



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

January 10, 2006

Lynn Ward
Duke Energy Field Services
10 Desta Dr. Ste 400W
Midland, TX 79705

lcward@duke-energy.com

Re: Closure Approval: SS Line 20" - #130012
Site Reference UL-F, Sec-32 T-21S R-37E
Initial Notification Date: August 8, 2004
Closure Request Dated: December 14, 2005

Dear Ms Ward,

The **Final Closure Document** submitted to the New Mexico Oil Conservation Division (OCD) by Environmental Plus, Inc. for Duke Energy Field Services is **hereby approved**. According to the information provided, no further action is required at this time.

Please be advised that OCD approval does not relieve Duke Energy Field Services of liability should remaining contaminants pose a future threat to ground water, surface water, human health or the environment. Additionally, OCD approval does not relieve Duke Energy Field Services of responsibility for compliance with any other federal, state, or local laws and/or regulations.

If you have any questions or need assistance please feel free to call me at (505) 393-6161, x111 or email lwjohnson@state.nm.us

Sincerely,

A handwritten signature in cursive script that reads "L. Johnson".

Larry Johnson - Environmental Engineer

Cc: Chris Williams - District I Supervisor
Roger Anderson - Environmental Bureau
Paul Sheeley - Environmental Engineer



Final Approved
1.10.06
JA

CLOSURE REPORT

SS LINE 20"

DEFS REF: 130012

UL-F (SW¼ OF THE NW¼) OF SECTION 32 T21S R37E

~1.6 MILES SOUTHWEST OF EUNICE

LEA COUNTY, NEW MEXICO

LATITUDE: N 32° 26' 9.12275" LONGITUDE: W 103° 11' 9.09175"

DECEMBER 2005

PREPARED BY:

Environmental Plus, Inc.

2100 Avenue O

P.O. Box 1558

Eunice, NM 88231

Phone: (505)394-3481

FAX: (505)394-2601

iolness@envplus.net



Standard of Care

Closure Report

SS Line 20-inch (Ref. #130012)

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

This report was prepared by:



Jason Stegemoller, M.S.
Environmental Scientist

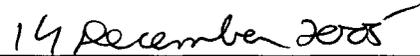


Date

This report was reviewed by:



Iain A. Olness, P.G.
Hydrogeologist



Date

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Duke Energy Field Services- SS Line 20" (Ref. #130012)

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1.0 Introduction & Background

This report addresses the site investigation and remediation of the Duke Energy Field Services (DEFS) "SS-Line" 20-inch natural gas gathering line remediation site. On August 8, 2004, Environmental Plus, Inc. (EPI) was notified by DEFS regarding a recently discovered natural gas and associated natural gas liquid (NGL) release along the SS-Line. This site is located approximately 1.6 miles southwest of Eunice, Lea County, New Mexico (*reference Figure 1*). The initial C-141 Form submitted to the New Mexico Oil Conservation Division (NMOCD) on August 18, 2004, reports the release volume as approximately 8-barrels with none recovered. EPI performed GPS surveying, photography and characterization of the site on August 9, 2004. The initial site consisted of approximately 1,075 square feet (ft²) of visibly affected surface area.

Initial activities at the site consisted of repairing the pipeline with a line repair clamp and visual delineation. Once the extents of contamination had been delineated, remediation activities commenced. Remediation of this site consisted of excavating and stockpiling approximately 140 cubic yards (yds³) of hydrocarbon-impacted soil for blending and transporting approximately 490 yds³ of contaminated soil to EPI's Landfarm for treatment. The excavation would ultimately comprise 3,385-ft², extending to approximately 5-feet below ground surface (bgs). Soil samples were collected on September 1, 2, and 7, 2004 (*reference Figure 3*). A portion of each sample was immediately placed in a laboratory provided container and set on ice for transport to an independent laboratory for quantification of benzene, toluene, ethylbenzene and total xylenes (BTEX), total petroleum hydrocarbons (TPH) and chlorides. The remainder of the sample was placed in a polyethylene bag and analyzed in the field for the presence of organic vapors utilizing an UltraRae photoionization detector (PID) equipped with a 9.8 electron volt (eV) lamp. Initial laboratory analytical results indicated TPH concentrations above the NMOCD remedial threshold of 1,000 parts per million (ppm) remained in the excavation and the stockpile material. Excavation activities resumed and further samples were collected on October 11, 2004. Analytical results for those samples indicated all contaminant concentrations within the excavation were less than the NMOCD remedial thresholds. Stockpiled material was remediated via blending clean soil, purchased from Mr. Sam Bruton, into the stockpiled NGL impacted soil. Confirmatory samples were taken from the north and east blending cells on October 26, 2004 and submitted for laboratory quantification. Analytical results indicated BTEX concentrations in the both blending cells were below the NMOCD remedial thresholds. TPH concentrations were slightly above the NMOCD remedial thresholds. The excavation portion of the construction phase was completed in October 2004.

In September 2005, the excavation was backfilled to approximately 3-feet bgs with excavated, blended soil. The remainder of the excavation was backfilled with clean topsoil and graded to allow natural drainage.

This release site is located in Unit Letter F, (SW¹/₄ of the NW¹/₄), Section 32, T21S, R37E, N32° 26' 9.12275" and W103° 11' 9.09175". The site is approximately 1.6-miles southwest of Eunice, New Mexico. The property is owned by the State of New Mexico and leased by Mr. Sam Bruton (*reference Figures 1 through 3*).

2.0 Site Description

2.1 Geological Description

The United States Geological Survey (USGS) Ground-Water Report 6, "Geology and Ground-Water Conditions in Southern Lea County, New Mexico," A. Nicholson and A. Clebsch, 1961, describes the near surface geology of southern Lea County as "an intergrade

of the Quaternary Alluvium (QA) sediments, i.e., fine to medium sand, with the mostly eroded Cenozoic Ogallala (CO) formation. Typically, the QA and CO formations in the area are capped by a thick interbed of caliche and generally overlain by sandy soil."

The release site is located in the Eunice Plain physiographic subdivision, described by Nicholson & Clebsch as an area "underlain by a hard caliche surface and is almost entirely covered by reddish-brown dune sand". The thickness of the sand cover ranges from 2-5 feet in most areas to as much as 20-30 feet in drift areas.

2.2 Ecological Description

The area is typical of the Upper Chihuahuan Desert Biome consisting primarily of hummocky sand hills covered with Harvard Shin Oak (*Quercus harvardi*) interspersed with Honey Mesquite (*Prosopis glandulosa*) along with typical desert grasses, flowering annuals and flowering perennials. Mammals represented, include Orrd's and Merriam's Kangaroo 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 area. A survey of Listed, Threatened, or Endangered species was not conducted.

2.3 Area Ground Water

The unconfined groundwater aquifer at this site is projected to be ≈80-ft bgs based on limited water depth data obtained from the New Mexico State Engineers Office data base

2.4 Area Water Wells

All recorded wells are greater than 1,000 horizontal feet from the site.

2.5 Area Surface Water Features

No surface water bodies exist within 1,000 horizontal feet of the site.

3.0 NMOCD Site Ranking

Contaminant delineation and remedial work done at this site indicate that the chemical parameters of the soil and the physical parameters of the 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)**

Acceptable thresholds for contaminants/constituents of concern (CoC), i.e., TPH^{8015m}, benzene, and the mass sum of benzene, toluene, ethylbenzene, and total xylenes (BTEX), were determined based on the NMOCD Ranking Criteria as follows:

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

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

1. Ground Water		2. Wellhead Protection Area		3. Distance to Surface Water	
Depth to GW <50 feet: 20 points		If <1,000' from water source, or; <200' from private domestic water source: 20 points		<200 horizontal feet: 20 points	
Depth to GW 50 to 99 feet: 10 points				200-1,000 horizontal feet: 10 points	
Depth to GW >100 feet: 0 points		If >1,000' from water source, or; >200' from private domestic water source: 0 points		>1,000 horizontal feet: 0 points	
Site Rank (1+2+3) = 10 + 0 + 0 = 0 points					
Total Site Ranking Score and Acceptable Remedial Goal Concentrations					
Parameter	20 or >	10	0		
Benzene ¹	10 ppm	10 ppm	10 ppm		
BTEX ¹	50 ppm	50 ppm	50 ppm		
TPH	100 ppm	1,000 ppm	5,000 ppm		

¹ A field soil vapor headspace measurement of 100 ppm may be substituted for a laboratory analysis of the benzene and BTEX concentration limits.

4.0 Subsurface Soil Investigation

The vertical extent of hydrocarbon contamination at the site was determined from field analyses during excavation. Organic vapor concentrations were measured in the field utilizing an UltraRae PID equipped with a 9.8 eV lamp.

On September 1, 2004, composite soil samples were collected from the excavation floor (BHC-B). A portion of the sample was analyzed in the field for organic vapor concentrations. Field analyses indicated organic vapor concentrations of 749 ppm. The remaining portion of the sample was submitted to an independent laboratory for quantification of TPH, BTEX constituents and chlorides. Laboratory analytical results indicated benzene concentrations were not detectable at or above laboratory method detection limits (MDL). Total BTEX concentrations were reported at 14.4 mg/Kg, below the NMOCD remedial thresholds of 50 mg/Kg. Analytical results indicated TPH concentrations were 5,882 mg/Kg, in excess of the NMOCD remedial thresholds of 1,000 mg/Kg. Chloride concentrations were reported at 4,319 mg/Kg, in excess of the New Mexico Water Quality Control Commission (NMWQCC) chloride groundwater standard of 250 mg/L (reference *Table 1* and *Figure 3*).

On September 2, 2004, composite soil samples were collected from the excavation from the flowpath areas (Flowpath #1 and Flowpath #2) and the leak origin (LOSWC and LOBHC). A portion of each sample was analyzed in the field for the presence of organic vapors. Field analyses indicated organic vapor concentrations ranged from 582 to 975 ppm. The remaining portion of each sample was submitted to an independent laboratory for quantification of TPH and BTEX constituents. Analytical results indicated benzene concentrations in all samples were not-detectable at or above laboratory MDL. Total BTEX concentrations were reported to range from 1.04 to 14.6 mg/Kg, below the NMOCD remedial thresholds. Reported TPH concentrations ranged from 1,501 to 5,936 mg/Kg, in excess of the NMOCD remedial thresholds (reference *Table 1*).

On October 11, 2004, after further excavation, soil samples were collected from the excavation and submitted for laboratory quantification of TPH, BTEX constituents and chlorides. Analytical results indicated BTEX constituent concentrations were non-detectable at or above laboratory method detection limits (MDL). Reported TPH concentrations ranged from <20.0 to 33.5 mg/Kg, below the NMOCD remedial thresholds of 1,000 mg/Kg. Analytical results indicated chloride concentrations ranged from 48 to 144 mg/Kg, below the NMWQCC chloride groundwater standard (reference *Table 1* and *Figure 4*).

Excavated, stockpiled soil was sampled on September 1, 2004, prior to blending activities. A portion of each sample was analyzed in the field for the presence of organic vapors. Field analyses indicated organic vapor concentrations ranged from 367 to 753 ppm. A composite sample was submitted for laboratory quantification of TPH, BTEX constituents and chlorides. Laboratory analyses for the sample collected on September 1 (Stockpile) indicated benzene concentrations were 0.072 mg/Kg and total BTEX concentrations of 26.4 mg/Kg, below the NMOCD remedial thresholds. TPH concentrations in this sample were 11,583 mg/Kg, above the NMOCD remedial threshold. Chloride concentrations were reported at 1,184 mg/Kg, in excess of the NMWQCC groundwater standard of 250 mg/L (reference *Table 1* and *Appendix I*).

The excavated, stockpiled soil was blended with clean soil and a composite soil sample (Stockpile Comp.) was collected and submitted for laboratory analyses. Laboratory analytical data indicated benzene and total BTEX concentrations were non-detectable at or above laboratory MDL. Reported TPH concentrations were 4,774 mg/Kg, above the NMOCD remedial threshold. Chloride concentrations were reported at 4,480 mg/Kg, in excess of NMWQCC groundwater standard of 250 mg/L (reference *Table 1* and *Appendix I*).

On October 26, 2004, composite soil samples were collected from the north and east excavated, stockpiled soil after further blending with clean soil and submitted for laboratory quantification of TPH, BTEX constituent concentrations and chlorides. Laboratory analytical results indicated BTEX concentrations in the north blending cell (N.S.-P 3) were not detected at or above laboratory MDL and TPH concentrations were reported at 110 mg/Kg, below the NMOCD remedial threshold. Reported chloride concentrations were 128 mg/Kg. Laboratory analytical results for the east blending cell (ESP 6) indicated BTEX concentrations were not detected at or above laboratory MDL. TPH concentrations were reported at 1,150 mg/Kg, slightly above the NMOCD remedial threshold of 1,000 mg/Kg. Reported chloride concentrations were 560 mg/Kg, above NMWQCC groundwater standards of 250 mg/L (reference *Table 1* and *Figure 4*).

5.0 Ground Water Investigation

The projected depth to ground water at this site is approximately 80-ft bgs. Excavation of the site was to a maximum depth of five feet. Final laboratory analyses for soil samples collected from the excavation indicated TPH, BTEX constituent and chloride concentrations were below NMOCD remedial thresholds (reference *Table 1*).

Based on the treatment of impacted soil, plus adequate depth to ground water, there is no need for further groundwater investigation at this site.

6.0 Remediation Process

Remediation of the site commenced on September 1, 2004 and continued through October 26, 2004. Approximately 140 yd³ of NGL contaminated soil was initially excavated and stockpiled on site, with an additional 490 yd³ of impacted soil excavated and transported to EPI's Landfarm for treatment. Confirmatory samples of the excavation indicated NMOCD remedial thresholds have

been achieved. The stockpiled, contaminated soil was blended with clean soil. Laboratory analyses of the composite soil sample from the blended excavation stockpile (ESP 6) indicated TPH concentrations were slightly above the NMOCD remedial threshold at the site (reference *Table 1* and *Appendix 1*).

On September 8 through 13, 2005, with verbal approval from the NMOCD, the excavation was backfilled with blended and clean soil and the site was graded to allow natural drainage.

7.0 Closure Justification

This report documents successful treatment of impacted soil above the remedial thresholds discussed in Section 3 above and confirmed via laboratory analyses for the this release site. A portion of the impacted soil was excavated and blended with clean soil obtained from an off-site source and utilized to backfill the excavation to approximately 3-feet bgs. The remaining portion of impacted soil (approximately 490-cubic yards) was transported to the EPI Landfarm for treatment. The final three feet of the excavation was backfilled with clean soil, then graded to allow natural drainage. Remaining closure activities consist of seeding the remedial area with a blend preferred by the New Mexico State Land Office. Based on the data presented in this report, Environmental Plus, Inc., on behalf of Duke Energy Field Services, request the NMOCD require “no further action” at this site and issue a *Site Closure Letter*.

FIGURES

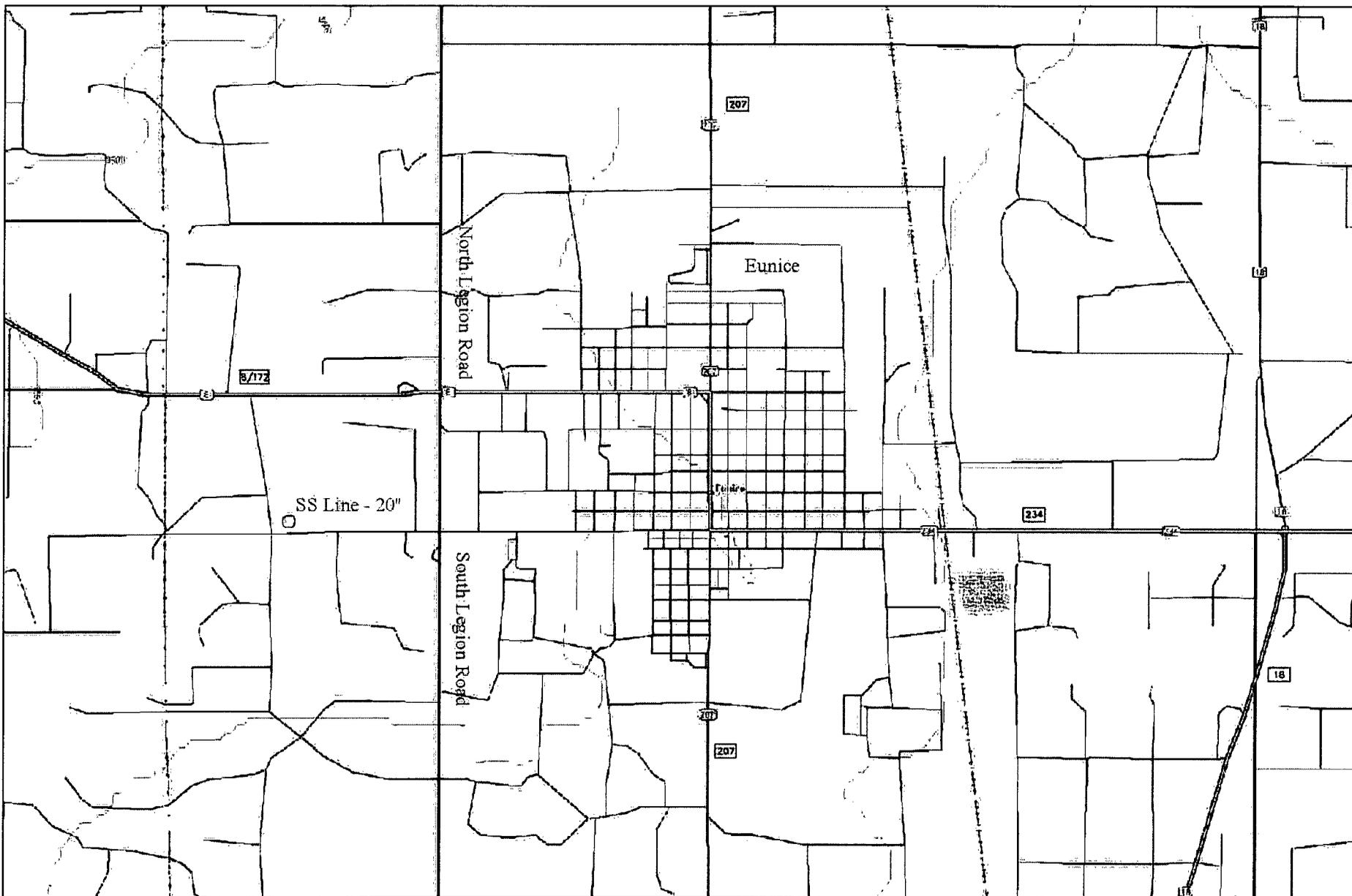
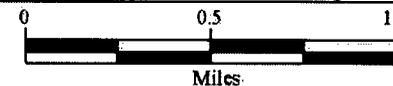


Figure 1
Area Map
 Duke Energy Field Services
 SS Line - 20"

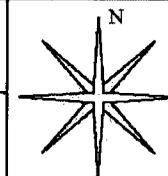
Lea County, New Mexico
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 N 32°26' 9.12" W 103°11' 9.09"
 Elevation: 3,462 feet amsl

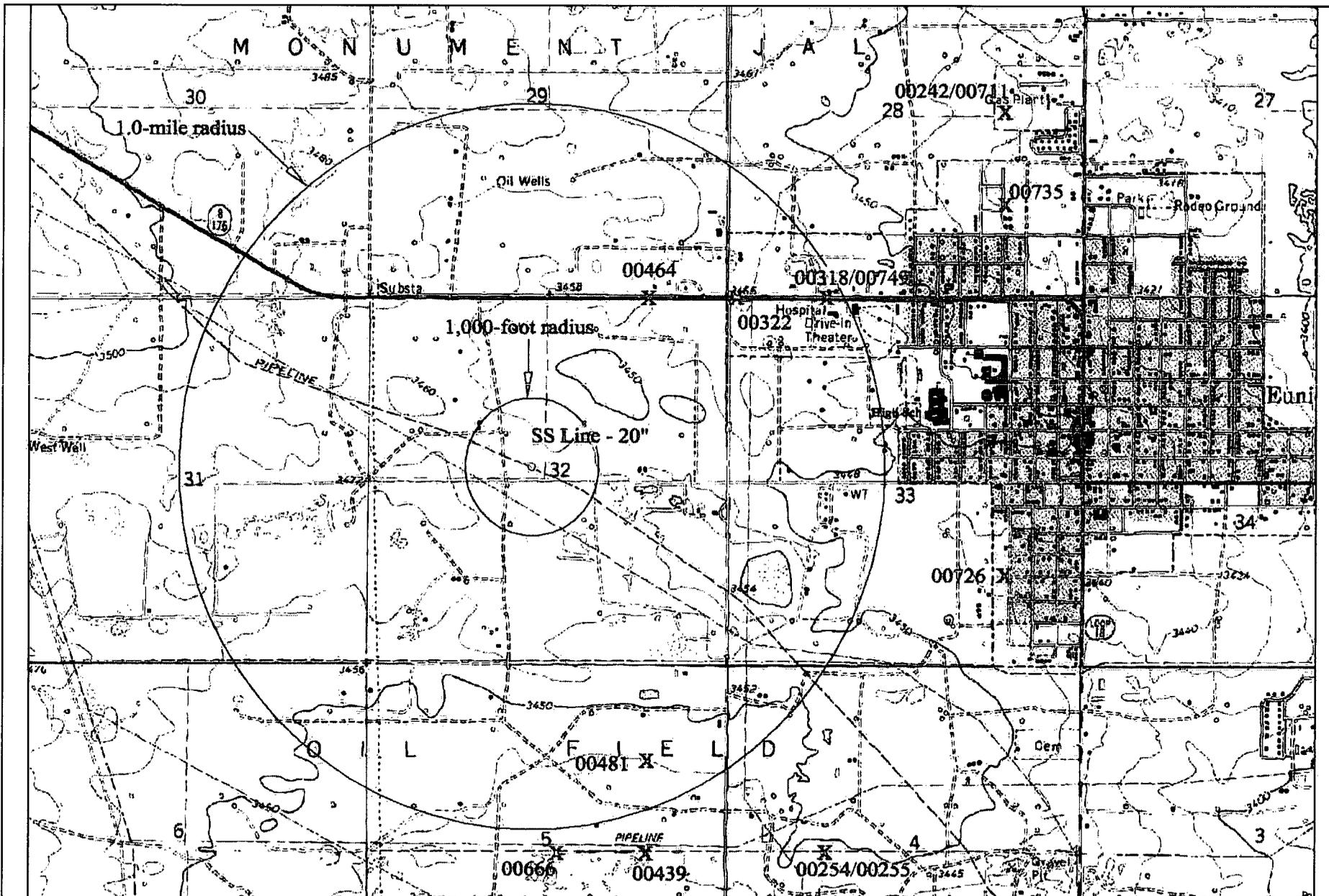
DWG By: Iain Olness
 August 2004

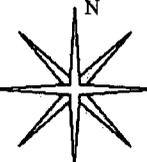
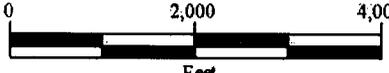
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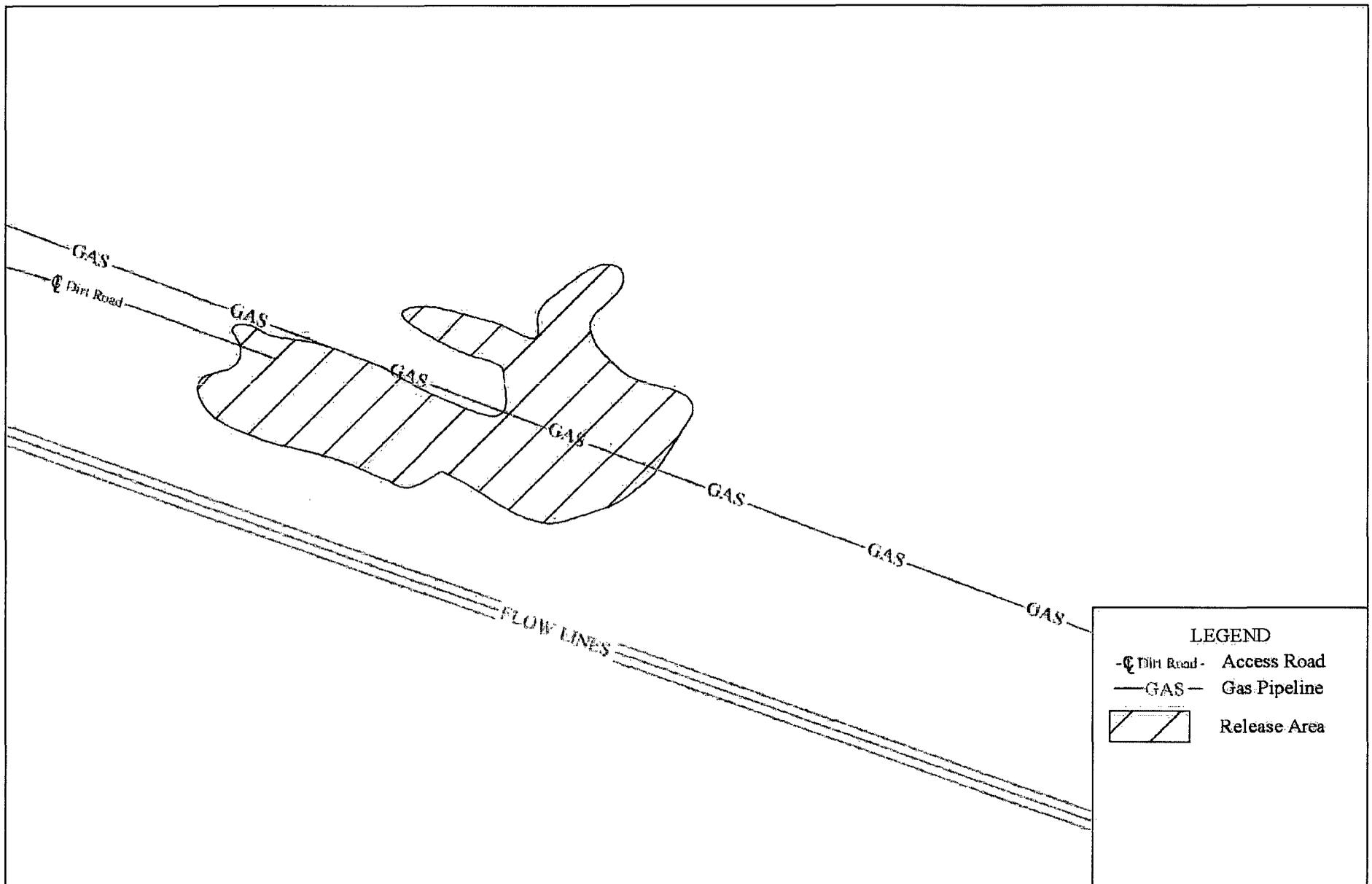


SHEET
 1 of 1





<p>Figure 2 Site and Well Location Map Duke Energy Field Services SS Line - 20"</p>	<p>Lea County, New Mexico SW 1/4 of the NW 1/4, Sec. 32, T21S, R37E N 32° 26' 9.12" W 103° 11' 9.09" Elevation: 3,462 feet amsl</p>	<p>DWG By: Iain Olness August 2004</p>	<p>REVISED:</p>	
		 <p>0 2,000 4,000 Feet</p>	<p>SHEET 1 of 1</p>	



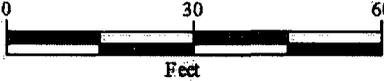
LEGEND

- Dirt Road- Access Road
- GAS- Gas Pipeline
-  Release Area

Figure 3
Site Map
 Duke Energy Field Services
 SS Line - 20"

Lea County, New Mexico
 SW 1/4 of the NW 1/4, Sec. 32, T21S, R37E
 N 32° 26' 9.12" W 103° 11' 9.09"
 Elevation: 3,462 feet amsl

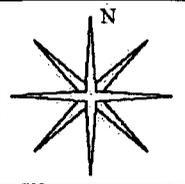
DWG By: Iain Olness
 August 2004

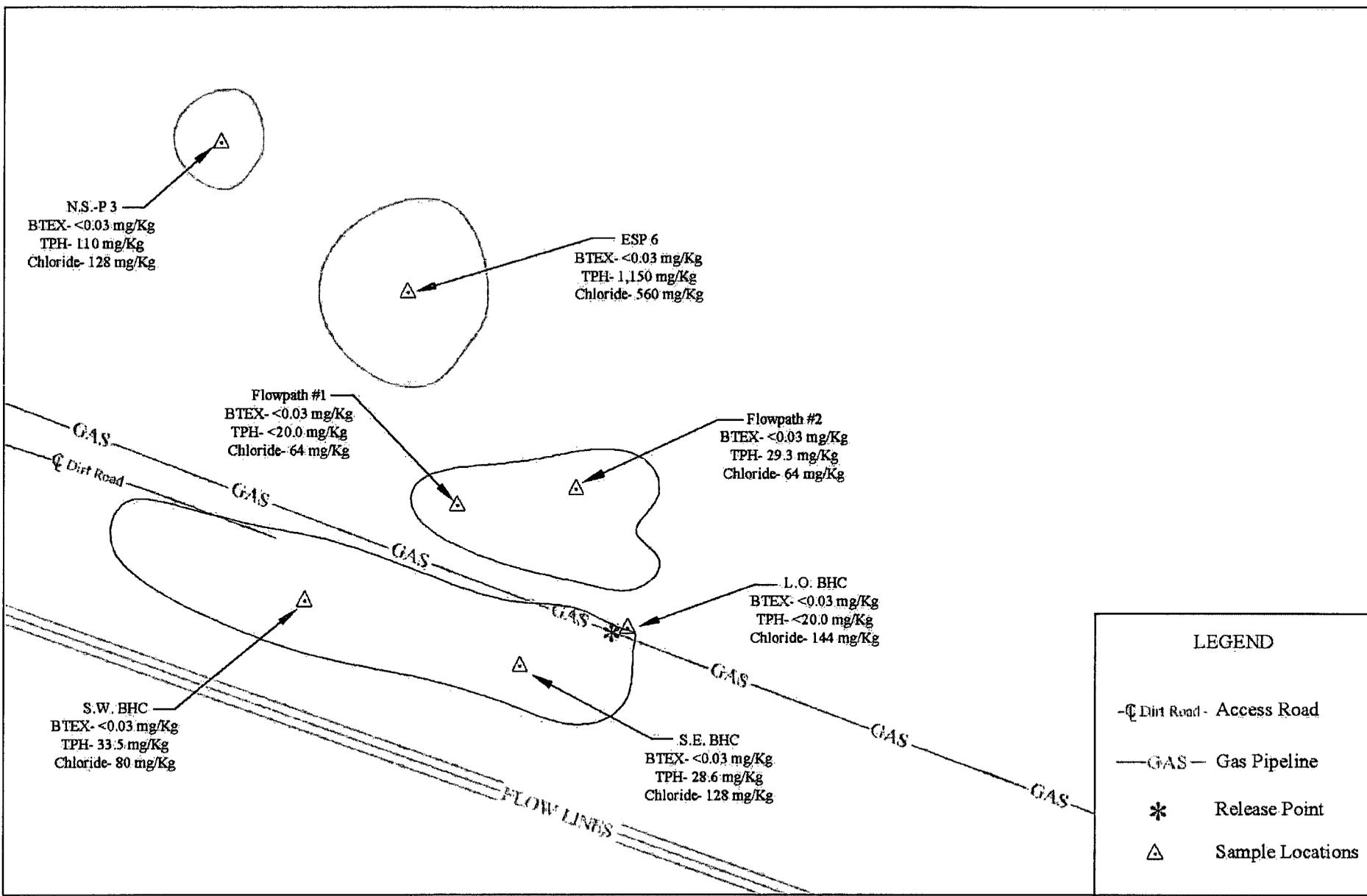


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 Feet

REVISED:

SHEET
 1 of 1





LEGEND

- ⊕- Dirt Road - Access Road
- GAS- Gas Pipeline
- * Release Point
- △ Sample Locations

Figure 4
 October 11 and 26, 2004
 Sample Location Map
 Duke Energy Field Services
 SS Line - 20"

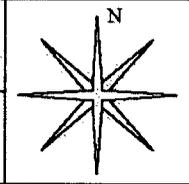
Lea County, New Mexico
 SW 1/4 of the NW 1/4, Sec. 32, T21S, R37E
 N 32° 26' 9.12" W 103° 11' 9.09"
 Elevation: 3,462 feet amsl

DWG By: Iain Olness
 August 2004

0 30 60
 Feet

REVISED:
 JCS, Aug. 2005

SHEET
 1 of 1



TABLES

TABLE 1

Summary of Excavation Soil Field Analyses and Laboratory Analytical Results

DEFS-SS Line 20"

Soil Boring	Depth (feet)	Soil Status	Sample Date	PID Reading (ppm)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	TPH (as gasoline) (mg/Kg)	TPH (as diesel) (mg/Kg)	Total TPH (mg/Kg)	Chloride (mg/Kg)
Stockpile	Not Applicable	Blended	9/1/2004	753	0.072	3.06	6.81	16.5	26.4	343	11,240	11,580	1,184
BHC-B	3	Excavated	9/1/2004	749	0.043	1.74	4.14	8.46	14.4	202	5,680	5,880	4,319
Flowpath #1	1	Excavated	9/2/2004	975	<0.005	0.044	0.209	0.791	1.04	130	3,800	3,930	NA
Flowpath #2	1	Excavated	9/2/2004	742	<0.005	0.676	3.93	10.0	14.6	416	5,520	5,930	NA
LOSWC	3	Excavated	9/2/2004	582	<0.005	0.252	0.896	1.93	3.08	42.0	1,130	1,170	NA
LOBHC	4	Excavated	9/2/2004	681	<0.005	0.050	0.471	1.31	1.83	41.0	1,460	1,500	NA
Stockpile Comp.	Not Applicable	Excavated	9/7/2004	367	<0.005	<0.005	<0.005	<0.005	<0.03	74.0	4,700	4,770	4,480
Flowpath #1	5	In Situ	10/11/2004	NA	<0.005	<0.005	<0.005	<0.015	<0.03	<10.0	<10.0	<20.0	64
Flowpath #2	5	In Situ	10/11/2004	NA	<0.005	<0.005	<0.005	<0.015	<0.03	<10.0	29.3	29.3	48
S.E. BHC	5	In Situ	10/11/2004	NA	<0.005	<0.005	<0.005	<0.015	<0.03	<10.0	28.6	28.6	144
L.O. BHC	5	In Situ	10/11/2004	NA	<0.005	<0.005	<0.005	<0.015	<0.03	<10.0	<10.0	<20.0	128
S.W.BHC	5	In Situ	10/11/2004	NA	<0.005	<0.005	<0.005	<0.015	<0.03	<10.0	33.5	33.5	80
N.S.-P 3	Not Applicable	Blended	10/26/2004	NA	<0.005	<0.005	<0.005	<0.015	<0.03	<10.0	110	110	128
ESP 6	Not Applicable	Blended	10/26/2004	NA	<0.005	<0.005	<0.005	<0.015	<0.03	20.0	1,130	1,150	560
NMOC Remedial Thresholds				100	10				50			1,000	250³

¹ *Bolded values are in excess of NMOC Remediation Thresholds*

² *NA=Not Analyzed*

³ *Chloride residuals may not be capable of impacting local groundwater above the NMWQCC standards of 250 mg/L.*

TABLE 2

WELL / SURFACE DATA REPORT

Duke Energy Field Services SS Line 20" - Ref #130012

DB	File Nbr	Use	Diversion ^A	Owner	Well Number	Twsp	Rng	Sec q q q	Latitude	Longitude	Start Date	Finish Date	Depth of Well (ft bgs)	Depth to Water (ft bgs)
CP	00242	IND	96	Versado Gas Processors, LLC	CP00242	21S	37E	28 2 4 3	N 32° 26' 59.02"	W 103° 09' 47.52"		31-Dec-64	112	
CP	00318	SAN	0	McCasland Hot Oil Services	CP00318 EXP	21S	37E	28 3 4	N 32° 26' 32.92"	W 103° 10' 18.29"				
CP	00322	DOM	3	Millard Deck	CP00322	21S	37E	28 3	N 32° 26' 32.92"	W 103° 10' 33.69"	8-Jun-66	10-Jun-66	138	73
CP	00464	DOM	0	Eugene Winker	CP00464 EXP	21S	37E	28 4 4 4	N 32° 26' 32.94"	W 103° 10' 49.08"				
CP	00513	SRO	0	Gulf Oil Corporation	CP00513	21S	37E	28 3 1 3	N 32° 26' 45.98"	W 103° 10' 33.7"				
CP	00711	DOM	3	Floyd G. Block	CP00711	21S	37E	28 2 4	N 32° 26' 59.02"	W 103° 09' 47.52"	1-Oct-87	2-Oct-87	100	65
CP	00726	DOM	3	Clayton L. Wooten	CP00726	21S	37E	33 4 2	N 32° 25' 53.76"	W 103° 09' 47.5"	23-Feb-88	23-Feb-88	125	100
CP	00735	DOM	3	Charles W. Jennings	CP00735	21S	37E	28 4 2	N 32° 26' 45.97"	W 103° 09' 47.51"	26-Jul-88	23-Feb-88	105	
CP	00749	DOM	3	D.M. Criswell	CP00749	21S	37E	28 3 4 2	N 32° 26' 32.92"	W 103° 10' 18.29"	15-Jun-90	22-Jun-90	123	75
CP	00254	IND	64	Versado Gas Processors, LLC	CP00254	22S	37E	04 1 4 2	N 32° 25' 14.63"	W 103° 10' 18.31"		31-Aug-50	164	
CP	00255	IND	64	Versado Gas Processors, LLC	CP00255	22S	37E	04 1 4 1	N 32° 25' 14.63"	W 103° 10' 18.31"		31-May-54	162	
CP	00439	DOM	0	Bobby Pearce	CP00439 EXP	22S	37E	05 2 4 2	N 32° 25' 14.58"	W 103° 10' 49.09"				
CP	00451	PUB	0	Skelly Oil Company	CP00451	22S	37E	04 3 1 3	N 32° 25' 01.55"	W 103° 10' 33.7"	25-Oct-67			
CP	00468	DOM	0	L.W. Fristoe	CP00468 DCL	22S	37E	04 4 4 3	N 32° 24' 48.55"	W 103° 09' 47.56"				
CP	00481	DOM	3	Mix Osborn	CP00481	22S	37E	05 2 2 4	N 32° 25' 27.64"	W 103° 10' 49.08"	9-Apr-70	11-Apr-70	125	90
CP	00666	DOM	3	Larry Henson	CP00666	22S	37E	05 2	N 32° 25' 14.55"	W 103° 11' 04.49"	27-Aug-84	27-Aug-84	120	79

* = Data obtained from the New Mexico Office of the State Engineer Website (http://iwaters.ose.state.nm.us:7001/iWATERS/wr_RegisServlet1)

Shaded well information indicates well location shown on Figure 2

^A = in acre feet per annum

IND = Industrial

EXP = Expired

SRO = Secondary Recovery of Oil

DOM = Domestic One Household

SAN = Sanitary in Conjunction with a Industrial Use

PUB = Construction of Public Works

(quarters are 1=NW, 2=NE, 3=SW, 4=SE)

(quarters are biggest to smallest - X Y are in Feet - UTM are in Meters)

APPENDIX I

LABORATORY ANALYTICAL REPORTS

AND

CHAIN-OF-CUSTODY FORMS



**ARDINAL
LABORATORIES**

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

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

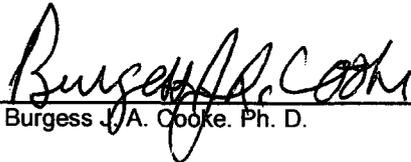
ANALYTICAL RESULTS FOR
ENVIRONMENTAL PLUS, INC.
ATTN: IAIN OLNESS
P.O. BOX 1558
EUNICE, NM 88231
FAX TO: (505) 394-2601

Receiving Date: 09/01/04
Reporting Date: 10/04/04
Project Number: 130012
Project Name: SS-LINE 20"
Project Location: NOT GIVEN

Sampling Date: 09/01/04
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: GP/BC

LAB NO.	SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/Kg)	DRO (>C ₁₀ -C ₃₅) (mg/Kg)	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE:		09/11/04	09/11/04	09/02/04	09/02/04	09/02/04	09/02/04
H9118-1	STOCKPILE	343	11240	0.072	3.06	6.81	16.5
H9118-2	BHC-B	202	5680	0.043	1.74	4.14	8.46
Quality Control		282	240	0.094	0.096	0.097	0.297
True Value QC		270	230	0.100	0.100	0.100	0.300
% Recovery		105	104	94.1	96.1	97.2	99.1
Relative Percent Difference		5.3	8.8	5.6	0.7	4.9	7.7

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


Burgess J.A. Cooke, Ph. D.

10/14/04
Date

H9118A.XLS

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



**ARDINAL
LABORATORIES**

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

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

Receiving Date: 09/10/04
Reporting Date: 10/01/04
Project Number: 130012
Project Name: SS-LINE 20"
Project Location: NOT GIVEN

Sampling Date: 09/02/04 & 09/07/04
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: GP
Analyzed By: GP

LAB NUMBER	SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/Kg)	DRO (>C ₁₀ -C ₂₈) (mg/Kg)
ANALYSIS DATE:		09/22/04	09/22/04
H9146-1	FLOW PATH #2	416	5520
H9146-2	LOSWC	42	1130
H9146-3	LOBHC	41	1460
H9146-4	FLOW PATH #1	130	3800
H9146-5	STOCKPILE COMP.	74	4700
Quality Control		265	205
True Value QC		270	230
% Recovery		98.1	88.9
Relative Percent Difference		1.5	1.5

METHOD: SW-846 8015 M


Chemist

09/23/2004
Date

H9146T.XLS

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

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

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

Receiving Date: 09/109/04
 Reporting Date: 09/21/04
 Project Number: 130012
 Project Name: SS-LINE 20"
 Project Location: NOT GIVEN

Sampling Date: 09/02/04 & 09/07/04
 Sample Type: SOIL
 Sample Condition: COOL & INTACT
 Sample Received By: GP
 Analyzed By: BC

LAB NUMBER	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		09/20/04	09/20/04	09/20/04	09/20/04
H9146-1	FLOW PATH #2	<0.005	0.676	3.93	10.0
H9146-2	LOSWC	<0.005	0.252	0.896	1.93
H9146-3	LOBHC	<0.005	0.050	0.471	1.310
H9146-4	FLOW PATH #1	<0.005	0.044	0.209	0.791
H9146-5	STOCKPILE COMP.	<0.005	<0.005	0.018	0.173
Quality Control		0.093	0.089	0.091	0.278
True Value QC		0.100	0.100	0.100	0.300
% Recovery		93.0	89.3	91.2	92.6
Relative Percent Difference		0.4	22.8	9.6	14.8

METHOD: EPA SW-846 8260

Bryson J. Cook
 Chemist

9/21/04
 Date

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

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

ANALYTICAL RESULTS FOR ENVIRONMENTAL PLUS, INC.

ATTN: IAIN OLNESS

P.O. BOX 1558

EUNICE, NM 88231

FAX TO: (505) 394-2601

Receiving Date: 10/12/04
 Reporting Date: 10/14/04
 Project Number: 130012 (DEFS)
 Project Name: SS-LINE 20"
 Project Location: NOT GIVEN

Sampling Date: 10/11/04
 Sample Type: SOIL
 Sample Condition: COOL & INTACT
 Sample Received By: BC
 Analyzed By: BC

LAB NUMBER	SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/Kg)	DRO (>C ₁₀ -C ₂₈) (mg/Kg)	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
------------	-----------	--	--	--------------------	--------------------	-----------------------------	-----------------------------

ANALYSIS DATE:	10/12/04	10/12/04	10/13/04	10/13/04	10/13/04	10/13/04
H9232-1 FLOW PATH #2	<10.0	29.3	<0.005	<0.005	<0.005	<0.015
H9232-2 S.E. BHC	<10.0	28.6	<0.005	<0.005	<0.005	<0.015
H9232-3 L.O. BHC	<10.0	<10.0	0.016	0.009	<0.005	<0.015
H9232-4 FLOW PATH #1	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
H9232-5 S.W. BHC	<10.0	33.5	<0.005	<0.005	<0.005	<0.015
Quality Control	793	774	0.104	0.096	0.100	0.307
True Value QC	800	800	0.100	0.100	0.100	0.300
% Recovery	99.1	96.8	104	95.8	99.9	102
Relative Percent Difference	1.6	4.1	4.0	2.4	3.1	4.3

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


 Burgess J. A. Cooke, Ph. D.

10/14/04
 Date

H9232A.XLS

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



**ARDINAL
LABORATORIES**

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

ANALYTICAL RESULTS FOR
ENVIRONMENTAL PLUS, INC.

ATTN: IAIN OLNESS

P.O. BOX 1558

EUNICE, NM 88231

FAX TO: (505) 394-2601

Receiving Date: 10/12/04

Reporting Date: 10/14/04

Project Number: 130012 (DEFS)

Project Name: SS-LINE 20"

Project Location: NOT GIVEN

Sampling Date: 10/11/04

Sample Type: SOIL

Sample Condition: COOL & INTACT

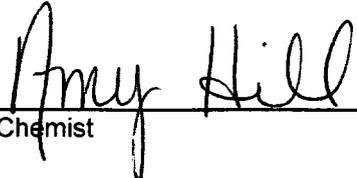
Sample Received By: BC

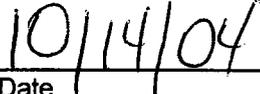
Analyzed By: AH

LAB NUMBER	SAMPLE ID	SO ₄ (mg/Kg)	Cl (mg/Kg)
ANALYSIS DATE:		10/14/04	10/14/04
H9232-1	FLOW PATH #2	82	48
H9232-2	S.E. BHC	18	144
H9232-3	L.O. BHC	<1	128
H9232-4	FLOW PATH #1	42	64
H9232-5	S.W. BHC	28	80
Quality Control		50.98	1050
True Value QC		50.00	1000
% Recovery		102	105
Relative Percent Difference		1.2	2.9

METHODS: EPA 600/4-79-020	375.4	SM 4500-Cl
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Note: Analyses performed on 1:4 w:v aqueous extracts.


Chemist


Date

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

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

Receiving Date: 10/26/04
 Reporting Date: 10/29/04
 Project Owner: DUKE ENERGY FELD SERVICES
 Project Name: SS-LINE
 Project Location: NOT GIVEN

Sampling Date: 10/26/04
 Sample Type: SOIL
 Sample Condition: COOL & INTACT
 Sample Received By: BC
 Analyzed By: BC

LAB NUMBER	SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/Kg)	DRO (>C ₁₀ -C ₂₈) (mg/Kg)	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE:		10/27/04	10/27/04	10/27/04	10/27/04	10/27/04	10/27/04
H9283-1	N.S.-P 3	<10.0	110	<0.005	<0.005	<0.005	<0.015
H9283-2	ESP 6	20.0	1130	<0.005	<0.005	<0.005	<0.015
Quality Control		755	812	0.094	0.087	0.094	0.296
True Value QC		800	800	0.100	0.100	0.100	0.300
% Recovery		94.3	101	94.4	87.3	94.4	98.6
Relative Percent Difference		1.4	2.4	5.9	11.9	10.2	7.1

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


 Burgess J.A. Cooke, Ph. D.

10/29/04
 Date

H9283A.XLS

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APPENDIX II

PROJECT PHOTOGRAPHS



Photo #1: Release area, looking easterly along the pipeline.
Notice soil staining in center of photo.



Photo #2: Initial excavation activity, looking northerly.

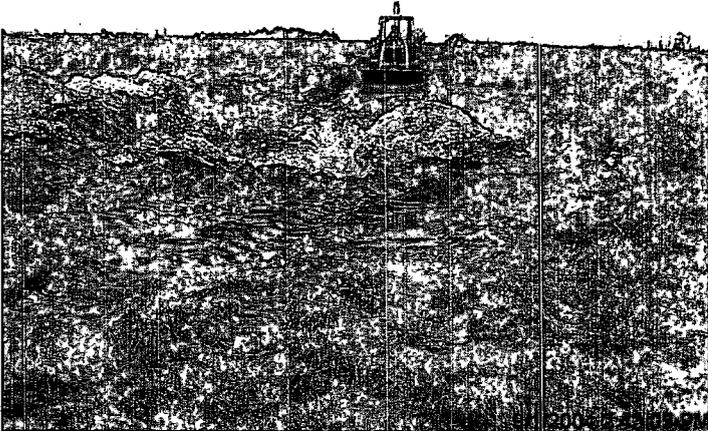


Photo #3: Initial excavation activities, looking northerly.

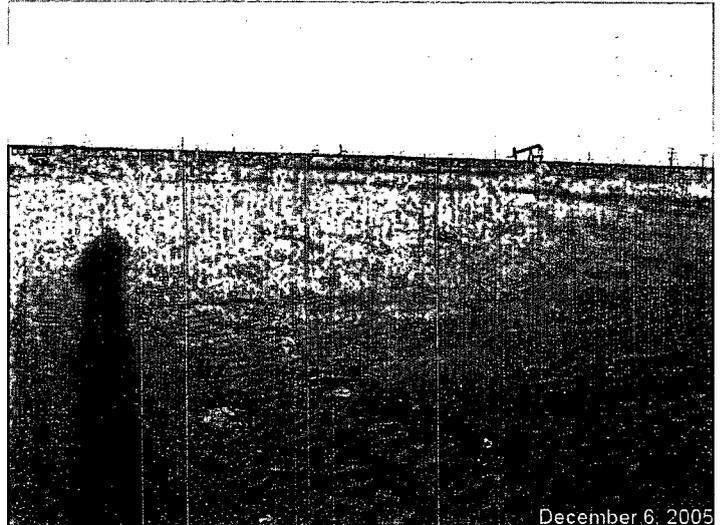


Photo #4: Current status, looking northwesterly.

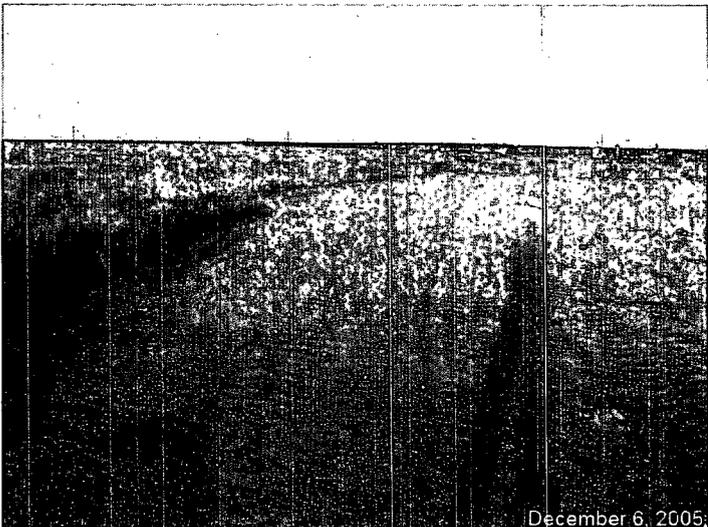


Photo #5: Current status, looking westerly.

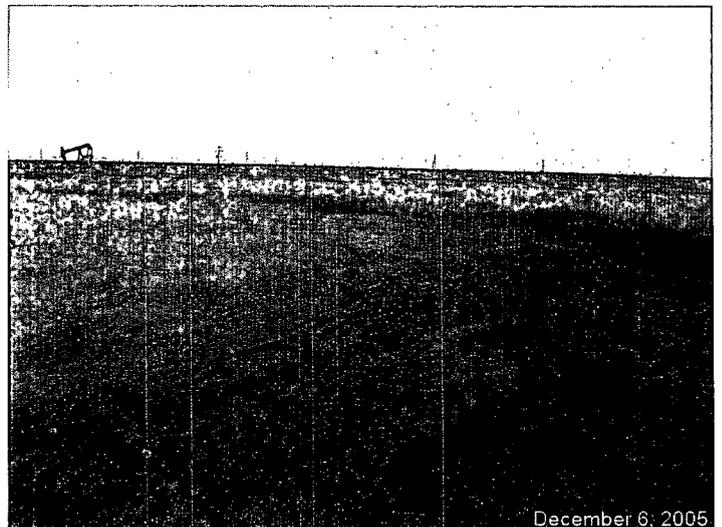


Photo #6: Current status, looking northerly.

APPENDIX III
FINAL 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 March 17, 1999
Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

Name of Company Duke Energy Field Services	Contact Lynn Ward
Address 10 Desta Drive, Suite 400-W, Midland, Texas 79705	Telephone No. (432) 620-4207
Facility Name SS-Line-20"	Facility Type 20" Steel Pipeline

Surface Owner State of New Mexico - leased by Sam Bruton	Mineral Owner	Lease No.
---	---------------	-----------

LOCATION OF RELEASE

Unit Letter F	Section 32	Township T21S	Range R37E	Feet from the North/South Line	Feet from the East/West Line	County: Lea Lat. N 32° 26' 9.12275" Lon. W 103° 11' 9.0917"
------------------	---------------	------------------	---------------	-----------------------------------	---------------------------------	---

NATURE OF RELEASE

Type of Release Natural Gas Pipeline Fluids	Volume of Release 8 barrels	Volume Recovered 0 barrels
Source of Release 20" steel pipeline operating at 8 lbs with a normal daily flow rate of 5 million cubic feet per day	Date and Hour of Occurrence 8 August 2004	Date and Hour of Discovery 8 August 2004
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? Not Required	
By Whom? Not Required	Not Required	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. NA	

If a Watercourse was Impacted, Describe Fully.
NA

Describe Cause of Problem and Remedial Action Taken.
20" steel line began leaking, probably due to internal corrosion. Line clamp installed. Soil contaminated above the NMOCD remedial goals was excavated, with a portion transported to EPI's Landfarm for treatment. The remaining portion of impacted soil was blended to below the NMOCD remedial goals and returned to the excavation.

Describe Area Affected and Cleanup Action Taken.
Approximately 490 cubic yards of soil contaminated above the NMOCD Remedial Guidelines was be disposed of at an approved facility. Approximately 140 cubic yards of excavated soil was blended with clean soil to below the NMOCD remedial goals and returned to the excavation to approximately 3-feet bgs. The remaining 3-feet was backfilled with clean soil obtained from an off-site source. Remedial Goals: TPH = 1,000 mg/Kg, benzene = 10 mg/Kg, and BTEX = 50 mg/Kg.

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

Signature: <i>Lynn Ward</i>	OIL CONSERVATION DIVISION	
Printed Name: Lynn Ward	Approved by District Supervisor:	
E-mail Address: lward@duke-energy.com	Approval Date:	Expiration Date:
Title: Environmental Specialist-Western Division	504 432/620-4207	
Date: 12/14/05 Phone: (505) 397-5716	Conditions of Approval:	Attached <input type="checkbox"/>

* Attach Additional Sheets If Necessary

LETTER OF TRANSMITTAL

ENVIRONMENTAL
PLUS, INC.



Date: December 14, 2005
 To: **Larry Johnson**
 Company Name: New Mexico Oil Conservation Division – Hobbs
 Address: 1625 French Drive
 City / State / Zip: Hobbs, New Mexico 88240
 From: Jason Stegemoller
 CC: Cody Morrow – New Mexico State Land Office – Sante Fe
 Steve Weathers, DEFS – Denver; Lynn Ward, DEFS – Midland;
 Mark Owens, DEFS – Hobbs
 Project #: 130012
 Project Name: Duke Energy Field Services – SS Line 20”
 Subject: **Closure Report**

# of originals	# of copies	Description
	1	Copy of the Duke Energy Field Services – SS Line 20” Remedial Investigation/Closure Report

Remarks

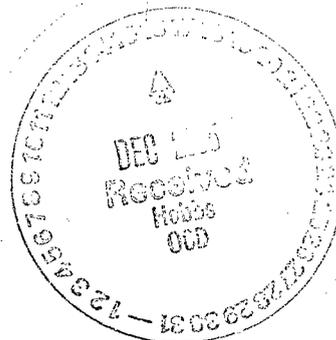
Dear Mr. Johnson:

Enclosed is a copy of the Remedial Investigation/Closure Report for the above-referenced site. A copy of the Report was sent to the New Mexico State Land Office and appropriate Duke Energy personnel. Should you have any questions or concerns, please feel free to contact Iain Olness or me at (505) 394-3481.

Sincerely,

Environmental Plus, Inc.

Jason Stegemoller



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

