



May 14, 2002

Mr. Steve Weathers  
Duke Energy Field Services, LP  
P. O. Box 5493  
Denver, Colorado 80217

1 RP-93  
10.19.05

Re: Removal of Hydrocarbon-Impacted Soils from the CC #9 site  
Township 20 South, Range 36 East, Section 25, Unit A

Dear Mr. Weathers:

Trident Environmental (Trident) was retained by Duke Energy Field Services, LP. (DEFS) to oversee the removal of hydrocarbon-impacted soil from an area along a pipeline right-of-way operated by DEFS near Monument, New Mexico in Lea County. The site (CC #9) is located in Section 25 (Unit A), Township 20 South, Range 36 East on property owned by Dale Cooper and managed by Clay Cooper. The location of the CC #9 site is shown on the topographic map in Attachment A. The work was conducted in accordance with the work plan submitted to the New Mexico Oil Conservation Division (OCD). Trident personnel periodically collected soil samples to characterize the extent of hydrocarbon-impact and to verify when cleanup target levels had been achieved. This letter report describes the methods and results of the excavation, sampling, waste disposition, and backfilling operations for documentation that closure requirements have been satisfied.

#### Excavation and Sampling Procedures

Walton Construction Company, Inc. (Hobbs, New Mexico) performed excavation. Walton Construction used one trackhoe, one dozer, one loader, and 12 yd<sup>3</sup> dump trucks for earthmoving services. An area was excavated where Mr. Cooper identified indications of hydrocarbon-impacted soils. During excavation operations, subsurface soil samples were collected and submitted to an analytical laboratory to characterize the approximate lateral and vertical extent of hydrocarbon-impacted soil in each area. Samples were collected by Trident with stainless steel trowels. Grab samples were collected from the floor and walls (north, south, east, and west), as specified in the site data form in Attachment A. During the course of excavation activities, samples were also collected for headspace analysis using an organic vapor meter (OVM), which was calibrated to assume a benzene response factor. All soil sampling, headspace analysis, and laboratory analysis were performed in accordance with OCD "Guidelines for Remediation of Leaks, Spills, and Releases" (August 13, 1993). Excavation operations were completed when laboratory analysis of collected samples indicated the extent of hydrocarbon-impacted soils remaining in the excavation were below the following concentrations:

- 100 milligrams per kilogram (mg/kg) of total petroleum hydrocarbons (TPH),
- 10 mg/kg benzene,
- 50 mg/kg total benzene, toluene, ethylbenzene, and xylenes (BTEX)

Soil samples were submitted to Environmental Laboratory of Texas (Odessa, Texas) and analyzed for gas and diesel range organics (GRO and DRO) using EPA Method 8015 to determine TPH concentrations. BTEX analyses were conducted only for the soil samples with OVM readings exceeding 100 ppm.

### Soil Stockpiling, Waste Disposition, and Backfilling

An effort to segregate clean versus impacted soil during excavation was made. Only hydrocarbon-impacted soil that exceeded 100 mg/kg GRO/DRO, 10 mg/kg benzene, and/or 50 mg/kg total BTEX was transported to the South Monument Landfarm. These target cleanup levels are based on the ranking criteria in the OCD "Guidelines for Remediation of Leaks, Spills, and Releases". A total ranking score of greater than 19 points was assumed since groundwater is less than 50 feet below ground surface based on landowner's claims and well records from the Office of the State Engineer.

Approximately 1,556 cubic yards of hydrocarbon-impacted soils were transported by Walton Construction to cell C-5 at the South Monument Landfarm, which is owned and operated by Ms. Kena Kay Cooper (OCD Rule 711 Permit Approval NM-01-0032). A completed *Release Notification and Corrective Action* (C-141) form is included in Attachment A.

Excavated soils below the remediation action levels and as agreed upon by Mr. Cooper were returned to the excavation after sampling and analysis verification. Also, native soil from adjacent sand dunes in the area was provided by Mr. Cooper and used as additional backfill in the excavation to restore the excavation to a level grade.

### Results

At the completion of excavation activities all areas had petroleum hydrocarbon concentrations below the OCD standards listed above, with the exception of the floor sample taken at a depth of 42 feet (GRO <10 mg/kg and DRO = 106 mg/kg) and the sample taken from the west wall of the main excavation and immediately adjacent to County Road 41 (GRO = 1080 mg/kg and DRO = 5120 mg/kg). The floor sample is considered to be close enough to the 100 mg/kg guideline to warrant no further excavation. In addition, there was a concern for safety in expediting backfilling operations and eliminate the traffic hazard of a relatively deep excavation adjacent to a much used oilfield traffic road. The west wall could not be excavated further to the west due to the presence of the county road. However, an excavation was conducted on the west side of the road to a depth of 13 feet directly beneath where the abandoned pipeline had been. A sample taken from the excavation floor on the west side of the road indicated GRO and DRO concentrations below the laboratory detection limit of 10 mg/kg. Soil sample locations are depicted on the Site Map in Attachment A. A summary of the analytical results and photo documentation are also provided in Attachment A. Laboratory analytical reports, and chain-of-custody documentation for the samples collected are provided in Attachment B. Copies of the field logbook are in Attachment C.

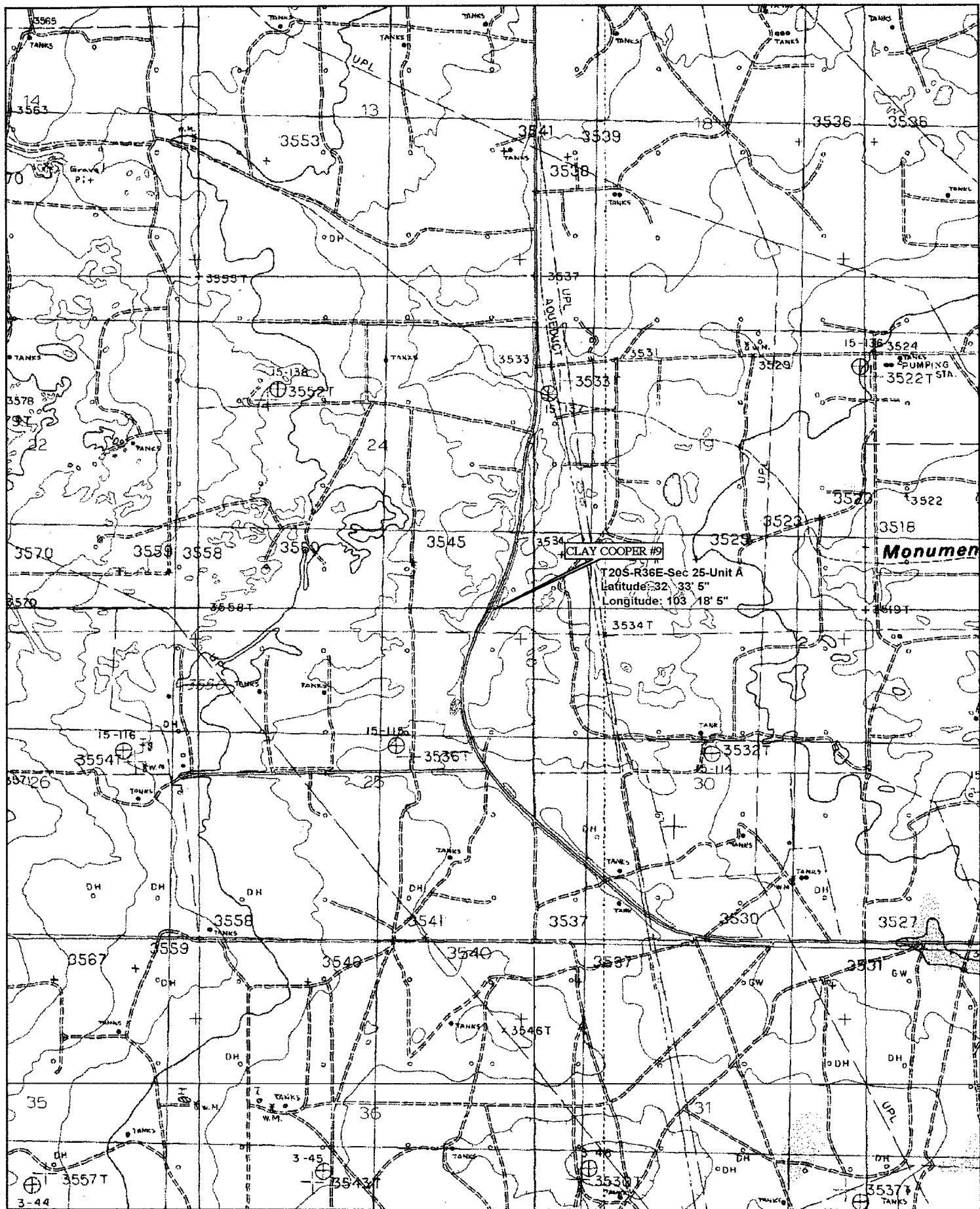
Sincerely,



Gilbert J. Van Deventer, REM  
Project Manager

Attachments

cc: Clay Cooper, landowner – Hobbs, NM





## Site Data Form

TRW Technician: GJV Excavation Crew Names: Walton Construction Site ID: Clay Cooper # 9  
Site Location: Latitude 32° 33' 5" N Longitude 103° 18' 5" W County: Lea State: New Mexico  
Township 20 South Range 36 East Section 25 Unit A  
Begin Excavation (Date/Time) 02/12/02 Complete Excavation (Date/Time) 02/28/02

LAND USE: ☐ Residential ☐ Recreational ☐ Farm land  
(Check all that apply) ☐ Industrial ☐ School/Daycare ☒ Range land  
☒ Oil & Gas ☐ Rural ☐ Other: \_\_\_\_\_

Depth to Groundwater: ☐ > 100 feet ☐ 50 - 99 ☒ < 50 feet  
Wellhead Protection Area: ☒ > 1,000 feet from a water source ☐ < 200 feet from private domestic water source  
Distance to Nearest Surface Water Body: ☒ > 1,000 feet ☐ 200 - 1,000 feet ☐ < 200 feet

SURFACE SOILS: ☒ Sand ☐ Gravel ☐ Silt  
☐ Caliche ☐ Clay ☒ Other Sandy silty clay at depth

EXCAVATION DIMENSIONS Length ~72 feet Width 45 feet Average Depth 20 - 42 feet Maximum Depth 42 feet

VOLUME EXCAVATED: ~3,000 yd<sup>3</sup> 9000 VOLUME HAULED TO LANDFARM: 1,556 yd<sup>3</sup>

### SUMMARY OF ANALYTICAL RESULTS

Sample ID (Depth)	Sample Type	Sample Date	OVm (ppm)	GRO (mg/kg)	DRO (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)
Floor-1 (20')	Grab	02-14-02	110	515	5160	<0.025	0.160	0.274	1.74
Floor-2 (38')	Grab	02-18-02	144	< 10	209	<0.025	<0.025	<0.025	0.046
Floor-3 (42')	Grab	02-20-02	29	< 10	106	-----	-----	-----	-----
S. Wall-1 (10')	Grab	02-14-02	151	192	3480	<0.025	<0.025	0.161	0.458
S. Wall-2 (12')	Grab	02-20-02	0	< 10	< 10	-----	-----	-----	-----
S. Wall-3 (25')	Grab	02-20-02	0	< 10	< 10	-----	-----	-----	-----
E. Wall-1 (10')	Grab	02-12-02	0	< 10	< 10	-----	-----	-----	-----
W. Wall-1 (10')	Grab	02-14-02	338	1080	5120	0.392	1.38	1.37	5.31
W. Side of Road Floor-1 (13')	Grab	02-20-02	1	< 10	< 10	-----	-----	-----	-----
N. Wall-1 (10')	Grab	02-14-02	5	< 10	< 10	-----	-----	-----	-----
Exc. Soil-1	Comp	02-14-02	199	287	2210	0.041	0.219	0.649	1.29
Backfill-1	Comp	02-14-02	2	< 10	< 10	-----	-----	-----	-----

Samples analyzed by Environmental Lab of Texas (Odessa, Texas) using EPA Method 8015M for Gas Range Organics (GRO) and Diesel Range Organics (DRO) and EPA Method 8021B for benzene, toluene, ethylbenzene, and xylenes.

----- Indicates sample not analyzed for this constituent.

Values in red indicate concentrations exceed Oil Conservation Division cleanup guidelines.

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 South First, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
2040 South Pacheco  
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 Inc.	Contact Mr. Steve Weathers
Address P. O. Box 5493, Denver, Colorado 80217	Telephone No. (303) 605-1718
Facility Name Site Name: CC #9	Facility Type Natural Gas Pipeline

Surface Owner Dale Cooper	Mineral Owner Unknown	Lease No.
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LOCATION OF RELEASE

Unit Letter A	Section 25	Township 20S	Range 36E	Feet from the North/South Line 32° 33' 5" N	Feet from the East/West Line 103° 18' 5" W	County Lea
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NATURE OF RELEASE

Type of Release Condensate	Volume of Release Unknown	Volume Recovered ~1,556 yd <sup>3</sup> soil removed
Source of Release Pipeline	Date and Hour of Occurrence Unknown	Date and Hour of Discovery Unknown
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? Paul Sheeley, NMOCD District 1	
By Whom? Steve Weathers	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.\*

N/A

Describe Cause of Problem and Remedial Action Taken.\*

Historical condensate release caused by subsurface external corrosion. 10" steel pipeline was removed in 1991, prior to initiation of excavation work. Removal of impacted soil requested by landowner (Clay Cooper).

Describe Area Affected and Cleanup Action Taken.\*

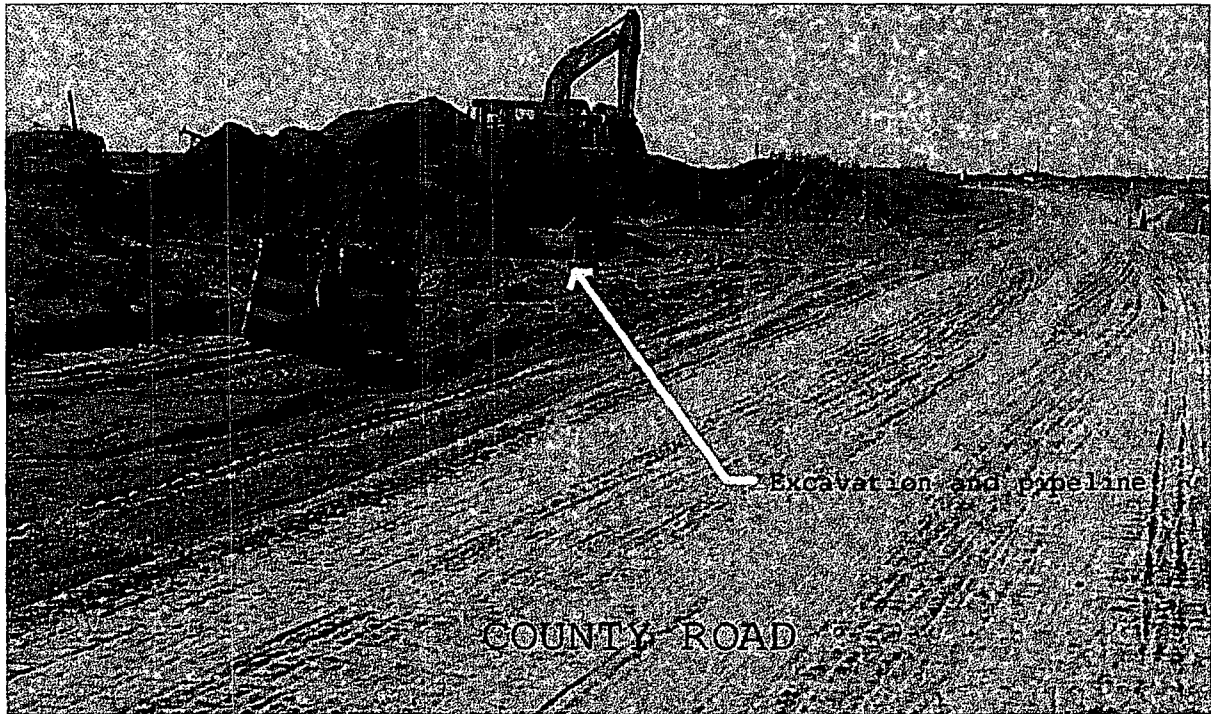
On 02/12/02 over-excavation was initiated. Excavation continued until 02/20/02. Final excavation dimensions were approx. ~45 ft wide x ~72 ft long x 12 -42 ft deep. Approximately 1,556 cu yds of soil was transported to cell C-5 at the South Monument Land Farm. Backfilling of excavation was completed on 02/28/02. Closure report, analytical results, photographs, and site map are attached.

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.

OIL CONSERVATION DIVISION

Signature:	Approved by District Supervisor:		
Printed Name: Stephen Weathers			
Title: Environmental Specialist	Approval Date:	Expiration Date:	
Date: Phone: (303) 605-1718	Conditions of Approval:	Attached <input type="checkbox"/>	

\* Attach Additional Sheets If Necessary

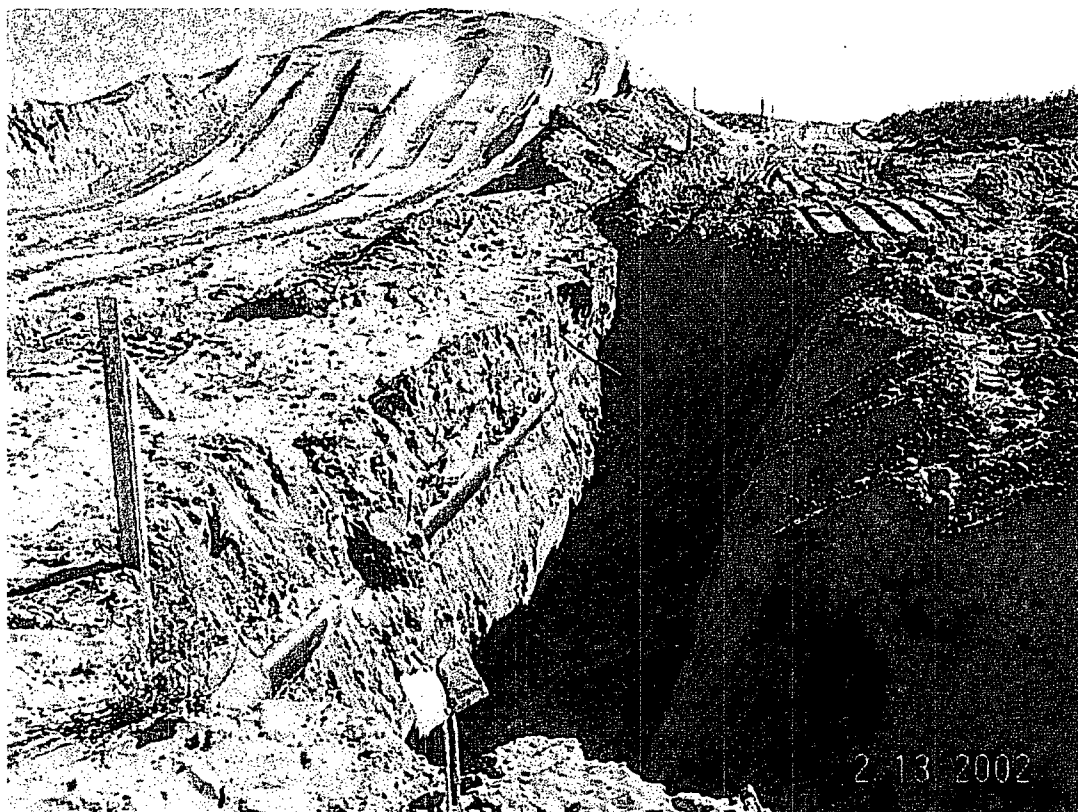


1 View (facing southwest) showing CC #9 excavation site and its proximity to County Road 41.

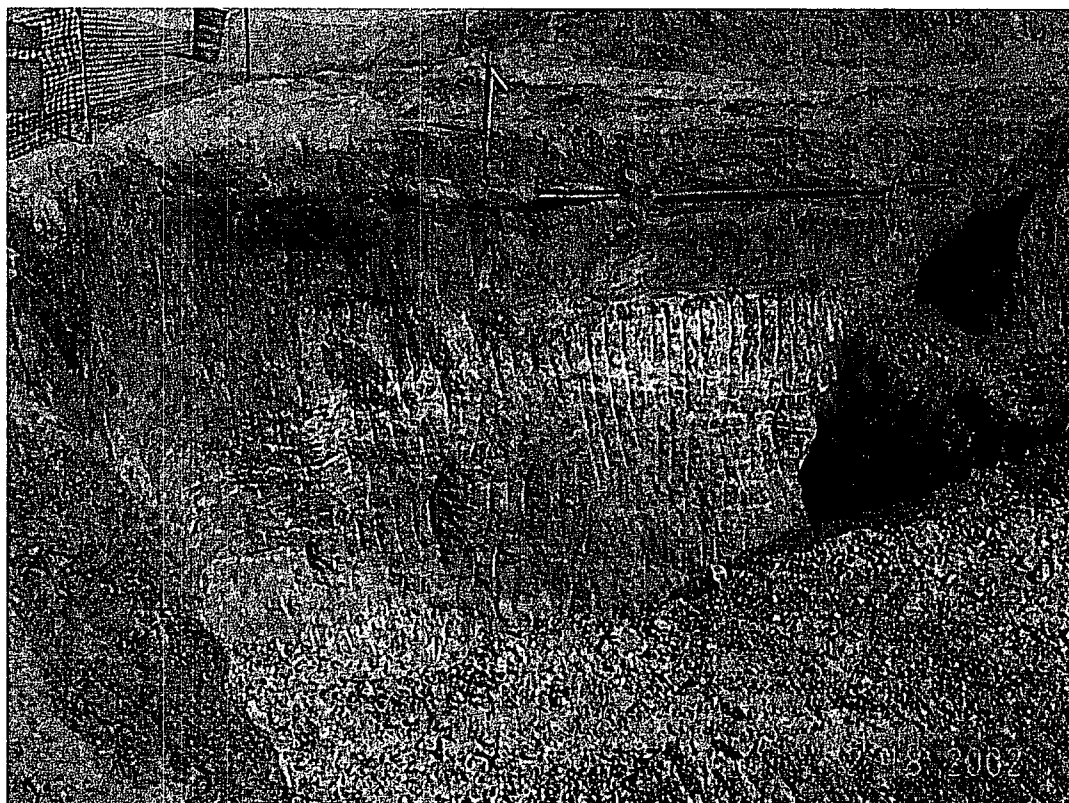


2 View facing west showing hydrocarbon-impacted soil beneath release point, where drip pot was located (center of photo). An abandoned steel pipeline (removed in 1991) was located directly above the drip pot. An active 10-inch polyethylene gas pipeline is located approx. 12 feet to the north (right side of photo) of the drip pot and abandoned pipeline.





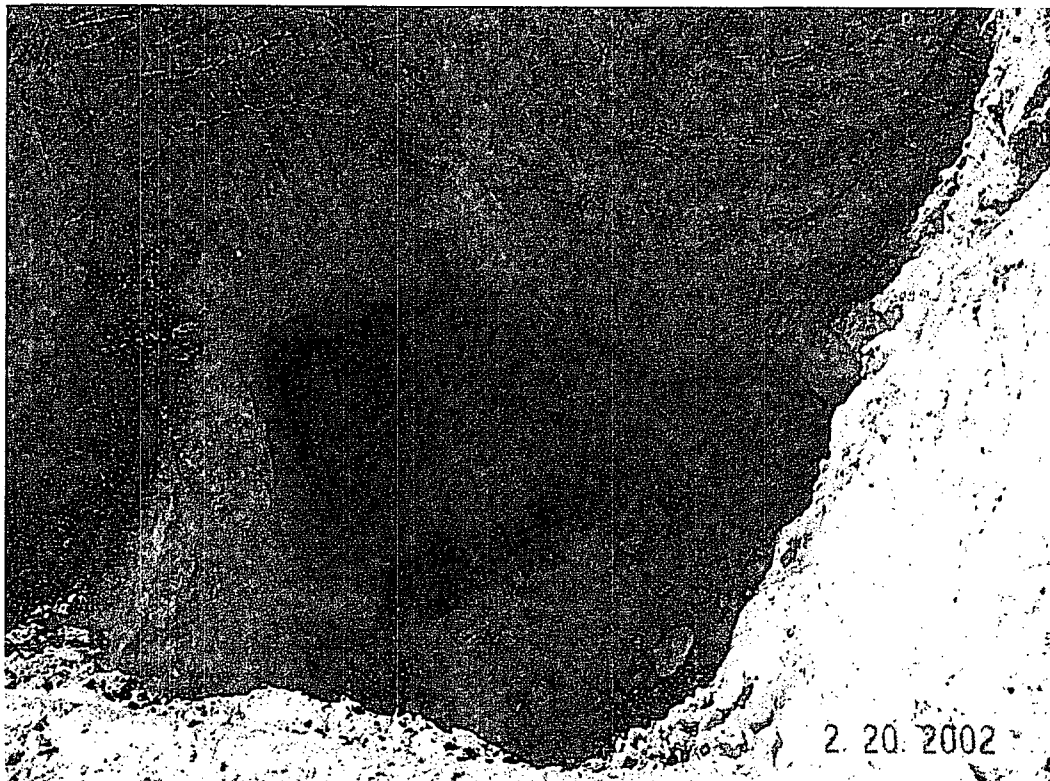
- 3 View facing east showing east end of excavation (center) and non-impacted stockpile (left background). The polyethylene 10-inch gas line to the left (north) of the excavation is in service.



- 4 View facing north showing the north wall beneath the active 10-inch polyethylene pipeline.

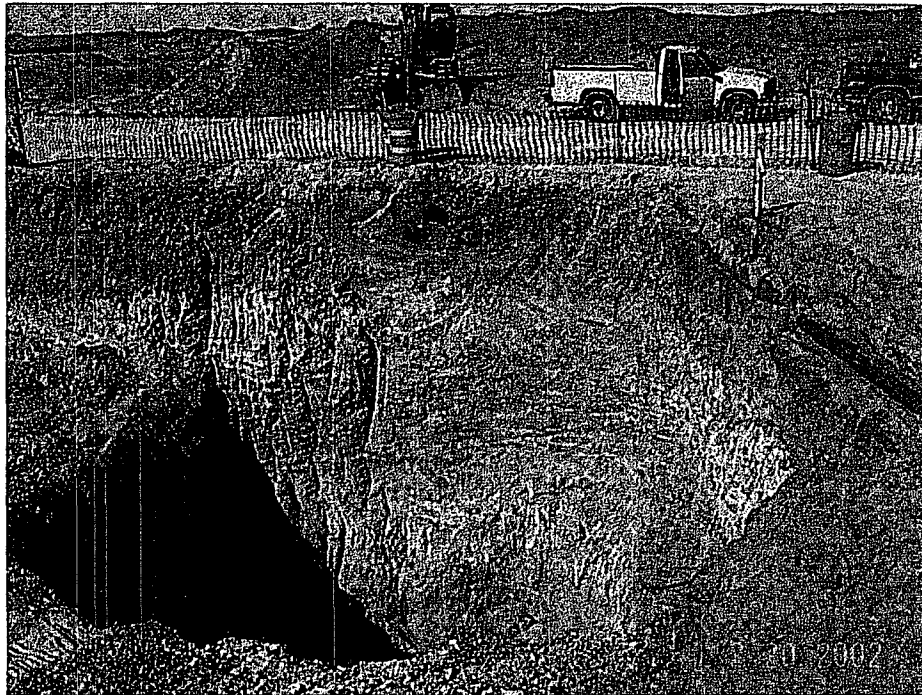


5 View facing southwest showing south side of main excavation at 12 feet depth. County Road 41 is in background (top of photo)

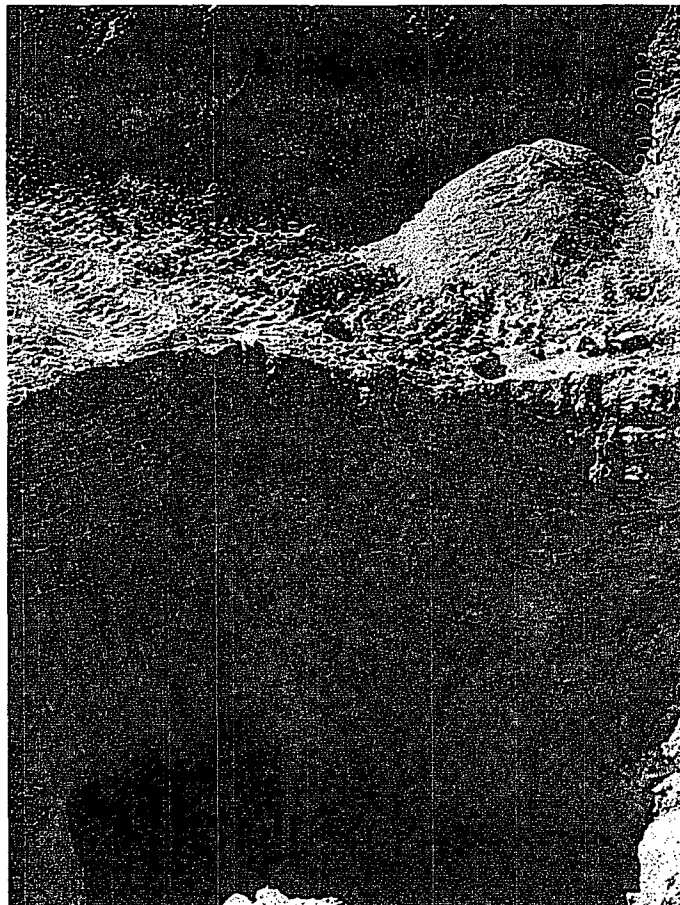


6 View facing southeast showing floor of excavation at maximum depth (42 feet).





- 7 View facing west showing west wall of main excavation at completion of excavation activities. Excavation activities on the west side of County Road 41 is shown in the background (top of photo)



- 8 View facing south showing south wall of excavation at maximum depth (42 feet).

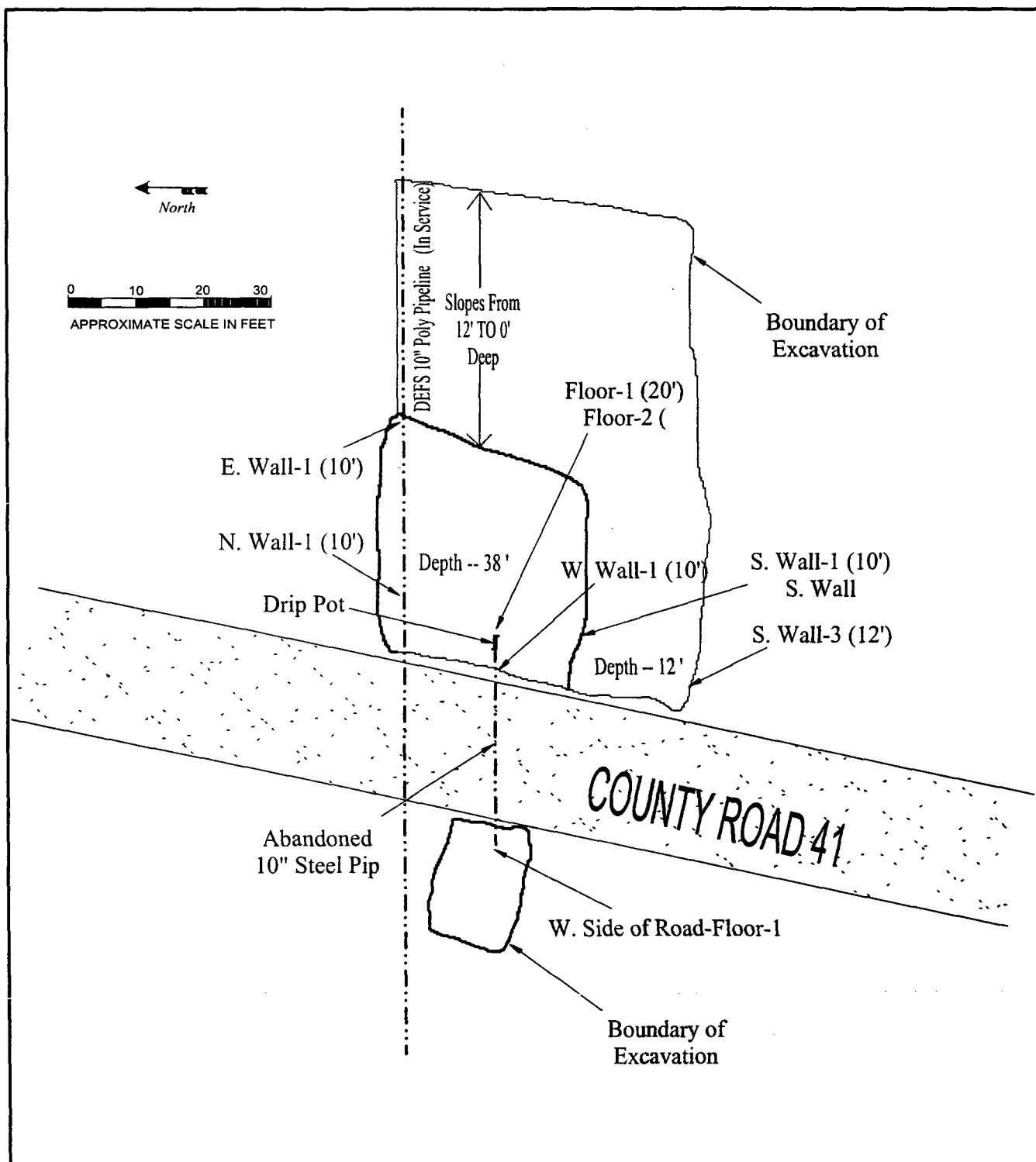
**ATTACHMENT A**

**TOPOGRAPHIC MAP**

**SITE DATA FORM**

**C-141 FORM**

**PHOTODOCUMENTATION**



SITE NAME: CLAY COOPER # 9

DATE: 02/28/02

REVISION NO.: 1

DRAWN BY: GJV

FILENAME: CC9.TCW

CHECKED BY: DTL

SCALE: 1 INCH = 20 FT

**SITE MAP**

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 South First, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
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Form C-141  
Revised March 17, 1999

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side of form

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OPERATOR

☐ Initial Report ☒ Final Report

Name of Company Duke Energy Field Services Inc.	Contact Mr. Steve Weathers	
Address P. O. Box 5493, Denver, Colorado 80217	Telephone No. (303) 605-1718	
Facility Name Site Name: CC #9	Facility Type Natural Gas Pipeline	
Surface Owner Dale Cooper	Mineral Owner Unknown	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	25	20S	36E		32° 33' 5" N		103° 18' 5" W	Lea

NATURE OF RELEASE

Type of Release Condensate	Volume of Release Unknown	Volume Recovered ~1,556 yd <sup>3</sup> soil removed
Source of Release Pipeline	Date and Hour of Occurrence Unknown	Date and Hour of Discovery Unknown
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? Paul Sheeley, NMOCD District 1	
By Whom? Steve Weathers	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	
If a Watercourse was Impacted, Describe Fully.* N/A		
Describe Cause of Problem and Remedial Action Taken.* Historical condensate release caused by subsurface external corrosion. 10" steel pipeline was removed in 1991, prior to initiation of excavation work. Removal of impacted soil requested by landowner (Clay Cooper).		
Describe Area Affected and Cleanup Action Taken.* On 02/12/02 over-excavation was initiated. Excavation continued until 02/20/02. Final excavation dimensions were approx. ~45 ft wide x ~72 ft long x 12 -42 ft deep. Approximately 1,556 cu yds of soil was transported to cell C-5 at the South Monument Land Farm. Backfilling of excavation was completed on 02/28/02. Closure report, analytical results, photographs, and site map are attached.		
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	
Printed Name: Stephen Weathers	Approved by District Supervisor:	
Title: Environmental Specialist	Approval Date:	Expiration Date:
Date:	Phone: (303) 605-1718	Conditions of Approval:
		Attached <input type="checkbox"/>

\* Attach Additional Sheets If Necessary

**ATTACHMENT B**

**LABORATORY ANALYTICAL REPORTS**

**AND**

**CHAIN-OF-CUSTODY DOCUMENTATION**

# ENVIRONMENTAL LAB OF I, LTD.

"Don't Treat Your Soil Like Dirt!"

TRIDENT ENVIRONMENTAL  
ATTN: GILBERT VAN DEVENTER  
P.O. BOX 7624  
MIDLAND, TEXAS 79708  
FAX: 682-0808

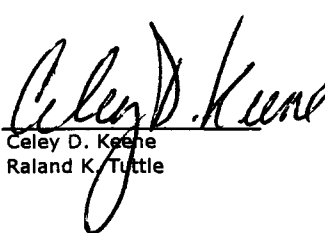
Sample Type: Soil  
Sample Condition: Intact/ Iced/ 2.0 deg C  
Project Name: Duke Energy Field Services  
Project #: V-106  
Project Location: CC#9

Sampling Date: 02/14/02  
Receiving Date: 02/14/02  
Analysis Date: 02/14/02

ELT#	FIELD CODE	GRO	DRO
		C6-C10 mg/kg	>C10-C28 mg/kg
0202603-01	Floor-1 (20')	515	5160
0202603-02	S. Wall-1 (10')	192	3480
0202603-03	W. Wall-1 (10')	1080	5120
0202603-04	N. Wall-1 (10')	<10	<10
0202603-05	Exc. Soil-1	287	2210
0202603-06	Backfill-1	<10	<10

QUALITY CONTROL	570	625
TRUE VALUE	500	500
% INSTRUMENT ACCURACY	114	125
SPIKED AMOUNT	500	500
ORIGINAL SAMPLE	<10	<10
SPIKE	531	591
SPIKE DUP	520	580
% EXTRACTION ACCURACY	104	116
BLANK	<10	<10
RPD	2.09	1.88

Methods: SW 846-8015M

  
Celey D. Keene  
Randall K. Tuttle

02/15/02  
Date



# ENVIRONMENTAL LAB OF I, LTD.

"Don't Treat Your Soil Like Dirt!"

TRIDENT ENVIRONMENTAL  
ATTN: GILBERT VAN DEVENTER  
P.O. BOX 7624  
MIDLAND, TEXAS 79708  
FAX: 682-0808


Sample Type: Soil  
Sample Condition: Intact/ Iced/ 2.0 deg C  
Project Name: Duke Energy Field Services  
Project #: V-106  
Project Location: CC #9

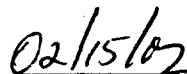
Sampling Date: 02/14/02  
Receiving Date: 02/14/02  
Analysis Date: 02/14/02

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
0202603-01	Floor-1 (20')	<0.025	0.160	0.274	1.74	0.270
0202603-02	S. Wall-1 (10')	<0.025	<0.025	0.161	0.458	0.138
0202603-03	W. Wall-1 (10')	0.392	1.38	1.37	5.31	0.528
0202603-05	Exc. Soil-1	0.041	0.219	0.649	1.29	0.265

QUALITY CONTROL	0.111	0.115	0.109	0.227	0.102
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% INSTRUMENT ACCURACY	111	115	109	114	102
SPIKED AMOUNT	0.100	0.100	0.100	0.200	0.100
ORIGINAL SAMPLE	0.041	0.219	0.649	1.29	0.265
SPIKE	0.116	0.122	0.139	0.279	0.120
SPIKE DUP	0.116	0.117	0.142	0.285	0.127
% EXTRACTION ACCURACY	114	113	113	114	109
BLANK	<0.025	<0.025	<0.025	<0.025	<0.025
RPD	0.00	4.18	2.14	2.13	5.67

METHODS: EPA SW 846-8021B ,5030

  
Celey D. Keene  
Raland K. Tuttle

  
Date

38 306

## Chain of Custody

Date 2-13-02 Page 1 of 1

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0202 603-

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Copy signed original form for Trident Environmental records

\* Rush 8015 only

# ENVIRONMENTAL LAB OF I, LTD.

"Don't Treat Your Soil Like Dirt!"

TRIDENT ENVIRONMENTAL  
ATTN: GILBERT VAN DEVENTER  
P.O. BOX 7624  
MIDLAND, TEXAS 79708  
FAX: 682-0808

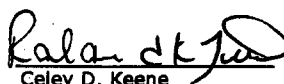
Sample Type: Soil  
Sample Condition: Intact/ Iced/ 4.0 deg C  
Project Name: Duke Energy Field Services  
Project #: V-106  
Project Location: CC#9

Sampling Date: See Below  
Receiving Date: 02/18/02  
Analysis Date: 02/18/02

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg	SAMPLE DATE
0202622-01	E. Wall-1 (10')	<10	<10	02/12/02
0202622-02	Floor-2 (38')	<10	209	02/18/02

QUALITY CONTROL	477	550
TRUE VALUE	500	500
% INSTRUMENT ACCURACY	95	110
SPIKED AMOUNT	476	476
ORIGINAL SAMPLE	<10	<10
SPIKE	593	644
SPIKE DUP	563	598
% EXTRACTION ACCURACY	118	126
BLANK	<10	<10
RPD	5.19	7.41

Methods: SW 846-8015M

  
Celey D. Keene  
Raland K. Tuttle

2-19-02  
Date

# ENVIRONMENTAL LAB OF I, LTD.

"Don't Treat Your Soil Like Dirt!"

TRIDENT ENVIRONMENTAL  
ATTN: GILBERT VAN DEVENTER  
P.O. BOX 7624  
MIDLAND, TEXAS 79706  
FAX: 682-0727

Sample Type: Soil  
Sample Condition: Intact/ Iced/ 4.0 deg C  
Project Name: Duke Energy Field Services  
Project #: V-106  
Project Location: CC #9

Sampling Date: 02/18/02  
Receiving Date: 02/18/02  
Analysis Date: 02/18/02

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
0202622-02	Floor-2 (38')	<0.025	<0.025	<0.025	0.046	<0.025

QUALITY CONTROL	0.091	0.094	0.086	0.186	0.086
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% INSTRUMENT ACCURACY	91	94	86	93	86
SPIKED AMOUNT	0.100	0.100	0.100	0.200	0.100
ORIGINAL SAMPLE	<0.025	<0.025	<0.025	<0.025	<0.025
SPIKE	0.092	0.096	0.093	0.201	0.091
SPIKE DUP	0.088	0.092	0.089	0.192	0.088
% EXTRACTION ACCURACY	92	96	93	100	91
BLANK	<0.025	<0.025	<0.025	<0.025	<0.025
RPD	4.44	4.26	4.40	4.58	3.35

METHODS: EPA SW 846-8021B ,5030

  
Celey D. Keene  
Raland K. Tuttle

2-19-02  
Date

**Phone: 915-563-1800**  
**Fax: 915-563-1713**

### CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

**Project Manager:**

Gil Van Deventer

**Company Name**

## Trident Environmental

**Company Address:**

PO Box 7624

City/State/Zip:

Midland, Tx 79706

**Telephone No:**

915 7682-0808

**Fax No:**

915-682-0727

**Sampler Signature:**

15/000-0000  
K. L. R. R.

**Project Name:**

Duke Energy Field Sur,

Project #:

V-106

Project Loc:

C C # G

PO #:

[illegible]

# ENVIRONMENTAL LAB OF I, LTD.

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ATTN: GILBERT VAN DEVENTER  
P.O. BOX 7624  
MIDLAND, TEXAS 79708  
FAX: 682-0808

Sample Type: Soil  
Sample Condition: Intact/ Iced/ 3.5 deg C  
Project Name: Duke Energy Field Services  
Project #: V-106  
Project Location: CC#9

Sampling Date: 02/20/02  
Receiving Date: 02/20/02  
Analysis Date: 02/20/02

ELT#	FIELD CODE	GRO	DRO
		C6-C10 mg/kg	>C10-C28 mg/kg
0202638-01	West Side of Road-Floor-1 (13')	<10	<10
0202638-02	S. Wall-2 (25')	<10	<10
0202638-03	S. Wall-3 (12')	<10	<10
QUALITY CONTROL		463	530
TRUE VALUE		500	500
% INSTRUMENT ACCURACY		93	106
SPIKED AMOUNT		476	476
ORIGINAL SAMPLE		<10	<10
SPIKE		515	603
SPIKE DUP		536	587
% EXTRACTION ACCURACY		113	123
BLANK		<10	<10
RPD		4.00	2.69

Methods: SW 846-8015M

  
Celey D. Keene  
Randall K. Tuttle

  
Date





# ANALYTICAL REPORT

## Prepared for:

GILBERT VAN DEVENTER  
TRIDENT ENVIRONMENTAL  
P.O. BOX 7624  
MIDLAND, TX 79708

Project: Duke Energy Field Services

Order#: G0202643

Report Date: 02/27/2002

## Certificates

US EPA Laboratory Code TX00158

# ENVIRONMENTAL LAB OF TEXAS

## SAMPLE WORK LIST

TRIDENT ENVIRONMENTAL  
P.O. BOX 7624  
MIDLAND, TX 79708  
915-682-0727

Order#: G0202643  
Project: V-106  
Project Name: Duke Energy Field Services  
Location: CC#9

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u> <u>Collected</u>	<u>Date / Time</u> <u>Received</u>	<u>Container</u>	<u>Preservative</u>
0202643-01	Floor-3 (42')	SOIL	02/20/2002 9:30	02/21/2002 10:25	4 oz glass	Ice
<u>Lab Testing:</u>		Rejected: No	Temp: 3.5 C			
8015M TPH GRO/DRO						

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

GILBERT VAN DEVENTER  
TRIDENT ENVIRONMENTAL  
P.O. BOX 7624  
MIDLAND, TX 79708

Order#: G0202643  
Project: V-106  
Project Name: Duke Energy Field Services  
Location: CC#9

Lab ID: 0202643-01  
Sample ID: Floor-3 (42')

### 8015M TPH GRO/DRO

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
0000701-02		02/24/2002 14:32	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	< 10.0	10.0
DRO, >C12-C28	106	10.0

Approval:

Raland K. Tuttle, Lab Director, QA Officer  
Celey D. Keene, Org. Tech. Director  
Jeanne McMurrey, Inorg. Tech. Director  
Irene Perry, QA Assistant  
Sandra Biezugbe, Lab Tech.  
Curt Cowdrey, Lab Tech.  
Sara Molina, Lab Tech.

Date

2-27-02

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

8015M TPH GRO/DRO

Order#: G0202643

<b>BLANK</b>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0000701-02			<10		
DRO, >C12-C28-mg/kg	0000701-02			<10		
<b>MS</b>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0202645-01	0	480	530	111.1%	
DRO, >C12-C28-mg/kg	0202645-01	0	480	550	115.1%	
<b>MSD</b>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0202645-01	0	480	520	108.6%	2.3%
DRO, >C12-C28-mg/kg	0202645-01	0	480	560	116.6%	1.3%
<b>SRM</b>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0000701-05		500	480	97.%	0.%
DRO, >C12-C28-mg/kg	0000701-05		500	470	94.8%	0.%





**ATTACHMENT C**

**FIELD BOOK NOTES**

2-12-02

Objective: Begin excavation of site located adjacent to county road.

Weather: (clear, cool (50's), breezy  
Personnel/Equipment  
Mike Neasley Tractor  
2 Dozers with operators

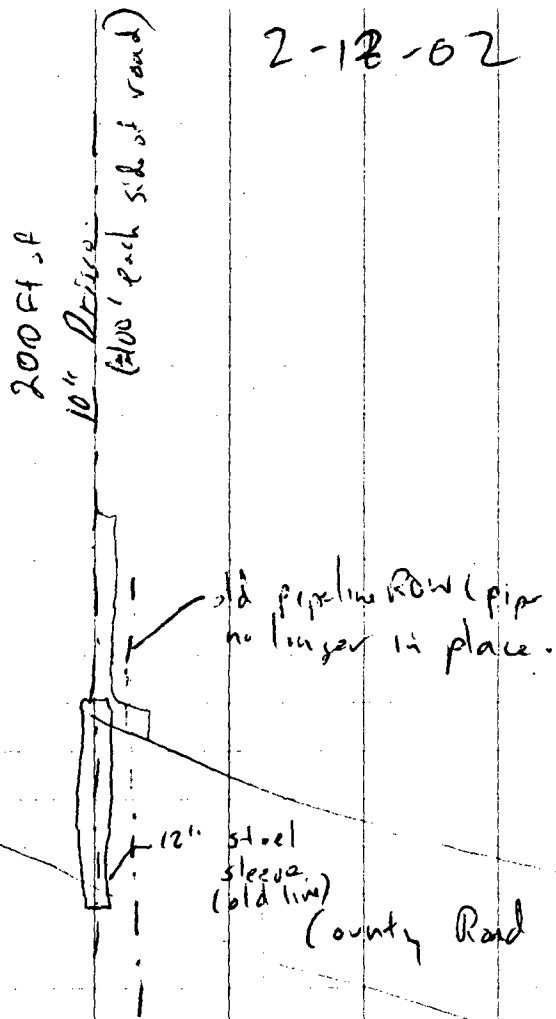
Roy

Dozers had to push sand dunes back to make room for stockpiling and access.

Did a little excavation along 10" Drisco DEFS pipeline from road (ditch) towards east. No other pipelines in area where we are working. One R. & O. operating line a ways north per Roy.

County is doing road work (watering, blading, compacting, etc). Jim Jones works for Lea County Road Dept.

2-12-02



2-12-02

Concentrated on digging small area near road (west end). East end looks very clean all the way to the pipeline marker where 10" Dmsco connects to 12" steel.

Another line used to be adjacent to the existing DEFS pipeline (south) but was removed — yrs ago.

At first we thought we found a remnant of old pipeline but it turned out to be a "drip pot" and was the apparent source of some localized contamination. The "drip pot" is a short (~6 ft) section of 12" steel pipe used to collect liquids and periodically was drained.

2-13-02

CC#9

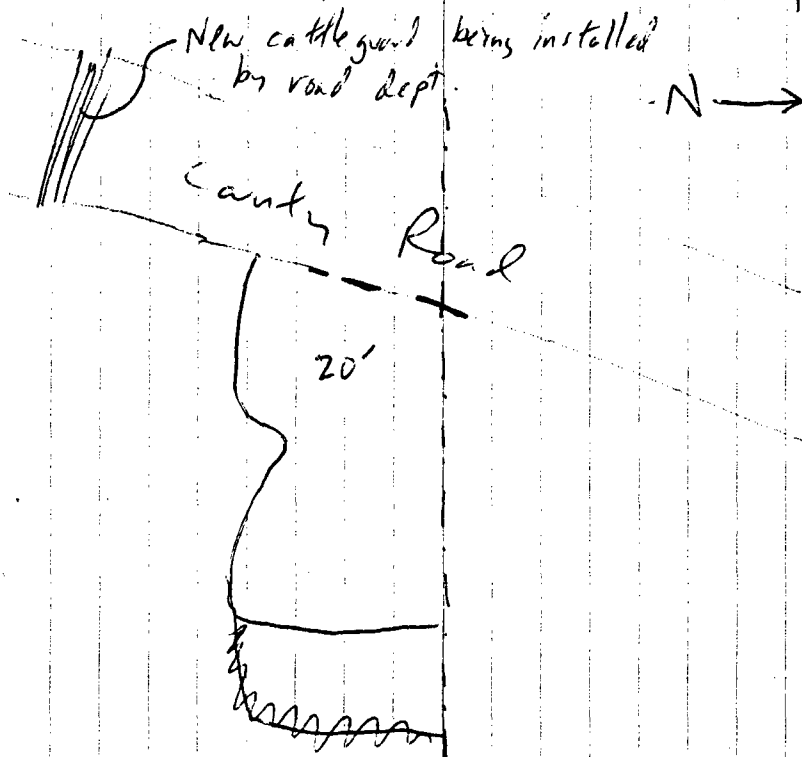
Excavated a bit more around drip pot, Contamination appears localized to drip pot area and extends toward road.

County road dept. suggested DEFS lower the pipeline where it crosses the road. I notified Stan Shawer of this & he made a site visit to discuss with road dept.

Should be ready to collect some samples tomorrow. Took photos.

2-14-02

CC#9



2-14-02

CC#9

Collected samples from floor (20')  
and 3 walls (south, west, & north)  
midway down (10' bgs).

Sample ID	Time	OVM
* Floor-1 (20')	1320	110
* S.Wall-1 (10')	1324	151
W.Wall-1 (10')	1336	338
N.Wall-1 (10')	1345	5
Exc Soil	1353	199
Backfill-1	1400	2

Delivered samples to lab (Env. Lab of TX)  
\* requested rush analysis (8015 only)

2-15-02

CC#9

Called in to Mike w/ Walter to  
give him analytical results and  
instructed him to continue excavating  
south wall and deeper.

Mike said he would have to spend  
some time on the track line to  
build a shield on south side to  
be able to get deeper. Won't  
be ready to sample anything  
until Monday.

2-18-02

3:00pm Back on site to collect floor  
sample at 33' bgs  
Paul Shalay & Larry Johnson with  
OCD also drove up on site at  
same time.

~~OVM Calib record:~~

~~OVM read 86 ppm w/ span gas (100  
ppm isobutylene) so re-calibrated  
instrument to read 100 ppm with  
span gas.~~

2-18-02 CCH9

0900-1100 Drive Miland to CCH9

1100 ~~to~~ Stopped by CCH9 site to check on status. Mole is about 30' bgs and might be clean at that depth. There is a lens of hydrocarbon stained soil about 2' thick above a bed of caliche (about the 25-27' level bgs). Instructed Mole to dig out more of the south wall & to the 30' depth level. Will be back later to sample it they're ready.

Left CCH9 site to go OCM at Linam Ranch Plant

3:00 pm back on site to collect floor sample at 38' bgs

Paul Sheeley & Larry Johnson (NM OGD) also drove up on site at same time.

They observed excavation & scrap pipe (from drip pot).

2-18-02

OVM calibration record:  
Before calibration 100 ppm isobutylene span gas measured 86 ppm. ~~At~~  
After calibration it read 100 ppm.

Collected floor sample ~~at~~ at 2:20 pm MST

Floor-2 (38') OVM = 144 ppm

At first Paul Sheeley suggested that he would require us to excavate under the road but said he would be satisfied if we dug a trench along the west side of the road and sampled there.

Still needs excavation along south



2-20-02 C#9

Crew excavated south wall for floor  
excavated hole to 42' bgs. and  
also excavated on west side of  
road, directly below abandoned  
12" steel pipeline

Collected samples

Wt	Time	OVM
Floor-3 (42')	0930	29
W. Road-Floor-1 (13')	1000	1
S. Wall-2 (25')	1030	0
S. Wall-3 (12')	1040	0

OVM measured 99 ppm with calibration  
gas (100 ppm isobutylene) before and  
after sample measurements. Good calibration

0 12 25 46

2-20-02

