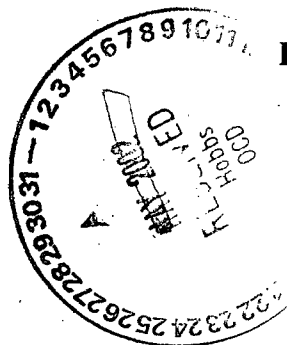


**Clay Cooper #10 Closure Report
Duke Energy Field Services
Lea County, New Mexico**

MAY 20, 2002

Prepared For:

**Duke Energy Field Services
P. O. Box 5493
Denver, CO 80217**



*1 RP - 2005
10.24.05*

Site Name:

CLAY COOPER #10 (CC#10)

Site Location:

T20S, R36 E, SECTION 26, UNIT A

Prepared By:



**PO Box 7624
Midland, Texas 79708**



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor
Betty Rivera
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

October 23, 2002

Duke Energy Field Services, LP (DEFS)
Attn: Stephen Weathers
POB 5493
Denver, CO 80217

Re: Spill Site Closure Approval for Duke Energy Field Services, LP
Clay Cooper #9: UL-A, Sec 25-T20S-R36E. Dated: May 14, 2002
Clay Cooper #10: UL-A, Sec 26-T20S-R36E Dated: May 20, 2002
Clay Cooper #12: UL-D, Sec 25-T20S-R36E. Dated: September 30, 2002
Clay Cooper #13: UL-D, Sec 25-T20S-R36E. Dated: September 9, 2002

Dear Mr. Weathers,

The Spill Site Closure Reports referenced above and submitted to the New Mexico Oil Conservation Division (OCD) by Trident Environmental for DEFS are hereby approved.

Please be advised that OCD approval of this plan does not relieve DEFS of liability should their operations fail to adequately investigate and remediate contaminants that threaten ground water, surface water, human health or the environment. In addition, OCD approval does not relieve DEFS of responsibility for compliance with any other federal, state, or local laws and/or regulations.

If you have any questions or need assistance please write or call: (505) 393-6161, ext. 113, or e-mail: psheeley@state.nm.us

Sincerely,

A handwritten signature in black ink, appearing to read "Paul Sheeley".

Paul Sheeley-Environmental Engineer

Cc: Roger Anderson - Environmental Bureau Chief
Chris Williams - District I Supervisor
William Olson - OCD Hydrologist
Larry Johnson - Environmental Engineer



May 20, 2002

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

Re: Removal of Hydrocarbon-Impacted Soils from the CC #10 site
Township 20 South, Range 36 East, Section 26, 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 #10) is located in Section 26 (Unit A), Township 20 South, Range 36 East on property owned by Dale Cooper and managed by Clay Cooper. The location of the CC #10 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 yd³ 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.

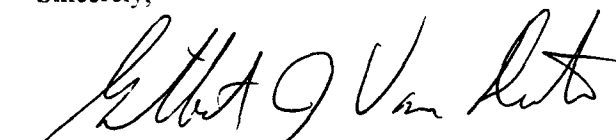
Approximately ^{1620'}540 cubic yards of hydrocarbon-impacted soils were transported by Walton Construction to cell C-5 at the South Monument Landfarm, which is owned and operated by Ms. Kena Kay Cooper (OCD Rule 711 Permit Approval NM-01-0032). A completed *Release Notification and Corrective Action* (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. 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

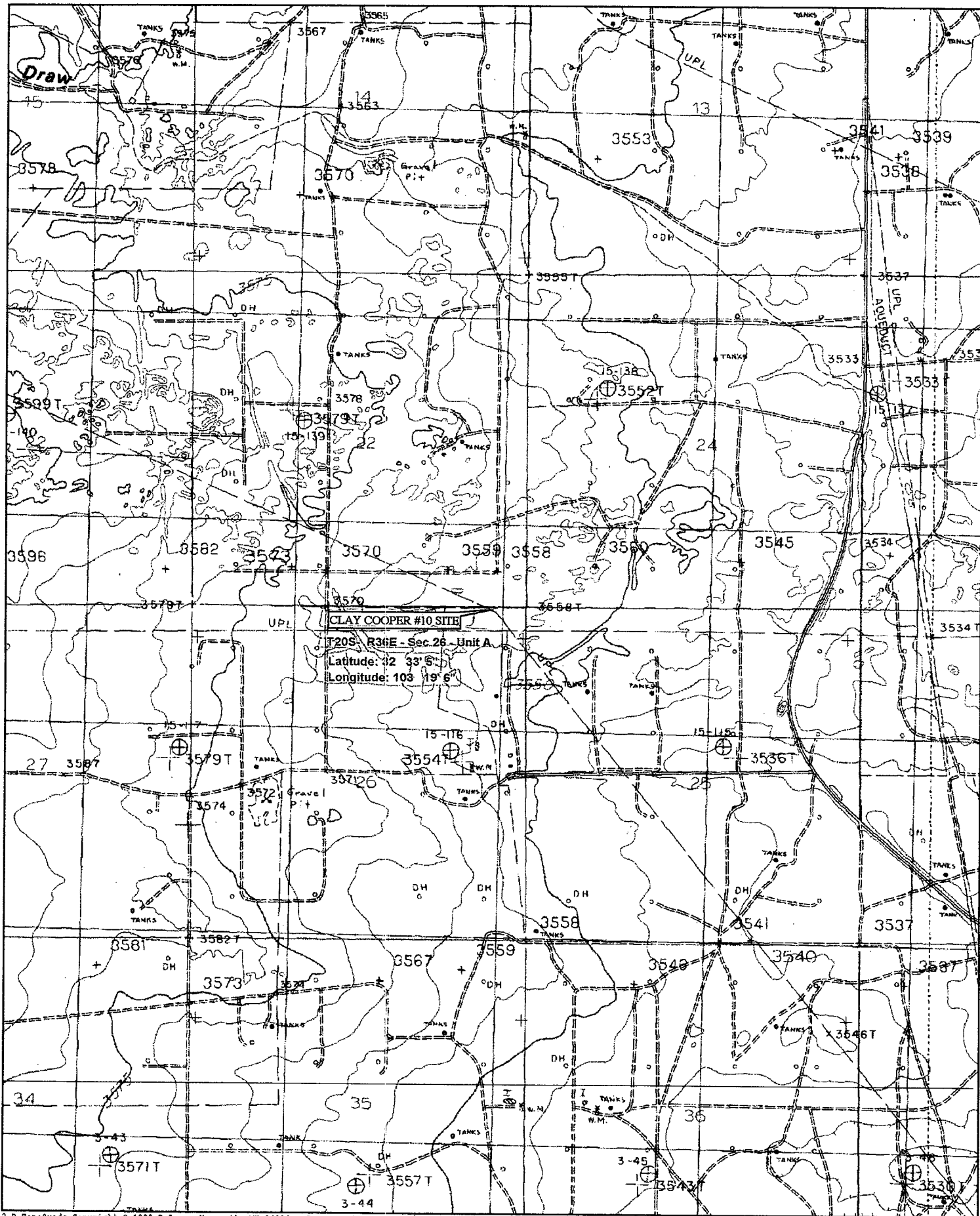
ATTACHMENT A

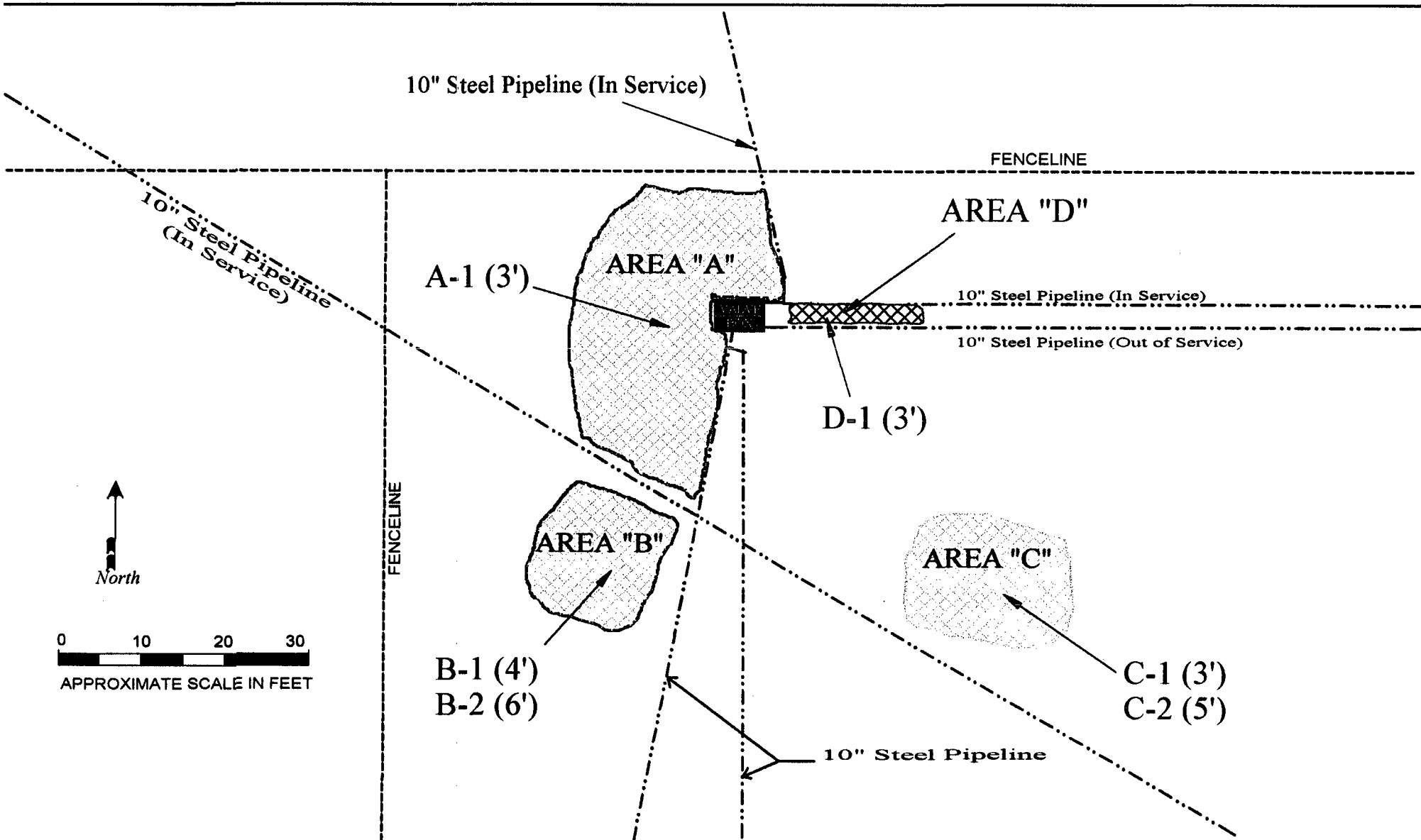
TOPOGRAPHIC MAP

SITE DATA FORM

C-141 FORM

PHOTODOCUMENTATION





SITE NAME: CLAY COOPER # 10

DATE: 03/13/02

REVISION NO.: 1

DRAWN BY: GJV

FILENAME: CC10.TCW

CHECKED BY: DTL

SCALE: 1 INCH = 20 FT

SITE MAP



Site Data Form

TRW Technician: GJV Excavation Crew Names: Walton Construction Site ID: Clay Cooper # 10
Site Location: Latitude 32° 33' 5" N Longitude 103° 19' 6" W County: Lea State: New Mexico
Township 20 South Range 36 East Section 26 Unit A
Begin Excavation (Date/Time) 03/07/02 Complete Excavation (Date/Time) 03/13/02

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 10-40 feet Width 4-20 feet Average Depth 3-6 feet Maximum Depth 6 feet

VOLUME EXCAVATED: ~1,000 yd³ 2000 VOLUME HAULED TO LANDFARM: 540 yd³

SUMMARY OF ANALYTICAL RESULTS

A-1 (3')	Grab	03-07-02	0.00	< 10	< 10
B-1 (4')	Grab	03-07-02	0.00	< 10	405
B-2 (6')	Grab	03-13-02	0.00	< 10	< 10
C-1 (3')	Grab	03-07-02	0.00	< 10	376
C-2 (5')	Grab	03-13-02	0.00	< 10	< 10
D-1 (3')	Grab	03-07-02	0.00	< 10	17.7
Exc. Soil-1	Comp	03-07-02	0.00	< 10	1110
Backfill-1	Comp	03-07-02	0.00	< 10	35.6

Samples analyzed by Environmental Lab of Texas (Odessa, Texas) using EPA Method 8015M for Gas Range Organics (GRO) and Diesel Range Organics (DRO).
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 #10	Facility Type Natural Gas Pipeline	
Surface Owner Dale Cooper	Mineral Owner Unknown	Lease No.

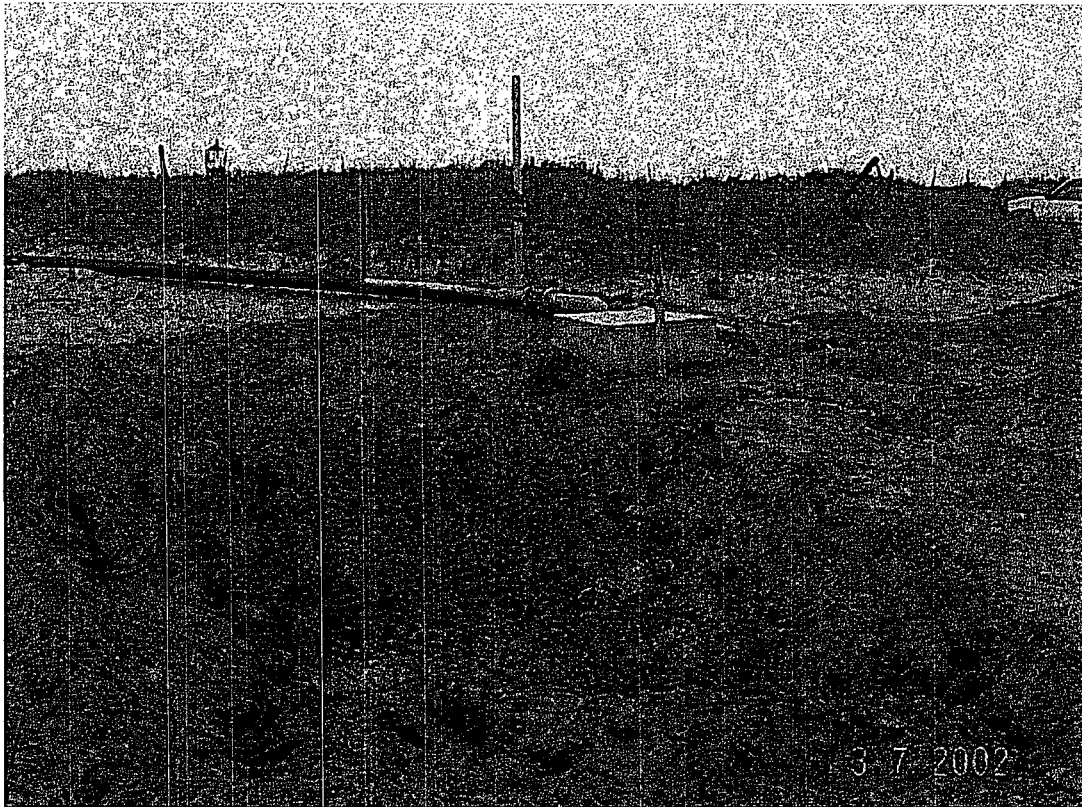
LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the North/South Line	Feet from the East/West Line	County
A	26	20S	36E	32° 33' 5" N	103° 19' 6" W	Lea

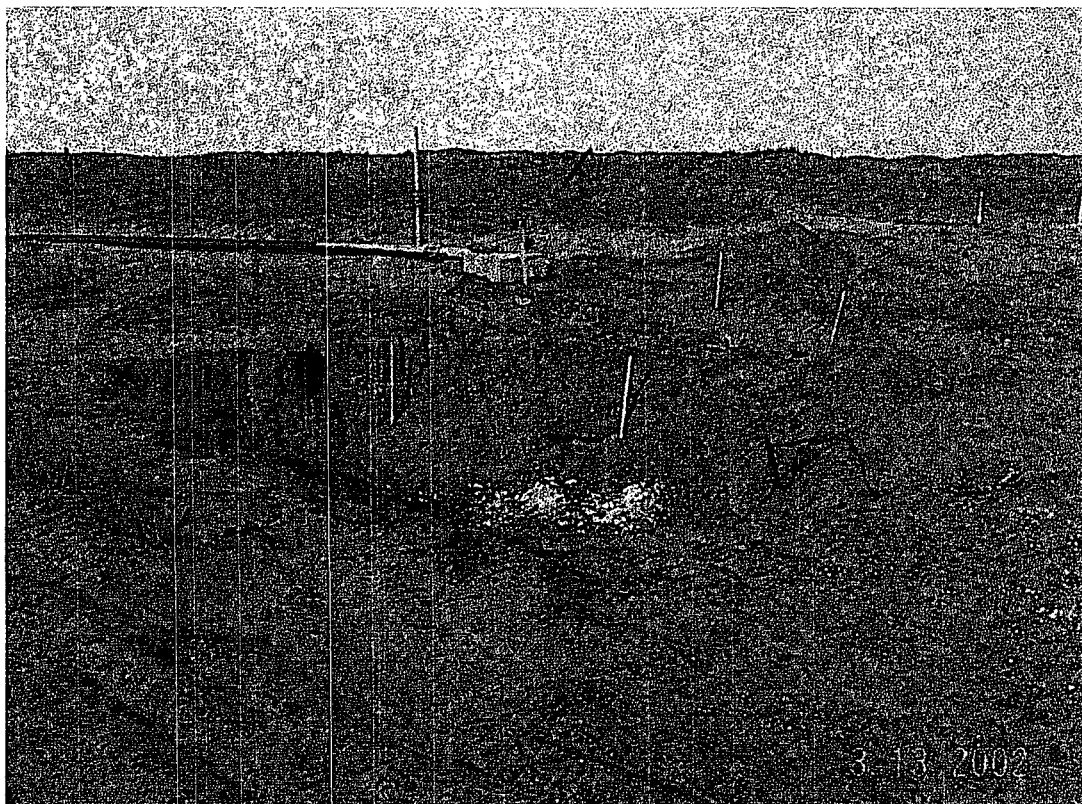
NATURE OF RELEASE

Type of Release Condensate	Volume of Release Unknown	Volume Recovered ~560 yd ³ 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. Removal of impacted soil requested by landowner (Clay Cooper).		
Describe Area Affected and Cleanup Action Taken.* On 03/07/02 over-excavation was initiated. Excavation continued until 03/13/02. The five separate excavations were relatively shallow (3 ft to 6 ft) and measured approx. 4 ft-20 ft wide by 10 ft-40 ft long. Approximately 540 cu yds of soil was transported to cell C-5 at the South Monument Land Farm. Backfilling of excavation was completed on 03/14/02. 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 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"/>

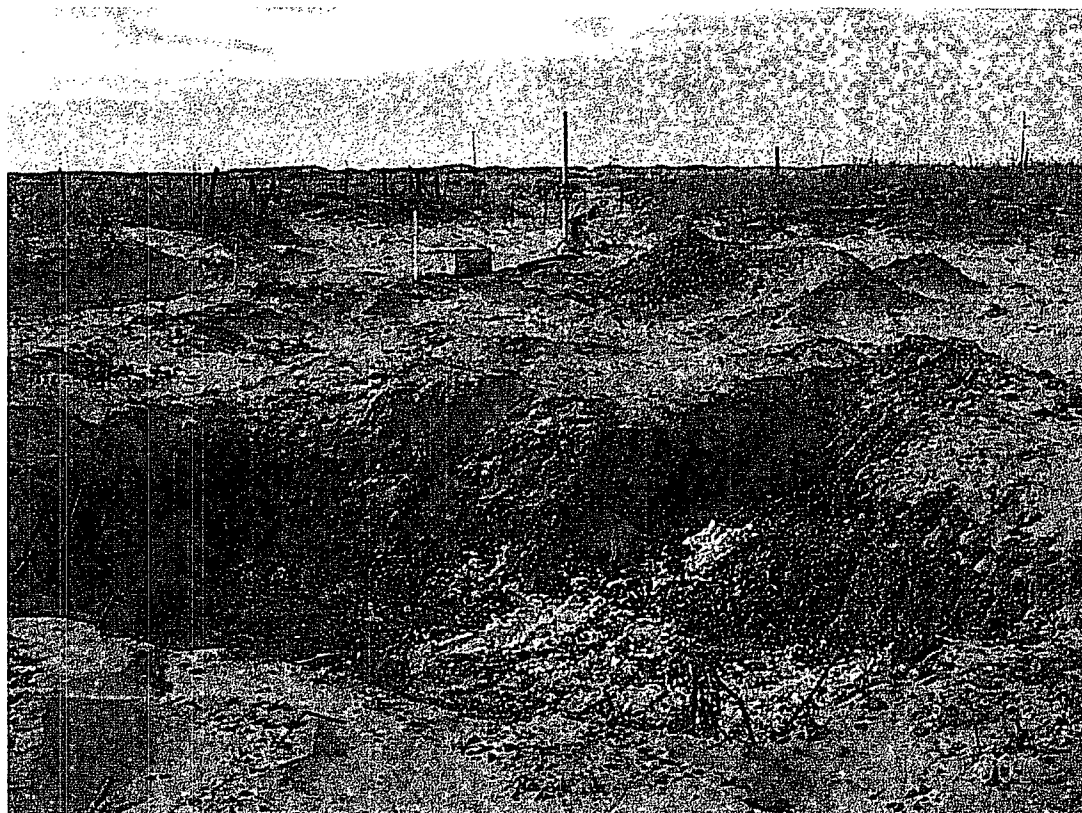
* Attach Additional Sheets If Necessary



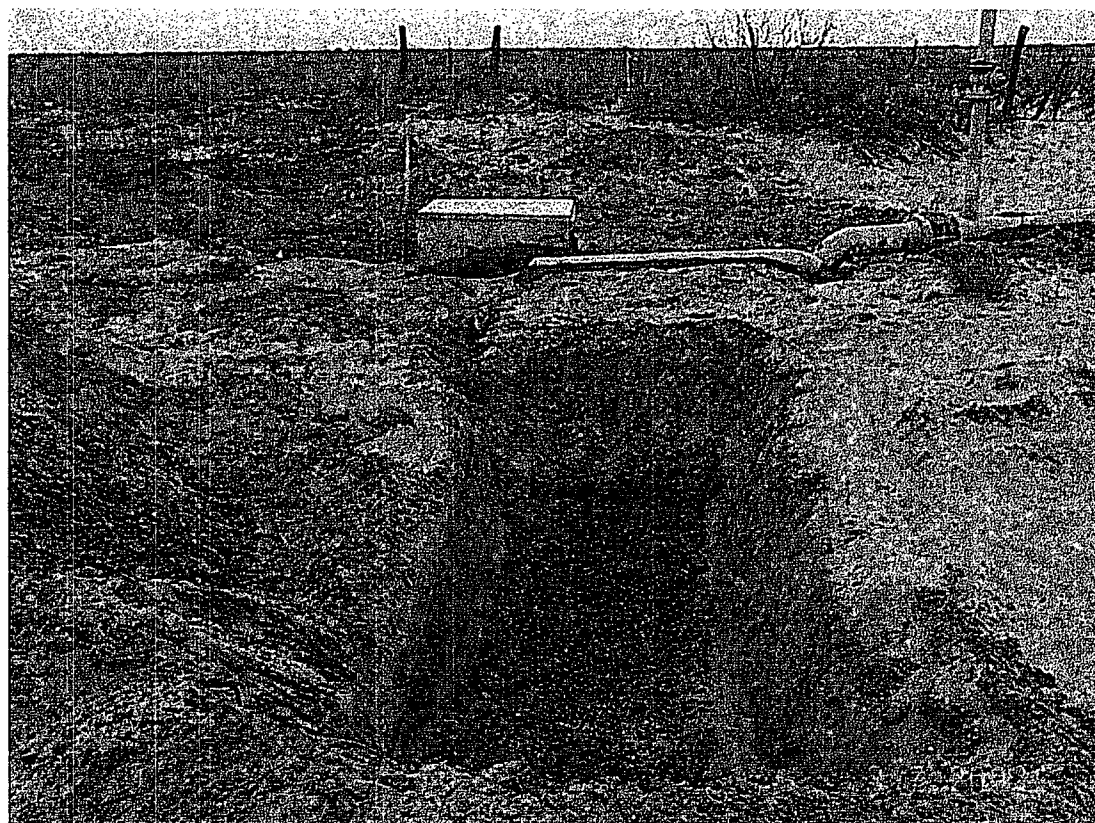
1 View (facing northeast) showing "Area A" (~3 ft depth) at completion of excavation activities.



2 View (facing northeast) showing "Area B" (~6 ft depth) at completion of excavation activities.



3 View (facing northwest) showing "Area C" (~5 ft depth) at completion of excavation activities.



4 View (facing northeast) showing "Area D" (~3 ft depth) at completion of excavation activities.

ATTACHMENT B

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

ANALYTICAL REPORT

Prepared for:

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

Project: Duke Energy Field Services
Order#: G0202763
Report Date: 03/13/2002

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#: G0202763
Project:
Project Name: Duke Energy Field Services
Location: CC#10

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>
0202763-01	A (3')	SOIL	03/07/2002 13:30	03/07/2002 17:20	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 4 C		
	8015M TPH GRO/DRO					
0202763-02	B (4')	SOIL	03/07/2002 13:35	03/07/2002 17:20	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 4 C		
	8015M TPH GRO/DRO					
0202763-03	C (3')	SOIL	03/07/2002 13:40	03/07/2002 17:20	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 4 C		
	8015M TPH GRO/DRO					
0202763-04	D (3')	SOIL	03/07/2002 13:45	03/07/2002 17:20	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 4 C		
	8015M TPH GRO/DRO					
0202763-05	Exc. Soil-1	SOIL	03/07/2002 13:50	03/07/2002 17:20	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 4 C		
	8015M TPH GRO/DRO					
	8021B/5030 BTEX					
0202763-06	Backfill-1	SOIL	03/07/2002 13:55	03/07/2002 17:20	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 4 C		
	8015M TPH GRO/DRO					

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0202763
Project:
Project Name: Duke Energy Field Services
Location: CC#10

Lab ID: 0202763-01

Sample ID: A (3')

8015M TPH GRO/DRO

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>		
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>	<u>Analyst</u>	<u>Method</u>
		03/11/2002	1	1	CK	8015M

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

Lab ID: 0202763-02

Sample ID: B (4')

8015M TPH GRO/DRO

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>		
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>	<u>Analyst</u>	<u>Method</u>
		03/11/2002	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C28	405	10.0
Total C6-C28	405	10.0

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0202763
Project:
Project Name: Duke Energy Field Services
Location: CC#10

Lab ID: 0202763-03

Sample ID: C (3')

8015M TPH GRO/DRO

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>	<u>Analyst</u>	<u>Method</u>
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		03/11/2002	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C28	376	10.0
Total C6-C28	376	10.0

Lab ID: 0202763-04

Sample ID: D (3')

8015M TPH GRO/DRO

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>	<u>Analyst</u>	<u>Method</u>
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		03/11/2002	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C28	17.7	10.0
Total C6-C28	17.7	10.0

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0202763
Project:
Project Name: Duke Energy Field Services
Location: CC#10

Lab ID: 0202763-05

Sample ID: Exc. Soil-1

8015M TPH GRO/DRO

Method	Date	Date	Sample	Dilution		
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>	<u>Analyst</u>	<u>Method</u>
		03/11/2002	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C28	1110	10.0
Total C6-C28	1110	10.0

8021B/5030 BTEX

Method	Date	Date	Sample	Dilution		
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>	<u>Analyst</u>	<u>Method</u>
0000830-02		03/13/2002 14:03	1	1	CK	8021B

Parameter	Result µg/kg	RL
Benzene	<25.0	25.0
Ethylbenzene	<25.0	25.0
Toluene	<25.0	25.0
p/m-Xylene	<25.0	25.0
o-Xylene	<25.0	25.0

Lab ID: 0202763-06

Sample ID: Backfill-1

8015M TPH GRO/DRO

Method	Date	Date	Sample	Dilution		
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>	<u>Analyst</u>	<u>Method</u>
		03/11/2002	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C28	35.6	10.0
Total C6-C28	35.6	10.0

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

Page 3 of 4

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0202763
Project:
Project Name: Duke Energy Field Services
Location: CC#10

Approval:

Raland K. Tuttle, Lab Director, QA Officer

Date

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.

Raland K. Tuttle 3-13-02

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M TPH GRO/DRO

Order#: G0202763

BLANK	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total C6-C28-mg/kg	0000838-02			<10.0		
MS	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total C6-C28-mg/kg	0202763-04	17.7	952	857	88.2%	
MSD	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total C6-C28-mg/kg	0202763-04	17.7	952	1150	118.9%	29.2%
SRM	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total C6-C28-mg/kg	0000838-05		1000	1023	102.3%	0.0%

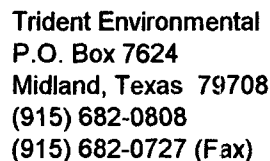
ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0202763

BLANK	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg	0000830-02			<25.0		
Ethylbenzene-µg/kg	0000830-02			<25.0		
Toluene-µg/kg	0000830-02			<25.0		
p/m-Xylene-µg/kg	0000830-02			<25.0		
o-Xylene-µg/kg	0000830-02			<25.0		
MS	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg	0202753-01	0	100	111	111.%	
Ethylbenzene-µg/kg	0202753-01	0	100	114	114.%	
Toluene-µg/kg	0202753-01	0	100	113	113.%	
p/m-Xylene-µg/kg	0202753-01	0	200	230	115.%	
o-Xylene-µg/kg	0202753-01	0	100	113	113.%	
MSD	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg	0202753-01	0	100	108	108.%	2.7%
Ethylbenzene-µg/kg	0202753-01	0	100	110	110.%	3.6%
Toluene-µg/kg	0202753-01	0	100	110	110.%	2.7%
p/m-Xylene-µg/kg	0202753-01	0	200	225	112.5%	2.2%
o-Xylene-µg/kg	0202753-01	0	100	109	109.%	3.6%
SRM	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg	0000830-05		100	111	111.%	0.0%
Ethylbenzene-µg/kg	0000830-05		100	113	113.%	0.0%
Toluene-µg/kg	0000830-05		100	113	113.%	0.0%
p/m-Xylene-µg/kg	0000830-05		200	228	114.%	0.0%
o-Xylene-µg/kg	0000830-05		100	113	113.%	0.0%



Chain of Custody

[illegible]

Copy signed original form for Trident Environmental records

ANALYTICAL REPORT

Prepared for:

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

Project: Duke Energy Field Services

Order#: G0202834

Report Date: 03/19/2002

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#: G0202834
Project:
Project Name: Duke Energy Field Services
Location: CC #10

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>
0202834-01	B-2 (6')	SOIL	03/13/2002 13:55	03/14/2002 14:42	4 oz glass	Ice
<u>Lab Testing:</u>		Rejected: No	Temp: 3.0 C			
8015M TPH GRO/DRO						
0202834-02	C-2 (5')	SOIL	03/13/2002 14:00	03/14/2002 14:42	4 oz glass	Ice
<u>Lab Testing:</u>		Rejected: No	Temp: 3.0 C			
8015M TPH GRO/DRO						

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0202834
Project:
Project Name: Duke Energy Field Services
Location: CC #10

Lab ID: 0202834-01
Sample ID: B-2 (6')

8015M TPH GRO/DRO

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		03/15/2002 19:33	1	1	CK	8015

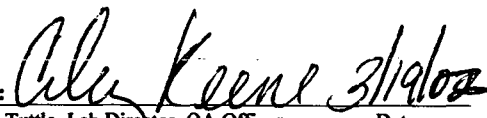
Parameter	Result mg/kg	RL
GRO, C6-C12	<10	10.0
DRO, >C12-C28	<10	10.0
Total C6-C28	<10	10.0

Lab ID: 0202834-02
Sample ID: C-2 (5')

8015M TPH GRO/DRO

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		03/15/2002 19:44	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	<10	10.0
DRO, >C12-C28	<10	10.0
Total C6-C28	<10	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.

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M TPH GRO/DRO

Order#: G0202834

BLANK	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total C6-C28-mg/kg	0000904-02			<10		
MS	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total C6-C28-mg/kg	0202817-02	0	952	947	99.5%	
MSD	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total C6-C28-mg/kg	0202817-02	0	952	982	103.2%	3.6%
SRM	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total C6-C28-mg/kg	0000904-05		1000	872	87.2%	0.0%

ATTACHMENT C

FIELD BOOK NOTES

3-7-02

CC#10

Collected samples from
four areas that were
excavated to ~ 3-4' bgs

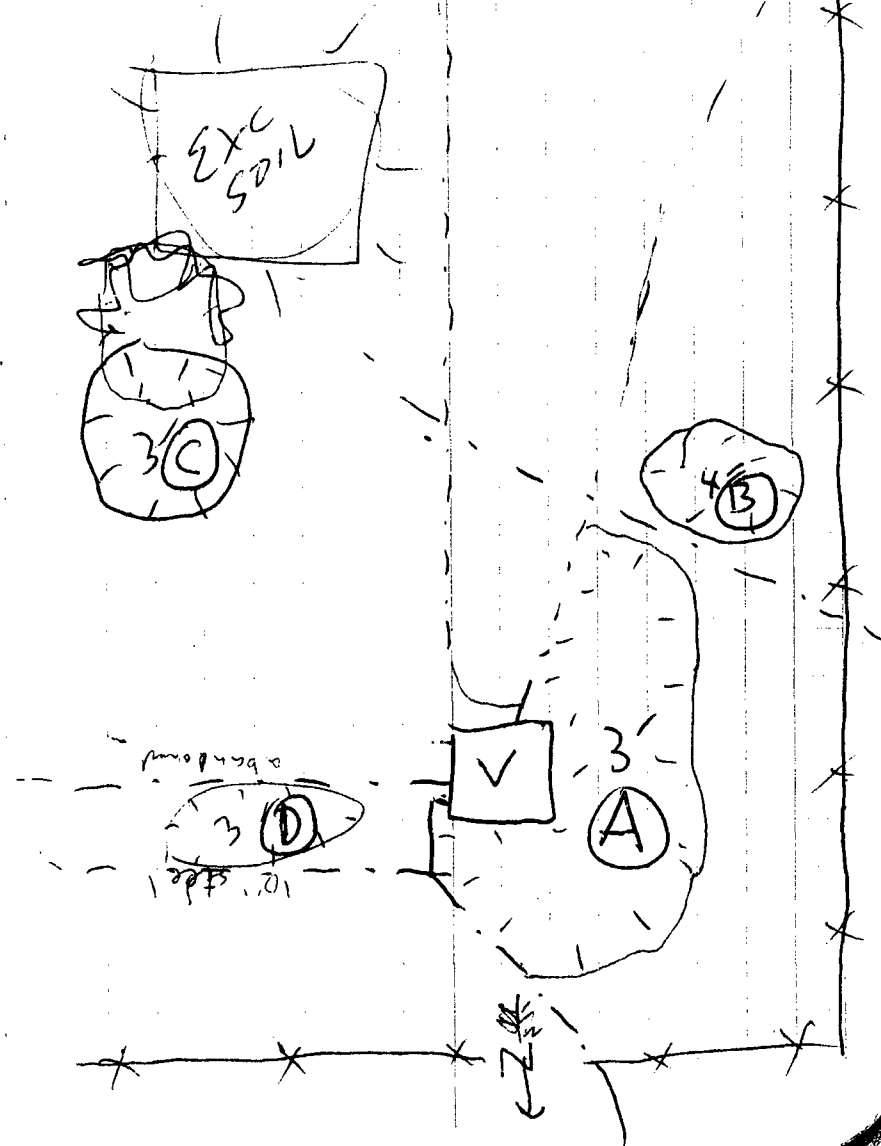
Sample ID	Time	OUM
A (3')	1330	0
B (4')	1335	0
C (3')	1340	0
D (3')	1345	0
Exc-Soil-1	1350	0
BF-1	1355	0

Called Paul Staley in morning (twice)
about sampling at CC#10. Paul
said he would likely come out to
site. called again to say site
looks clean so probably will
be fine sample even if
indeed clean.

OUM calibration. Instrument
read 99 ppm w/ 100 ppm calibration
gas (iso butylene)
Paul Sheeley did not show up while I
He stopped by later. was on site.

3-7-02

CC#10



3-13-02 CC#10

Collected deeper samples from
areas B & C as follows:

Sample ID	Time	DJM
B-2(6')	1555	0.00
C-2(5')	1600	0.00

DJM calibration, instrument read 100 ppm
with 100 ppm calibration gas

45 loads to cell C-5
loads

1	3-11-02
18	3-12-02
15	3-13-02
17	3-14-02
<u>45</u>	

540 yd³



March 1, 2002

Mr. Paul Sheeley
New Mexico Oil Conservation Division
1625 North French Drive
Hobbs, New Mexico 88240

Re: Work Plan for Removal of Hydrocarbon-Impacted Soils along Pipeline right-of-way operated by Duke Energy Field Services near Monument, New Mexico (Clay Cooper #10 site)

Dear Mr. Sheeley:

Trident Environmental (Trident) was retained by Duke Energy Field Services, LP (DEFS) to prepare this work plan for the removal of hydrocarbon-impacted soil at one location (Clay Cooper #10 site) along the pipeline right-of-way operated by DEFS near Monument, New Mexico in Lea County. The purpose of this work plan is to develop procedures that meet the requirements of the landowner (Mr. Clay Cooper), New Mexico Oil Conservation Division (OCD), and DEFS. Walton Construction Co., Inc. (Walton) will perform the soil excavation and transport the soil to the South Monument Surface Waste Facility L.L.C. owned and operated by Ms. Kena Kay Cooper. Walton will be responsible for contacting the New Mexico One Call for all line location requests. Trident Environmental personnel will also periodically collect soil samples to characterize the extent of hydrocarbon-impact and advise DEFS when cleanup target levels have been achieved where practicable.

Site Location

The latitude, longitude, and legal coordinates with relevant to this work plan are described below:

Site Name	Latitude	Longitude	Township-Range-Section-UL
Clay Cooper No.10	32° 33' 5"	103° 19' 6"	T20S-R36E-S26-Unit A

Soil Sampling Procedures

During excavation operations, subsurface soil samples will be collected and submitted to an analytical laboratory to characterize the approximate lateral and vertical extent of hydrocarbon-impacted soil at each site. Samples will be collected by Trident with stainless steel trowels and/or hand augers. During the course of excavation activities, samples will also be collected for headspace analysis using an organic vapor meter (OVM), which will be calibrated to assume a benzene response factor. The headspace analysis will be used as guidance for continuation or cessation of excavation activities. All soil sampling, headspace analysis, and laboratory analysis will be performed in accordance with OCD "Guidelines for Remediation of Leaks, Spills, and Releases" (August 13, 1993). Excavation operations will cease when laboratory analysis of collected samples indicates the extent of hydrocarbon-impacted soils remaining in the excavation is 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)

Upon completion of excavation activities, closure samples will be collected as follows:

- A minimum of one grab sample collected along each wall (north, south, east and west sides) in closest proximity to the location with the highest OVM reading and/or the location where most staining/pooling has been observed.
- A minimum of one grab sample will be collected from the floor of the excavation in closest proximity to the location with the highest OVM reading and/or the location where most staining/pooling has been observed.

Soil samples submitted to the laboratory shall be analyzed for gas and diesel range organics (GRO and DRO) using EPA Method 8015 to determine TPH concentrations. Samples with OVM readings above 100 ppm will also be analyzed for BTEX using EPA Method 8021B.

Soil Stockpiling and Backfilling

An effort to segregate clean versus impacted soil during excavation will be made. Only hydrocarbon-impacted soil that exceeds 100 mg/kg TPH, 10 mg/kg benzene, and/or 50 mg/kg total BTEX will be 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 is assumed since groundwater is reportedly less than 50 feet below ground surface. Any excavated soils below the remediation action levels may be returned to the excavation after sampling and analysis verification. Mr. Clay Cooper will provide nonhydrocarbon-impacted native soil and it will be used as additional backfill in the excavation until the original grade of the excavated site is restored as practicable.

Recordkeeping and Waste Disposition

A field logbook and photographs will also be used to record work related activities. Site data forms that will document pertinent information (Attachment A) will be completed for each site. The site data forms will include:

- Date and time of arrival/departure
- Site location (unit letter, section, township, range, and latitude/longitude)
- Site map (excavated area, sample locations, and pertinent structures)
- OVM readings (sample screening)
- Depth and areal extent of excavation (explanation and site sketch)
- Volume of excavated soil in cubic yards
- Comments (weather, visitors, crew names)
- Copy of notes from field book

Mr. Paul Sheeley
New Mexico Oil Conservation Division
February 6, 2002

Hydrocarbon-impacted soils will be transported to the South Monument land farm. A Generator Certificate of Waste Status form (C-143) and laboratory analytical reports will accompany the excavated soil as required by the landfarm permit.

A letter report will be prepared by Trident Environmental describing the excavation procedures, sample methods, analytical results, and supporting documentation (site data forms, C-141 and C-143 forms, laboratory analytical reports, and photodocumentation). The letter report will be submitted to the District OCD office along with a request from DEFS for no further action.

If you find the procedures proposed in this work plan acceptable please acknowledge your approval verbally followed with written backup at your convenience. Work is scheduled to begin on March 5, 2002. DEFS and Trident look forward to working with the OCD in getting closure to the affected site. Please feel free to contact Mr. Steve Weathers (DEFS) at (303) 605-1718 or myself at (915) 682-0808 if you have any questions.

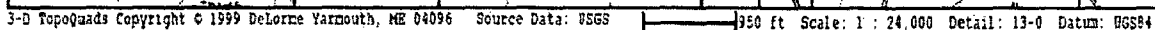
Sincerely,

Gilbert J. Van Deventer, REM
Project Manager

Attachments

xc: Steve Weathers, DEFS - Denver, CO
Clay Cooper, landowner – Hobbs, NM

D:\DUKE\CC10WORKPLAN.DOC



May 28, 2002

Mr. Paul Sheeley
New Mexico Oil Conservation Division
1625 N. French Drive
Hobbs, New Mexico 88240

RE: CC#9 and #10 Spill Site Closure Reports
Duke Energy Field Services, LP
Lea County, NM

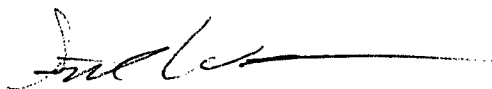
Mr. Sheeley:

Enclosed please find for your review, one copy of the Clay Cooper # 9 and Clay Cooper #10 closure reports summarizing remedial activities associated with the clean up. Based on the information provided in the above referenced closure reports, DEFS would like to request no further action for this spill sites Clay Cooper #9 and #10.

If you have any questions regarding the information provided in the closure reports, please give me a call at 303-605-1718.

Sincerely

Duke Energy Field Services, LP



Stephen Weathers
Environmental Specialist

cc: Environmental Files

Enclosure

