



DELINEATION AND REMEDIATION REPORT

Lateral NMG-180
Ref. # Historical

UL-B, NW¼ of the NE¼ of Section 20, R37E, T19S
Latitude 32 39' 01.457"N and Longitude 103 16' 11.229"W
Elevation ~3670 'amsl

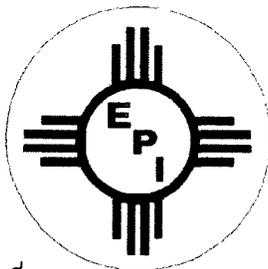
~2 miles north of Monument, Lea New Mexico

Date

12-30-03

Prepared by

Environmental Plus, Inc.
2100 Avenue O
P.O. Box 1558
Eunice, New Mexico 88231
Tele 505•394•3481 FAX 505•394•2601



Duke = 229153
facility = FPAC0602045806
traced = ePAC0602045949
incident = nPAC0602046005
application = pPAC0602046291

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1.0 INTRODUCTION

This site is located in UL-B in the NW¼ of the NE¼ of 20, R37E, T19S at Latitude 32° 39' 01.457"N and Longitude 103° 16' 11.229"W approximately ~2 miles north of Monument Lea County, New Mexico on property owned by the State of New Mexico. A topographical map is included in Attachment I. The estimated <20 bbls (bbl) natural gas liquid leak attributed to internal/external corrosion, occurred at an unknown time in the past in the Duke 6" Lateral NMG-180 steel pipeline. Approximately 1,600 square feet (ft²) of surface was affected during excavation and disposal of 654 cubic yards (yd³) of contaminated soil. Ground water was estimated to occur at ~40' below ground surface ('bgs) and was not impacted. An agricultural well is located with 1000 horizontal feet of the site. These site characteristics give the site a 40 point New Mexico Oil Conservation Division (NMOCD) ranking score that applies the following remedial guidelines;

- Benzene= 10 mg/Kg
- BTEX= 50 mg/Kg
(BTEX is the mass sum of Benzene, Toluene, Ethyl Benzene, and Xylenes)
- Total Petroleum Hydrocarbon 8015m(TPH^{8015m})= 100 mg/Kg

Laboratory results from analysis of the excavation sidewall and bottom samples were all reported to be less than the instrument detection limit, subsequently, with consensus with the local NMOCD office, the excavation was backfilled with a similar volume of clean soil.

2.0 ENVIRONMENTAL MEDIA CHARACTERIZATION

Chemical parameters of the soil and ground water were characterized consistent with the characterization and remediation/abatement goals and objectives set forth in the New Mexico Oil Conservation Division (NMOCD) guidelines published in the following documents;

- 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, Benzene, and the mass sum of Benzene, Toluene, Ethyl Benzene, and total Xylenes (BTEX), Sulfate, and Chloride were 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.

2.1 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 and weeds. Mammals represented, include Orrd's and Merriam's Kangaroo Rat, Deer Mouse, White Throated Wood Rat, Cottontail Rabbit, Black Tailed Jackrabbit, and the Mule Deer. Reptiles, Amphibians, and Birds are numerous and typical of area. A survey of Listed, Threatened, or Endangered species was not conducted.

2.2 AREA GROUND WATER

Based on information from the New Mexico Office of the State Engineer and the New Mexico Tech Geo-Information Internet Mapping System database, ground water was estimated to occur at ~40'bgs. The United States Geological Survey (USGS) Ground-Water Report 6, "Geology and Ground-Water Conditions in Southern Lea County, New Mexico," A. Nicholson, Jr. and A. Clebsch, Jr., 1961, suggests that the ground water elevation decreases generally to the southeast.

2.3 AREA WATER WELLS

The New Mexico Tech Geo-Information Internet Mapping System database records the following area water wells with known water levels. Well #6294 is approximately 541 feet southwest of the site, i.e., upgrade and transverse to the ground water gradient.

Water wells	Latitude	Longitude	Altitude	Water Level	Water Table Elevation
			'amsl	'bgs	'amsl
6294	323900	1031617	3665	36.96	3628.04
6242	323839	1031615	3677	47.85	3629.15
6260	323848	1031532	3636	25.46	3610.54

Refer to the annotated topographical map included in Attachment I.

2.4 AREA SURFACE WATER BODIES

There are no permanent or intermittent surface water bodies within 1000 horizontal feet of the site.

3.0 NMOCD SITE RANKING

Based on the proximity of the site to protectable area water wells, surface water bodies, and depth to ground water, the site has an NMOCD ranking score of 40 points with the soil remedial goals highlighted below in the Site Ranking Matrix.

1. Ground Water	2. Wellhead Protection Area	3. Distance to Surface Water Body	
If Depth to GW < 50 feet: 20 points	If < 1000' from water source, or; < 200' from private domestic water source: 20 points	< 200 horizontal feet: 20 points	
If Depth to GW 50 to 99 feet: 10 points		200-100 horizontal feet: 10 points	
If Depth to GW > 100 feet: 0 points	If > 1000' from water source, or; > 200' from private domestic water source: 0 points	> 1000 horizontal feet: 0 points	
Ground water Score = 20	Wellhead Protection Area Score = 20	Surface Water Score = 0	
Site Rank (1+2+3) = 20 + 20 + 0 = 40 points			
Total Site Ranking Score and Acceptable Remedial Goal Concentrations			
Parameter	> 19	10-19	0-9
Benzene ¹	10 ppm	10 ppm	10 ppm
BTEX ¹	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1000 ppm	5000 ppm

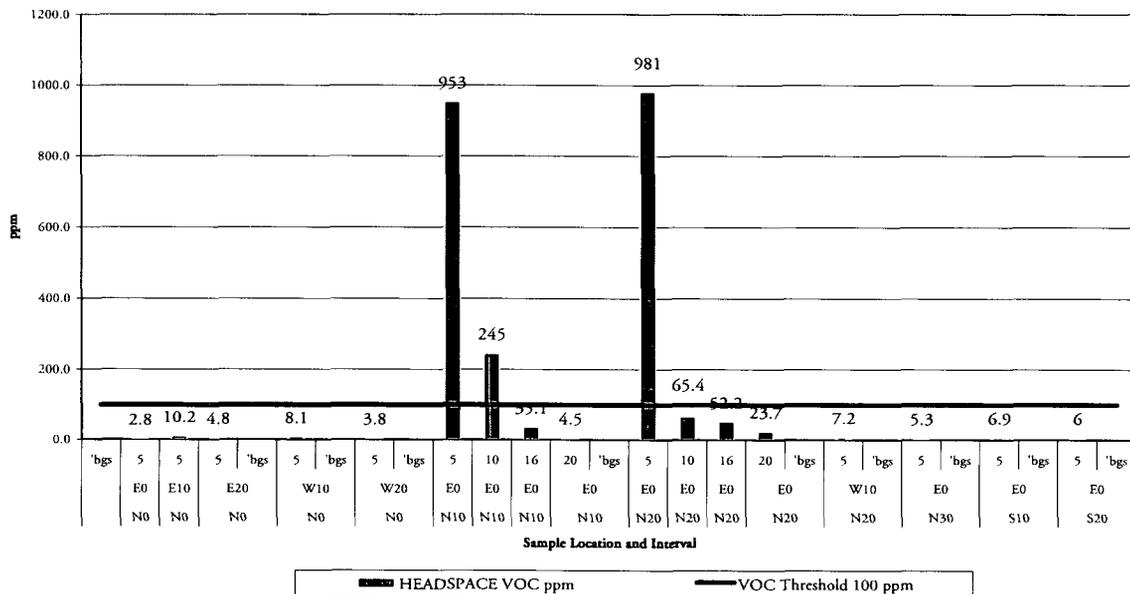
4.0 SOIL INVESTIGATION

The vertical and horizontal extents of hydrocarbon contamination were delineated during excavation using Volatile Organic Constituent (VOC) Headspace field surveys with a calibrated Photoionization detector (PID). Analytical reports are provided and summarized in Attachment II and the data illustrated below.

4.1 VOLATILE ORGANIC CONSTITUENT (VOC) HEADSPACE

Grab samples of the excavation bottom and composite samples of the sidewalls and bottom were collected and the VOC Headspace analyzed. All final samples were < 100 ppm and deemed acceptable in accordance with the NMOCD Guidelines. The survey results are illustrated below.

Duke Energy Field Services
NMG 180
VOC Headspace Delineation



4.2 TPH^{8015M}

Laboratory samples were jarred prior to VOC Headspace analysis for the sidewall and bottom compliance samples in preparation for laboratory TPH^{8015m} analyses. All results were <100 mg/Kg and deemed acceptable.

4.3 SULFATE

Sulfate concentrations were determine by laboratory analysis to be insignificant, i.e., 62.1 mg/Kg and <1 mg/Kg.

4.4 CHLORIDE

Chloride residuals were determined by laboratory analysis to be insignificant, i.e., 16 mg/Kg and 16 mg/Kg.

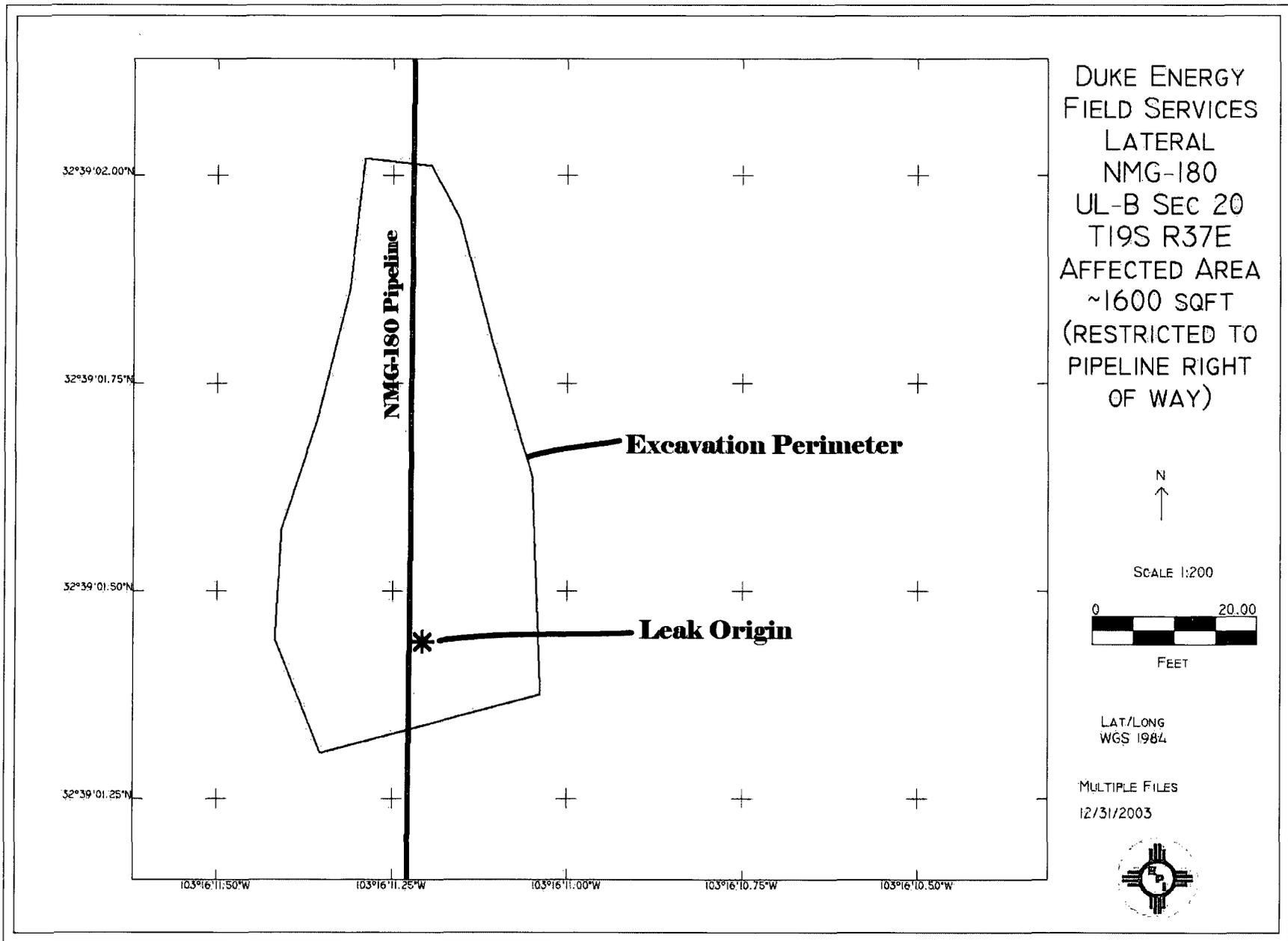
5.0 REMEDIATION

Contaminated soil, i.e., 654 yd³ was excavated and disposed of at the NMOCD approved and permitted South Monument Solid Waste Management Facility. The excavation was approximately 10 feet deep, 10 feet wide, and 15 feet long and was within the 30 foot pipeline right of way. Upon achievement of the NMOCD remedial goals for the CoCs and with consensus from the local NMOCD office, a similar volume of native clean soil used to backfill the excavation. Photographs of the backfilled and contoured site are included in Attachment III.

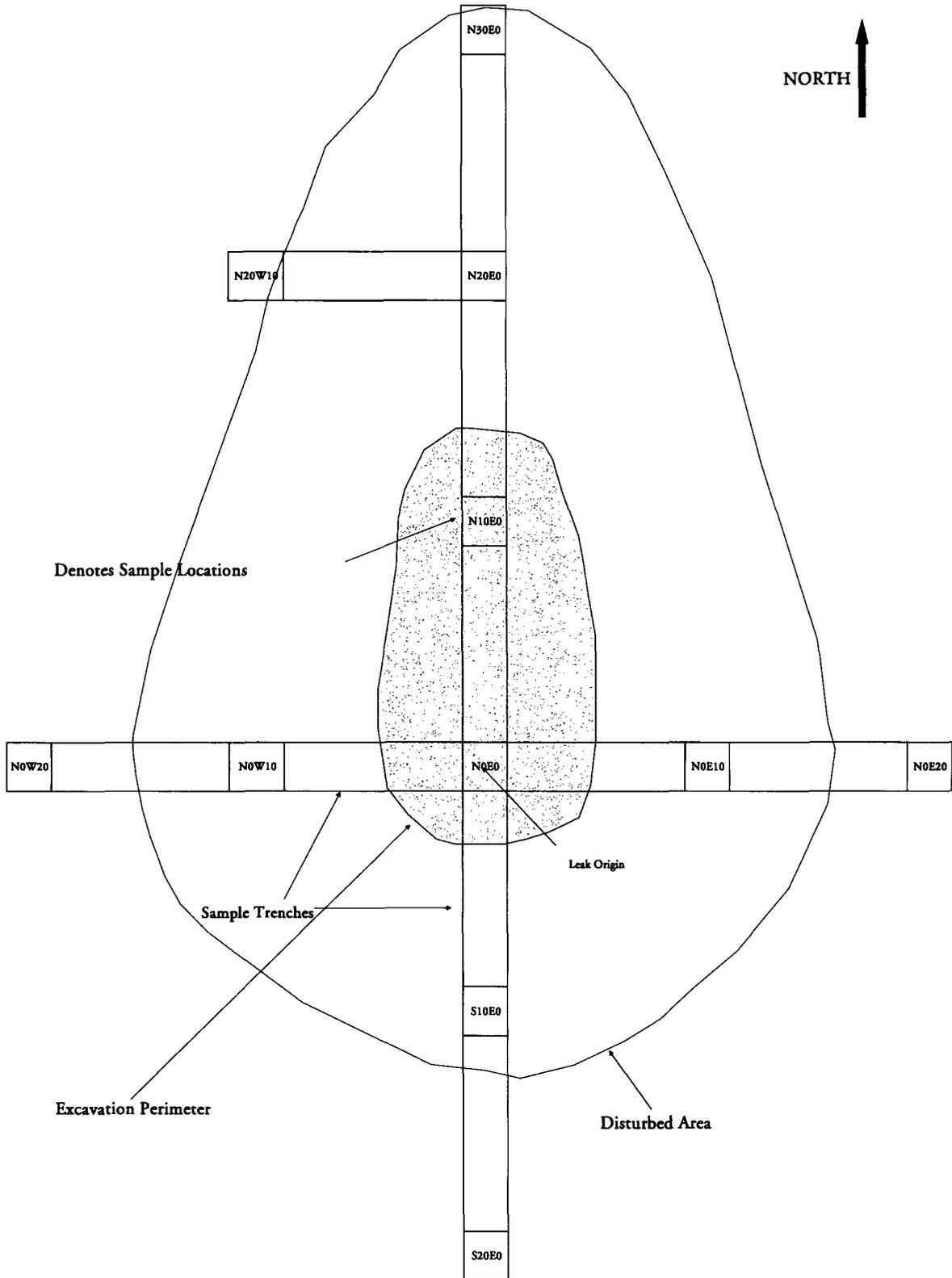
6.0 CLOSURE JUSTIFICATION

Given that the NMOCD remedial goals for the hydrocarbon and inorganic CoCs have been achieved in the sidewall and bottom and the site backfilled and contoured, it is requested that the NMOCD require "no further action" at this site. The final form C-141 is included in Attachment VI.

ATTACHMENT I: SITE MAPS



Duke NMG-180 Sample Trench Location Map



Sample ID, e.g., "N0W20" = From Origin, North 0 feet and West 20 feet
Reference Origin = N0E0

ATTACHMENT II: ANALYTICAL SUMMARY AND REPORTS

Duke Energy Field Services Lateral NMG 180 Soil Delineation Data Summary

North South Coordinate feet	East West Coordinate feet	Sampling Interval (FT. BGS ¹)	SAMPLE ID#	Sample Date	Lithology	HEADSPACE VOC ² (ppm)	GRO ³ mg/Kg	DRO ⁴ mg/Kg	TPH ⁵ (8015M.) mg/Kg	BTEX mg/Kg	Benzene mg/Kg	Toluene mg/Kg	Ehtyl Benzene mg/Kg	Total Xylenes mg/Kg	Sulfate mg/Kg	Chloride mg/Kg
N0	E0	5	DNMG180N0E0-5	3/18/03	TAN CALICHE SAND	2.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N0	E10	5	DNMG180E10-5	3/18/03	TAN CALICHE SAND	10.2	<10.0	<10.0	ND	ND	<0.005	<0.005	<0.005	<0.005	62.1	16
N0	E20	5	DNMG180E20-5	3/18/03	TAN CALICHE SAND	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N0	W10	5	DNMG180W10-5	3/18/03	TAN CALICHE SAND	8.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N0	W20	5	DNMG180W20-5	3/18/03	TAN CALICHE SAND	3.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N10	E0	5	DNMG180N10-5	3/18/03	TAN CALICHE SAND	953	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N10	E0	10	DNMG180N10-10	3/18/03	TAN CALICHE SAND	245	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N10	E0	16	DNMG180N10-16	3/18/03	TAN CALICHE SAND	35.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N10	E0	20	DNMG180N10-20	3/18/03	TAN CALICHE SAND	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N20	E0	5	DNMG180N20-5	3/18/03	TAN CALICHE SAND	981	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N20	E0	10	DNMG180N20-10	3/18/03	TAN CALICHE SAND	65.4	<10.0	<10.0	ND	ND	<0.005	<0.005	<0.005	<0.005	<1	16
N20	E0	16	DNMG180N20-16	3/18/03	TAN CALICHE SAND	52.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N20	E0	20	DNMG180N20-20	3/18/03	TAN CALICHE SAND	23.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N20	W10	5	DNMG180N20W10-5	3/18/03	TAN CALICHE SAND	7.2	<10.0	<10.0	ND	ND	<0.005	<0.005	<0.005	<0.005	NA	NA
N30	E0	5	DNM180N30-5	3/18/03	TAN CALICHE SAND	5.3	<10.0	<10.0	ND	ND	<0.005	<0.005	<0.005	<0.005	NA	NA
S10	E0	5	DNMG180S10-5	3/18/03	TAN CALICHE SAND	6.9	<10.0	<10.0	ND	ND	<0.005	<0.005	<0.005	<0.005	NA	NA
S20	E0	5	DNMG180S20-5	3/18/03	TAN CALICHE SAND	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
			PID CALIBRATION	3/18/03	100 PPM CAL GAS	99.9										

¹bgs – below ground surface

²VOC–Volatile Organic Contaminants/Constituents

³GRO-Gasoline Range Organics (C₆-C₁₀)

⁴DRO-Diesel Range Organics (>C₁₀-C₂₈)

⁵TPH(8015 Mod.)-Total Petroleum Hydrocarbon = GRO+DRO.

Laboratory analyses were performed by Cardinal Laboratories of Hobbs New Mexico

⁶Bolded values are in excess of the New Mexico Oil Conservation Division guideline threshold for the parameter

⁷Italicized values are < the instrument detection limit.

⁸na - Not Analyzed

⁹Total Petroleum Hydrocarbon Method 418.1

¹⁰ND indicates the parameter was not detected above the instrument detection limit.



ARDINAL LABORATORIES, INC.

2111 Beechwood, Abilene, TX 79603 101 East Marland, Hobbs, NM 88240
(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 1 of 1

Company Name: <u>EPI</u>		BILL TO		ANALYSIS REQUEST															
Project Manager: <u>PMcCasiano</u>		P.O. #: <u>Same</u>																	
Address: <u>P.O. Box 1558</u>		Company:																	
City: <u>Eunice</u> State: <u>NM</u> Zip: <u>88231</u>		Attn:																	
Phone #: <u>505-394-2481</u> Fax #: <u>505-394-2601</u>		Address:																	
Project #: _____ Project Owner:		City:																	
Project Name: <u>Duke LATERAL NMG 180</u>		State: _____ Zip: _____																	
Project Location:		Phone #: _____																	
Sampler Name: <u>PMcCasiano</u>		Fax #: _____																	
Lab I.D.	Sample I.D.	(GRAB OR) (COMP. # CONTAINERS	MATRIX					PRESERV		SAMPLING		DATE	TIME	BTEX 8020	TPH 481	TPH 8015M	Chloride	TDS	Sulfate
			GROUNDWATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	ACID/BASE	ICE / COOL	OTHER:								
H7548-1	DNMG180S10-5	✓	✓								3-18-03	0830	✓						
-2	DNMG180E10-5	✓	✓								3-18-03	0900	✓						
-3	DNMG180N30-5	✓	✓								3-8-03	1000	✓						
-4	DNMG180N20-10	✓	✓								3-11-03	1400	✓						
-5	DNMG180N20W10-5	✓	✓								3-19-03	0945	✓						

PLEASE NOTE: Liability and Coverage. Cardinal's liability and client's obligation remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 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 remedies or otherwise.

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 20% per annum from the original date of invoice, and all costs of collection, including attorney's fees.

Sampler Relinquished:	Date: <u>3-25-03</u> Time: <u>1500</u>	Received By:	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Fax Result: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
<u>[Signature]</u>		<u>[Signature]</u>	REMARKS:	
Relinquished By:	Date: <u>3-25-03</u> Time:	Received By: (Lab Staff)	<u>CofC requested</u>	
<u>[Signature]</u>		<u>[Signature]</u>		
Delivered By: (Circle One)	Sample Condition	CHECKED BY:		
Sampler - UPS - Bus - Other:	Cool / Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No	(Initials)		

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476.



PHONE (815) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

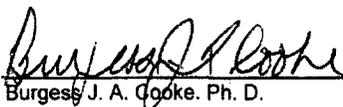
ANALYTICAL RESULTS FOR
ENVIRONMENTAL PLUS, INC.
ATTN: PAT McCASLAND
P.O. BOX 1558
EUNICE, NM 88231
FAX TO: (505) 394-2601

Receiving Date: 03/25/03
Reporting Date: 03/27/03
Project Number: NOT GIVEN
Project Name: DUKE LATERAL NMG 180
Project Location: NOT GIVEN

Sampling Date: 03/18 & 03/19/03
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: HM
Analyzed By: BC

LAB NO.	SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/Kg)	DRO (>C ₁₀ -C ₂₈) (mg/Kg)	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE:		03/25/03	03/25/03	03/25/03	03/25/03	03/25/03	03/25/03
H7548-1	DNMG180S10-5	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
H7548-2	DNMG180E10-5	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
H7548-3	DNMG180N30-5	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
H7548-4	DNMG180N20-10	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
H7548-5	DNMG180N20W10-5	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
Quality Control		758	822	0.109	0.105	0.106	0.304
True Value QC		800	800	0.100	0.100	0.100	0.300
% Recovery		94.7	103	109	105	106	101
Relative Percent Difference		7.2	1.8	<0.1	4.3	0.9	2.1

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

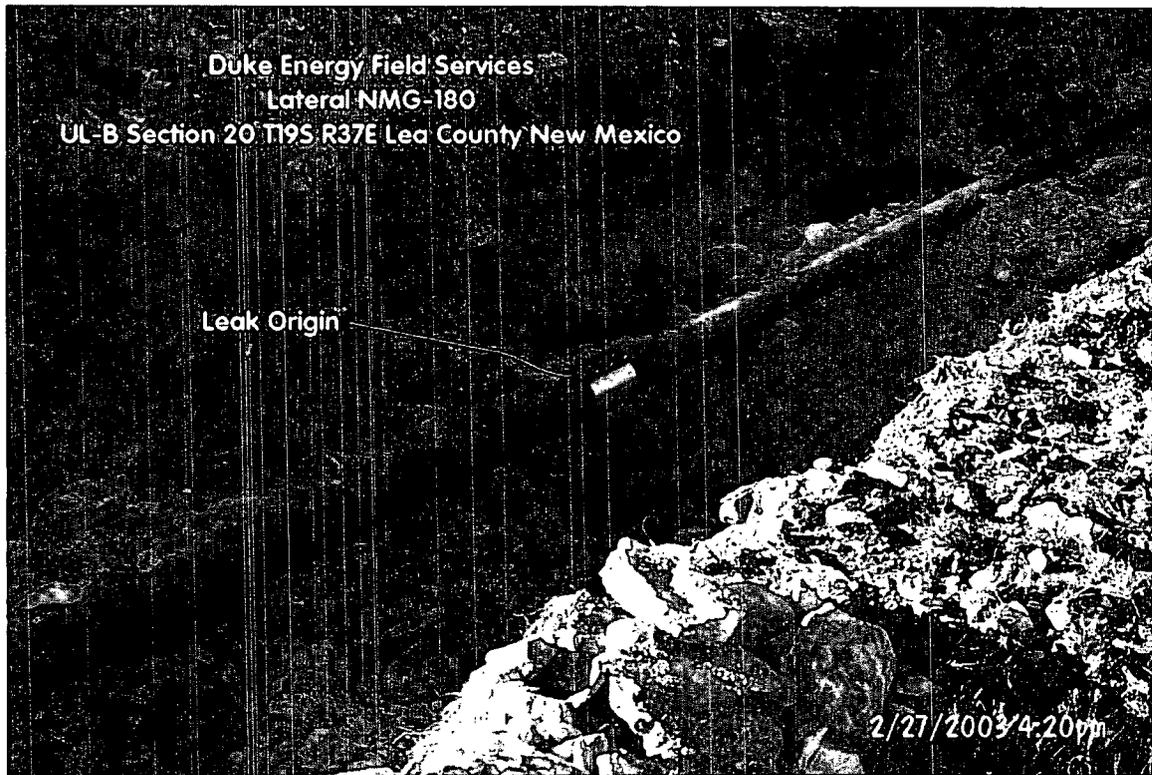

Burgess J. A. Cooke, Ph. D.

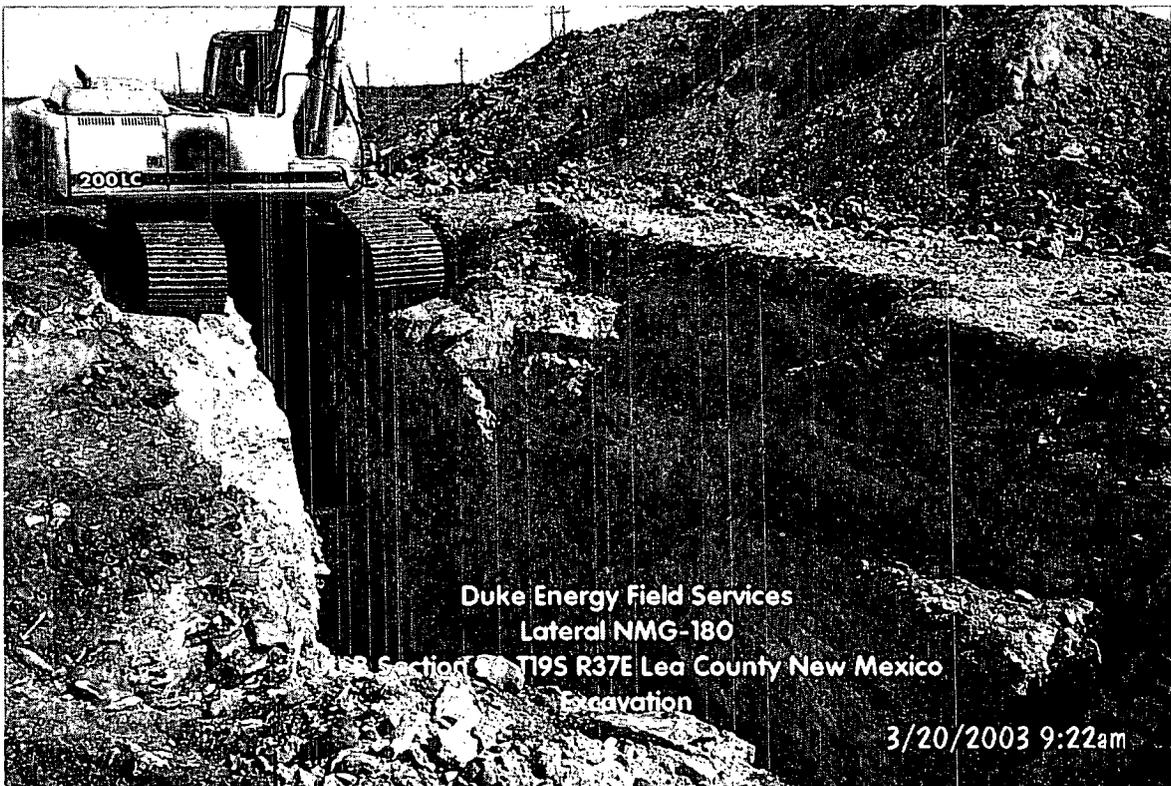
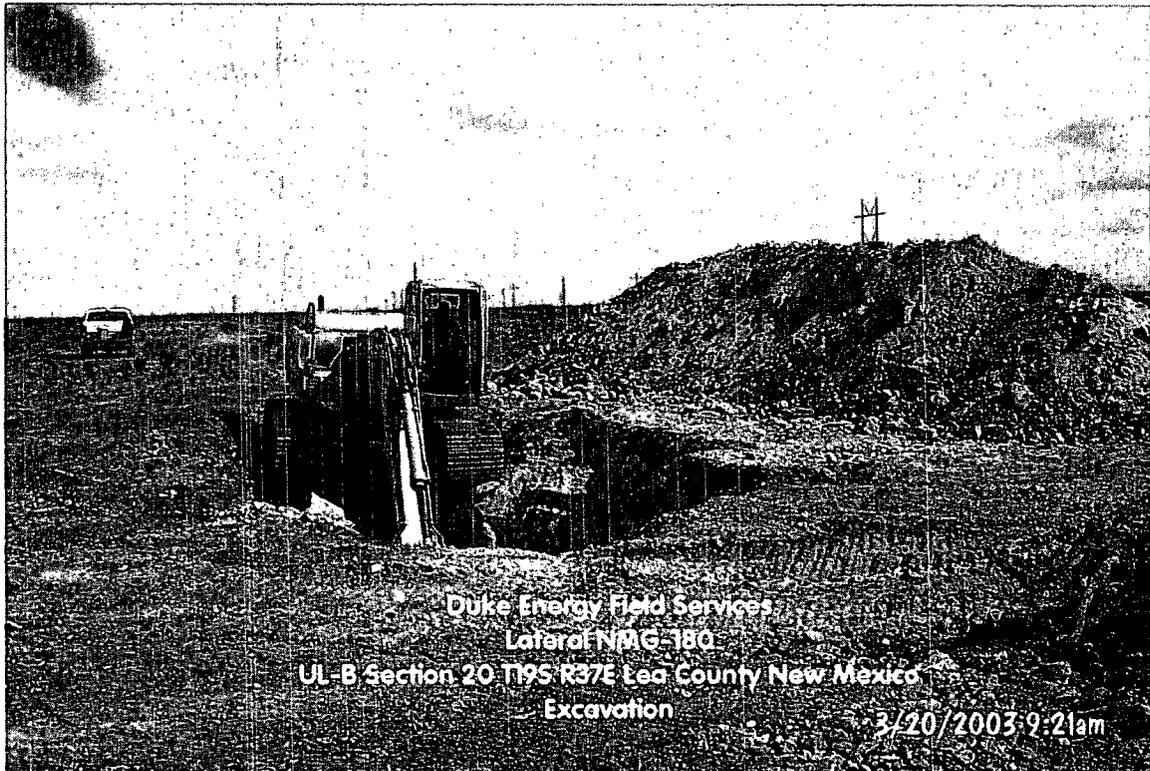
3/27/03
Date

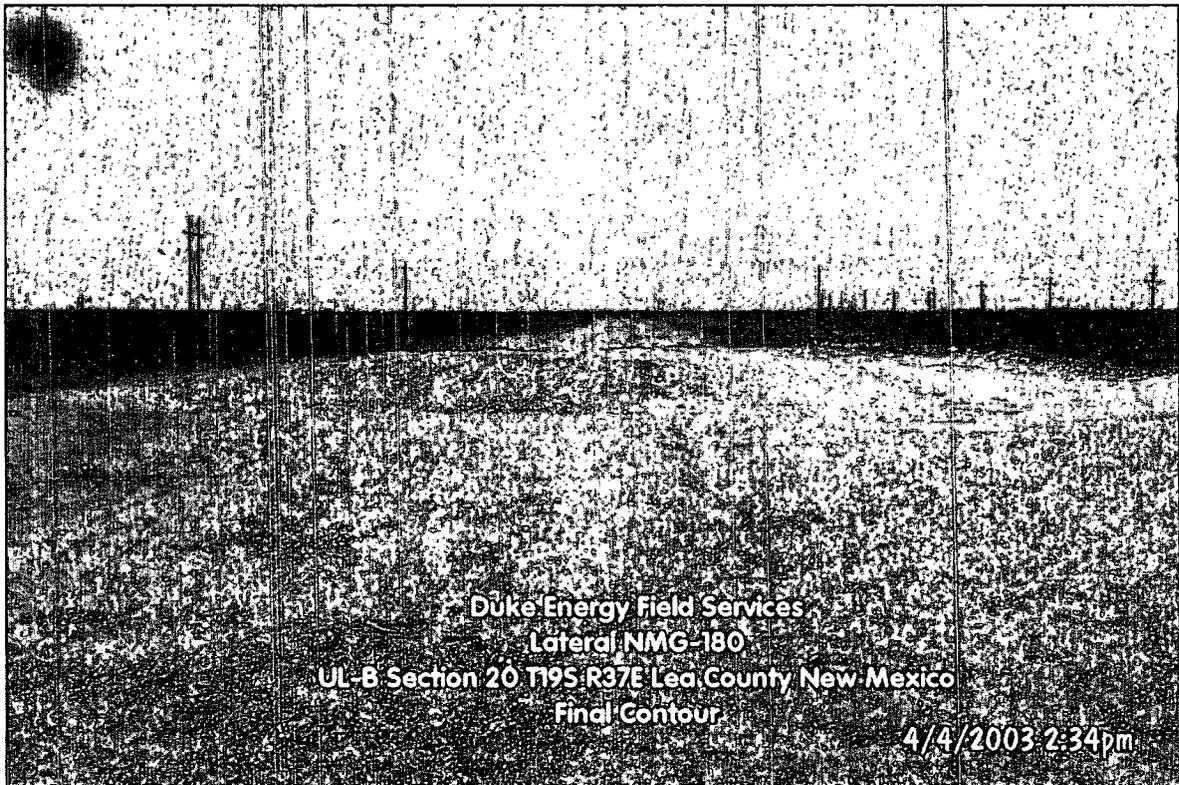
H7548a

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ATTACHMENT III: PHOTOGRAPHS







ATTACHMENT IV: FINAL NMOCD FORM C-141

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

Form C-141
Revised June 10, 2003

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

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: Paul Mulkey
Address: 11525 West Carlsbad Highway, Hobbs, New Mexico 88240	Telephone No.: 505.397.5716
Facility Name: Lateral NMG-180	Facility Type: 6" Steel Pipeline

Surface Owner: State of New Mexico	Mineral Owner	Lease No.
------------------------------------	---------------	-----------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County	Lea
B	20	T19S	R37E						

NATURE OF RELEASE

Type of Release: Natural Gas Pipeline Fluids	Volume of Release : <20 bbls	Volume Recovered :
Source of Release: 6" Steel Pipeline	Date and Hour of Occurrence: unknown	Date and Hour of Discovery: 2-28-03 @ 11:00 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Larry Johnson	
By Whom? Stan Shaver, DEFS	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken:*
Pipe repair clamp installed.

Describe Area Affected and Cleanup Action Taken:*
Site was delineated during excavation and a remediated by disposal. Refer to attached report. Remedial Goals: TPH 8015m = 100 mg/Kg, Benzene = 10 mg/Kg, and BTEX, i.e., the mass sum of Benzene, Ethyl Benzene, Toluene, and Xylenes = 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: 	OIL CONSERVATION DIVISION	
	Approved by District Supervisor:	
Printed Name: Pat McCasland	Approval Date:	Expiration Date:
Title: EPI Technical Manager	Conditions of Approval:	
E-mail Address: enviplus1@aol.com	Attached <input type="checkbox"/>	
Date: 12-30-03	Phone: 505.394.3481	

* Attach Additional Sheets If Necessary



ENVIRONMENTAL PLUS, INC.

Micro-Blaze

Micro-Blaze Oct™

STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES

January 12, 2004

Mr. Larry Johnson
Environmental Engineer
New Mexico Oil Conservation Division
1625 North French
Hobbs, New Mexico 88240

Subject: Duke Energy Field Services Final C-141

Re: Lateral NMG-180, Historical
UL B, NW¼ of the NE¼ of Section 20 T19S R37E
Latitude 32° 39' 01.457"N and Longitude 103° 16' 11.229"W

Dear Mr. Johnson,

Environmental Plus, Inc. (EPI), on behalf of Mr. Paul Mulkey, Duke Energy Field Services, submits the enclosed "Delineation and Remediation Report" and the attached New Mexico Oil Conservation Division (NMOCD) final form C-141. EPI, on behalf of Duke Energy Field Services, requests that "no further action" be required at the site.

If there are any questions please call Mr. Ben Miller or myself at the office or at 505.390.0288 and 505.390.7864, respectively or Mr. Paul Mulkey at 505.397.5716. All official communication should be addressed to:

Mr. Paul Mulkey
Duke Energy Field Services
11525 West Carlsbad Highway
Hobbs, New Mexico 88240

Sincerely,

Pat McCasland
EPI Technical Services Manager

cc: Paul Mulkey, Duke Energy Field Services, w/enclosure
Steve Weathers, Duke Energy Field Services, w/enclosure
Lynn Ward, Duke Energy Field Services, w/enclosure
Ben Miller, EPI Vice President and General Manager
Sherry Miller, EPI President
file



ENVIRONMENTAL PLUS, INC.

Duke Energy Field Services Site Information and Metrics		Incident Date: unknown	NMOCD Notified: 2003-02-28 00:00:00
SITE: Lateral NMG-180		Assigned Site Reference #: Historical	
Company: Duke Energy Field Services			
Street Address:			
Mailing Address: 11525 West Carlsbad Highway			
City, State, Zip: Hobbs, New Mexico 88240			
Representative: Paul Mulkey			
Representative Telephone: 505.397.5716			
Telephone:			
Fluid volume released (bbls): <20 bbls		Recovered (bbls): 0	
>25 bbls: Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days. (Also applies to unauthorized releases >500 mcf Natural Gas)			
5-25 bbls: Submit form C-141 within 15 days (Also applies to unauthorized releases of 50-500 mcf Natural Gas)			
Leak, Spill, or Pit (LSP) Name: Lateral NMG-180			
Source of contamination: 6" Steel Pipeline			
Land Owner, i.e., BLM, ST, Fee, Other: State of New Mexico			
LSP Dimensions none observed			
LSP Area: none observed ft ²			
Location of Reference Point (RP)			
Location distance and direction from RP			
Latitude: 32 39' 01.457"N			
Longitude: 103 16' 11.229"W			
Elevation above mean sea level: 3670 'amsl			
Feet from South Section Line			
Feet from West Section Line			
Location- Unit or ¼¼: NW¼ of the NE¼		Unit Letter: B	
Location- Section: 20			
Location- Township: T19S			
Location- Range: R37E			
Surface water body within 1000 ' radius of site: none			
Surface water body within 1000 ' radius of site:			
Domestic water wells within 1000' radius of site: none			
Domestic water wells within 1000' radius of site:			
Agricultural water wells within 1000' radius of site: 541' west			
Agricultural water wells within 1000' radius of site:			
Public water supply wells within 1000' radius of site: none			
Public water supply wells within 1000' radius of site:			
Depth from land surface to ground water (DG) ~40			
Depth of contamination (DC) - ?			
Depth to ground water (DG - DC = DtGW) - ?			
1. Ground Water		2. Wellhead Protection Area	
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		Wellhead Protection Area Score= 20	
Ground water Score = 20		Surface Water Score= 0	
Site Rank (1+2+3) = 40			
Total Site Ranking Score and Acceptable Concentrations			
Parameter	>19	10-19	0-9
Benzene ¹	10 ppm	10 ppm	10 ppm
BTEX ¹	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1000 ppm	5000 ppm
¹ 100 ppm field VOC headspace measurement may be substituted for lab analysis			

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 Paul Mulkey
Address 11525 West Carlsbad Highway Hobbs, New Mexico 88240	Telephone No. 505.397.5716
Facility Name Lateral NMG-180	Facility Type 6" Steel Pipeline

Surface Owner State of New Mexico	Mineral Owner	Lease No.
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LOCATION OF RELEASE

Unit Letter 20	Section 20	Township T19S	Range R37E	Feet from the	North/South Line	Feet from the	East/West Line	County: Lea Lat. 32 39' 01.457"N Lon. 103 16' 11.229"W
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NATURE OF RELEASE

Type of Release Natural Gas Pipeline Fluids	Volume of Release <20 bbls barrels	Volume Recovered 0 barrels
Source of Release 6" Steel Pipeline	Date and Hour of Occurrence unknown	Date and Hour of Discovery 2-28-03 @ 11:00 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Larry Johnson	
By Whom? Stan Shaver, DEFS	Date and Hour 2003-02-28 00:00:00	
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.*
Pipe repair clamp installed.

Describe Area Affected and Cleanup Action Taken.*
Site was delineated and remediated to the NMOCD Site Specific Remedial Goals: TPH 8015m = 100 mg/Kg, Benzene = 10 mg/Kg, and BTEX, i.e., the mass sum of Benzene, Ethyl Benzene, Toluene, and Xylenes = 50 mg/Kg. Refer to the attached report.

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: 	<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Paul Mulkey email: pdmulkey@duke-energy.com	Approved by District Supervisor:	
Title: Maintenance Construction Supervisor	Approval Date:	Expiration Date:
Date: January 12, 2004 Phone: 505.397.5716	Conditions of Approval:	Attached <input type="checkbox"/>

* Attach Additional Sheets If Necessary