

#### **CLOSURE REPORT**

#### G-28-4 (REF. #130002)

UL-P (SE<sup>4</sup> of the SE<sup>4</sup>) 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:**



#### LETTER OF TRANSMITTAL

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
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1	Copy of the Duke Energy Field Services – G-28-4 Closure Report
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#### 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 lain Olness or me at (505) 394-3481.

Sincerely,

Environmental Plus, Inc.

Javon Atagemall

Jason Stegemoller Environmental Scientist



**ENVIRONMENTAL** 

PLUS, INC.

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:

Hagemolt

Jason Stegemoller Environmental Scientist

3 February 2006

Date

This report was reviewed by:

Iain A. Olness, P.G. Hydrogeologist

tobuany Date

Duke Energy

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NMOCD - New Mexico Oil Conservation Division

DEFS - Duke Energy Field Services

EPI - Environmental Plus, Inc.

#### **Table of Contents**

Proj	ect S	ynopsis1
1.0	Sum	1 mary2
2.0	Site	Description3
	2.1	Historical Use
	2.2	Legal Description
	2.3	Photographic Documentation
	2.4	Geological Description
	2.5	Ecological Description
	2.6	Area Groundwater3
	2.7	Area Water Wells4
	2.8	Area Surface Water Bodies4
3.0	Env	ironmental Media Characterization4
	3.1	Area Groundwater Levels4
	3.2	Depth to Groundwater Calculation4
	3.3	Groundwater Gradient4
	3.4	Wellhead Protection Area5
	3.5	Distance to Nearest Surface Water Body5
	3.6	Identification of Remedial Action Levels5
		<b>3.6.1</b> Site Ranking
		3.6.2 Remedial Action Levels
4.0	Sub	surface Soil Investigation6
5.0	Soil	Remediation
6.0	Gro	undwater Investigation
7.0	Clos	sure Justification7

#### **Figures**

Figure 1	Area Location Map
Figure 2	Site Location Map
Figure 3	Site Map
Figure 4	Soil Boring Location Map
Figure 5	Sample Location Map

#### <u>Tables</u>

Table 1	Summary of Excavation Analytical Results
Table 2	Summary of Soil Boring Analytical Results
Table 3	Well Information Report

Table 4Contaminant Concentrations in the Soil at the Source AreaTable 5Contaminant Concentrations in the Soil at the Watertable

#### **Appendices**

- Appendix I Laboratory Analytical Reports and Chain-of-Custody Forms
- Appendix II Site Photographs
- Appendix III Clay Liner Compaction Report
- Appendix IV Site Information and Metrics Form and Initial C-141

#### **Project Synopsis**

#### Site Specific:

- Company Name: Duke Energy Field Services
- ♦ Facility Name: G=28-4
- ◆ Project Reference: 130002
- ♦ Site Location: WGS84: N 32° 22' 23.073" and W 103° 15' 52.003"
- ♦ Legal Description: UL-P (SE<sup>1</sup>/<sub>4</sub> of the SE<sup>1</sup>/<sub>4</sub>) 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<sup>2</sup>

#### **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; BTEY – 50 ppm; Benzene – 10 ppm; Chlorides – 250

**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) Riskbased 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<sup>3</sup>

• 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  $\sim 1,190$ -ft<sup>2</sup> release area with a small  $(\sim 880-ft^2)$  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<sup>™</sup> 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  $\sim 1.910$ -ft<sup>2</sup>. 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 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 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  $5,570 \text{ ft}^2$  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<sup>3</sup> 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 (SE<sup>1</sup>/<sub>4</sub> of the SE<sup>1</sup>/<sub>4</sub>) 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	<200 horizontal feet: 20 points
Depth to GW 50 to 99 feet: 10 points	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
$\underline{GW} + \underline{WP} + \underline{SW} = Sc$	ore	ала от на станите на и области и кала и со уколо и от таките на так и кала кала со с
Site Rank $(1+2+3) = 0 + 0 + 0 = 0$ poir	nts (for soil 0-59'bgs)	
Site Rank (1+2+3) = 10 + 0 + 0 = 10 pe	oints (for soil 60-109'bgs)	
Site Rank $(1+2+3) = 20 + 0 + 0 = 20$ p	oints (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:

D & C. JACTORUMON CONFIGURE EMMONISTIC CONTROL DATA	Total Site Ranking Score and Acce	ptable Remedial Goal Concentrations	an and a second secon
Parameter	20 or >	10	0
Benzene <sup>1</sup>	10 ppm	10 ppm	10 ppm
BTEX <sup>1</sup>	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1,000 ppm	5,000 ppm

Parameter	NMWQCC Groundwater Standard
ТРН	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)

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

#### 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<sup>3</sup>, 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<sup>3</sup> 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<sup>3</sup> 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 X 10<sup>-5</sup> 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

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#### TABLES

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TABLE 1

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## Summary of Excavation Analytical Results

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

Samula Name	Date	Sample	l acation	Denth	Soil Status	PID Analysis	GRO	DRO	Total TPH	Beuzene	Toluene	e unyuorazen e	Xytenes	BTEX	Chloride	Sulfate
		Type				(mqq)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(µg/Kg)	(mg/Kg)	(mg/Kg)
G28-4#1compB.H.130002	22-Apr-04	Composite	Section 1 Bottomhole	e	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 Bottorrhole	E	Excavated	404	:	:	-	:	-	;	:	:	:	:
G28-4#4compB.H.130002	22-Apr-04	Composite	Section 4 Bottomhole	e	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 G28-4WSWC130002	22-Apr-()4 22-Apr-()4	Composite	East Sidewall West Sidewall	20	In Situ In Situ	61.1	: :	: :	: :	:[:	: :	: :	: :	:	; ;	: :
SDG284042304BH1-5	23-Apr-(14	Composite	Section 1 Bottombole	i s	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	ž	,
SDG284042304BH2-5	23-Apr-04	Composite	Section 2 Bottomhole	s	Excavated	449	:	:	:	:	:	:	;	:	:	:
SDG284042304BH2-10	23-Apr-04	Composite	Section 2 Bottombole	10	ln Situ	646	:	;	:	:	:	;	:		:	:
SDG284042304BH3-5'	23-Apr-04	Composite	Section 3 Bottomhole	\$	Excavated	706	:	:			:	;	:	:	:	:
SDG284042304BH3-10'	23-Apr-04	Composite	Section 3 Bottombole	01	In Situ	109	:	:	:	:	:	:	:	:	;	:
SDG284042304BH4-5'	23-Apr-04	Composite	Section 4 Bottomhole	\$	Excavated	682	3,050	12,000_	15,050	0.848	10.7	10.0	-48.1	69.6	48	I
SDG284042304BH4-10	23-Apr-04	Composite	Section 4 Bottomhole	10	la Situ	626	3,120	11,000	14,120	0.422	9.04	10.7	56.4	76.6	112	1
SDG284042304BH5-5	23-Apr-04	Composite	Section 5 Bottomhole	s	Excavated	27.8	<10.0	97.8	97.8	<0.005	<0.005	<0.005	<0.015	<0.030	48	1
SDG284042304BH5-10'	23-Apr-04	Composite	Section 5 Bottomhole	10	In Situ	17.3	;	;	:	;	:	;	;	:	;	:
2 W-WS	4-Nov-05	Grab	West Side of South Sidewall	5	In Situ	11	<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	5	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
.z m-msn	7-Nov-05	Grab	West Side of North Sidewall	6	In Situ	0.2	<10.0	<10.0	<10.01>	<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
Z N-MSW	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	0.61	62.4
''S S-WSW	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	1.61	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 Threshol	ds s conivalent to	millionams re	er kiloensen						5,000	01				50	250	650

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pure – pure of numero, much a sourcement to numerous per analyzen mp/R = millignms per telogram, which is equivalent to parts per million - - - Not Analyzed Results in Bold are above the remedial action levels as set by the NMOCD. **TABLE 2** 

## Summary of Soil Boring Analytical Results

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

			Soil	DID	GRO	DRO	Total TPH	Benzene	Toluene	Ethylbenzene	Total	BTEX
Borehole	Sample ID	Interval	Status	Analysis	(ma/Ka)	(ma/Ka)	(ma/Ka)	(mo/Ka)	(ma/Ka)	(mo/Ko)	Xylenes (mo/Ko)	(ma/Ka)
					(3		(Sur /Sun)	(3~r/3m)	(Bare (Bare)	(gar Am)	(9-x /9-m)	19 AL
			In Situ	1 701		:		:	:			
	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
Ę		37-39	In Situ	998	:		:	:	••	-		
-92-		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	1	:		• •			:	:
	SDEG284-051804-SB1(62')	62-64	In Situ	350	6,530	11,700	18,230	10.1	172	78.6	420	681
		69-69	In Situ	1	6 2					•	1	1
		72-74	In Situ	:	1	:			•		;	
	SB-2 (60')	65-67	In Situ	5.4	<10.0	65	65	<0.025	<0.025	<0.025	<0.050	<0.125
SB-2		70-72	In Situ	5.0	-	:	•		:			
1	SB-2-(70)	-75-78-	-In Situ	-9.2	5:98 <sup>A</sup>		- 26:5 -	− <0.025	<0.025	<0.025 −	<0.050	< <u>0.125</u>
		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	1	:			••			
		70-72	In Situ	760	:	:	:		:		:	:
		75-77	In Situ	715		:			•	1	ł	:
		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
V1-00		90-92	In Situ	694		:			:	1	1	;
		95-97	In Situ	712		:	• •			1		;
	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	• •	:		•		1	•	;
	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
nnm = nari	ts per million which is equiva	dent to m	illigrams I	per kilogra	Ε							

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6-1

## WELL INFORMATION REPORT\*

## Duke Energy Field Services G28-4 - Ref #130002

r Diversion <sup>A</sup>	Owner	Use	Source	Twsp	Rng	Sec q q q	Latitude	Longitude	Date Measured	Surface Flevedor <sup>B</sup>	Depth to Water
ſ	MCVAY DRILLING CO.	STK	Shallow	22S	36E	16 1 2 2	N32° 23' 42.95"	W103º 16' 26.28"	05-Oct-72		(ft bgs) 170
0	EL PASO NATURAL GAS COMPANY	NON	A MANAGES AND	225	368	22 1.3	"164"LE:22-3EN	W103º15:40:09"		3,517	a and an and a second se
Contraction of the	U.R. CATHLE COMPANY	DOM		22S	36E	22 4 3.1	"TT 11 22 26N	W103° J 5: 9.23"	28-Jun-80	3,507	1
	MILLARD DBCK	NIS 🗧	Shallow	228	36L	274 4 3 acres	N32º 21' 19 499	W103e.1519:39"	13-Nov-78	3,507.	.160

\* = Data obtained from the New Mexico Office of the State Engineer Website (http://iwaters.ose.state.nn.us.7001/iWATERS/wr\_RegisServlet1) and USGS Database. Shaded well information indicates well location shown on Figure 2

A = in acre feet per armun B = Interpolated from USGS Topographical Map STK = Livestock Watering NON = Non-Profit Organizational Use NON = 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



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

		GRO	DRO	
		$(C_{6}-C_{10})$	(>C <sub>10</sub> -C <sub>28</sub> )	CI*
LAB NUMBI	ER SAMPLE ID	(mg/Kg)	(mg/Kg)	(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 Con	trol	790	762	1010
True Value	QC	1000	1000	1000
% Recovery	,	98.8	95.3	101
Relative Pe	rcent Difference	2.5	6.3	3.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI<sup>-</sup>: Std. Methods 4500-CI<sup>-</sup>B \*Analyses performed on 1:4 w:v aqueous extracts.

est fa Cooke

128/04 Date

H8642A.XLS

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

# Cardinal Laboratories Inc.

101 Eas 101



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

	GRO	DRO			ETHYL	TOTAL
LAB NO. SAMPLE ID	(C <sub>6</sub> -C <sub>10</sub> )	(>C <sub>10</sub> -C <sub>28</sub> )	BENZENE	TOLUENE	BENZENE	XYLENES
	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(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.

H8711.XLS

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

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Iboratories Im	os, NM 88240	5-393-2476	Environmental Plus	lain olness	P.O. BOX 1558	Eunice New Mexico	505-394-3481 / 505-	Duke Energy Field Se	G28-4	130002	Manuel Gonzales		SAMPLE I.D.		i284-051804-SB1(17')	;284-051804-SB1(32')	;284-051804-SB1(47')	:284-051804-SB1(62')							Date	2/19/0	''''3/ジケ) 	, , , , , , , , , , , , , , , , , , ,	
l La	d, Hobt	Fax 50:	Ð	nager			¢#	 		Ice	Ime				1 SDEG	2 SDEG	SDEG	4 SDEG		2		<u>~</u>	6		V				
Cardima	101 East Marlan	505-393-2326	<b>Company Nam</b>	EPI Project Mar	<b>Billing Address</b>	City, State, Zip	EPI Phone#/Fa)	<b>Client Company</b>	<b>Facility Name</b>	<b>Project Referen</b>	<b>EPI Sampler Na</b>		LAB I.D.		1-1128H	-2	÷ 2-	- C/ 1				~		1(	Sampler Relinquished	Relignuished by:	Delivered by:		



#### **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

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#### Project: DEFS G28-4 (130002) Project Number: 130002 Project Manager: Iain Olness

Fax: 505-394-2601

**Reported:** 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

Project: DEFS G28-4 (130002) Project Number: 130002 Project Manager: Iain Olness

06/21/04 16:59

#### 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	"	"	n	и	"	18	
Ethylbenzene	ND	0.0250	"	н	н	н	и	97	
Xylene (p/m)	ND	0.0250	**	u	n	"	"	۹	
Xylene (o)	ND	0.0250	и	"	"	"	N	11	
Surrogate: a,a,a-Trifluorotoluene		88.2 %	80-1	120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		91.1 %	80-1	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			н		н		
Total Hydrocarbon C6-C35	65.0	10.0	"	*		11	и	**	
Surrogate: 1-Chlorooctane		102 %	70-1	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		94.6 %	70-1	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	n	*	"	"	н	*	
Ethylbenzene	ND	0.0250	*	"	"	**	"		
Xylene (p/m)	ND	0.0250	u	н	"	"	н	*1	
Xylene (o)	ND	0.0250		"		"	n	н	
Surrogate: a,a,a-Trifluorotoluene		90.7 %	80-1	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		88.5 %	80-1	20	"	"	"	"	
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	"		н	н	н	n	
Total Hydrocarbon C6-C35	26.5	10.0	н	**	"	и	и	"	
Surrogate: 1-Chlorooctane		111 %	70-1	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		97.4%	70-1	130	н	"	"	"	

Environmental Lab of Texas

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

**Reported:** 06/21/04 16:59

#### 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	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas. Page 3 of 9

#### **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	& Analyze	ed: 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	H							
Surrogate: 1-Chlorooctane	41.2		mg/kg	50.0		82.4	70-130			
Surrogate: 1-Chlorooctadecane	<b>35</b> .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	11							
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	& Analyze	ed: 06/17/0	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	n	1000		99.7	75-125			
Surrogate: 1-Chlorooctane	55.5		mg/kg	50.0		-m	70-130			
Surrogate: 1-Chlorooctadecane	36.8		"	50.0		73.6	70-130			
Calibration Check (EF41705-CCV1)			·	Prepared	& Analyze	ed: 06/17/0	04			
Gasoline Range Organics C6-C12	523		mg/kg	500		105	80-120			
Diesel Range Organics >C12-C35	562		n	500		112	80-120			
Total Hydrocarbon C6-C35	1090		11	1000		109	80-120			
Surrogate: 1-Chlorooctane	53.3		Т	50.0	~	107	70-130			
Surrogate: 1-Chlorooctadecane	42.9		"	50.0		85.8	70-130			

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

**Reported:** 06/21/04 16:59

#### **Organics by GC - Quality Control**

**Environmental Lab of Texas** 

		Reporting		Snike	Source		%RFC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EF41705 - Solvent Extraction	(GC)									
Calibration Check (EF41705-CCV2)			• • • • • • • • • • • • • • • • • • • •	Prepared	: 06/17/04	Analyzed	l: 06/18/04			
Gasoline Range Organics C6-C12	518		mg/kg	500		104	80-120			
Diesel Range Organics >C12-C35	570		11	500		114	80-120			
Total Hydrocarbon C6-C35	1090		11	1000		109	80-120			
Surrogate: 1-Chlorooctane	54.5		"	50.0		109	70-130		., .	
Surrogate: 1-Chlorooctadecane	<b>46</b> .7		"	50.0		93.4	70-130			
Matrix Spike (EF41705-MS1)	So	urce: 4F170	03-01	Prepared	& Analyze	ed: 06/17/0	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	н	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)	So	urce: 4F170	07-02	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	Η.,	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)	So	urce: 4F170	03-01	Prepared	& Analyze	ed: 06/17/0	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	<b>63</b> .0		mg/kg	50.0		126	70-130			
Surrogate: 1-Chlorooctadecane	<b>52</b> .7		"	50.0		105	7 <b>0-13</b> 0			
Matrix Spike Dup (EF41705-MSD2)	So	urce: 4F170	07-02	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	н	633	ND	123	75-125	2.34	20	
Total Hydrocarbon C6-C35	1450	10.0	n	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			

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Page 5 of 9

#### **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	& Analyze	ed: 06/19/	04	,		
Benzene	ND	0.0250	mg/kg wet							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	н							
Xylene (p/m)	ND	0.0250	11							
Xylene (o)	ND	0.0250	н							
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	& Analyze	ed: 06/19/	04			
Benzene	96.1		ug/kg	100		96.1	80-120			
Toluene	92.5		"	100		92.5	80-120			
Ethylbenzene	89.0		H	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	<u> </u>	n	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		n	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	and a first state of the state	"	100		87.9	80-120			
Surrogate: 4-Bromofluorobenzene	<i>87.2</i>		"	100		87.2	80-120			
Matrix Spike (EF42112-MS1)	So	urce: 4F180	07-23	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		ti	2500	32.5	85.1	80-120			
Xylene (p/m)	4390		"	5000	123	85.3	80-120			
Xylene (o)	2260		14	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		<b>9</b> 7.0	80-120			

Environmental Lab of Texas

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#### Project: DEFS G28-4 (130002) Project Number: 130002 Project Manager: Iain Olness

**Reported:** 06/21/04 16:59

#### Organics by GC - Quality Control Environmental Lab of Texas

Analyte	Reporting		Spike	Source	ce %REC		RPD		
	Result	Limit Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EF42112 - EPA 5030C (GC)									
Matrix Spike Dup (EF42112-MSD1)	Source: 4F18007-23		Prepared	Prepared: 06/19/04 Analyzed: 06/21/04					
Benzene	2380	ug/kg	2500	36.8	93.7	80-120	4.36	20	
Toluene	2310	11	2500	36.5	90.9	80-120	5.42	20	
Ethylbenzene	2290	н	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			

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Environmental Plus, Incorporated 2100 Avenue 6 Eunice NM, 88231

# 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 Prepar	ration (Prep)									
Blank (EF41806-BLK1)				Prepared	& Analyze	ed: 06/17/0	04			
% Solids	100		%							
Duplicate (EF41806-DUP1)	So	urce: 4F1700	3-01	Prepared	& Analyze	ed: 06/17/0	04			
% Solids	93.0		%		93.0		· · · ·	0.00	20	

Environmental Lab of Texas

06/21/04 16:59

#### **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: Kalandk Juril Date:

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.

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Environmental Lab of Texas

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

Client: Env. Plus loc
Date/Time: 06-17-04@ 1315
Order #:UF17008
Initials: JMM

# Sample Receipt Checklist

Temperature of container/cooler?	(Yes	No	4.0 C
Shipping container/cooler in good condition?	Yes	No	NA
Custody Seals intact on shipping container/cooler?	Yes	No	Notpresent
Custody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?	Pes	No	
Sample Instructions complete on Chain of Custody?	Tes	No	
Chain of Custody signed when relinquished and received?	Yes	No	
Chain of custody agrees with sample label(s)	Tes	No	
Container labels legible and intact?	Yes	No	
Sample Matrix and properties same as on chain of custody?	tes	No	
Samples in proper container/bottle?	Tes	No	
Samples properly preserved?	res	No	
Sample bottles intact?	(es)	No	
Preservations documented on Chain of Custody?	res	No	
Containers documented on Chain of Custody?	es	No	
Sufficient sample amount for indicated test?	(Ves)	No	
All samples received within sufficient hold time?	<b>E</b>	No	
VOC samples have zero headspace?	Yes	No	Not Applicable

Other observations:

Contact Person: Regarding:	Variance Documentation: Date/Time:	_ Contacted by:
Corrective Action Taken:		



# 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	Project: Duke Energy- G-28-4 (ref. #130002)	Fax: 505-394-2601
P.O. Box 1558	Project Number: None Given	Reported:
Eunice NM, 88231	Project Manager: Iain Olness	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

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

## Organics by GC

**Environmental Lab of Texas** 

		Reporting							
Analyte	Result	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	ŧ		11	н	n	U	
Ethylbenzene	35.7	0.100	и	"	11	U	n	"	
Xylene (p/m)	119	0.100		n	11	11	н	U	
Xylene (0)	30.6	0.100	u	"	11	"	U	11	
Surrogate: a,a,a-Trifluorotoluene		929 %	80-1	20	"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		90.4 %	80-1	20	"	"	"	"	
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	н	н	11	**	"	"	
Total Hydrocarbon C6-C35	25400	50.0	"	*1	**	н	11	"	
Surrogate: 1-Chlorooctane		59.4 %	70-1	130	"	"	"	"	S-06
Surrogate: 1-Chlorooctadecane		18.7 %	70	130	"	n	11	"	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	u	n	n	n	n	ti	
Ethylbenzene	38.1	0.100	н	Ħ	"	"	U	H	
Xylene (p/m)	129	0.100	u	"		u	14		
Xylene (0)	37.9	0.100	"	11	11	"	н	11	
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	n	11	11	"	и	"	
Total Hydrocarbon C6-C35	20800	50.0	"	11	H	11	11	"	
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	11	It	н	"	Ħ	0	
Ethylbenzene	28.0	0.100	11	n	**	n	n	н	
Xylene (p/m)	97.7	0.100	"	"	"	n	n	11	
Xylene (0)	27.5	0.100	"	"	"	"	ti	u	
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	"		и	n	u.	н	
Total Hydrocarbon C6-C35	15700	50.0	u	"	н	I	н	13	

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Page 2 of 11

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

**Reported:** 02/25/05 11:08

## 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	u	**	"	11	"	n	
Ethylbenzene	ND	0.0250	"	и	"	14	"	n	
Xylene (p/m)	ND	0.0250	n	"	"	14	н	н	
Xylene (o)	ND	0.0250	11	"	"	U	н	n	
Surrogate: a,a,a-Trifluorotoluene		80.4 %	80-1	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.9 %	80-1	20	"	"	11	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	i	EB52307	02/23/05	02/24/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	*	"	"	U.		11	
Total Hydrocarbon C6-C35	ND	10.0		"	"	"	"	n	
Surrogate: 1-Chlorooctane		89.0 %	70-1	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		75.4 %	70-1	30	"	"	"	"	

Environmental Lab of Texas

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

# **Reported:** 02/25/05 11:08

### General Chemistry Parameters by EPA / Standard Methods

**Environmental Lab of Texas** 

		Reporting							
Analyte	Result	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	

Environmental Lab of Texas

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Page 5 of 11

## **Organics by GC - Quality Control**

## Environmental Lab of Texas

		Perorting		Snike	Source		%PEC		רוסס	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EB52307 - Solvent Extraction (	<u>(GC)</u>					·				
Blank (EB52307-BLK1)				Prepared:	02/23/05	Analyzed	1: 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	1: 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	1: 02/24/05			
Gasoline Range Organics C6-C12	509		mg/kg	500		102	80-120			
Diesel Range Organics >C12-C35	565	t	n	500		113	80-120			
Total Hydrocarbon C6-C35	1070		H	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)	So	urce: 5B230	07-03	Prepared:	02/23/05	Analyzed	1: 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	11	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)	So	urce: 5B230	07-03	Prepared:	02/23/05	Analyzed	1: 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	<del>9</del> 9.7	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			

Environmental Lab of Texas

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

## **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	& Analyze	ed: 02/23/	05			
Benzene	· ND	0.0250	mg/kg wet						· · · · · · · · · · · · · · · · · · ·	
Toluene	ND	0.0250	n							
Ethylbenzene	ND	0.0250	н							
Xylene (p/m)	ND	0.0250	Ħ							
Xylene (o)	ND	0.0250	H							
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	& Analyze	ed: 02/23/	05			
Benzene	91.7	- <u> </u>	ug/kg	100		91.7	80-120			
Toluene	96.7		**	100		96.7	80-120			
Ethylbenzene	105		"	100		105	80-120			
Kylene (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	, <i>1.11.</i>	ug/kg	100		95.1	80-120			
Foluene	98.1			100		98.1	<b>80-120</b> /			
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	<u> </u>		
Surrogate: 4-Bromofluorobenzene	99.0		"	100		99.0	80-120	·		
Matrix Spike (EB52408-MS1)	So	urce: 5B230	09-03	Prepared	& Analyze	ed: 02/23/0	05			
Benzene	101		ug/kg	100	ND	101	80-120			
Foluene	104		· N	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			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas. Page 7 of 11

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

**Reported:** 02/25/05 11:08

### **Organics by GC - Quality Control**

#### **Environmental Lab of Texas**

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	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				

Environmental Lab of Texas

#### 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	ı (Prep)									
Blank (EB52401-BLK1)				Prepared:	02/23/05	Analyzed	1: 02/24/05			
% Moisture	ND	0.1	%							
Duplicate (EB52401-DUP1)	So	urce: 5B230(	01-01	Prepared:	02/23/05	Analyzed	1: 02/24/05			
% Moisture	1.0	0.1	%		1.0			0.00	20	,
Batch EB52503 - Water Extraction		<u></u>								
Blank (EB52503-BLK1)				Prepared	& Analyze	d: 02/24/	05			
Chloride	ND	0.500	mg/kg							
Blank (EB52503-BLK2)				Prepared	& Analyza	ed: 02/24/	05			
Chloride	ND	0.500	mg/kg							
LCS (EB52503-BS1)				Prepared	& Analyze	ed: 02/24/	05			
Chloride	10.3		mg/L	10.0		103	80-120			
LCS (EB52503-BS2)				Prepared	& Analyze	ed: 02/24/	05			
Chloride	10.4		mg/L	10.0		104	80-120			
Calibration Check (EB52503-CCV1)				Prepared	& Analyze	ed: 02/24/	05			
Chloride	10.4		mg/L	10.0		104	80-120		44.45,41.4	
Calibration Check (EB52503-CCV2)				Prepared	& Analyze	d: 02/24/	05			
Chloride	10.4		mg/L	10.0		104	80-120			
Duplicate (EB52503-DUP1)	So	urce: 5B2200	)6-01	Prepared	& Analyze	ed: 02/24/	05			
Chloride	35.3	5.00	mg/kg		42.2			17.8	20	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas. Page 9 of 11

### 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)	So	urce: 5B2400	02-02	Prepared	& Analyze	ed: 02/24/0	05			
Chloride	17.2	5.00	mg/kg		17.1			0.583	20	

Environmental Lab of Texas

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Page 10 of 11

Enviror	nmental Plus, Incorporated	Project: Project Number:	Duke Energy- G-28-4 (ref. #130002) None Given	Fax: 505-394-260		
Eunice	NM, 88231	Project Manager:	Iain Olness	02/25/05 11:08		
		Notes and De	finitions	<u> </u>		
S-06	The recovery of this surrogate is o matrix interference's.	utside control limits due to sa	mple dilution required from high analyte conce	entration and/or		
S-04	The surrogate recovery for this sar	nple 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					
drv	Sample results reported on a dry weig	nt basis				

- RPD **Relative Percent Difference**
- Laboratory Control Spike LCS
- MS Matrix Spike
- Duplicate Dup

alandk Jush Date: 2-25-05 Report Approved By:

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.

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

Environmental Lab of Texas

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Page 11 of 11

of Texas, Inc.	79763	
Environmental Lab of	12600 West I-20 East, Odessa Texas 797	432-563-1800 EAY. 432-562-1713

Chain of Custody Form

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ANALYSIS REQUEST		П ВТЕХ 8021В СНLОRIDES (SO4 <sup>=</sup> ) SULFATES (SO4 <sup>=</sup> ) СНLОRIDES (CI) СНLОRIDES (CI) СНLОRIDES (SO4 <sup>=</sup> ) РАН НА							9:50 X X X	11:30 X X X	13:35   X   X   X   X	14:20 X X X	14:50 X X X	15:20   X   X   X						olness@hotmail.com		N						
3111-10-27-27-27							ain Olnee		3ox 1558,	e, NM 88231	SERV. SAM		ОГ	отнея DATE DATE	X 21-Feb	X 21-Feb	X 21-Feb	X 21-Feb	X 21-Feb	X 21-Feb						E-mail results to: REMARKS:	1 1 1	402 10
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<i>AX: 432-563-</i>	ager: lai	P.	ш	÷	DC :#	: Du	Ċ		:	me: Rc		da <u>ma ang a</u> g	SAN		SB-1A (62')	SB-1A (87')	SB-1A (102')	SB-1A (112')	(117) SB-1A (117)	SB-1A (122')						Rose Press		
432-563-1800 F	EPI Project Man	<b>Mailing Address</b>	City, State, Zip:	101 Dhone#/Eav	EPI Phone#/Fax	<b>Client Company</b>	Facility Name:		roject Location	EPI Sampler Nar		•	LABI.D	ant nac		- 01-2	-033	-DQ 4	- 82	~ DI0 6	7	8	6	10		ample Relinquished:	elinquished by:	elivered by:

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

Client: ENVIRON Plip, Inc. 23 05 1:37 Date/Time: Order #: \_\_\_\_\_5B23008 Initials:

## Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	3,5 C
Shipping container/cooler in good condition?	Tes	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?	Xes	No	
Sample Instructions complete on Chain of Custody?	(CES)	No	
Chain of Custody signed when relinquished and received?	Xes)	No	
Chain of custody agrees with sample label(s)	XII	No	
Container labels legible and intact?	Yes	No	
Sample Matrix and properties same as on chain of custody?	A See	No	
Samples in proper container/bottle?	Tes	No	
Samples properly preserved?	(ES)	No	
Sample bottles intact?	res	No	
Preservations documented on Chain of Custody?	<u>(es</u> )	No	
Containers documented on Chain of Custody?	Kes	No	
Sufficient sample amount for indicated test?	TES	No	
All samples received within sufficient hold time?	Tes	No	
VOC samples have zero headspace?	Res	No	Not Applicable

Other observations:

Variance Documentation: Contact Person: -\_\_\_\_ Date/Time: \_\_\_\_\_ Contacted by: \_

\_\_\_\_\_

\_\_\_\_

\_\_\_\_\_

Regarding:

Corrective Action Taken:



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# **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

Page 1 of 13

Project: DEFS/G-28-4 Project Number: 130002 Project Manager: lain Olness

**Reported:** 11/17/05 13:02

## Organics by GC

**Environmental Lab of Texas** 

	_	Reporting							
Analyte	Result	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		"	"	"	н	"	
Ethylbenzene	ND	0.0250	"	н	11	н	"	n	
Xylene (p/m)	ND	0.0250	"		n	"	**	п	
Xylene (o)	ND	0.0250			"	"	11	н	
Surrogate: a,a,a-Trifluorotoluene		82.1 %	80-1.	20	"	"	"	<i>n</i>	
Surrogate: 4-Bromofluorobenzene		98.6 %	80-1.	20	"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	н	1	EK50908	11/09/05	11/10/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"		n		11	
Total Hydrocarbon C6-C35	ND	10.0	н		"	"	11	n	
Surrogate: 1-Chlorooctane		95.2 %	70-1.	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		95.2 %	70-1.	30	"	"	"	''	
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	н	"		u	"	"	
Ethylbenzene	ND	0.0250	"	"	"	н	"	n	
Xylene (p/m)	ND	0.0250		"	"	н			
Xylene (o)	ND	0.0250		"	"	и	11	11	
Surrogate: a,a,a-Trifluorotoluene		81.7 %	80-1.	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.9 %	80-1.	20	n	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	н	1	EK50908	11/09/05	11/10/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0			11	ч	11	n	
Total Hydrocarbon C6-C35	ND	10.0	u.			н		"	
Surrogate: 1-Chlorooctane		90.6 %	70-1	30	"	"	"	n	
Surrogate: 1-Chlorooctadecane		96.6 %	70-1.	30	"	"	"	n	
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	0	"	"	"	"	u	
Ethylbenzene	ND	0.0250	"	**	"	"	"	и	
Xylene (p/m)	ND	0.0250	"	"	14	"	*	PE	
Xylene (o)	ND	0.0250	**		11	0	и	11	
Surrogate: a,a,a-Trifluorotoluene		80.1 %	80-1	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		105 %	80-1.	20	"	"	"	"	
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		*	11	17	н	и	
Total Hydrocarbon C6-C35	ND	10.0	"	*1	"	"	"	и	

Environmental Lab of Texas

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Page 2 of 13

Environmental Plus, Incorporated	Projec	ct: DEFS/ G-28-4
P.O. Box 1558	Project Numbe	er: 130002
Eunice NM, 88231	Project Manage	er: Iain Olness

Fax: 505-394-2601

**Reported:** 11/17/05 13:02

#### 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 %	70-13	0	EK50908	11/09/05	11/10/05	EPA 8015M	·
Surrogate: 1-Chlorooctadecane		94.2 %	70-13	0	"	n	"	"	
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	н			n		"	
Ethylbenzene	ND	0.0250	11		"	н	•	н	
Xylene (p/m)	ND	0.0250		н	"	"	"		
Xylene (o)	ND	0.0250	м	n	п	"	n	H	
Surrogate: a,a,a-Trifluorotoluene		84.0 %	80-120	)	"	#	"	"	
Surrogate: 4-Bromofluorobenzene		98.0 %	80-120	)	"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	n	1	EK50908	11/09/05	11/11/05	EPA 8015M	·
Diesel Range Organics >C12-C35	ND	10.0	н	"	"	"	H	n	
Total Hydrocarbon C6-C35	ND	10.0	"	н	н	н	п		
Surrogate: 1-Chlorooctane		88.4 %	70-130	)	"	"	"	"	
Surrogate: 1-Chlorooctadecane		97.6 %	70-130	)	"	"	"	"	
NSW-C 2' (5K08007-05) Soil		s.							
Benzene	ND	0.0250	mg/kg dry	25	EK50811	11/09/05	11/09/05	EPA 8021B	
Foluene	ND	0.0250		"	"	"	"	<b>H</b> · · ·	
Ethylbenzene	ND	0.0250	"	"		н	•		
Kylene (p/m)	ND	0.0250	*	и		n	*		
Xylene (o)	ND	0.0250	"	"	"	"	н	19	
Surrogate: a,a,a-Trifluorotoluene		80.9 %	80-120	)	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		<i>93.2 %</i>	80-120	)	"	"	"	, <b>"</b>	
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	"	н	н	н			
Total Hydrocarbon C6-C35	ND	10.0		и	и		"	•	
Surrogate: 1-Chlorooctane		92.0 %	70-130	)	"	"	n	"	
Surrogate: 1-Chlorooctadecane		99.8 %	70-130	)	"	"	n	"	

Environmental Lab of Texas

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Page 3 of 13

#### Project: DEFS/G-28-4 Project Number: 130002 Project Manager: lain Olness

**Reported:** 11/17/05 13:02

## Organics by GC

#### **Environmental Lab of Texas**

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
NSW-E 2' (5K08007-06) Soil				<u></u>					
Benzene	ND	0.0250	mg/kg dry	25	EK50811	11/09/05	11/09/05	EPA 8021B	
Toluene	ND	0.0250	н	"	"		н	"	
Ethylbenzene	ND	0.0250	"	"	"	н	**	"	
Xylene (p/m)	ND	0.0250	**	n	'n	**	"	n	
Xylene (0)	ND	0.0250	"	и		н	н	"	
Surrogate: a,a,a-Trifluorotoluene		81.2 %	80-1	20	ť	n	u	"	
Surrogate: 4-Bromofluorobenzene		96.3 %	80-1	20	"	"	n	"	
Gasoline Range Organics C6-C12	ND	10.0	11	1	EK50908	11/09/05	11/11/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	ч	"	n	н	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	и	н	"	н	
Surrogate: 1-Chlorooctane		115 %	70-1	30	"	n	"	"	
Surrogate: 1-Chlorooctadecane		112 %	70-1	30	"	n	"	n	
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	"		н	н	"	"	
Ethylbenzene	ND	0.0250	"	n	n	n	'n	n	
Xylené (p/m)	ND	0.0250	"	"	**	н	"	"	
Xylene (0)	ND	0.0250	11	н	"	"	u ,	"	
Surrogate: a,a,a-Trifluorotoluene		82.0 %	80-1	20	"	"	<i>n</i>	"	
Surrogate: 4-Bromofluorobenzene		101 %	80-1	20	"	n	n	a	
Gasoline Range Organics C6-C12	ND	10.0	н	ı	EK50908	11/09/05	11/11/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	ri	н	"	н	*		
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	н	
Surrogate: 1-Chlorooctane		118 %	70-1	30	"	"	"	н	
Surrogate: 1-Chlorooctadecane		113 %	70-1	30	"	"	"	ıt	
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	u	"	**	'n	**	м	
Ethylbenzene	ND	0.0250	If	"		н		н	
Xylene (p/m)	ND	0.0250	и	11	"	"			
Xylene (o)	ND	0.0250	"	"	н	н	"	u.	
Surrogate: a,a,a-Trifluorotoluene		80.5 %	80-1	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.6 %	80-1	20	"	"	"	"	
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			н	*		11	
Total Hydrocarbon C6-C35	ND	10.0	H	н	"	11	11	"	

Environmental Lab of Texas

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#### Project: DEFS/G-28-4 Project Number: 130002 Project Manager: Iain Olness

Reported:

11/17/05 13:02

#### 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 %	70-12	30	EK50908	11/09/05	11/11/05	EPA 8015M	
Surrogate: 1-Chlorooctadecane		89.6 %	70-13	80	"	"	n	"	
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	. "	"	"	н		н	
Ethylbenzene	ND	0.0250	"		**	II		м	
Xylene (p/m)	· ND	0.0250	"	"	•	**	u	н	
Xylene (0)	ND	0.0250	н	"	"	11	"	W	
Surrogate: a,a,a-Trifluorotoluene		86.3 %	80-12	20	"	"	"	n .	
Surrogate: 4-Bromofluorobenzene		103 %	80-12	0	"	n	"	"	
Gasoline Range Organics C6-C12	ND	10.0	11	1	EK50908	11/09/05	11/11/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	II	"	n	19	*	"	
Total Hydrocarbon C6-C35	ND	10.0	"	и	"		N .	"	
Surrogate: 1-Chlorooctane		96.0 %	70-13	0	"	"	"	n	
Surrogate: 1-Chlorooctadecane		99.4 %	70-13	0	"	"	п	"	
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	**	"	"	н	"	"	
Ethylbenzene	ND	0.0250	n		"	**	н	"	
Xylene (p/m)	ND	0.0250	19	"	"	u	H	u ·	
Xylene (0)	ND	0.0250	*	"	"	17	н	11	·
Surrogate: a,a,a-Trifluorotoluene		80.6 %	80-12	0	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.8 %	80-12	0	"	"	"	"	
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		н	"	н	"	и	
Total Hydrocarbon C6-C35	ND	10.0		"	"		"	<b>H</b>	
Surrogate: 1-Chlorooctane		97.0 %	70-13	0	"	"	n	"	

Surrogate: 1-Chlorooctadecane

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Page 5 of 13

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70-130

101 %

#### Project: DEFS/ G-28-4 Project Number: 130002 Project Manager: Iain Olness

**Reported:** 11/17/05 13:02

#### General Chemistry Parameters by EPA / Standard Methods

#### **Environmental Lab of Texas**

······································		Reporting							
Analyte	Result	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	%	ι	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	

Environmental Lab of Texas

Environmental Plus, Incorporated	Project:	DEFS/ G-28-4
P.O. Box 1558	Project Number:	130002
Eunice NM, 88231	Project Manager:	Iain Olness

Fax: 505-394-2601

**Reported:** 11/17/05 13:02

### 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	EK 50906	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	

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Page 7 of 13

#### Project: DEFS/G-28-4 Project Number: 130002 Project Manager: Iain Olness

**Reported:** 11/17/05 13:02

#### **Organics by GC - Quality Control**

**Environmental Lab of Texas** 

Analute	Recult	Reporting	Unite	Spike	Source	%RFC	%REC	<u>t</u> aŭ	RPD Limit	Notes
Analyu	Kesult		Units	Level	ncsull					110105
Batch EK50811 - EPA 5030C (GC)						<u></u>				
Blank (EK50811-BLK1)				Prepared: 1	1/08/05 A	Analyzed: 11	/09/05			
Benzene	ND	0.0250	mg/kg wet							
Toluene	ND	0.0250	n							
Ethylbenzene	ND	0.0250								
Xylene (p/m)	ND	0.0250	w							
Xylene (0)	ND	0.0250	н							
Surrogate: a.a.a-Trifluorotoluene	0.0324		"	0.0400		81.0	80-120			n
Surrogate: 4-Bromofluorobenzene	0.0392		"	0.0400		98.0	80-120			
LCS (EK50811-BS1)				Prepared: 1	1/08/05 A	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	н	0.100		91.0	80-120			
Xylenc (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: 1	1/08/05 A	Analyzed: 11	/10/05			
Benzene	41.4		ug/kg	50.0		82.8	80-120			
Toluene	42.0		н	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. <b>033</b> 7		"	0.0400		84.2	80-120			
Matrix Spike (EK50811-MS1)	S	ource: 5K08009	-03	Prepared: 1	1/08/05 A	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	11	0.0527	ND	80.6	80-120			
Xylene (p/m)	0.0851	0.00100		0.105	ND	81.0	80-120			
Xylene (0)	0.0450	0.00100	w	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			

Environmental Lab of Texas

Environmental Plus, Incorporated		1	Project: DE	EFS/ G-28-4					Fax: 505-	-394-2601
P.O. Box 1558		Project N	umber: 13	0002					Repo	orted:
Eunice NM, 88231		Project M	anager: Iai	n Olness					11/17/0	)5 13:02
	C	Organics by	y GC - Q	uality Co	ontrol					
		Environ	mental L	ab of Te	xas					
Anglyta	Pagult	Reporting	Linite	Spike	Source	M BEC	%REC	PDD	RPD	Neter
Analyc	Kesun		Onto	Level	Kesun	/ikec	Linits		Linit	Indies
Batch EK50811 - EPA 5030C (GC)									• · · · ·	
Matrix Spike Dup (EK50811-MSD1)	So	urce: 5K0800	9-03	Prepared: 1	1/08/05 A	nalyzed: 1	1/09/05			
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	11	0.105	ND	81.6	80-120	0.738	20	
Xylene (0)	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: 1	1/09/05 A	nalyzed: 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: 1	1/09/05 A	nalyzed: 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	н	500		88.8	75-125			
Fotal Hydrocarbon C6-C35	837	10.0	н	1000		83.7	75-125			
Surrogate: 1-Chlorooctane	48.1		mg/kg	50.0		96.2	70-130			
Surrogate: 1-Chlorooctadecane	47.0		n	50.0		94.0	70-130			
Calibration Check (EK50908-CCV1)				Prepared: 1	1/09/05 Aı	nalyzed: 11	/11/05			
Gasoline Range Organics C6-C12	425		mg/kg	500		85.0	80-120			
Diesel Range Organics >C12-C35	548		н	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			

Environmental Lab of Texas

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Page 9 of 13

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Fax: 505-394-2601

#### Project: DEFS/G-28-4 Project Number: 130002 Project Manager: Iain Olness

**Reported:** 11/17/05 13:02

#### **Organics by GC - Quality Control**

#### **Environmental Lab of Texas**

		Reporting		Snike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EK50908 - Solvent Extraction (GC)										
Matrix Spike (EK50908-MS1)	Sou	rce: 5K08007	7-01	Prepared: 1	1/09/05 A	nalyzed: 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	н	538	ND	96.3	75-125			
Total Hydrocarbon C6-C35	931	10.0	н	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)	Sou	rce: 5K08007	7-01	Prepared: 1	1/09/05 A	nalyzed: 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	п	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			

Environmental Lab of Texas

Environmental Plus, Incorporated		P	roject: D	EFS/ G-28-4					Fax: 505-	394-2601
P.O. Box 1558		Project N	umber: 13	30002					Repo	rted:
Eunice NM, 88231		Project Ma	nager: la	in Olness					11/17/0	5 13:02
General C	hemistry Para	ameters by	/ EPA /	Standard	Methoo	ls - Qua	ality Con	trol		
······································		Environi								
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				
6 Solids	100		%							
Duplicate (EK50906-DUP1)	Sou	rce: 5K08004	-01	Prepared &	Analyzed:	11/09/05				
6 Solids	94.5		%		94.1			0.424	20	
<b>3atch EK51503 - Water Extraction</b>										
Blank (EK51503-BLK1)				Prepared: 1	1/11/05 Ar	nalyzed: 1	1/15/05			
Chloride	ND	0.500	mg/kg							
Sulfate	ND	0.500	"							
.CS (EK51503-BS1)				Prepared: 1	1/11/05 Ar	alyzed: 1	1/15/05			
Sulfate	9.05		mg/L	10.0		90.5	80-120			
hloride	8.00		H	10.0		80.0	80-120			
Calibration Check (EK51503-CCV1)				Prepared: 1	1/11/05 Ar	alyzed: 11	1/15/05			
Chloride	8.00		mg/L	10.0		80.0	80-120			
ulfate	9.35		и	10.0		93.5	80-120			
Duplicate (EK51503-DUP1)	Sou	rce: 5K08008	-01	Prepared: 1	1/11/05 Ar	alyzed: 11	1/15/05			
Chloride	35.1	5.00	mg/kg		35.9			2.25	20	
ulfate	56.2	5.00	"		57.7			2.63	20	
Batch EK51504 - Water Extraction										
Blank (EK51504-BLK1)				Prepared: 1	1/14/05 Ar	alyzed: 11	/15/05			
ulfate	ND	0.500	mg/kg							
Chloride	ND	0.500								

Environmental Lab of Texas

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**Reported:** 11/17/05 13:02

#### General Chemistry Parameters by EPA / Standard Methods - Quality Control

#### **Environmental Lab of Texas**

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EK51504 - Water Extraction										
LCS (EK51504-BS1)				Prepared:	1/14/05 A	nalyzed: 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:	1/14/05 A	nalyzed: 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)	Sou	rce: 5K08007	-01	Prepared: 1	1/14/05 A	nalyzed: 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	

Environmental Lab of Texas

**Reported:** 11/17/05 13:02

#### **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 Just 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.

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

Environmental Lab of Texas

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

Page 13 of 13

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Page 1 of 1

# Variance / Corrective Action Report – Sample Log-In

Client:	Env. Plus	
Date/Time:	11/8/05 11:00	
Order #:	5808007	
Initials:	0K	-

### Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	2.0 C
Shipping container/cooler in good condition?	হৈছ	No	
Custody Seals intact on shipping container/cooler?	Yes	No	Not present
Custody Seals intact on sample bottles?	XES	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?	Ves	No	
Samples in proper container/bottle?	1 Kes	No	
Samples properly preserved?	Xas	No	
Sample bottles intact?	YES I	No	
Preservations documented on Chain of Custody?	1 Yes 1	No	
Containers documented on Chain of Custody?	(PS)	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: \_\_\_\_\_Date/Time: \_\_\_\_\_\_Contacted by: \_\_\_\_\_\_

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Contact Person:	
Regarding:	•

Corrective Action Taken:

Environmental Plus, Incorporated	Project:	Duke Energy- G-28-4 (ref. #130002)	Fax: 505-394-2601
P.O. Box 1558	Project Number:	None Given	Reported:
Eunice NM, 88231	Project Manager:	Iain Olness	02/25/05 11:08

## 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						<u></u>			
Benzene	ND	0.0250	mg/kg dry	25	EB52408	02/23/05	02/24/05	EPA 8021B	
Toluene	0.0353	0.0250	"	"	"	и	u	0	
Ethylbenzene	0.0549	0.0250		"		и	"	"	
Xylene (p/m)	0.234	0.0250	•	11	"	н	"	P	
Xylene (0)	0.0741	0.0250	"	"	u	и	"	"	
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	**	н	"	и	и	n	
Total Hydrocarbon C6-C35	222	10.0	v	It	"	n	"	"	
Surrogate: 1-Chlorooctane		78.0 %	70-	130	n	"	"	"	
Surrogate: 1-Chlorooctadecane		81.0 %	70-	130	n	"	"	"	
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	"	0	н	n	"	11	
Ethylbenzene	0.236	0.0250	n	н		n	"	U	
Xylene (p/m)	1.01	0.0250	н	"	"	"	"	U	
Xylene (0)	0.358	0.0250	U	"	"	**	11	11	
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	"			"	и	u	
Total Hydrocarbon C6-C35	270	10.0	11	н		11	11		
Surrogate: 1-Chlorooctane		97.0 %	70-	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		86.2 %	70-	130	"	"	"	"	

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

Page 3 of 11

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

Client:	Env. Plus	2
Date/Time:	11/8/05	11:00
Order #:	5608007	ang 2018,789 2 katalogo na mang 2 min mino, dinang pang pang pang pang pang pang pang
Initials	ne	

# Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	2,0 C
Shipping container/cooler in good condition?	CTES	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?	Xes	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?	(es	No	
Samples in proper container/bottle?	Yes	No	
Samples properly preserved?	Yas	No	
Sample bottles intact?	YES	No	
Preservations documented on Chain of Custody?	1 Yes	No	
Containers documented on Chain of Custody?	(Ps)	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:

Contact Person: Regarding:	Variance Documentation: Date/Time:	_ Contacted by:
Corrective Action Taken:		

# **APPENDIX II**

# **SITE PHOTOGRAPHS**


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



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

Duke Energy Field Services



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



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

Duke Energy Field Services



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



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

- 17 12



**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.

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# **APPENDIX III**

### **CLAY LINER COMPACTION RESULTS**

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PETTIGREN SHO		LABORATORY TEST F PETTIGREW & ASSO 1110 N. GRIMES HOBBS, NM 88240 (505) 393-9827	REPORT C <b>IATES, P.A</b> .	ASHTO R18 DEBRA P. HICKS, P.E./L.S.I. WILLIAM M. HICKS. III, P.E./P.S.
То:	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

		Dry Density			
Test No.	Location	% 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 Compa	action: 95%	
Lab No.:	05 11032-11033	PETTIGREW & ASSOCIATES
Copies To:	Enviromental Plus	BY: Use Cu pel

P.E.

## **APPENDIX IV**

#### SITE INFORMATION AND METRICS FORM

#### AND

### FINAL C-141

Duke Energy Field Services Site Incide			lent Date: NMOCD Noti		ified:		
Informatio	and Metrics 14 April 2004		l l	03 May 2004	@ 0730 hrs		
Site: C78:4	011 0110 11100 103	Assigned Site Deferment the 1			30009		
Company Dub	Sue: U20-4 Assigned Site Reference #: 150002						
Stroot Address	to Energy Field Dervices						
Mailing Address	11505 West Challahod	Uishinai					
Address	Tiobha Now Marias	nigiway					
Cny, State, Zip:	HODDS, INCW MEXICO	00240					
Representative:	Paul Mulkey	6717					
Representative 1	elephone: (505) 397-	5/16					
Telephone:							
Fluid volume rel	eased (bbls): unknown		Recove	red (bbis): 0 bi	DIS		
	>25 DDIS: NOTIFY IN	MOCD verbally w	Anno 24 ars and sui	mit form C-141 v met Natural Car	vinin 15 days.		
5	25 bbis: Submit form C-141	within 15 days (A	iso applies to unaut	horized releases o	f 50-500 mcf Natural Gas)		
Leak, Spill, or P	it (LSP) Name: G28-	4					
Source of contan	nination: 8" Steel Pipel	ine		······································			
Land Owner, i.e	BLM. ST. Fee. Other	: Miller Deck I	Istate	· · · · · · · · · · · · · · · · · · ·			
LSP Dimensions	: 47' x 27'						
ISP Area:	1 205 soft ft <sup>2</sup>						
Location of Refe	rence Point (RP)						
Location distance	e and direction from R	р.					
Tatindar N 320	22' 23 06"	<u></u>		· · · · · · · · · · · · · · · · · · ·			
Langitudes W 1	22 25.00		· · · · · · · · · · · · · · · · · · ·				
Elemetion chove	man res levels 3.510's	mel					
Liest from South	Section Lines	11181					
Feet from West	Section Lines						
Territon Unit o	- 1414. CR1/ of the CR1/		Unit Lattan	)			
Location Cartin		ł	Unit Letter:	•			
Location-Sectio	11: 21 	·			······································		
Location- Towns	snip: 1225						
Location- Kange	K JOE	· · · · · · · · · · · · · · · · · · ·					
	1 111 1 1000 1						
Surface water be	ody within 1000 · radiu	s of site: none	<u> </u>				
Surface water be	ody within 1000 * radiu	s of site: none					
Domestic water	wells within 1000' radi	us of site: non	e				
Domestic water	wells within 1000' radi	us of site: non	ė				
Agricultural wat	ter wells within 1000' r	adius of site: 1	none				
Agricultural wat	ter wells within 1000' r	adius of site: 1	none		· · · · ·		
Public water sur	oply wells within 1000'	radius of site:	none				
Public water sup	oply 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	n water source. c	r;<200' from	<200 horizontal feet: 20 points		
If Depth to GW 50 to 99 feet: 10 points private domestic water source: 20 points 200-100 horizontal feet: 10 point					200-100 horizontal feet: 10 points		
If >1000' from water source or >200' from							
If Depth to GW >100 feet: 0 points private domestic water source; 0 points >1000 horizontal feet: 0 points							
Ground water Sc	Ground water Score = 0 Wellh			re=0	Surface Water Score= 0		
Site Rank $(1+2+3) = 0$							
	Totel Si	e Ranking Se	are and Accenta	hie Concentra	tions		
Parameter >19 10.10 0.0							
Renzenal	10 mm		10-17		10 mm		
BTEX	<u> </u>		10 ppm		50 mm		
TDU		1000 prim 5000					
	no ppm	الاستريد المديدين المدير			SUUU ppm		
100 ppm held VOC headspace measurement may be substituted for lab analysis							

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#6823 P.002/002

Distict of New Mexico       Form C-142         Distict of New Mexico       Energy Minorals and Natrul Resources       Subject of New Mexico         Distict of New Mexico       Energy Minorals and Natrul Resources       Subject of New Mexico         Distict of New Mexico       Energy Minorals and Natrul Resources       Subject of New Mexico         Distict of New Mexico       Subject of New Mexico       Subject of New Mexico         Distict of New Mexico       Subject of New Mexico       Subject of New Mexico         Distict of New Mexico       Subject of New Mexico       Subject of New Mexico         Distict Strengt New Mexico       Subject of New Mexico       Subject of New Mexico         Distict Strengt New Mexico       Subject of New Mexico       Subject of New Mexico         Distict Strengt New Mexico       Subject of New Mexico       Subject of New Mexico         Distict Strengt New Mexico       Subject of New Mexico       Subject of New Mexico         Name of Company       Cursitor       Junit New Ject of New Mexico       Subject of New Mexico         Name of Company       Cursitor       Junit New Ject of New Mexico       Subject of New Mexico         Name of Company       Cursitor       Junit New Ject of New J									uke Energy eld Services	
Release Notification and Corrective Action         OPERATOR       Initial Report         Name of Company       Contact         Date Energy Field Services       Lynn Ward         Address       Lynn Ward         Contact       Contact       Contact       Contact         Name of Company       Contact         Contact       Contact         Name of Company       Contact         Contact       Contact         Address       Contact         Contact       Contact         Contact </td <td>Distort 1 1025 N. Fronch 1 Distort 11 1301 W. Groud J Distance (1) 1000 Rio Brazos District IV 1220 S. St. France</td> <td colspan="5">District 1       State of N.         1025 N. Franch Dr., Hobbs, NM 88240       State of N.         District II       Energy Minerals an         1301 W. Groud Avenue, Artexia, NM 89210       District III         District III       Oil Conserva         1000 Rio Brezow Road, Avenue, NM 87410       Oil Conserva         District IV       1220 South S         1220 S. St. Francis Dr., Santa Fe, NM 87304       Santa Fe,</td> <td>co Resources ision s Dr. 15</td> <td>Sabmít Distr</td> <td colspan="2">Form C-141 Revised March 17, 1999 Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form</td>	Distort 1 1025 N. Fronch 1 Distort 11 1301 W. Groud J Distance (1) 1000 Rio Brazos District IV 1220 S. St. France	District 1       State of N.         1025 N. Franch Dr., Hobbs, NM 88240       State of N.         District II       Energy Minerals an         1301 W. Groud Avenue, Artexia, NM 89210       District III         District III       Oil Conserva         1000 Rio Brezow Road, Avenue, NM 87410       Oil Conserva         District IV       1220 South S         1220 S. St. Francis Dr., Santa Fe, NM 87304       Santa Fe,					co Resources ision s Dr. 15	Sabmít Distr	Form C-141 Revised March 17, 1999 Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form	
OPERATOR         Istical Report           Date and Despite Derivices         Lyrun Ward           Date Energy Field Services         Lyrun Ward           Address         Togethreen No.           10 Destin Drive, Saite 400-W, Midland, Texas 79705         (432) 620-J207           Predity Name         Pacility Type           228-4         Pacility Type           21         Towathip         Renge           P         21         Towathip         Renge           Mineral Owner         Loca Name         County:         Lee           Visit Lefter         Section         Towathip         Renge         Pect Form the Namh/Section         County:         Lee           Visit Lefter         Section         Towathip         Renge         Date and Hour of Decareme         Otamatic Action of Decareme           Visit Lefter         Section         Towathip         Renge         Date and Hour of Decareme         Otamatic Action of Decareme           Some of Release         Date and Hour of Decareme         Date and Hour of Decareme         Date and Hour of Decareme	:		R	telease )	Notification	and Co	rective Action			
Nume or Company         Constrict           Date Energy Field Services         Lymn Ward           Address         Lymn Ward           Address         Lips Ward           GDest Drive, Suite 490-W, Midland, Tenss 79705         (423, 620-1207)           Facility Type         (228.4)           Surface Owner         Mineral Owner         Leans No.           Milland Deck Estate         County: Lange Previous Restates         Foct from the EastWest Line           Unit Letter         Section         Towarking Previous Restates         Post from the EastWest Line           Manual Case Previous Restates         Post from the EastWest Line         Lange Ward States         Lange Ward States           Manual Case Previous Restates         Volumes Recovered         Unit Ward         Lange Ward States         Volumes Recovered           Manual Case Previous Restates         Volumes Recovered         Unit Ward Cases         Outcase Recovered         Dates and How of Discovery           Type of Retearse         Date and How of Discovery         Dates and How of Discovery         Discovery         Discovery           Was Immediate Natice Given?         Yes IS No         No Required         Mark 200-46 (270 bes         Discovery           Was Wastercourse Reached?         Yes IS No         If YES, Volume I Researce IS Posteres Indit Restates	0	OPERATOR Initial Report S Final Report						nal Report		
Address       Tolephone No.         10 Desta Driva, Suite 300-W, Midland, Texas 79705       [423] 620-470         Predity Name       Partity Type         Q28-4       R* Stead Pipeline         Serface Owner       Mineral Owner       Lesso No.         Millard Deck Estate       LOCATION OF RELEASE       County: Les         Unit Letter       Section       Township       Range       Peer from the NarkhSenth       Rect from the EastWest Lise       County: Les         1       T225       R3GE       Lice       NATURE OF RELEASE       Unit uses Notes and Hour of Deck reset       Uses Notes 19 52.09*         NATURE OF RELEASE       Volume of Release       Volume of Release       Uses and Hour of Deck reset       Deck and Hour of Oreansance         Source of Release       Date and Hour of Oreansance       Date and Hour of Oreansance       Date and Hour of Oreansance         Was watercourse Reachest*       Yes IS No IN Statewater and Hour of Oreansance       Date and Hour of Oreansance         By Whenn?       Istry foltreen       Istry foltreen       No IN Required Hourse       No IN Required Hourse         Was watercourse was impacted, Descelbe Fully.* NA       NA       NA       No IN Required Hourse       No IN Required Hourse       No IN Required Hourse         Has 2004 @ 0230 bra       Istry foltreen <t< td=""><td>Duke Energy</td><td>npany Field Servi</td><td>C08</td><td></td><td></td><td>Lvrm V</td><td>त्त धःस्तर</td><td></td><td></td></t<>	Duke Energy	npany Field Servi	C08			Lvrm V	त्त धःस्तर			
10 USSIN Drive, Suite 300-W, Migliand, Texis 79705       1422 (22) 4207         Fredity Type       8" Steel Pipeline         Surface Owner       Range         Wilt Letter       Section         Wilt Letter       Numeral Owner         LOCATION OF RELEASE       Lesso No.         Unit Letter       Section         P       21       Towaship         Range       Perform the Nanhännith         Parcel Robust       Doctation of Release         Natural One Pipeline Shuide       Obarrole         Some of Robusto       Obarrole         Some of Robusto       Date and Born of Discovery         Pipe of Robusto       Obarrole         Some of Robusto       Date and Born of Discovery         Pipe of Robusto       Obarrole         Some of Robusto       Date and Born of Discovery         Pipe of Robusto       Disc and Born of Discovery         Was Tunnellace Notice Given?       Vest Bioline         Was Tunnellace Notice Given?       Vest Bioline         Was Standerdowne Renchast?       Vest Bioline         Was Standerdowne Renchast?       Vest Bioline         Was Waseroourse Renchast?       Vest Bioline Course of Problem and Remedial Action Taken.*         Steed Pipeline Anes Affected med Cleames Action T	Address					Teleph	ane Na.			
Q28-4       8" Steel Properties         Surface Owner Milland Deck Estric       Minereal Owner       Lesso No.         Unit Letter       Section       Towaship       Range       Ref. form the ParkhSeath       Ext from the East/Weit Lise       County: Les         Unit Letter       21       Towaship       Range       Ref. form the ParkhSeath       Foct from the East/Weit Lise       County: Les         Unit Letter       21       Towaship       Range       Ref. form the ParkhSeath       Ext from the East/Weit Lise       Let. N 327 27: 23, 06"         Mural One Provides       Provide Towaship       Range       Volume of Release       Use More 10 Second       Date and Home of Discondery         Service of Release       Date and Home of Oceannese       Date and Home of Discondery       04-14-04 (g) 1600 the       04-14-04 (g) 1600 the         Was TunnedInte Native Given?       Viel (S) No []       Not Required       Long Volume 1       04-14-04 (g) 1600 the         Was TunnedInte Native Given?       Viel (S) No []       Not Required       Lift, NS, Yo Wheent       04-14-04 (g) 1600 the         Was TunnedInte Native Given?       Viel (S) No []       No []       No       If YES, Yo Wheent       04-14-04 (g) 1600 the         Was TunnedInte Native Given?       Viel (S) No []       No []       No       If YES, Yo Wheent </td <td>Facility Nam</td> <td>o, Sume Au</td> <td>P-W. Niciland</td> <td>[[exas 79</td> <td>705</td> <td>(432) 6</td> <td>20-4207</td> <td></td> <td></td>	Facility Nam	o, Sume Au	P-W. Niciland	[[exas 79	705	(432) 6	20-4207			
Surface Owner Milland Deck Estate       LOCATION OF RELEASE         Unit Letter       Section       Township         21       Township       Rame         221       Township       Rame         21       Township       Rame         22       Rame       Nature         21       Township       Rame         22       Rame       Watercourse       Data and Hour         23       May 2001 (0) 0730 hra       Hay 2001 (0) 0730 hra         24       State and Hour       State and Hour         24       Watercourse was annotedial Actios Taken.*         25       Refere       NA         26       No       NA         27       State and Hour	G28-4					R" Stee	l Pipeline			
Distance Or Action       Distance Or Action         Milland Deck Estate       LOCATION OF RELEASE         Unit Letter       Section         P       21       T225         Range       Peet from the NathGarth       Feet from the SateWest Line       County: Les         Lar.       N322 22 23.06"       Lar.       N422 22 23.06"         Dyne of Release       Volume of Release       Darrela       Darrela         Sorreco of Release       Unit cent of the Sate and Hone of Release       Date and Hone of Release         Sorreco of Release       Date and Hone of Release       Date and Hone of Release         Nwas turnediate Natice Givens?       Disc barrely Field Service       D4:14.04 @ 1000 hts         By Whom?       Date and Hone of Release       Date and Hone of Release         By Whom?       Date and Hone of Release       Date and Hone of Release         By Whom?       Date and Hone of Release       Date and Hone of Release         By Whom?       Date and Hone of Release       Date and Hone of Release         By Whom?       Date and Hone of Release       Date and Hone of Release         By Whom?       Date and Hone of Release       Lary Softwart         By Whom?       Date and Hone of Release       Date and Hone of Release         By Whom?	Staffada Our		and and a state of the state of					E novo	Na	
LOCATION OF RELEASE         Unit Letter       Section       Towaship       Range       Exc from the NarkhSoeth       Exc from the ExarWest Lise       Lat.       Lat. 327 22 30 df         21       725       R36E       Line       Feet from the NarkhSoeth       Exc from the ExarWest Lise       Lat. 327 22 30 df         Type of Release       Watarea of Release       Obtaread       Obtaread       Obtaread         Some of Release       Date and Boar of Discovery       Obtaread       Obtaread       Obtaread         Was strunctions       Date and Boar of Discovery       Date and Boar of Discovery       Obtaread       Date and Boar       Obtaread       Date and Boar       Date and Hour of Discovery         Was strunctions       Disc and Boar       Date and Boar       Obtaread       Date and Boar       Date and Hour of Discovery         Was strunctions       Disc and Boar       Diste and Boar       Date and Boar <t< td=""><td>Milland Deck</td><td>Estate</td><td></td><td></td><td></td><td>ner.</td><td></td><td>Peris.</td><td>140.</td></t<>	Milland Deck	Estate				ner.		Peris.	140.	
Unit Letter       Section       Township       Ramge Ride       Entrom the North/Sonth       Foot from the EnarWest Line       County: La Lart. N 327 22: 30.6° Lart. N 327 22: 30.6° Dearning         Type of Release       Volumes Recovered       Volumes Recovered       Observery         Some of Release       Date and Hour of Discovery       Date and Hour of Discovery       Date and Hour of Discovery         Was Immediate Natice Given?       Yes I No       Not Required       Larr. Johnson       Date and Hour of Discovery         By Whom?       Jan 2004 @ 0730 hrs       If YES, To Whom?       Jany 2004 @ 0730 hrs       If YES, To Whom?         Hin & Watercourse was Impacted, Describe Fully. <sup>4</sup> NA       NA       Describe Cause of Problem and Remedial Action Taken. <sup>4</sup> Describe Cause of Problem and Remedial Action Taken. <sup>4</sup> Steel Impecting that comparison of the problem and Remedial Action Taken. <sup>4</sup> Approximately 1.205 square free of plyceline inght-of-way and pasture land were initially affected by the release. Soil contamined aboves the NMOCD Remedial Cuidelines was excavated from an area that comprised sproximately 5.750 square free to plyceline inght-of-way and pasture					LOCATION	OF REL	EASE	9-92-94999, instead of a second second		
NATURE OF RELEASE         Type of Retease       Voluate Recovered       Otamate         Natural Cas Produce Fhids       Unknown Barrols       O barrols       O barrols         Sorrec of Retease       Date and Hour of Occurrence       Date and Hour of Occurrence       Date and Hour of Occurrence         Was Immediate Netles Given?       If YES, To Whom?       Larry Johnson       Date and Hour of Occurrence       Date and Hour of Occurrence         By Whom?       Date and Hour of Occurrence       Date and Hour of Occurrence       Date and Hour of Occurrence         By Whom?       Date and Hour of Occurrence       Date and Hour of Occurrence       Date and Hour of Occurrence         Was a Watercourse Reached?       Yes El No       If YES, Voluena Impacted, Describe Fully.* NA         Describe Area Affected and Cleanup Action Taken.*       NA         Steel line began leaking due to internal corrosion. Pipe replaced and line tested.         Describe Area Affected and Cleanup Action Taken.*       Approximately 1,205 square free of pipelline right-of-Way and posture land were initially effected by the release. Soil contaminand above the NMOCD mean and compared day liner was imalied in the statewasten flow of all was active and the posture land were initially effected by the release. Soil contaminand above the NMOCD mean and compared day liner was imalied in the statewasten flow and posture land were wastend flow and and test posture land were initially effected by the release. Soil contamines above the NMOCD mean and completed	Unit Letter P	Section 21	Township T22S	Range R36E	Range Pret from the North's R36E Line		Feet from the Base/West L	lse Coun Lat. Lon.	ic County: Lea Lat. N 32° 22° 23,06" Lan. W 400° 14° 52 00"	
Type of Release Natural Gas Problem Fluids       Voltate of Release Unknown Barrols       Voltate of Release Unknown Barrols       Voltate of Release Date and Blow of Occurrence Duke Energy Field Services       Date and Blow of Occurrence Duke Energy Field Services       D4-14-04 @ 1600 hts         Was Immediate Natice Given?       If YES, To Whom?       Linry Johnson       Date and Blow of Occurrence Duke Energy Field Services       D4-14-04 @ 1600 hts         By Whom?       If YES, To Whom?       Linry Johnson       Date and Blow of Occurrence If YES, Voltage of Blow of Cocurrence Was a Watercourse Reached?       Yes El No       If YES, Voltage of Blow of Cocurrence NA         The Watercourse Reached?       Yes El No       If YES, Voltage of Blow of Cocurrence NA       If YES, Voltage of Blow of Cocurrence NA         The Watercourse was Impacted, Describe Fully.* NA       Describe Area Affected and Econor Taken.*       NA         Describe Area Affected and Cleanup Action Taken.*       Store Johnston and Remedial Action Taken.*         Approximately 1,205 square free of pipeline right-of-Way and popure land were initially affected by the release. Soil contaminand above the NMOCCD Remedial Coldelines was executed from an area the comprised approximately 5,750 square face to approximately approximately approximately to an approved theling for treatment. A comparted cing line reactinately face and perform contexture action and reacting tectus contrained to all own entrated data mage.         I hereby centify that the information given above is true and complete tor the bandowas and contoward to allow nature of MocOCD rules and					NATUREO	FRELE	ASE	₩. (1999-19. 197 <u>9</u> ) (1999-19-19-19-19-19-19-19-19-19-19-19-19		
Attraction Straids       unknown barrols       O barrols         Source of Rehense       Date and Hour of Discovery       Date and Hour of Discovery         #" Steel Pipeline       Date and Hour of Discovery       Date and Hour of Discovery         Was Immediano Natice Given?       If YZS, To Whom?       Date and Hour of Discovery         By Whom?       Date and Hour of Discovery       Date and Hour of Discovery         By Whom?       Date and Hour of Discovery       Date and Hour of Discovery         By Whom?       Date and Hour of Discovery       Date and Hour of Discovery         Was Immediano Natice Given?       Vent Bio of Discovery       Date and Hour of Discovery         Wis a Watercourse Renched?       Yea Bio No       No       If YES, Yo Waters Impecting the Watercourse.         Wis a Watercourse was Impacted, Describe Fully.* NA       Describe Area Affected mod Cleamop Action Taken.*       NA         Steel line began leaking due to internal corrosion.       Pipe repliced and line tested.       Discovery of the steel of the opponytice fact to approximately 7-6m bg. Impacted solv was tennoponted to an approve fact for pipeline inght of Sway and pusture land were initially affected by the release. Soil contaminated above the NMOCD Remedial Ouidelines was excented from na area that completed tay line was initiality in the outper and beingen:       Sway Dose and Sway the NMOCD mate and the pusture was initiality in the outper and outper advect starts of approvimately 7-6m bg. Impacted sol was tennopoted theil	Type of Release	HC		<b></b>		Voturne of	Release	Volume R	covered	
** Steel Pipeline       Duke Emergy Field Services       04:14-04 (2) 1500 hrs         Was Trainediate Nation Givers?       If YES, To Whom?       If YES, To Whom?         By Whom?       Date and Borr       3 May 2004 (2) 0730 krs         By Whom?       In Oness, BPI       Date and Borr         In Oness, BPI       If YES, Volume Impacting the Watercourse.         Was a Watercourse Renched?       Yes         Yes, Volume Impacting the Watercourse.       No         If a Watercourse was Impacted, Describe Fully.* NA       Describe Cause of Problem and Remedial Action Taken.*         Steel line began leaking due to internal corresion. Pipe repliced and line tested.       Describe Area Affected md Cleamap Action Taken.*         Prosting In the soil. The encavation was backfilled with clean soil purchased meet initially affected by the release. Soil contaminated above the NMOCD Remedial Guidelines was encavated from na area that compacted city liner was installed in the encavarian floor to loolsan tealdour hydrocarbons remaining in the soil. The encavation was backfilled with clean soil purchased from the landowars and controvated on allow taxing due to an approved theiline spin-face of the carbin plane show is true and compacted to the portant desinge.         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 creations for release which may endanger public health or the cavinopation. In addition, NMOCD acceptance of a C-141 report does not releve the operation of Inshipps due to decayarby in travel desine to decayarby ino	Source of Rek	aso				Date and	barrels.	Dete and I	Date and Hour of Discourse	
If Y2S, Ta Whom?       If Y2S, Ta Whom?         Intercention of the environment of the envit the the the envit the the there the environment of there the en	8" Steel Pipelin	e				Duke Engr	gy Flatd Services	04-14-04 (	a 1600 hrs	
By Whom?       Into Ofress, 821       3 May 2004 @ 0730 bra         Was a Watercourse Reached?       Yes El No       If Yes, Volume I mpacting the Watercourse.         If a Watercourse Reached?       Yes El No       If Yes, Volume I mpacting the Watercourse.         If a Watercourse Reached?       Yes El No       If Yes, Volume I mpacting the Watercourse.         If a Watercourse Reached?       Yes El No       If Yes, Volume I mpacting the Watercourse.         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.*         Remedial Ouidelines was excaved from an area that comprised approximately 5,570 spure fact to approximately root boy manual approxed the thilly for treatment. A compacted ciny liner was installed in the excavation floor to loolate residual hydrocarbons termaining in the soil. The excavation was backfiled with elean 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 complete the bit of my knowledge and understand that pursuant to NMOCD rules and public health or the environment. The acceptance of a C-141 report does not relieve actions for relaxes which may endanger public health or the environment. The acceptance of a C-141 report does not relieve the operations of responsibility for compliance with any ether federal, rules for lood lawa and/or regulations. <t< td=""><td>AABE TÜRUCURU</td><td>PD ING1600 (54</td><td>vens D Ya</td><td>No No</td><td>Not Required</td><td>Larry John</td><td>son</td><td></td><td></td></t<>	AABE TÜRUCURU	PD ING1600 (54	vens D Ya	No No	Not Required	Larry John	son			
Interset, SP1       3 May 2006 @ 0730 km         Whis a Watercourse Renchesi?       Yes B No       If YES, Volume Impacting the Watercourse.         IT a Watercourse was Impacted, Describe Fnily.* NA       NA         Describe Cause of Problem and Remedial Action Taken.*       NA         Steel line began leaking due to internal corrosion. Pipe replaced and line tested.       Describe Area Affected mid Cleanup Action Taken.*         Approximately 1.205 square feet of pipeline right-of-way and pasture land were initially affected by the release. Soil contaminant above the NMOCD Remedial Action Taken.*         Approximately 1.205 square feet of pipeline right-of-way and pasture land were initially affected by the release. Soil contaminant above the NMOCD Remedial Guidelines was excaved them area that comprised epipeline installed in the excavation floor to lobate realbaul hydrocarbons remaining in the soil. The exception with telean soil purchased from the landownar and contoured to allow natural dealinage.         I hereby certify that the information given above is true and ecomplete to the best of my knowledge and understand that pursuan to NMOCD rules and regulations all operators are required to roport and/or file certain release conflications and perform corroctive actions for releases which may endanger public health or the environment. The acceptance of a C-141 report does not releave the persuare function may enderger public health or the environment. NMOCD exceptance of a C-141 report does not releave the operator of tability for compliance with hum environing interpendence.         Signature:       MA         Princed Names, Lyon Ward       Approved by Distrift Sepanalose. </td <td>By Whom?</td> <td></td> <td></td> <td></td> <td></td> <td>Date and</td> <td>Hour</td> <td></td> <td></td>	By Whom?					Date and	Hour			
If a Watterconreso 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 fact of pipelline right-of-way and pasure land were initially affected by the release. Soil contaminated above the NMOCD Remedial Ouidelines was excavated from na area that comprised approximately 5,570 square fact to approximately 5,670 square fact to approximated by The restment. A compacted clay line was installed in the excavation floor to lobke reducat phone reducation was backfilled with clean soil purchased from the landowner and contoured to allow natural drainage.         I horeby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and requisitions all operators are required to roport and/or file certain release continistion that post at more actions tor releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD nucles are to generate or devent to write address and requires to the control to a spectrometer. The addition, NMOCD acceptance of a C-141 report does not relieve the operators of responsibility for compliance with any endanger public health or the invironment. The acceptance of a C-141 report does not relieve the operators of responsibility for compliance of a C-141 report does not relieve the operators.         Signature:	Was a Watero	urse Reach	ed? 🗌 Yes	X No		3 May 200	4 @ 0730 hrs shume Impecting the Wet	eroouese.		
If a Watercourse was Impacted, Descelbe 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 mrd Cleamop Action Taken.*         Approximately 1,205 square fact of pipelline right-of-way and pursure land were initially affected by the release. Soil contaminant above the NMOCD         Remedial Guidelines was excaved from an area that comprised sporteximately 5,570 spuare fact on approximately 7-feet bgs. Impacted soil was transported to an approved fielding for treatment. A compacted clay liner was installed in the excavation floor to leolate realdual hydrocarbons remaining in the soil. The excavation given above is true and complete to be best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to roport and/or file carain release outilications and perform corrective actions for releases which may endenger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operature of lability for compliance of a C-141 report does not relieve the operator of responsibility for compliance with any endenger public health or the environment. The acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any endenger finderic does not relieve the operator of the conductor investigate and remediate contamination that pose a farest to ground water, surface or local lave and/or given above the Contamination that pose a farest to ground water, surface with any endenger public health or the environment. The acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, natec fried lawa and/or regulations.      <		·····				NA	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 md Cleanup Action Taken.*         Approximately 1,205 square for of pipelino right-of-way and posture land were initially affected by the release. Soil contaminated above the NMOCD Remedial Guidelinos was excavated from an area that comprised approximately 5,570 square fact of pipelino right-of-way and posture land were initially affected by the release. Soil contaminated above the NMOCD Remedial Guidelinos was excavated from an area that comprised approximately 5,570 square fact to approximately 7-feet bgs. Impacted soil was transported to an approved theiling for treatment. A compacted day line was installed in the excavation foor to looks realwal hydrocarbons remaining in the soil. The excavation was backfilled with clean soil purchased from the landowner and control to allow natural drainage.         I hereby certify that the information given above is true and ecomplete to the best of my knowledge and understand that pursuan to NMOCD rules and regulations all operators are required to roport and/or file certain release ontifications and perform corrective actions for releases which may endenger public health or the environtment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of isbuility should their operations face deequately investigate and transport does not relieve the operator of responsibility for compliance with any endenger public health or the environtment. The acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any endenger is the information, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state for local lawa and/or reg	ITA Watercon	rse was Imp	acted, Describ	e Fally.* N	A					
Describe Area Affected mid Cleamup Action Takea.*         Approximately 1,205 square fact of pipelino right-of-way and possure land were initially affected by the release. Soil contaminated above the NMOCD Remedial Quidelines was excavated from an area that compacted cipy line was installed in the excavation floor to isolate residual hydrocarbons remaining in the soil. The excavation the lindowners and contoured to allow natural drainage.         I hereby certify that the information given above is true and ecomplete to the best of my knowledge and understand that pursuan to NMOCD rules and regulations all operators are required to roport and/or file certain release of my knowledge and understand that pursuan to NMOCD rules and regulations all operators are required to roport and/or file certain release of my knowledge and understand that pursuan to NMOCD rules and regulations all operators are required to advert and/or file certain release on the environment. The acceptance of a C-141 report by the NMOCD contexts at the approximation with any endenger bet fielded, state or local laws and/or file certain of a C-141 report does not relieve the operator of responsibility for compliance with any endenger field Name: Lynn Ward         E-mail Address: lewand@date-econgr.com       OSIL CONSERVATION DEVISION         Finance:       Phone: (432) 620-4207       Conditions of Approval;         * Attach Additional Sheets If Necessary       Conditions of Approval;       Attached	Describe Caus Steel line began	e of Problem a leaking due	n and Remedia to internal con	Action Tr resion. Pipe	icen.* replaced and line te	sted.		·····		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuan to NMOCD rules and regulations all operators are required to roport and/or file certain release portifications 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 likebility stould their operations have failed to adequately investigate and convediate contamination that pose a threat to ground water, surface water, human bealth or the environment. The acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other fedoral, state or local laws and/or regulations.  Signature:  Printed Name: Linn Ward  E-mail Address: lewandalable coursy com Tate:  Phone: (432) 620-4207  Conditions of Approval:  Attached  Attached  * Attach Additional Sheets If Neccessary	Describe Area Affected and Cleanup Action Takes.* Approximately 1,205 square flex of pipelins right-of-way and passure land were initially affected by the release. Soil contaminated above the NMOCD Remedial Ouidelines was excavated from an area that comprised approximately 5,570 square flex to approximately 7-feet bigs. Impacted soil was remedial Ouidelines was excavated from an area that compared city liner was installed in the excavation floor to isolate realized hydrocarbons remaining in the soil. The excavation was backfilled with clean soil purchased from the landowner and contoured to allow natural drainage.									
Signature:       John Ward       OIL CONSERVATION DIVISION         Printed Name:       Lynn Ward       Exult Cost         E-mail Address:       Image:       Exult Cost         Title:       Environmental Specialist-Western Division       Approval Date:       Conditions of Approval:         Date:       Phone: (432) 620-4207       Conditions of Approval:       Attached	I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuan to NMOCD rules and regulations all operators are required to report and/or file certain release posifications and perform corrective actions for releases which may endenger 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 complete contamination that pose a threat to ground water, surface with any endenge the the two failed to adequately investigate and remodiate contamination that pose a threat to ground water, surface with any ether federal, surface, or local laws and/carregulations.									
Printed Name:       Lynn Ward         E-mail Address:       Lynn Ward         Approved by District Supervisor:       Lynn Western Division         Tale:       Phone: (432) 620-420?         Conditions of Approval:       Attached []	Signature: Than Ward QIL CONSERVATION DIVISION									
Title:       Explorition       Approval Date: C . O C       Explorition Date: C . O C         Date:       Phone: (432) 620.4207       Conditions of Approval: Attached       Attached         * Attach Additional Sheets If Necessary       Conditions of Approval: Conditions of Conditions of Approval: Conditions of Conditio	Printed Names Lynn Ward R-mail Address: Jovand addressen				Approved by Discrict Supervisor (					
Date: Phone: (432) 620-4207 Conditions of Approval; Attached	Title: Environmental Specialist-Western Division					Annow	n Devil . BC.	Fanlanti	Date	
* Attach Additional Sheets If Necessary	Date:			Рімпе	(432) 620-4203	Candid	ante of A premium in	Townshields	Attached 🔲	
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