Duke Energy Field Services

CLOSURE REPORT

G-28-4 (REF. #130002)

UL-P (SE¼ OF THE SE¼) OF SECTION 21 T22S R36E

~7.7 MILES SOUTHWEST (BEARING 227°) OF EUNICE

LEA COUNTY, NEW MEXICO

LATITUDE: N32° 22' 23.073" LONGITUDE: W103° 15' 52.003"

FEBRUARY 2006

PREPARED BY:

Duke-229153

Environmental Plus, Inc.
2100 Avenue O
P.O. Box 1558
Eunice, NM 88231
Phone: (505)394-3481
FAX: (505)394-2601
jolness@envplus.net

facility - fPAC0607931354

incident - nPAC0607931484

application - pPAC0607931823

LETTER OF TRANSMITTAL

ENVIRONMENTAL PLUS, INC.

Date:	February 3, 2006
To:	**Larry Johnson**
Company Name:	New Mexico Oil Conservation Division – Hobbs
Address:	1625 French Drive
City / State / Zip:	Hobbs, New Mexico 88240
From:	Jason Stegemoller
CC:	Steve Weathers, DEFS – Denver; Lynn Ward, DEFS – Midland; Mark Owens, DEFS – Hobbs; Millard Deck Estates, landowner – Midland
Project #:	130002
Project Name:	Duke Energy Field Services – G-28-4
Subject:	**Closure Report**

# of originals	# of copies	Description
	1	Copy of the Duke Energy Field Services – G-28-4 Closure Report

Remarks

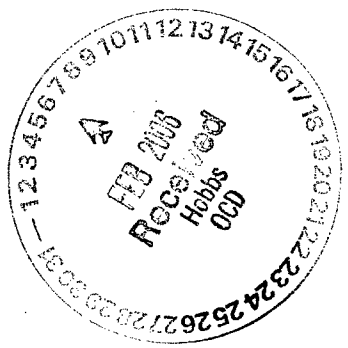
Dear Mr. Johnson:

Enclosed is a copy of the Closure Report for the above-referenced site. An original copy of the report was also sent to the landowner and appropriate Duke Energy personnel. Should you have any questions or concerns, please feel free to contact Iain Olness or me at (505) 394-3481.

Sincerely,

Environmental Plus, Inc.

Jason Stegemoller
Environmental Scientist



P. O. Box 1558
Eunice, NM 88240
(505) 394-3481
Fax: (505) 394-2601

STANDARD OF CARE

Closure Report

G-28-4

Ref. # 130002

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 the 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 arrived at with currently accepted geologic, hydrogeologic and engineering practices at this time and location. The report was prepared or reviewed by a certified or registered EPI professional with a background in engineering, environmental, and/or the natural sciences.

This report was prepared by:

Jason Stegemoller — 3 February 2006

Jason Stegemoller — Date

Environmental Scientist

This report was reviewed by:

Iain A. Olness — 3 February 2006

Iain A. Olness, P.G. — Date

Hydrogeologist

Distribution List

Name	Title	Company or Agency	Mailing Address	e-mail
Larry Johnson	Environmental Engineer	NMOCD	1625 French Drive Hobbs, NM 88240	lwjohnson@state.nm.us
Steve Weathers	Senior Environmental Specialist	DEFS	370 17th Street, Suite 2500 Denver, CO 80202	swweathers@duke-energy.com
Lynn Ward	Senior Environmental Specialist	DEFS	10 Desta Drive, Suite 400-W Midland, TX 79705	lcward@duke-energy.com
Mark Owens	Construction Maintenance Supervisor	DEFS	1625 West Marland Hobbs, NM 88240	mrowens@duke-energy.com
Millard Deck Estate, Attn: Tim Wolters	Landowner c/o Bank of America	--	P.O. Box 270 Midland, TX 79702	tim.wolters@bankofamerica.com
File	--	EPI	P.O. Box 1558 Eunice, NM 88231	iolness@envplus.net

NMOCD – New Mexico Oil Conservation Division

DEFS – Duke Energy Field Services

EPI – Environmental Plus, Inc.

Table of Contents

Figures

Tables

Appendices

Project Synopsis

Site Specific:

- **Company Name:** Duke Energy Field Services
- **Facility Name:** G-28-4
- **Project Reference:** 130002
- **Company Contact:** Steve Weathers
- **Site Location:** WGS84: N 32° 22' 23.073" and W 103° 15' 52.003"
- **Legal Description:** UL-P (SE¼ of the SE¼) of Section 21, T 22 S, R 36 E
- **General Description:** ~7.7 miles southwest of Eunice, Lea County, New Mexico
- **Elevation:** 3,507-ft amsl **Depth to Ground Water:** ~160-ft
- **Land Ownership:** Millard Deck Estate
- **EPI Personnel:** Project Consultant – Iain Olness
  Project Foreman – Morris Burkett/John Robinson

Release Specific:

- **Product Released:** Natural Gas & NGL
- **Volume Released:** Unknown **Volume Recovered:** 0 bbl
- **Time of Occurrence:** Unknown **Time of Discovery:** 14 April 2004
- **Release Source:** 8" Steel Pipeline
- **Initial Surface Area Affected:** ~2,010-ft^2

Remediation Specific:

- **Final Vertical extent of contamination:** 120-ft bgs; Remaining depth to ground water: ~40-ft
- **Water wells within 1000-ft:** 0 **Surface water bodies within 1000-ft:** 0
- **NMOCD Site Ranking Index:** 10 points (water table between 50 and 100 feet)
- **Remedial goals for Soil: 0-59-ft bgs** TPH – 5,000 ppm; BTEX – 50 ppm; Benzene – 10 ppm; Chlorides – 250 ppm; Sulfates – 600 ppm.
  60-109-ft bgs TPH – 1,000 ppm; BTEX – 50 ppm; Benzene – 10 ppm; Chlorides – 250 ppm; Sulfates – 600 ppm.
  110-160-ft bgs TPH – 100 ppm; BTEX – 50 ppm; Benzene – 10 ppm; Chlorides – 250 ppm; Sulfates – 600 ppm.
- **RCRA Waste Classification:** Exempt
- **Remediation Option Selected:** a) Excavation and transport of soil impacted above NMOCD remedial goals to an approved land farm; b) Vertical delineation of soil contamination; c) Risk-based closure assessment; d) Installation of impermeable layer (i.e., clay barrier) and backfill with clean soil.
- **Disposal Facility:** NM-01-0013 **Volume disposed of:** ~1,450 yds^3
- **Project Completion Date:** NA

1.0 Summary

This report addresses the site investigation and remediation of the Duke Energy Field Services (DEFS) G-28-4 (Ref. #130002) natural gas discharge line remediation site. On April 5, 2004, Environmental Plus, Inc. (EPI), Eunice-NM, was notified by DEFS regarding a natural gas and associated natural gas liquid (NGL) release at this site. The *Initial C-141 Form* submitted to NMOCD (May 3, 2004) reports the release volume (NGL) as unknown with no recovery. On April 14, 2004, EPI mobilized to the site and commenced GPS delineation, photography and preliminary evaluation of the site. The overall affected site consisted of a ~1,190–ft^2 release area with a small (~880-ft^2) historical release area (reference *Figure 3*). Remediation of this release site consisted of the excavation and disposal (at a State of New Mexico Land Treatment Facility) of the visibly contaminated soil from the release areas to a depth of approximately 7-feet below ground surface (bgs). Samples were collected at 5 and 10 feet bgs to determine the extents and magnitude of contamination associated with the release site. The samples were analyzed in the field for the presence of organic vapors utilizing an UltraRae™ photoionization detector (PID) equipped with a 9.8 electron volt (eV) lamp. Hydrocarbon contaminant concentrations were confirmed at the 5-foot, and 10-foot depths with composite samples and lab analyses (reference *Table 1* and *Appendix I*). Additionally, analyses of the 5-foot and 10-foot samples for chlorides indicated that this inorganic contaminant was of no concern at this site. The excavation was expanded laterally in all directions to a surface area of ~1,910-ft^2. The contaminated soil was transported to the Environmental Plus, Inc. (EPI) land treatment facility located south of Eunice, New Mexico.

Due to the high concentrations of total petroleum hydrocarbons (TPH) situated at 5 and 10 feet bgs, a soil boring was advanced to delineate the vertical extent of contamination. Soil boring SB-1 was advanced to a depth of 74-feet bgs, the maximum depth for the drilling rig. The last sample analyzed was collected from the 62 to 64-feet bgs sampling interval with analytical results indicating TPH concentrations in excess of the NMOCD remedial thresholds for this site. Based on this, a larger drilling rig was utilized to advance a second soil boring at the site to further delineate the vertical extent of contaminated soil. The second soil boring, SB-2, was advanced to a depth of 70 feet bgs and samples collected at 60, 65 and 70-feet bgs. Field and laboratory analyses indicated contaminant concentrations were below NMOCD remedial thresholds. However, due to the fact that the soil boring was advanced on the north side of the pipeline, approximately 15 feet from the original soil boring and conflicting analytical results, a third soil boring, SB-1A, was advanced adjacent to soil boring SB-1. This soil boring was advanced to a depth of 120-feet bgs, at which depth, field analyses indicated the vertical extent of contamination had been delineated. Analytical results for the sample collected from the 120 to 122-feet bgs sampling interval confirmed that the vertical extent of contamination had been delineated.

On November 1 through 3, 2005, remaining soil impacted above the NMOCD remedial thresholds was excavated from the southern sidewall of the excavation and transported to the EPI land farm for treatment. Excavation activities continued until field analyses indicated organic vapor concentrations were below remedial goals.

On November 4 and 7, 2005, soil samples were collected from the excavation sidewalls. A portion of each sample was placed in a laboratory provided container and set on ice for transport to an independent laboratory for quantification of TPH, BTEX constituents, chloride and sulfate concentrations. The remaining portion of each sample was analyzed in the field for the presence of organic vapors. Field analyses indicated organic vapor concentrations ranged from 0.2 to 4.5 ppm. Laboratory analytical results indicated hydrocarbon concentrations were non-detectable at or above laboratory method detection limits (MDL). Reported chloride concentrations ranged from 12.6 to 34.1 mg/Kg and sulfate ranged from 46 to 165 mg/Kg (reference *Table 1* and *Figure 4*).

The excavation consisted of approximately 5,570 ft^2 to a maximum depth of 7-feet bgs. Upon laboratory verification that hydrocarbon impacted soil had been removed from the excavation sidewalls, a one-foot clay liner was installed (in six-inch lifts) at 6 to 7- feet bgs in the excavation floor and engineer certified to be compacted to within 95% of it Proctor Density (reference Appendix III). The excavation was backfilled with approximately 1,200 yds^3 of clean soil purchased from the landowner and graded to allow natural drainage.

2.0 Site Description

The site is located approximately 7.7 miles southwest of Eunice, Lea County, New Mexico on property owned by the Millard Deck Estate.

2.1 Historical Use

The area has historically been used for livestock grazing and access to oil and gas production facilities.

2.2 Legal Description

The legal description for the site is: Unit Letter-P (SE¼ of the SE¼) of Section 21, Township 22 South, Range 36 East at latitude N 32° 22' 23.073" and longitude W 103° 15' 52.003". The site is at an elevation of approximately 3,507-feet above mean sea level.

2.3 Photographic Documentation

Photographs are included as Appendix II.

2.4 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 Plain 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 to 5 feet in most areas to as much as 20-30 feet in drift areas.

2.5 Ecological Description

The area is typical of the Upper Chihuahuan Desert Biome consisting primarily of hummocky sand hills covered with Harvard Shin Oak (*Querqus 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.

2.6 Area Groundwater

The unconfined groundwater aquifer at this site is projected to be ~160-ft bgs based on water depth data obtained from the NM State Engineers Office database for water wells

located in this portion of Lea County. Groundwater gradient in this area is generally to the east-southeast.

2.7 Area Water Wells

There are no water wells located within a 1,000 foot radius of the release area.

2.8 Area Surface Water Features

There are no bodies of surface water located within a 1,000 foot radius of the release area.

3.0 Environmental Media Characterization

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) were determined based on the NMOCD Ranking Criteria as follows:

- *Depth to Groundwater (i.e., distance from the lower most acceptable concentration to the groundwater);*
- *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).*

3.1 Area Groundwater Levels

The New Mexico Office of the State Engineer database indicates there are four water supply wells located within 8,000 feet of the release site (reference *Figure 2* and *Table 3*). The closest of these wells (CP 00485 EXP) is located approximately 1,800 feet northeast of the release site. Records from the New Mexico Office of the State Engineer indicate an average depth to water of approximately 160 feet bgs in the vicinity of the release. Drilling activities associated with delineating the vertical extent of hydrocarbon impacted soil extended to a depth of 120 feet bgs. During these activities, no groundwater or saturated soil was encountered; verifying the depth to groundwater at least exceeds 120 feet bgs.

3.2 Depth to Groundwater Calculation

The NMOCD requires the site to be ranked to determine applicable remedial thresholds for TPH, benzene and total BTEX. The depth to groundwater is defined as the vertical distance from the lowermost contaminants to the seasonal high groundwater elevation. Depth to groundwater at the release site is approximately 160-feet bgs. Soil samples collected during the advancement of soil borings at the site indicated contamination exists to depths of at least 117 feet bgs. The calculated NMOCD depth to groundwater is approximately 43 feet.

3.3 Groundwater Gradient

The groundwater gradient in the area of the release is generally to the southeast according to the USGS Groundwater Report #6 – *Geology and Groundwater Conditions in Southern Lea County, New Mexico* (Nicholson, Jr. and Clebsch, 1961).

3.4 Wellhead Protection Area

There are no water supply wells located within a 1,000-foot radius of the release site, based on information available from the New Mexico Office of the State Engineer.

3.5 Distance to Nearest Surface Water Body

There are no bodies of surface water located within a 1,000-foot radius of the release site.

3.6 Identification of Remedial Action Levels

Remedial goals for the impacted soil at this site were determined in accordance with the NMOCD Guidelines. The NMOCD depth to groundwater is calculated to be approximately 43 feet bgs.

3.6.1 Site Ranking

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 varies with the depth of the contamination 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 <1000' 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*		200-1000 horizontal feet: *10 points*
Depth to GW >100 feet: 0 points	If >1000' from water source, or; >200' from private domestic water source: *0 points*	>1000 horizontal feet: *0 points*
Groundwater Score = 0, 10 or 20 as outlined below	Wellhead Protection Score= 0	Surface Water Score= 0

GW + WP + SW = Score

Site Rank (1+2+3) = 0 + 0 + 0 = 0 points (for soil 0-59'bgs)

Site Rank (1+2+3) = 10 + 0 + 0 = 10 points (for soil 60-109'bgs)

Site Rank (1+2+3) = 20 + 0 + 0 = 20 points (for soil 110-160'bgs)

3.6.2 Remedial Action Levels

Based on the Site Ranking, the remedial action levels for the soil at this site, according to NMOCD Guidelines, are:

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

The New Mexico Water Quality Control Commission (NMWQCC) groundwater maximum contaminant levels for TPH, BTEX and chloride are as follows:

Parameter	NMWQCC Groundwater Standard
TPH	No standard
Benzene	10 micrograms per liter (µg/L)
Toluene	750 µg/L
Ethylbenzene	750 µg/L
Total Xylenes	620 µg/L
Chloride	250 micrograms per liter (mg/L)

4.0 Subsurface Soil Investigation

The vertical and lateral extents of hydrocarbon contamination at the site were determined by excavation of the release area to a depth of approximately 7 feet bgs and the advancement of a soil boring to a depth of 120 feet bgs. It was determined that the NGL had penetrated the soil to a depth of ~117 feet beneath the point of release (POR). The lateral extent of contamination was within a ~25 to 40 – foot radius of the POR. Contamination extent was determined by utilizing a PID to measure organic vapors in the soil samples collected during delineation activities. Discrete soil samples were submitted to an independent laboratory for quantification of total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene and total xylenes (BTEX constituents) and chloride to confirm field analyses. Laboratory analyses indicated high levels of contaminants to a depth of ~102 feet bgs, with levels dissipating to non-detectable at a depth of 122 feet bgs (reference *Table 2*).

Soil samples were collected from the sidewalls of the excavation on November 4 and 7, 2005. A portion of each sample was placed in a laboratory provided container and submitted for laboratory quantification of TPH, BTEX constituents, chloride and sulfates. The remaining portion of each sample was analyzed in the field for the presence of organic vapors. Field analyses indicated organic vapor concentrations ranged from 0.2 to 4.5 ppm.Laboratory analytical data of the samples collected from the excavation sidewalls indicated TPH and BTEX constituent concentrations were non-detectable at or above laboratory MDL. Reported chloride concentrations ranged from 10.7 to 34.1 mg/Kg and sulfate concentrations ranged from 35.1 to 165 mg/Kg (reference *Table 1*).

5.0 Soil Remediation

The excavated soil, ~1,450 yds^3, was transported to the Environmental Plus, Inc. (EPI) land treatment facility located south of Eunice, New Mexico. To isolate the remaining contamination, a one-foot clay liner was installed In two 6-inch lifts in the excavation floor and compacted within 95% of its' Proctor Density. Upon verification of proper compaction of the clay liner by an independent engineering firm, approximately 1,200 yds^3 of clean soil purchased from the landowner was utilized to backfill the excavation.

6.0 Groundwater Investigation

The projected depth to groundwater at this site is ~160-ft bgs. Delineation activities determined that hydrocarbon impacts extend to a depth of approximately 117 feet bgs. Based on the depth to groundwater and analytical results obtained from soil samples collected during the advancement of

the soil borings, it is believed that groundwater was not impacted due to this release. Therefore, no further groundwater investigation is required.

7.0 Closure Justification

Approximately 1,820 yds^3 of hydrocarbon-impacted soil remain at the site and is represented by an inverted cone extending from the release area to a depth of approximately 117 feet bgs. Isolation of the remaining source term was accomplished with an impermeable barrier constructed of dense compactable red clay with a minimum permeability of 1×10^{-5} cm/sec. The barrier was placed in the excavation floor at approximately 6 to 7-feet bgs and extends a minimum of three feet beyond the edges of soil impacted above the NMOCD remedial thresholds for this site and is a minimum of one-foot thick. The barrier was installed in six-inch lifts, compacted and tested by an independent engineering firm to verify that the compaction has achieved a minimum of 95% of its Proctor Density (reference *Appendix III*). After the barrier was installed and tested to be acceptable, the excavation was backfilled with clean soil purchased from the land owner and graded to allow natural drainage. The final closure activity at the site is to seed the remediation area with a seed blend preferred by the landowner.

FIGURES

Figure 1 Area Map Duke Energy Field Services Duke G28-4	Lea County, New Mexico SE 1/4 of the SE 1/4, Sec. 21, T22S, R36E N 32° 22' 23.1" W 103° 15' 52.1" Elevation: 3,507 feet amsl	DWG By: Iain Olness April 2004 0 4,500 9,000 Feet	REVISED: Sept. 2005 SHEET 1 of 1

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DEFS G-28-4
130002

Duke Energy Field Services

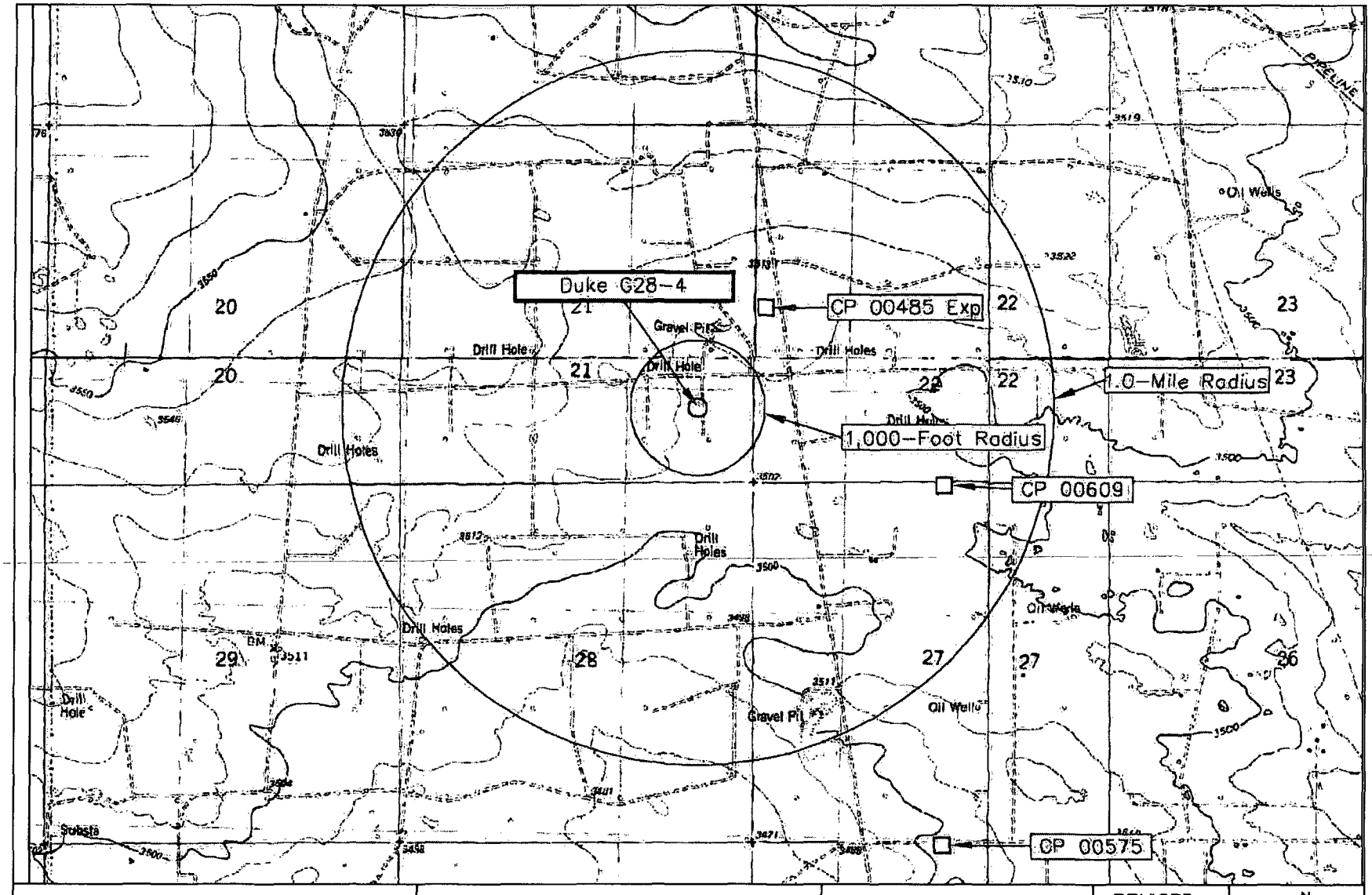

Figure 2 Site Location Map Duke Energy Field Services Duke G28-4	Lea County, New Mexico SE 1/4 of the SE 1/4, Sec. 21, T22S, R36E N 32° 22' 23.1" W 103° 15' 52.1" Elevation: 3,507 feet amsl	DWG By: Daniel Dominguez September 2005 0 2000 4000 Feet	REVISED: SHEET 1 of 1

DEFS G-28-4
130002

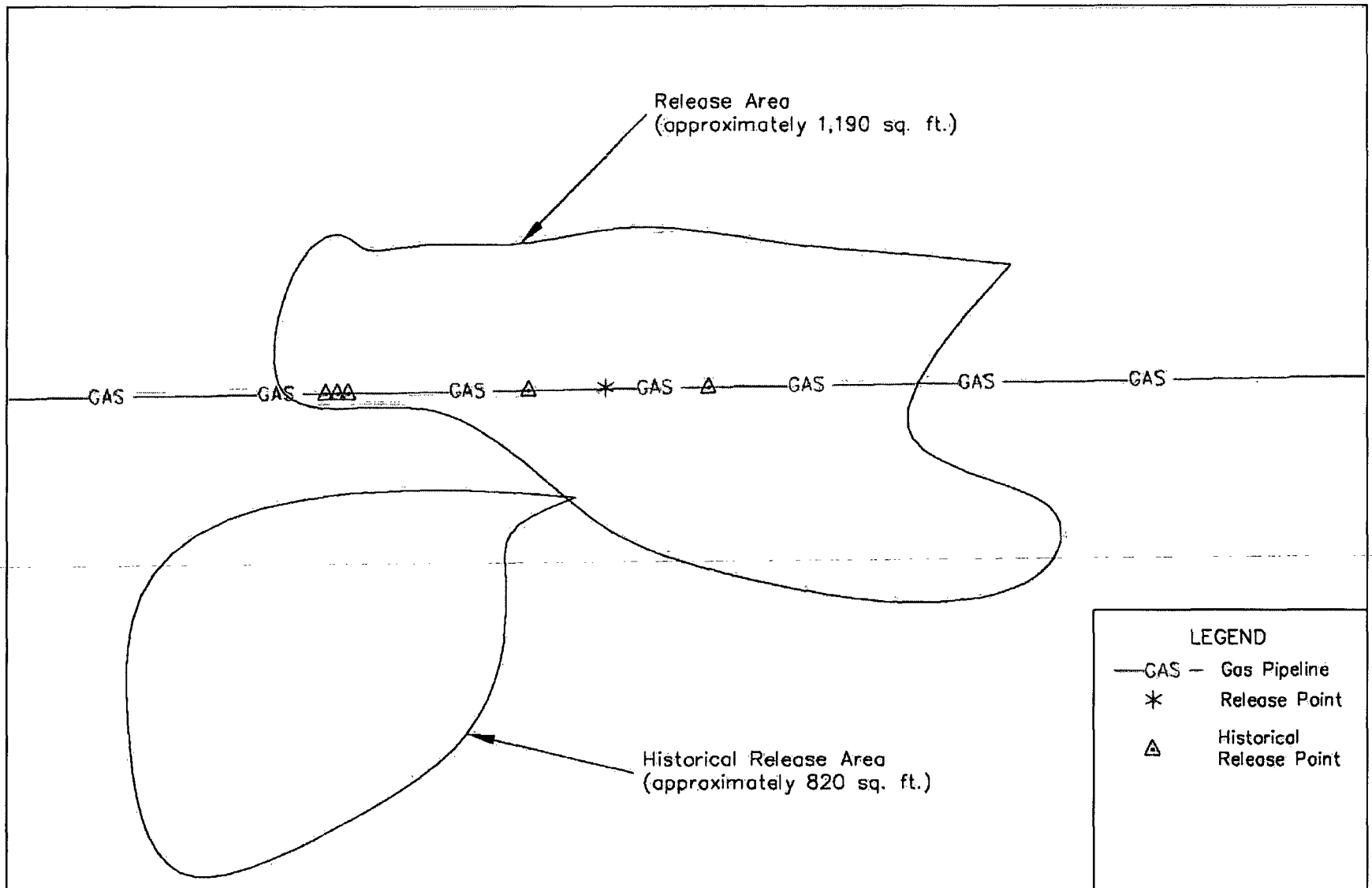

Figure 3 Site Map Duke Energy Field Services Duke G-28-4	Lea County, New Mexico SE 1/4 of the SE 1/4, Sec. 21, T22S, R36E N 32° 22' 23.1" W 103° 15' 52.1" Elevation: 3,507 feet amsl	DWG By: Iain Olness May 2004 0 10 20 Feet	REVISED: SHEET 1 of 1

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DEFS G-28-4
130002

Duke Energy Field Services

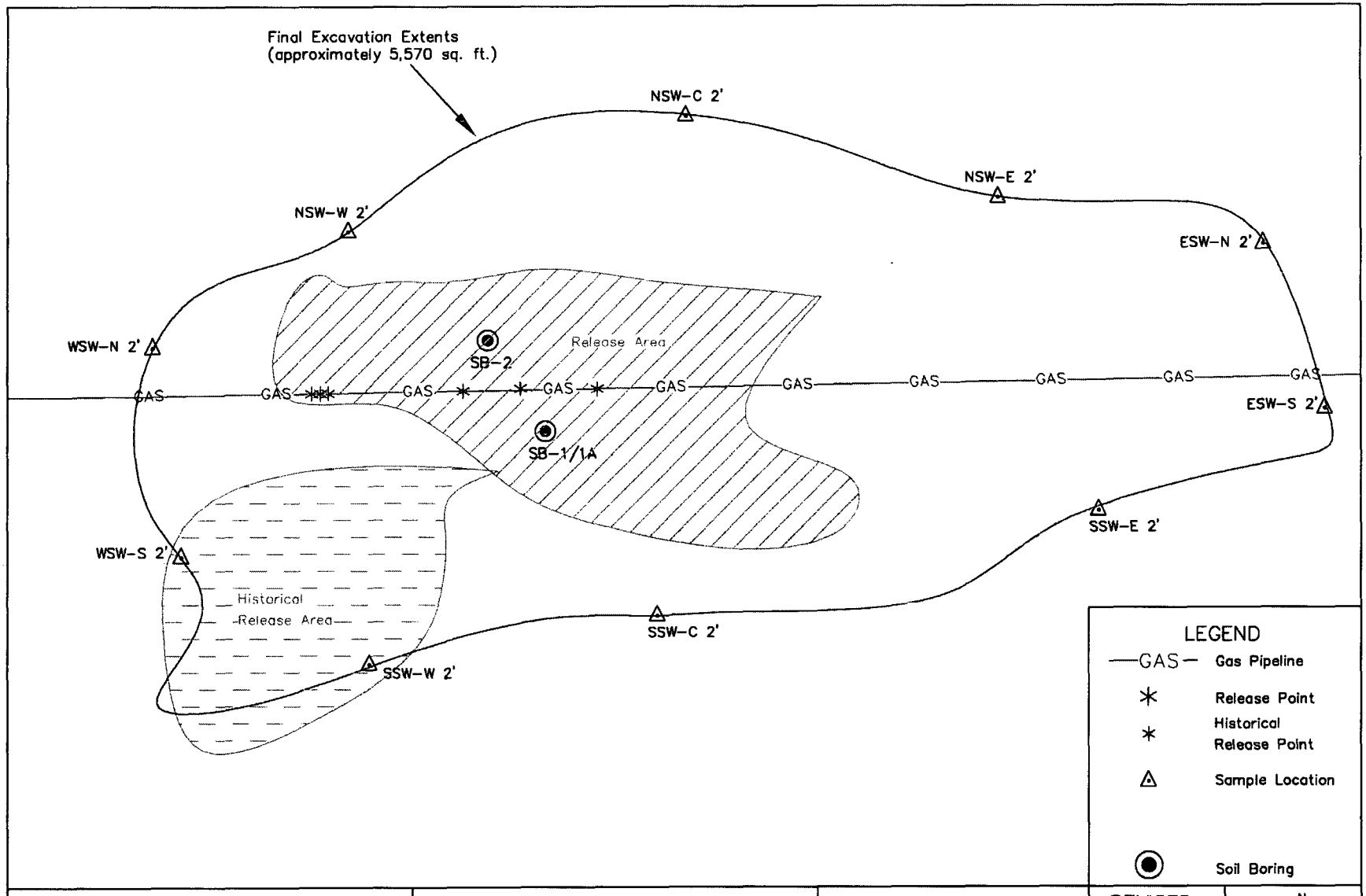


Figure 4 Soil Boring and Sample Location Map Duke Energy Field Services Duke G-28-4	Lea County, New Mexico SE 1/4 of the SE 1/4, Sec. 21, T22S, R36E N 32° 22' 23.1" W 103° 15' 52.1" Elevation: 3,507 feet amsl	DWG By: Iain Olness May 2004	REVISED:	N
		0 7.5 15 Feet	SHEET 1 of 1	

DEFS G-28-4
130002

Duke Energy Field Services

TABLES

TABLE 1

Summary of Excavation Analytical Results

Duke G-28-4 (Ref. #130002)

Sample Name	Date	Sample Type	Location	Depth	Soil Status	PID Analysis (ppm)	GRO (mg/Kg)	DRO (mg/Kg)	Total TPH (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	BTEX (µg/Kg)	Chloride (mg/Kg)	Sulfate (mg/Kg)
G28-4#1compB.H.130002	22-Apr-04	Composite	Section 1 Bottomhole	3	Excavated	819	--	--	--	--	--	--	--	--	--	--
G28-4#2compB.H.130002	22-Apr-04	Composite	Section 2 Bottomhole	3	Excavated	728	--	--	--	--	--	--	--	--	--	--
G28-4#3compB.H.130002	22-Apr-04	Composite	Section 3 Bottomhole	3	Excavated	404	--	--	--	--	--	--	--	--	--	--
G28-4#4compB.H.130002	22-Apr-04	Composite	Section 4 Bottomhole	3	Excavated	874	--	--	--	--	--	--	--	--	--	--
G28-4#5compB.H.130002	22-Apr-04	Composite	Section 5 Bottomhole	2	Excavated	1,271	--	--	--	--	--	--	--	--	--	--
G28-4NSWC130002	22-Apr-04	Composite	North Sidewall	2	In Situ	16.2	--	--	--	--	--	--	--	--	--	--
G28-4SSWC130002	22-Apr-04	Composite	South Sidewall	1.5	In Situ	737	--	--	--	--	--	--	--	--	--	--
G28-4ESWC130002	22-Apr-04	Composite	East Sidewall	2	In Situ	12.6	--	--	--	--	--	--	--	--	--	--
G28-4WSWC130002	22-Apr-04	Composite	West Sidewall	2	In Situ	61.1	--	--	--	--	--	--	--	--	--	--
SDG284042304BH1-5'	23-Apr-04	Composite	Section 1 Bottomhole	5	Excavated	571	18,200	32,500	**50,700**	**27.6**	272	159	726	**1,185**	96	--
SDG284042304BH1-10'	23-Apr-04	Composite	Section 1 Bottomhole	10	In Situ	480	23,400	35,200	**58,600**	**38.5**	321	131	656	**1,147**	64	--
SDG284042304BH2-5'	23-Apr-04	Composite	Section 2 Bottomhole	5	Excavated	449	--	--	--	--	--	--	--	--	--	--
SDG284042304BH2-10'	23-Apr-04	Composite	Section 2 Bottomhole	10	In Situ	646	--	--	--	--	--	--	--	--	--	--
SDG284042304BH3-5'	23-Apr-04	Composite	Section 3 Bottomhole	5	Excavated	706	--	--	--	--	--	--	--	--	--	--
SDG284042304BH3-10'	23-Apr-04	Composite	Section 3 Bottomhole	10	In Situ	601	--	--	--	--	--	--	--	--	--	--
SDG284042304BH4-5'	23-Apr-04	Composite	Section 4 Bottomhole	5	Excavated	682	3,050	12,000	**15,050**	0.848	10.7	10.0	48.1	**69.6**	48	--
SDG284042304BH4-10'	23-Apr-04	Composite	Section 4 Bottomhole	10	In Situ	626	3,120	11,000	**14,120**	0.422	9.04	10.7	56.4	**76.6**	112	--
SDG284042304BH5-5'	23-Apr-04	Composite	Section 5 Bottomhole	5	Excavated	27.8	<10.0	97.8	97.8	<0.005	<0.005	<0.005	<0.015	<0.030	48	--
SDG284042304BH5-10'	23-Apr-04	Composite	Section 5 Bottomhole	10	In Situ	17.3	--	--	--	--	--	--	--	--	--	--
SSW-W 2'	4-Nov-05	Grab	West Side of South Sidewall	2	In Situ	1.1	<10.0	<10.0	<10.0	<0.0250	<0.0250	<0.0250	<0.0250	<0.125	20.9	41.2
SSW-C 2'	4-Nov-05	Grab	Center of South Sidewall	2	In Situ	2.9	<10.0	<10.0	<10.0	<0.0250	<0.0250	<0.0250	<0.0250	<0.125	30.6	52.8
SSW-E 2'	4-Nov-05	Grab	East Side of South Sidewall	2	In Situ	4.5	<10.0	<10.0	<10.0	<0.0250	<0.0250	<0.0250	<0.0250	<0.125	17.8	49.1
NSW-W 2'	7-Nov-05	Grab	West Side of North Sidewall	2	In Situ	0.2	<10.0	<10.0	<10.0	<0.0250	<0.0250	<0.0250	<0.0250	<0.125	12.6	165
NSW-C 2'	7-Nov-05	Grab	Center of North Sidewall	2	In Situ	0.7	<10.0	<10.0	<10.0	<0.0250	<0.0250	<0.0250	<0.0250	<0.125	26.5	50.5
NSW-E 2'	7-Nov-05	Grab	East Side of North Sidewall	2	In Situ	0.6	<10.0	<10.0	<10.0	<0.0250	<0.0250	<0.0250	<0.0250	<0.125	10.7	35.1
WSW-N 2'	7-Nov-05	Grab	North Side of West Sidewall	2	In Situ	0.6	<10.0	<10.0	<10.0	<0.0250	<0.0250	<0.0250	<0.0250	<0.125	19.0	62.4
WSW-S 2'	7-Nov-05	Grab	South Side of West Sidewall	2	In Situ	0.7	<10.0	<10.0	<10.0	<0.0250	<0.0250	<0.0250	<0.0250	<0.125	17.8	46
ESW-N 2'	7-Nov-05	Grab	North Side of East Sidewall	2	In Situ	0.4	<10.0	<10.0	<10.0	<0.0250	<0.0250	<0.0250	<0.0250	<0.125	19.1	60.8
ESW-S 2'	7-Nov-05	Grab	South Side of East Sidewall	2	In Situ	0.3	<10.0	<10.0	<10.0	<0.0250	<0.0250	<0.0250	<0.0250	<0.125	34.1	68.3
NMOCD Remedial Thresholds									5,000	10				50	250	650

ppm = parts per million, which is equivalent to milligrams per kilogram
mg/Kg = milligrams per kilogram, which is equivalent to parts per million
-- = Not Analyzed
Results in Bold are above the remedial action levels as set by the NMOCD.

DEFS G-28-4
130002

Duke Energy Field Services

TABLE 2

Summary of Soil Boring Analytical Results

Duke G-28-4 (Ref. #130002)

Borehole	Sample ID	Interval	Soil Status	PID Analysis (ppm)	GRO (mg/Kg)	DRO (mg/Kg)	Total TPH (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	BTEX (mg/Kg)
SB-1		9-11	In Situ	2,999	--	--	--	--	--	--	--	--
		12-14	In Situ	1,791	--	--	--	--	--	--	--	--
	SDEG284-051804-SB1(17')	17-19	In Situ	1,640	7,190	13,000	**20,190**	6.57	104	69.1	308	**488**
		22-24	In Situ	1,030	--	--	--	--	--	--	--	--
		27-29	In Situ	1,448	--	--	--	--	--	--	--	--
	SDEG284-051804-SB1(32')	32-34	In Situ	1,117	4,653	6,060	**10,713**	**16.4**	179	87	417	**700**
		37-39	In Situ	998	--	--	--	--	--	--	--	--
		42-44	In Situ	960	--	--	--	--	--	--	--	--
	SDEG284-051804-SB1(47')	47-49	In Situ	842	3,240	5,750	**8,990**	1.95	45.6	32.3	154	**234**
		52-54	In Situ	469	--	--	--	--	--	--	--	--
		57-59	In Situ	342	--	--	--	--	--	--	--	--
	SDEG284-051804-SB1(62')	62-64	In Situ	350	6,530	11,700	**18,230**	**10.1**	172	78.6	420	**681**
		67-69	In Situ	--	--	--	--	--	--	--	--	--
		72-74	In Situ	--	--	--	--	--	--	--	--	--
SB-2	SB-2 (60')	65-67	In Situ	5.4	<10.0	65	65	<0.025	<0.025	<0.025	<0.050	<0.125
		70-72	In Situ	5.0	--	--	--	--	--	--	--	--
	SB-2 (70')	75-78	In Situ	9.2	5.98[A]	26.5	26.5	<0.025	<0.025	<0.025	<0.050	<0.125
SB-1A		35-37	In Situ	1,024	--	--	--	--	--	--	--	--
	SB-1A (62')	60-62	In Situ	686	13,200	12,200	**25,400**	**34.9**	110	35.7	150	**331**
		65-67	In Situ	586	--	--	--	--	--	--	--	--
		70-72	In Situ	760	--	--	--	--	--	--	--	--
		75-77	In Situ	715	--	--	--	--	--	--	--	--
		80-82	In Situ	508	--	--	--	--	--	--	--	--
	SB-1A (87')	85-87	In Situ	965	10,800	10,000	**20,800**	**22.8**	103	38.1	167	**331**
		90-92	In Situ	694	--	--	--	--	--	--	--	--
		95-97	In Situ	712	--	--	--	--	--	--	--	--
	SB-1A (102')	100-102	In Situ	659	7,150	8,550	**15,700**	**12.9**	66.7	28.0	125	**233**
		105-107	In Situ	649	--	--	--	--	--	--	--	--
	SB-1A (112')	110-112	In Situ	64.8	33.6	188	**222**	<0.250	0.0353	0.0549	0.308	0.398
	SB-1A (117')	115-117	In Situ	56.1	95.3	175	**270**	<0.0250	0.188	0.236	1.37	1.79
	SB-1A (122')	120-122	In Situ	10.1	<10.0	<10.0	<10.0	<0.0250	<0.0250	<0.0250	<0.050	<0.125
					100		5,000	10				50

ppm = parts per million, which is equivalent to milligrams per kilogram

mg/Kg = miiligrams per kilogram, which is equivalent to parts per million

- - = Not Sampled

Results in **Bold** are above the remedial action levels as set by the NMOCD.

[A]Detected, but below the Reporting Limit; therefore, result is an estiamted concentration (CLP J-Flag)

TABLE 3

WELL INFORMATION REPORT*

Duke Energy Field Services G28-4 - Ref #130002

Well Number	Diversion[A]	Owner	Use	Source	Twsp	Rng	Sec q q q	Latitude	Longitude	Date Measured	Surface Elevation[B]	Depth to Water (ft bgs)
CP 00070 2	3	MCVAY DRILLING CO.	STK	Shallow	22S	36E	16 1 2 2	N32° 23' 42.95"	W103° 16' 26.28"	05-Oct-72		170
CP 00485 EXP	0	EL PASO NATURAL GAS COMPANY	NON		22S	36E	22 1 3	N32° 22' 37.79"	W103° 15' 40.09"		3,517	
CP 00609	3	U R CATTLE COMPANY	DOM		22S	36E	22 4 3 1	N32° 22' 11.77"	W103° 15' 9.23"	28-Jun-80	3,507	22
CP 00575	3	MILLARD DECK	STK	Shallow	22S	36E	27 4 3	N32° 21' 19.49"	W103° 15' 9.39"	13-Nov-78	3,507	160

* = 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
STK = Livestock Watering
NON = Non-Profit Organizational Use
DOM = 72-12-1 Domestic One Household
(quarters are 1=NW, 2=NE, 3=SW, 4=SE)
(quarters are biggest to smallest - X Y are in Feet - UTM are in Meters)

APPENDICES

APPENDIX A

LABORATORY ANALYTICAL REPORTS

AND CHAIN-OF-CUSTODY FORMS

CARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

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

Receiving Date: 04/26/04
Reporting Date: 04/28/04
Project Owner: DUKE ENERGY
Project Name: G 28-4
Project Location: NOT GIVEN

Sampling Date: 04/23/04
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: GP
Analyzed By: BC/GP

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/Kg)	DRO (>C_{10}-C_{28}) (mg/Kg)	Cl* (mg/Kg)
ANALYSIS DATE		04/26/04	04/26/04	04/27/04
H8642-1	SDG284042304BH1-5'	18200	32500	96
H8642-2	SDG284042304BH1-10'	23400	35200	64
H8642-3	SDG284042304BH4-5'	3050	12000	48
H8642-4	SDG284042304BH4-10'	3120	11000	112
H8642-5	SDG284042304BH5-5'	<10.0	97.8	48
Quality Control		790	762	1010
True Value QC		1000	1000	1000
% Recovery		98.8	95.3	101
Relative Percent Difference		2.5	6.3	3.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl^-: Std. Methods 4500-Cl^-B
*Analyses performed on 1:4 w:v aqueous extracts.

Burgett A Cobb
Chemist

4/28/04
Date

H8642A.XLS

Cardinal Laboratories Inc.

2111 Beechwood, Abilene, TX 79603
915-673-7001 Fax 915-673-7020

101 East Marland, Hobbs, NM 88240
505-393-2326 Fax 505-393-2476

Company Name	Duke Energy
Project Manager	Paul Mulkey
Address	
City, State, Zip	
Phone#/Fax#	
Project #/Owner	130002
Project Name	G 28-4
Project Location	
Sampler Name	Morris Burkett

Bill To

Environmental Plus Inc.

Analysis Request

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	WASTEWATER	SOIL	CUDE OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE/COOL	OTHER	SAMPLING: DATE	TIME	BTEX 8021B	TPH8015M	Cl
H2042-1	SDG284042304BH1-5'	C	1			X					X		4/23	9:00	X	X	X
-2	SDG284042304BH1-10'	C	1			X					X		4/23	9:05	X	X	X
-3	SDG284042304BH4-5'	C	1			X					X		4/23	9:30	X	X	X
-4	SDG284042304BH4-10'	C	1			X					X		4/23	9:35	X	X	X
-5	SDG284042304BH5-5'	C	1			X					X		4/23	9:40	X	X	X

Sampler Relinquished: Morris Burkett	Date 4/24/04 Time 1:50 pm	Received By: Cindy Miller	Fax Results To Iain Olness 505-394-2601
Relinquished by: Cindy Miller	Date 4/24/04 Time 3:05 pm	Received By: (lab staff)	Remarks
Delivered by Sampler	Sample Cool & Intact (Yes) (No)	Checked By:	

CARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

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

Receiving Date: 05/19/04
Reporting Date: 05/21/04
Project Owner: DUKE ENERGY FIELD SERVICES
Project Name: G28-4
Project Location: 130002

Sampling Date: 05/18/04
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: BC

LAB NO. SAMPLE ID	GRO (C_6-C_{10}) (mg/Kg)	DRO (>C_{10}-C_{28}) (mg/Kg)	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE:	05/19/04	05/19/04	05/20/04	05/20/04	05/20/04	05/20/04
H8711-1 SDEG284-051804-SB1(17')	7190	13000	6.57	104	69.1	308
H8711-2 SDEG284-051804-SB1(32')	4653	6060	16.4	179	87.1	417
H8711-3 SDEG284-051804-SB1(47')	3240	5750	1.95	45.6	32.3	154
H8711-4 SDEG284-051804-SB1(62')	6530	11700	10.1	172	78.6	420
Quality Control	826	753	0.098	0.091	0.086	0.259
True Value QC	800	800	0.100	0.100	0.100	0.300
% Recovery	103	94.1	98.4	90.9	86.3	86.3
Relative Percent Difference	2.5	2.8	3.8	5.1	5.9	7.9

METHODS: TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8260.

Burgess J.A. Cooke, Ph. D.

5/21/04
Date

H8711.XLS

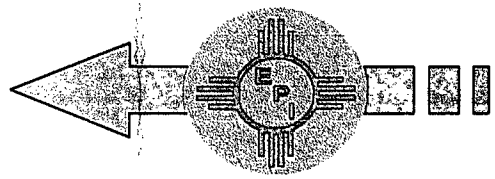
Cardinal Laboratories Inc.

101 East Marland, Hobbs, NM 88240
505-393-2326 Fax 505-393-2476

2111 Beechwood, Abilene, TX 79603
915-673-7001 Fax 915-673-7020

Company Name	Environmental Plus, Inc.
EPI Project Manager	Iain olness
Billing 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	G28-4
Project Reference	130002
EPI Sampler Name	Manuel Gonzales

Bill To



ANALYSIS REQUEST

LAB I.D.		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 >>>
H8711-1	1	SDEG284-051804-SB1(17')	G	1			X					X		18-May	10:00	X	X					
-2	2	SDEG284-051804-SB1(32')	G	1			X					X		18-May	12:00	X	X					
-3	3	SDEG284-051804-SB1(47')	G	1			X					X		18-May	13:45	X	X					
-4	4	SDEG284-051804-SB1(62')	G	1			X					X		18-May	17:15	X	X					
	5																				
	6																				
	7																				
	8																				
	9																				
	10																				

Sampler Relinquished: Manuel Gonzales	Date	Received By:
Relinquished by:	Time Date 5/19/04 Time 3:35	Received By: (lab staff)
Delivered by:	Sample Cool & Intact Yes / No	Checked By:

Fax Results To Iain Olness @ (505) 394-2601

REMARKS:

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Iain Olness

Environmental Plus, Incorporated

2100 Avenue 6

Eunice, NM 88231

Project: DEFS G28-4 (130002)

Project Number: 130002

Location: UL-P Section 21 T22S R36E

Lab Order Number: 4F17008

Report Date: 06/21/04

Environmental Plus, Incorporated	Project: DEFS G28-4 (130002)	Fax: 505-394-2601
2100 Avenue 6	Project Number: 130002	**Reported:**
Eunice NM, 88231	Project Manager: Iain Olness	06/21/04 16:59

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-2 (60')	4F17008-01	Soil	06/16/04 15:15	06/17/04 12:40
SB-2 (70')	4F17008-02	Soil	06/16/04 15:42	06/17/04 12:40

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
SB-2 (60') (4F17008-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EF42112	06/19/04	06/21/04	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		*88.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.1 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EF41705	06/17/04	06/18/04	EPA 8015M	
Diesel Range Organics >C12-C35	**65.0**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**65.0**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*102 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*94.6 %*	*70-130*		"	"	"	"	
SB-2 (70') (4F17008-02) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EF42112	06/19/04	06/20/04	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		*90.7 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*88.5 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**J [5.98]**	10.0	mg/kg dry	1	EF41705	06/17/04	06/18/04	EPA 8015M	J
Diesel Range Organics >C12-C35	**26.5**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**26.5**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*111 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*97.4 %*	*70-130*		"	"	"	"	

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-2 (60') (4F17008-01) Soil									
% Solids	**98.0**		%	1	EF41806	06/17/04	06/17/04	% calculation	
SB-2 (70') (4F17008-02) Soil									
% Solids	**98.0**		%	1	EF41806	06/17/04	06/17/04	% calculation	

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

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF41705 - Solvent Extraction (GC)										
Blank (EF41705-BLK1)				Prepared & Analyzed: 06/17/04						
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	*35.7*		*"*	*50.0*		*71.4*	*70-130*			
Blank (EF41705-BLK2)				Prepared: 06/17/04 Analyzed: 06/18/04						
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	*40.4*		*mg/kg*	*50.0*		*80.8*	*70-130*			
Surrogate: 1-Chlorooctadecane	*35.1*		*"*	*50.0*		*70.2*	*70-130*			
LCS (EF41705-BS1)				Prepared & Analyzed: 06/17/04						
Gasoline Range Organics C6-C12	480	10.0	mg/kg wet	500		96.0	75-125			
Diesel Range Organics >C12-C35	536	10.0	"	500		107	75-125			
Total Hydrocarbon C6-C35	1020	10.0	"	1000		102	75-125			
Surrogate: 1-Chlorooctane	*57.0*		*mg/kg*	*50.0*		*114*	*70-130*			
Surrogate: 1-Chlorooctadecane	*38.2*		*"*	*50.0*		*76.4*	*70-130*			
LCS (EF41705-BS2)				Prepared: 06/17/04 Analyzed: 06/18/04						
Gasoline Range Organics C6-C12	461	10.0	mg/kg wet	500		92.2	75-125			
Diesel Range Organics >C12-C35	536	10.0	"	500		107	75-125			
Total Hydrocarbon C6-C35	997	10.0	"	1000		99.7	75-125			
Surrogate: 1-Chlorooctane	*55.5*		*mg/kg*	*50.0*		*111*	*70-130*			
Surrogate: 1-Chlorooctadecane	*36.8*		*"*	*50.0*		*73.6*	*70-130*			
Calibration Check (EF41705-CCV1)				Prepared & Analyzed: 06/17/04						
Gasoline Range Organics C6-C12	523		mg/kg	500		105	80-120			
Diesel Range Organics >C12-C35	562		"	500		112	80-120			
Total Hydrocarbon C6-C35	1090		"	1000		109	80-120			
Surrogate: 1-Chlorooctane	*53.3*		*"*	*50.0*		*107*	*70-130*			
Surrogate: 1-Chlorooctadecane	*42.9*		*"*	*50.0*		*85.8*	*70-130*			

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF41705 - Solvent Extraction (GC)										
Calibration Check (EF41705-CCV2)				Prepared: 06/17/04 Analyzed: 06/18/04						
Gasoline Range Organics C6-C12	518		mg/kg	500		104	80-120			
Diesel Range Organics >C12-C35	570		"	500		114	80-120			
Total Hydrocarbon C6-C35	1090		"	1000		109	80-120			
Surrogate: 1-Chlorooctane	*54.5*		*"*	*50.0*		*109*	*70-130*			
Surrogate: 1-Chlorooctadecane	*46.7*		*"*	*50.0*		*93.4*	*70-130*			
Matrix Spike (EF41705-MS1)	**Source: 4F17003-01**			Prepared & Analyzed: 06/17/04						
Gasoline Range Organics C6-C12	595	10.0	mg/kg dry	538	ND	111	75-125			
Diesel Range Organics >C12-C35	657	10.0	"	538	ND	122	75-125			
Total Hydrocarbon C6-C35	1250	10.0	"	1080	ND	116	75-125			
Surrogate: 1-Chlorooctane	*62.9*		*mg/kg*	*50.0*		*126*	*70-130*			
Surrogate: 1-Chlorooctadecane	*53.2*		*"*	*50.0*		*106*	*70-130*			
Matrix Spike (EF41705-MS2)	**Source: 4F17007-02**			Prepared: 06/17/04 Analyzed: 06/18/04						
Gasoline Range Organics C6-C12	681	10.0	mg/kg dry	633	ND	108	75-125			
Diesel Range Organics >C12-C35	759	10.0	"	633	ND	120	75-125			
Total Hydrocarbon C6-C35	1440	10.0	"	1270	ND	113	75-125			
Surrogate: 1-Chlorooctane	*58.3*		*mg/kg*	*50.0*		*117*	*70-130*			
Surrogate: 1-Chlorooctadecane	*49.3*		*"*	*50.0*		*98.6*	*70-130*			
Matrix Spike Dup (EF41705-MSD1)	**Source: 4F17003-01**			Prepared & Analyzed: 06/17/04						
Gasoline Range Organics C6-C12	599	10.0	mg/kg dry	538	ND	111	75-125	0.670	20	
Diesel Range Organics >C12-C35	645	10.0	"	538	ND	120	75-125	1.84	20	
Total Hydrocarbon C6-C35	1240	10.0	"	1080	ND	115	75-125	0.803	20	
Surrogate: 1-Chlorooctane	*63.0*		*mg/kg*	*50.0*		*126*	*70-130*			
Surrogate: 1-Chlorooctadecane	*52.7*		*"*	*50.0*		*105*	*70-130*			
Matrix Spike Dup (EF41705-MSD2)	**Source: 4F17007-02**			Prepared: 06/17/04 Analyzed: 06/18/04						
Gasoline Range Organics C6-C12	677	10.0	mg/kg dry	633	ND	107	75-125	0.589	20	
Diesel Range Organics >C12-C35	777	10.0	"	633	ND	123	75-125	2.34	20	
Total Hydrocarbon C6-C35	1450	10.0	"	1270	ND	114	75-125	0.692	20	
Surrogate: 1-Chlorooctane	*60.5*		*mg/kg*	*50.0*		*121*	*70-130*			
Surrogate: 1-Chlorooctadecane	*50.7*		*"*	*50.0*		*101*	*70-130*			

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF42112 - EPA 5030C (GC)										
Blank (EF42112-BLK1)				Prepared & Analyzed: 06/19/04						
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	*85.6*		*ug/kg*	*100*		*85.6*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*92.1*		"	*100*		*92.1*	*80-120*			
LCS (EF42112-BS1)				Prepared & Analyzed: 06/19/04						
Benzene	96.1		ug/kg	100		96.1	80-120			
Toluene	92.5		"	100		92.5	80-120			
Ethylbenzene	89.0		"	100		89.0	80-120			
Xylene (p/m)	180		"	200		90.0	80-120			
Xylene (o)	93.8		"	100		93.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	*86.4*		"	*100*		*86.4*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*101*		"	*100*		*101*	*80-120*			
Calibration Check (EF42112-CCV1)				Prepared: 06/19/04 Analyzed: 06/21/04						
Benzene	90.9		ug/kg	100		90.9	80-120			
Toluene	88.6		"	100		88.6	80-120			
Ethylbenzene	83.7		"	100		83.7	80-120			
Xylene (p/m)	168		"	200		84.0	80-120			
Xylene (o)	88.0		"	100		88.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	*87.9*		"	*100*		*87.9*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*87.2*		"	*100*		*87.2*	*80-120*			
Matrix Spike (EF42112-MS1)	**Source: 4F18007-23**			Prepared: 06/19/04 Analyzed: 06/21/04						
Benzene	2280		ug/kg	2500	36.8	89.7	80-120			
Toluene	2190		"	2500	36.5	86.1	80-120			
Ethylbenzene	2160		"	2500	32.5	85.1	80-120			
Xylene (p/m)	4390		"	5000	123	85.3	80-120			
Xylene (o)	2260		"	2500	21.7	89.5	80-120			
Surrogate: a,a,a-Trifluorotoluene	*84.3*		"	*100*		*84.3*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*97.0*		"	*100*		*97.0*	*80-120*			

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF42112 - EPA 5030C (GC)										
Matrix Spike Dup (EF42112-MSD1)	**Source: 4F18007-23**			Prepared: 06/19/04 Analyzed: 06/21/04						
Benzene	2380		ug/kg	2500	36.8	93.7	80-120	4.36	20	
Toluene	2310		"	2500	36.5	90.9	80-120	5.42	20	
Ethylbenzene	2290		"	2500	32.5	90.3	80-120	5.93	20	
Xylene (p/m)	4650		"	5000	123	90.5	80-120	5.92	20	
Xylene (o)	2420		"	2500	21.7	95.9	80-120	6.90	20	
Surrogate: a,a,a-Trifluorotoluene	*89.1*		"	*100*		*89.1*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*98.6*		"	*100*		*98.6*	*80-120*			

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF41806 - General Preparation (Prep)										
Blank (EF41806-BLK1)				Prepared & Analyzed: 06/17/04						
% Solids	100		%							
Duplicate (EF41806-DUP1)		**Source: 4F17003-01**		Prepared & Analyzed: 06/17/04						
% Solids	93.0		%		93.0			0.00	20	

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Raland K Tuttle Date: 6-21-04

Raland K. Tuttle, QA Officer
Celey D. Keene, Lab Director, Org. Tech Director
Jeanne Mc Murrey, Inorg. Tech Director
James L. Hawkins, Chemist/Geologist
Sara Molina, Chemist
Sandra Biezugbe, Lab Tech.

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

Project Manager: Iain Olness
Company Name: Environmental Plus, Inc.
Company Address: P.O. Box 1558
City/State/Zip: Eunice, NM 88231
Telephone No: (505) 394-3481
Sampler Signature: Iain Olness for Eddie Harper EPI - Environmental Consultant

Project Name: DEFS G28-4 (130002)
Project #: 130002
Project Loc: UL-P Section 21 T22S R36E
PO#:

LAB ID 4F17008	SAMPLE IDENTIFICATION	Date Sampled	Time Sampled	No. of Containers	Preservative: ICE	HNO	HCl	NaOH	HSO	None	Other (Specify)	Type: Water	Sludge	Soil	Other (Specify)	Analyze For: TCLP/TOTAL TDS/Cl/SAR/EC	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals *	Volatiles *	Semivolatiles *	BTEX 8021B/5030	Reactivity	Corrosivity	Ignitiability	Chlorides	Sulfates		RUSH TAT	Standard TAT
-01	SB-2 (60')	16-Jun	15:15	1	X									X					X				X								X
-02	SB-2 (70')	16-Jun	15:42	1	X									X					X				X								X

Special Instructions
FAX RESULTS TO Iain Olness ASAP [505-394-2601]
Bill Env. Plus.

Sample Containers Intact? Y N
Temperature Upon Request
Laboratory Comments:
Rec 4°C.

Relinquished:	Date	Time	Received by:	Date	Time
Iain Olness	6/17/04	0930	CM Mobbs		
Relinquished:	Date	Time	Received by:	Date	Time
CM Mobbs			Calvin Klein	6-17-04	1240

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

Client: Env. Plus, Inc.

Date/Time: 06-17-04 @ 1315

Order #: 4F17008

Initials: JMM

Sample Receipt Checklist

Temperature of container/cooler?	(Yes)	No	4.0 C
Shipping container/cooler in good condition?	Yes	No	N/A
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:

_____

_____

_____

_____

_____

_____

_____

_____

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-28-4 (ref. #130002)

Project Number: None Given

Location: UL p, Sec 21, T22S, R36E

Lab Order Number: 5B23008

Report Date: 02/25/05

Environmental Plus, Incorporated
P.O. Box 1558
Eunice NM, 88231

Project: Duke Energy- G-28-4 (ref. #130002)
Project Number: None Given
Project Manager: Iain Olness

Fax: 505-394-2601

Reported:
02/25/05 11:08

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-1A (62')	5B23008-01	Soil	02/21/05 09:50	02/23/05 13:25
SB-1A (87')	5B23008-02	Soil	02/21/05 11:30	02/23/05 13:25
SB-1A (102')	5B23008-03	Soil	02/21/05 13:35	02/23/05 13:25
SB-1A (112')	5B23008-04	Soil	02/21/05 14:20	02/23/05 13:25
SB-1A (117')	5B23008-05	Soil	02/21/05 14:50	02/23/05 13:25
SB-1A (122)	5B23008-06	Soil	02/21/05 15:20	02/23/05 13:25

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-1A (62') (5B23008-01) Soil									
Benzene	**34.9**	0.100	mg/kg dry	100	EB52408	02/23/05	02/23/05	EPA 8021B	
Toluene	**110**	0.100	"	"	"	"	"	"	
Ethylbenzene	**35.7**	0.100	"	"	"	"	"	"	
Xylene (p/m)	**119**	0.100	"	"	"	"	"	"	
Xylene (o)	**30.6**	0.100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*929 %*	*80-120*		"	"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*90.4 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**13200**	50.0	mg/kg dry	5	EB52307	02/23/05	02/24/05	EPA 8015M	
Diesel Range Organics >C12-C35	**12200**	50.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**25400**	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*59.4 %*	*70-130*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*18.7 %*	*70-130*		"	"	"	"	*S-06*
SB-1A (87') (5B23008-02) Soil									
Benzene	**22.8**	0.100	mg/kg dry	100	EB52408	02/23/05	02/23/05	EPA 8021B	
Toluene	**103**	0.100	"	"	"	"	"	"	
Ethylbenzene	**38.1**	0.100	"	"	"	"	"	"	
Xylene (p/m)	**129**	0.100	"	"	"	"	"	"	
Xylene (o)	**37.9**	0.100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*815 %*	*80-120*		"	"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*90.9 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**10800**	50.0	mg/kg dry	5	EB52307	02/23/05	02/24/05	EPA 8015M	
Diesel Range Organics >C12-C35	**10000**	50.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**20800**	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*47.2 %*	*70-130*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*16.3 %*	*70-130*		"	"	"	"	*S-06*
SB-1A (102') (5B23008-03) Soil									
Benzene	**12.9**	0.100	mg/kg dry	100	EB52408	02/23/05	02/23/05	EPA 8021B	
Toluene	**66.7**	0.100	"	"	"	"	"	"	
Ethylbenzene	**28.0**	0.100	"	"	"	"	"	"	
Xylene (p/m)	**97.7**	0.100	"	"	"	"	"	"	
Xylene (o)	**27.5**	0.100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*591 %*	*80-120*		"	"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*119 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**7150**	50.0	mg/kg dry	5	EB52307	02/23/05	02/24/05	EPA 8015M	
Diesel Range Organics >C12-C35	**8550**	50.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**15700**	50.0	"	"	"	"	"	"	

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-1A (122) (5B23008-06) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EB52408	02/23/05	02/23/05	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		*80.4 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.9 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EB52307	02/23/05	02/24/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*89.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*75.4 %*	*70-130*		"	"	"	"	

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-1A (62') (5B23008-01) Soil									
Chloride	**37.9**	5.00	mg/kg	10	EB52503	02/24/05	02/24/05	EPA 300.0	
% Moisture	**5.1**	0.1	%	1	EB52401	02/23/05	02/24/05	% calculation	
SB-1A (87') (5B23008-02) Soil									
Chloride	**22.4**	5.00	mg/kg	10	EB52503	02/24/05	02/24/05	EPA 300.0	
% Moisture	**4.2**	0.1	%	1	EB52401	02/23/05	02/24/05	% calculation	
SB-1A (102') (5B23008-03) Soil									
Chloride	**15.1**	5.00	mg/kg	10	EB52503	02/24/05	02/24/05	EPA 300.0	
% Moisture	**2.5**	0.1	%	1	EB52401	02/23/05	02/24/05	% calculation	
SB-1A (112') (5B23008-04) Soil									
Chloride	**15.0**	5.00	mg/kg	10	EB52503	02/24/05	02/24/05	EPA 300.0	
% Moisture	**1.9**	0.1	%	1	EB52401	02/23/05	02/24/05	% calculation	
SB-1A (117') (5B23008-05) Soil									
Chloride	**18.5**	5.00	mg/kg	10	EB52503	02/24/05	02/24/05	EPA 300.0	
% Moisture	**1.5**	0.1	%	1	EB52401	02/23/05	02/24/05	% calculation	
SB-1A (122) (5B23008-06) Soil									
Chloride	**15.8**	5.00	mg/kg	10	EB52503	02/24/05	02/24/05	EPA 300.0	
% Moisture	**1.6**	0.1	%	1	EB52401	02/23/05	02/24/05	% calculation	

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 EB52307 - Solvent Extraction (GC)										
Blank (EB52307-BLK1)				Prepared: 02/23/05 Analyzed: 02/24/05						
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	*44.9*		*mg/kg*	*50.0*		*89.8*	*70-130*			
Surrogate: 1-Chlorooctadecane	*41.1*		*"*	*50.0*		*82.2*	*70-130*			
LCS (EB52307-BS1)				Prepared: 02/23/05 Analyzed: 02/24/05						
Gasoline Range Organics C6-C12	453	10.0	mg/kg wet	500		90.6	75-125			
Diesel Range Organics >C12-C35	460	10.0	"	500		92.0	75-125			
Total Hydrocarbon C6-C35	913	10.0	"	1000		91.3	75-125			
Surrogate: 1-Chlorooctane	*46.7*		*mg/kg*	*50.0*		*93.4*	*70-130*			
Surrogate: 1-Chlorooctadecane	*36.7*		*"*	*50.0*		*73.4*	*70-130*			
Calibration Check (EB52307-CCV1)				Prepared: 02/23/05 Analyzed: 02/24/05						
Gasoline Range Organics C6-C12	509		mg/kg	500		102	80-120			
Diesel Range Organics >C12-C35	565		"	500		113	80-120			
Total Hydrocarbon C6-C35	1070		"	1000		107	80-120			
Surrogate: 1-Chlorooctane	*48.6*		*"*	*50.0*		*97.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*47.8*		*"*	*50.0*		*95.6*	*70-130*			
Matrix Spike (EB52307-MS1)	**Source: 5B23007-03**			Prepared: 02/23/05 Analyzed: 02/24/05						
Gasoline Range Organics C6-C12	530	10.0	mg/kg dry	602	ND	88.0	75-125			
Diesel Range Organics >C12-C35	579	10.0	"	602	ND	96.2	75-125			
Total Hydrocarbon C6-C35	1110	10.0	"	1200	ND	92.5	75-125			
Surrogate: 1-Chlorooctane	*37.3*		*mg/kg*	*50.0*		*74.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*39.3*		*"*	*50.0*		*78.6*	*70-130*			
Matrix Spike Dup (EB52307-MSD1)	**Source: 5B23007-03**			Prepared: 02/23/05 Analyzed: 02/24/05						
Gasoline Range Organics C6-C12	516	10.0	mg/kg dry	602	ND	85.7	75-125	2.68	20	
Diesel Range Organics >C12-C35	600	10.0	"	602	ND	99.7	75-125	3.56	20	
Total Hydrocarbon C6-C35	1120	10.0	"	1200	ND	93.3	75-125	0.897	20	
Surrogate: 1-Chlorooctane	*41.4*		*mg/kg*	*50.0*		*82.8*	*70-130*			
Surrogate: 1-Chlorooctadecane	*38.0*		*"*	*50.0*		*76.0*	*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 EB52408 - EPA 5030C (GC)										
Blank (EB52408-BLK1)				Prepared & Analyzed: 02/23/05						
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	*84.0*		*ug/kg*	*100*		*84.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*97.1*		*"*	*100*		*97.1*	*80-120*			
LCS (EB52408-BS1)				Prepared & Analyzed: 02/23/05						
Benzene	91.7		ug/kg	100		91.7	80-120			
Toluene	96.7		"	100		96.7	80-120			
Ethylbenzene	105		"	100		105	80-120			
Xylene (p/m)	237		"	200		118	80-120			
Xylene (o)	119		"	100		119	80-120			
Surrogate: a,a,a-Trifluorotoluene	*89.5*		*"*	*100*		*89.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*104*		*"*	*100*		*104*	*80-120*			
Calibration Check (EB52408-CCV1)				Prepared: 02/23/05 Analyzed: 02/24/05						
Benzene	95.1		ug/kg	100		95.1	80-120			
Toluene	98.1		"	100		98.1	80-120			
Ethylbenzene	100		"	100		100	80-120			
Xylene (p/m)	229		"	200		114	80-120			
Xylene (o)	117		"	100		117	80-120			
Surrogate: a,a,a-Trifluorotoluene	*90.3*		*"*	*100*		*90.3*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*99.0*		*"*	*100*		*99.0*	*80-120*			
Matrix Spike (EB52408-MS1)		**Source: 5B23009-03**		Prepared & Analyzed: 02/23/05						
Benzene	101		ug/kg	100	ND	101	80-120			
Toluene	104		"	100	ND	104	80-120			
Ethylbenzene	104		"	100	ND	104	80-120			
Xylene (p/m)	236		"	200	ND	118	80-120			
Xylene (o)	116		"	100	ND	116	80-120			
Surrogate: a,a,a-Trifluorotoluene	*93.7*		*"*	*100*		*93.7*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*113*		*"*	*100*		*113*	*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 EB52408 - EPA 5030C (GC)										
Matrix Spike Dup (EB52408-MSD1)	**Source: 5B23009-03**		Prepared & Analyzed: 02/23/05							
Benzene	90.4		ug/kg	100	ND	90.4	80-120	11.1	20	
Toluene	94.5		"	100	ND	94.5	80-120	9.57	20	
Ethylbenzene	102		"	100	ND	102	80-120	1.94	20	
Xylene (p/m)	235		"	200	ND	118	80-120	0.00	20	
Xylene (o)	117		"	100	ND	117	80-120	0.858	20	
Surrogate: a,a,a-Trifluorotoluene	*82.4*		"	*100*		*82.4*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*114*		"	*100*		*114*	*80-120*			

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EB52401 - General Preparation (Prep)										
Blank (EB52401-BLK1)				Prepared: 02/23/05 Analyzed: 02/24/05						
% Moisture	ND	0.1	%							
Duplicate (EB52401-DUP1)		**Source: 5B23001-01**		Prepared: 02/23/05 Analyzed: 02/24/05						
% Moisture	1.0	0.1	%		1.0			0.00	20	
Batch EB52503 - Water Extraction										
Blank (EB52503-BLK1)				Prepared & Analyzed: 02/24/05						
Chloride	ND	0.500	mg/kg							
Blank (EB52503-BLK2)				Prepared & Analyzed: 02/24/05						
Chloride	ND	0.500	mg/kg							
LCS (EB52503-BS1)				Prepared & Analyzed: 02/24/05						
Chloride	10.3		mg/L	10.0		103	80-120			
LCS (EB52503-BS2)				Prepared & Analyzed: 02/24/05						
Chloride	10.4		mg/L	10.0		104	80-120			
Calibration Check (EB52503-CCV1)				Prepared & Analyzed: 02/24/05						
Chloride	10.4		mg/L	10.0		104	80-120			
Calibration Check (EB52503-CCV2)				Prepared & Analyzed: 02/24/05						
Chloride	10.4		mg/L	10.0		104	80-120			
Duplicate (EB52503-DUP1)		**Source: 5B22006-01**		Prepared & Analyzed: 02/24/05						
Chloride	35.3	5.00	mg/kg		42.2			17.8	20	

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 EB52503 - Water Extraction										
Duplicate (EB52503-DUP2)		**Source: 5B24002-02**		Prepared & Analyzed: 02/24/05						
Chloride	17.2	5.00	mg/kg		17.1			0.583	20	

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Raland K Tuttle Date: 2-25-05

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

Environmental Lab of Texas, Inc.

Chain of Custody Form

12600 West I-20 East, Odessa Texas 79763
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-28-4 (Ref. #130002)
Project Location:	UL P, Sec 21, T22S, R36E
EPI Sampler Name:	Roger Boone

Bill To

Attn: Iain Olness
PO Box 1558,
Eunice, NM 88231

ANALYSIS REQUEST

LAB I.D. 58230089	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	MATRIX: WASTEWATER	MATRIX: SOIL	MATRIX: CRUDE OIL	MATRIX: SLUDGE	MATRIX: OTHER:	PRESERV.: ACID/BASE	PRESERV.: ICE/COOL	PRESERV.: OTHER	SAMPLING: DATE	SAMPLING: TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl)	SULFATES ($SO_4^=$)	pH	TCLP	OTHER >>>	PAH				
-01 1	SB-1A (62')	G	1			X				X	X		21-Feb	9:50	X	X	X									
-02 2	SB-1A (87')	G	1			X				X	X		21-Feb	11:30	X	X	X									
-03 3	SB-1A (102')	G	1			X				X	X		21-Feb	13:35	X	X	X									
-04 4	SB-1A (112')	G	1			X				X	X		21-Feb	14:20	X	X	X									
-05 5	SB-1A (117')	G	1			X				X	X		21-Feb	14:50	X	X	X									
-06 6	SB-1A (122')	G	1			X				X	X		21-Feb	15:20	X	X	X									
7																										
8																										
9																										
10																										

Sampler Relinquished: Iain Olness for Roger Boone	Date 2/23/05 Time 1035	Received By:	E-mail results to: iolness@hotmail.com
Relinquished by:	Date 2-23-05 Time 1325	Received By: (lab staff)	REMARKS: 3.5°C 4oz jar
Delivered by:	3.5C. Sample Cool & Intact (Yes) No	Checked By:	

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

Client: Environ. Plus, Inc.

Date/Time: 2/23/05 1:37

Order #: SB23008

Initials: CK

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	3.5 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:

_____

_____

_____

_____

_____

_____

_____

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: DEFS/ G-28-4

Project Number: 130002

Location: UL-P, Sect. 21, T22S, R36E

Lab Order Number: 5K08007

Report Date: 11/17/05

Environmental Plus, Incorporated	Project: DEFS/ G-28-4	Fax: 505-394-2601
P.O. Box 1558	Project Number: 130002	**Reported:**
Eunice NM, 88231	Project Manager: Iain Olness	11/17/05 13:02

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SSW-W 2'	5K08007-01	Soil	11/04/05 14:35	11/08/05 11:00
SSW-C 2'	5K08007-02	Soil	11/04/05 14:40	11/08/05 11:00
SSW-E 2'	5K08007-03	Soil	11/04/05 14:45	11/08/05 11:00
NSW-W 2'	5K08007-04	Soil	11/07/05 07:45	11/08/05 11:00
NSW-C 2'	5K08007-05	Soil	11/07/05 07:48	11/08/05 11:00
NSW-E 2'	5K08007-06	Soil	11/07/05 07:52	11/08/05 11:00
WSW-N 2'	5K08007-07	Soil	11/07/05 07:56	11/08/05 11:00
WSW-S 2'	5K08007-08	Soil	11/07/05 08:00	11/08/05 11:00
ESW-N 2'	5K08007-09	Soil	11/07/05 08:05	11/08/05 11:00
ESW-S 2'	5K08007-10	Soil	11/07/05 08:11	11/08/05 11:00

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Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SSW-W 2' (5K08007-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EK50811	11/09/05	11/09/05	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		*82.1 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.6 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	"	1	EK50908	11/09/05	11/10/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*95.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*95.2 %*	*70-130*		"	"	"	"	
SSW-C 2' (5K08007-02) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EK50811	11/09/05	11/09/05	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		*81.7 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.9 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	"	1	EK50908	11/09/05	11/10/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*90.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*96.6 %*	*70-130*		"	"	"	"	
SSW-E 2' (5K08007-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EK50811	11/09/05	11/09/05	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		*80.1 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*105 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	"	1	EK50908	11/09/05	11/10/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SSW-E 2' (5K08007-03) Soil									
Surrogate: 1-Chlorooctane		*90.8 %*	*70-130*		*EK50908*	*11/09/05*	*11/10/05*	*EPA 8015M*	
Surrogate: 1-Chlorooctadecane		*94.2 %*	*70-130*		"	"	"	"	
NSW-W 2' (5K08007-04) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EK50811	11/09/05	11/09/05	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		*84.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.0 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	"	1	EK50908	11/09/05	11/11/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*88.4 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*97.6 %*	*70-130*		"	"	"	"	
NSW-C 2' (5K08007-05) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EK50811	11/09/05	11/09/05	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		*80.9 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.2 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	"	1	EK50908	11/09/05	11/11/05	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		*99.8 %*	*70-130*		"	"	"	"	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
NSW-E 2' (5K08007-06) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EK50811	11/09/05	11/09/05	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		*81.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.3 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	"	1	EK50908	11/09/05	11/11/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*115 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*112 %*	*70-130*		"	"	"	"	
WSW-N 2' (5K08007-07) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EK50811	11/09/05	11/09/05	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		*82.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	"	1	EK50908	11/09/05	11/11/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*118 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*113 %*	*70-130*		"	"	"	"	
WSW-S 2' (5K08007-08) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EK50811	11/09/05	11/09/05	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		*80.5 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*92.6 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	"	1	EK50908	11/09/05	11/11/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WSW-S 2' (5K08007-08) Soil									
Surrogate: 1-Chlorooctane		*94.6 %*	*70-130*		*EK50908*	*11/09/05*	*11/11/05*	*EPA 8015M*	
Surrogate: 1-Chlorooctadecane		*89.6 %*	*70-130*		"	"	"	"	
ESW-N 2' (5K08007-09) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EK50811	11/09/05	11/09/05	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		*86.3 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*103 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	"	1	EK50908	11/09/05	11/11/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*96.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*99.4 %*	*70-130*		"	"	"	"	
ESW-S 2' (5K08007-10) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EK50811	11/09/05	11/09/05	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		*80.6 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.8 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	"	1	EK50908	11/09/05	11/11/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*97.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*101 %*	*70-130*		"	"	"	"	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SSW-W 2' (5K08007-01) Soil									
Chloride	**20.9**	12.5	mg/kg	25	EK51504	11/14/05	11/15/05	EPA 300.0	
% Moisture	**7.1**	0.1	%	1	EK50906	11/09/05	11/09/05	% calculation	
Sulfate	**41.2**	12.5	mg/kg	25	EK51504	11/15/05	11/15/05	EPA 300.0	
SSW-C 2' (5K08007-02) Soil									
Chloride	**30.6**	12.5	mg/kg	25	EK51504	11/14/05	11/15/05	EPA 300.0	
% Moisture	**8.4**	0.1	%	1	EK50906	11/09/05	11/09/05	% calculation	
Sulfate	**52.8**	12.5	mg/kg	25	EK51504	11/15/05	11/15/05	EPA 300.0	
SSW-E 2' (5K08007-03) Soil									
Chloride	**17.8**	12.5	mg/kg	25	EK51504	11/14/05	11/15/05	EPA 300.0	
% Moisture	**5.5**	0.1	%	1	EK50906	11/09/05	11/09/05	% calculation	
Sulfate	**49.1**	12.5	mg/kg	25	EK51504	11/15/05	11/15/05	EPA 300.0	
NSW-W 2' (5K08007-04) Soil									
Chloride	**12.6**	5.00	mg/kg	10	EK51503	11/11/05	11/15/05	EPA 300.0	
% Moisture	**1.8**	0.1	%	1	EK50906	11/09/05	11/09/05	% calculation	
Sulfate	**165**	5.00	mg/kg	10	EK51503	11/11/05	11/15/05	EPA 300.0	
NSW-C 2' (5K08007-05) Soil									
Chloride	**26.5**	12.5	mg/kg	25	EK51504	11/15/05	11/15/05	EPA 300.0	
% Moisture	**9.9**	0.1	%	1	EK50906	11/09/05	11/09/05	% calculation	
Sulfate	**50.5**	12.5	mg/kg	25	EK51504	11/15/05	11/15/05	EPA 300.0	
NSW-E 2' (5K08007-06) Soil									
Chloride	**10.7**	5.00	mg/kg	10	EK51503	11/11/05	11/15/05	EPA 300.0	
% Moisture	**7.4**	0.1	%	1	EK50906	11/09/05	11/09/05	% calculation	
Sulfate	**35.1**	5.00	mg/kg	10	EK51503	11/11/05	11/15/05	EPA 300.0	
WSW-N 2' (5K08007-07) Soil									
Chloride	**19.0**	12.5	mg/kg	25	EK51504	11/14/05	11/15/05	EPA 300.0	
% Moisture	**9.9**	0.1	%	1	EK50906	11/09/05	11/09/05	% calculation	
Sulfate	**62.4**	12.5	mg/kg	25	EK51504	11/15/05	11/15/05	EPA 300.0	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WSW-S 2' (5K08007-08) Soil									
Chloride	**17.8**	12.5	mg/kg	25	EK51504	11/14/05	11/15/05	EPA 300.0	
% Moisture	**6.9**	0.1	%	1	EK50906	11/09/05	11/09/05	% calculation	
Sulfate	**46.0**	12.5	mg/kg	25	EK51504	11/15/05	11/15/05	EPA 300.0	
ESW-N 2' (5K08007-09) Soil									
Chloride	**19.1**	12.5	mg/kg	25	EK51504	11/14/05	11/15/05	EPA 300.0	
% Moisture	**9.9**	0.1	%	1	EK50906	11/09/05	11/09/05	% calculation	
Sulfate	**60.8**	12.5	mg/kg	25	EK51504	11/15/05	11/15/05	EPA 300.0	
ESW-S 2' (5K08007-10) Soil									
Chloride	**34.1**	12.5	mg/kg	25	EK51504	11/14/05	11/15/05	EPA 300.0	
% Moisture	**2.0**	0.1	%	1	EK50906	11/09/05	11/09/05	% calculation	
Sulfate	**68.3**	12.5	mg/kg	25	EK51504	11/15/05	11/15/05	EPA 300.0	

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 EK50811 - EPA 5030C (GC)										
Blank (EK50811-BLK1)				Prepared: 11/08/05 Analyzed: 11/09/05						
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	*0.0324*		"	*0.0400*		*81.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.0392*		"	*0.0400*		*98.0*	*80-120*			
LCS (EK50811-BS1)				Prepared: 11/08/05 Analyzed: 11/09/05						
Benzene	0.0408	0.00100	mg/kg wet	0.0500		81.6	80-120			
Toluene	0.0425	0.00100	"	0.0500		85.0	80-120			
Ethylbenzene	0.0445	0.00100	"	0.0500		89.0	80-120			
Xylene (p/m)	0.0910	0.00100	"	0.100		91.0	80-120			
Xylene (o)	0.0491	0.00100	"	0.0500		98.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	*0.0348*		"	*0.0400*		*87.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.0444*		"	*0.0400*		*111*	*80-120*			
Calibration Check (EK50811-CCV1)				Prepared: 11/08/05 Analyzed: 11/10/05						
Benzene	41.4		ug/kg	50.0		82.8	80-120			
Toluene	42.0		"	50.0		84.0	80-120			
Ethylbenzene	40.7		"	50.0		81.4	80-120			
Xylene (p/m)	82.5		"	100		82.5	80-120			
Xylene (o)	43.1		"	50.0		86.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	*0.0355*		*mg/kg wet*	*0.0400*		*88.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.0337*		"	*0.0400*		*84.2*	*80-120*			
Matrix Spike (EK50811-MS1)	**Source: 5K08009-03**			Prepared: 11/08/05 Analyzed: 11/09/05						
Benzene	0.0423	0.00100	mg/kg dry	0.0527	ND	80.3	80-120			
Toluene	0.0434	0.00100	"	0.0527	ND	82.4	80-120			
Ethylbenzene	0.0425	0.00100	"	0.0527	ND	80.6	80-120			
Xylene (p/m)	0.0851	0.00100	"	0.105	ND	81.0	80-120			
Xylene (o)	0.0450	0.00100	"	0.0527	ND	85.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	*0.0358*		"	*0.0422*		*84.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.0395*		"	*0.0422*		*93.6*	*80-120*			

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK50811 - EPA 5030C (GC)										
Matrix Spike Dup (EK50811-MSD1)	**Source: 5K08009-03**			Prepared: 11/08/05 Analyzed: 11/09/05						
Benzene	0.0425	0.00100	mg/kg dry	0.0527	ND	80.6	80-120	0.373	20	
Toluene	0.0434	0.00100	"	0.0527	ND	82.4	80-120	0.00	20	
Ethylbenzene	0.0425	0.00100	"	0.0527	ND	80.6	80-120	0.00	20	
Xylene (p/m)	0.0857	0.00100	"	0.105	ND	81.6	80-120	0.738	20	
Xylene (o)	0.0453	0.00100	"	0.0527	ND	86.0	80-120	0.700	20	
Surrogate: a,a,a-Trifluorotoluene	*0.0366*		*"*	*0.0422*		*86.7*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.0431*		*"*	*0.0422*		*102*	*80-120*			
Batch EK50908 - Solvent Extraction (GC)										
Blank (EK50908-BLK1)				Prepared: 11/09/05 Analyzed: 11/10/05						
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	*44.8*		*mg/kg*	*50.0*		*89.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*45.3*		*"*	*50.0*		*90.6*	*70-130*			
LCS (EK50908-BS1)				Prepared: 11/09/05 Analyzed: 11/10/05						
Gasoline Range Organics C6-C12	393	10.0	mg/kg wet	500		78.6	75-125			
Diesel Range Organics >C12-C35	444	10.0	"	500		88.8	75-125			
Total Hydrocarbon C6-C35	837	10.0	"	1000		83.7	75-125			
Surrogate: 1-Chlorooctane	*48.1*		*mg/kg*	*50.0*		*96.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*47.0*		*"*	*50.0*		*94.0*	*70-130*			
Calibration Check (EK50908-CCV1)				Prepared: 11/09/05 Analyzed: 11/11/05						
Gasoline Range Organics C6-C12	425		mg/kg	500		85.0	80-120			
Diesel Range Organics >C12-C35	548		"	500		110	80-120			
Total Hydrocarbon C6-C35	973		"	1000		97.3	80-120			
Surrogate: 1-Chlorooctane	*54.2*		*"*	*50.0*		*108*	*70-130*			
Surrogate: 1-Chlorooctadecane	*52.1*		*"*	*50.0*		*104*	*70-130*			

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK50908 - Solvent Extraction (GC)										
Matrix Spike (EK50908-MS1)	**Source: 5K08007-01**			Prepared: 11/09/05 Analyzed: 11/11/05						
Gasoline Range Organics C6-C12	413	10.0	mg/kg dry	538	ND	76.8	75-125			
Diesel Range Organics >C12-C35	518	10.0	"	538	ND	96.3	75-125			
Total Hydrocarbon C6-C35	931	10.0	"	1080	ND	86.2	75-125			
Surrogate: 1-Chlorooctane	*54.8*		*mg/kg*	*50.0*		*110*	*70-130*			
Surrogate: 1-Chlorooctadecane	*54.0*		*"*	*50.0*		*108*	*70-130*			
Matrix Spike Dup (EK50908-MSD1)	**Source: 5K08007-01**			Prepared: 11/09/05 Analyzed: 11/11/05						
Gasoline Range Organics C6-C12	427	10.0	mg/kg dry	538	ND	79.4	75-125	3.33	20	
Diesel Range Organics >C12-C35	547	10.0	"	538	ND	102	75-125	5.45	20	
Total Hydrocarbon C6-C35	974	10.0	"	1080	ND	90.2	75-125	4.51	20	
Surrogate: 1-Chlorooctane	*54.1*		*mg/kg*	*50.0*		*108*	*70-130*			
Surrogate: 1-Chlorooctadecane	*57.3*		*"*	*50.0*		*115*	*70-130*			

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 EK50906 - General Preparation (Prep)										
Blank (EK50906-BLK1)				Prepared & Analyzed: 11/09/05						
% Solids	100		%							
Duplicate (EK50906-DUP1)	**Source: 5K08004-01**			Prepared & Analyzed: 11/09/05						
% Solids	94.5		%		94.1			0.424	20	
Batch EK51503 - Water Extraction										
Blank (EK51503-BLK1)				Prepared: 11/11/05 Analyzed: 11/15/05						
Chloride	ND	0.500	mg/kg							
Sulfate	ND	0.500	"							
LCS (EK51503-BS1)				Prepared: 11/11/05 Analyzed: 11/15/05						
Sulfate	9.05		mg/L	10.0		90.5	80-120			
Chloride	8.00		"	10.0		80.0	80-120			
Calibration Check (EK51503-CCV1)				Prepared: 11/11/05 Analyzed: 11/15/05						
Chloride	8.00		mg/L	10.0		80.0	80-120			
Sulfate	9.35		"	10.0		93.5	80-120			
Duplicate (EK51503-DUP1)	**Source: 5K08008-01**			Prepared: 11/11/05 Analyzed: 11/15/05						
Chloride	35.1	5.00	mg/kg		35.9			2.25	20	
Sulfate	56.2	5.00	"		57.7			2.63	20	
Batch EK51504 - Water Extraction										
Blank (EK51504-BLK1)				Prepared: 11/14/05 Analyzed: 11/15/05						
Sulfate	ND	0.500	mg/kg							
Chloride	ND	0.500	"							

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 EK51504 - Water Extraction										
LCS (EK51504-BS1)				Prepared: 11/14/05 Analyzed: 11/15/05						
Sulfate	9.10		mg/L	10.0		91.0	80-120			
Chloride	8.58		"	10.0		85.8	80-120			
Calibration Check (EK51504-CCV1)				Prepared: 11/14/05 Analyzed: 11/15/05						
Chloride	8.62		mg/L	10.0		86.2	80-120			
Sulfate	9.24		"	10.0		92.4	80-120			
Duplicate (EK51504-DUP1)	**Source: 5K08007-01**			Prepared: 11/14/05 Analyzed: 11/15/05						
Sulfate	40.3	12.5	mg/kg		41.2			2.21	20	
Chloride	20.4	12.5	"		20.9			2.42	20	

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: 11/17/2005

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.

Environmental Plus, Inc.

Chain of Custody Form

2100 Avenue O, Eunice, NM 88231 P.O. Box 1558, Eunice, NM 88231
(505) 394-3481 FAX: (505) 394-2601

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-28-4
Location	UL-P, Sect. 21, T 22 S, R 36 E
Project Reference	130002
EPI Sampler Name	John Robinson

Bill To

Duke Energy Field Services

Attn: Steve Weathers
370 17th Street, Suite 2500
Denver, CO 80202

LAB I.D. 5K08007	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 ($SO_4^{=}$)	pH	TCLP	OTHER >>>	PAH			
-01	1 SSW-W (2')	G	1			1					X		04-Nov-05	14:35	X	X	X	X							
-02	2 SSW-C (2')	G	1			1					X		04-Nov-05	14:40	X	X	X	X							
-03	3 SSW-E (2')	G	1			1					X		04-Nov-05	14:45	X	X	X	X							
-04	4 NSW-W (2')	G	1			1					X		07-Nov-05	7:45	X	X	X	X							
-05	5 NSW-C (2')	G	1			1					X		07-Nov-05	7:48	X	X	X	X							
-06	6 NSW-E (2')	G	1			1					X		07-Nov-05	7:52	X	X	X	X							
-07	7 WSW-N (2')	G	1			1					X		07-Nov-05	7:56	X	X	X	X							
-08	8 WSW-S (2')	G	1			1					X		07-Nov-05	8:00	X	X	X	X							
-09	9 ESW-N (2')	G	1			1					X		07-Nov-05	8:05	X	X	X	X							
-10	10 ESW-S (2')	G	1			1					X		07-Nov-05	8:11	X	X	X	X							

Sampler Relinquished: John Robinson
Date: 11-8-05 Time: 6:30
Received By: Jason Boone

Relinquished by: Jason Boone
Date: 11/8/05 Time: 11:00
Received By: (lab staff) Carrie Keeley

Delivered by:

Sample Cool & Intact: (Yes) No

Checked By:

E-mail results to: iolness@envplus.net

NOTES: 2.0
402
seals/labels

Environmental Lab of Texas

Variance / Corrective Action Report – Sample Log-In

Client: Env. Plus

Date/Time: 11/8/05 11:00

Order #: 5K08007

Initials: CK

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	2.0 C
Shipping container/cooler in good condition?	Yes	No	
Custody Seals intact on shipping container/cooler?	Yes	No	Not present
Custody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?	Yes	No	
Sample Instructions complete on Chain of Custody?	Yes	No	
Chain of Custody signed when relinquished and received?	Yes	No	
Chain of custody agrees with sample label(s)	Yes	No	
Container labels legible and intact?	Yes	No	
Sample Matrix and properties same as on chain of custody?	Yes	No	
Samples in proper container/bottle?	Yes	No	
Samples properly preserved?	Yes	No	
Sample bottles intact?	Yes	No	
Preservations documented on Chain of Custody?	Yes	No	
Containers documented on Chain of Custody?	Yes	No	
Sufficient sample amount for indicated test?	Yes	No	
All samples received within sufficient hold time?	Yes	No	
VOC samples have zero headspace?	Yes	No	Not Applicable

Other observations:

Variance Documentation:

Contact Person: - _____ Date/Time: _____ Contacted by: _____

Regarding:

Corrective Action Taken:

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-1A (102') (5B23008-03) Soil									
Surrogate: 1-Chlorooctane		*39.6 %*	*70-130*		*EB52307*	*02/23/05*	*02/24/05*	*EPA 8015M*	*S-06*
Surrogate: 1-Chlorooctadecane		*14.9 %*	*70-130*		"	"	"	"	*S-06*
SB-1A (112') (5B23008-04) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EB52408	02/23/05	02/24/05	EPA 8021B	
Toluene	**0.0353**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.0549**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.234**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.0741**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*84.3 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**33.6**	10.0	mg/kg dry	1	EB52307	02/23/05	02/24/05	EPA 8015M	
Diesel Range Organics >C12-C35	**188**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**222**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*78.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*81.0 %*	*70-130*		"	"	"	"	
SB-1A (117') (5B23008-05) Soil									
Benzene	**ND**	0.0250	mg/kg dry	25	EB52408	02/23/05	02/23/05	EPA 8021B	
Toluene	**0.188**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.236**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**1.01**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.358**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*87.1 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*103 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**95.3**	10.0	mg/kg dry	1	EB52307	02/23/05	02/24/05	EPA 8015M	
Diesel Range Organics >C12-C35	**175**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**270**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*97.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*86.2 %*	*70-130*		"	"	"	"	

Environmental Lab of Texas

Variance / Corrective Action Report – Sample Log-In

Client: Env. Plus

Date/Time: 11/8/05 11:00

Order #: 5E08007

Initials: CK

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	2.0 C
Shipping container/cooler in good condition?	Yes	No	
Custody Seals intact on shipping container/cooler?	Yes	No	Not present
Custody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?	Yes	No	
Sample Instructions complete on Chain of Custody?	Yes	No	
Chain of Custody signed when relinquished and received?	Yes	No	
Chain of custody agrees with sample label(s)	Yes	No	
Container labels legible and intact?	Yes	No	
Sample Matrix and properties same as on chain of custody?	Yes	No	
Samples in proper container/bottle?	Yes	No	
Samples properly preserved?	Yes	No	
Sample bottles intact?	Yes	No	
Preservations documented on Chain of Custody?	Yes	No	
Containers documented on Chain of Custody?	Yes	No	
Sufficient sample amount for indicated test?	Yes	No	
All samples received within sufficient hold time?	Yes	No	
VOC samples have zero headspace?	Yes	No	Not Apolicable

Other observations:

Variance Documentation:

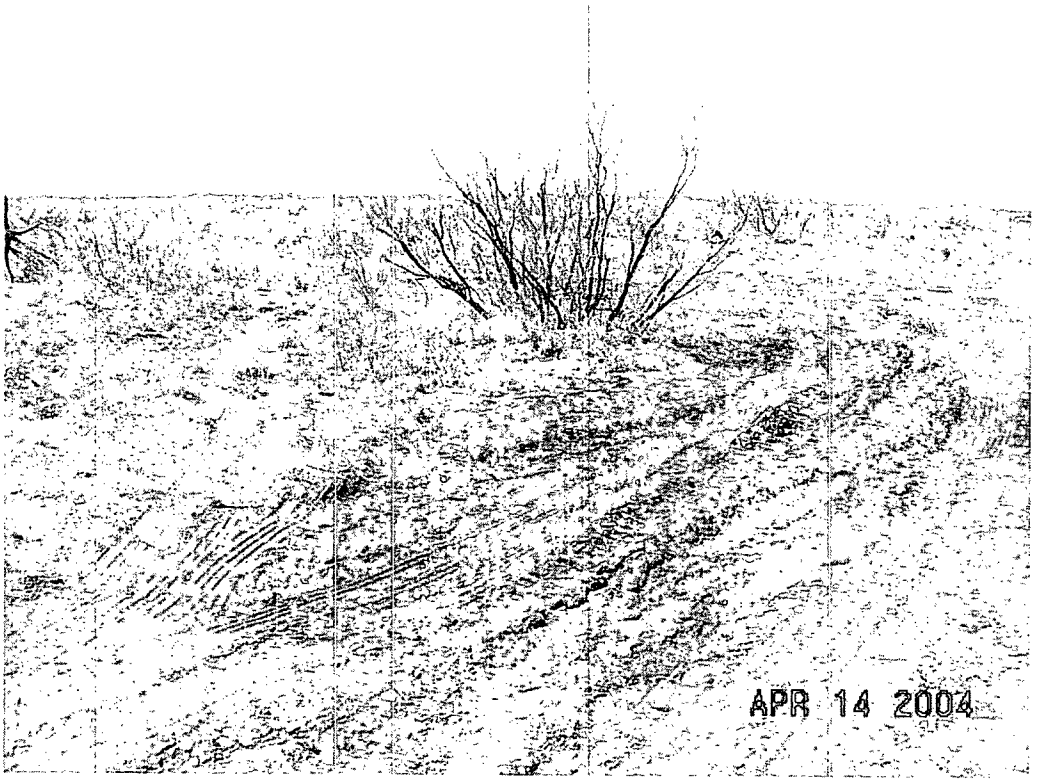
Contact Person: - _____ Date/Time: _____ Contacted by: _____

Regarding:

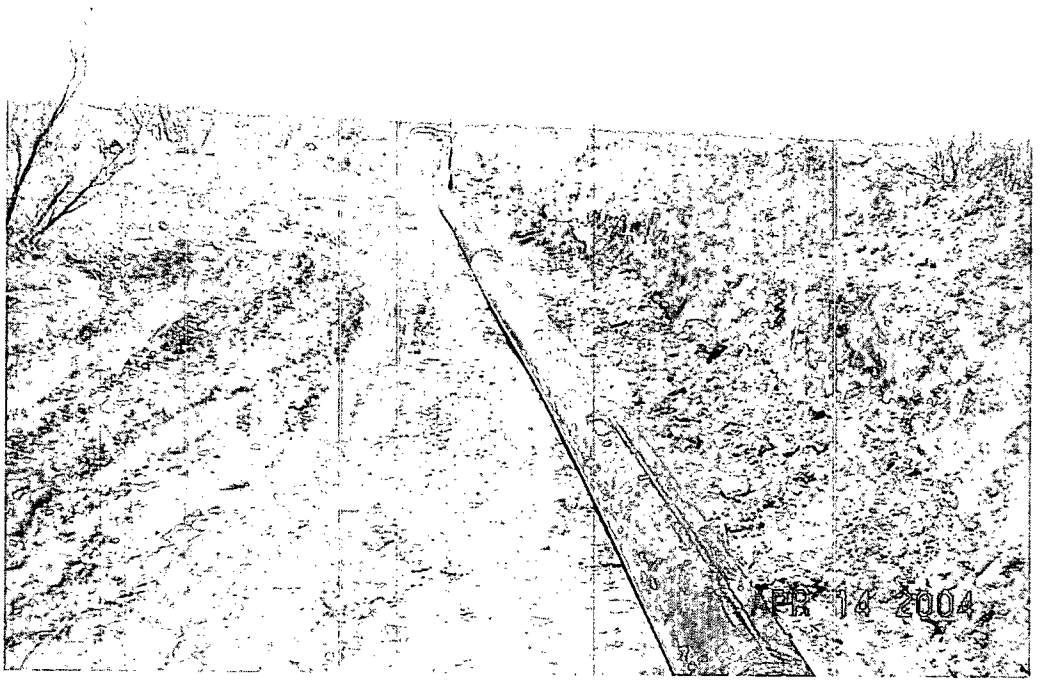
Corrective Action Taken:

APPENDIX II

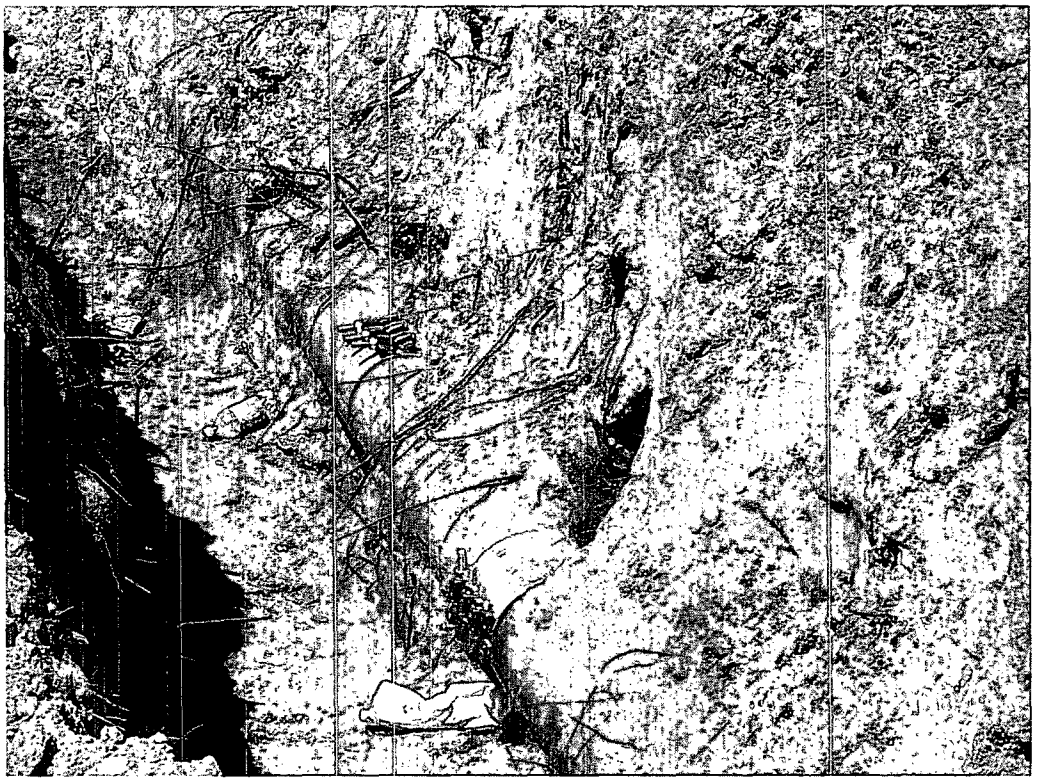
SITE PHOTOGRAPHS



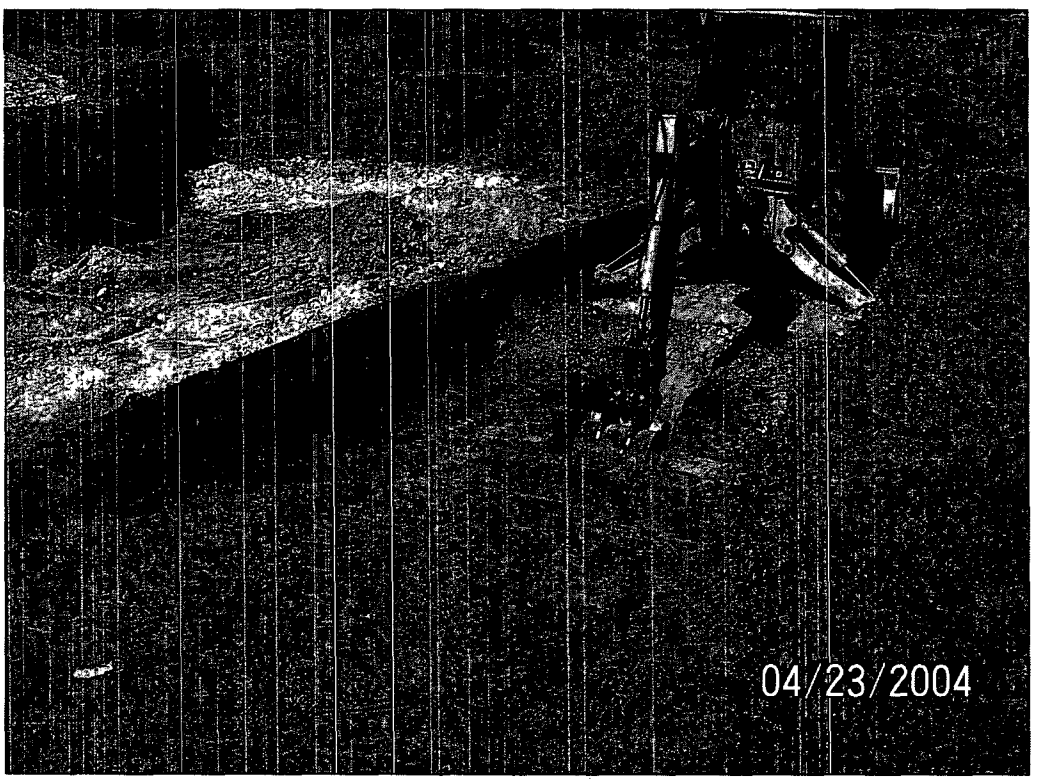
Photograph #1: Stained soil indicating release area, looking westerly.



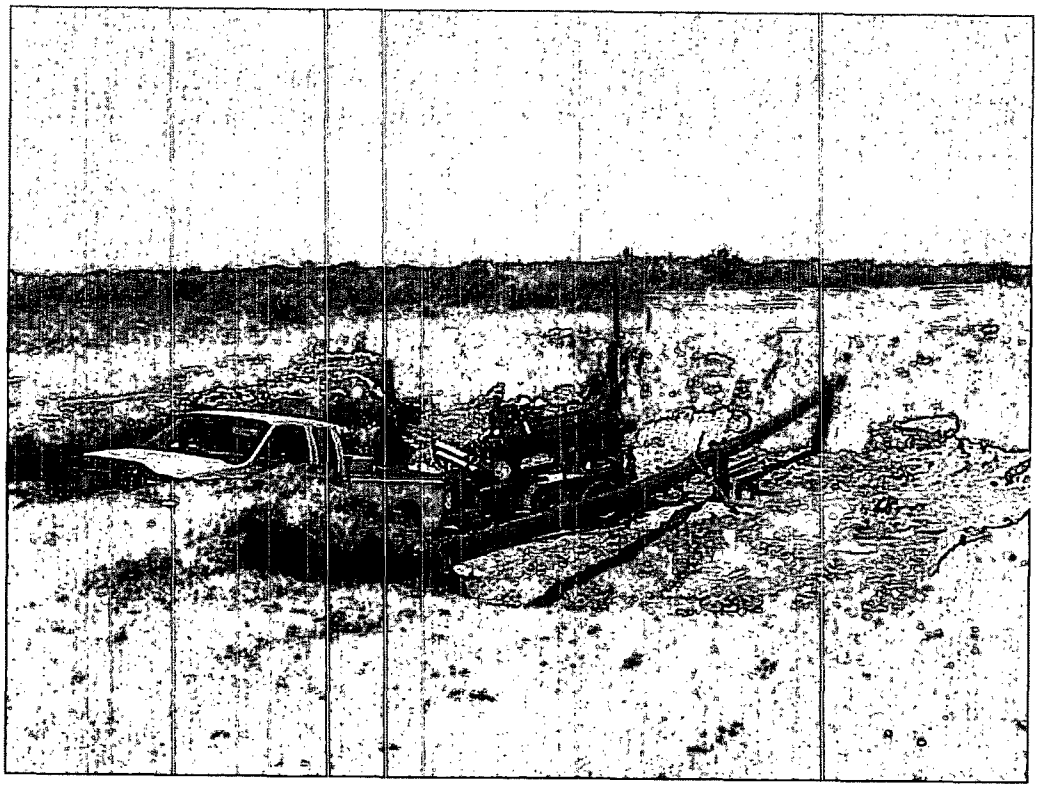
Photograph #2: New pipeline being installed, looking westerly.



Photograph #3: Original line that was replaced, showing numerous clamps, looking westerly.

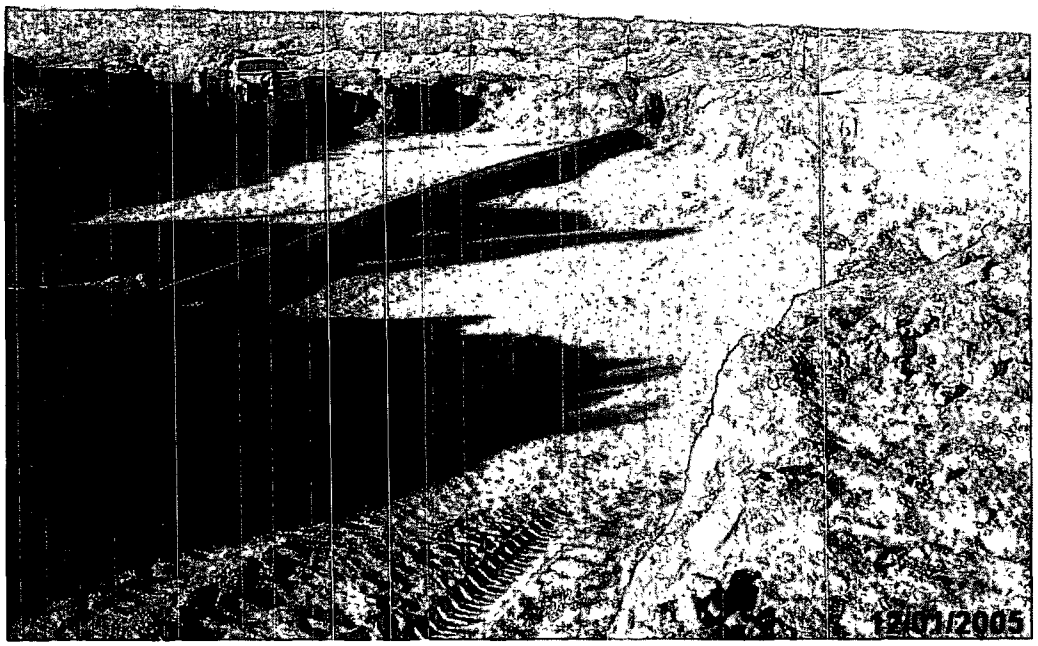


Photograph #4: Excavation and test trench, looking westerly.

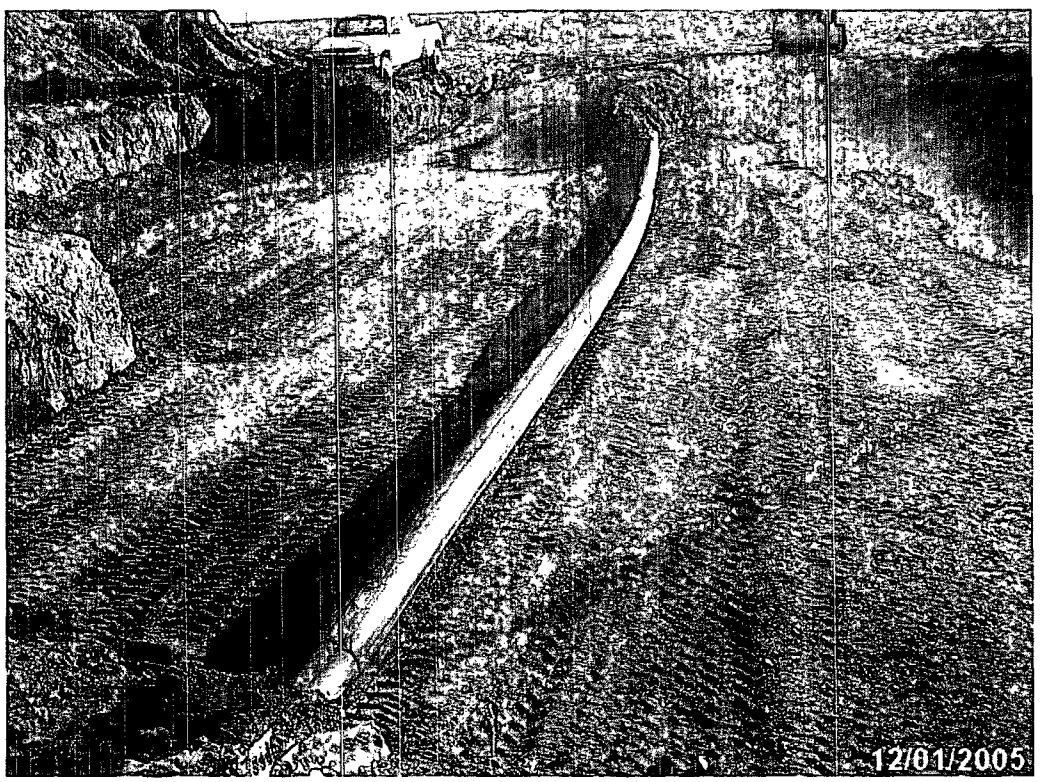


Photograph #5: Advancement of original soil boring, looking southwesterly across the excavation.

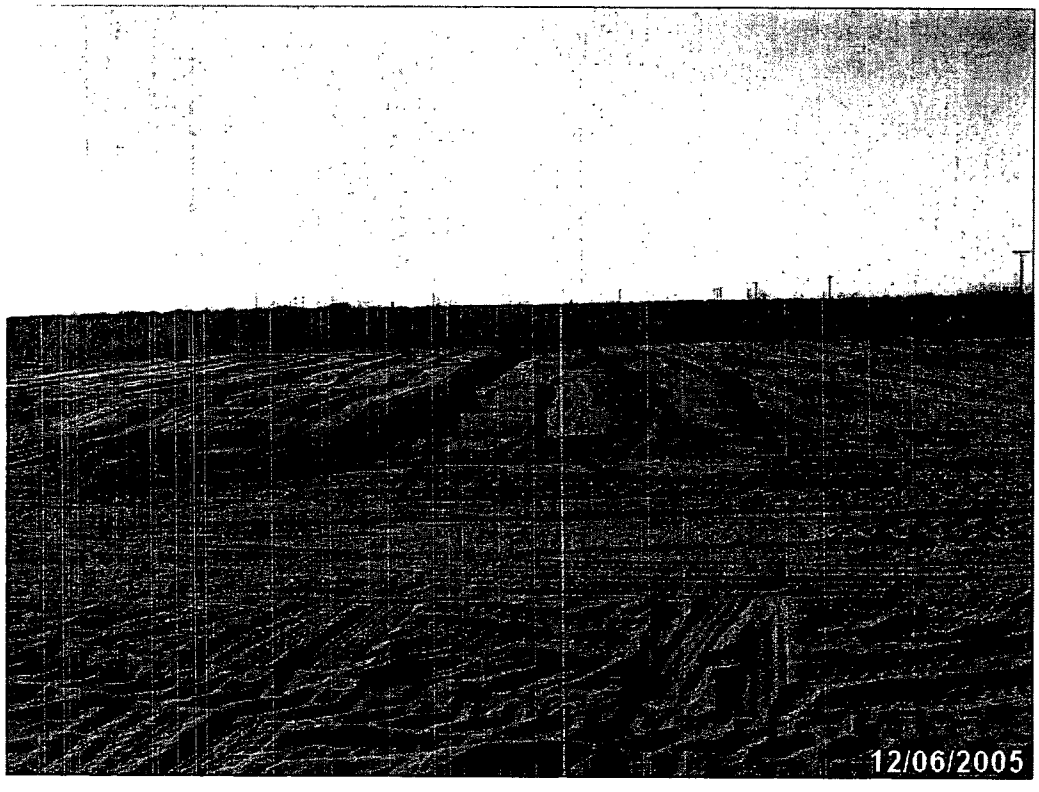
Photograph #6: Advancement of original soil boring, looking southerly.



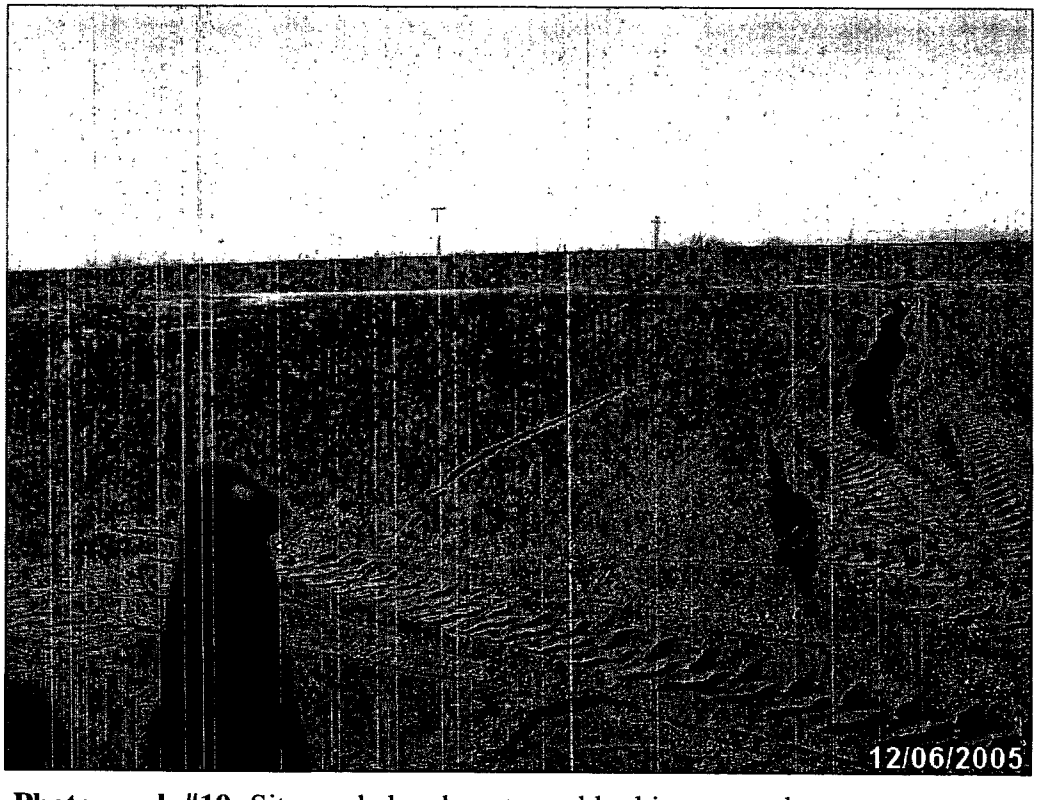
Photograph #7: Verification of compaction results after installation of clay barrier, looking southwesterly.



Photograph #8: Excavation after installation of clay barrier, looking easterly.



Photograph #9: Site graded and contoured, looking easterly.



Photograph #10: Site graded and contoured looking westerly.

APPENDIX III

CLAY LINER COMPACTION RESULTS

LABORATORY TEST REPORT

PETTIGREW & ASSOCIATES, P.A.

1110 N. GRIMES
HOBBS, NM 88240
(505) 393-9827

AASHTO R18

DEBRA P. HICKS, P.E./L.S.I.
WILLIAM M. HICKS. III, P.E./P.S.

To: Environmental Plus
Attn: Roger Boone
P.O. Box 1558
Eunice, NM 88231

Material: Red Clay

Test Method: ASTM: D 2922

Project: Duke G-284
Project No. 2005.1060

Date of Test: December 1, 2005

Depth: 6' Below Finished Subgrade

Test No.	Location	Dry Density % Maximum	% Moisture	Depth
SG 3	15' E. of SW Corner & 75' N. of S. End	101.1	11.3	
SG 4	15' S. of NE Corner & 20' W. of E. End	97.5	17.5	

Control Density: 106.0
ASTM: D 698

Optimum Moisture: 18.8%

Required Compaction: 95%

Lab No.: 05 11032-11033

Copies To: Enviromental Plus

PETTIGREW & ASSOCIATES

BY: _____ P.E.

APPENDIX IV

SITE INFORMATION AND METRICS FORM

AND

FINAL C-141

Duke Energy Field Services Site Information and Metrics	**Incident Date:** 14 April 2004	**NMOCD Notified:** 03 May 2004 @ 0730 hrs

Site: G28-4	**Assigned Site Reference #:** 130002
Company: Duke Energy Field Services	
Street Address:	
Mailing Address: 11525 West Carlsbad Highway	
City, State, Zip: Hobbs, New Mexico 88240	
Representative: Paul Mulkey	
Representative Telephone: (505) 397-5716	
Telephone:	
Fluid volume released (bbls): unknown	**Recovered (bbls):** 0 bbls
>25 bbls: Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days. (Also applies to unauthorized releases >500 mcf Natural Gas)	
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: G28-4	
Source of contamination: 8" Steel Pipeline	
Land Owner, i.e., BLM, ST, Fee, Other: Miller Deck Estate	
LSP Dimensions: 47' x 27'	
LSP Area: 1,205 sqft ft^2	
Location of Reference Point (RP):	
Location distance and direction from RP:	
Latitude: N 32° 22' 23.06"	
Longitude: W 103° 15' 52.09"	
Elevation above mean sea level: 3,510' amsl	
Feet from South Section Line:	
Feet from West Section Line:	
Location- Unit or ¼¼: SE¼ of the SE¼	**Unit Letter:** P
Location- Section: 21	
Location- Township: T22S	
Location- Range: R36E	
Surface water body within 1000 ' radius of site: none	
Surface water body within 1000 ' radius of site: none	
Domestic water wells within 1000' radius of site: none	
Domestic water wells within 1000' radius of site: none	
Agricultural water wells within 1000' radius of site: none	
Agricultural water wells within 1000' radius of site: none	
Public water supply wells within 1000' radius of site: none	
Public water supply wells within 1000' radius of site: none	
Depth from land surface to ground water (DG): 160 bgs	
Depth of contamination (DC): Unknown	
Depth to ground water (DG – DC = DtGW): Unknown, however, it is assumed to be greater than 100 feet.	

1. Ground Water	2. Wellhead Protection Area	3. Distance to Surface Water Body
If Depth to GW <50 feet: *20 points*	If <1000' from water source, or; <200' from private domestic water source: *20 points*	<200 horizontal feet: *20 points*
If Depth to GW 50 to 99 feet: *10 points*		200-100 horizontal feet: *10 points*
If Depth to GW >100 feet: *0 points*	If >1000' from water source, or; >200' from private domestic water source: *0 points*	>1000 horizontal feet: *0 points*
Ground water Score = 0	*Wellhead Protection Area Score= 0*	*Surface Water Score= 0*
Site Rank (1+2+3) = 0		

Total Site Ranking Score and Acceptable Concentrations

Parameter	>19	10-19	0-9
Benzene[1]	10 ppm	10 ppm	10 ppm
BTEX[1]	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1000 ppm	5000 ppm

[1]100 ppm field VOC headspace measurement may be substituted for lab analysis

Duke Energy Field Services

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 Lynn Ward
Address 10 Desta Drive, Suite 400-W, Midland, Texas 79705	Telephone No. (432) 620-4207
Facility Name G28-4	Facility Type 8" Steel Pipeline

Surface Owner	Mineral Owner	Lease No.
Midland Deck Estate		

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the North/South Line	Feet from the East/West Line	County: Lea Lat. N 32° 22' 23.06" Lon. W 103° 15' 52.09"
P	21	T22S	R36E			

NATURE OF RELEASE

Type of Release Natural Gas Pipeline Fluids	Volume of Release unknown barrels	Volume Recovered 0 barrels
Source of Release 8" Steel Pipeline	Date and Hour of Occurrence Duke Energy Field Services	Date and Hour of Discovery 04-14-04 @ 1600 hrs
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom? Larry Johnson	
By Whom? Iain Olness, EPI	Date and Hour 3 May 2004 @ 0730 hrs	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. NA	

If a Watercourse was Impacted, Describe Fully.* NA

Describe Cause of Problem and Remedial Action Taken.*
Steel line began leaking due to internal corrosion. Pipe replaced and line tested.

Describe Area Affected and Cleanup Action Taken.*
Approximately 1,205 square feet of pipeline right-of-way and pasture land were initially affected by the release. Soil contaminated above the NMOCD Remedial Guidelines was excavated from an area that comprised approximately 5,570 square feet to approximately 7-feet bgs. Impacted soil was transported to an approved facility for treatment. A compacted clay liner was installed in the excavation floor to isolate residual hydrocarbons remaining in the soil. The excavation was backfilled with clean soil purchased from the landowner and contoured to allow natural drainage.

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

Signature: Lynn Ward	**OIL CONSERVATION DIVISION**
Printed Name: Lynn Ward	Approved by District Supervisor: ENVIR GOK
E-mail Address: leward@duke-energy.com	
Title: Environmental Specialist-Western Division	Approval Date: 3-6-06 Expiration Date: —
Date: Phone: (432) 620-4207	Conditions of Approval: — Attached ☐

* Attach Additional Sheets If Necessary

DEFS G-28-4
130002