REMEDIATION PROPOSAL

G-28-14 EXT. 3

NMOCD 1RP#1029

COMPANY NO. 36785
EPI REF: 130018

UL-D (NW¼ OF THE NW¼) OF SECTION 26 T23S R36E
~11.9 MILES SOUTH-SOUTHWEST OF EUNICE
LEA COUNTY, NEW MEXICO
LATITUDE: N 32° 16' 49.349" LONGITUDE: W 103° 14' 27.415"

DECEMBER 2006

PREPARED BY:

ENVIRONMENTAL PLUS, INC.
2100 AVENUE O
EUNICE, NEW MEXICO 88231

Received
Hobbs
OCD

PREPARED FOR:

Duke Energy Field Services

RP#1029

Application - pPAC071433912O

STANDARD OF CARE

Closure Proposal

G -28-14 Ext. 3

(NMOCD 1RP # 1029; EPI Ref. #130018)

The information provided in this report was collected consistent with the New Mexico Oil Conservation Division (NMOCD) *Guidelines for Remediation of Leaks, Spills and Releases* (August 13, 1993), the NMOCD *Unlined Surface Impoundment Closure Guidelines* (February, 1993) and Environmental Plus, Inc. (EPI) *Standard Operating Procedures and Quality Assurance/Quality Control Plan.* The conclusions are based on field observations and laboratory analytical reports as presented in the report. Recommendations follow NMOCD guidance and represent the professional opinions of EPI staff. These opinions were derived using currently accepted geologic, hydrogeologic and engineering practices at this time and location. The report was prepared or reviewed by a certified or registered professional with a background in engineering, environmental and/or natural sciences.

Prepared by:

Jason Stegemoller — December 21, 2006

Jason Stegemoller
Environmental Scientist

Date

Reviewed by:

David P. Duncan — 12/21/06

David P. Duncan
Civil Engineer

Date

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1.0 PROJECT SYNOPSIS

Site Specific:

- ***Company Name:*** Duke Energy Field Services
- ***Facility Name:*** G -28-14 Ext. 3
- ***Project Reference:*** NMOCD 1RP# 1029; EPI Ref: 130018
- ***Company Contacts:*** Lynn Ward
- ***Site Location:*** WGS84 N32° 16' 49.349"; W103° 14' 27.415"
- ***Legal Description:*** Unit Letter-D, (NW¼ of the NW¼), Section 26, T23S, R36E
- ***General Description:*** Approximately 11.9-miles south-southwest of Eunice, New Mexico
- ***Elevation:*** 3,364-ft amsl
- ***Land Ownership:*** Kelly Myers, President – Deep Wells Ranch
- ***EPI Personnel:*** Project Consultant – Jason Stegemoller

Release Specific:

- ***Product Released:*** Natural Gas and Natural Gas Liquids (NGL)
- ***Volume Released:*** 12 barrels ***Volume Recovered:*** 10 barrels
- ***Time of Occurrence:*** March 27, 2005 ***Time of Discovery:*** March 27, 2005
- ***Release Source:*** Weld failure on 6-inch Marlex natural gas pipeline (20-30 mcf at 18-20 lbs)
- ***Initial Surface Area Affected:*** ~ 6,660 square feet

Remediation Specific:

- ***Final Vertical extent of contamination:*** 5-feet bgs at maximum depth
- ***Depth to Ground Water:*** ~148-ft bgs
- ***Water wells within 1,000-ft:*** None
- ***Private domestic water sources within 200-ft:*** None
- ***Surface water bodies within 1,000-ft:*** None
- ***NMOCD Site Ranking Index:*** 0 points
- ***Remedial goals for Soil:*** TPH – 5,000 mg/Kg; BTEX – 50 mg/Kg; Benzene – 10 mg/Kg; Chloride and sulfate residuals may not be capable of impacting groundwater above NMWQCC groundwater standards of 250 mg/L and 600 mg/L, respectively.
- ***RCRA Waste Classification:*** Exempt
- ***Remediation Option Selected:*** a) Excavate visibly stained soil to approximately 5-feet bgs ; b) collect soil samples to verify NMOCD remedial thresholds achieved; c) transport excavated soil to EPI landfarm for treatment; d) backfill excavation with native soil; e) seed remediation area with a blend approved by the landowner.
- ***Disposal Facility:*** Environmental Plus, Inc. Landfarm
- ***Volume disposed:*** To be determined
- ***Project Completion Date:*** Ongoing

2.0 SITE AND RELEASE INFORMATION

2.1 Describe the land use and pertinent geographic features within 1,000 feet of the site.

In addition to oilfield activities, the surrounding area is rangeland and utilized for livestock grazing.

2.2 Identify and describe the source or suspected source(s) of the release.

Weld failure on 6-inch Marlex natural gas pipeline.

2.3 What is the volume of the release? (if known): 12 ***barrels of*** natural gas and natural gas liquids

2.4 What is the volume recovered? (if any) 10 ***barrels***

2.5 When did the release occur? (if known): March 27, 2005

2.6 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 hard caliche surface and is almost entirely covered by reddish-brown dune sand". The thickness of the sand cover ranges from 2-5 feet in most areas to as much as 20-30 feet in drift areas.

2.7 Ecological Description

Typical vegetation consists primarily of an intergrade of High Plains and Northern Chihuahuan Desert grasses. Vegetation includes perennial grasses (eg. blue grama, buffalograss) and annual and perennial forbs (eg. broad-leafed milkweed and Russian thistle). Degraded/disturbed areas will consist primarily of annual grasses and forbs and mesquite exhibiting shrubby growth forms. Mammals represented include Orrd's and Merriam's Kangaroo Rats, 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 the area. A survey of Listed, Threatened or Endangered species was not conducted.

2.8 Area Groundwater

The unconfined groundwater aquifer at this site is projected to be ~148 feet (ft) bgs based on water depth data obtained from the New Mexico State Engineers Office and the United States Geological Survey data base (reference *Table 1*).

2.9 Area Water Wells

There are no wells within a 1,000-foot radius of the site (reference *Table 1* and *Figure 2*).

2.10 Area Surface Water Features

There are no surface water features within a 1,000-foot radius of the site (reference *Figure 2*).

3.0 NMOCD SITE RANKING

Contaminant delineation and remedial work done at this site indicate chemical parameters of the soil and physical parameters of the groundwater were 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)***
- ***Pit and Below-Grade Tank Guidelines (November, 2004)***

Acceptable thresholds for contaminants/constituents of concern (CoC) were determined based on the NMOCD Ranking Criteria as follows:

- *Depth to Groundwater (i.e., distance from the lower most acceptable concentration to ground-water); and*
- *Wellhead Protection Area (i.e., distance from fresh water supply wells); and*
- *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 groundwater from the lower most contamination, the NMOCD ranking score for the site is zero (0) points with the soil remedial goals highlighted in the Site Ranking table presented below:

1. GROUNDWATER	2. WELLHEAD PROTECTION AREA	3. DISTANCE TO SURFACE WATER
Depth to GW <50 feet: **20 points**	If <1,000' from water source, or <200' from private domestic water source: ***20 points***	<200 horizontal feet: ***20 points***
Depth to GW 50 to 99 feet: ***10 points***		200-1,000 horizontal feet: ***10 points***
Depth to GW >100 feet: **0 points**	If >1,000' from water source, or >200' from private domestic water source: ***0 points***	>1,000 horizontal feet: ***0 points***
Site Rank (1+2+3) = 0 + 0 + 0 = 0 points		

Total Site Ranking Score and Acceptable Remedial Goal Concentrations			
Parameter	20 or >	10	0
Benzene[1]	10 ppm	10 ppm	10 ppm
BTEX[1]	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1,000 ppm	5,000 ppm

[1] A field soil vapor headspace measurement of 100 ppm can be substituted in lieu of laboratory analyses for benzene and BTEX.

4.0 EXCAVATED SOIL INFORMATION

4.1 Was soil excavated for off-site treatment or disposal? ☐ *Yes* ☒ *No*

Date excavated: To be determined

Total volume removed: To be determined

4.2 Indicated soil treatment type:

- ☒ ***Disposal***
- ☐ ***Land Treatement***
- ☐ ***Composting/Biopiling***
- ☐ ***Other*** ( )

Name and location of treatment/disposal facility:
Environmental Plus, Inc. Landfarm

5.0 SAMPLING INFORMATION

5.1 Briefly describe the field screening methods used to distinguish contaminated from uncontaminated soil.

Organic Vapor Concentrations – A portion of each soil sample was placed in a polyethylene bag and allowed sufficient time and temperature for organic vapors to volatilize. The detector portion of a Photoionization Detector equipped with a 10.2 electron volt lamp was placed in the bag to analyze organic vapor concentration.

Chloride Concentrations – A La Motte Chloride Test Kit was utilized for field chloride concentration analyses.

5.2 Briefly describe the soil analytical sampling and handling procedures used.

Soil samples were collected during the advancement of soil borings BH-1, BH-2 and BH-3 utilizing a hollow core drill. Soil samples were collected at five foot (5-ft) intervals from 5-ft below ground surface (bgs) to a total depth of 20-feet bgs for BH-1 and 15-feet bgs for BH-2 and BH-3.

Upon collection of each sample, a portion was immediately placed in a laboratory provided container, labeled and set on ice for transport to an independent laboratory for quantification of total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene and total xylenes (BTEX) and chloride concentrations.

5.3 Discuss sample locations and provide rationale for their locations.

On August 1, 2005, a series of three soil borings (BH-1, BH-2 and BH-3) were advanced within the release area. Soil boring BH-1 was advanced to approximately 20-feet bgs north of the point of release. Soil boring BH-2 was advanced to approximately 15-feet bgs adjacent to the point of release. Soil boring BH-3 was advanced to approximately 15-feet bgs south of the point of release. Soil samples were collected from the soil borings initially at 5-foot bgs and then 5-foot intervals thereafter. Soil boring locations within the release area were chosen to provide the best representative sample to delineate the vertical extent of hydrocarbon impacted soil, if any (reference *Figure 4*).

6.0 ANALYTICAL RESULTS

6.1 Describe the vertical and horizontal extent and magnitude of soil contamination.
Laboratory analyses of the soil samples collected on August 1, 2005 from soil borings BH-1, BH-2 and BH-3 indicated TPH and BTEX constituent concentrations were non-detectable at or above laboratory method detection limits. The exception was soil sample BH-2 (10') which indicated BTEX constituent concentrations were 0.0575 mg/Kg, below the NMOCD remedial threshold of 50 mg/Kg. Chloride concentrations ranged from 17.5 to 83.4 mg/Kg (reference *Table 2* and *Figure 4*).

6.2 Is surface soil contamination present at the site (i.e., soil in the uppermost two feet that is visibly stained, contaminated at greater than 10 ppm (PID) or hydrocarbon saturated)?

☒ *yes* ☐ *no*

If yes, attach a site map identifying extent(s) of surface soil contamination.
Soil impacted by the NGL release remains *in situ* (reference *Figure 3*).

7.0 DISCUSSION

7.1 ***Discuss the risks associated with the remaining soil contamination:***
Laboratory analyses of soil samples obtained via soil borings BH-1, BH-2 and BH-3 indicate *in situ* soil below 5-feet bgs was not impacted by this release. Based on depth to groundwater (>100-feet bgs), non-detectable hydrocarbon and low chloride concentrations this release should not impact local groundwater.

7.2 ***Discuss the risks associated with the impacted groundwater:*** Not Applicable

7.3 ***Discuss other concerns not mentioned above:*** Not Applicable

8.0 CONCLUSIONS AND RECOMMENDATIONS

8.1 ***Recommendation for the site:***

- ☐ *Site Closure*
- ☐ *Additional Groundwater Monitoring*
- ☒ *Corrective Action*

8.2 ***Base the recommendation above on Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993). Describe below how you applied the policy to support your recommendation. If closure is recommended, please summarize significant site investigative events and describe how site specific risk issues have been adequately addressed or minimized to acceptable low risk levels.***
Laboratory analyses of soil samples collected from soil borings BH-1, BH-2 and BH-3 indicate TPH and BTEX constituent concentrations below 5-feet bgs were extremely low to non-detectable at laboratory method detection limits. Chloride concentrations were below the remedial goal of 250 mg/Kg.

8.3 ***If additional groundwater monitoring is recommended, indicate the proposed monitoring schedule and frequency. Conduct quarterly monitoring until the NMOCD responds to this report.*** Not Applicable

8.4 ***If corrective action is recommended, provide a conceptual approach.***
Environmental Plus, Inc., on behalf of Duke Energy Field Services, recommends the following:

1) Excavate stained soil within the initial release area to approximately 5-feet bgs;

2) Collect soil samples from the excavation floor and sidewalls to verify NMOCD remedial thresholds achieved; and

3) Transport impacted soil to the Environmental Plus, Inc. Landfarm for treatment; and

4) Backfill excavation with clean native soil; and

5) Seed the area with a blend approved by the landowner.

EPI, on behalf of DEFS, will provide the NMOCD with documentation of activities upon completion of remediation activities.

FIGURES

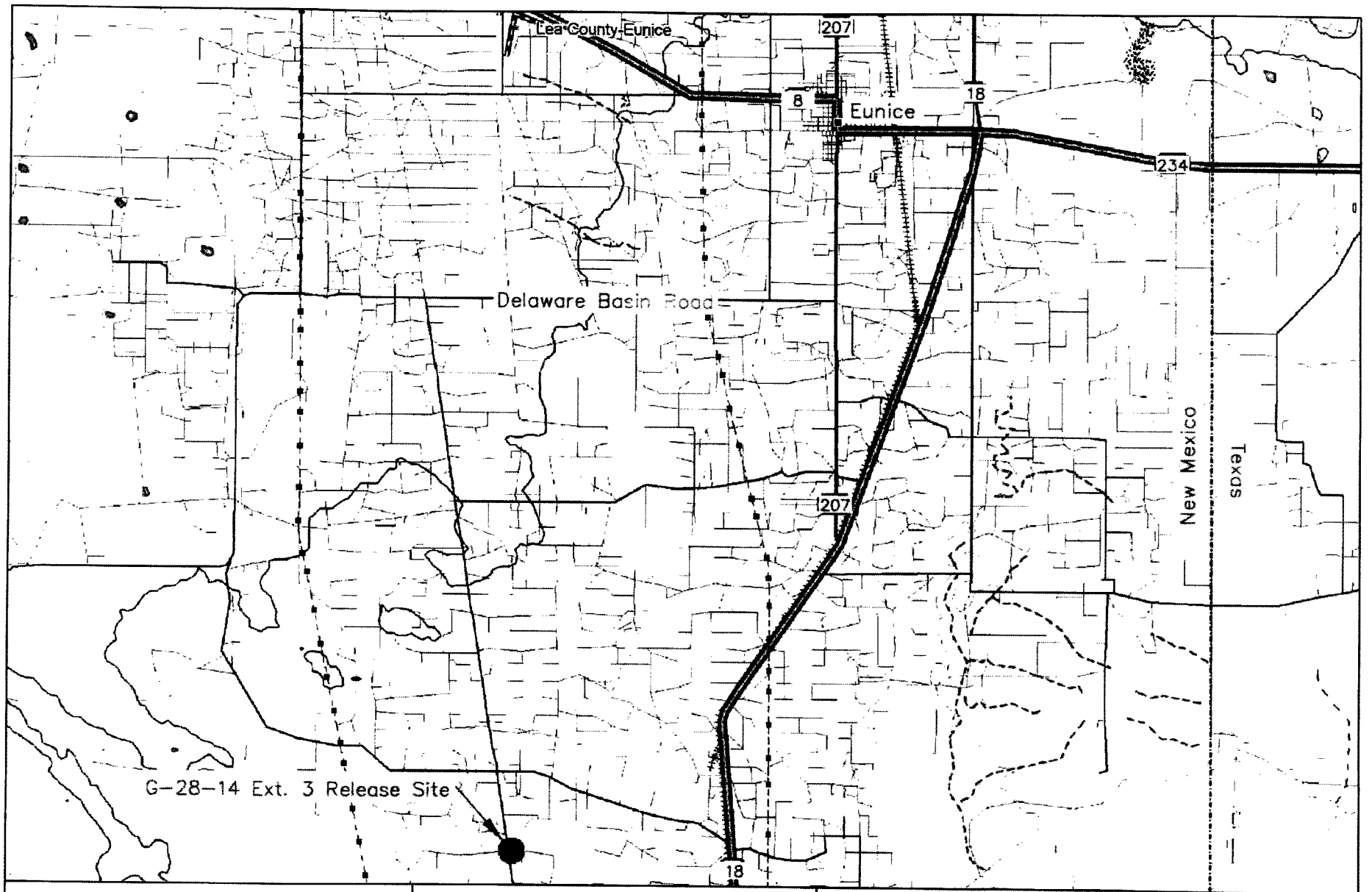

Figure 1 Area Map Duke Energy Field Services G-28-14 Ext. 3	Lea County, New Mexico NW 1/4 of the NW 1/4, Sec. 26, T23S, R36E N 32° 16' 49.3" W 103° 14' 27.4" Elevation: 3,364 feet amsl	DWG By: Iain Olness April 2005	REVISED:
		0 2.0 4.0 Miles	SHEET 1 of 1
			N

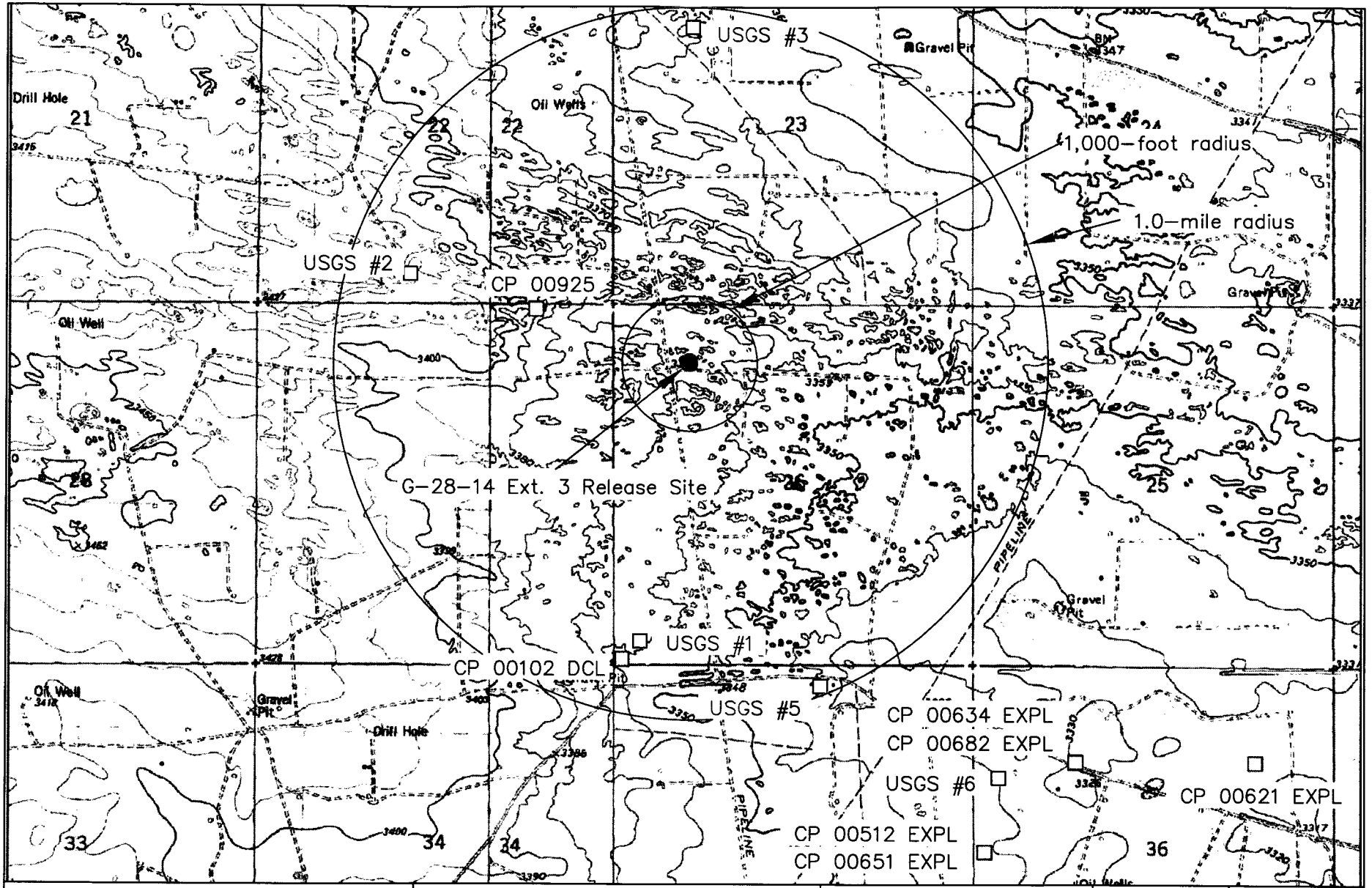

Figure 2 Site and Well Location Map Duke Energy Field Services G-28-14 Ext. 3	Lea County, New Mexico NW 1/4 of the NW 1/4, Sec. 26, T23S, R36E N 32° 16' 49.3" W 103° 14' 27.4" Elevation: 3,364 feet amsl	DWG By: Iain Olness April 2005 0 2.0 4.0 Miles	REVISED: SHEET 1 of 1 N

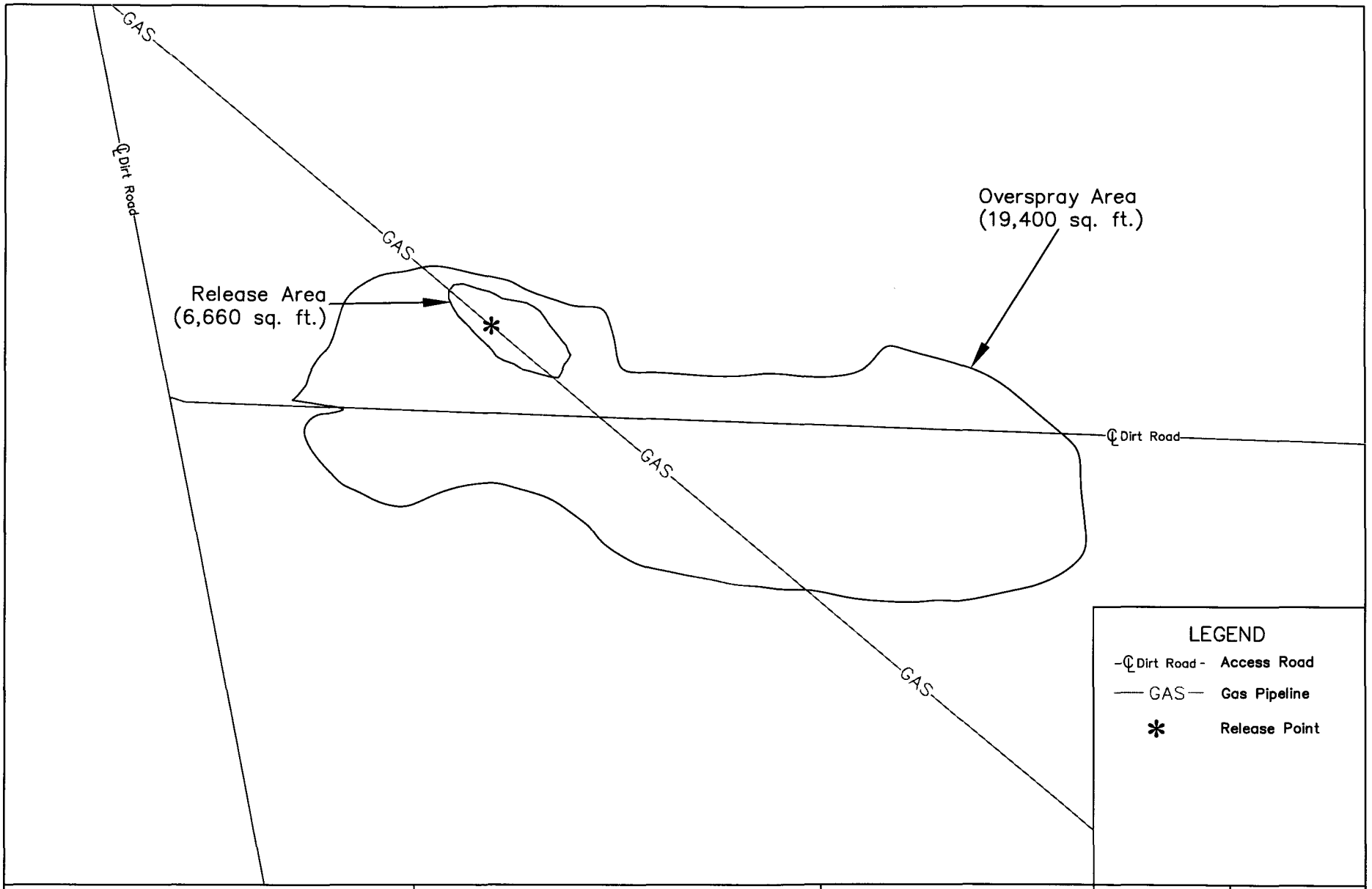

Figure 3 Site Map Duke Energy Field Services G-28-14 Ext. 3	Lea County, New Mexico NW 1/4 of the NW 1/4, Sec. 26, T23S, R36E N 32° 16' 49.3" W 103° 14' 27.4" Elevation: 3,364 feet amsl	DWG By: Iain Olness April 2005	REVISED: Sept 2006	SHEET 1 of 1

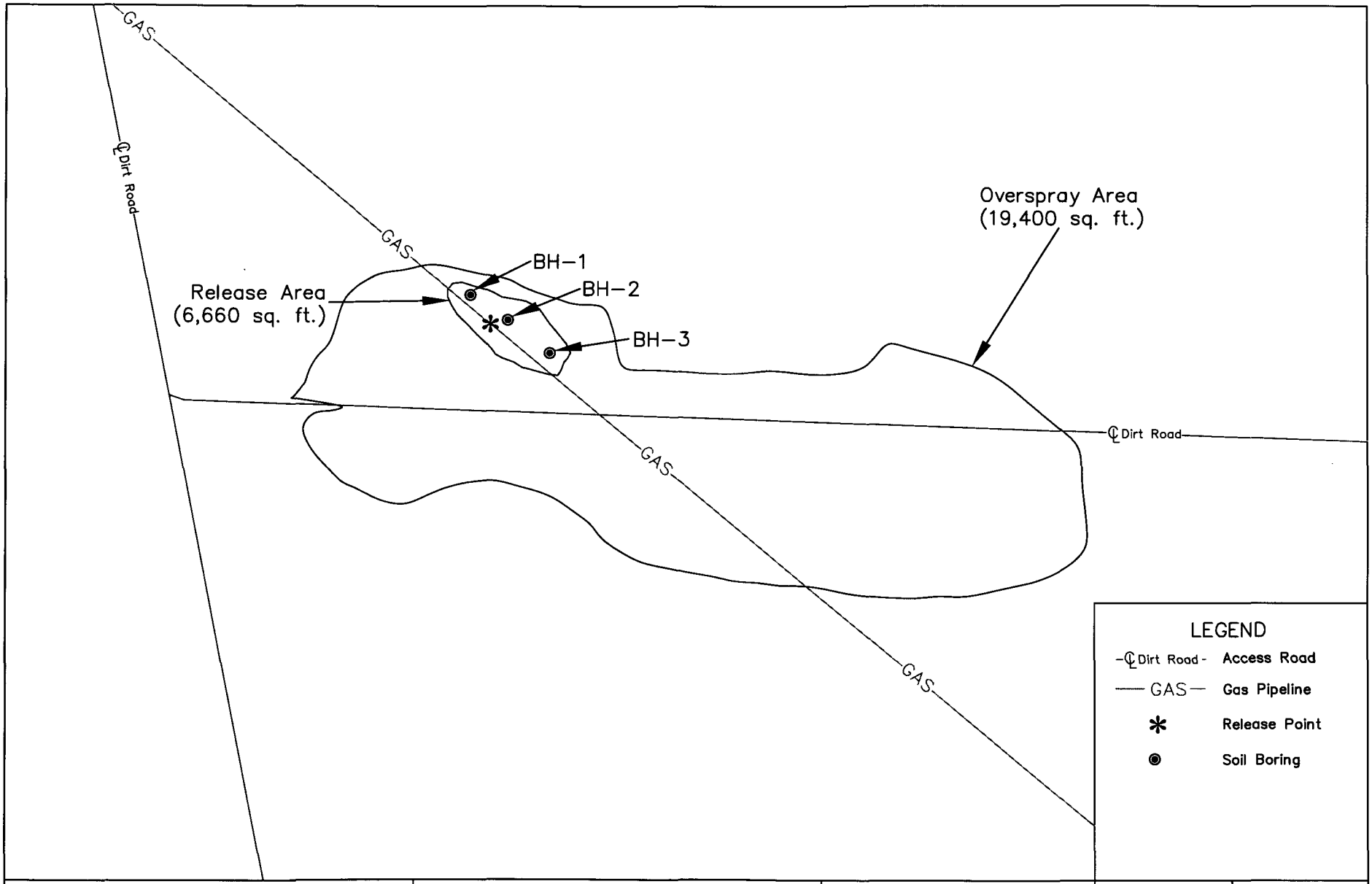

Figure 4 Soil Boring Location Map Duke Energy Field Services G–28–14 Ext. 3	Lea County, New Mexico NW 1/4 of the NW 1/4, Sec. 26, T23S, R36E N 32° 16' 49.3" W 103° 14' 27.4" Elevation: 3,364 feet amsl	DWG By: Iain Olness April 2005 0 140 280 Feet	REVISED: Sept 2006 SHEET 1 of 1	N

TABLE 1

WELL INFORMATION REPORT*

Duke Energy Field Services G-28-14 Ext. 3 (NMOCD 1RP# 1029; EPI Ref #130018)

Well Number	Diversion[A]	Owner	Use	Twsp	Rng	Sec q q q	Latitude	Longitude	Date Measured	Surface Elevation[B]	Well Depth (ft bgs)	Depth to Water (ft bgs)
CP 00102 DCL	0	Deep Wells Ranch, Inc.	DOM	23 S	36 E	26 3 3 3	N 32° 16' 4.84"	W 103° 14' 38.3"		3,358		
USGS #1				23 S	36 E	26 3 3 3			28-Feb-96	3,362		140.9
CP 00925	141.14	Energen Resources, Inc.	SRO	23 S	36 E	22 4 4 4	N 32° 16' 57.18"	W 103° 14' 53.64"	20-Oct-04	3,390	1,820	400
USGS #2				23 S	36 E	22 3 4 4			1-Dec-53	3,415		188.57
USGS #3				23 S	36 E	23 1 1 4			17-Dec-70	3,370		141.23
USGS #4				23 S	36 E	23 2 2 1			17-Dec-70	3,355		132.39
USGS #5				23 S	36 E	35 2 1 1			28-Feb-96	3,335		122.43
CP 00497 EXPL	3	El Paso Natural Gas Company	EXP	23 S	36 E	36 4	N 32° 15' 12.37"	W 103° 13' 6.12"	18-Apr-71	3,337	246	133
CP 00512 EXPL	3	El Paso Natural Gas Company	EXP	23 S	36 E	36 1 3 4	N 32° 15' 38.59"	W 103° 13' 36.84"	1-Dec-72	3,337	264	128
CP 00621 EXPL	3	El Paso Natural Gas Company	EXP	23 S	36 E	36 2 2 3	N 32° 15' 51.58"	W 103° 12' 50.72"	8-Jul-08	3,326	245	127
CP 00634 EXPL	3	El Paso Natural Gas Company	EXP	23 S	36 E	36 1 2 1	N 32° 15' 51.64"	W 103° 13' 21.46"	15-Jun-81	3,332	260	125
CP 00651 EXPL	3	El Paso Natural Gas Company	IND	23 S	36 E	36 1 3 2	N 32° 15' 38.59"	W 103° 13' 36.84"	1-Jul-82	3,337	260	123
CP 00682 EXPL	3	El Paso Natural Gas Company	EXP	23 S	36 E	36 1 2 4	N 32° 15' 51.64"	W 103° 13' 21.46"		3,332		
USGS #6				23 S	36 E	36 1 3 1			20-Jan-76	3,330		122.58
USGS #7				23 S	36 E	36 3 1 4			22-Feb-96	3,335		120.92
USGS #8				23 S	36 E	36 3 4 1			17-Dec-70	3,335		136.21
USGS #9				23 S	36 E	36 3 4 2			20-Oct-65	3,325		142.17R

* = Data obtained from the New Mexico Office of the State Engineer Website (http://iwaters.ose.state.nm.us:7001/iWATERS/wr_RegisServlet1) and USGS Database.
Shaded well information indicates well location shown on Figure 2

[A] = in acre feet per annum

[B] = Interpolated from USGS Topographical Map

DOM = Domestic One Household
SRO = Secondary recovery of oil
EXP = Exploration
IND = Industrial
R = The site had been pumped recently
(quarters are 1=NW, 2=NE, 3=SW, 4=SE)
(quarters are biggest to smallest - X Y are in Feet - UTM are in Meters)

TABLE 2

Summary of Soil Boring Analytical Results

DEFS G-28-14 Ext 3 (NMOCD 1RP # 1029; EPI Ref. #130018)

Soil Sample ID	Depth (feet)	Sample Date	Soil Status	PID Reading (ppm)	Field Chloride (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	TPH (as gasoline) (mg/Kg)	TPH (as diesel) (mg/Kg)	Total TPH (mg/Kg)	Chloride (mg/Kg)
Soil Boring BH-1	5	01-Aug-05	In Situ	6.0	400	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	<10.0	<10.0	25.0
	10	01-Aug-05	In Situ	13.7	400	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	<10.0	<10.0	17.5
	15	01-Aug-05	In Situ	3.0	250	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	<10.0	<10.0	18.5
	20	01-Aug-05	In Situ	2.9	250	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	<10.0	<10.0	30.5
Soil Boring BH-2	5	01-Aug-05	In Situ	15.9	280	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	<10.0	<10.0	25.9
	10	01-Aug-05	In Situ	11.1	250	<0.0250	<0.0250	<0.0250	0.0575	0.0575	<10.0	<10.0	<10.0	82.8
	15	01-Aug-05	In Situ	4.2	250	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	<10.0	<10.0	21.0
Soil Boring BH-3	5	01-Aug-05	In Situ	3.5	250	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	<10.0	<10.0	19.1
	10	01-Aug-05	In Situ	27.5	250	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	<10.0	<10.0	83.4
	15	01-Aug-05	In Situ	1.5	250	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	<10.0	<10.0	23.2
NMOCD Remedial Thresholds				**100**		**10**				**50**			**5,000**	**250** [A]

Bolded *values are in excess of the NMOCD Remediation Thresholds and/or NMWQCC groundwater standards*

[A] *Chloride residuals may not be capable of impacting local groundwater above the NMWQCC standards of 250 mg/L.*

APPENDICES

APPENDIX I

LABORATORY ANALYTICAL REPORTS
AND
CHAIN-OF-CUSTODY FORM

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Iain Olness

Environmental Plus, Incorporated

P.O. Box 1558

Eunice, NM 88231

Project: Duke Energy- G-28-14 Ext. 3 (Ref. #130018)

Project Number: None Given

Location: UL-D, Sec. 26, T23S, R36E

Lab Order Number: 5H04005

Report Date: 08/11/05

Environmental Plus, Incorporated	Project: Duke Energy- G-28-14 Ext. 3 (Ref. #130018)	Fax: 505-394-2601
P.O. Box 1558	Project Number: None Given	**Reported:**
Eunice NM, 88231	Project Manager: Iain Olness	08/11/05 15:59

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-1 (5') (5H04005-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EH50410	08/04/05	08/05/05	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		*88.9 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*85.5 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EH50508	08/05/05	08/05/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*86.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*117 %*	*70-130*		"	"	"	"	
BH-1 (10') (5H04005-02) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EH50410	08/04/05	08/05/05	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		*91.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.2 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EH50508	08/05/05	08/05/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*87.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*122 %*	*70-130*		"	"	"	"	
BH-1 (15') (5H04005-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EH50410	08/04/05	08/05/05	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		*96.9 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.3 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EH50508	08/05/05	08/05/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	

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Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-2 (10') (5H04005-06) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EH50410	08/04/05	08/05/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.0575**	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*80.1 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*81.3 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EH50509	08/05/05	08/06/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*87.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*118 %*	*70-130*		"	"	"	"	
BH-2 (15') (5H04005-07) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EH50410	08/04/05	08/05/05	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		*80.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*80.4 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EH50509	08/05/05	08/06/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*82.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*117 %*	*70-130*		"	"	"	"	
BH-3 (5') (5H04005-08) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EH50410	08/04/05	08/05/05	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		*85.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*85.2 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EH50509	08/05/05	08/06/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	

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Environmental Plus, Incorporated	Project: Duke Energy- G-28-14 Ext. 3 (Ref. #130018)	Fax: 505-394-2601
P.O. Box 1558	Project Number: None Given	**Reported:**
Eunice NM, 88231	Project Manager: Iain Olness	08/11/05 15:59

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-1 (5') (5H04005-01) Soil									
Chloride	**25.0**	5.00	mg/kg	10	EH51009	08/09/05	08/09/05	EPA 300.0	
% Moisture	**19.8**	0.1	%	1	EH50501	08/04/05	08/05/05	% calculation	
BH-1 (10') (5H04005-02) Soil									
Chloride	**17.5**	5.00	mg/kg	10	EH51009	08/09/05	08/09/05	EPA 300.0	
% Moisture	**12.6**	0.1	%	1	EH50501	08/04/05	08/05/05	% calculation	
BH-1 (15') (5H04005-03) Soil									
Chloride	**18.5**	5.00	mg/kg	10	EH51009	08/09/05	08/09/05	EPA 300.0	
% Moisture	**10.0**	0.1	%	1	EH50501	08/04/05	08/05/05	% calculation	
BH-1 (20') (5H04005-04) Soil									
Chloride	**30.5**	5.00	mg/kg	10	EH51009	08/09/05	08/09/05	EPA 300.0	
% Moisture	**8.4**	0.1	%	1	EH50501	08/04/05	08/05/05	% calculation	
BH-2 (5') (5H04005-05) Soil									
Chloride	**25.9**	5.00	mg/kg	10	EH51009	08/09/05	08/09/05	EPA 300.0	
% Moisture	**15.6**	0.1	%	1	EH50501	08/04/05	08/05/05	% calculation	
BH-2 (10') (5H04005-06) Soil									
Chloride	**82.8**	5.00	mg/kg	10	EH51009	08/09/05	08/09/05	EPA 300.0	
% Moisture	**11.4**	0.1	%	1	EH50501	08/04/05	08/05/05	% calculation	
BH-2 (15') (5H04005-07) Soil									
Chloride	**21.0**	5.00	mg/kg	10	EH51010	08/10/05	08/10/05	EPA 300.0	
% Moisture	**13.3**	0.1	%	1	EH50501	08/04/05	08/05/05	% calculation	
BH-3 (5') (5H04005-08) Soil									
Chloride	**19.1**	5.00	mg/kg	10	EH51010	08/10/05	08/10/05	EPA 300.0	
% Moisture	**17.3**	0.1	%	1	EH50501	08/04/05	08/05/05	% 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 EH50410 - EPA 5030C (GC)										
Blank (EH50410-BLK1)				Prepared: 08/04/05 Analyzed: 08/05/05						
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	*101*		*ug/kg*	*100*		*101*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*83.4*		*"*	*100*		*83.4*	*80-120*			
LCS (EH50410-BS1)				Prepared: 08/04/05 Analyzed: 08/05/05						
Benzene	102		ug/kg	100		102	80-120			
Toluene	102		"	100		102	80-120			
Ethylbenzene	98.7		"	100		98.7	80-120			
Xylene (p/m)	197		"	200		98.5	80-120			
Xylene (o)	89.0		"	100		89.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	*93.4*		*"*	*100*		*93.4*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*95.8*		*"*	*100*		*95.8*	*80-120*			
Calibration Check (EH50410-CCV1)				Prepared: 08/04/05 Analyzed: 08/05/05						
Benzene	94.5		ug/kg	100		94.5	80-120			
Toluene	93.8		"	100		93.8	80-120			
Ethylbenzene	87.4		"	100		87.4	80-120			
Xylene (p/m)	174		"	200		87.0	80-120			
Xylene (o)	82.9		"	100		82.9	80-120			
Surrogate: a,a,a-Trifluorotoluene	*84.7*		*"*	*100*		*84.7*	*0-200*			
Surrogate: 4-Bromofluorobenzene	*91.6*		*"*	*100*		*91.6*	*0-200*			
Matrix Spike (EH50410-MS1)	**Source: 5H04005-08**			Prepared: 08/04/05 Analyzed: 08/05/05						
Benzene	100		ug/kg	100	ND	100	80-120			
Toluene	103		"	100	ND	103	80-120			
Ethylbenzene	99.3		"	100	ND	99.3	80-120			
Xylene (p/m)	198		"	200	ND	99.0	80-120			
Xylene (o)	86.9		"	100	ND	86.9	80-120			
Surrogate: a,a,a-Trifluorotoluene	*89.3*		*"*	*100*		*89.3*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*98.8*		*"*	*100*		*98.8*	*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 EH50508 - Solvent Extraction (GC)										
Matrix Spike (EH50508-MS1)	**Source: 5H04004-03**			Prepared & Analyzed: 08/05/05						
Gasoline Range Organics C6-C12	522	10.0	mg/kg dry	570	ND	91.6	75-125			
Diesel Range Organics >C12-C35	666	10.0	"	570	ND	117	75-125			
Total Hydrocarbon C6-C35	1190	10.0	"	1140	ND	104	75-125			
Surrogate: 1-Chlorooctane	*58.0*		*mg/kg*	*50.0*		*116*	*70-130*			
Surrogate: 1-Chlorooctadecane	*63.6*		*"*	*50.0*		*127*	*70-130*			
Matrix Spike Dup (EH50508-MSD1)	**Source: 5H04004-03**			Prepared & Analyzed: 08/05/05						
Gasoline Range Organics C6-C12	475	10.0	mg/kg dry	570	ND	83.3	75-125	9.43	20	
Diesel Range Organics >C12-C35	659	10.0	"	570	ND	116	75-125	1.06	20	
Total Hydrocarbon C6-C35	1130	10.0	"	1140	ND	99.1	75-125	5.17	20	
Surrogate: 1-Chlorooctane	*52.1*		*mg/kg*	*50.0*		*104*	*70-130*			
Surrogate: 1-Chlorooctadecane	*63.6*		*"*	*50.0*		*127*	*70-130*			
Batch EH50509 - Solvent Extraction (GC)										
Blank (EH50509-BLK1)				Prepared: 08/05/05 Analyzed: 08/06/05						
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	*41.2*		*mg/kg*	*50.0*		*82.4*	*70-130*			
Surrogate: 1-Chlorooctadecane	*57.4*		*"*	*50.0*		*115*	*70-130*			
LCS (EH50509-BS1)				Prepared: 08/05/05 Analyzed: 08/06/05						
Gasoline Range Organics C6-C12	400	10.0	mg/kg wet	500		80.0	75-125			
Diesel Range Organics >C12-C35	518	10.0	"	500		104	75-125			
Total Hydrocarbon C6-C35	918	10.0	"	1000		91.8	75-125			
Surrogate: 1-Chlorooctane	*49.3*		*mg/kg*	*50.0*		*98.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*60.3*		*"*	*50.0*		*121*	*70-130*			

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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 EH50808 - EPA 5030C (GC)										
LCS (EH50808-BS1)				Prepared: 08/07/05 Analyzed: 08/08/05						
Benzene	94.6		ug/kg	100		94.6	80-120			
Toluene	96.8		"	100		96.8	80-120			
Ethylbenzene	94.6		"	100		94.6	80-120			
Xylene (p/m)	190		"	200		95.0	80-120			
Xylene (o)	86.9		"	100		86.9	80-120			
Surrogate: a,a,a-Trifluorotoluene	*91.6*		"	*100*		*91.6*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*94.7*		"	*100*		*94.7*	*80-120*			
Calibration Check (EH50808-CCV1)				Prepared: 08/07/05 Analyzed: 08/08/05						
Benzene	101		ug/kg	100		101	80-120			
Toluene	96.5		"	100		96.5	80-120			
Ethylbenzene	87.4		"	100		87.4	80-120			
Xylene (p/m)	179		"	200		89.5	80-120			
Xylene (o)	80.5		"	100		80.5	80-120			
Surrogate: a,a,a-Trifluorotoluene	*91.9*		"	*100*		*91.9*	*0-200*			
Surrogate: 4-Bromofluorobenzene	*91.2*		"	*100*		*91.2*	*0-200*			
Matrix Spike (EH50808-MS1)	**Source: 5H04006-05**			Prepared: 08/07/05 Analyzed: 08/08/05						
Benzene	98.2		ug/kg	100	ND	98.2	80-120			
Toluene	96.0		"	100	ND	96.0	80-120			
Ethylbenzene	85.2		"	100	ND	85.2	80-120			
Xylene (p/m)	179		"	200	ND	89.5	80-120			
Xylene (o)	80.2		"	100	ND	80.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	*87.4*		"	*100*		*87.4*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*87.8*		"	*100*		*87.8*	*80-120*			
Matrix Spike Dup (EH50808-MSD1)	**Source: 5H04006-05**			Prepared: 08/07/05 Analyzed: 08/08/05						
Benzene	96.4		ug/kg	100	ND	96.4	80-120	1.85	20	
Toluene	98.9		"	100	ND	98.9	80-120	2.98	20	
Ethylbenzene	98.3		"	100	ND	98.3	80-120	14.3	20	
Xylene (p/m)	198		"	200	ND	99.0	80-120	10.1	20	
Xylene (o)	85.8		"	100	ND	85.8	80-120	6.75	20	
Surrogate: a,a,a-Trifluorotoluene	*93.6*		"	*100*		*93.6*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*93.4*		"	*100*		*93.4*	*80-120*			

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General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EH50501 - General Preparation (Prep)										
Blank (EH50501-BLK1)				Prepared: 08/04/05 Analyzed: 08/05/05						
% Moisture	ND	0.1	%							
Duplicate (EH50501-DUP1)	**Source: 5H03008-01**			Prepared: 08/04/05 Analyzed: 08/05/05						
% Moisture	4.7	0.1	%		5.1			8.16	20	
Batch EH51009 - Water Extraction										
Blank (EH51009-BLK1)				Prepared & Analyzed: 08/09/05						
Chloride	ND	0.500	mg/kg							
LCS (EH51009-BS1)				Prepared & Analyzed: 08/09/05						
Chloride	10.3		mg/L	10.0		103	80-120			
Calibration Check (EH51009-CCV1)				Prepared & Analyzed: 08/09/05						
Chloride	10.6		mg/L	10.0		106	80-120			
Duplicate (EH51009-DUP1)	**Source: 5H04004-01**			Prepared & Analyzed: 08/09/05						
Chloride	606	5.00	mg/kg		613			1.15	20	
Batch EH51010 - Water Extraction										
Blank (EH51010-BLK1)				Prepared & Analyzed: 08/10/05						
Chloride	ND	0.500	mg/kg							
LCS (EH51010-BS1)				Prepared & Analyzed: 08/10/05						
Chloride	10.5		mg/L	10.0		105	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 EH50509 - Solvent Extraction (GC)										
Calibration Check (EH50509-CCV1)				Prepared: 08/05/05 Analyzed: 08/06/05						
Gasoline Range Organics C6-C12	451		mg/kg	500		90.2	80-120			
Diesel Range Organics >C12-C35	465		"	500		93.0	80-120			
Total Hydrocarbon C6-C35	916		"	1000		91.6	80-120			
Surrogate: 1-Chlorooctane	*49.5*		"	*50.0*		*99.0*	*0-200*			
Surrogate: 1-Chlorooctadecane	*64.5*		"	*50.0*		*129*	*0-200*			
Matrix Spike (EH50509-MS1)	**Source: 5H04005-06**			Prepared: 08/05/05 Analyzed: 08/06/05						
Gasoline Range Organics C6-C12	489	10.0	mg/kg dry	564	ND	86.7	75-125			
Diesel Range Organics >C12-C35	633	10.0	"	564	ND	112	75-125			
Total Hydrocarbon C6-C35	1120	10.0	"	1130	ND	99.1	75-125			
Surrogate: 1-Chlorooctane	*50.0*		*mg/kg*	*50.0*		*100*	*70-130*			
Surrogate: 1-Chlorooctadecane	*60.7*		"	*50.0*		*121*	*70-130*			
Matrix Spike Dup (EH50509-MSD1)	**Source: 5H04005-06**			Prepared: 08/05/05 Analyzed: 08/06/05						
Gasoline Range Organics C6-C12	469	10.0	mg/kg dry	564	ND	83.2	75-125	4.18	20	
Diesel Range Organics >C12-C35	636	10.0	"	564	ND	113	75-125	0.473	20	
Total Hydrocarbon C6-C35	1110	10.0	"	1130	ND	98.2	75-125	0.897	20	
Surrogate: 1-Chlorooctane	*50.5*		*mg/kg*	*50.0*		*101*	*70-130*			
Surrogate: 1-Chlorooctadecane	*61.0*		"	*50.0*		*122*	*70-130*			
Batch EH50808 - EPA 5030C (GC)										
Blank (EH50808-BLK1)				Prepared: 08/07/05 Analyzed: 08/08/05						
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	*88.4*		*ug/kg*	*100*		*88.4*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*83.8*		"	*100*		*83.8*	*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 EH50410 - EPA 5030C (GC)										
Matrix Spike Dup (EH50410-MSD1)	**Source: 5H04005-08**			Prepared: 08/04/05 Analyzed: 08/05/05						
Benzene	97.5		ug/kg	100	ND	97.5	80-120	2.53	20	
Toluene	98.4		"	100	ND	98.4	80-120	4.57	20	
Ethylbenzene	95.4		"	100	ND	95.4	80-120	4.01	20	
Xylene (p/m)	192		"	200	ND	96.0	80-120	3.08	20	
Xylene (o)	84.4		"	100	ND	84.4	80-120	2.92	20	
Surrogate: a,a,a-Trifluorotoluene	*87.5*		*"*	*100*		*87.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*96.9*		*"*	*100*		*96.9*	*80-120*			
Batch EH50508 - Solvent Extraction (GC)										
Blank (EH50508-BLK1)				Prepared & Analyzed: 08/05/05						
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	*41.6*		*mg/kg*	*50.0*		*83.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*56.5*		*"*	*50.0*		*113*	*70-130*			
LCS (EH50508-BS1)				Prepared & Analyzed: 08/05/05						
Gasoline Range Organics C6-C12	414	10.0	mg/kg wet	500		82.8	75-125			
Diesel Range Organics >C12-C35	532	10.0	"	500		106	75-125			
Total Hydrocarbon C6-C35	946	10.0	"	1000		94.6	75-125			
Surrogate: 1-Chlorooctane	*50.3*		*mg/kg*	*50.0*		*101*	*70-130*			
Surrogate: 1-Chlorooctadecane	*58.9*		*"*	*50.0*		*118*	*70-130*			
Calibration Check (EH50508-CCV1)				Prepared: 08/05/05 Analyzed: 08/06/05						
Gasoline Range Organics C6-C12	459		mg/kg	500		91.8	80-120			
Diesel Range Organics >C12-C35	574		"	500		115	80-120			
Total Hydrocarbon C6-C35	1030		"	1000		103	80-120			
Surrogate: 1-Chlorooctane	*50.9*		*"*	*50.0*		*102*	*0-200*			
Surrogate: 1-Chlorooctadecane	*62.6*		*"*	*50.0*		*125*	*0-200*			

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

Environmental Plus, Incorporated	Project: Duke Energy- G-28-14 Ext. 3 (Ref. #130018)	Fax: 505-394-2601
P.O. Box 1558	Project Number: None Given	**Reported:**
Eunice NM, 88231	Project Manager: *Iain Olness*	*08/11/05 15:59*

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-3 (10') (5H04005-09) Soil									
Chloride	**83.4**	5.00	mg/kg	10	EH51010	08/10/05	08/10/05	EPA 300.0	
% Moisture	**9.9**	0.1	%	1	EH50501	08/04/05	08/05/05	% calculation	
BH-3 (15') (5H04005-10) Soil									
Chloride	**23.2**	5.00	mg/kg	10	EH51010	08/10/05	08/10/05	EPA 300.0	
% Moisture	**12.3**	0.1	%	1	EH50501	08/04/05	08/05/05	% calculation	

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

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
BH-3 (5') (5H04005-08) Soil									
Surrogate: 1-Chlorooctane		*81.4 %*	*70-130*		*EH50509*	*08/05/05*	*08/06/05*	*EPA 8015M*	
Surrogate: 1-Chlorooctadecane		*109 %*	*70-130*		"	"	"	"	
BH-3 (10') (5H04005-09) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EH50808	08/07/05	08/07/05	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		*89.4 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*90.9 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EH50509	08/05/05	08/06/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*79.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*107 %*	*70-130*		"	"	"	"	
BH-3 (15') (5H04005-10) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EH50808	08/07/05	08/08/05	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		*85.7 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*82.0 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EH50509	08/05/05	08/06/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*83.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*112 %*	*70-130*		"	"	"	"	

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Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-1 (15') (5H04005-03) Soil									
Surrogate: 1-Chlorooctane		*84.2 %*		*70-130*		*EH50508*	*08/05/05*	*08/05/05*	*EPA 8015M*	
Surrogate: 1-Chlorooctadecane		*118 %*		*70-130*		"	"	"	"	
BH-1 (20') (5H04005-04) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EH50410	08/04/05	08/05/05	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		*92.7 %*		*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*		*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EH50508	08/05/05	08/05/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*92.0 %*		*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*125 %*		*70-130*		"	"	"	"	
BH-2 (5') (5H04005-05) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EH50410	08/04/05	08/05/05	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		*89.5 %*		*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EH50508	08/05/05	08/06/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*83.2 %*		*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*115 %*		*70-130*		"	"	"	"	

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

Environmental Plus, Incorporated	Project: Duke Energy- G-28-14 Ext. 3 (Ref. #130018)	Fax: 505-394-2601
P.O. Box 1558	Project Number: None Given	**Reported:**
Eunice NM, 88231	Project Manager: Iain Olness	08/11/05 15:59

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH-1 (5')	5H04005-01	Soil	08/01/05 08:20	08/04/05 12:52
BH-1 (10')	5H04005-02	Soil	08/01/05 08:50	08/04/05 12:52
BH-1 (15')	5H04005-03	Soil	08/01/05 09:17	08/04/05 12:52
BH-1 (20')	5H04005-04	Soil	08/01/05 09:57	08/04/05 12:52
BH-2 (5')	5H04005-05	Soil	08/01/05 12:10	08/04/05 12:52
BH-2 (10')	5H04005-06	Soil	08/01/05 12:30	08/04/05 12:52
BH-2 (15')	5H04005-07	Soil	08/01/05 13:10	08/04/05 12:52
BH-3 (5')	5H04005-08	Soil	08/01/05 13:55	08/04/05 12:52
BH-3 (10')	5H04005-09	Soil	08/01/05 14:25	08/04/05 12:52
BH-3 (15')	5H04005-10	Soil	08/01/05 14:58	08/04/05 12:52

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

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 EH51010 - Water Extraction										
Calibration Check (EH51010-CCV1)				Prepared & Analyzed: 08/10/05						
Chloride	10.8		mg/L	10.0		108	80-120			
Duplicate (EH51010-DUP1)		**Source: 5H04006-09**		Prepared & Analyzed: 08/10/05						
Chloride	43700	5000	mg/kg		47800			8.96	20	

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

Environmental Lab of Texas, Inc.

Chain of Custody Form

12600 West I-20 East
Odessa Texas 79763
Phone: 432-563-1800
Fax: 432-563-1713

Company Name:	Environmental Plus, Inc.
EPI Project Manager:	Iain Olness
Mailing Address:	P.O. BOX 1558
City, State, Zip:	Eunice New Mexico 88231
EPI Phone#/Fax#:	505-394-3481 / 505-394-2601
Client Company:	Duke Energy Field Services
Facility Name:	G-28-14 Ext. 3 (Ref. #130018)
Project Location:	UL-D, Sec 26, T23S, R36E
EPI Sampler Name:	George Blackburn

Bill To

Duke Energy.

Attn: Polo Rendon
11525 West Carlsbad Highway
Hobbs, NM 88240

ANALYSIS REQUEST

LAB I.D. 5704005		SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE/COOL	OTHER	SAMPLING: DATE	TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl^-)	SULFATES (SO_4^{2-})	pH	TCLP	OTHER >>	PAH			
-01	1	BH-1 (5')	G	1			X					X		01-Aug-05	8:20	X	X	X								
-02	2	BH-1 (10')	G	1			X					X		01-Aug-05	8:50	X	X	X								
-03	3	BH-1 (15')	G	1			X					X		01-Aug-05	9:17	X	X	X								
-04	4	BH-1 (20')	G	1			X					X		01-Aug-05	9:57	X	X	X								
-05	5	BH-2 (5')	G	1			X					X		01-Aug-05	12:10	X	X	X								
-06	6	BH-2 (10')	G	1			X					X		01-Aug-05	12:30	X	X	X								
-07	7	BH-2 (15')	G	1			X					X		01-Aug-05	13:10	X	X	X								
-08	8	BH-3 (5')	G	1			X					X		01-Aug-05	13:55	X	X	X								
-09	9	BH-3 (10')	G	1			X					X		01-Aug-05	14:25	X	X	X								
-10	10	BH-3 (15')	G	1			X					X		01-Aug-05	14:58	X	X	X								

Sampler Relinquished: [signature] Date 8-4-05 Time 4:00 pm Received By: [signature]

Relinquished by: [signature] Date 8.4.05 Time 17:12 Received By: (lab staff) [signature]

Delivered by: [signature] Sample Cool & Intact (Yes) No Checked By: JMM

E-mail results to: iolness@hotmail.com

REMARKS: ANY QUESTIONS, CONTACT IAIN OLNESS AT EPI AT (505) 394-3481.

0.5°C

4oz glass on ice w/labels + seals

seal on cooler

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: 8/11/2005

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.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

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

Client: EPI

Date/Time: 8/4/05 12:52

Order #: 5H04005

Initials: CK

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	0.5 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 II

PROJECT PHOTOGRAPHS

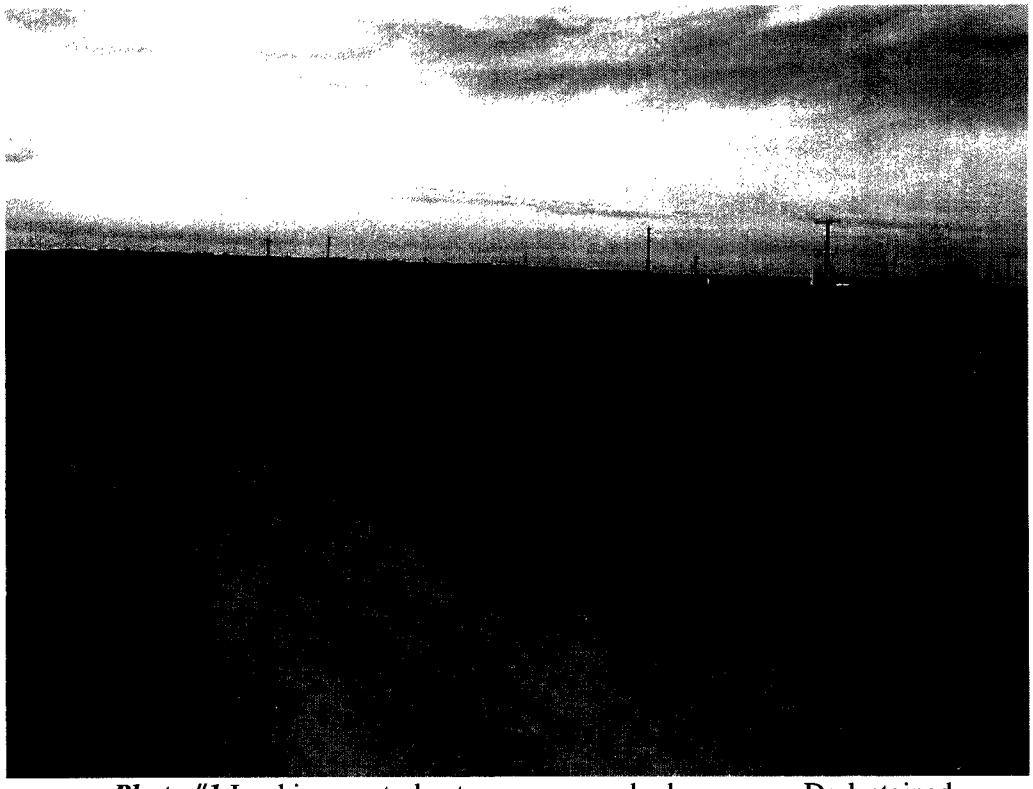

Photo #1:Looking westerly at overspray and release area. Dark stained soil indicates NGL contamination.

Photo #2: Looking northwesterly at point of release, failed section of line is being replaced.

Photo #3: Looking northwesterly at overspray and release area.

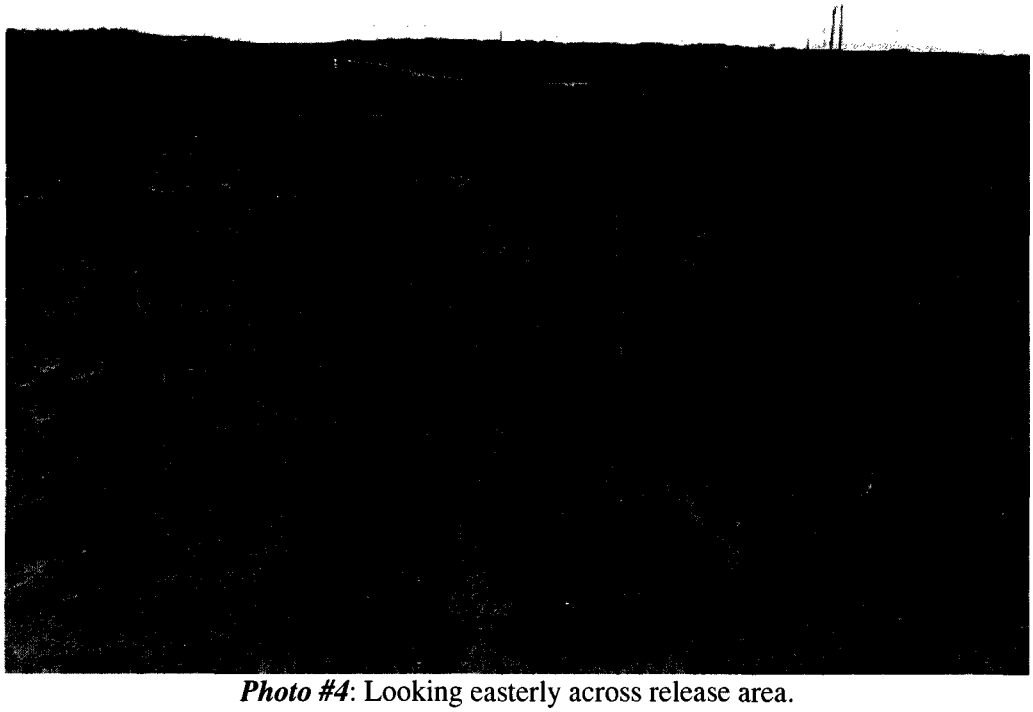

Photo #4: Looking easterly across release area.

APPENDIX III

SOIL BORING LOG

Log Of Test Borings

ENVIRONMENTAL PLUS, INC.
CONSULTING AND
REMEDIAL CONSTRUCTION
EUNICE, NEW MEXICO
505-394-3481

Project Number: 130018

Project Name: Duke-G-28-14 Ext 3

Location: UL-C, Section 26, Township 23 South, Range 36 East

Boring Number: SB-1 | Surface Elevation: 3,364-feet amsl

Start Date: 8-1-05 Time: 0820

Completion Date: 8-1-05 Time: 1000

Time	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	Chloride Analysis (mg/Kg)	U.S.C.S. Symbol	Depth (feet)	Description
0820			no	6.0	400		5	5'
0850			no	13.7	400		10	10'
0917			no	3.0	250		15	15'
0957			no	2.9	250		20	20'
								End of Soil Boring at 20' bgs
							25	
							30	

Water Level Measurements (feet)

Date	Time	Sample Depth	Casing Depth	Cave-in Depth	Water Level
-	-	-	-	-	-
-	-	-	-	-	-

Drilling Method: Auger Trailer

Backfill Method: Bentonite

Field Representative: G/B

Log Of Test Borings

(NOTE - Page 1 of 1)

ENVIRONMENTAL PLUS, INC.
CONSULTING AND
REMEDIAL CONSTRUCTION
EUNICE, NEW MEXICO
505-394-3481

Project Number: 130018

Project Name: Duke-G-28-14 Ext 3

Location: UL-C, Section 26, Township 23 South, Range 36 East

Boring Number: SB-2 | Surface Elevation: 3,364-feet amsl

Start Date: 8-1-05 Time: 0820

Completion Date: 8-1-05 Time: 1500

Time	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	Chloride Analysis (mg/Kg)	U.S.C.S. Symbol	Depth (feet)	Description
1210			no	15.9	280		5	5'
1230			no	11.1	250		10	10'
1310			no	4.2	250		15	15'
								End of Soil Boring at 15' bgs
							20	
							25	
							30	

Water Level Measurements (feet)

Date	Time	Sample Depth	Casing Depth	Cave-in Depth	Water Level
-	-	-	-	-	-
-	-	-	-	-	-

Drilling Method: Auger Trailer

Backfill Method: Bentonite

Field Representative: G/B

Log Of Test Borings

ENVIRONMENTAL PLUS, INC.
CONSULTING AND
REMEDIAL CONSTRUCTION
EUNICE, NEW MEXICO
505-394-3481

Project Number: 130018

Project Name: Duke-G-28-14 Ext3

Location: UL-C, Section 26, Township 23 South, Range 36 East

Boring Number: SB-3 | Surface Elevation: 3,364-feet amsl

Start Date: 8-1-05 Time: 0820

Completion Date: 8-1-05 Time: 1500

Time	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	Chloride Analysis (mg/Kg)	U.S.C.S. Symbol	Depth (feet)	Description
1430			no	3.5	250		5	5'
1500			no	27.5	250		10	10'
1525			no	1.5	250		15	15'
								End of Soil Boring at 15' bgs
							20	
							25	
							30	

Water Level Measurements (feet)

Date	Time	Sample Depth	Casing Depth	Cave-in Depth	Water Level
-	-	-	-	-	-
-	-	-	-	-	-

Drilling Method: Auger Trailer

Backfill Method: Bentonite

Field Representative: G/B

APPENDIX IV

INFORMATIONAL COPY OF INITIAL NMOCD C-141 FORM

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 October 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	**Contact:** Mark Owens
Address: 1625 West Marland, Hobbs, NM 88240	**Telephone No.:** (505) 397-5541
Facility Name: G-28-14 Ext. 3	**Facility Type:** 6" Marlex Line

Surface Owner: Deep Wells Ranch	**Mineral Owner:** Federal	**Lease No.:**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	26	23 S	36 E					Lea

Latitude: N 32° 16' 49.349" **Longitude:** W 103° 14' 27.415"

WTR > 100'

NATURE OF RELEASE

Type of Release: Natural Gas Pipeline Fluids	**Volume of Release:** 12 barrels	**Volume Recovered:** 10 barrels
Source of Release: 6" Marlex pipeline operating at 18-20 lbs with a normal daily flow rate of 20-30 mcf	**Date and Hour of Occurrence:** 27 March 2005	**Date and Hour of Discovery:** 27 March 2005
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	**If YES, To Whom?** Gary Wink, NMOCD	
By Whom? Lynn Ward	**Date and Hour:** 27 March 2005 @1407 hrs	
Was a Watercourse Reached? ☐ Yes ☒ No	**If YES, Volume Impacting the Watercourse.**	

If a Watercourse was Impacted, Describe Fully.* Not Applicable

Describe Cause of Problem and Remedial Action Taken.*
6" Marlex line began leaking, due to a weld failure. A line clamp was installed and the section replaced.

Describe Area Affected and Cleanup Action Taken.* The affected area consists of approximately 6,660 square feet of pasture land owned by Deep Wells Ranch. The section with the failed weld has been 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 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:

Printed Name: Mark Owens

Title: Construction Maintenance Supervisor

E-mail Address: mrowens@duke-energy.com

Date: **Phone:**

OIL CONSERVATION DIVISION

Approved by District ~~Supervisor~~: ENVIRO ENGR

Approval Date: 5.23.07 **Expiration Date:** 7.23.07

Conditions of Approval: SIGNED SUBMIT FINAL C-141 W/ CLOSURE

Attached ☐

* Attach Additional Sheets If Necessary