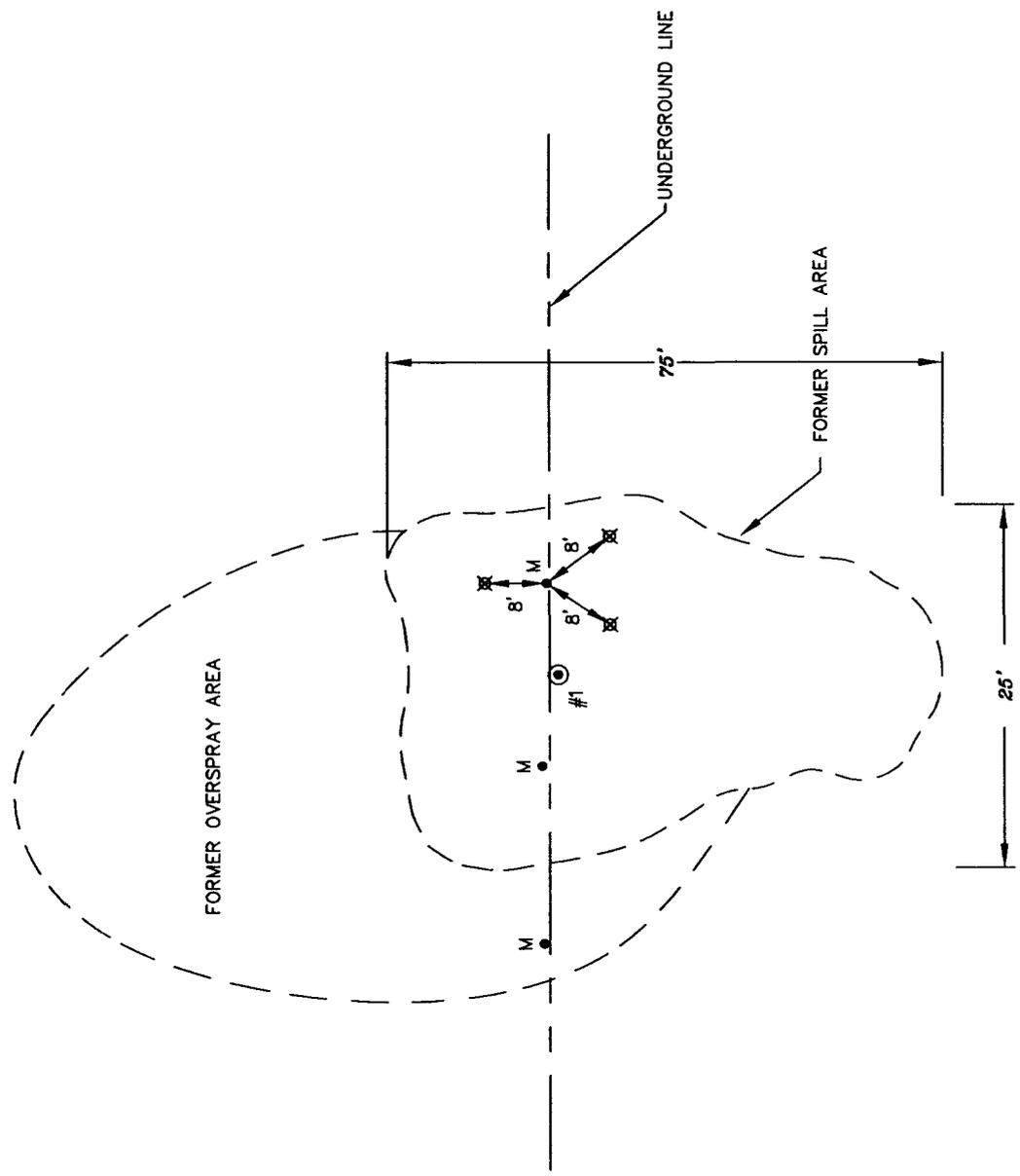


**FIGURE NO. 1**  
**LEA COUNTY, NEW MEXICO**  
**DUKE ENERGY FIELD SERVICES, LP**  
**G-28 SPILL AREA**  
**TOPOGRAPHIC MAP**



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**FIGURE NO. 2**

LEA COUNTY, NEW MEXICO  
 DUKE ENERGY FIELD SERVICES, LP  
 G-28 SPILL  
 HIGHLANDER ENVIRONMENTAL CORP.  
 MIDLAND, TEXAS

DATE: 10/2/03  
 DWS, BY: JDA  
 FILE: 25000451715  
 PG-2A

**LEGEND**

- ⊙ AUGERHOLE LOCATION
- M PIPELINE MARKER
- ⊕ COMPOSITE SAMPLE LOCATION

NOT TO SCALE

**APPENDIX A**

**State of New Mexico Form C-141**

# FAXED

10/5/01  
LW

FORM C-141

Release Notification and Corrective Action

Initial Report  Final Report

OPERATOR

Name: Cuke Energy Field Services	Contact: Vicki Ginter
Address: PO Box 50020 Midland, Tx 79710-0020	Telephone No.: 915-620-4142
Facility Name: NMR Regional Unit N/A	Facility Type:

Surface Owner:	Mineral Owner:	Lease No.:
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LOCATION OF RELEASE

Unit Letter:	Section: 9	Township: 22S	Range: 36E	Feet from N/S Line:	Feet from E/W Line:	County: Lea
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NATURE OF RELEASE:

Release Type: propane liquids	Volume Released: 210 Gallons 0 Pounds	Volume Recovered: 42 Gallons 0 Pounds
Release Source: gas gathering line	Date/Hour of Occurrence: 08/24/2001 10:00 AM	Date/Hour of Discovery: 08/24/2001 10:00 AM
Immediate Notice Given? <input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Required	To Whom? NMOCD, Buddy Hill	
By Whom? Jackie Flowers	When? 08/24/2001	
Watercourse Reached? <input type="radio"/> Yes <input checked="" type="radio"/> No	Impact Volume: 0	

If Watercourse was impacted, Describe Fully

Cause of Problem and Remedial Action Taken

A leak in the G-25 gathering line. The leak was clamped.

Area Affected and Cleanup Action Taken

The free liquid around the leak was picked up with a vacuum truck. Further soil remediation will be done after the line is replaced.

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 appearance of a C-141 report by the NMOCD marked as "Field Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state or local laws and/or regulations.

Signature: <i>Sigmund Ward for Beeky Moore</i>	OIL CONSERVATION DIVISION	
Printed Name: R. A. Moore	Approved by: District Supervisor:	
Title: Env. Tech	Approval Date:	Expiration Date:
Date: 10/4/01	Phone: 915-620-4126	Conditions of Approval:
		Attached:

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

Form C-141  
Revised June 10, 2003

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

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

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company : Duke Energy Field Service, LP	Contact: Polo Rendon
Address: 1625 W. Marland, Hobbs, New Mexico	Telephone No.: (505) 397-5601
Facility Name: NMR Regional Unit N/A (G-28)	Facility Type: Gathering System Line

Surface Owner:	Mineral Owner:	Lease No.:
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**LOCATION OF RELEASE**

Unit Letter N	Section 9	Township 22S	Range 36E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
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**NATURE OF RELEASE**

Type of Release: Petroleum Oil and Liquids	Volume of Release: 210 gallons	Volume Recovered: 42 gallons
Source of Release: Gathering Pipeline	Date and Hour of Occurrence 8/24/01 10:00 AM	Date and Hour of Discovery 8/24/01 10:01 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? NMOCD - Buddy Hill	
By Whom? : Jackie Flowers - Duke	Date and Hour: 8/24/01	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

A leak in the G-28 gathering line. The leak at the line was repaired. The free liquids around the leak were pickup with a vacuum truck. Soil remediation of the soil would be performed after the line is replaced.

Describe Area Affected and Cleanup Action Taken.\*

The pipeline was repaired and majority of the fluids were confined to the to the release. Assessment performed at the release. Submitted the Assessment and Work Plan Report to the NMOCD for review. The areal extent of the surface staining measured approx. 25' x 75'. In addition, the area north of the release had some over spray. No remedial action was taken for the impacted soil, other than mixing the soil during the line repair. The spill was allowed to naturally degrade. The final soil composite sample collected was all below the RRAL. A Closure Report was submitted the NMOCD for review.

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

**OIL CONSERVATION DIVISION**

Signature:	Approved by District Supervisor:	
Printed Name: Ike Tavarez	Approval Date:	Expiration Date:
Title: Senior Geologist	Conditions of Approval:	
E-mail Address: itavarez@hec-enviro.com	Attached <input type="checkbox"/>	
Date:	Phone:	

\* Attach Additional Sheets If Necessary

**APPENDIX B**

**Analytical Results**

# ANALYTICAL REPORT

## Prepared for:

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

**Project:** Duke/6-28 Spill Area

**PO#:**

**Order#:** G0307633

**Report Date:** 10/07/2003

### Certificates

US EPA Laboratory Code TX00158

# ENVIRONMENTAL LAB OF TEXAS

## SAMPLE WORK LIST

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

Order#: G0307633  
Project: 1713  
Project Name: Duke/6-28 Spill Area  
Location: Lea County, N.M.

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

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u> <u>Collected</u>	<u>Date / Time</u> <u>Received</u>	<u>Container</u>	<u>Preservative</u>
0307633-01	Composite (0-1.0')	SOIL	10/1/03 13:00	10/2/03 16:40	4 oz glass	ice
	<u>Lab Testing:</u> 8015M Chloride	Rejected: No		Temp: 14.5 C		

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

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

Order#: G0307633  
Project: 1713  
Project Name: Duke/6-28 Spill Area  
Location: Lea County, N.M.

Lab ID: 0307633-01  
Sample ID: Composite (0-1.0')

**8015M**

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>	<u>Analyst</u>	<u>Method</u>
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		10/3/03	1	1	JLH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	112	10.0
DRO, >C12-C35	1,160	10.0
TOTAL, C6-C35	1,272	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	100%	70	130
1-Chlorooctadecane	106%	70	130

Approval: Jeanne McMurrey 10-07-03  
Raland K. Tuttle, Lab Director, QA Officer      Date  
Celey D. Keene, Org. Tech. Director  
Jeanne McMurrey, Inorg. Tech. Director  
Sandra Biezugbe, Lab Tech.  
Sara Molina, Lab Tech.

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

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

Order#: G0307633  
Project: 1713  
Project Name: Duke/6-28 Spill Area  
Location: Lea County, N.M.

Lab ID: 0307633-01  
Sample ID: Composite (0-1.0')

### Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	337	mg/kg	1	20	9253	10/3/03	SB

Approval: *Jeanne McMurrey* 10-07-03  
Raland K. Tuttle, Lab Director, QA Officer      Date  
Celey D. Keene, Org. Tech. Director  
Jeanne McMurrey, Inorg. Tech. Director  
Sandra Biezugbe, Lab Tech.  
Sara Molina, Lab Tech.

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

8015M

Order#: G0307633

<b>BLANK</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0007055-02			<10.0		
<b>CONTROL</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0007055-03		952	772	81.1%	
<b>MS</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0307635-01	16.8	952	1054	108.9%	
<b>MSD</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0307635-01	16.8	952	1046	108.1%	0.8%
<b>SRM</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0007055-05		1000	921	92.1%	

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

### Test Parameters

Order#: G0307633

<b>BLANK</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0007031-01			<20		
<b>MS</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0307632-01	177	500	674	99.4%	
<b>MSD</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0307632-01	177	500	674	99.4%	0.0%
<b>SRM</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0007031-04		5000	4960	99.2%	

