

# CLOSURE PROPOSAL

**C-23-10 LINE SITE #10 RELEASE SITE**

**NMOCD 1RP # 422**  
**COMPANY No. 36785**  
**DEFS REF: 130044-10**

**UL-A (NE¼ OF THE NE¼) OF SECTION 14 T20S R35E**

**~18 MILES SOUTHWEST OF HOBBS,**

**LEA COUNTY, NEW MEXICO**

**LATITUDE: N 32° 34' 39.03"**

**LONGITUDE: W 103° 25' 31.23"**

**NOVEMBER 2006**

**PREPARED BY:**

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

**PREPARED FOR:**



**Duke Energy  
Field Services**

RP # 422

pPAC0603741819



Distribution List

Duke Energy Field Services – C-23-10 Line Site #10 Release Site  
NMOCD 1RP #422; DEFS/EPI Ref: 130044-10

Name	Title	Company or Agency	Mailing Address	e-mail
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## STANDARD OF CARE

### Closure Proposal

#### C-23-10 Line Site #10

(NMOCD 1RP#422; DEFS/EPI Ref. #130044-10)

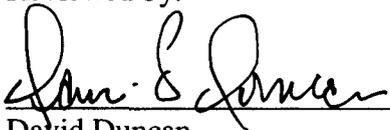
The information provided in this report was collected consistent with the New Mexico Oil Conservation Division (NMOCD) *Guidelines for Remediation of Leaks, Spills and Releases* (August 13, 1993), the NMOCD *Unlined Surface Impoundment Closure Guidelines* (February, 1993) and Environmental Plus, Inc.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

Prepared by:

  
\_\_\_\_\_  
Jason Stegemoller, M.S.  
Environmental Scientist

November 21, 2006  
Date

Reviewed by:

  
\_\_\_\_\_  
David Duncan  
Civil Engineer

11-21-06  
Date



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## 1.0 PROJECT SYNOPSIS

### *Site Specific:*

- ◆ **Company Name:** Duke Energy Field Services
- ◆ **Facility Name:** C-23-10 Line Site #10
- ◆ **Project Reference:** NMOCD 1RP#422; EPI Ref. #130044-10
- ◆ **Company Contacts:** Steven Weathers
- ◆ **Site Location:** WGS84 N32° 34' 39.03"; W103° 25' 31.23"
- ◆ **Legal Description:** Unit Letter-A, (NE¼ of the NE¼), Section 14, T 20 S, R 35 E
- ◆ **General Description:** Approximately 18-miles Southwest of Hobbs, New Mexico
- ◆ **Elevation:** 3,664-ft amsl
- ◆ **Land Ownership:** Patrick Sims
- ◆ **EPI Personnel:** Project Consultant – Jason Stegemoller  
Project Foreman – David Robinson

### *Release Specific:*

- ◆ **Product Released:** Natural Gas and Natural Gas Liquids (NGL)
- ◆ **Volume Released:** Unknown      **Volume Recovered:** None
- ◆ **Time of Occurrence:** Unknown      **Time of Discovery:** January 13, 2006
- ◆ **Release Source:** Steel natural gas pipeline
- ◆ **Initial Surface Area Affected:** ~ 1,000 square feet

### *Remediation Specific:*

- ◆ **Final Vertical extent of contamination:** 23-feet bgs at maximum depth
- ◆ **Depth to Ground Water:** ~50-ft bgs
- ◆ **Water wells within 1,000-ft:** None
- ◆ **Private domestic water sources within 200-ft:** None
- ◆ **Surface water bodies within 1,000-ft:** None
- ◆ **NMOCD Site Ranking Index:** 10 points
- ◆ **Remedial goals for Soil:** TPH – 1,000 mg/Kg; BTEX – 50 mg/Kg; Benzene – 10 mg/Kg; Chloride and sulfate residuals may not be capable of impacting groundwater above NMWQCC groundwater standards of 250 mg/L and 600 mg/L, respectively.
- ◆ **RCRA Waste Classification:** Exempt
- ◆ **Remediation Option Selected:** a) Excavate contaminated soil above NMOCD remedial goals in floor, sidewalls and stockpile on site; b) laboratory analyses to confirm removal of soil impacted above NMOCD remedial thresholds in excavation sidewalls and floor; c) shred/aerate a portion of the least impacted excavated soil; d) transport remaining excavated soil to a state approved landfarm for treatment; e) backfill the excavation with shredded soil and clean topsoil.
- ◆ **Disposal Facility:** South Monument Landfarm, Monument, New Mexico
- ◆ **Volume disposed:** Not applicable
- ◆ **Project Completion Date:** Ongoing



## 2.0 SITE AND RELEASE INFORMATION

**2.1** *Describe the land use and pertinent geographic features within 1,000 feet of the site.*  
In addition to oilfield activities, land surrounding the area is rangeland utilized for livestock grazing.

**2.2** *Identify and describe the source or suspected source(s) of the release.*  
Corrosion of steel natural gas pipeline.

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

**2.4** *What is the volume recovered? (if any)* 0 barrels

**2.5** *When did the release occur? (if known):* Unknown

### **2.6** *Geological Description*

The United States Geological Survey (USGS) Ground-Water Report 6, "*Geology and Ground-water Conditions in Southern Lea County, New Mexico*," A. Nicholson and A. Clebsch, 1961, describes the near surface geology of southern Lea County as "an intergrade of the Quaternary Alluvium (QA) sediments (i.e., fine to medium sand) with the mostly eroded Cenozoic Ogallala (CO) formation. Typically, the QA and CO formations in the area are capped by a thick interbed of caliche and generally overlain by sandy soil."

The release site is located in the Laguna Valley physiographic subdivision, described by Nicholson & Clebsch as an area that "covered almost entirely by dune sand which is stable or semi-stable over most of the area, but which locally drifts. The thickness of the sand cover ranges from a few inches to a probable maximum of 20 feet"

### **2.7** *Ecological Description*

The area is typical of the Upper Chihuahuan Desert Biome consisting primarily of sandy soil covered with short semi-arid grasses, interspersed with Honey Mesquite and forbs. Mammals represented include Orrd's and Merriam's Kangaroo Rats, Deer Mouse, White Throated Wood Rat, Cottontail Rabbit, Black Tailed Jackrabbit, Mule Deer, Bobcat, Red Fox and Coyote. Reptiles, amphibians and birds are numerous and typical of the area. A survey of Listed, Threatened or Endangered species was not conducted.

### **2.8** *Area Groundwater*

The unconfined groundwater aquifer at this site is projected to be ~50 feet (ft) bgs based on water depth data obtained from the New Mexico State Engineers Office and the United States Geological Survey data base (reference *Table 1*).

### **2.9** *Area Water Wells*

No public water supply wells are located within 1,000-feet of the release site. In addition, no private domestic fresh water wells or springs used by less than five households for domestic or stock watering purposes exist within 200-feet of the release site (reference *Table 1* and *Figure 2*).

### **2.10** *Area Surface Water Features*

No surface water features exist within 1,000 feet of the release site (reference *Figure 2*).



### 3.0 NMOCD SITE RANKING

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

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

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

Based on the proximity of the site to protectable area water wells, surface water bodies, and depth to groundwater from the lower most contamination, the NMOCD ranking score for the site is ten (10) points with the soil remedial goals highlighted in the Site Ranking table presented below:

1. GROUNDWATER		2. WELLHEAD PROTECTION AREA		3. DISTANCE TO SURFACE WATER	
Depth to GW <50 feet: <b>20 points</b>		If <1,000' from water source, or <200' from private domestic water source: <b>20 points</b>		<200 horizontal feet: <b>0 points</b>	
Depth to GW 50 to 99 feet: <b>10 points</b>				200-1,000 horizontal feet: <b>10 points</b>	
Depth to GW >100 feet: <b>0 points</b>		If >1,000' from water source, or >200' from private domestic water source: <b>0 points</b>		>1,000 horizontal feet: <b>0 points</b>	
<b>Site Rank (1+2+3) = 10 + 0 + 0 = 10 points</b>					
<b>Total Site Ranking Score and Acceptable Remedial Goal Concentrations</b>					
Parameter	20 or >	10	0		
Benzene <sup>1</sup>	10 ppm	10 ppm	10 ppm		
BTEX <sup>1</sup>	50 ppm	50 ppm	50 ppm		
TPH	100 ppm	1,000 ppm	5,000 ppm		

<sup>1</sup> A field soil vapor headspace measurement of 100 ppm can be substituted in lieu of laboratory analyses for benzene and BTEX.



4.0 **EXCAVATED SOIL INFORMATION**

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

**Date excavated:** March 27, 2006 through June 19, 2006

**Total volume removed:** Approximately 2,260 cubic yards of impacted soil were excavated and stockpiled on site. Approximately 1,380 cubic yards of stockpiled soil were shredded/aerated. The remaining soil, approximately 880 cubic yards of the most impacted soil will be transported to South Monument Landfarm for treatment.

4.2 **Indicated soil treatment type:**

<input type="checkbox"/>	<i>Disposal</i>
<input checked="" type="checkbox"/>	<i>Land Treatment</i>
<input type="checkbox"/>	<i>Composting/Biopiling</i>
<input checked="" type="checkbox"/>	<i>Other (shredding)</i>

**Name and location of treatment/~~disposal~~ facility:**  
South Monument Landfarm – Located near Monument, New Mexico



## 5.0 SAMPLING INFORMATION

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

Organic Vapor Concentrations – A portion of each soil sample collected was inserted into a self-sealing polyethylene bag to allow volatilization of organic vapors. After the samples equilibrated to ~70° F, they were analyzed for organic vapors utilizing a MiniRae® Photoionization Detector (PID) equipped with a 10.6 electron volt (eV) lamp and calibrated for benzene response.

Chloride Concentrations – A LaMotte Chloride Test Kit was utilized for field analyses of chloride concentration.

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

Soil samples from the excavation were collected utilizing hand and/or mechanical excavation equipment to gather the sample from at least 6-inches below/within the surface of the excavation.

Upon collection of each sample, a portion was immediately placed in a laboratory provided container, labeled and set on ice for transport to an independent laboratory for quantification of total petroleum hydrocarbons (TPH); benzene, toluene, ethylbenzene and total xylenes (BTEX); chloride and sulfate concentrations. The remaining portion of each sample was placed in a polyethylene bag for field organic vapor concentration and chloride concentration analyses.

### 5.3 *Discuss sample locations and provide rationale for their locations.*

On March 30, 2006, soil samples were collected in three locations from the excavation floor, twelve locations from the excavation sidewalls and three locations in the stockpiled soil. Soil sample locations were chosen to provide the best representative example of soil within the excavation floor, sidewalls and stockpile (reference *Figure 4*).

On June 19, 2006, soil samples were collected in four locations from the excavation floor and sidewalls after increasing the excavation depth an additional 8 to 11 feet below the existing excavation floor. Soil sample locations were chosen to provide the best representative example of soil from within the excavation floor and sidewalls (reference *Figure 4*).

On September 12, 2006, soil samples were collected in four locations from the shredded/aerated soil stockpile. Soil sample locations were chosen to provide the best representative example of soil within the stockpile.



## 6.0 ANALYTICAL RESULTS

### 6.1 *Describe the vertical and horizontal extent and magnitude of soil contamination.*

Laboratory analyses of soil samples collected on March 30, 2006 from the excavation sidewalls indicated BTEX constituent concentrations were non-detectable (ND) at or above laboratory method detection limits (MDL). TPH concentrations ranged from ND to 15.7 mg/Kg, below the NMOCD remedial threshold of 1,000 mg/Kg. Chloride concentrations ranged from 9.68 mg/Kg to 109 mg/Kg. Sulfate concentrations ranged from 12.5 mg/Kg to 25.0 mg/Kg. Laboratory analyses of samples collected from the excavation floor at 12-ft bgs indicated BTEX concentrations were ND at or above laboratory MDL. TPH concentrations ranged from 34.0 mg/Kg to 36.4 mg/Kg, below the NMOCD remedial threshold of 1,000 mg/Kg. Chloride concentrations ranged from 23.4 to 694 mg/Kg. Sulfate concentrations ranged from 12.5 mg/Kg to 25.0 mg/Kg (reference *Table 2* and *Figure 4*).

After excavating an additional 8 to 11-feet from the existing excavation floor, three soil samples were collected on June 19, 2006 at depths ranging from 20 to 23-ft bgs. Additional sidewall soil samples were collected below the previous sidewall samples at depths ranging from 12 to 18-ft bgs. As previous soil sample analyses indicated TPH, BTEX constituent and sulfate concentrations were low to ND, soil samples were submitted for chloride concentration analyses. Chloride concentrations ranged from 2.25 mg/Kg to 109 mg/Kg (reference *Table 2* and *Figure 4*).

Laboratory analyses of soil samples collected on September 12, 2006 from the shredded/aerated stockpiled soil indicated TPH and BTEX constituent concentrations were ND at or above laboratory MDL. Reported chloride concentrations ranged from 16.0 mg/Kg to 304 mg/Kg. Sulfate concentrations were reported to range from non-detectable to 115 mg/Kg (reference *Table 3*).

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

*yes*       *no*

*If yes, attach a site map identifying extent(s) of surface soil contamination.*

Visibly stained soil has been excavated. Approximately 880 cubic yards of impacted soil and 1,280 cubic yards of shredded/aerated soil remain stockpiled adjacent to the excavation.



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7.0 **DISCUSSION**

7.1 ***Discuss the risks associated with the remaining soil contamination:***

Soil impacted above NMOCD remedial thresholds has been excavated from the sidewalls and floor. Laboratory analyses of soil samples collected from the excavation sidewalls and floor indicated TPH and BTEX constituent concentrations were below each analytes' respective NMOCD remedial threshold. Additionally, laboratory analyses indicated chloride and sulfate concentrations were below each analytes' respective remedial threshold/goal.

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

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



## 8.0 CONCLUSIONS AND RECOMMENDATIONS

- 8.1 *Recommendation for the site:*
- |                                     |  |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | <i>Site Closure</i>                      |
| <input type="checkbox"/>            | <i>Additional Groundwater Monitoring</i> |
| <input type="checkbox"/>            | <i>Corrective Action</i>                 |

- 8.2 *Base the recommendation above on Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993). Describe below how you applied the policy to support your recommendation. If closure is recommended, please summarize significant site investigative events and describe how site specific risk issues have been adequately addressed or minimized to acceptable low risk levels.*

Approximately 2,260 cubic yards of hydrocarbon impacted soil were excavated from a surface area of approximately 3,560 square feet to a maximum depth of 23-ft bgs. Approximately 1,380 cubic yards of impacted soil were shredded/aerated and stockpiled adjacent to the excavation. The remaining soil, approximately 880 cubic yards of the most impacted soil, will be transported to South Monument Landfarm for treatment

Laboratory analytical results of soil samples collected by EPI personnel from the excavation sidewalls and floor indicate TPH and BTEX constituents concentrations were below each analytes' respective NMOCD remedial threshold. Chloride and sulfate residuals were below the remedial goals of 250 mg/Kg and 600 mg/Kg, respectively. Laboratory analytical results of soil samples collected from the shredded/aerated soil indicate TPH and BTEX constituent concentrations were non-detectable at or above laboratory MDL. Chloride concentrations ranged from 16.0 to 304 mg/Kg and sulfate concentrations ranged from ND to 115 mg/Kg.

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

- 8.4 *If corrective action is recommended, provide a conceptual approach.*

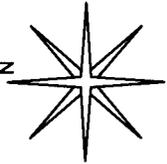
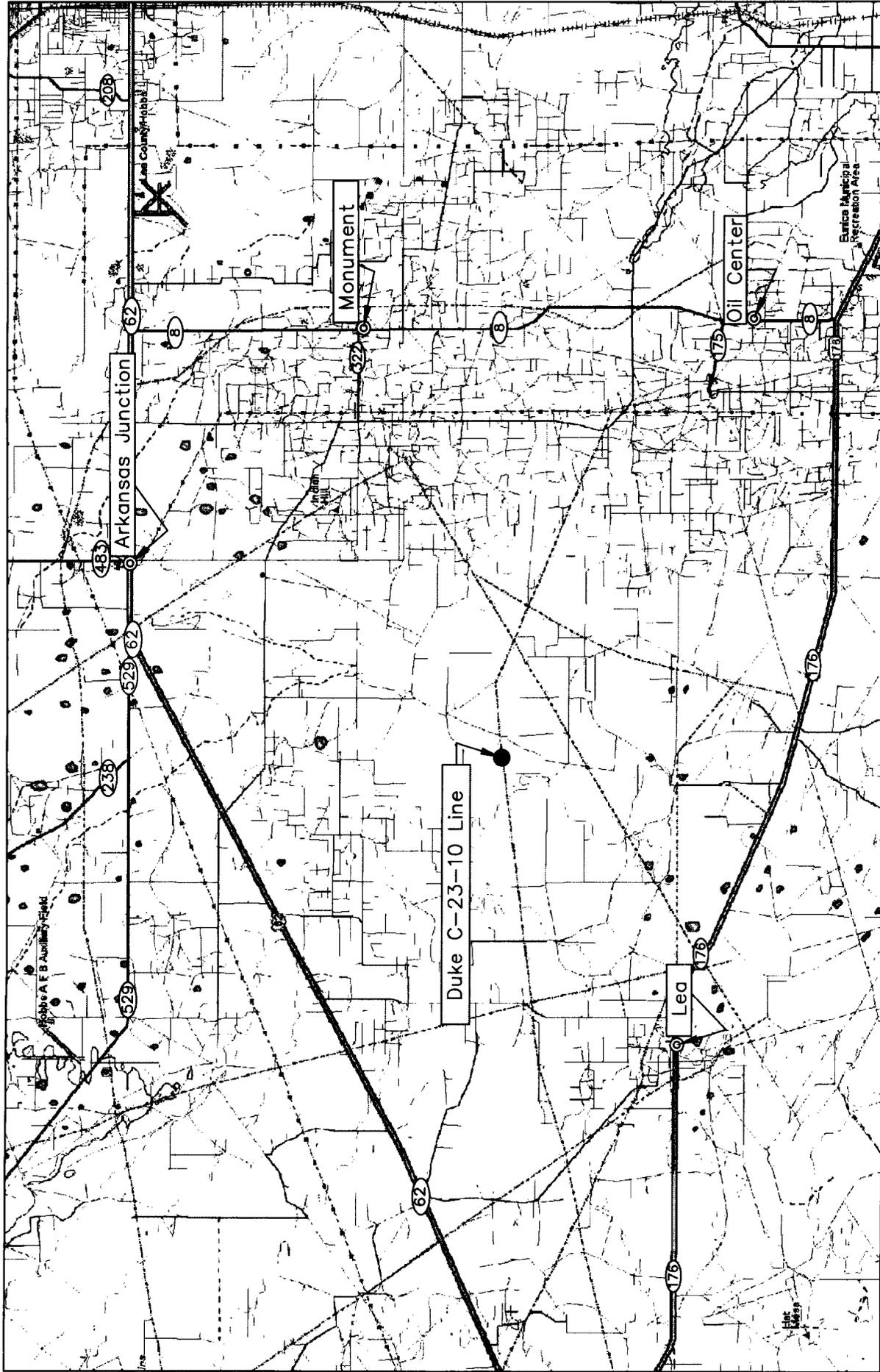
Based on laboratory analyses, soil impacted above NMOCD remedial thresholds have been removed from the excavation sidewalls and floor.

Environmental Plus, Inc., on behalf of Duke Energy Field Services, recommends the following:

- 1) Backfill the excavation with clean soil obtained from the landowner and shredded/aerated soil (currently stockpiled on site).
- 2) Transport remaining impacted (i.e., non-shredded) soil to South Monument Landfarm for treatment.
- 3) Grade and contour the site to allow natural drainage.
- 4) Seed the area with a seed mixture approved by the landowner.

Closure activities will commence upon NMOCD approval of this *Closure Proposal*. A *Closure Report* documenting remediation activities will be submitted to the NMOCD upon completion of closure activities at this site.

**FIGURES**



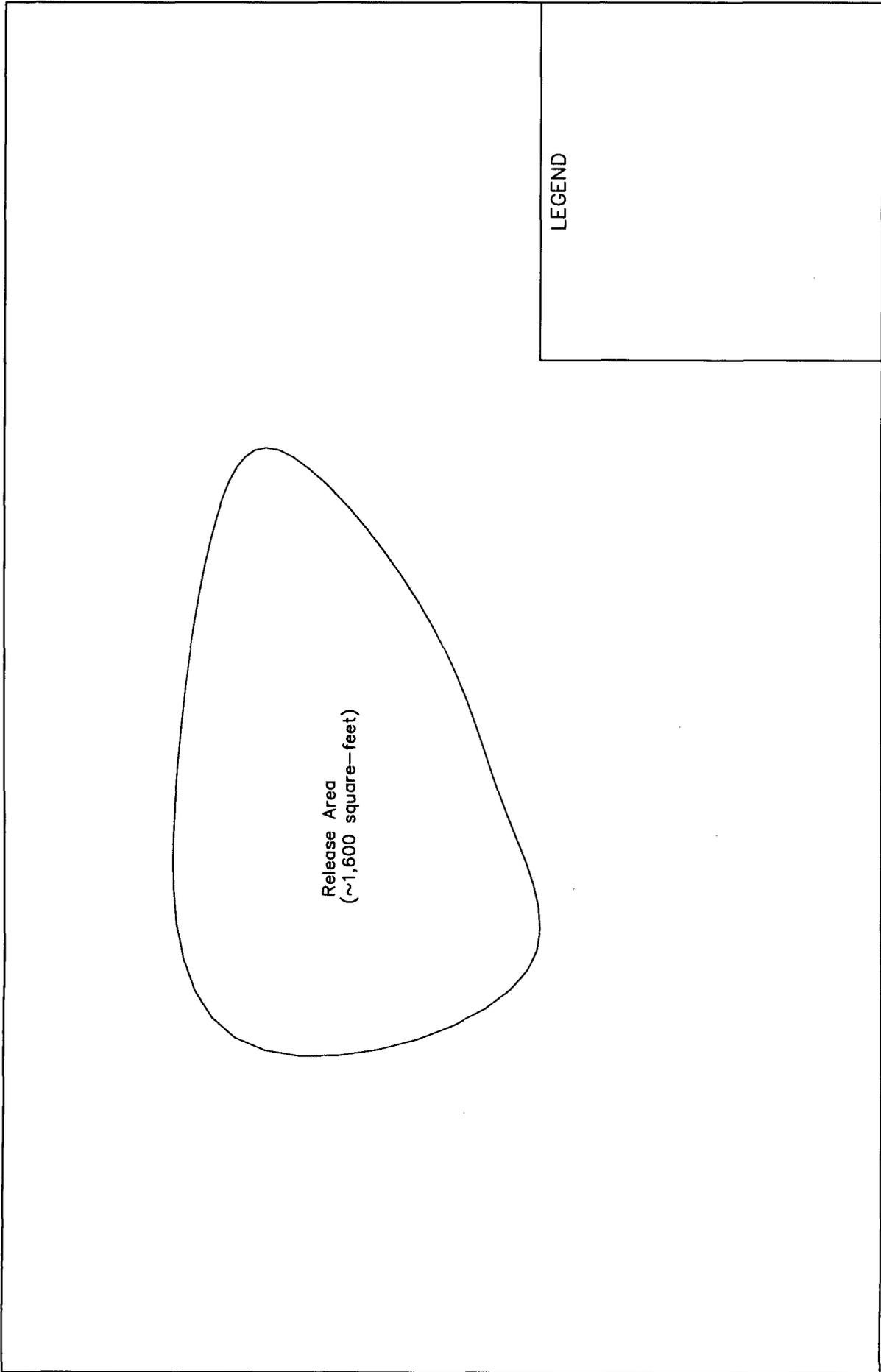
DWG By: Jason Stegemoller  
October 2006

Lea County, New Mexico  
NW 1/4 of the NE 1/4, Sec. 14, T20S, R35E  
N 32° 34' 39.03" W 103° 25' 31.23"  
Elevation: 3,664 feet amsl

Figure 1  
Area Map  
Duke Energy  
C-23-10 Line - Leak #10

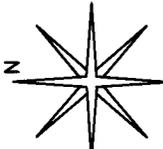


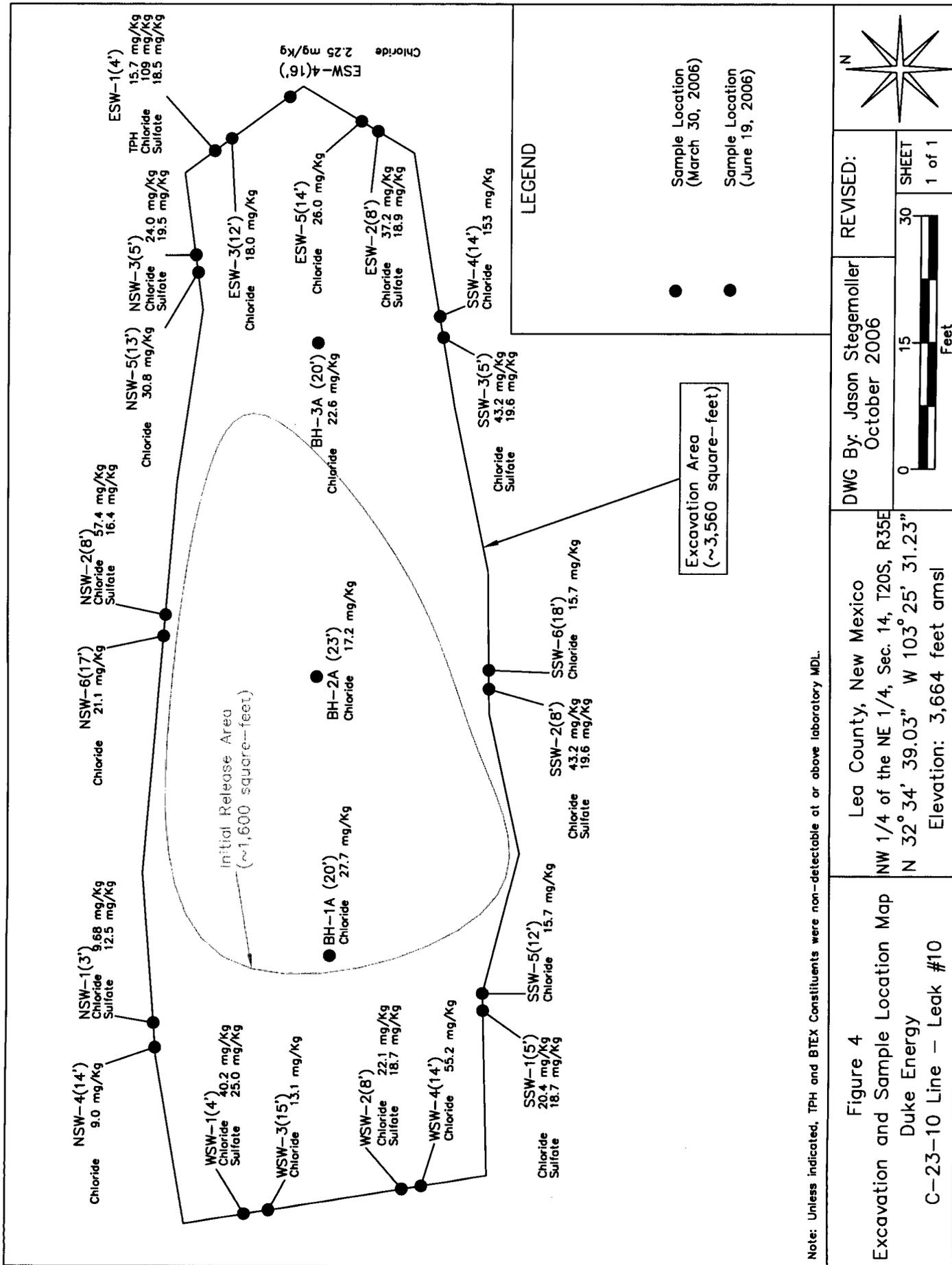




Release Area  
 (~1,600 square-feet)

LEGEND

<p>Figure 3          Site Map          Duke Energy          C-23-10 Line - Leak #10</p>	<p>Lea County, New Mexico          NW 1/4 of the NE 1/4, Sec. 14, T20S, R35E          N 32° 34' 39.03" W 103° 25' 31.23"          Elevation: 3,664 feet amsl</p>	<p>DWG By: Jason Stegemoller          October 2006</p>	<p>REVISED:</p>	
		<p>0 15 30          Feet</p>	<p>SHEET          1 of 1</p>	



Note: Unless indicated, TPH and BTEX Constituents were non-detectable at or above laboratory MDL.

Figure 4  
Excavation and Sample Location Map  
Duke Energy  
C-23-10 Line - Leak #10

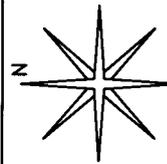
Lea County, New Mexico  
NW 1/4 of the NE 1/4, Sec. 14, T20S, R35E  
N 32° 34' 39.03" W 103° 25' 31.23"  
Elevation: 3,664 feet amsl

DWG By: Jason Stegemoller  
October 2006

REVISED:

0 15 30  
Feet

SHEET  
1 of 1



**TABLES**

TABLE 1

Well Data

Duke Energy - C-23-10 Line #10 (NMOCD IRP #422; DEFS/EPI Ref. # 130044-10)

Well Number	Diversion <sup>A</sup>	Owner	Use	Twsp	Rng	Sec q q q	Latitude	Longitude	Date Measured	Surface Elevation <sup>B</sup>	Depth to Water (ft. bgs)
L 02420	3	MORAN DRILLING CO.	PRO	20S	36E	18 1 2	N32° 34' 36.14"	W103° 23' 50.87"	25-Nov-53	3,642	34
L 02420 APPRO				20S	36E	18 1 2	N32° 34' 36.14"	W103° 23' 50.87"	25-Nov-53	3,642	34

<sup>B</sup> = Elevation interpolated from USGS topographical map based on referenced location.

PRO = 72-12-1 Prospecting or development of natural resource

quarters are 1=NW, 2=NE, 3=SW, 4=SE; quarters are biggest to smallest

TABLE 2

Summary of Excavation Analytical Results

Duke Energy Field Services C-23-10 Line - Site #10 (NMOCD IRP 422; DEFS/EPI Ref. #130044-10)

Sample ID	Depth (feet)	Sample Date	Soil Status	PID Reading (ppm)	Field Chloride (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	Carbon Ranges C6-C12 (mg/kg)	Carbon Ranges C12-C28 (mg/kg)	Carbon Ranges C28-C35 (mg/kg)	TPH C6-C35 (mg/kg)	Chloride (mg/kg)	Sulfate (mg/kg)			
WSW-1 (4')	4	30-Mar-06	In situ	0.2	160	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	<10.0	<10.0	<10.0	40.2	25.0			
WB-1 (6')	6	30-Mar-06	Excavated	1.9	160	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	33.6	<10.0	33.6	26.8	20.1			
WB-2 (6')	6	30-Mar-06	Excavated	3.8	160	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	<10.0	<10.0	<10.0	18.6	16.8			
WSW-2 (8')	8	30-Mar-06	In situ	2.4	80	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	<10.0	<10.0	<10.0	22.1	18.7			
WSW-3	15	19-Jun-06	In situ	---	240	---	---	---	---	---	---	---	---	---	13.1	---			
WSW-4	14	19-Jun-06	In situ	---	240	---	---	---	---	---	---	---	---	---	55.2	---			
SSW-1 (5')	5	30-Mar-06	In situ	5.6	120	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	<10.0	<10.0	<10.0	20.4	18.7			
SSW-2 (8')	8	30-Mar-06	In situ	2.5	200	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	<10.0	<10.0	<10.0	43.6	18.1			
SSW-3 (5')	5	30-Mar-06	In situ	35.2	160	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	<10.0	<10.0	<10.0	43.2	19.6			
SSW-4	14	19-Jun-06	In situ	---	200	---	---	---	---	---	---	---	---	---	23.6	---			
SSW-5	12	19-Jun-06	In situ	---	240	---	---	---	---	---	---	---	---	---	153	---			
SSW-6	18	19-Jun-06	In situ	---	240	---	---	---	---	---	---	---	---	---	15.7	---			
BH-1 (12')	12	30-Mar-06	Excavated	2.7	200	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	34.0	<10.0	34.0	23.4	20.6			
BH-1A	20	19-Jun-06	In situ	---	240	---	---	---	---	---	---	---	---	---	27.7	---			
BH-2 (12')	12	30-Mar-06	Excavated	62.9	240	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	36.0	<10.0	36.0	356	28.2			
BH-2A	23	19-Jun-06	In situ	---	240	---	---	---	---	---	---	---	---	---	17.2	---			
BH-3 (12')	12	30-Mar-06	Excavated	6.4	240	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	36.4	5.49 <sup>c</sup>	36.4	694	25.5			
BH-3A	20	19-Jun-06	In situ	---	240	---	---	---	---	---	---	---	---	---	22.6	---			
NSW-1 (3')	3	30-Mar-06	In situ	2.3	80	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	<10.0	<10.0	<10.0	9.68	12.5			
NSW-2 (8')	8	30-Mar-06	In situ	4.2	120	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	<10.0	<10.0	<10.0	57.4	16.4			
NSW-3 (5')	5	30-Mar-06	In situ	7.6	120	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	<10.0	<10.0	<10.0	24.0	19.5			
NSW-4	14	19-Jun-06	In situ	---	200	---	---	---	---	---	---	---	---	---	8.97	---			
NSW-5	13	19-Jun-06	In situ	---	240	---	---	---	---	---	---	---	---	---	30.8	---			
NSW-6	17	19-Jun-06	In situ	---	240	---	---	---	---	---	---	---	---	---	21.1	---			
ESW-1 (4')	4	30-Mar-06	In situ	11	160	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	15.7	<10.0	15.7	109	18.5			
ESW-2 (8')	8	30-Mar-06	In situ	6	160	<0.0250	<0.0250	<0.0250	<0.0500	<0.125	<10.0	<10.0	<10.0	<10.0	37.2	18.9			
ESW-3	12	19-Jun-06	In situ	---	240	---	---	---	---	---	---	---	---	---	18.0	---			
ESW-4	16	19-Jun-06	In situ	---	240	---	---	---	---	---	---	---	---	---	2.25 <sup>c</sup>	---			
ESW-5	14	19-Jun-06	In situ	---	200	---	---	---	---	---	---	---	---	---	26.0	---			
Stockpile 1	NA	30-Mar-06	Excavated Stockpile	416	---	<0.0250	0.0747	0.130	0.898	1.10	87.0	261	22.5	371	83.0	23.7			
Stockpile 2	NA	30-Mar-06	Excavated Stockpile	498	---	<0.0250	0.104	0.162	1.64	1.90	443	2,450	459	3,350	148	37.7			
Stockpile 3	NA	30-Mar-06	Excavated Stockpile	287	---	<0.0250	0.0710	0.104	0.495	0.670	63.1	593	122	778	56.5	36.5			
<b>NMOCD Remedial Thresholds</b>														<b>100<sup>A</sup></b>	<b>10</b>	<b>50</b>	<b>1,000</b>	<b>250<sup>B</sup></b>	<b>600<sup>B</sup></b>

*Bolded values are in excess of the NMOCD Remediation Thresholds*

*--- : Not Analyzed*

*<sup>A</sup> In lieu of laboratory analyses of benzene, toluene, ethylbenzene and total xylenes.*

*<sup>B</sup> Chloride and sulfate residuals may not be capable of impacting local groundwater above the NMWQCC standard of 250 mg/L and 600 mg/L, respectively.*

*<sup>C</sup> Detected, but below the Reporting Limit; therefore, results is an estimated concentration.*

TABLE 3

Summary of Shredded Soil Analytical Results

Duke Energy Field Services C-23-10 Line - Site #10 (Ref. #130044-10)

Sample ID	Depth (feet)	Sample Date	Soil Status	PID Reading (ppm)	Field Chloride (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH gasoline) (mg/kg)	(as TPH C6-C10 diesel) (mg/kg)	(as C10-C28) (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)	Sulfate (mg/kg)
SH-1	NA	12-Sep-06	Shredded	1.8	240	<0.005	<0.005	<0.005	<0.015	<0.030	<10.0	<10.0	<10.0	<20.0	16.0	115*
SH-2	NA	12-Sep-06	Shredded	1.7	480	<0.005	<0.005	<0.005	<0.015	<0.030	<10.0	<10.0	<10.0	<20.0	304	15.8
SH-3	NA	12-Sep-06	Shredded	0.6	200	<0.005	<0.005	<0.005	<0.015	<0.030	<10.0	<10.0	<10.0	<20.0	144	<1
SH-4	NA	12-Sep-06	Shredded	2.1	240	<0.005	<0.005	<0.005	<0.015	<0.030	<10.0	<10.0	<10.0	<20.0	160	<1*
<b>NMOC Remedial Thresholds</b>				<b>100<sup>A</sup></b>		<b>10</b>				<b>50</b>				<b>1,000</b>	<b>250<sup>B</sup></b>	<b>600<sup>B</sup></b>

*Bolded values are in excess of the NMOC Remediation Thresholds*

*- : Not Analyzed*

*<sup>A</sup> In lieu of laboratory analysis of benzene, toluene, ethylbenzene and total xylenes.*

*<sup>B</sup> Chloride and sulfate residuals may not be capable of impacting local groundwater above the NMOC standard of 250 mg/L and 600 mg/L, respectively.*

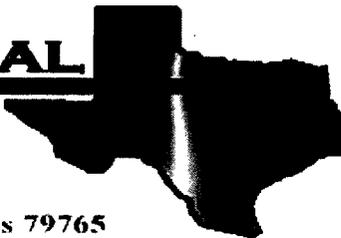
*\* Color matrix interference. Results should therefore be considered an approximation*

**APPENDICES**

**APPENDIX I**

**LABORATORY ANALYTICAL REPORTS  
AND  
CHAIN-OF-CUSTODY FORM**

**E** **NVIRONMENTAL**  
**LAB OF**



12600 West 1-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Iain Olness

Environmental Plus, Incorporated

P.O. Box 1558

Eunice, NM 88231

Project: DEFS/ C-23-10 #10

Project Number: 130044-10

Location: UL-B, Sect. 14, T 20 S, R 35 E

Lab Order Number: 6C31016

Report Date: 04/10/06

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

Project: DEFS/ C-23-10 #10  
Project Number: 130044-10  
Project Manager: Iain Olness

Fax: 505-394-2601

Reported:  
04/10/06 16:48

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WSW-1 (4')	6C31016-01	Soil	03/30/06 07:25	03/31/06 14:14
WB-1 (6')	6C31016-02	Soil	03/30/06 07:26	03/31/06 14:14
WB-2 (6')	6C31016-03	Soil	03/30/06 07:27	03/31/06 14:14
WSW-2 (8')	6C31016-04	Soil	03/30/06 07:28	03/31/06 14:14
SSW-1 (5')	6C31016-05	Soil	03/30/06 07:30	03/31/06 14:14
SSW-2 (8')	6C31016-06	Soil	03/30/06 07:31	03/31/06 14:14
SSW-3 (5')	6C31016-07	Soil	03/30/06 07:32	03/31/06 14:14
BH-1 (12')	6C31016-08	Soil	03/30/06 07:34	03/31/06 14:14
BH-2 (12')	6C31016-09	Soil	03/30/06 07:35	03/31/06 14:14
BH-3 (12')	6C31016-10	Soil	03/30/06 07:36	03/31/06 14:14
NSW-1 (3')	6C31016-11	Soil	03/30/06 07:38	03/31/06 14:14
NSW-2 (8')	6C31016-12	Soil	03/30/06 07:39	03/31/06 14:14
NSW-3 (5')	6C31016-13	Soil	03/30/06 07:40	03/31/06 14:14
ESW-1 (4')	6C31016-14	Soil	03/30/06 07:42	03/31/06 14:14
ESW-2 (8')	6C31016-15	Soil	03/30/06 07:43	03/31/06 14:14
Stockpile 1	6C31016-16	Soil	03/30/06 14:35	03/31/06 14:14
Stockpile 2	6C31016-17	Soil	03/30/06 14:37	03/31/06 14:14
Stockpile 3	6C31016-18	Soil	03/30/06 14:38	03/31/06 14:14

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>WSW-1 (4') (6C31016-01) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	ED60416	04/04/06	04/04/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		104 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		92.2 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC63116	03/31/06	04/01/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		109 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		113 %	70-130		"	"	"	"	
<b>WB-1 (6') (6C31016-02) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	ED60416	04/04/06	04/05/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		100 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		85.0 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC63116	03/31/06	04/01/06	EPA 8015M	
<b>Carbon Ranges C12-C28</b>	<b>33.6</b>	10.0	"	"	"	"	"	"	
<b>Carbon Ranges C28-C35</b>	<b>ND</b>	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon C6-C35</b>	<b>33.6</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		117 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		119 %	70-130		"	"	"	"	
<b>WB-2 (6') (6C31016-03) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	ED60416	04/04/06	04/05/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		98.2 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		94.0 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC63116	03/31/06	04/01/06	EPA 8015M	

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>WB-2 (6') (6C31016-03) Soil</b>									
Carbon Ranges C12-C28	ND	10.0	mg/kg dry	1	EC63116	03/31/06	04/01/06	EPA 8015M	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		111 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		114 %	70-130		"	"	"	"	
<b>WSW-2 (8') (6C31016-04) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	ED60416	04/04/06	04/05/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		91.2 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		92.8 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC63116	03/31/06	04/01/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		126 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		128 %	70-130		"	"	"	"	
<b>SSW-1 (5') (6C31016-05) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	ED60416	04/04/06	04/05/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		90.8 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		92.0 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC63116	03/31/06	04/01/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		129 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		130 %	70-130		"	"	"	"	

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SSW-2 (8') (6C31016-06) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	ED60416	04/04/06	04/05/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		93.8 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		82.8 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC63116	03/31/06	04/01/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		120 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		122 %	70-130		"	"	"	"	
<b>SSW-3 (5') (6C31016-07) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	ED60416	04/04/06	04/05/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		84.8 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		84.2 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC63116	03/31/06	04/01/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		77.4 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		79.0 %	70-130		"	"	"	"	
<b>BH-1 (12') (6C31016-08) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	ED60416	04/04/06	04/05/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		102 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		92.0 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC63116	03/31/06	04/01/06	EPA 8015M	

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>BH-1 (12') (6C31016-08) Soil</b>									
<b>Carbon Ranges C12-C28</b>	<b>34.0</b>	10.0	mg/kg dry	1	EC63116	03/31/06	04/01/06	EPA 8015M	
<b>Carbon Ranges C28-C35</b>	<b>ND</b>	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon C6-C35</b>	<b>34.0</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		113 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		114 %	70-130		"	"	"	"	
<b>BH-2 (12') (6C31016-09) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	ED60416	04/04/06	04/05/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		99.5 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		90.5 %	80-120		"	"	"	"	
<b>Carbon Ranges C6-C12</b>	<b>ND</b>	10.0	mg/kg dry	1	EC63116	03/31/06	04/01/06	EPA 8015M	
<b>Carbon Ranges C12-C28</b>	<b>36.0</b>	10.0	"	"	"	"	"	"	
<b>Carbon Ranges C28-C35</b>	<b>ND</b>	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon C6-C35</b>	<b>36.0</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		121 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		124 %	70-130		"	"	"	"	
<b>BH-3 (12') (6C31016-10) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	ED60416	04/04/06	04/05/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		91.5 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		81.0 %	80-120		"	"	"	"	
<b>Carbon Ranges C6-C12</b>	<b>ND</b>	10.0	mg/kg dry	1	EC63116	03/31/06	04/01/06	EPA 8015M	
<b>Carbon Ranges C12-C28</b>	<b>36.4</b>	10.0	"	"	"	"	"	"	
<b>Carbon Ranges C28-C35</b>	<b>J [5.49]</b>	10.0	"	"	"	"	"	"	J
<b>Total Hydrocarbon C6-C35</b>	<b>36.4</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		118 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		122 %	70-130		"	"	"	"	

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**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>NSW-1 (3') (6C31016-11) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	ED60416	04/04/06	04/05/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		96.8 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		89.5 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC63116	03/31/06	04/03/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		85.0 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		86.6 %	70-130		"	"	"	"	
<b>NSW-2 (8') (6C31016-12) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	ED60416	04/04/06	04/05/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		96.2 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		89.2 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC63116	03/31/06	04/03/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		119 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		122 %	70-130		"	"	"	"	
<b>NSW-3 (5') (6C31016-13) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	ED60416	04/04/06	04/05/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		88.5 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		87.5 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC63116	03/31/06	04/03/06	EPA 8015M	

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>NSW-3 (5') (6C31016-13) Soil</b>									
Carbon Ranges C12-C28	ND	10.0	mg/kg dry	1	EC63116	03/31/06	04/03/06	EPA 8015M	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		105 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		108 %	70-130		"	"	"	"	
<b>ESW-1 (4') (6C31016-14) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	ED60416	04/04/06	04/05/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		84.8 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		86.0 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC63116	03/31/06	04/03/06	EPA 8015M	
<b>Carbon Ranges C12-C28</b>	<b>15.7</b>	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon C6-C35</b>	<b>15.7</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		106 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		108 %	70-130		"	"	"	"	
<b>ESW-2 (8') (6C31016-15) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	ED60416	04/04/06	04/05/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		87.0 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		85.8 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC63116	03/31/06	04/03/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		130 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		130 %	70-130		"	"	"	"	

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Stockpile 1 (6C31016-16) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	ED60620	04/06/06	04/06/06	EPA 8021B	
Toluene	0.0747	0.0250	"	"	"	"	"	"	
Ethylbenzene	0.130	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.613	0.0250	"	"	"	"	"	"	
Xylene (o)	0.285	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		101 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		107 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	87.0	10.0	mg/kg dry	1	EC63116	03/31/06	04/03/06	EPA 8015M	
Carbon Ranges C12-C28	261	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	22.5	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	371	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		137 %	70-130		"	"	"	"	S-04
Surrogate: 1-Chlorooctadecane		134 %	70-130		"	"	"	"	S-04
<b>Stockpile 2 (6C31016-17) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	ED60620	04/06/06	04/06/06	EPA 8021B	
Toluene	0.104	0.0250	"	"	"	"	"	"	
Ethylbenzene	0.162	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.996	0.0250	"	"	"	"	"	"	
Xylene (o)	0.640	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		104 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		113 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	443	10.0	mg/kg dry	1	EC63116	03/31/06	04/03/06	EPA 8015M	
Carbon Ranges C12-C28	2450	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	459	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	3350	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		99.0 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		118 %	70-130		"	"	"	"	
<b>Stockpile 3 (6C31016-18) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	ED60620	04/06/06	04/06/06	EPA 8021B	
Toluene	0.0710	0.0250	"	"	"	"	"	"	
Ethylbenzene	0.104	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.266	0.0250	"	"	"	"	"	"	
Xylene (o)	0.229	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		97.2 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.0 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	63.1	10.0	mg/kg dry	1	EC63116	03/31/06	04/03/06	EPA 8015M	

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Project: DEFS/ C-23-10 #10  
Project Number: 130044-10  
Project Manager: Iain Olness

Fax: 505-394-2601

Reported:  
04/10/06 16:48

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Stockpile 3 (6C31016-18) Soil</b>									
<b>Carbon Ranges C12-C28</b>	<b>593</b>	10.0	mg/kg dry	1	EC63116	03/31/06	04/03/06	EPA 8015M	
<b>Carbon Ranges C28-C35</b>	<b>122</b>	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon C6-C35</b>	<b>778</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		106 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		112 %	70-130		"	"	"	"	

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>WSW-1 (4') (6C31016-01) Soil</b>									
Chloride	40.2	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
% Moisture	9.5	0.1	%	1	ED60401	03/31/06	04/03/06	% calculation	
Sulfate	25.0	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
<b>WB-1 (6') (6C31016-02) Soil</b>									
Chloride	26.8	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
% Moisture	9.4	0.1	%	1	ED60401	03/31/06	04/03/06	% calculation	
Sulfate	20.1	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
<b>WB-2 (6') (6C31016-03) Soil</b>									
Chloride	18.6	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
% Moisture	10.6	0.1	%	1	ED60401	03/31/06	04/03/06	% calculation	
Sulfate	16.8	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
<b>WSW-2 (8') (6C31016-04) Soil</b>									
Chloride	22.1	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
% Moisture	8.4	0.1	%	1	ED60401	03/31/06	04/03/06	% calculation	
Sulfate	18.7	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
<b>SSW-1 (5') (6C31016-05) Soil</b>									
Chloride	20.4	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
% Moisture	10.1	0.1	%	1	ED60401	03/31/06	04/03/06	% calculation	
Sulfate	18.7	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
<b>SSW-2 (8') (6C31016-06) Soil</b>									
Chloride	43.6	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
% Moisture	7.0	0.1	%	1	ED60401	03/31/06	04/03/06	% calculation	
Sulfate	18.1	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
<b>SSW-3 (5') (6C31016-07) Soil</b>									
Chloride	43.2	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
% Moisture	15.1	0.1	%	1	ED60401	03/31/06	04/03/06	% calculation	
Sulfate	19.6	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>BH-1 (12') (6C31016-08) Soil</b>									
Chloride	23.4	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
% Moisture	9.2	0.1	%	1	ED60401	03/31/06	04/03/06	% calculation	
Sulfate	20.6	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
<b>BH-2 (12') (6C31016-09) Soil</b>									
Chloride	356	10.0	mg/kg	20	ED60412	04/04/06	04/05/06	EPA 300.0	
% Moisture	9.6	0.1	%	1	ED60401	03/31/06	04/03/06	% calculation	
Sulfate	28.2	10.0	mg/kg	20	ED60412	04/04/06	04/05/06	EPA 300.0	
<b>BH-3 (12') (6C31016-10) Soil</b>									
Chloride	694	10.0	mg/kg	20	ED60412	04/04/06	04/05/06	EPA 300.0	
% Moisture	8.5	0.1	%	1	ED60401	03/31/06	04/03/06	% calculation	
Sulfate	25.5	10.0	mg/kg	20	ED60412	04/04/06	04/05/06	EPA 300.0	
<b>NSW-1 (3') (6C31016-11) Soil</b>									
Chloride	9.68	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
% Moisture	5.9	0.1	%	1	ED60401	03/31/06	04/03/06	% calculation	
Sulfate	12.5	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
<b>NSW-2 (8') (6C31016-12) Soil</b>									
Chloride	57.4	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
% Moisture	6.4	0.1	%	1	ED60401	03/31/06	04/03/06	% calculation	
Sulfate	16.4	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
<b>NSW-3 (5') (6C31016-13) Soil</b>									
Chloride	24.0	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
% Moisture	15.0	0.1	%	1	ED60401	03/31/06	04/03/06	% calculation	
Sulfate	19.5	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
<b>ESW-1 (4') (6C31016-14) Soil</b>									
Chloride	109	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
% Moisture	8.1	0.1	%	1	ED60401	03/31/06	04/03/06	% calculation	
Sulfate	18.5	5.00	mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	

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**General Chemistry Parameters by EPA / Standard Methods**  
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Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>ESW-2 (8') (6C31016-15) Soil</b>										
Chloride	37.2	5.00		mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
% Moisture	7.4	0.1		%	1	ED60401	03/31/06	04/03/06	% calculation	
Sulfate	18.9	5.00		mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
<b>Stockpile 1 (6C31016-16) Soil</b>										
Chloride	83.0	5.00		mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
% Moisture	7.3	0.1		%	1	ED60401	03/31/06	04/03/06	% calculation	
Sulfate	23.7	5.00		mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
<b>Stockpile 2 (6C31016-17) Soil</b>										
Chloride	148	5.00		mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
% Moisture	6.8	0.1		%	1	ED60401	03/31/06	04/03/06	% calculation	
Sulfate	37.7	5.00		mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
<b>Stockpile 3 (6C31016-18) Soil</b>										
Chloride	56.5	5.00		mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	
% Moisture	4.7	0.1		%	1	ED60401	03/31/06	04/03/06	% calculation	
Sulfate	36.5	5.00		mg/kg	10	ED60412	04/04/06	04/05/06	EPA 300.0	

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EC63116 - Solvent Extraction (GC)**

**Blank (EC63116-BLK1)**

Prepared: 03/31/06 Analyzed: 04/01/06

Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	"							
Carbon Ranges C28-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	56.2		mg/kg	50.0		112	70-130			
Surrogate: 1-Chlorooctadecane	58.6		"	50.0		117	70-130			

**LCS (EC63116-BS1)**

Prepared: 03/31/06 Analyzed: 04/01/06

Carbon Ranges C6-C12	547	10.0	mg/kg wet	500		109	75-125			
Carbon Ranges C12-C28	531	10.0	"	500		106	75-125			
Total Hydrocarbon C6-C35	1080	10.0	"	1000		108	75-125			
Surrogate: 1-Chlorooctane	64.3		mg/kg	50.0		129	70-130			
Surrogate: 1-Chlorooctadecane	60.0		"	50.0		120	70-130			

**Calibration Check (EC63116-CCV1)**

Prepared: 03/31/06 Analyzed: 04/03/06

Carbon Ranges C6-C12	288		mg/kg	250		115	80-120			
Carbon Ranges C12-C28	299		"	250		120	80-120			
Total Hydrocarbon C6-C35	587		"	500		117	80-120			
Surrogate: 1-Chlorooctane	49.2		"	50.0		98.4	70-130			
Surrogate: 1-Chlorooctadecane	51.6		"	50.0		103	70-130			

**Matrix Spike (EC63116-MS1)**

Source: 6C31016-01

Prepared: 03/31/06 Analyzed: 04/01/06

Carbon Ranges C6-C12	613	10.0	mg/kg dry	552	ND	111	75-125			
Carbon Ranges C12-C28	594	10.0	"	552	ND	108	75-125			
Total Hydrocarbon C6-C35	1210	10.0	"	1100	ND	110	75-125			
Surrogate: 1-Chlorooctane	62.7		mg/kg	50.0		125	70-130			
Surrogate: 1-Chlorooctadecane	58.1		"	50.0		116	70-130			

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Project: DEFS/ C-23-10 #10  
Project Number: 130044-10  
Project Manager: Iain Olness

Fax: 505-394-2601

Reported:  
04/10/06 16:48

**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
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**Batch EC63116 - Solvent Extraction (GC)**

<b>Matrix Spike Dup (EC63116-MSD1)</b>		<b>Source: 6C31016-01</b>		<b>Prepared: 03/31/06</b>		<b>Analyzed: 04/01/06</b>				
Carbon Ranges C6-C12	606	10.0	mg/kg dry	552	ND	110	75-125	1.15	20	
Carbon Ranges C12-C28	583	10.0	"	552	ND	106	75-125	1.87	20	
Total Hydrocarbon C6-C35	1190	10.0	"	1100	ND	108	75-125	1.67	20	
Surrogate: 1-Chlorooctane	62.2		mg/kg	50.0		124	70-130			
Surrogate: 1-Chlorooctadecane	58.5		"	50.0		117	70-130			

**Batch ED60416 - EPA 5030C (GC)**

<b>Blank (ED60416-BLK1)</b>				<b>Prepared &amp; Analyzed: 04/04/06</b>	
Benzene	ND	0.0250	mg/kg wet		
Toluene	ND	0.0250	"		
Ethylbenzene	ND	0.0250	"		
Xylene (p/m)	ND	0.0250	"		
Xylene (o)	ND	0.0250	"		
Surrogate: a,a,a-Trifluorotoluene	41.4		ug/kg	40.0	104 80-120
Surrogate: 4-Bromofluorobenzene	37.2		"	40.0	93.0 80-120

**LCS (ED60416-BS1)**

				<b>Prepared &amp; Analyzed: 04/04/06</b>	
Benzene	1.07	0.0250	mg/kg wet	1.25	85.6 80-120
Toluene	1.03	0.0250	"	1.25	82.4 80-120
Ethylbenzene	1.41	0.0250	"	1.25	113 80-120
Xylene (p/m)	2.44	0.0250	"	2.50	97.6 80-120
Xylene (o)	1.18	0.0250	"	1.25	94.4 80-120
Surrogate: a,a,a-Trifluorotoluene	41.9		ug/kg	40.0	105 80-120
Surrogate: 4-Bromofluorobenzene	39.4		"	40.0	98.5 80-120

**Calibration Check (ED60416-CCV1)**

				<b>Prepared &amp; Analyzed: 04/04/06</b>	
Benzene	43.0		ug/kg	50.0	86.0 80-120
Toluene	40.2		"	50.0	80.4 80-120
Ethylbenzene	44.6		"	50.0	89.2 80-120
Xylene (p/m)	90.6		"	100	90.6 80-120
Xylene (o)	45.4		"	50.0	90.8 80-120
Surrogate: a,a,a-Trifluorotoluene	40.0		"	40.0	100 80-120
Surrogate: 4-Bromofluorobenzene	38.5		"	40.0	96.2 80-120

Environmental Lab of Texas

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

Project: DEFS/ C-23-10 #10  
Project Number: 130044-10  
Project Manager: Iain Olness

Fax: 505-394-2601

Reported:  
04/10/06 16:48

**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 ED60416 - EPA 5030C (GC)**

Matrix Spike (ED60416-MS1)	Source: 6D04012-05			Prepared: 04/04/06		Analyzed: 04/05/06				
Benzene	1.15	0.0250	mg/kg dry	1.32	ND	87.1	80-120			
Toluene	1.08	0.0250	"	1.32	ND	81.8	80-120			
Ethylbenzene	1.42	0.0250	"	1.32	ND	108	80-120			
Xylene (p/m)	2.43	0.0250	"	2.63	ND	92.4	80-120			
Xylene (o)	1.15	0.0250	"	1.32	ND	87.1	80-120			
Surrogate: a,a,a-Trifluorotoluene	43.8		ug/kg	40.0		110	80-120			
Surrogate: 4-Bromofluorobenzene	34.4		"	40.0		86.0	80-120			

Matrix Spike Dup (ED60416-MSD1)	Source: 6D04012-05			Prepared: 04/04/06		Analyzed: 04/05/06				
Benzene	1.12	0.0250	mg/kg dry	1.32	ND	84.8	80-120	2.68	20	
Toluene	1.08	0.0250	"	1.32	ND	81.8	80-120	0.00	20	
Ethylbenzene	1.46	0.0250	"	1.32	ND	111	80-120	2.74	20	
Xylene (p/m)	2.51	0.0250	"	2.63	ND	95.4	80-120	3.19	20	
Xylene (o)	1.18	0.0250	"	1.32	ND	89.4	80-120	2.61	20	
Surrogate: a,a,a-Trifluorotoluene	32.2		ug/kg	40.0		80.5	80-120			
Surrogate: 4-Bromofluorobenzene	36.9		"	40.0		92.2	80-120			

**Batch ED60620 - EPA 5030C (GC)**

Blank (ED60620-BLK1)	Prepared & Analyzed: 04/06/06									
Benzene	ND	0.0250	mg/kg wct							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
Xylene (p/m)	ND	0.0250	"							
Xylene (o)	ND	0.0250	"							
Surrogate: a,a,a-Trifluorotoluene	36.6		ug/kg	40.0		91.5	80-120			
Surrogate: 4-Bromofluorobenzene	32.4		"	40.0		81.0	80-120			

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

Project: DEFS/ C-23-10 #10  
Project Number: 130044-10  
Project Manager: Iain Olness

Fax: 505-394-2601

Reported:  
04/10/06 16:48

**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
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**Batch ED60620 - EPA 5030C (GC)**

**LCS (ED60620-BS1)**

Prepared & Analyzed: 04/06/06

Benzene	1.06	0.0250	mg/kg wet	1.25		84.8	80-120			
Toluene	1.03	0.0250	"	1.25		82.4	80-120			
Ethylbenzene	1.40	0.0250	"	1.25		112	80-120			
Xylene (p/m)	2.42	0.0250	"	2.50		96.8	80-120			
Xylene (o)	1.17	0.0250	"	1.25		93.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	33.3		ug/kg	40.0		83.2	80-120			
Surrogate: 4-Bromofluorobenzene	37.4		"	40.0		93.5	80-120			

**Calibration Check (ED60620-CCV1)**

Prepared: 04/06/06 Analyzed: 04/07/06

Benzene	41.6		ug/kg	50.0		83.2	80-120			
Toluene	40.4		"	50.0		80.8	80-120			
Ethylbenzene	44.0		"	50.0		88.0	80-120			
Xylene (p/m)	90.2		"	100		90.2	80-120			
Xylene (o)	44.6		"	50.0		89.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	37.6		"	40.0		94.0	80-120			
Surrogate: 4-Bromofluorobenzene	38.7		"	40.0		96.8	80-120			

**Matrix Spike (ED60620-MS1)**

Source: 6D04007-01

Prepared: 04/06/06 Analyzed: 04/07/06

Benzene	1.08	0.0250	mg/kg dry	1.33	ND	81.2	80-120			
Toluene	1.09	0.0250	"	1.33	ND	82.0	80-120			
Ethylbenzene	1.45	0.0250	"	1.33	ND	109	80-120			
Xylene (p/m)	2.53	0.0250	"	2.66	ND	95.1	80-120			
Xylene (o)	1.19	0.0250	"	1.33	ND	89.5	80-120			
Surrogate: a,a,a-Trifluorotoluene	38.3		ug/kg	40.0		95.8	80-120			
Surrogate: 4-Bromofluorobenzene	38.2		"	40.0		95.5	80-120			

**Matrix Spike Dup (ED60620-MSD1)**

Source: 6D04007-01

Prepared: 04/06/06 Analyzed: 04/07/06

Benzene	1.07	0.0250	mg/kg dry	1.33	ND	80.5	80-120	0.866	20	
Toluene	1.07	0.0250	"	1.33	ND	80.5	80-120	1.85	20	
Ethylbenzene	1.43	0.0250	"	1.33	ND	108	80-120	0.922	20	
Xylene (p/m)	2.50	0.0250	"	2.66	ND	94.0	80-120	1.16	20	
Xylene (o)	1.19	0.0250	"	1.33	ND	89.5	80-120	0.00	20	
Surrogate: a,a,a-Trifluorotoluene	37.8		ug/kg	40.0		94.5	80-120			
Surrogate: 4-Bromofluorobenzene	35.6		"	40.0		89.0	80-120			

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Page 16 of 19

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

Project: DEFS/ C-23-10 #10  
Project Number: 130044-10  
Project Manager: Iain Olness

Fax: 505-394-2601

Reported:  
04/10/06 16:48

**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
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**Batch ED60401 - General Preparation (Prep)**

<b>Blank (ED60401-BLK1)</b>				Prepared: 03/31/06 Analyzed: 04/03/06						
% Solids	100		%							
<b>Duplicate (ED60401-DUP1)</b>				Source: 6C30011-01 Prepared: 03/31/06 Analyzed: 04/03/06						
% Solids	92.8		%		92.3			0.540	20	
<b>Duplicate (ED60401-DUP2)</b>				Source: 6C31006-06 Prepared: 03/31/06 Analyzed: 04/03/06						
% Solids	96.1		%		96.2			0.104	20	
<b>Duplicate (ED60401-DUP3)</b>				Source: 6C31016-09 Prepared: 03/31/06 Analyzed: 04/03/06						
% Solids	90.5		%		90.4			0.111	20	
<b>Duplicate (ED60401-DUP4)</b>				Source: 6C31018-04 Prepared: 03/31/06 Analyzed: 04/03/06						
% Solids	87.5		%		87.5			0.00	20	

**Batch ED60412 - Water Extraction**

<b>Blank (ED60412-BLK1)</b>				Prepared: 04/04/06 Analyzed: 04/05/06						
Sulfate	ND	0.500	mg/kg							
Chloride	ND	0.500	"							
<b>LCS (ED60412-BS1)</b>				Prepared: 04/04/06 Analyzed: 04/05/06						
Sulfate	9.93		mg/L	10.0		99.3	80-120			
Chloride	9.02		"	10.0		90.2	80-120			
<b>Calibration Check (ED60412-CCV1)</b>				Prepared: 04/04/06 Analyzed: 04/05/06						
Chloride	9.16		mg/L	10.0		91.6	80-120			
Sulfate	10.2		"	10.0		102	80-120			

Environmental Plus, Incorporated  
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Project: DEFS/ C-23-10 #10  
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Project Manager: Iain Olness

Fax: 505-394-2601

Reported:  
04/10/06 16:48

**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
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**Batch ED60412 - Water Extraction**

Duplicate (ED60412-DUP1)	Source: 6C31016-01			Prepared: 04/04/06 Analyzed: 04/05/06		
Sulfate	25.5	5.00	mg/kg	25.0	1.98	20
Chloride	41.2	5.00	"	40.2	2.46	20

Environmental Lab of Texas

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### Notes and Definitions

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By: \_\_\_\_\_

*Raland K Tuttle*

Date: \_\_\_\_\_

4/10/2006

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

## Variance / Corrective Action Report – Sample Log-In

Client: EPI

Date/Time: 03-31-06 @ 1414

Order #: 6C31016

Initials: JMM

### Sample Receipt Checklist

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

Other observations:

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### Variance Documentation:

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

Regarding: \_\_\_\_\_

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Corrective Action Taken:

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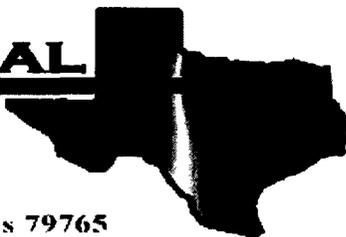


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# **E** NVIRONMENTAL LAB OF



12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Iain Olness

Environmental Plus, Incorporated

P.O. Box 1558

Eunice, NM 88231

Project: DEFS/ C-23-10 #10

Project Number: 130044-10

Location: UL-B, Sect. 14, T 20 S, R 35 E

Lab Order Number: 6F20003

Report Date: 06/21/06

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

Project: DEFS/ C-23-10 #10  
Project Number: 130044-10  
Project Manager: Iain Olness

Fax: 505-394-2601

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ESW-3 12'	6F20003-01	Soil	06/19/06 10:00	06/20/06 10:00
ESW-4 16'	6F20003-02	Soil	06/19/06 10:01	06/20/06 10:00
ESW-5 14'	6F20003-03	Soil	06/19/06 10:02	06/20/06 10:00
BH-1A 20'	6F20003-04	Soil	06/19/06 10:03	06/20/06 10:00
BH-2A 23'	6F20003-05	Soil	06/19/06 10:04	06/20/06 10:00
BH-3A 20'	6F20003-06	Soil	06/19/06 10:05	06/20/06 10:00
SSW-4 14'	6F20003-07	Soil	06/19/06 10:06	06/20/06 10:00
SSW-5 12'	6F20003-08	Soil	06/19/06 10:07	06/20/06 10:00
SSW-6 18'	6F20003-09	Soil	06/19/06 10:08	06/20/06 10:00
NSW-4 14'	6F20003-10	Soil	06/19/06 10:09	06/20/06 10:00
NSW-5 13'	6F20003-11	Soil	06/19/06 10:10	06/20/06 10:00
NSW-6 17'	6F20003-12	Soil	06/19/06 10:11	06/20/06 10:00
WSW-3 15'	6F20003-13	Soil	06/19/06 10:12	06/20/06 10:00
WSW-4 14'	6F20003-14	Soil	06/19/06 10:13	06/20/06 10:00

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>ESW-3 12' (6F20003-01) Soil</b>									
Chloride	18.0	5.00	mg/kg	10	EF62107	06/21/06	06/21/06	EPA 300.0	
<b>ESW-4 16' (6F20003-02) Soil</b>									
Chloride	J [2.25]	5.00	mg/kg	10	EF62107	06/21/06	06/21/06	EPA 300.0	J
<b>ESW-5 14' (6F20003-03) Soil</b>									
Chloride	26.0	5.00	mg/kg	10	EF62107	06/21/06	06/21/06	EPA 300.0	
<b>BH-1A 20' (6F20003-04) Soil</b>									
Chloride	27.7	5.00	mg/kg	10	EF62107	06/21/06	06/21/06	EPA 300.0	
<b>BH-2A 23' (6F20003-05) Soil</b>									
Chloride	17.2	5.00	mg/kg	10	EF62107	06/21/06	06/21/06	EPA 300.0	
<b>BH-3A 20' (6F20003-06) Soil</b>									
Chloride	22.6	5.00	mg/kg	10	EF62107	06/21/06	06/21/06	EPA 300.0	
<b>SSW-4 14' (6F20003-07) Soil</b>									
Chloride	23.6	5.00	mg/kg	10	EF62107	06/21/06	06/21/06	EPA 300.0	
<b>SSW-5 12' (6F20003-08) Soil</b>									
Chloride	153	5.00	mg/kg	10	EF62107	06/21/06	06/21/06	EPA 300.0	
<b>SSW-6 18' (6F20003-09) Soil</b>									
Chloride	15.7	5.00	mg/kg	10	EF62107	06/21/06	06/21/06	EPA 300.0	
<b>NSW-4 14' (6F20003-10) Soil</b>									
Chloride	8.97	5.00	mg/kg	10	EF62107	06/21/06	06/21/06	EPA 300.0	
<b>NSW-5 13' (6F20003-11) Soil</b>									
Chloride	30.8	5.00	mg/kg	10	EF62107	06/21/06	06/21/06	EPA 300.0	

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>NSW-6 17' (6F20003-12) Soil</b>									
Chloride	21.1	5.00	mg/kg	10	EF62107	06/21/06	06/21/06	EPA 300.0	
<b>WSW-3 15' (6F20003-13) Soil</b>									
Chloride	13.1	5.00	mg/kg	10	EF62107	06/21/06	06/21/06	EPA 300.0	
<b>WSW-4 14' (6F20003-14) Soil</b>									
Chloride	55.2	5.00	mg/kg	10	EF62107	06/21/06	06/21/06	EPA 300.0	

Environmental Lab of Texas

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Page 3 of 5

Environmental Plus, Incorporated  
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Project: DEFS/ C-23-10 #10  
Project Number: 130044-10  
Project Manager: Iain Olness

Fax: 505-394-2601

**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
<b>Batch EF62107 - General Preparation (WetChem)</b>										
<b>Blank (EF62107-BLK1)</b>				Prepared & Analyzed: 06/21/06						
Chloride	ND	0.500	mg/kg							
<b>LCS (EF62107-BS1)</b>				Prepared & Analyzed: 06/21/06						
Chloride	10.2		mg/L	10.0		102	80-120			
<b>Calibration Check (EF62107-CCV1)</b>				Prepared & Analyzed: 06/21/06						
Chloride	11.1		mg/L	10.0		111	80-120			
<b>Duplicate (EF62107-DUP1)</b>				Source: 6F20003-04			Prepared & Analyzed: 06/21/06			
Chloride	27.5	5.00	mg/kg		27.7			0.725	20	
<b>Duplicate (EF62107-DUP2)</b>				Source: 6F20003-08			Prepared & Analyzed: 06/21/06			
Chloride	153	5.00	mg/kg		153			0.00	20	
<b>Matrix Spike (EF62107-MS1)</b>				Source: 6F20003-04			Prepared & Analyzed: 06/21/06			
Chloride	118	5.00	mg/kg	100	27.7	90.3	80-120			
<b>Matrix Spike (EF62107-MS2)</b>				Source: 6F20003-08			Prepared & Analyzed: 06/21/06			
Chloride	263	5.00	mg/kg	100	153	110	80-120			

### Notes and Definitions

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

Report Approved By:

Raland K Tuttle

Date:

6/21/2006

Raland K. Tuttle, Lab Manager  
Celey D. Keene, Lab Director, Org. Tech Director  
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director  
LaTasha Cornish, Chemist  
Sandra Sanchez, Lab Tech.

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

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

# Environmental Plus, Inc.

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

# Chain of Custody Form

LAB: ELT

Company Name Environmental Plus, Inc.		Bill To		ANALYSIS REQUEST	
EPI Project Manager Iain Olness	Duke Energy Field Services				
Mailing Address P.O. BOX 1558	Attn: Polo Rendon 1625 West Marland Hobbs, NM 88240				
City, State, Zip Eunice New Mexico 88231					
EPI Phone#/Fax# 505-394-3481 / 505-394-2601					
Client Company Duke Energy Field Services					
Facility Name C-23-10 #10					
Location UL-B, Sect. 14, T 20 S, R 35 E					
Project Reference 130044-10					
EPI Sampler Name David Robinson					

LAB I.D.	SAMPLE I.D.	# CONTAINERS	MATRIX						PRESERV.		DATE	TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl)	SULFATES (SO <sub>4</sub> )	PH	TCLP	OTHER >>	PAH
			GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	ACID/BASE	ICE/COOL										
01	1 ESW-3 (12')	G 1	X						X		19-Jun-06	10:00		X						
02	2 ESW-4 (16')	G 1	X						X		19-Jun-06	10:01		X						
03	3 ESW-5 (14')	G 1	X						X		19-Jun-06	10:02		X						
04	4 BH-1A (20')	G 1	X						X		19-Jun-06	10:03		X						
05	5 BH-2A (23')	G 1	X						X		19-Jun-06	10:04		X						
06	6 BH-3A (20')	G 1	X						X		19-Jun-06	10:05		X						
07	7 SSW-4 (14')	G 1	X						X		19-Jun-06	10:06		X						
08	8 SSW-5 (12')	G 1	X						X		19-Jun-06	10:07		X						
09	9 SSW-6 (18')	G 1	X						X		19-Jun-06	10:08		X						
10	10 NSW-4 (14')	G 1	X						X		19-Jun-06	10:09		X						

Sampler Relinquished: <i>David Robinson</i>	Date: 6-20-06 Time: 7:20 AM	Received By: <i>[Signature]</i>	E-mail results to: jstegemoller@envplus.net
Relinquished by: <i>[Signature]</i>	Date: 6/20/06 Time: 7:00	Received By: (lab staff) <i>[Signature]</i>	REMARKS: plastic baggie
Delivered by: <i>[Signature]</i>	Sample Cool & Intact (Yes) No	Checked By: <i>[Signature]</i>	w/ labels 6.5

# Environmental Plus, Inc.

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

P.O. Box 1558, Eunice, NM 88231

Chain of Custody Form  
 LAB: ELT

Company Name: Environmental Plus, Inc.

EPI Project Manager: Iain Olness

Mailing Address: P.O. BOX 1558

City, State, Zip: Eunice New Mexico 88231

EPI Phone#/Fax#: 505-394-3481 / 505-394-2601

Client Company: Duke Energy Field Services

Facility Name: C-23-10 #10

Location: UL-B, Sect. 14, T 20 S, R 35 E

Project Reference: 130044-10

EPI Sampler Name: David Robinson

Attn: Polo Rendon  
 1625 West Marland  
 Hobbs, NM 88240



Bill To

ANALYSIS REQUEST

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							PRESERV.	SAMPLING		BTEX 8021B	TPH 8015M	CHLORIDES (Cl)	SULFATES (SO <sub>4</sub> <sup>-2</sup> )	pH	TCLP	OTHER >>>	PAH
				GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	ACID/BASE		ICE/COOL	OTHER								
1	NSW-5 (13)	G	1			X					X	19-Jun-06	10:10			X					
2	NSW-6 (17)	G	1			X					X	19-Jun-06	10:11			X					
3	WSW-3 (16)	G	1			X					X	19-Jun-06	10:12			X					
4	WSW-4 (14)	G	1			X					X	19-Jun-06	10:13			X					
5																					
6																					
7																					
8																					
9																					
10																					

LAB I.D. *W-40005*

Sampler Relinquished by: *David Robinson*

Received By: *Scott W...*  
 Date: *6-20-06*  
 Time: *7:00 AM*  
 Received By: (lab staff)  
 Date: *6/20/06*  
 Time: *7:00:00*

E-mail results to: *fstegenmoller@envplus.net*  
 REMARKS: *plastic baggie*

Delivered by: *Y* Sample Cool & Intact No

Checked By:

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

Client: EPL  
 Date/Time: 6/20/06 10:00  
 Order #: 6E10003  
 Initials: ck

**Sample Receipt Checklist**

Temperature of container/cooler?	Yes	No	6.5 C
Shipping container/cooler in good condition?	<input checked="" type="checkbox"/>	No	
Custody Seals intact on shipping container/cooler?	Yes	No	<u>Not present</u>
Custody Seals intact on sample bottles?	Yes	No	<u>Not present</u>
Chain of custody present?	<input checked="" type="checkbox"/>	No	
Sample Instructions complete on Chain of Custody?	<input checked="" type="checkbox"/>	No	
Chain of Custody signed when relinquished and received?	<input checked="" type="checkbox"/>	No	
Chain of custody agrees with sample label(s)	<input checked="" type="checkbox"/>	No	
Container labels legible and intact?	<input checked="" type="checkbox"/>	No	
Sample Matrix and properties same as on chain of custody?	<input checked="" type="checkbox"/>	No	
Samples in proper container/bottle?	<input checked="" type="checkbox"/>	No	
Samples properly preserved?	<input checked="" type="checkbox"/>	No	
Sample bottles intact?	<input checked="" type="checkbox"/>	No	
Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/>	No	
Containers documented on Chain of Custody?	<input checked="" type="checkbox"/>	No	
Sufficient sample amount for indicated test?	<input checked="" type="checkbox"/>	No	
All samples received within sufficient hold time?	<input checked="" type="checkbox"/>	No	
VOC samples have zero headspace?	Yes	No	<u>Not Applicable</u>

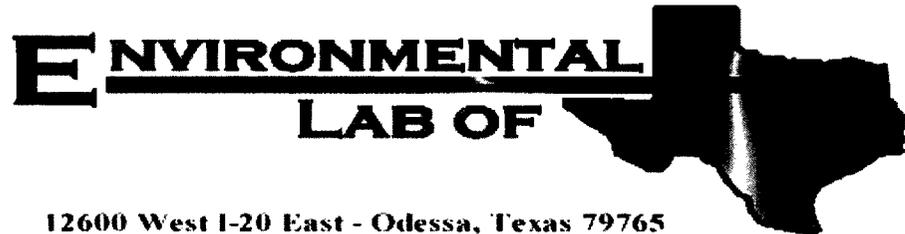
Other observations:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Variance Documentation:**

Contact Person: - \_\_\_\_\_ Date/Time: \_\_\_\_\_ Contacted by: \_\_\_\_\_  
 Regarding: \_\_\_\_\_

**Corrective Action Taken:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Iain Olness

Environmental Plus, Incorporated

P.O. Box 1558

Eunice, NM 88231

Project: DEFS/ C-23-10 #10

Project Number: 130044-10

Location: UL-B, Sect. 14, T 20 S, R 35 E

Lab Order Number: 6G10008

Report Date: 07/13/06

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

Project: DEFS/ C-23-10 #10  
Project Number: 130044-10  
Project Manager: Iain Olness

Fax: 505-394-2601

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SP-1	6G10008-01	Soil	07/07/06 13:35	07/10/06 09:55
SP-2	6G10008-02	Soil	07/07/06 13:41	07/10/06 09:55
SP-3	6G10008-03	Soil	07/07/06 13:48	07/10/06 09:55
SP-4	6G10008-04	Soil	07/07/06 13:52	07/10/06 09:55
SP-5	6G10008-05	Soil	07/07/06 13:56	07/10/06 09:55

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SP-1 (6G10008-01) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG61219	07/12/06	07/12/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		83.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		85.5 %	80-120		"	"	"	"	
<b>Carbon Ranges C6-C12</b>	<b>J [5.24]</b>	10.0	mg/kg dry	1	EF62314	07/10/06	07/10/06	EPA 8015M	J
<b>Carbon Ranges C12-C28</b>	<b>42.8</b>	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon nC6-nC35</b>	<b>42.8</b>	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		104 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		102 %	70-130		"	"	"	"	
<b>SP-2 (6G10008-02) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG61219	07/12/06	07/12/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		82.5 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		88.2 %	80-120		"	"	"	"	
<b>Carbon Ranges C6-C12</b>	<b>J [5.81]</b>	10.0	mg/kg dry	1	EF62314	07/10/06	07/10/06	EPA 8015M	J
<b>Carbon Ranges C12-C28</b>	<b>785</b>	10.0	"	"	"	"	"	"	
<b>Carbon Ranges C28-C35</b>	<b>103</b>	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon nC6-nC35</b>	<b>888</b>	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		95.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		109 %	70-130		"	"	"	"	
<b>SP-3 (6G10008-03) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG61219	07/12/06	07/12/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		82.2 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		91.8 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EF62314	07/10/06	07/10/06	EPA 8015M	

Environmental Lab of Texas

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**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SP-3 (6G10008-03) Soil</b>									
<b>Carbon Ranges C12-C28</b>	ND	10.0	mg/kg dry	1	EF62314	07/10/06	07/10/06	EPA 8015M	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		107 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		108 %	70-130		"	"	"	"	
<b>SP-4 (6G10008-04) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG61219	07/12/06	07/12/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		107 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.5 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EF62314	07/10/06	07/10/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		97.8 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		97.0 %	70-130		"	"	"	"	
<b>SP-5 (6G10008-05) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG61219	07/12/06	07/12/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		83.2 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		82.5 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EF62314	07/10/06	07/10/06	EPA 8015M	
<b>Carbon Ranges C12-C28</b>	<b>33.2</b>	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon nC6-nC35</b>	<b>33.2</b>	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		89.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		88.6 %	70-130		"	"	"	"	

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

Project: DEFS/ C-23-10 #10  
Project Number: 130044-10  
Project Manager: Iain Olness

Fax: 505-394-2601

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

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>SP-1 (6G10008-01) Soil</b>									
Chloride	425	20.0	mg/kg Wet	2	EG61014	07/10/06	07/11/06	SW 846 9253	
% Moisture	6.7	0.1	%	1	EG61101	07/10/06	07/11/06	% calculation	
Sulfate	ND	25.0	mg/kg	5	EG61104	07/10/06	07/11/06	EPA 9038	
<b>SP-2 (6G10008-02) Soil</b>									
Chloride	42.5	20.0	mg/kg Wet	2	EG61014	07/10/06	07/11/06	SW 846 9253	
% Moisture	0.4	0.1	%	1	EG61101	07/10/06	07/11/06	% calculation	
Sulfate	30.0	25.0	mg/kg	5	EG61104	07/10/06	07/11/06	EPA 9038	
<b>SP-3 (6G10008-03) Soil</b>									
Chloride	191	20.0	mg/kg Wet	2	EG61014	07/10/06	07/11/06	SW 846 9253	
% Moisture	9.3	0.1	%	1	EG61101	07/10/06	07/11/06	% calculation	
Sulfate	31.5	25.0	mg/kg	5	EG61104	07/10/06	07/11/06	EPA 9038	
<b>SP-4 (6G10008-04) Soil</b>									
Chloride	42.5	20.0	mg/kg Wet	2	EG61014	07/10/06	07/11/06	SW 846 9253	
% Moisture	5.7	0.1	%	1	EG61101	07/10/06	07/11/06	% calculation	
Sulfate	45.0	25.0	mg/kg	5	EG61104	07/10/06	07/11/06	EPA 9038	
<b>SP-5 (6G10008-05) Soil</b>									
Chloride	ND	20.0	mg/kg Wet	2	EG61014	07/10/06	07/11/06	SW 846 9253	
% Moisture	4.5	0.1	%	1	EG61101	07/10/06	07/11/06	% calculation	
Sulfate	250	125	mg/kg	25	EG61104	07/10/06	07/11/06	EPA 9038	

Environmental Lab of Texas

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Page 4 of 10

**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 EF62314 - Solvent Extraction (GC)**

**Blank (EF62314-BLK1)**

Prepared & Analyzed: 07/10/06

Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	"							
Carbon Ranges C28-C35	ND	10.0	"							
Total Hydrocarbon nC6-nC35	ND	10.0	"							
Surrogate: 1-Chlorooctane	43.5		mg/kg	50.0		87.0	70-130			
Surrogate: 1-Chlorooctadecane	40.9		"	50.0		81.8	70-130			

**LCS (EF62314-BS1)**

Prepared & Analyzed: 07/10/06

Carbon Ranges C6-C12	502	10.0	mg/kg wet	500		100	75-125			
Carbon Ranges C12-C28	486	10.0	"	500		97.2	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00			75-125			
Total Hydrocarbon nC6-nC35	988	10.0	"	1000		98.8	75-125			
Surrogate: 1-Chlorooctane	60.2		mg/kg	50.0		120	70-130			
Surrogate: 1-Chlorooctadecane	58.7		"	50.0		117	70-130			

**Calibration Check (EF62314-CCV1)**

Prepared: 07/10/06 Analyzed: 07/11/06

Carbon Ranges C6-C12	273		mg/kg	250		109	80-120			
Carbon Ranges C12-C28	284		"	250		114	80-120			
Total Hydrocarbon nC6-nC35	557		"	500		111	80-120			
Surrogate: 1-Chlorooctane	47.9		"	50.0		95.8	70-130			
Surrogate: 1-Chlorooctadecane	44.9		"	50.0		89.8	70-130			

**Matrix Spike (EF62314-MS1)**

Source: 6G10004-01

Prepared & Analyzed: 07/10/06

Carbon Ranges C6-C12	559	10.0	mg/kg dry	573	5.31	96.6	75-125			
Carbon Ranges C12-C28	574	10.0	"	573	15.0	97.6	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125			
Total Hydrocarbon nC6-nC35	1130	10.0	"	1150	15.0	97.0	75-125			
Surrogate: 1-Chlorooctane	60.0		mg/kg	50.0		120	70-130			
Surrogate: 1-Chlorooctadecane	50.4		"	50.0		101	70-130			

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

Project: DEFS/ C-23-10 #10  
Project Number: 130044-10  
Project Manager: Iain Olness

Fax: 505-394-2601

**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 EF62314 - Solvent Extraction (GC)**

<b>Matrix Spike Dup (EF62314-MSD1)</b>		<b>Source: 6G10004-01</b>		<b>Prepared &amp; Analyzed: 07/10/06</b>						
Carbon Ranges C6-C12	549	10.0	mg/kg dry	573	5.31	94.9	75-125	1.81	20	
Carbon Ranges C12-C28	560	10.0	"	573	15.0	95.1	75-125	2.47	20	
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125		20	
Total Hydrocarbon nC6-nC35	1110	10.0	"	1150	15.0	95.2	75-125	1.79	20	
Surrogate: 1-Chlorooctane	61.5		mg/kg	50.0		123	70-130			
Surrogate: 1-Chlorooctadecane	52.5		"	50.0		105	70-130			

**Batch EG61219 - EPA 5030C (GC)**

<b>Blank (EG61219-BLK1)</b>		<b>Prepared &amp; Analyzed: 07/12/06</b>								
Benzene	ND	0.0250	mg/kg wet							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
Xylene (p/m)	ND	0.0250	"							
Xylene (o)	ND	0.0250	"							
Surrogate: a,a,a-Trifluorotoluene	32.5		ug/kg	40.0		81.2	80-120			
Surrogate: 4-Bromofluorobenzene	37.6		"	40.0		94.0	80-120			

<b>LCS (EG61219-BS1)</b>		<b>Prepared &amp; Analyzed: 07/12/06</b>								
Benzene	1.16	0.0250	mg/kg wet	1.25		92.8	80-120			
Toluene	1.15	0.0250	"	1.25		92.0	80-120			
Ethylbenzene	1.08	0.0250	"	1.25		86.4	80-120			
Xylene (p/m)	2.49	0.0250	"	2.50		99.6	80-120			
Xylene (o)	1.21	0.0250	"	1.25		96.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	34.5		ug/kg	40.0		86.2	80-120			
Surrogate: 4-Bromofluorobenzene	35.4		"	40.0		88.5	80-120			

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

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

**Batch EG61219 - EPA 5030C (GC)**

**Calibration Check (EG61219-CCV1)**

Prepared & Analyzed: 07/12/06

Benzene	51.1		ug/kg	50.0		102	80-120			
Toluene	52.1		"	50.0		104	80-120			
Ethylbenzene	50.6		"	50.0		101	80-120			
Xylene (p/m)	102		"	100		102	80-120			
Xylene (o)	49.9		"	50.0		99.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	38.9		"	40.0		97.2	80-120			
Surrogate: 4-Bromofluorobenzene	37.6		"	40.0		94.0	80-120			

**Matrix Spike (EG61219-MS1)**

Source: 6G10008-05

Prepared & Analyzed: 07/12/06

Benzene	1.31	0.0250	mg/kg dry	1.31	ND	100	80-120			
Toluene	1.34	0.0250	"	1.31	ND	102	80-120			
Ethylbenzene	1.16	0.0250	"	1.31	ND	88.5	80-120			
Xylene (p/m)	2.72	0.0250	"	2.62	ND	104	80-120			
Xylene (o)	1.29	0.0250	"	1.31	ND	98.5	80-120			
Surrogate: a,a,a-Trifluorotoluene	37.5		ug/kg	40.0		93.8	80-120			
Surrogate: 4-Bromofluorobenzene	37.3		"	40.0		93.2	80-120			

**Matrix Spike Dup (EG61219-MSD1)**

Source: 6G10008-05

Prepared & Analyzed: 07/12/06

Benzene	1.47	0.0250	mg/kg dry	1.31	ND	112	80-120	11.3	20	
Toluene	1.46	0.0250	"	1.31	ND	111	80-120	8.45	20	
Ethylbenzene	1.36	0.0250	"	1.31	ND	104	80-120	16.1	20	
Xylene (p/m)	3.02	0.0250	"	2.62	ND	115	80-120	10.0	20	
Xylene (o)	1.52	0.0250	"	1.31	ND	116	80-120	16.3	20	
Surrogate: a,a,a-Trifluorotoluene	38.0		ug/kg	40.0		95.0	80-120			
Surrogate: 4-Bromofluorobenzene	38.4		"	40.0		96.0	80-120			

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

Project: DEFS/ C-23-10 #10  
Project Number: 130044-10  
Project Manager: Iain Olness

Fax: 505-394-2601

**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
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**Batch EG61014 - Water Extraction**

**Blank (EG61014-BLK1)**

Prepared: 07/10/06 Analyzed: 07/11/06

Chloride ND 20.0 mg/kg Wet

**LCS (EG61014-BS1)**

Prepared & Analyzed: 07/11/06

Chloride 84.0 mg/kg 100 84.0 80-120

**Matrix Spike (EG61014-MS1)**

Source: 6G10009-06

Prepared: 07/10/06 Analyzed: 07/11/06

Chloride 766 20.0 mg/kg Wet 500 298 93.6 80-120

**Matrix Spike Dup (EG61014-MSD1)**

Source: 6G10009-06

Prepared: 07/10/06 Analyzed: 07/11/06

Chloride 776 20.0 mg/kg Wet 500 298 95.6 80-120 1.30 20

**Reference (EG61014-SRM1)**

Prepared & Analyzed: 07/11/06

Chloride 50.0 mg/kg 50.0 100 80-120

**Batch EG61101 - General Preparation (Prep)**

**Blank (EG61101-BLK1)**

Prepared: 07/10/06 Analyzed: 07/11/06

% Moisture ND 0.1 %

**Duplicate (EG61101-DUP1)**

Source: 6G10004-01

Prepared: 07/10/06 Analyzed: 07/11/06

% Moisture 14.2 0.1 % 12.8 10.4 20

**Batch EG61104 - Water Extraction**

**Blank (EG61104-BLK1)**

Prepared: 07/10/06 Analyzed: 07/11/06

Sulfate ND 25.0 mg/kg

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

Project: DEFS/ C-23-10 #10  
Project Number: 130044-10  
Project Manager: Iain Olness

Fax: 505-394-2601

**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
<b>Batch EG61104 - Water Extraction</b>										
<b>LCS (EG61104-BS1)</b>										
Sulfate	24.1	5.00	mg/kg	25.0		96.4	80-120			Prepared & Analyzed: 07/11/06
<b>Calibration Check (EG61104-CCV1)</b>										
Sulfate	51.8		mg/kg	50.0		104	80-120			Prepared & Analyzed: 07/11/06
<b>Duplicate (EG61104-DUP1)</b>										
		<b>Source: 6G07012-01</b>								Prepared: 07/10/06 Analyzed: 07/11/06
Sulfate	132	25.0	mg/kg		134			1.50	20	

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

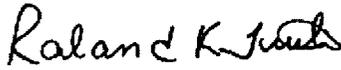
Project: DEFS/ C-23-10 #10  
Project Number: 130044-10  
Project Manager: Iain Olness

Fax: 505-394-2601

### 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:



Date:

7/13/2006

Raland K. Tuttle, Lab Manager  
Celey D. Keene, Lab Director, Org. Tech Director  
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director  
LaTasha Cornish, Chemist  
Sandra Sanchez, Lab Tech.

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

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

# Environmental Plus, Inc.

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

P.O. Box 1558, Eunice, NM 88231

# Chain of Custody Form

LAB: ELT

Company Name Environmental Plus, Inc.		Billing To	
EPI Project Manager Iain Oiness	Duke Energy Field Services		
Mailing Address P.O. BOX 1558	Attn: Polo Rendon		
City, State, Zip Eunice New Mexico 88231	1625 West Marland		
EPI Phone#/Fax# 505-394-3481 / 505-394-2601	Hobbs, NM 88240		
Client Company Duke Energy Field Services			
Facility Name C-23-10 #10			
Location UL-B, Sect. 14, T 20 S, R 35 E			
Project Reference 130044-10			
EPI Sampler Name George Blackburn			

LAB I.D.	SAMPLE I.D.	MATRIX							PRESERV.			SAMPLING		ANALYSIS REQUEST										
		(G)RAB OR (C)OMP.	# CONTAINERS	GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	ACID/BASE	ICE/COOL	OTHER	DATE	TIME	BTEX 8021B	TPH 8015M	CHLORIDES (C)	SULFATES (SO <sub>4</sub> <sup>2-</sup> )	PH	TCLP	OTHER >>	PAH		
100000	1 SP-1	G	1			X					X			07-Jul-06	13:35	X	X	X						
	2 SP-2	G	1			X					X			07-Jul-06	13:41	X	X	X						
	3 SP-3	G	1			X					X			07-Jul-06	13:48	X	X	X						
	4 SP-4	G	1			X					X			07-Jul-06	13:52	X	X	X						
	5 SP-5	G	1			X					X			07-Jul-06	13:56	X	X	X						
	6																							
	7																							
	8																							
	9																							
	10																							

Supplier Requisitioned <i>John Deros</i>	Received By: <i>Paul J...</i>
Relinquished by: <i>Paul J...</i>	Relinquished By: (lab staff) <i>Paul J...</i>
Delivered by:	Sample Cool & Intact Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Checked By:	

REMARKS: 0.5%  
C-23-10  
4oz glass w/ label

E-mail results to: ioiness@envplus.net

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

Client: EPI  
 Date/Time: 7/10/04  
 Order #: 641008  
 Initials: OK

**Sample Receipt Checklist**

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

Other observations:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Variance Documentation:**

Contact Person: - \_\_\_\_\_ Date/Time: \_\_\_\_\_ Contacted by: \_\_\_\_\_  
 Regarding: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_

Corrective Action Taken:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2328 • 101 E. MARLAND • HOBBS, NM 88240

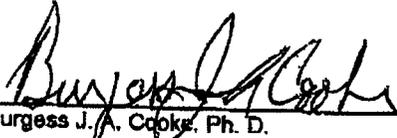
ANALYTICAL RESULTS FOR  
 ENVIRONMENTAL PLUS, INC.  
 ATTN: J. STEGEMOLLER  
 P.O. BOX 1558  
 EUNICE, NM 88231  
 FAX TO: (505) 394-2601

Receiving Date: 09/13/06  
 Reporting Date: 09/15/06  
 Project Number: DUKE ENERGY FIELD SERVICES (130044-10)  
 Project Name: C-23-10 #10  
 Project Location: UL-B, SECT. 14, T 20 S, R 35 E

Sampling Date: 09/12/06  
 Sample Type: SOIL  
 Sample Condition: COOL & INTACT  
 Sample Received By: HM  
 Analyzed By: BC

LAB NO.	SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/Kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/Kg)	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE:		09/13/06	09/13/06	09/13/06	09/13/06	09/13/06	09/13/06
H11530-1	SH-1	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
H11530-2	SH-2	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
H11530-3	SH-3	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
H11530-4	SH-4	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
Quality Control		791	754	0.098	0.100	0.102	0.298
True Value QC		800	800	0.100	0.100	0.100	0.300
% Recovery		98.8	94.2	97.6	99.8	105	99.2
Relative Percent Difference		0.7	4.9	11.1	4.2	2.6	2.7

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

  
 Burgess J. A. Cooke, Ph. D.

9/15/06  
 Date

h11530a

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

**ANALYTICAL RESULTS FOR  
ENVIRONMENTAL PLUS, INC.  
ATTN: J. STEGEMOLLER  
P.O. BOX 1558  
EUNICE, NM 88231  
FAX TO: (505) 394-0201**

Receiving Date: 09/13/06  
Reporting Date: 09/15/06  
Project Owner: DUKE ENERGY FIELD SERVICES (130044-10)  
Project Name: C-23-10 #10  
Project Location: UL-B, SECT. 14, T 20 S, R 35 E

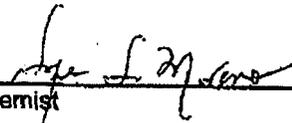
Sampling Date: 09/12/06  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: HM  
Analyzed By: HM

LAB NUMBER	SAMPLE ID	SO <sub>4</sub> (mg/Kg)	Cl (mg/Kg)
ANALYSIS DATE:		09/14/06	09/14/06
H11530-1	SH-1	115	16
H11530-2	SH-2	15.8	304
H11530-3	SH-3	< 1	144
H11530-4	SH-4	* < 1	160
Quality Control		26.8	1000
True Value QC		25.0	1000
% Recovery		107	100
Relative Percent Difference		14.0	2.0

METHODS: EPA 600/4-79-020	375.4	SM 4500 Cl/B
---------------------------	-------	--------------

NOTE: Analyses performed on 1:4 w:v aqueous extracts.

\* Color matrix interference. Results should therefore be considered an approximation.

  
Chemist

09-15-06  
Date

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analysis. 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. No other party shall 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.

# Environmental Plus, Inc.

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

P.O. Box 1558, Eunice, NM 88231

Chain of Custody Form  
 LAB: Cardinal

Company Name: Environmental Plus, Inc.  
 EPI Project Manager: John Otness *JSTE General Mgr*  
 Mailing Address: P.O. BOX 1558  
 City, State, Zip: Eunice New Mexico 88231  
 EPI Phone#/Fax#: 505-394-3481 / 505-394-2601  
 Client Company: Duke Energy Field Services  
 Facility Name: C-23-10 #10  
 Location: UL-B, Sect. 14, T 20 S, R 35 E  
 Project Reference: 130044-10  
 EPI Sampler Name: David Robinson

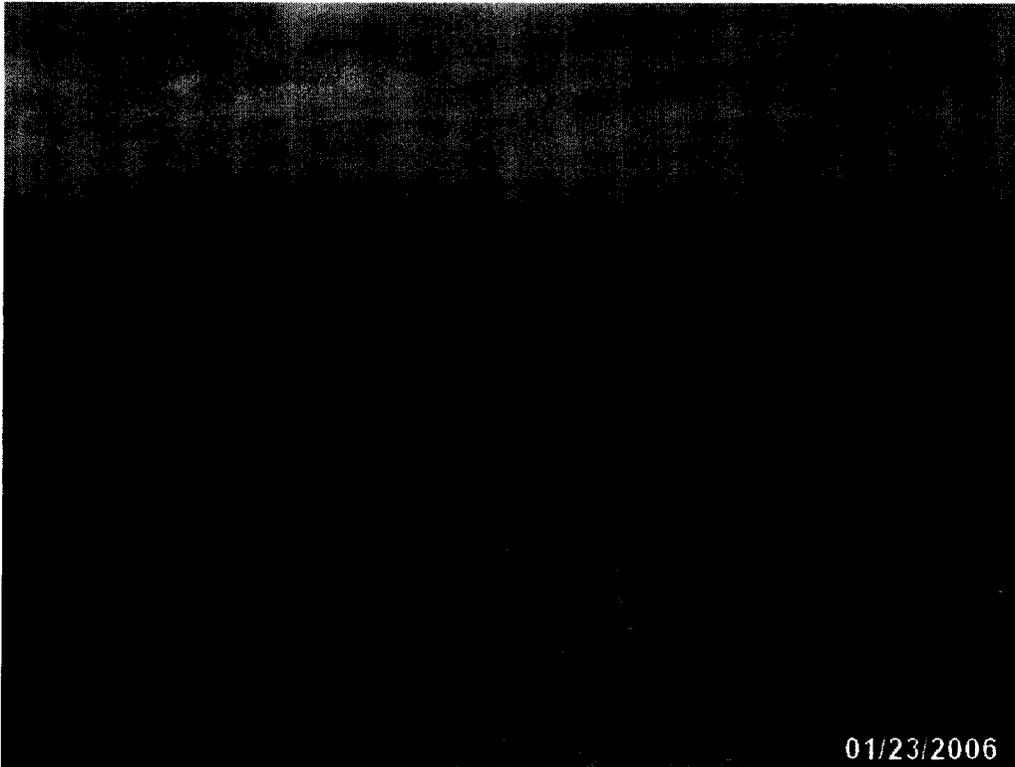
**Duke Energy Field Services**  
 Attn: Polo Rendon  
 1625 West Marland  
 Hobbs, NM 88240

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							PRESERV.	SAMPLING		BTX 8021B	TPH 8015M	CHLORIDES (Cl)	SULFATES (SO <sub>4</sub> )	PH	TCLP	OTHER >>>	PAH				
				GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	ACID/BASE		ICE/COOL	OTHER									DATE	TIME		
11530-1	1SH-1	G	1	X		X																			
2	2SH-2	G	1	X																					
3	3SH-3	G	1	X		X																			
4	4SH-4	G	1	X		X																			
5																									
6																									
7																									
8																									
9																									
10																									

Requested by: *Harold McQueen*  
 Date: *9-13-06*  
 Time: *3:50P*  
 Received By: *Hope S. M. Rendon*  
 Date of Receipt: *09-13-06*  
 Time of Receipt: *3:50P*  
 Received By: (lab staff)  
 Signature: *Hope S. M. Rendon*  
 Delivered by:   
 Sampled, Spill & Impact Yes   
 Checked By:   
 E-mail results to: [jategemoller@envplus.net](mailto:jategemoller@envplus.net)  
 REMARKS:

**APPENDIX II**

**PROJECT PHOTOGRAPHS**



01/23/2006

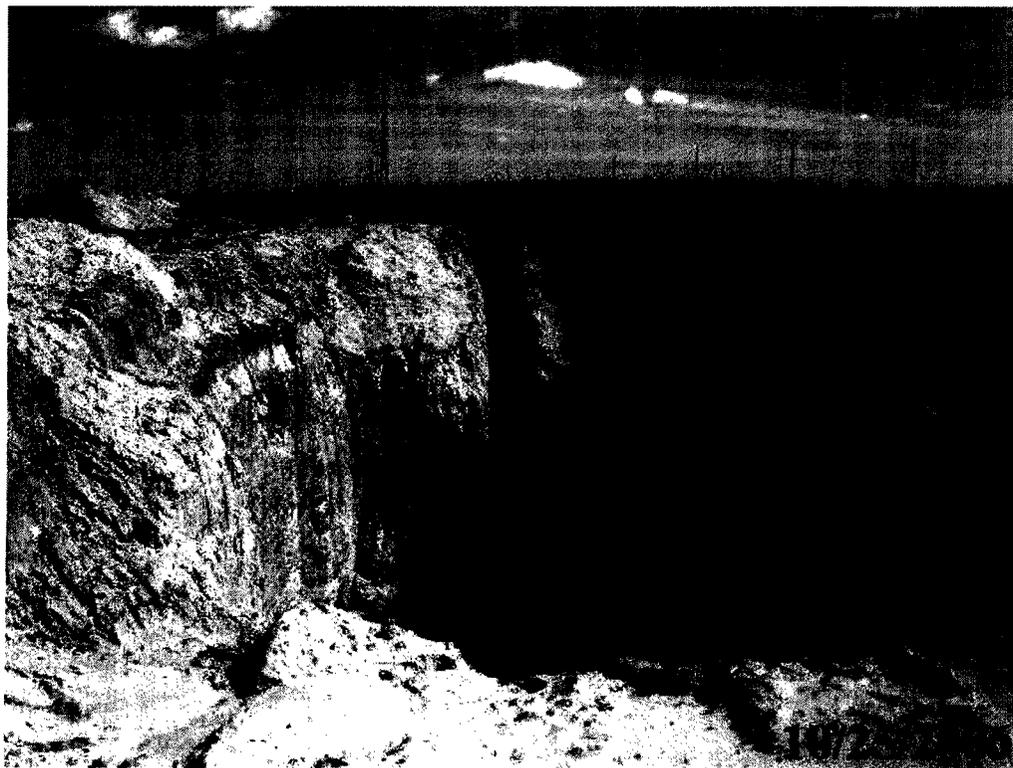
*Photo #1:* Looking westerly across point-of release.



*Photo #2:* Looking easterly across excavation as of March 30, 2006.



*Photo #3:* Looking southerly across excavation as of March 30, 2006.



*Photo #4:* Current excavation, looking easterly.



*Photo #5:* Looking down on excavation floor.



*Photo #6:* Looking easterly at shredded/aerated soil.

**APPENDIX III**  
**INFORMATIONAL COPY OF INTIAL**  
**NMOCD C-141 FORM**

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-141  
Revised October 10, 2003

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

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

<b>Name of Company:</b> Duke Energy Field Services	<b>Contact:</b> Lynn Ward
<b>Address:</b> 10 Desta Drive, Suite 400-W	<b>Telephone No.:</b> (432) 620-4207
<b>Facility Name:</b> C-23-10 Line - Leak #10	<b>Facility Type:</b> Natural Gas Pipeline

<b>Surface Owner:</b> Aline Sims	<b>Mineral Owner:</b>	<b>Lease No.:</b>
----------------------------------	-----------------------	-------------------

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	14	20S	35E					Lea

**Latitude:** N 32° 34' 39.03" **Longitude:** W 103° 25' 31.23"

**NATURE OF RELEASE**

<b>Type of Release:</b> Natural Gas	<b>Volume of Release:</b> unknown	<b>Volume Recovered:</b> none
<b>Source of Release:</b> Pipeline	<b>Date and Hour of Occurrence:</b> unknown	<b>Date and Hour of Discovery:</b> January 13, 2006
<b>Was Immediate Notice Given?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	<b>If YES, To Whom?</b> Larry Johnson, NMOCD	
<b>By Whom?</b> Lynn Ward	<b>Date and Hour:</b> January 13, 2006 @ 11:59 A.M.	
<b>Was a Watercourse Reached?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>If YES, Volume Impacting the Watercourse:</b> Not Applicable	

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

**Describe Cause of Problem and Remedial Action Taken.\*** An unknown amount of natural gas was released as the result of the structural integrity of the natural gas line failing when the pressure was increased on the line, with no amount recovered from the site. The line was shut in and is scheduled to be replaced.

**Describe Area Affected and Cleanup Action Taken.\*** Approximately 1,600 square-feet of surface area was impacted by the release. Remediation of the site will be in accordance with NMOCD guidelines.

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

<b>Signature:</b>		<u>OIL CONSERVATION DIVISION</u>	
<b>Printed Name:</b> Lynn Ward		<b>Approved by District Supervisor:</b>	
<b>Title:</b> Environmental Specialist-Western Division		<b>Approval Date:</b>	<b>Expiration Date:</b>
<b>E-mail Address:</b> lward@duke-energy.com		<b>Conditions of Approval:</b>	<b>Attached</b> <input type="checkbox"/>
<b>Date:</b>	<b>Phone:</b> (432) 620-4207		

\* Attach Additional Sheets If Necessary

RPH#422

# LETTER OF TRANSMITTAL

ENVIRONMENTAL PLUS, INC.



Date: November 21, 2006  
 To: **Larry Johnson**  
 Company Name: New Mexico Oil Conservation Division  
 Address: 1625 N. French Drive  
 City / State / Zip: Hobbs, New Mexico 88240  
 From: Jason Stegemoller  
 CC: Lynn Ward, DEFS – Midland, TX; Steve Weathers, DEFS – Denver, CO; Patrick Sims, Landowner – Eunice, NM  
 Project #: **1RP# 422**; DEFS/EPI Ref: 130044-10  
 Project Name: C-23-10 Line Site #10  
 Subject: **Closure Proposal**

# of originals	# of copies	Description
	1	DEFS – C-23-10 Line Site #10 Closure Proposal

**Remarks**

Sincerely,

Environmental Plus, Inc.

*Jason Stegemoller*  
 Jason Stegemoller  
 Environmental Scientist



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

