



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Lori Wrotenbery**

Director

**Oil Conservation Division**

February 20, 2003

Mr. Paul Mulkey [pdmulkey@duke-energy.com](mailto:pdmulkey@duke-energy.com)  
Duke Field Energy Services  
11252 W. Carlsbad Hwy.  
Hobbs, NM 88240

Re: Closure Approval: N Line Release Site  
Site Reference UL-K Sec-12 T-20S R-37E  
Spill Date: 11-6-02  
Closure Request Dated: 2-7-03

Dear Mr. Mulkey,

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

Please be advised that OCD approval does not relieve Duke Field Energy 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 Field Energy 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 or e-mail me at (505) 393-6161, x111 or email [lwjohnson@state.nm.us](mailto:lwjohnson@state.nm.us)

Sincerely,

Larry Johnson - Environmental Engineer

Cc: Roger Anderson - Environmental Bureau Chief  
Chris Williams - District I Supervisor  
Bill Olson - Hydrologist  
Paul Shreeley-Environmental Engineer  
Pat McCasland - EPI: [enviplus1@aol.com](mailto:enviplus1@aol.com)

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

NEED NO FURTHER

ACTION LETTER

xico

ral Resources

Form C-141

Revised March 17, 1999

2/17/03

vision

is Dr.

05

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<br><b>Duke Energy Field Services</b>       | Contact<br><b>Paul Mulkey</b>                |
| Address<br><b>11525 West Carlsbad Hwy, Hobbs, NM 88240</b> | Telephone No.<br><b>505-397-5716</b>         |
| Facility Name<br><b>N-Lne</b>                              | Facility Type<br><b>Natural Gas Pipeline</b> |

|                                       |                            |                        |
|---------------------------------------|----------------------------|------------------------|
| Surface Owner<br><b>SW Cattle Co.</b> | Mineral Owner<br><b>NA</b> | Lease No.<br><b>NA</b> |
|---------------------------------------|----------------------------|------------------------|

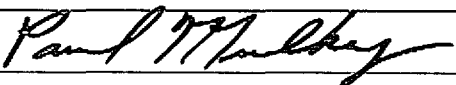
## LOCATION OF RELEASE

|                         |                      |                        |                     |  |                                       |                                   |                                 |                       |
|-------------------------|----------------------|------------------------|---------------------|--|---------------------------------------|-----------------------------------|---------------------------------|-----------------------|
| Unit Letter<br><b>K</b> | Section<br><b>12</b> | Township<br><b>20S</b> | Range<br><b>37E</b> | Feet from<br>South Line<br><b>1885</b> | Feet from<br>West Line<br><b>1938</b> | Longitude<br><b>W103:12:24.51</b> | Latitude<br><b>N32:35:07.56</b> | County:<br><b>Lea</b> |
|-------------------------|----------------------|------------------------|---------------------|--|---------------------------------------|-----------------------------------|---------------------------------|-----------------------|

## NATURE OF RELEASE

|   |  |   |
|---|--|---|
| Type of Release<br><b>Natural Gas and associated liquid components</b>  | Volume of Release<br><b>60 bbl</b>                       | Volume Recovered<br><b>55 bbl</b>                     |
| Source of Release<br><b>Steel Natural Gas Pipeline</b>  | Date and Hour of Occurrence<br><b>11/06/02-10:00 AM</b>  | Date and Hour of Discovery<br><b>11/06/02-1:00 PM</b> |
| Was Immediate Notice Given?<br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required  | If YES, To Whom?<br><b>NMOCD - Hobbs District Office</b> |   |
| By Whom?<br><b>Stan Shaver</b>  | Date and Hour<br><b>11/06/02-3:00 PM</b>                 |   |
| Was a Watercourse Reached?<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No   | If YES, Volume Impacting the Watercourse<br><b>NA</b>    |   |
| If a Watercourse was Impacted, Describe Fully.*<br><b>NA</b>  |  |   |
| Describe Cause of Problem and Remedial Action Taken.*<br><b>Corroded pipeline, repaired with clamp</b>  |  |   |
| Describe Area Affected and Cleanup Action Taken.*<br>~3100-ft <sup>2</sup> area affected (150-ft X 50-ft, E-W) was excavated to 8-ft depth. Contaminated RCRA Exempt Non-hazardous soil (164-yd <sup>3</sup> ) was excavated and disposed at J&L Land Farm. |  |   |

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:  | <b>OIL CONSERVATION DIVISION</b> |                                   |
| Printed Name: <b>Paul Mulkey</b>   |                                  |                                   |
| Title: <b>Construction &amp; Maintenance Supervisor</b>  | Approved by District Supervisor: |                                   |
| Date: <b>2/7/03</b> Phone: <b>505-397-5716</b>   | Approval Date:                   | Expiration Date:                  |
| Conditions of Approval:  |                                  | <input type="checkbox"/> Attached |

Attach Additional Sheets If Necessary

# DUKE ENERGY FIELD SERVICES



1-RP-66

## SITE INVESTIGATION, REMEDIATION, AND FINAL C-141 CLOSURE DOCUMENTATION

N-LINE RELEASE SITE

DEFS REF: N-LINE 110602

UL-K (NE¼ OF THE SW¼) OF SECTION 12 T20S R37E

~4.25 MILES SOUTH-SOUTHEAST (128.7°) OF MONUMENT

LEA COUNTY, NEW MEXICO

LATITUDE: 32°35'07.56"N

LONGITUDE: 103°12'24.51"W

FEBRUARY 7, 2003

PREPARED BY: JCG

### ***Environmental Plus, Inc.***

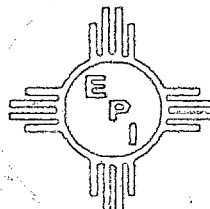
2100 Avenue O

P.O. Box 1558

Eunice, NM 88231

Phone: (505)394-3481

FAX: (505)394-2601





ENVIRONMENTAL PLUS, INC. *Micro-Blaze Micro-Blaze Out™*

STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES

February 7, 2003

Mr. Larry Johnson  
Energy, Minerals, and Natural Resources Department  
New Mexico Oil Conservation Division  
1625 North French Dr.  
Hobbs, New Mexico 88240

Subject: Duke Energy Field Services – N-Line 110602 Final C-141 and Closure Documentation

Dear Mr. Johnson:

Environmental Plus, Inc. (EPI), on behalf of Duke Energy Field Services (DEFS) submits for your consideration and approval the Final C-141 and Closure Documentation for the "N-Line 110602" remediation site. This report documents the vertical and horizontal extents of hydrocarbon contamination at the site, removal of contaminated soils above acceptable CoC levels and disposal of said contaminated soils at a NMOCD approved land farm. This submittal is consistent with the Initial C-141 and Remediation Plan submitted to NMOCD on November 12, 2002. Therefore, on behalf of Duke Energy Field Services, EPI requests that the NMOCD consider the information provided within this documentation and require "no further action" at this site.

If there are any questions please call Mr. Ben Miller or myself at EPI's offices, or at 505-390-0288 or 505-390-9804 respectively. Mr. Paul Mulkey of Duke Energy Field Services can be contacted at 505-397-5716.

Please address all official correspondence regarding this release to Mr. Paul Mulkey at:

Duke Energy Field Services  
11525 West Carlsbad Highway  
Hobbs, New Mexico 88240

Sincerely,

John Good, Environmental Consultant

cc: Paul Mulkey, Duke Energy Field Services, Hobbs, w/enclosure  
Lynn Ward, Duke Energy Field Services, Midland, w/enclosure  
Sherry Miller, President, Environmental Plus, Inc.  
Ben Miller, Vice President/General Manager, Environmental Plus, Inc.  
Pat McCasland, EPI Technical Manager, Environmental Plus, Inc.  
File

ENVIRONMENTAL PLUS, INC.

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## **Executive Summary**

Environmental Plus, Inc. (EPI) was notified by Duke Energy Field Services (DEFS) on November 6, 2002 regarding a pipeline release site involving DEFS' "N-Line" natural gas gathering pipeline. DEFS' initial C-141 (12-Nov) indicates a natural gas liquid (NGL) release of 60-bbl, with recovery of 55-bbl. The leak was a result of internal pipeline corrosion. DEFS personnel repaired the steel pipeline by clamping.

Characterization and remedial work by EPI commenced on November 6, 2002 and was completed on December 5, 2002. The "N-Line 110602" site is located ~4.25-miles southeast (128.7°) of Monument, NM, in Unit Letter K, (NE¼ of the SW¼), Section 12, T20S, R37E, (N32°35'07.56" and W103°12'24.51"). The spill occurred on property owned by Trent Stradley, d.b.a SW Cattle Company, PO. Box 1800, Hobbs, NM 88240. The surface extent of the reported spill was approximately 3,100-ft<sup>2</sup> (see Plate 3, Attachments). The vertical extent of contamination did not extend below 8-ft below ground surface (bgs).

EPI excavated and disposed of 164-yd<sup>3</sup> of contaminated soil from the site commencing on 6-Nov. Composite bottom-hole and sidewall soil samples were submitted to Cardinal Laboratories, Hobbs, NM on November 7, 2002. Results of these analyses confirmed that TPH, BTEX, and Benzene levels were below threshold levels throughout the site.

All contaminated soil removed from the site was disposed of at the NMOCD approved J&L Land Farm. The excavation was backfilled with clean caliche and topsoil purchased from the landowner. The site was contoured to prevent pooling over the excavation sites. The surface damaged area beyond road or pipeline rights-of-way will be evaluated for new vegetative growth in Spring-2003 and reseeded with natural grasses if determined necessary.

## **1.0 Introduction**

This report addresses the site investigation and remediation of the DEFS "N-Line 110602" natural gas gathering line remediation site. On November 6, 2002, EPI was notified by DEFS regarding a natural gas and associated NGL release at this site. The initial C-141 Form submitted to NMOCD (November 12, 2002) reports the release volume (NGL) as 60 bbl with 55 bbl recovered. EPI responded the same day (11-12-02) and commenced GPS delineation, photography, characterization and preliminary excavation of the contaminated soil in the immediate area of the reported leak. The site initially consisted of an area ~150-ft X ~50-ft associated with the release. The total release affected area comprised ~3,100-ft<sup>2</sup>. Remediation of this release site consisted of excavation and disposal of contaminated soil at J&L Land Farm, soil analyses, backfill and contouring of the excavation. Remediation of the site was completed on December 5, 2002.

## **2.0 Background**

The site is associated with the DEFS N-Line natural gas gathering pipeline. This release site is located in Unit Letter K, (NE¼ of the SW¼), Section 12, T20S, R37E, (N32°35'07.56" and W103°12'24.51"), and approximately 4.25 miles south-southeast (128.7°) of Monument, NM. Trent Stradley, d.b.a SW Cattle Company, P.O. Box 1800, Hobbs, NM 88240, owns the property. A site location map, site topographical map and a detailed GPS site diagram are included in the Attachments as Plates 1, 2 and 3.

The natural gas and associated NGL release at this site was discovered and reported on November 6, 2002. The leak was the result of internal pipe corrosion. The pipe was clamped and repaired by DEFS personnel.

### **3.0 Site Description**

#### ***3.1 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 just north of the Mescalero Ridge, which marks the southern boundary of the High Plains physiographic subdivision, described by Nicholson & Clebsch as an area "capped by a thick layer of resistant caliche, locally called caprock." The High Plains surface is uniformly flat and slopes ~17-ft per mile east-southeast.

#### ***3.2 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 Rat, Deer Mouse, White Throated Wood Rat, Cottontail Rabbit, Black Tailed Jackrabbit, Mule Deer, Bobcat, Red Fox and Coyote. Reptiles, Amphibians, and Birds are numerous and typical of area. A survey of Listed, Threatened, or Endangered species was not conducted.

#### ***3.3 Area Ground Water***

The unconfined ground water aquifer at this site is projected to be 59-ft bgs. The site is located in the extreme southern edge of the High Plains (Llano Estacado) physiographic area approximately 4.5-miles southeast of Monument, NM. Water Column Reports (Plate 4 and Data Summary Table) were obtained from the NM State Engineers Office. This data was utilized to generate a "Surfer" plot (Plate 5) of the water table elevation within a ~5-mile radius of the site. Ground water gradient in this area is generally to the southeast.

#### ***3.4 Area Water Wells***

All recorded wells are greater than 1000 horizontal feet from the site.

#### ***3.5 Area Surface Water Features***

No surface water bodies exist within 1000 horizontal feet of the site.

### **4.0 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 ground water were characterized consistent with the characterization and remediation/abatement goals and objectives set forth in the following New Mexico Oil Conservation Division (NMOCD) publications:

- ♦ *Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993)*
- ♦ *Unlined Surface Impoundment Closure Guidelines (February 1993)*

Acceptable thresholds for contaminants/constituents of concern (CoCs), i.e., TPH<sup>8015m</sup>, Benzene, and the mass sum of Benzene, Toluene, Ethyl Benzene, and total Xylenes (BTEX), was determined based on the NMOCD Ranking Criteria as follows:

- ◆ *Depth to Ground water, i.e., distance from the lower most acceptable concentration to the ground water.*
- ◆ *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 ground water 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:<br>20 points   | If <1000' from water source, or;<br><200' from private domestic water<br>source: 20 points | <200 horizontal feet: 20 points        |                  |
| Depth to GW 50 to 99 feet:<br>10 points  |  | 200-1000 horizontal feet:<br>10 points |                  |
| Depth to GW >100 feet:<br>0 points   | If >1000' from water source, or;<br>>200' from private domestic water<br>source: 0 points  | >1000 horizontal feet: 0 points        |                  |
| Ground Water Score = 10  | Wellhead Protection Score= 0   | Surface Water Score= 0                 |                  |
| Site Rank (1+2+3) = 10 + 0 + 0 = 10 points (for soil 0-9'bgs)                            |  |  |                  |
| Total Site Ranking Score and Acceptable Remedial Goal Concentrations                     |  |  |                  |
| Parameter  | 20 or >  | 10 (soil 0 – 9'bgs)                    | 0 (soil > 9'bgs) |
| Benzene <sup>1</sup>   | 10 ppm   | 10 ppm                                 | 10 ppm           |
| BTEX <sup>1</sup>  | 50 ppm   | 50 ppm                                 | 50 ppm           |
| TPH  | 100 ppm  | 1000 ppm                               | 5000 ppm         |
| <sup>1</sup> 100 ppm field VOC headspace measurement may be substituted for lab analysis |  |  |                  |

## 5.0 Subsurface Soil Investigation

The subsurface soil samples were composite samples taken from the bottom and sidewalls of the excavation on November 7, 2002. Lab analyses results of this sampling event confirmed that TPH, BTEX and Benzene levels were well below the Remedial Goals for this site. Plate 6 in the Attachments is a summary table, with charts, of the results of the composite sampling performed on 7-Nov.

## 6.0 Ground Water Investigation

The projected depth to ground water at this site is 59-ft bgs. Excavation of the site was to a maximum depth of 8-ft. Final CoC levels of the bottom-hole and sidewalls of the excavation were



analyzed to be within the following ranges: TPH – 0 to 65 ppm; Benzene – 0 to 0.005 ppm; BTEX – 0 to 1.248 ppm.

The excavation was backfilled with clean caliche and topsoil obtained from the property owner. Based on the removal the Constituents of Concern and adequate depth to ground water, there will be no need for further ground water investigation at this site.

## **7.0 Remediation**

Remediation of the site commenced on November 6, 2002 and continued through December 5, 2002. Remediation of the site consisted of excavation and disposal of 164 yd<sup>3</sup> of contaminated soil from the site. All contaminated soil removed from the site was disposed of in the NMOCD approved J&L land farm located south of Hobbs, NM. The excavation was backfilled up to 2-feet below surface level with clean caliche purchased from the landowner. The top 2-feet of the excavation was backfilled with clean topsoil purchased from the landowner.

The excavation was composite sampled on November 7, 2002. Results of the analyses indicated that no further excavation was necessary to achieve remedial goals in the excavation.

The surface damaged area of the project was determined by GPS to be 10,340-ft<sup>2</sup>. Re-seeding of the area will be evaluated in the Spring of 2003.

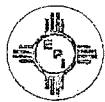
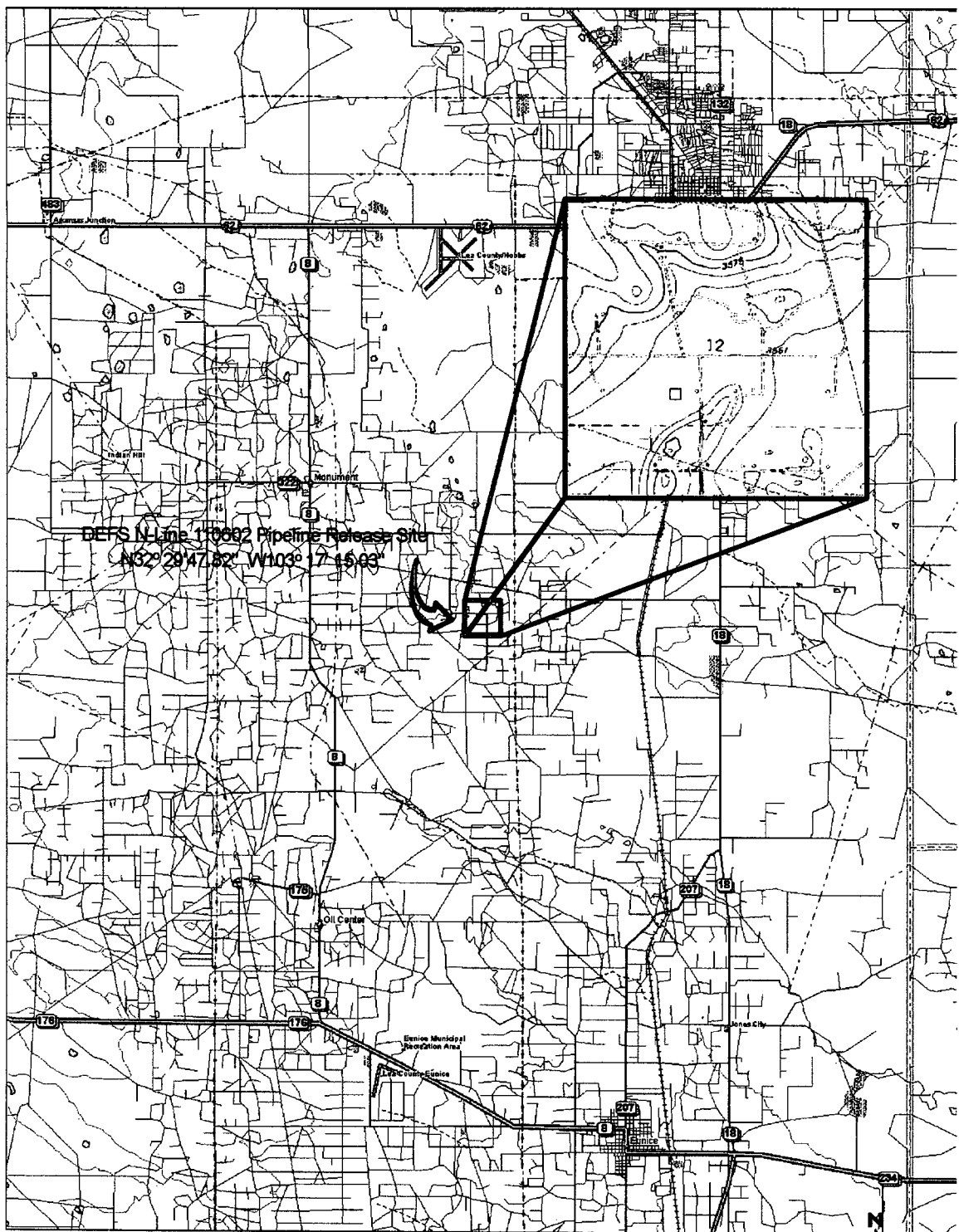
## **8.0 Closure Justification**

This report documents successful implementation of the Remediation Plan approved by NMOCD for this release site. Soil contaminated above acceptable CoC remedial concentrations was excavated and removed from the location. Disposal of RCRA exempt contaminated soils was at the J&L approved land farm. The excavation was backfilled with clean caliche and topsoil and properly contoured to provide adequate drainage. Based on the data presented in this report, Environmental Plus, Inc., on behalf of Duke Energy Field Services, requests that the NMOCD require “no further action” at this site.

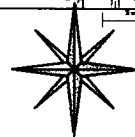
## **ATTACHMENTS**

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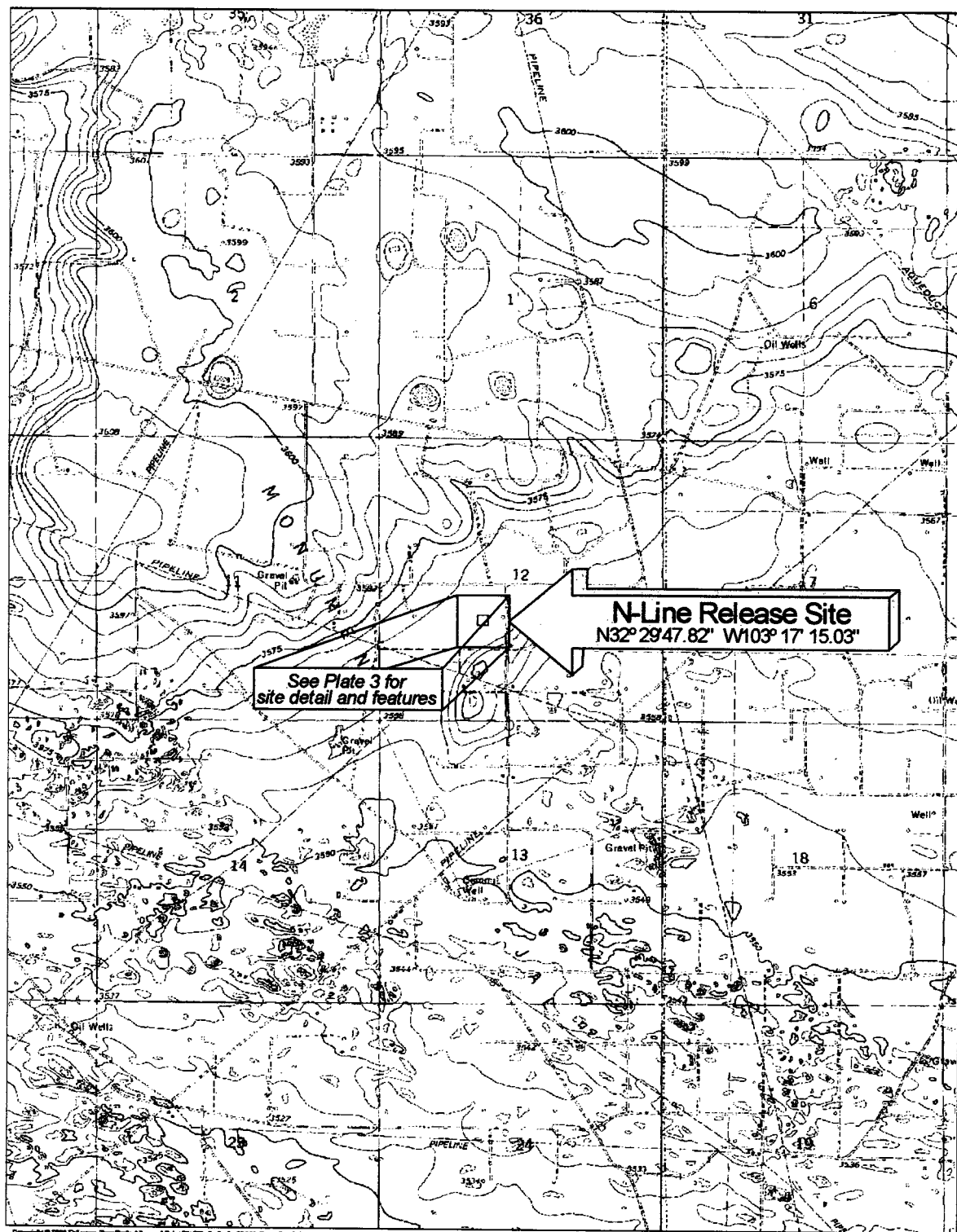
**Plate 1: Site Location Map**



**Plate 1: Release Site Location**  
**Duke Energy Field Services - N-Line 110602**  
**Lea County, NM; UL-K Section 12 T20S R37E**



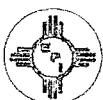
# **Plate 2: Site Topography Map**



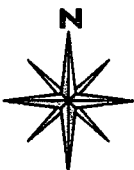
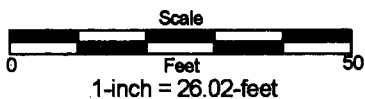
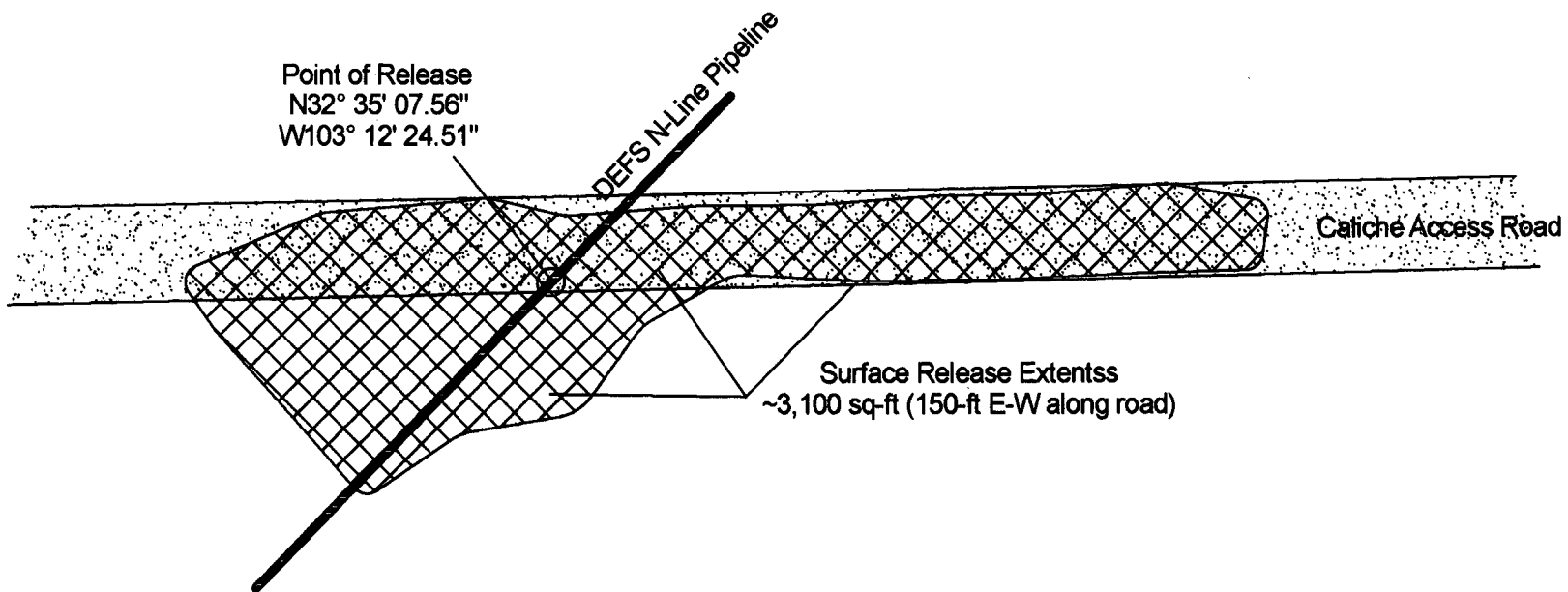
**Plate 2: Site Topography and Release Location**

Duke Energy Field Services - N-Line 110602

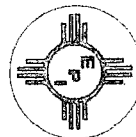
Lea County, NM; UL-K Section 12 T20S R37E



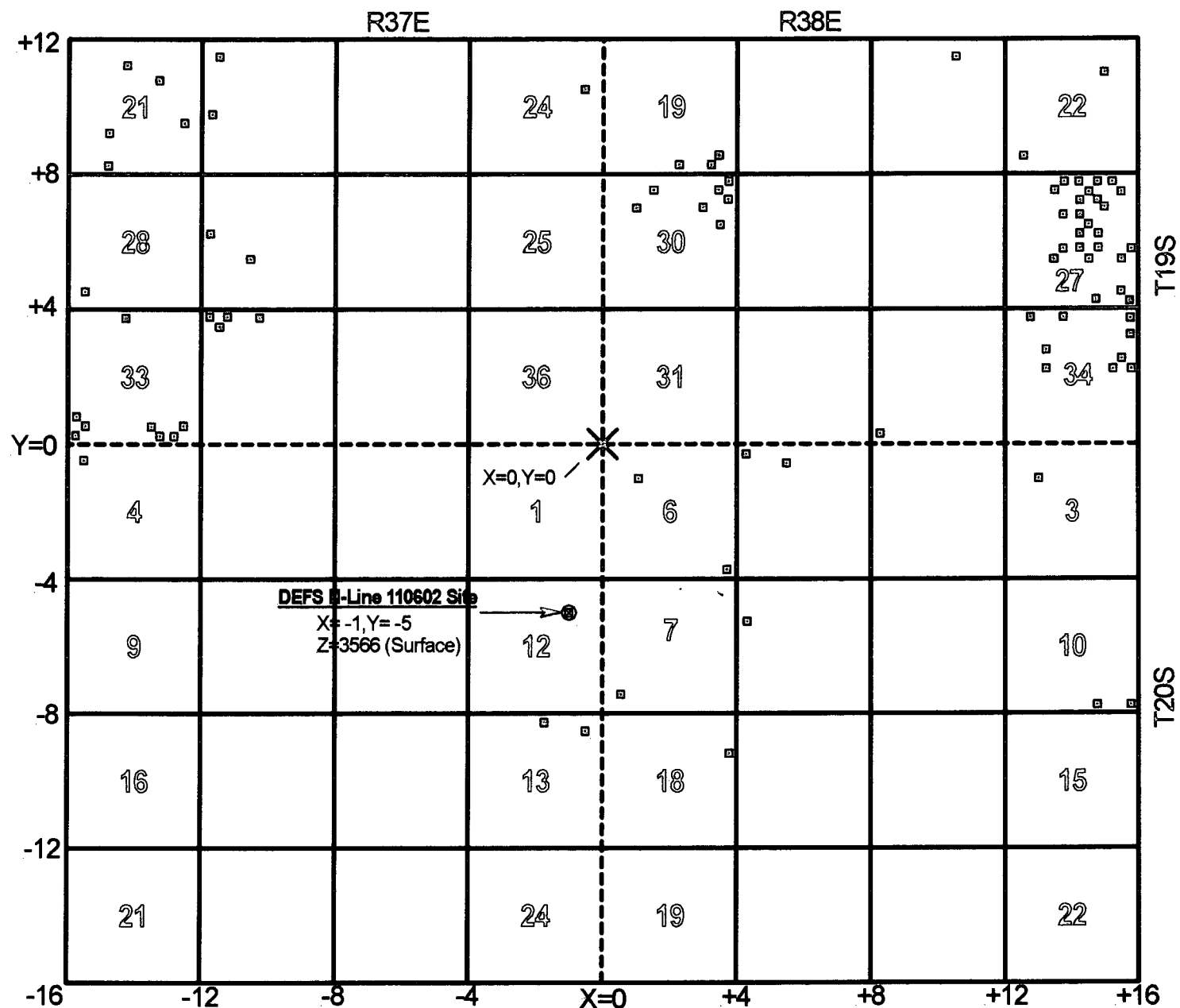
*Plate 3: Initial GPS Demarcation with Site Features*



**Plate 3: Initial Release Site GPS Demarcation**  
 Duke Energy Field Services - N-Line 110602  
 Lea County, NM; UL-K Section 12 T20S R37E  
 Drawn By: JCG Date: Nov-02 Revised:



*Plate 4 – Water Well Locations*



**Plate 6 - Water Well Grid Locations (for Surfer 8.0 Plot of Water Table Elevations)**  
**All Well Data is Contained in Table ??**

**Water Table and Surface Elevation Data (with Surfer XY Coordinates)**

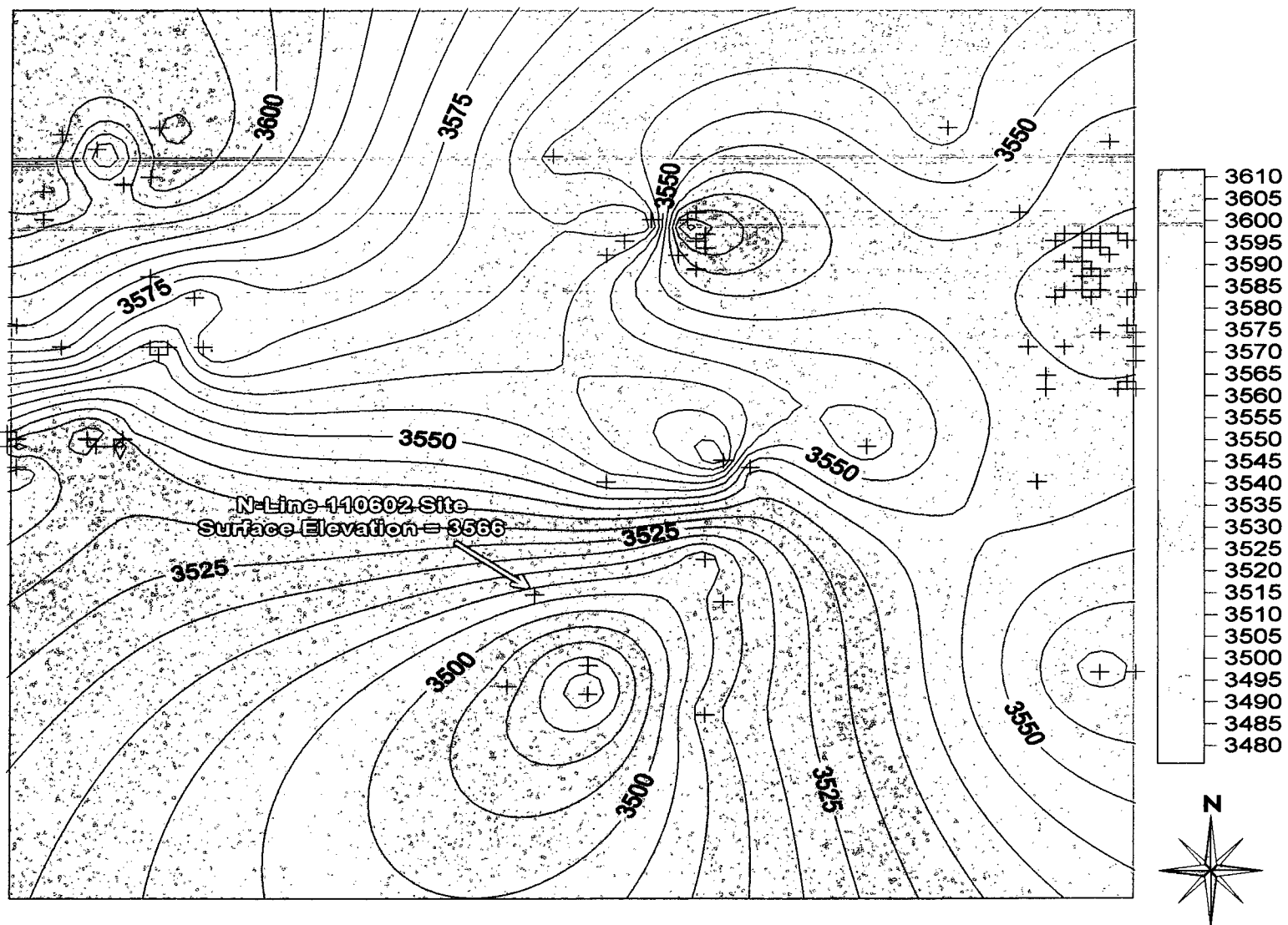
| NM State Engineer Water Column Report 11/13/02 |     |     |     |   |   |   |            |             |              |                   |                 |                    |       |
|--|-----|-----|-----|---|---|---|------------|-------------|--------------|-------------------|-----------------|--------------------|-------|
| Well Number                                    | Tws | Rng | Sec | Q | Q | Q | Well Depth | Water Depth | Water Column | Surface Elevation | Water Elevation | Surfer Coordinates |       |
|  |     |     |     |   |   |   |            |             |              |                   |                 | X                  | Y     |
| POR  | 20S | 37E | 12  | 2 |   |   |            |             |              | 3566              |                 | -1.00              | -5.00 |
| 10117  | 20S | 37E | 13  | 2 | 1 | 1 | 130        | 70          | 60           | 3563              | 3493            | -1.75              | -8.25 |
| 5349   | 20S | 37E | 13  | 2 | 2 |   | 140        | 85          | 55           | 3560              | 3475            | 0.50               | -8.50 |
| 10069  | 20S | 37E | 4   | 1 | 1 |   | 39         | 22          | 17           | 3565              | 3543            | -15.50             | -0.50 |
| 4501   | 20S | 38E | 3   | 1 |   |   | 62         | 45          | 17           | 3586              | 3541            | 13.00              | -1.00 |
| 2495   | 20S | 38E | 5   | 1 | 1 | 1 | 104        | 24          | 80           | 3599              | 3575            | 4.25               | -0.25 |
| 4769   | 20S | 38E | 5   | 1 | 2 |   | 104        | 54          | 50           | 3593              | 3539            | 5.00               | -0.50 |
| 9771   | 20S | 38E | 6   | 1 |   |   | 65         | 53          | 12           | 3606              | 3553            | 1.00               | -1.00 |
| 2498   | 20S | 38E | 6   | 4 | 4 | 4 | 88         | 67          | 21           | 3573              | 3506            | 3.75               | -3.75 |
| 1675   | 20S | 38E | 7   | 3 | 3 |   | 130        | 80          | 50           | 3563              | 3483            | 0.50               | -7.50 |
| 3281   | 20S | 38E | 8   | 1 | 3 | 1 | 127        | 60          | 67           | 3573              | 3513            | 4.25               | -5.25 |
| 9503   | 20S | 38E | 10  | 4 | 3 | 4 | 100        | 47          | 53           | 3609              | 3562            | 14.75              | -7.75 |
| 3125   | 20S | 38E | 10  | 4 | 4 | 4 | 52         | 52          | 0            | 3612              | 3560            | 15.75              | -7.75 |
| 2109   | 20S | 38E | 18  | 2 | 4 | 2 | 124        | 50          | 74           | 3563              | 3513            | 3.75               | -9.25 |
| 5336   | 19S | 37E | 21  | 1 | 2 | 4 | 71         | 30          | 41           | 3635              | 3605            | -14.25             | 11.25 |
| 9163   | 19S | 37E | 21  | 2 | 3 | 2 | 60         | 47          | 13           | 3629              | 3582            | -13.25             | 10.75 |
| 2621   | 19S | 37E | 21  | 3 | 2 | 3 | 83         | 40          | 43           | 3651              | 3611            | -14.75             | 9.25  |
| 10238  | 19S | 37E | 21  | 3 | 4 | 3 | 60         | 30          | 30           | 3630              | 3600            | -14.75             | 8.25  |
| 4108   | 19S | 37E | 21  | 4 | 2 |   | 70         | 22          | 48           | 3622              | 3600            | -12.50             | 9.50  |
| 3313   | 19S | 37E | 22  | 1 | 1 |   | 90         | 40          | 50           | 3652              | 3612            | -11.50             | 11.50 |
| 3387   | 19S | 37E | 22  | 3 | 1 | 1 | 95         | 35          | 60           | 3643              | 3608            | -11.75             | 9.75  |
| 3474   | 19S | 37E | 24  | 2 | 4 |   | 83         | 48          | 35           | 3606              | 3558            | -0.50              | 10.50 |
| 8217   | 19S | 37E | 27  | 1 | 3 | 3 | 50         | 18          | 32           | 3596              | 3578            | -11.75             | 6.25  |
| 3515   | 19S | 37E | 27  | 3 | 2 |   | 57         | 35          | 22           | 3601              | 3566            | -10.50             | 5.50  |
| 3982   | 19S | 37E | 28  | 3 | 3 |   | 43         | 31          | 12           | 3616              | 3585            | -15.50             | 4.50  |
| 10397  | 19S | 37E | 33  | 1 | 2 | 2 | 34         | 13          | 21           | 3588              | 3575            | -14.25             | 3.75  |
| 4842   | 19S | 37E | 33  | 3 | 3 |   | 60         | 35          | 25           | 3566              | 3531            | -15.50             | 0.50  |
| 9128   | 19S | 37E | 33  | 3 | 3 | 1 | 30         | 26          | 4            | 3566              | 3540            | -15.75             | 0.75  |
| 4448   | 19S | 37E | 33  | 3 | 3 | 3 | 46         | 36          | 10           | 3563              | 3527            | -15.75             | 0.25  |
| 9129   | 19S | 37E | 33  | 4 | 3 |   | 52         | 43          | 9            | 3566              | 3523            | -13.50             | 0.50  |
| 8501   | 19S | 37E | 33  | 4 | 3 | 4 | 43         | 29          | 14           | 3566              | 3537            | -13.25             | 0.25  |
| 3738   | 19S | 37E | 33  | 4 | 4 |   | 72         | 31          | 41           | 3570              | 3539            | -12.50             | 0.50  |
| 9127   | 19S | 37E | 33  | 4 | 4 | 3 | 52         | 40          | 12           | 3566              | 3526            | -12.75             | 0.25  |
| 9768   | 19S | 37E | 34  | 1 | 1 |   | 39         | 24          | 15           | 3579              | 3555            | -11.50             | 3.50  |
| 8803   | 19S | 37E | 34  | 1 | 1 | 1 | 41         | 25          | 16           | 3582              | 3557            | -11.75             | 3.75  |
| 10403  | 19S | 37E | 34  | 1 | 1 | 2 | 41         | 20          | 21           | 3579              | 3559            | -11.25             | 3.75  |
| 10386  | 19S | 37E | 34  | 1 | 2 | 2 | 34         | 21          | 13           | 3597              | 3576            | -10.25             | 3.75  |
| 02389  | 19S | 38E | 19  | 4 | 3 | 3 | 92         | 30          | 62           | 3600              | 3570            | 2.25               | 8.25  |
| 07847  | 19S | 38E | 19  | 4 | 4 |   | 80         | 65          | 15           | 3593              | 3528            | 3.50               | 8.50  |
| 01559  | 19S | 38E | 19  | 4 | 4 | 3 | 82         | 82          | 0            | 3596              | 3514            | 3.25               | 8.25  |
| 03424  | 19S | 38E | 21  | 2 | 1 |   | 102        | 45          | 57           | 3602              | 3557            | 10.50              | 11.50 |
| 02746  | 19S | 38E | 22  | 2 |   |   | 110        | 60          | 50           | 3602              | 3542            | 15.00              | 11.00 |
| 04833  | 19S | 38E | 22  | 3 | 3 |   | 115        | 50          | 65           | 3596              | 3546            | 12.50              | 8.50  |
| 09868  | 19S | 38E | 27  | 1 | 2 |   | 103        | 52          | 51           | 3589              | 3537            | 13.50              | 7.50  |
| 09620  | 19S | 38E | 27  | 1 | 2 | 2 | 98         | 60          | 38           | 3593              | 3533            | 13.75              | 7.75  |
| 10130  | 19S | 38E | 27  | 1 | 4 | 2 | 96         | 40          | 56           | 3589              | 3549            | 13.75              | 6.75  |
| 08871  | 19S | 38E | 27  | 2 |   |   | 105        | 63          | 42           | 3596              | 3533            | 15.00              | 7.00  |
| 09703  | 19S | 38E | 27  | 2 | 1 |   | 104        | 65          | 39           | 3593              | 3528            | 14.50              | 7.50  |
| 09208  | 19S | 38E | 27  | 2 | 1 | 1 | 105        | 56          | 49           | 3593              | 3537            | 14.25              | 7.75  |

**Water Table and Surface Elevation Data (with Surfer XY Coordinates)**

| NM State Engineer Water Column Report 11/13/02 |     |     |     |   |   |   |            |             |              |                   |                 |                    |      |
|--|-----|-----|-----|---|---|---|------------|-------------|--------------|-------------------|-----------------|--------------------|------|
| Well Number                                    |     |     |     |   |   |   | Well Depth | Water Depth | Water Column | Surface Elevation | Water Elevation | Surfer Coordinates |      |
|  | Tws | Rng | Sec | Q | Q | Q |            |             |              |                   |                 | X                  | Y    |
| 05789  | 19S | 38E | 27  | 2 | 1 | 2 | 87         | 50          | 37           | 3593              | 3543            | 14.75              | 7.75 |
| 09205  | 19S | 38E | 27  | 2 | 1 | 3 | 108        | 55          | 53           | 3593              | 3538            | 14.25              | 7.25 |
| 08992  | 19S | 38E | 27  | 2 | 1 | 4 | 100        | 54          | 46           | 3593              | 3539            | 14.75              | 7.25 |
| 09702  | 19S | 38E | 27  | 2 | 2 |   | 89         | 60          | 29           | 3595              | 3535            | 15.50              | 7.50 |
| 08855  | 19S | 38E | 27  | 2 | 2 | 1 | 105        | 55          | 50           | 3596              | 3541            | 15.25              | 7.75 |
| 09773  | 19S | 38E | 27  | 2 | 3 |   | 104        | 65          | 39           | 3589              | 3524            | 14.50              | 6.50 |
| 09074  | 19S | 38E | 27  | 2 | 3 | 1 | 100        | 55          | 45           | 3593              | 3538            | 14.25              | 6.75 |
| 09606  | 19S | 38E | 27  | 2 | 3 | 3 | 100        | 56          | 44           | 3589              | 3533            | 14.25              | 6.25 |
| 09501  | 19S | 38E | 27  | 2 | 3 | 4 | 92         | 40          | 52           | 3589              | 3549            | 14.75              | 6.25 |
| 09302  | 19S | 38E | 27  | 3 | 2 |   | 96         | 48          | 48           | 3589              | 3541            | 13.50              | 5.50 |
| 10417  | 19S | 38E | 27  | 3 | 2 | 2 | 94         | 30          | 64           | 3589              | 3559            | 13.75              | 5.75 |
| 09573  | 19S | 38E | 27  | 4 | 1 |   | 92         | 57          | 35           | 3586              | 3529            | 14.50              | 5.50 |
| 10812  | 19S | 38E | 27  | 4 | 1 | 1 | 100        | 44          | 56           | 3589              | 3545            | 14.25              | 5.75 |
| 09164  | 19S | 38E | 27  | 4 | 1 | 2 | 100        | 80          | 20           | 3589              | 3509            | 14.75              | 5.75 |
| 07968  | 19S | 38E | 27  | 4 | 2 |   | 130        | 65          | 65           | 3592              | 3527            | 15.50              | 5.50 |
| 04269  | 19S | 38E | 27  | 4 | 2 | 2 | 80         | 49          | 31           | 3598              | 3549            | 15.75              | 5.75 |
| 09836  | 19S | 38E | 27  | 4 | 3 | 4 | 98         | 57          | 41           | 3583              | 3526            | 14.75              | 4.25 |
| 03433  | 19S | 38E | 27  | 4 | 4 |   | 100        | 55          | 45           | 3590              | 3535            | 15.50              | 4.50 |
| 01464  | 19S | 38E | 27  | 4 | 4 | 4 | 85         | 58          | 27           | 3596              | 3538            | 15.75              | 4.25 |
| 02829  | 19S | 38E | 34  | 1 | 1 | 2 | 68         | 35          | 33           | 3583              | 3548            | 12.75              | 3.75 |
| 01687  | 19S | 38E | 34  | 1 | 2 | 2 | 50         | 40          | 10           | 3583              | 3543            | 13.75              | 3.75 |
| 02978  | 19S | 38E | 34  | 1 | 4 | 1 | 54         | 35          | 19           | 3583              | 3548            | 13.25              | 2.75 |
| 10425  | 19S | 38E | 34  | 1 | 4 | 3 | 60         | 35          | 25           | 3583              | 3548            | 13.25              | 2.25 |
| 03955  | 19S | 38E | 34  | 2 | 2 | 2 | 100        | 58          | 42           | 3602              | 3544            | 15.75              | 3.75 |
| 11014  | 19S | 38E | 34  | 2 | 2 | 4 | 128        | 67          | 61           | 3600              | 3533            | 15.75              | 3.25 |
| 08612  | 19S | 38E | 34  | 2 | 4 |   | 105        | 65          | 40           | 3593              | 3528            | 15.50              | 2.50 |
| 07327  | 19S | 38E | 34  | 2 | 4 | 3 | 75         | 45          | 30           | 3586              | 3541            | 15.25              | 2.25 |
| 02582  | 19S | 38E | 34  | 2 | 4 | 4 | 80         | 57          | 23           | 3593              | 3536            | 15.75              | 2.25 |
| 10611  | 19S | 38E | 30  | 1 |   |   | 97         | 50          | 47           | 3609              | 3559            | 1.00               | 7.00 |
| 7573   | 19S | 38E | 30  | 1 | 2 |   | 120        | 50          | 70           | 3609              | 3559            | 1.50               | 7.50 |
| 9758   | 19S | 38E | 30  | 2 |   |   | 130        | 80          | 50           | 3602              | 3522            | 3.00               | 7.00 |
| 8940   | 19S | 38E | 30  | 2 | 2 |   | 90         | 70          | 20           | 3597              | 3527            | 3.50               | 7.50 |
| 9182   | 19S | 38E | 30  | 2 | 2 | 2 | 100        | 48          | 52           | 3596              | 3548            | 3.75               | 7.75 |
| 10821  | 19S | 38E | 30  | 2 | 2 | 4 | 61         | 37          | 24           | 3599              | 3562            | 3.75               | 7.25 |
| 7976   | 19S | 38E | 30  | 2 | 4 |   | 81         | 48          | 33           | 3609              | 3561            | 3.50               | 6.50 |
| 1312   | 19S | 38E | 33  | 3 | 3 | 3 | 67         | 40          | 27           | 3599              | 3559            | 8.25               | 0.25 |



**Plate 5: Surfer 8.0 Water Table Elevation Plot**



**Plate 5: Water Table Elevation Plot (Surfer 8.0)**

Duke Energy Field Services - N-Line 110602

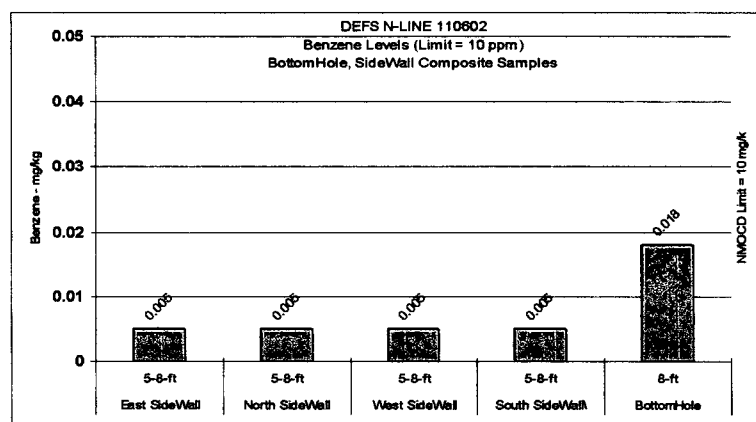
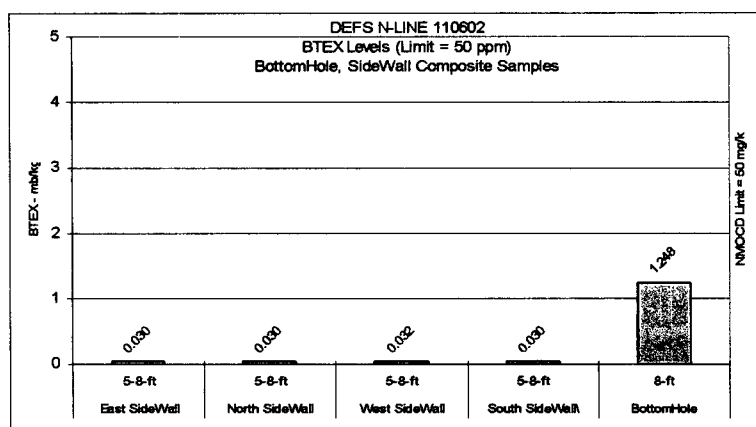
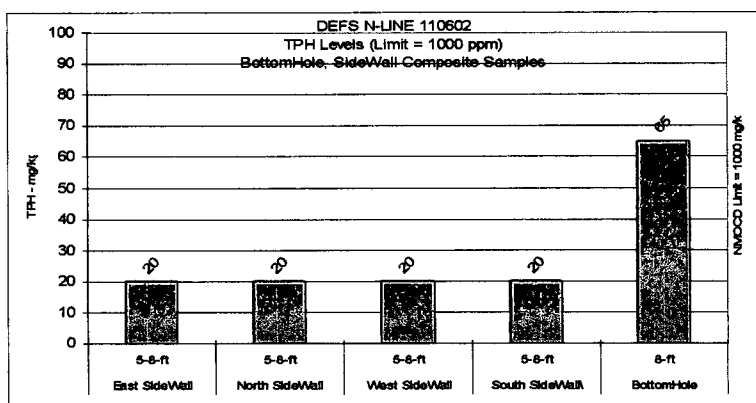
Lea County, NM; UL-K Section 12 T20S R37E

Drawn By: JCG Date: Feb-03 Revised:

## Plate 6: Soil Analytical Data and Associated Bar Charts

| Duke Energy Field Services - N-Line 110602 - Excavation Sampling Results   |                          |                                |              |                      |                        |                        |                        |                         |               |               |                     |                     |                       |                                    |
|--|--------------------------|--------------------------------|--------------|----------------------|------------------------|------------------------|------------------------|-------------------------|---------------|---------------|---------------------|---------------------|-----------------------|------------------------------------|
| <b>Bold</b>   highlighted cells indicate values in excess of the NMOC remedial action guideline thresholds: TPH = 5000 mg/Kg; Benzene = 10 mg/Kg; BTEX = 50 mg/Kg; Cl = 250 mg/Kg; SO <sub>4</sub> = 600 mg/Kg |                          |                                |              |                      |                        |                        |                        |                         |               |               |                     |                     |                       |                                    |
| Sample Date  | Excavation Sampling Area | Depth (ft - bgs <sup>1</sup> ) | SAMPLE ID#   | VOC <sup>2</sup> ppm | GRO <sup>3</sup> mg/Kg | DRO <sup>4</sup> mg/Kg | TPH <sup>5</sup> mg/Kg | BTEX <sup>6</sup> mg/Kg | Benzene mg/Kg | Toluene mg/Kg | Ethyl Benzene mg/Kg | Total Xylenes mg/Kg | Cl <sup>-</sup> mg/Kg | SO <sub>4</sub> <sup>=</sup> mg/Kg |
| 7-Nov  | East SideWall            | 5-8-ft                         | CDNL11702EW  |                      | 10                     | 10                     | 20                     | 0.030                   | 0.005         | 0.005         | 0.005               | 0.015               |                       |                                    |
| 7-Nov  | North SideWall           | 5-8-ft                         | CDNL11702NW  |                      | 10                     | 10                     | 20                     | 0.030                   | 0.005         | 0.005         | 0.005               | 0.015               |                       |                                    |
| 7-Nov  | West SideWall            | 5-8-ft                         | CDNL11702WW  |                      | 10                     | 10                     | 20                     | 0.032                   | 0.005         | 0.007         | 0.005               | 0.015               |                       |                                    |
| 7-Nov  | South SideWall           | 5-8-ft                         | CDNL11702SW  |                      | 10                     | 10                     | 20                     | 0.030                   | 0.005         | 0.005         | 0.005               | 0.015               |                       |                                    |
| 7-Nov  | BottomHole               | 8-ft                           | CDNL11702BH8 |                      | 10                     | 55                     | 65                     | 1.248                   | 0.018         | 0.193         | 0.359               | 0.678               |                       |                                    |

<sup>1</sup> bgs = below ground surface    <sup>2</sup> VOC = Volatile Organic Constituents; (note: 100 ppm Isobutylene calibration gas = 101 ppm)  
<sup>3</sup> GRO - Gasoline Range Organics (Detection Limit = 10 mg/Kg)    <sup>4</sup> DRO - Diesel Range Organics (Detection Limit = 10 mg/Kg)    <sup>5</sup> TPH - Total Petroleum Hydrocarbon (GRO+DRO)  
<sup>6</sup> BTEX = Sum of CoC's (Detection Limits = 0.005 mg/Kg; 0.015 mg/Kg) Note: Reported detection limits are considered "de minimus" values and are included in the TPH and BTEX summations.



# **Lab Analyses Reports and Chain-of-Custody Forms**



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: PAT McCASLAND

P.O. BOX 1558

EUNICE, NM 88231

FAX TO:

Receiving Date: 11/08/02

Reporting Date: 11/13/02

Project Owner: DUKE

Project Name: DUKE

Project Location: N-LINE 110602

Sampling Date: 11/07/02

Sample Type: SOIL

Sample Condition: COOL &amp; INTACT

Sample Received By: BC

Analyzed By: BC

| LAB NO.                     | SAMPLE ID    | GRO<br>(C <sub>6</sub> -C <sub>10</sub> )<br>(mg/Kg) | DRO<br>(>C <sub>10</sub> -C <sub>28</sub> )<br>(mg/Kg) | BENZENE<br>(mg/Kg) | TOLUENE<br>(mg/Kg) | ETHYL<br>BENZENE<br>(mg/Kg) | TOTAL<br>XYLENES<br>(mg/Kg) |
|-----------------------------|--------------|--|--|--------------------|--------------------|-----------------------------|-----------------------------|
| ANALYSIS DATE:              |              | 11/11/02   | 11/11/02   | 11/08/02           | 11/08/02           | 11/08/02                    | 11/08/02                    |
| H7189-1                     | CDNL11702EW  | <10.0  | <10.0  | <0.005             | <0.005             | <0.005                      | <0.015                      |
| H7189-2                     | CDNL11702NW  | <10.0  | <10.0  | <0.005             | <0.005             | <0.005                      | <0.015                      |
| H7189-3                     | CDNL11702WW  | <10.0  | <10.0  | <0.005             | 0.007              | <0.005                      | <0.015                      |
| H7189-4                     | CDNL11702SW  | <10.0  | <10.0  | <0.005             | <0.005             | <0.005                      | <0.015                      |
| H7189-5                     | CDNL11702BH8 | <10.0  | 55.0   | 0.018              | 0.193              | 0.359                       | 0.678                       |
|                             |              |  |  |                    |                    |                             |                             |
|                             |              |  |  |                    |                    |                             |                             |
|                             |              |  |  |                    |                    |                             |                             |
| Quality Control             |              | 788  | 835  | 0.105              | 0.102              | 0.104                       | 0.297                       |
| True Value QC               |              | 800  | 800  | 0.100              | 0.100              | 0.100                       | 0.300                       |
| % Recovery                  |              | 98.5   | 104  | 105                | 102                | 104                         | 98.8                        |
| Relative Percent Difference |              | 4.2  | 1.9  | 1.2                | 7.6                | 9.6                         | 8.3                         |

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

  
Burgess J. A. Cooke, Ph. D.  
11/13/02  
Date

H7189

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.



## **CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

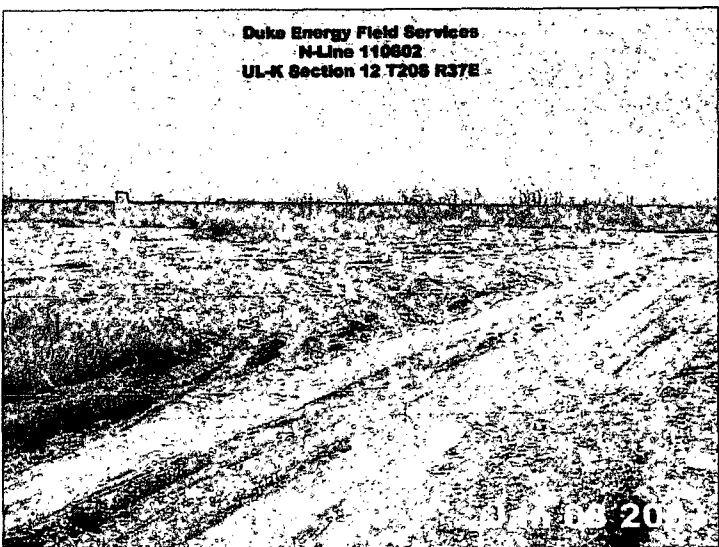
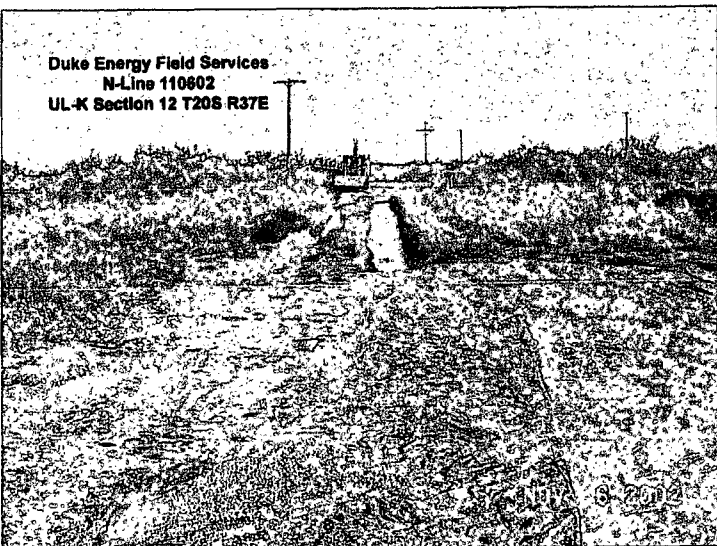
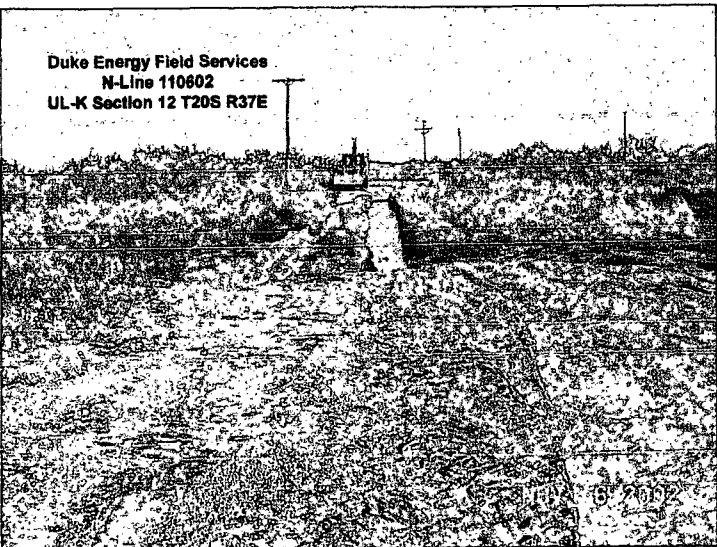
Page 1 of 1

**Terms and Conditions:** Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

|   |  |  |   |  |
|---|--|--|---|--|
| <b>Sampler Relinquished:</b><br><i>Eddie J. Hays</i><br><b>Relinquished By:</b><br><i>Chas. H. Hays</i><br><b>Delivered By: (Circle One)</b><br><b>Sampler - UPS - Bus - Other:</b> |  | <b>Date:</b><br><i>11-7-02</i><br><b>Time:</b><br><br><b>Date:</b><br><i>11-8-02</i><br><b>Time:</b><br><i>1200pm</i>                        | <b>Received By:</b><br><br><b>Received By: (Lab Staff)</b><br><i>Bryant L. Cook</i> | <b>Phone Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No<br><b>Fax Result:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br><b>REMARKS:</b> |
|   |  | <b>Sample Condition</b><br><b>Temp, °C</b> <b>Intact?</b><br><i>cool</i> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | <b>Checked By:</b><br><b>(Initials)</b>   |  |

† Cardinal cannot accept verbal changes. Please fax written changes to (915) 673-7020.

# Site Photographs



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<br><b>Duke Energy Field Services</b>       | Contact<br><b>Paul Mulkey</b>                |
| Address<br><b>11525 West Carlsbad Hwy, Hobbs, NM 88240</b> | Telephone No.<br><b>505-397-5716</b>         |
| Facility Name<br><b>N-Lne</b>                              | Facility Type<br><b>Natural Gas Pipeline</b> |

|                                       |                            |                        |
|---------------------------------------|----------------------------|------------------------|
| Surface Owner<br><b>SW Cattle Co.</b> | Mineral Owner<br><b>NA</b> | Lease No.<br><b>NA</b> |
|---------------------------------------|----------------------------|------------------------|

**LOCATION OF RELEASE**

|                         |                      |                        |                     |  |                                       |                                   |                                 |                       |
|-------------------------|----------------------|------------------------|---------------------|--|---------------------------------------|-----------------------------------|---------------------------------|-----------------------|
| Unit Letter<br><b>K</b> | Section<br><b>12</b> | Township<br><b>20S</b> | Range<br><b>37E</b> | Feet from<br>South Line<br><b>1885</b> | Feet from<br>West Line<br><b>1938</b> | Longitude<br><b>W103:12:24.51</b> | Latitude<br><b>N32:35:07.56</b> | County:<br><b>Lea</b> |
|-------------------------|----------------------|------------------------|---------------------|--|---------------------------------------|-----------------------------------|---------------------------------|-----------------------|

**NATURE OF RELEASE**

|  |  |   |
|--|--|---|
| Type of Release<br><b>Natural Gas and associated liquid components</b>   | Volume of Release<br><b>60 bbl</b>                       | Volume Recovered<br><b>55 bbl</b>                     |
| Source of Release<br><b>Steel Natural Gas Pipeline</b>   | Date and Hour of Occurrence<br><b>11/06/02-10:00 AM</b>  | Date and Hour of Discovery<br><b>11/06/02-1:00 PM</b> |
| Was Immediate Notice Given?<br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required   | If YES, To Whom?<br><b>NMOCD - Hobbs District Office</b> |   |
| By Whom?<br><b>Stan Shaver</b>   | Date and Hour<br><b>11/06/02-3:00 PM</b>                 |   |
| Was a Watercourse Reached?<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  | If YES, Volume Impacting the Watercourse.<br><b>NA</b>   |   |
| If a Watercourse was Impacted, Describe Fully.*<br><b>NA</b>   |  |   |
| Describe Cause of Problem and Remedial Action Taken.*<br><b>Corroded pipeline, repaired with clamp</b>   |  |   |
| Describe Area Affected and Cleanup Action Taken.*<br>~3100-ft <sup>2</sup> area affected (150-ft X 50-ft, E-W) was excavated to 8-ft depth. Contaminated RCRA Exempt Non-hazardous soil (164-yd <sup>3</sup> ) was excavated and disposed at J&L Land Farm.  |  |   |
| 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>Paul Mulkey</i>                           | <b>OIL CONSERVATION DIVISION</b> |                                   |
| Printed Name: <b>Paul Mulkey</b>                        | Approved by District Supervisor: |                                   |
| Title: <b>Construction &amp; Maintenance Supervisor</b> | Approval Date:                   | Expiration Date:                  |
| Date: <b>2/7/03</b> Phone: <b>505-397-5716</b>          | Conditions of Approval:          | <input type="checkbox"/> Attached |

Attach Additional Sheets If Necessary



## Incident Date and NMOCD Notified?

11/06/02-1:00 PM 11/06/02-3:00 PM

|   |         |  |          |
|---|---------|--|----------|
| SITE: N-Line  |         | Assigned Site Reference #: N-Line 110602   |          |
| Company: Duke Energy Field Services   |         |  |          |
| Street Address: 11525 West Carlsbad Hwy, Hobbs, NM 88240  |         |  |          |
| Mailing Address: 11525 West Carlsbad Hwy, Hobbs, NM 88240   |         |  |          |
| City, State, Zip:   |         |  |          |
| Representative: Paul Mulkey   |         |  |          |
| Representative Telephone: 505-397-5716  |         |  |          |
| Telephone:  |         |  |          |
| Fluid volume released (bbls): 60  |         | Recovered (bbls): 55   |          |
| >25 bbls: Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days.                           |         |  |          |
| 5-25 bbls: Submit form C-141 within 15 days (Also applies to unauthorized releases of 50-500 mcf Natural Gas) |         |  |          |
| Leak, Spill, or Pit (LSP) Name: N-Line 110602   |         |  |          |
| Source of contamination: Steel Natural Gas Pipeline   |         |  |          |
| Land Owner, i.e., BLM, ST, Fee, Other: SW Cattle Co. P.O. Box 1800, Hobbs, NM 88240                           |         |  |          |
| LSP Dimensions: GPS Site Diagram attached   |         |  |          |
| LSP Area: 3100 -ft <sup>2</sup>   |         |  |          |
| Location of Reference Point (RP):   |         |  |          |
| Location distance and direction from RP:  |         |  |          |
| Latitude: N32:35:07.56  |         |  |          |
| Longitude: W103:12:24.51  |         |  |          |
| Elevation above mean sea level: 3566 -ft amsl   |         |  |          |
| Feet from South Section Line: 1885  |         |  |          |
| Feet from West Section Line: 1938   |         |  |          |
| Location - Unit or 1/4 1/4: UL- K NE 1/4 of SW 1/4  |         |  |          |
| Location - Section: 12  |         |  |          |
| Location - Township: 20S  |         |  |          |
| Location - Range: 37E   |         |  |          |
| Surface water body within 1000' radius of Site: 0   |         |  |          |
| Surface water body within 1000' radius of Site: 0   |         |  |          |
| Domestic water wells within 1000' radius of Site: 0   |         |  |          |
| Domestic water wells within 1000' radius of Site: 0   |         |  |          |
| Agricultural water wells within 1000' radius of Site: 0   |         |  |          |
| Agricultural water wells within 1000' radius of Site: 0   |         |  |          |
| Public water supply wells within 1000' radius of Site: 0  |         |  |          |
| Public water supply wells within 1000' radius of Site: 0  |         |  |          |
| Depth (ft) from land surface to ground water (DG): 59   |         |  |          |
| Depth (ft) of contamination (DC): 8   |         |  |          |
| Depth (ft) to ground water (DG - DC = DtGW): 51   |         |  |          |
| <b>1. Ground Water</b>  |         | <b>2. Wellhead Protection Area</b>   |          |
| If Depth to GW <50 feet: 20 points  |         | If <1000' from water source, or, <200' from private domestic water source: 20 points |          |
| If Depth to GW 50 to 99 feet: 10 points   |         | If >1000' from water source, or, >200' from private domestic water source: 0 points  |          |
| If Depth to GW >100 feet: 0 points  |         |  |          |
| Ground water Score: 10  |         | Wellhead Protection Area Score: 0  |          |
| Site Rank (1+2+3) = 10  |         | Surface Water Score: 0   |          |
| <b>Total Site Ranking Score and Acceptable 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 | 1000 ppm   | 5000 ppm |

<sup>1</sup>100 ppm field VOC headspace measurement may be substituted for lab analysis