

# DUKE ENERGY FIELD SERVICES



IRP-72  
10/5/05

## SITE INVESTIGATION, REMEDIATION, AND FINAL C-141 CLOSURE DOCUMENTATION

G-28 LOOP LINE RELEASE SITE

DEFS REF: G-28 LOOP LINE WEST 031902

UL-L (NW¼ OF THE SW¼) OF SECTION 7 T22S R36E

~9.0 MILES WEST-SOUTHWEST (256.6°) OF EUNICE

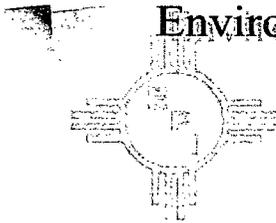
LEA COUNTY, NEW MEXICO

LATITUDE: N32° 24' 18.03"

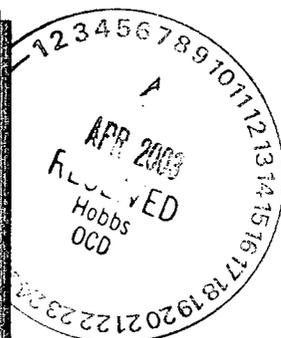
LONGITUDE: W103° 18' 35.04"

MARCH 28, 2003

PREPARED BY: JCG



**John Good**  
Environmental Consultant  
**Environmental Plus, Inc.**  
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ENVIRONMENTAL PLUS, INC. *Micro-Blaze Micro-Blaze Out™*

STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES

March 28, 2003

Mr. Larry Johnson  
Energy, Minerals, and Natural Resources Department  
New Mexico Oil Conservation Division  
1625 North French Dr.  
Hobbs, New Mexico 88240

Subject: DEFS – G28 Loop Line West 031902 Final C-141 and Closure Documentation

Dear Mr. Johnson:

Environmental Plus, Inc. (EPI), on behalf of Duke Energy Field Services (DEFS) submits for your consideration and approval the Final C-141 and Closure Documentation for the “G28 Loop Line West 031902” remediation site. This report documents the vertical and horizontal extents of hydrocarbon contamination at the site, removal of contaminated soils above acceptable CoC levels and disposal of said contaminated soils at EPI’s approved land farm. This submittal is consistent with the Initial C-141 and Remediation Plan submitted to NMOCD on March 19, 2002. Therefore, on behalf of Duke Energy Field Services, EPI requests that the NMOCD consider the information provided within this documentation and require “no further action” at this site.

If there are any questions please call Mr. Ben Miller or myself at EPI’s offices, or at 505-390-0288 or 505-390-9804 respectively. Mr. Paul Mulkey of Duke Energy Field Services can be contacted at 505-397-5716.

Please address all official correspondence regarding this release to Mr. Paul Mulkey at:

Duke Energy Field Services  
11525 West Carlsbad Highway  
Hobbs, New Mexico 88240

Sincerely,

John Good, Environmental Consultant

cc: Paul Mulkey, Duke Energy Field Services, Hobbs, w/enclosure  
Lynn Ward, Duke Energy Field Services, Midland, w/enclosure  
Steve Weathers, Duke Energy Field Services, Denver, w/enclosure  
Sherry Miller, President, Environmental Plus, Inc.  
Ben Miller, Vice President/General Manager, Environmental Plus, Inc.  
Pat McCasland, EPI Technical Manager, Environmental Plus, Inc.  
File

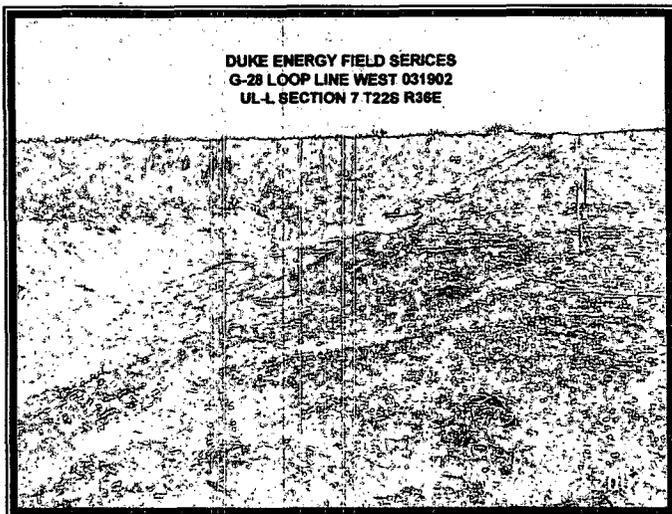
ENVIRONMENTAL PLUS, INC.

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## Executive Summary

Environmental Plus, Inc. (EPI) was notified by Duke Energy Field Services (DEFS) on March 19, 2002 regarding a historical pipeline release site involving DEFS' "G-28 Loop Line" natural gas gathering pipeline. DEFS' initial C-141 (03-19-02) indicates an unknown release volume and no recovery. The leak was historical in nature and was the result of internal pipeline corrosion. DEFS personnel repaired the steel pipeline by clamping.



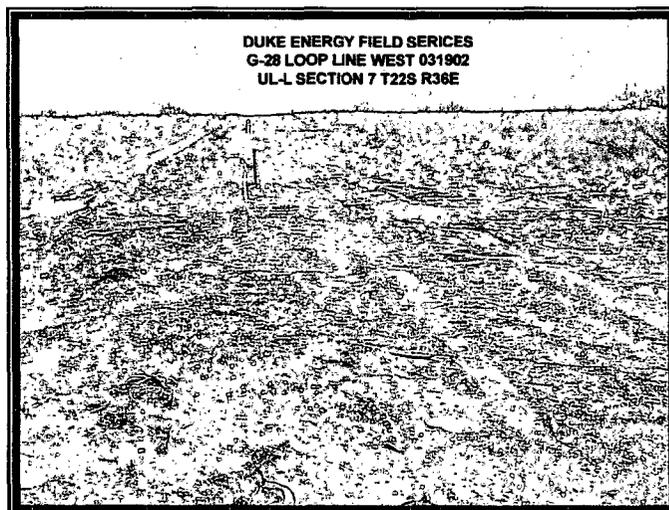
Characterization and remedial work by EPI commenced on March 19, 2002 and was completed on April 30, 2002. The "G-28 Loop Line West 031902" site is located ~9-miles west-southwest (256.6°) of Eunice, NM, in Unit Letter L, (NW¼ of the SW¼), Section 07, T22S, R36E, (N32°24'18.03" and W103°18'35.04"). The spill occurred on property owned by the State of New Mexico. The surface extent of the reported spill was approximately 2,424-ft<sup>2</sup> (see Plate 3, Attachments). The vertical extent of contamination did not extend beyond 15-ft below ground surface (bgs).

EPI excavated and disposed of 2,068-yd<sup>3</sup> of contaminated soil from the site commencing on March 19, 2002. Composite bottom-hole and sidewall soil samples were submitted to Cardinal Laboratories, Hobbs, NM on April 18 and 23, 2002. Results of these analyses confirmed that TPH, BTEX, and Benzene levels were below threshold levels throughout the site.

All contaminated soil removed from the site was disposed of at EPI's NMOCD approved land farm. The excavation was backfilled with clean caliche and topsoil. The site was contoured to prevent pooling over the excavation site.

## 1.0 Introduction

This report addresses the site investigation and remediation of the DEFS "G-28 Loop Line West 031902" natural gas gathering line remediation site. On March 19, 2002, DEFS notified EPI regarding a natural gas and associated NGL release at this site. The initial C-141 Form submitted to NMOCD (March 19, 2002) contains no data concerning release volumes, and indicates zero recovery. EPI responded the same day (March 19, 2002) and commenced GPS delineation, photography, characterization and preliminary excavation of the contaminated soil in the immediate area of the reported leak. The site initially consisted of an area ~40-ft X ~80-ft associated with the release. The total release affected area comprised ~2,324-ft<sup>2</sup>. Remediation of this release site consisted of excavation and

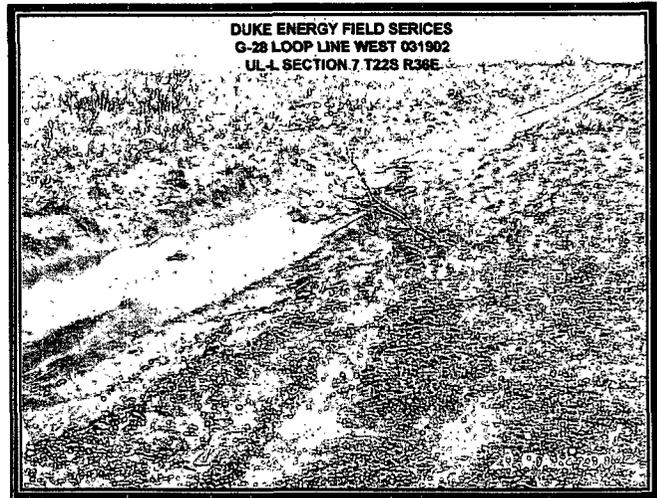


disposal of contaminated soil at EPI's Land Farm, soil analyses, backfill and contouring of the excavation. Completion of the site remediation project was on April 30, 2002.

## 2.0 Background

The site is associated with the DEFS G-28 Loop Line natural gas gathering pipeline. This release site is located in Unit Letter L, (NW $\frac{1}{4}$  of the SW $\frac{1}{4}$ ), Section 07, T22S, R36E, (N32°24'18.03" and W103°18'35.04"), and ~9-miles west-southwest (256.6°) of Eunice, NM. The land is owned by the State of New Mexico. A site location map, site topographical map and a detailed GPS site diagram are included in the *Attachments as Plates 1, 2 and 3*.

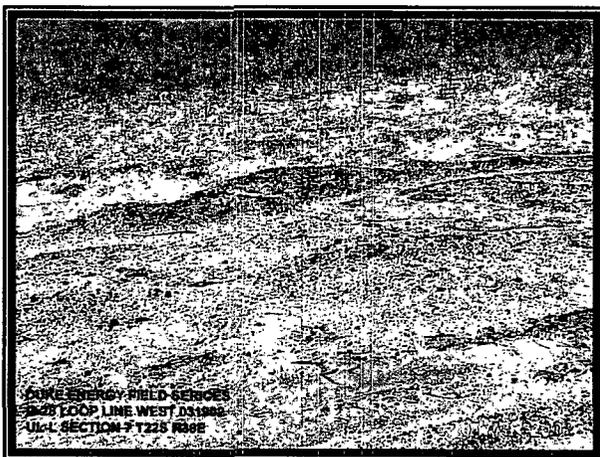
The natural gas and associated NGL release at this site was discovered March 19, 2002. The leak was the result of internal pipe corrosion. The pipe was clamped and repaired by DEFS personnel.



## 3.0 Site Description

### 3.1 Geological Description

*The United States Geological Survey (USGS) Ground-Water Report 6, "Geology and Ground-Water Conditions in Southern Lea County, New Mexico," A. Nicholson and A. Clebsch, 1961*, describes the near surface geology of southern Lea County as "an intergrade of the Quaternary Alluvium (QA) sediments, i.e., fine to medium sand, with the mostly eroded Cenozoic Ogallala (CO) formation. Typically, the QA and CO formations in the area are capped by a thick interbed of caliche and generally overlain by sandy soil." The release site is located in the Eunice Plains physiographic subdivision, described by Nicholson & Clebsch as an area "underlain by a resistant caliche surface, and almost entirely covered by red dune sand. The Eunice Plains surface generally slopes east-southeast.

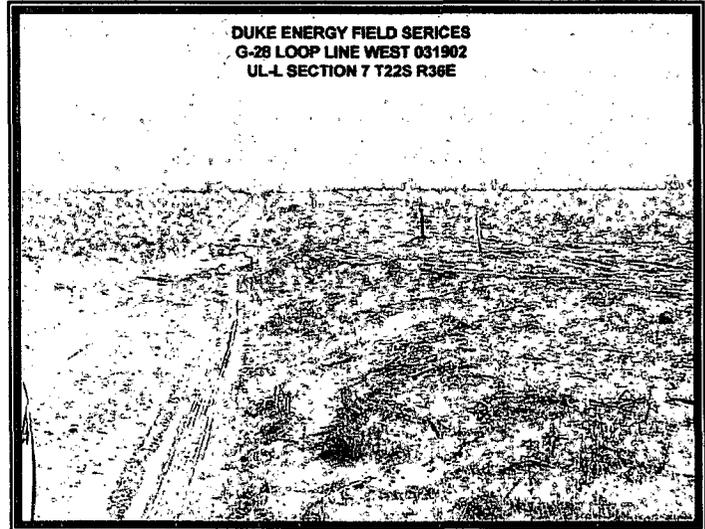


### 3.2 Ecological Description

The area is typical of the Upper Chihuahuan Desert Biome consisting primarily of hummocky sand hills covered with Harvard Shin Oak (*Quercus harvardi*) interspersed with Honey Mesquite (*Prosopis glandulosa*) along with typical desert grasses, flowering annuals and flowering perennials. Mammals represented, include Orrd's and Merriam's Kangaroo Rat, Deer Mouse, White Throated Wood Rat, Cottontail Rabbit, Black Tailed Jackrabbit, Mule Deer, Bobcat, Red Fox and Coyote. Reptiles, Amphibians, and Birds are numerous and typical of area. A survey of Listed, Threatened, or Endangered species was not conducted.

### 3.3 Area Ground Water

The estimated depth to the unconfined ground water aquifer at this site is 195-ft bgs, based on data obtained from the NM State Engineers Office. The site is located in the Eunice Plains physiographic area approximately 9-miles west-southwest (256.6°) of Eunice, NM. Ground water gradient in this area is generally to the southeast.



### 3.4 Area Water Wells

All recorded wells are greater than 1000 horizontal feet from the site.

### 3.5 Area Surface Water Features

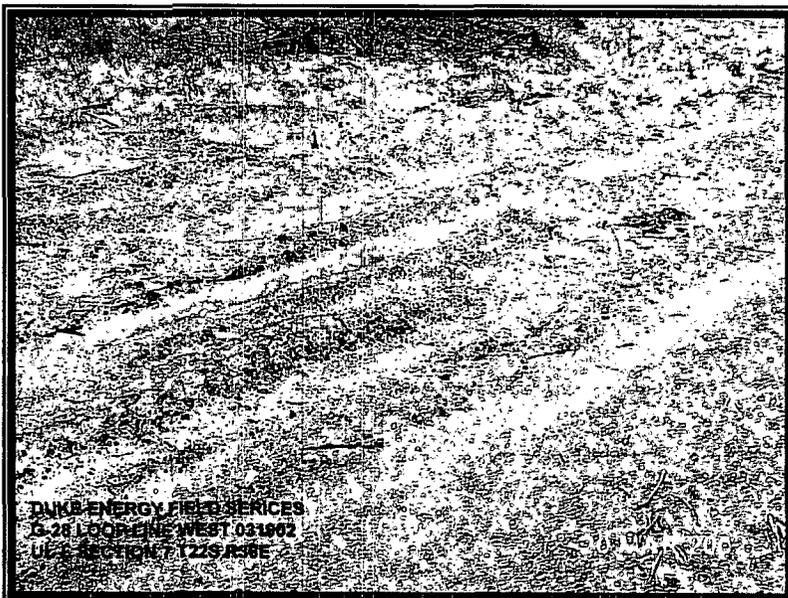
No surface water bodies exist within 1000 horizontal feet of the site.

## 4.0 NMOCD Site Ranking

Contaminant delineation and remedial work done at this site indicate that the chemical parameters of the soil and the physical parameters of the ground water were characterized consistent with the characterization and remediation/abatement goals and objectives set forth in the following New Mexico Oil Conservation Division (NMOCD) publications:

- ◆ Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993)
- ◆ Unlined Surface Impoundment Closure Guidelines (February 1993)

Acceptable thresholds for contaminants/constituents of concern (CoCs), i.e., TPH<sup>8015m</sup>, Benzene, and the mass sum of Benzene, Toluene, Ethyl Benzene, and total Xylenes (BTEX), was determined based on the NMOCD Ranking Criteria as follows:



- ◆ *Depth to Ground water, i.e., distance from the lower most acceptable concentration to the ground water.*
- ◆ *Wellhead Protection Area, i.e., distance from fresh water supply wells.*
- ◆ *Distance to Surface Water Body, i.e., horizontal distance to all down gradient surface water bodies.*

Based on the proximity of the site to protectable area water wells, surface water bodies, and depth to ground water from the lower most contamination, the NMOCD ranking

score for the site is 0 points with the soil remedial goals highlighted in the Site Ranking table presented below.

1. Ground Water	2. Wellhead Protection Area	3. Distance to Surface Water	
Depth to GW <50 feet: <b>20 points</b>	If <1000' from water source, or; <200' from private domestic water source: <b>20 points</b>	<200 horizontal feet: <b>20 points</b>	
Depth to GW 50 to 99 feet: <b>10 points</b>		200-1000 horizontal feet: <b>10 points</b>	
Depth to GW >100 feet: <b>0 points</b>	If >1000' from water source, or; >200' from private domestic water source: <b>0 points</b>	>1000 horizontal feet: <b>0 points</b>	
<b>Ground Water Score = 0</b>	<b>Wellhead Protection Score= 0</b>	<b>Surface Water Score= 0</b>	
<b>Site Rank (1+2+3) = 0 + 0 + 0 = 0 points (for soil 0-95'bgs)</b>			
<b>Total Site Ranking Score and Acceptable Remedial Goal Concentrations</b>			
<b>Parameter</b>	20 or >	10	0
<b>Benzene<sup>1</sup></b>	10 ppm	10 ppm	<b>10 ppm</b>
<b>BTEX<sup>1</sup></b>	50 ppm	50 ppm	<b>50 ppm</b>
<b>TPH</b>	100 ppm	1000 ppm	<b>5000 ppm</b>
<sup>1</sup> 100 ppm field VOC headspace measurement may be substituted for lab analysis			

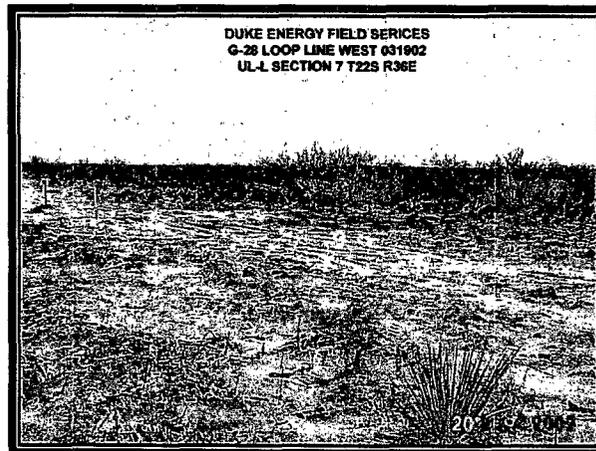
### 5.0 Subsurface Soil Investigation

The subsurface soil samples were composite samples taken from the bottom and sidewalls of the excavation on April 18, 2002 (and one confirmation sidewall sample taken on April 23). Lab analyses results of this sampling event confirmed that TPH, BTEX, Benzene and Chloride levels were below the Remedial Goals for this site. *Plate 4* in the Attachments is a summary table, with charts, of the results of the composite soil sampling performed for this remediation project.

### 6.0 Ground Water Investigation

The conservatively estimated depth to ground water at this site is 195-ft bgs. Excavation of the site was to a maximum depth of 15-ft. Final CoC levels of the bottom-hole and sidewalls of the excavation were analyzed to be within the following ranges: TPH – 20 to 581 ppm; Benzene – 0 to 0.005 ppm; BTEX – 0 to 0.03 ppm; and, Chlorides – 32 to 48 ppm.

The excavation was backfilled with clean backfill material (caliche and top soil), and then contoured to prevent pooling of runoff water. Based on the removal the Constituents of Concern and adequate depth to ground water, there will be no need for further ground water investigation at this site.



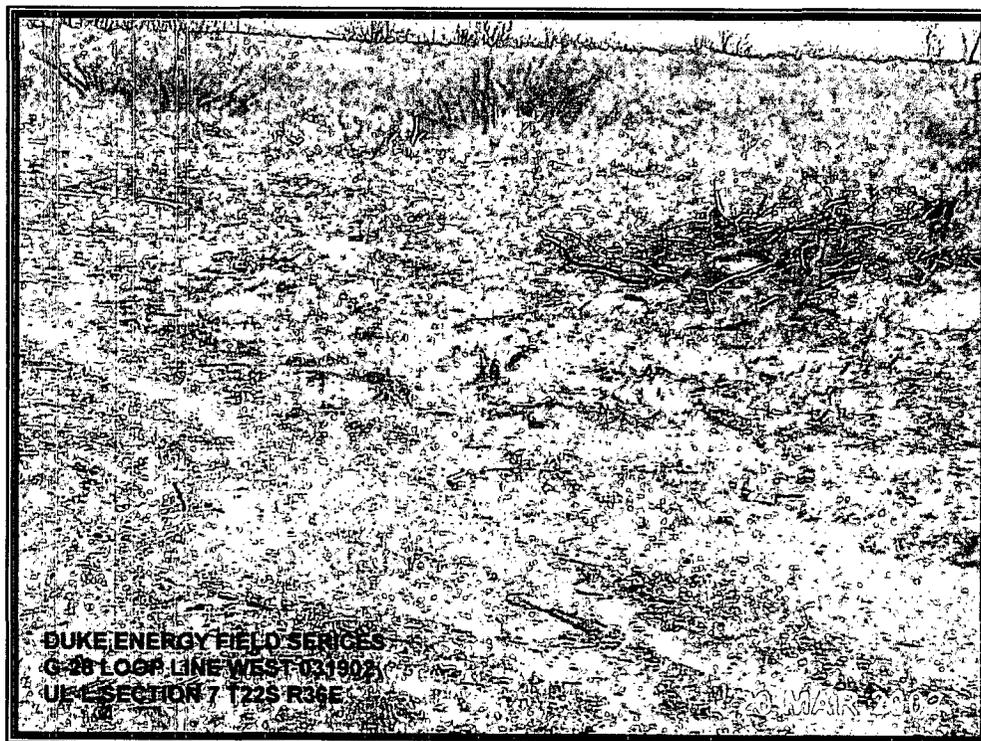
## **7.0 Remediation**

Remediation of the site commenced on March 19, 2002 and continued through April 30, 2002. Site remediation consisted of excavation and disposal of 2,068 yd<sup>3</sup> of RCRA Exempt contaminated soil in EPI's approved land farm located south of Eunice, NM. The excavation was backfilled with clean caliche and top soil material.

The excavation was composite sampled on April 18 and 23, 2002. Results of the bottom hole and sidewall analyses (*Plate 4 – Attachments*) indicated that no further excavation was necessary to achieve remedial goals in the excavation.

## **8.0 Closure Justification**

This report documents successful implementation of the Remediation Plan approved by NMOCD for this release site. Soil contaminated above acceptable CoC remedial concentrations was excavated and removed from the location. Disposal of RCRA exempt contaminated soils was at EPI's approved land farm. The excavation was backfilled with clean caliche and topsoil and properly contoured to provide adequate drainage. Based on the data presented in this report, Environmental Plus, Inc., on behalf of Duke Energy Field Services, requests that the NMOCD require "no further action" at this site.



## **ATTACHMENTS**

Plate 1: Site Location Map .....	8
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Plate 2: Site Topography Map

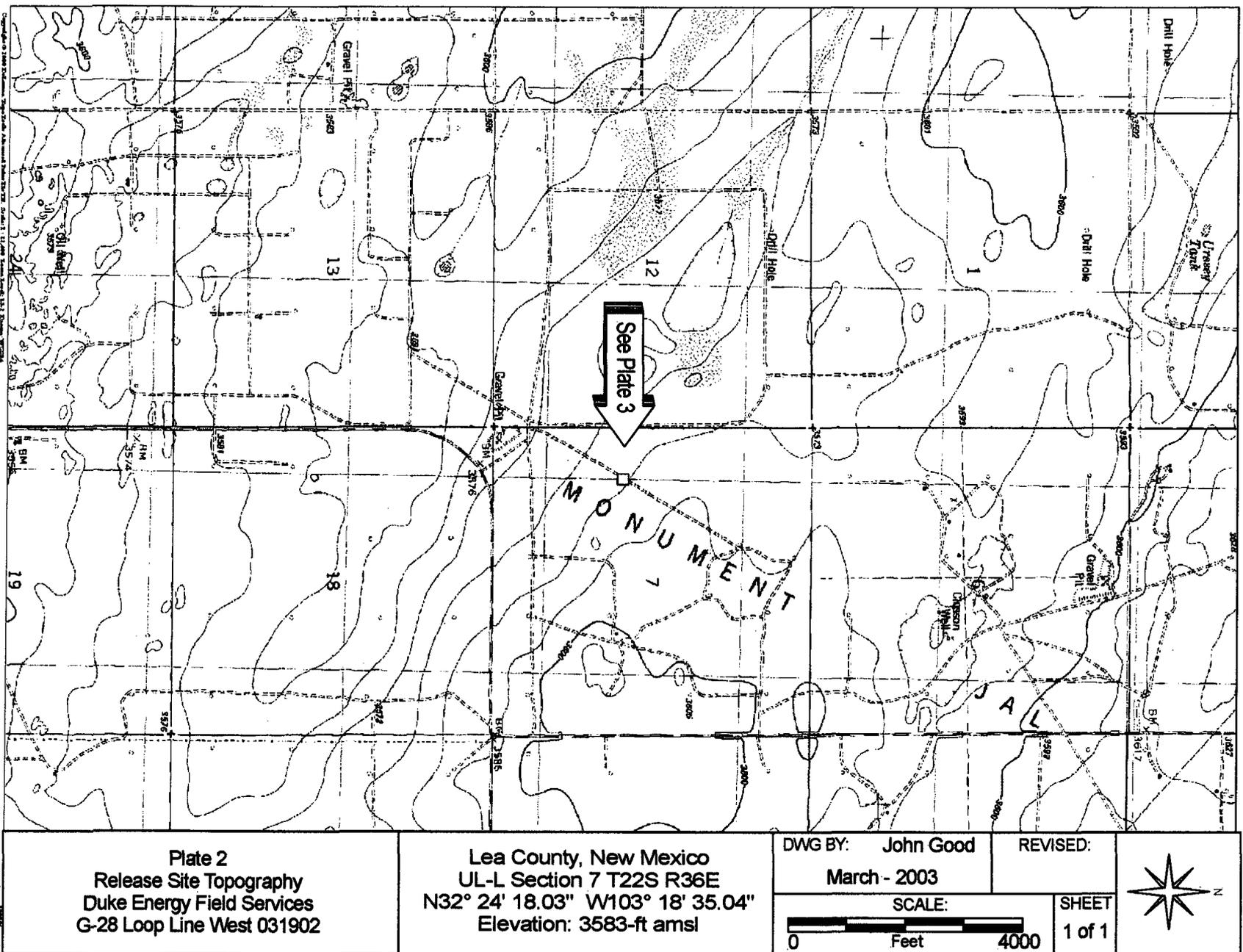


Plate 2  
Release Site Topography  
Duke Energy Field Services  
G-28 Loop Line West 031902

Lea County, New Mexico  
UL-L Section 7 T22S R36E  
N32° 24' 18.03" W103° 18' 35.04"  
Elevation: 3583-ft amsl

DWG BY: John Good  
March - 2003

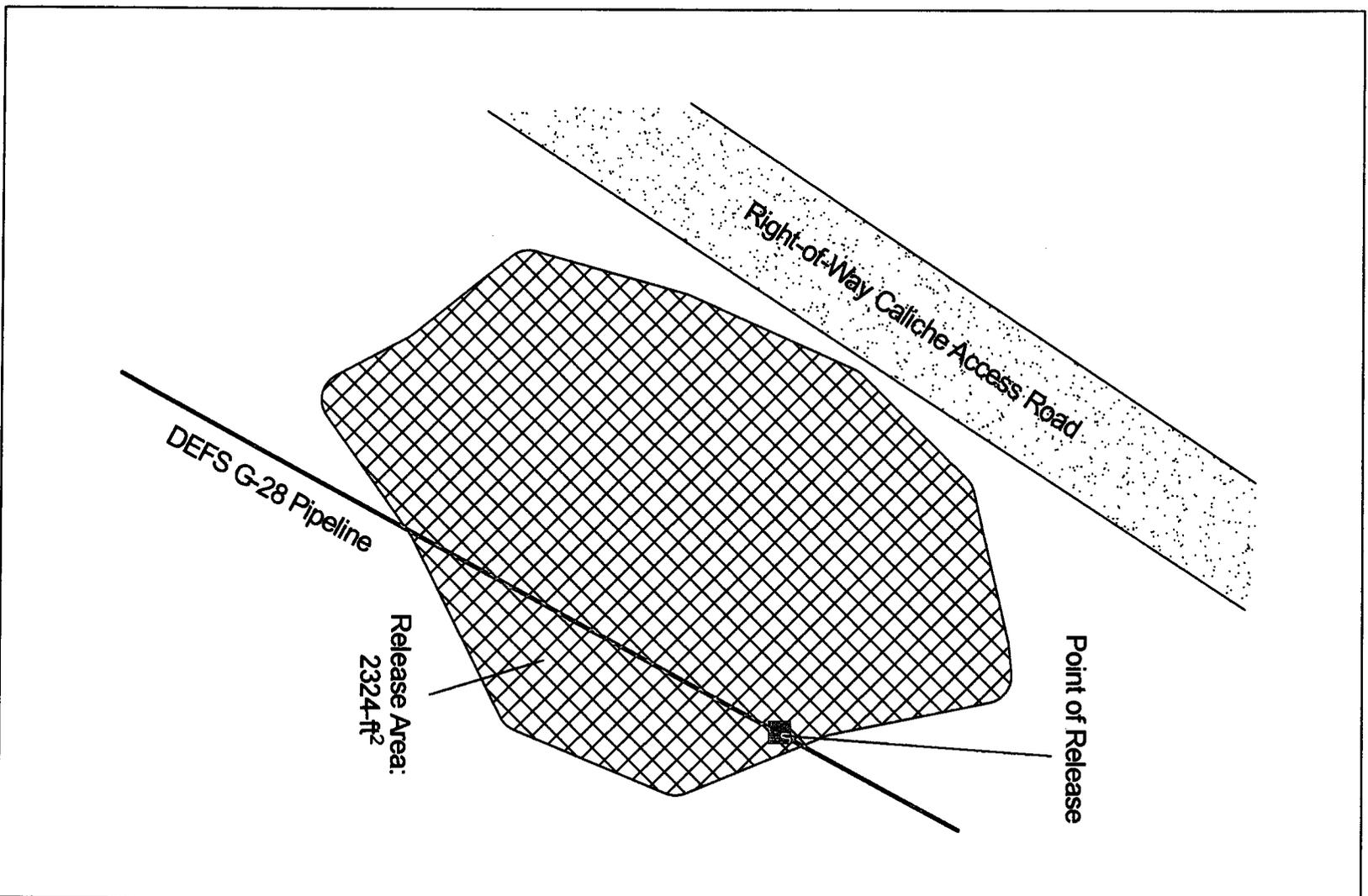
REVISED:

SCALE:  
0 Feet 4000

SHEET  
1 of 1



*Plate 3: GPS Demarcation with Site Features*

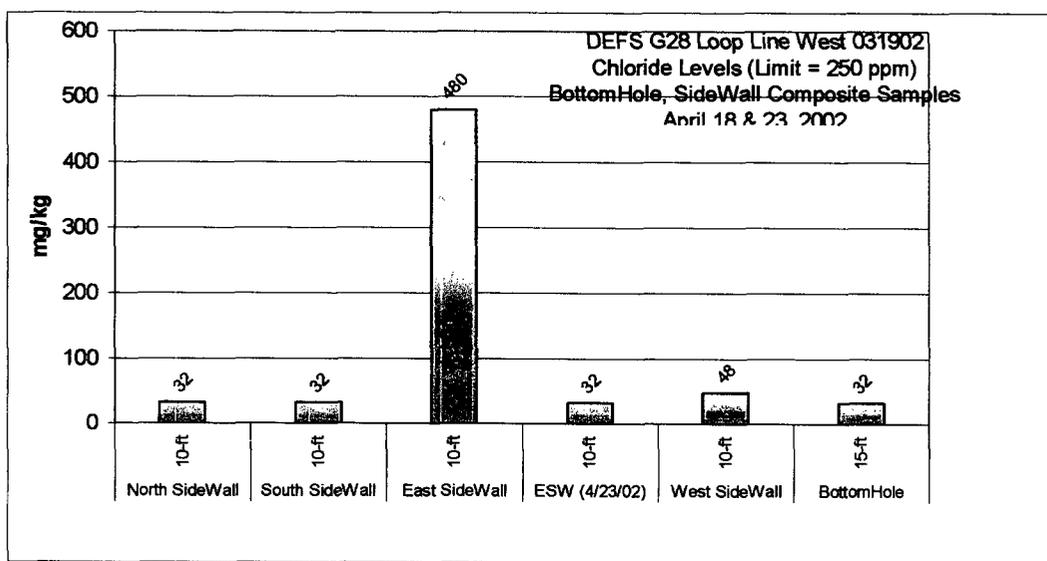
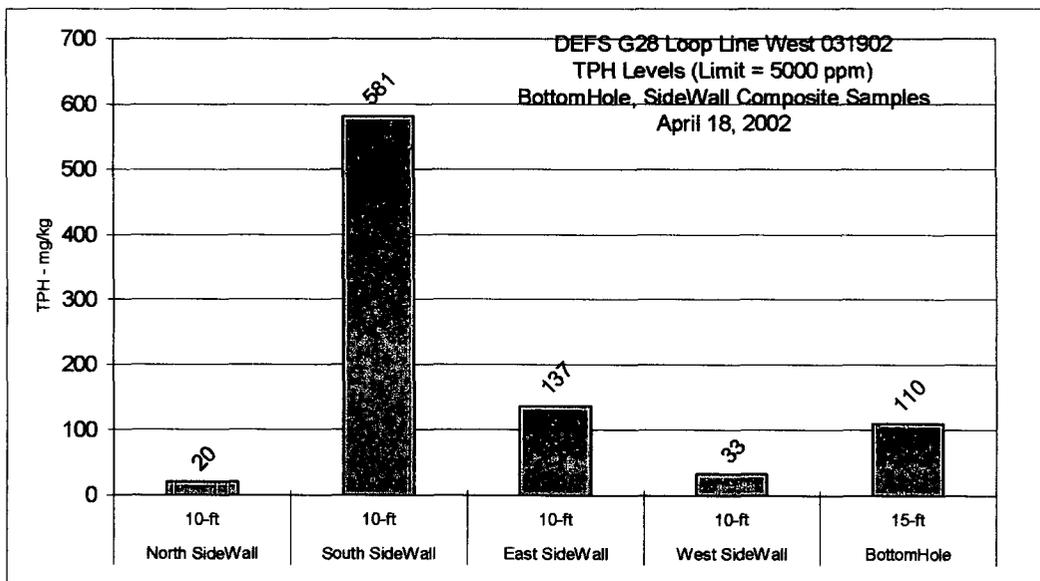


<b>Plate 3</b> Release Site Features - GPS Demarcation Duke Energy Field Services G-28 Loop Line West 031902	<b>Lea County, New Mexico</b> UL-L Section 7 T22S R36E N32° 24' 18.03" W103° 18' 35.04" Elevation: 3583-ft amsl		DWG BY: John Good	REVISED:
	SIZE: ANSI A	SCALE:  0 Feet 20	March - 2003	SHEET 1 of 1

### Plate 4 – Soil Analytical Data and Associated Bar Charts

Duke Energy Field Services - G28 Loop Line West 031902 - Excavation Sampling Results														
<b>Bold</b> highlighted cells indicate values in excess of the NMOCD remedial action guideline thresholds: TPH = 5000 mg/Kg; Benzene = 10 mg/Kg; BTEX = 50 mg/Kg; Cl <sup>-</sup> = 250 mg/Kg; SO <sub>4</sub> <sup>2-</sup> = 600 mg/Kg														
Sample Date	Excavation Sampling Area	Depth (ft - bgs <sup>1</sup> )	SAMPLE ID#	VOC <sup>2</sup> ppm	GRO <sup>3</sup> mg/Kg	DRO <sup>4</sup> mg/Kg	TPH <sup>5</sup> mg/Kg	BTEX <sup>6</sup> mg/Kg	Benzene mg/Kg	Toluene mg/Kg	Ethyl Benzene mg/Kg	Total Xylenes mg/Kg	Cl <sup>-</sup> mg/Kg	SO <sub>4</sub> <sup>2-</sup> mg/Kg
18-Apr	North SideWall	10-ft	SDG2841802NSW-10		10	10	20	0.030	0.005	0.005	0.005	0.015	32.0	
18-Apr	South SideWall	10-ft	SDG2841802SSW-10		29	552	581	0.030	0.005	0.005	0.005	0.015	32.0	
18-Apr	East SideWall	10-ft	SDG2841802ESW-10		10	127	137	0.030	0.005	0.005	0.005	0.015	<b>480.0</b>	
23-Apr	East SideWall	10-ft	SDG2842302ESW										32.0	
18-Apr	West SideWall	10-ft	SDG2841802WSW-10		10	23	33	0.030	0.005	0.005	0.005	0.015	48.0	
18-Apr	BottomHole	15-ft	SDG2841802BH-15		10	100	110	0.030	0.005	0.005	0.005	0.015	32.0	

<sup>1</sup> bgs = below ground surface    <sup>2</sup> VOC = Volatile Organic Constituents; (note: 100 ppm Isobutylene calibration gas = 101 ppm)  
<sup>3</sup> GRO - Gasoline Range Organics (Detection Limit = 10 mg/Kg)    <sup>4</sup> DRO - Diesel Range Organics (Detection Limit = 10 mg/Kg)    <sup>5</sup> TPH - Total Petroleum Hydrocarbon (GRO+DRO)  
<sup>6</sup> BTEX = Sum of CoC's (Detection Limits = 0.005 mg/Kg; 0.015 mg/Kg) Note: Reported detection limits are considered "de minimus" values and are included in the TPH and BTEX summations.



**Lab Analyses Reports  
and  
Chain-of-Custody Forms**



**ARDINAL  
LABORATORIES**

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
ENVIRONMENTAL PLUS, INC.  
ATTN: PAT McCASLAND  
P.O. BOX 1558  
EUNICE, NM 88231  
FAX TO: (505) 394-2601

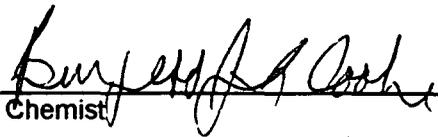
Receiving Date: 04/18/02  
Reporting Date: 04/22/02  
Project Owner: DUKE ENERGY FIELD SERVICES  
Project Name: G-28 LOOP LINE  
Project Location: NOT GIVEN

Sampling Date: 04/18/02  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: AH  
Analyzed By: BC/HM

LAB NUMBER	SAMPLE ID	GRO	DRO	CI*
		(C <sub>6</sub> -C <sub>10</sub> ) (mg/Kg)	(>C <sub>10</sub> -C <sub>28</sub> ) (mg/Kg)	(mg/Kg)
	ANALYSIS DATE	04/19/02	04/19/02	04/22/02
H6687-1	SDG2841802NSW10	<10.0	<10.0	32
H6687-2	SDG2841802SSW10	29.4	552	32
H6687-3	SDG2841802ESW10	<10.0	127	480
H6687-4	SDG2841802WSW10	<10.0	23.0	48
H6687-5	SDG2841802BH15	<10.0	100	32
	Quality Control	768	746	1000
	True Value QC	800	800	1000
	% Recovery	95.9	93.2	100
	Relative Percent Difference	0.4	7.9	4.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI: Std. Methods 4500-CI'B

\*Analyses performed on 1:4 w:v aqueous extracts.

  
Chemist

4/22/02  
Date



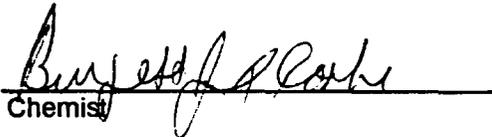
ANALYTICAL RESULTS FOR  
 ENVIRONMENTAL PLUS, INC.  
 ATTN: PAT McCASLAND  
 P.O. BOX 1558  
 EUNICE, NM 88231  
 FAX TO: (505) 394-2601

Receiving Date: 04/18/02  
 Reporting Date: 04/22/02  
 Project Owner: DUKE ENERGY FIELD SERVICES  
 Project Name: G-28 LOOP LINE  
 Project Location: NOT GIVEN

Sampling Date: 04/18/02  
 Sample Type: SOIL  
 Sample Condition: COOL & INTACT  
 Sample Received By: AH  
 Analyzed By: BC

LAB NUMBER	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		04/19/02	04/19/02	04/19/02	04/19/02
H6687-1	SDG2841802NSW10	<0.005	<0.005	<0.005	<0.015
H6687-2	SDG2841802SSW10	<0.005	<0.005	<0.005	<0.015
H6687-3	SDG2841802ESW10	<0.005	<0.005	<0.005	<0.015
H6687-4	SDG2841802WSW10	<0.005	<0.005	<0.005	<0.015
H6687-5	SDG2841802BH15	<0.005	<0.005	<0.005	<0.015
Quality Control		0.105	0.105	0.107	0.311
True Value QC		0.100	0.100	0.100	0.300
% Recovery		105	105	107	104
Relative Percent Difference		4.9	3.0	4.6	0.4

METHOD: EPA SW-846 8260

  
 Chemist

4/22/02  
 Date

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.





**ARDINAL  
LABORATORIES**

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ANALYTICAL RESULTS FOR  
ENVIRONMENTAL PLUS, INC.  
ATTN: PAT McCASLAND  
P.O. BOX 1558  
EUNICE, NM 88231  
FAX TO: (505) 394-2601

Receiving Date: 04/24/02  
Reporting Date: 04/25/02  
Project Number: NOT GIVEN  
Project Name: G-28 LOOP LINE ~~East West~~  
Project Location: NOT GIVEN

Analysis Date: 04/24/02  
Sampling Date: 04/23/02  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: BC  
Analyzed By: HM

LAB NUMBER	SAMPLE ID	Cl <sup>-</sup> (mg/Kg)
H6698-1	SDG2842302ESW	32
Quality Control		1000
True Value QC		1000
% Recovery		100
Relative Percent Difference		4.0

METHOD: Standard Methods      4500-ClB

NOTE: Analysis performed on a 1:4 w:v aqueous extract.

Amy Hill  
Chemist

4-25-02  
Date

**H6698**  
PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.





		<b>Incident Date and NMOCD Notified?</b>	
		3/19/02	NA
SITE: G-28 Loop Line West		Assigned Site Reference #031902	
Company: DUKE ENERGY FIELD SERVICES			
Street Address: 5805 East Highway 80			
Mailing Address: 11525 W. Carlsbad Hwy.			
City, State, Zip: Hobbs, NM 88240			
Representative: Paul Mulkey			
Representative Telephone: 505-397-5716			
Telephone:			
Fluid volume released (bbls): 5-25		Recovered (bbls): 0	
>25 bbls: Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days.			
5-25 bbls: Submit form C-141 within 15 days (Also applies to unauthorized releases of 50-500 mcf Natural Gas)			
Leak, Spill, or Pit (LSP) Name: #031902			
Source of contamination: Steel Pipeline - Natural gas gathering			
Land Owner, i.e., BLM, ST, Fee, Other: State of New Mexico Commissioner of Lands, Santa Fe, NM			
LSP Dimensions: 60' x 40' (GPS Site Diagram attached)			
LSP Area: 2,324 -ft <sup>2</sup>			
Location of Reference Point (RP):			
Location distance and direction from RP:			
Latitude: N32° 24' 18.03"			
Longitude: W103° 18' 35.04"			
Elevation above mean sea level: 3583 -ft amsl			
Feet from South Section Line: 2153			
Feet from West Section Line: 877			
Location - Unit and 1/4 1/4: UL- L		NW 1/4 of SW 1/4	
Location - Section: 7			
Location - Township: 22S			
Location - Range: 36E			
Surface water body within 1000' radius of Site: 0			
Surface water body within 1000' radius of Site: 0			
Domestic water wells within 1000' radius of Site: 0			
Domestic water wells within 1000' radius of Site: 0			
Agricultural water wells within 1000' radius of Site: 0			
Agricultural water wells within 1000' radius of Site: 0			
Public water supply wells within 1000' radius of Site: 0			
Public water supply wells within 1000' radius of Site: 0			
Depth (ft) from land surface to ground water (DG): 195			
Depth (ft) of contamination (DC): 15			
Depth (ft) to ground water (DG - DC = DtGW): 180			
<b>1. Ground Water</b>		<b>2. Wellhead Protection Area</b>	
If Depth to GW <50 feet: 20 points		If <1000' from water source, or, <200' from private domestic water source: 20 points	
If Depth to GW 50 to 99 feet: 10 points		If >1000' from water source, or, >200' from private domestic water source: 0 points	
If Depth to GW >100 feet: 0 points			
Ground water Score: 0		Wellhead Protection Area Score: 0	
Site Rank (1+2+3) = 0		Surface Water Score: 0	
<b>Total Site Ranking Score and Acceptable Concentrations</b>			
Parameter	20 or >	10	0
Benzene <sup>1</sup>	10 ppm	10 ppm	10 ppm
BTEX <sup>1</sup>	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1000 ppm	5000 ppm
<sup>1</sup> 100 ppm field VOC headspace measurement may be substituted for lab analysis			

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 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
Contact: Paul Mulkey
Address: 11525 W. Carlsbad Hwy. Hobbs, NM 88240
Telephone No.: 505-397-5716
Facility Name: G-28 Loop Line West
Facility Type: Natural Gas Gathering Pipeline

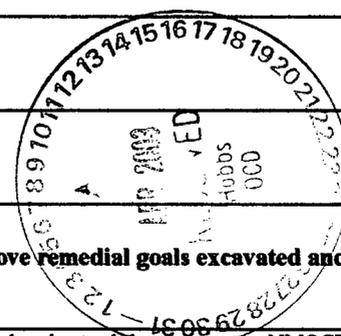
Surface Owner: State of New Mexico
Mineral Owner: NA
Lease No.: NA

LOCATION OF RELEASE

Table with 9 columns: Unit Letter, Section, Township, Range, Feet from South Line, Feet from West Line, Longitude, Latitude, County. Values: L, 7, 22S, 36E, 2153, 877, W103° 18' 35.04", N32° 24' 18.03", Lea

NATURE OF RELEASE

Type of Release: Natural Gas release and associated liquid components
Volume of Release: 5-25 bbl
Volume Recovered: 0 bbl
Source of Release: Steel Pipeline - Natural gas gathering
Date and Hour of Occurrence: Unknown
Date and Hour of Discovery: 3/19/02
Was Immediate Notice Given? No
By Whom? NA
Was a Watercourse Reached? No
Describe Cause of Problem and Remedial Action Taken: Historical leak caused by internal pipeline corrosion. Pipeline repaired by DEFS.
Describe Area Affected and Cleanup Action Taken: 2324-ft² surface area RCRA Exempt Non-hazardous contaminated soil (2068-yd³) above remedial goals excavated and disposed of by EPL. Excavation was backfilled with clean material.



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.

Signature: Paul Mulkey
Printed Name: Paul Mulkey
Title: Maintenance/Construction Supervisor
Date: 3/28/03
Phone: 505-397-5716
OIL CONSERVATION DIVISION
Approved by District Supervisor:
Approval Date:
Expiration Date:
Conditions of Approval: Attached

Attach Additional Sheets If Necessary