Clay Cooper #12 Closure Report
Duke Energy Field Services
Lea County, New Mexico

SEPTEMBER 30, 2002

Prepared For:

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

1RP-207
10.24.05

Site Name:

CLAY COOPER #12 (CC#12)

Site Location:

T20S, R36 E, SECTION 25, UNIT D

Prepared By:

TRIDENT ENVIRONMENTAL

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: psheeeley@state.nm.us

Sincerely,

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

TRIDENT ENVIRONMENTAL

September 30, 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 #12 site
Township 20 South, Range 36 East, Section 25, Unit D

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 #12) is located in Section 25 (Unit D), Township 20 South, Range 36 East on property owned by Dale Cooper and managed by Clay Cooper. The location of the CC #12 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^3 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, GRO, or DRO concentrations 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 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

C:DEFS\COOPER\CC12\CC12CLOSE.DOC

ATTACHMENT A

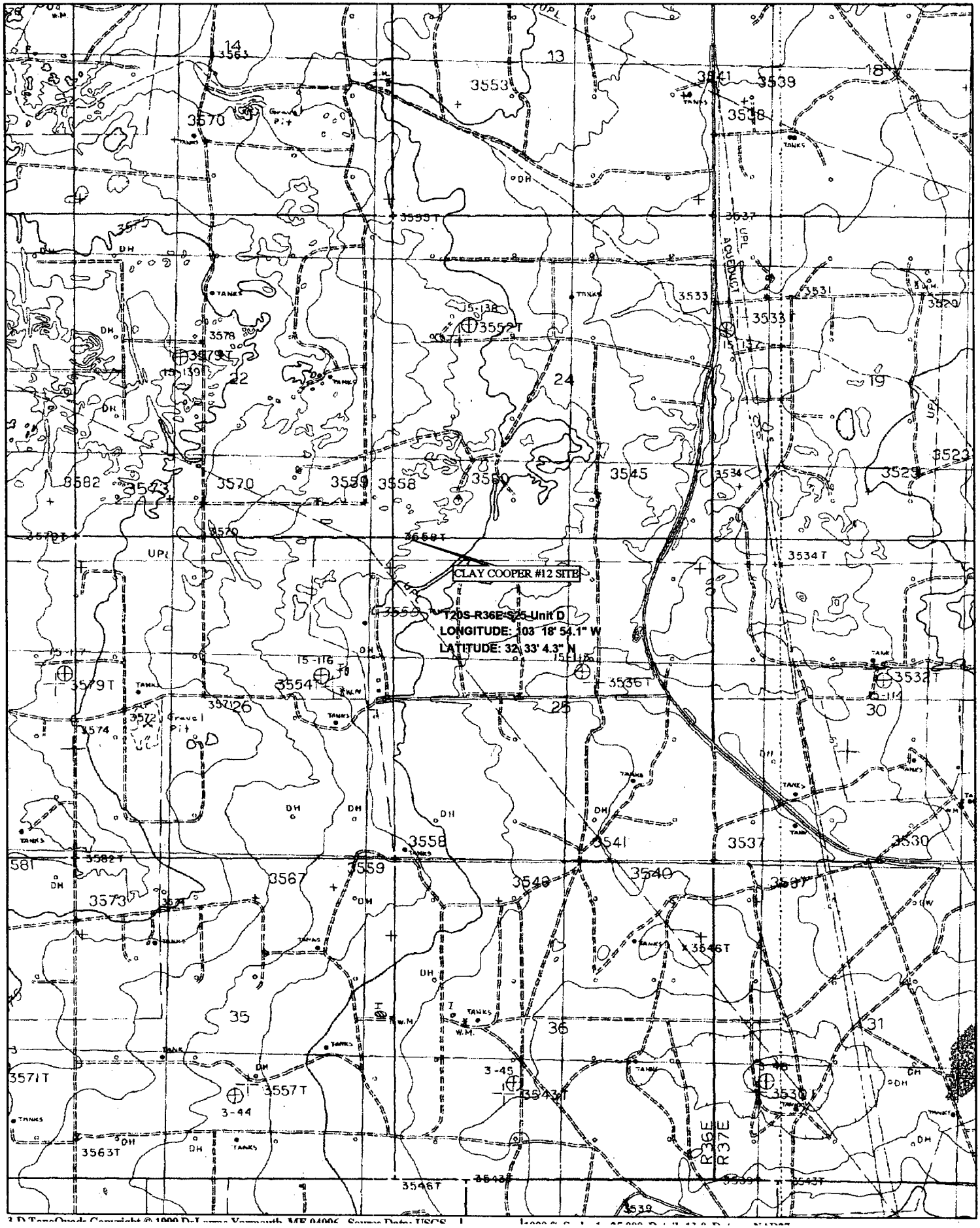
TOPOGRAPHIC MAP

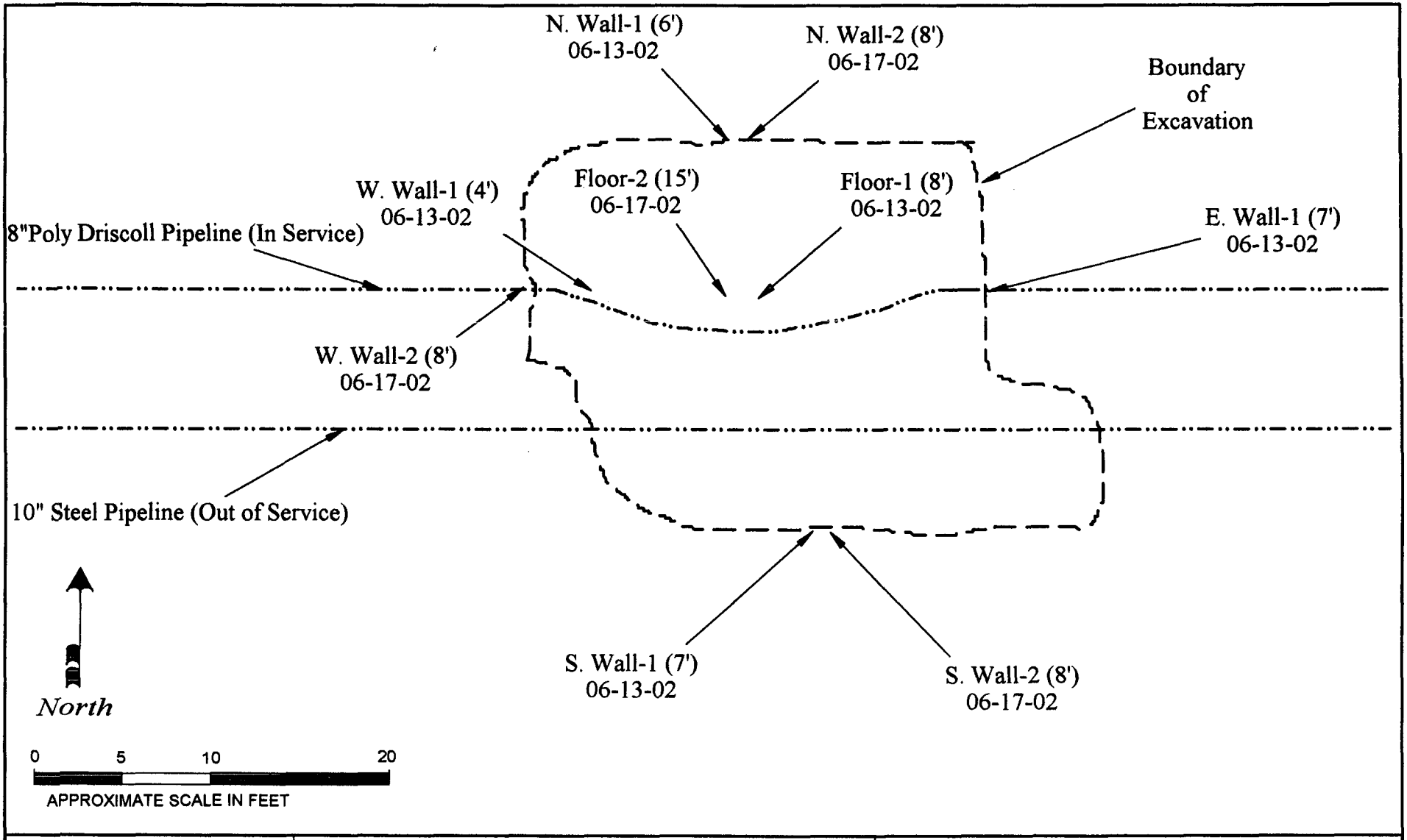
SITE MAP

SITE DATA FORM

C-141 FORM

PHOTODOCUMENTATION


CLAY COOPER #12 SITE
T20S-R36E-S25-Unit D
LONGITUDE: 103° 18' 54.1" W
LATITUDE: 32° 33' 4.3" N
R36E
R37E



TRIDENT ENVIRONMENTAL

SITE NAME: CLAY COOPER # 12	
DATE: 06/17/02	REVISION NO.: 1
DRAWN BY: GJV	FILENAME: CC12.TCW
CHECKED BY: DTL	SCALE: 1 INCH = 20 FT

SITE MAP

Site Data Form

Trident Technician: DTL/GJV Excavation Crew Names: Walton Construction Site ID: Clay Cooper # 12

Site Location: Latitude 32° 33' 4.3" N Longitude 103° 18' 54.1" W County: Lea State: New Mexico

Township 20 South Range 36 East Section 25 Unit D

Begin Excavation (Date/Time) 06/11/02 Complete Excavation (Date/Time) 06/25/02

LAND USE: (Check all that apply)
☐ Residential ☐ Recreational ☐ Farm land
☐ 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 Silty clay at depth

EXCAVATION DIMENSIONS	Length	Width	Average Depth	Maximum Depth
	25 feet	30 feet	8-15 feet	15 feet

VOLUME EXCAVATED: ~1,000 yd³ 3000' **VOLUME HAULED TO LANDFARM:** 540 yd³

SUMMARY OF ANALYTICAL RESULTS

Sample ID	Sample Type	Date	OVM (mg/m³)	GRO (mg/kg)	DRO (mg/kg)	Benzene (mg/m³)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)
A) Floor-1 (8')	Grab	06-13-02	0	< 10	< 10	---	---	---	---
B) N. Wall-1 (6')	Grab	06-13-02	0	< 10	< 10	---	---	---	---
C) S. Wall-1 (7')	Grab	06-13-02	0	< 10	< 10	---	---	---	---
D) E. Wall-1 (7')	Grab	06-13-02	0	< 10	< 10	---	---	---	---
E) W. Wall-1 (4')	Grab	06-13-02	124	1330	2840	< 0.025	0.211	0.159	0.830
F) N. Wall-2 (8')	Grab	06-17-02	1	< 10	< 10	---	---	---	---
G) Floor-2 (15')	Grab	06-17-02	0	< 10	< 10	---	---	---	---
H) W. Wall-2 (8')	Grab	06-17-02	0	< 10	< 10				
I) S. Wall-2 (8')	Grab	06-17-02	0	< 10	< 10	---	---	---	---
E. Stockpile-1 (backfill)	Comp	06-13-02	0	< 10	< 10	---	---	---	---
W. Stockpile-2 (land farm)	Comp	06-17-02	199	1310	3920	0.171	0.250	0.055	0.374

Note: West wall was excavated further until concentrations were below OCD guidelines as confirmed by subsequent wall and floor samples.

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	Contact
Duke Energy Field Services Inc.	Mr. Steve Weathers
Address	**Telephone No.**
P. O. Box 5493, Denver, Colorado 80217	(303) 605-1718
Facility Name	**Facility Type**
Site Name: CC #12	Natural Gas Pipeline

Surface Owner	Mineral Owner	Lease No.
Dale Cooper	Unknown	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	25	20S	36E		32° 33' 4.3" N		103° 18' 54.1" W	Lea

NATURE OF RELEASE

Type of Release	Volume of Release	Volume Recovered
Condensate	Unknown	~540 yd³ soil removed
Source of Release	**Date and Hour of Occurrence**	**Date and Hour of Discovery**
Pipeline	Unknown	Unknown
Was Immediate Notice Given? ☐ Yes ☐ No ■ Not Required	**If YES, To Whom?** Larry Johnson, NMOCD District 1	
By Whom? Steve Weathers	**Date and Hour**	
Was a Watercourse Reached? ☐ Yes ■ 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). The 10-inch steel pipeline (in service) was replaced with 8-inch poly Driscol pipeline approximately ten years prior to subsequent over-excavation activities. Another 10-inch out of service steel pipeline is located approximately 10 feet south of the in service pipeline.

Describe Area Affected and Cleanup Action Taken.*

On 06/11/02 over-excavation was initiated. Excavation continued until 06/16/02. The excavation was relatively shallow (8 ft to 15 ft) and measured approx. 25 ft wide by 30 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 06/25/02. Closure report, analytical results, photographs, and site map are attached.

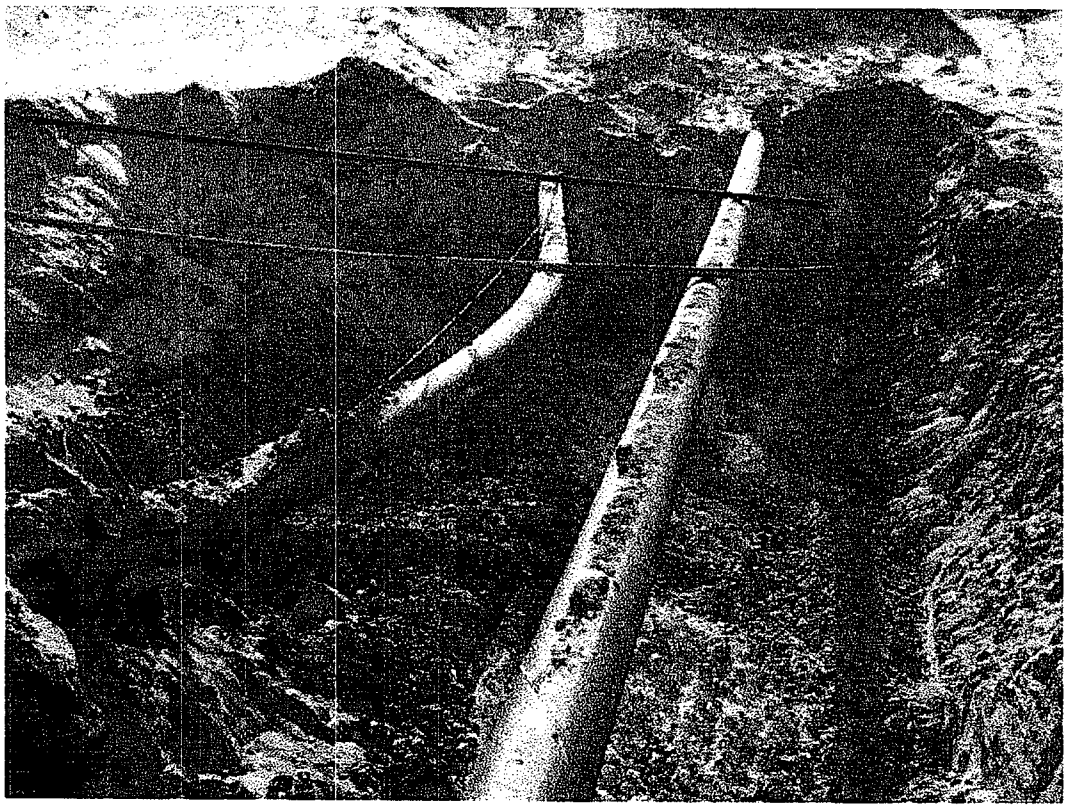
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger 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: 10/9/02 Phone: (303) 605-1718	Conditions of Approval: / Attached ☐

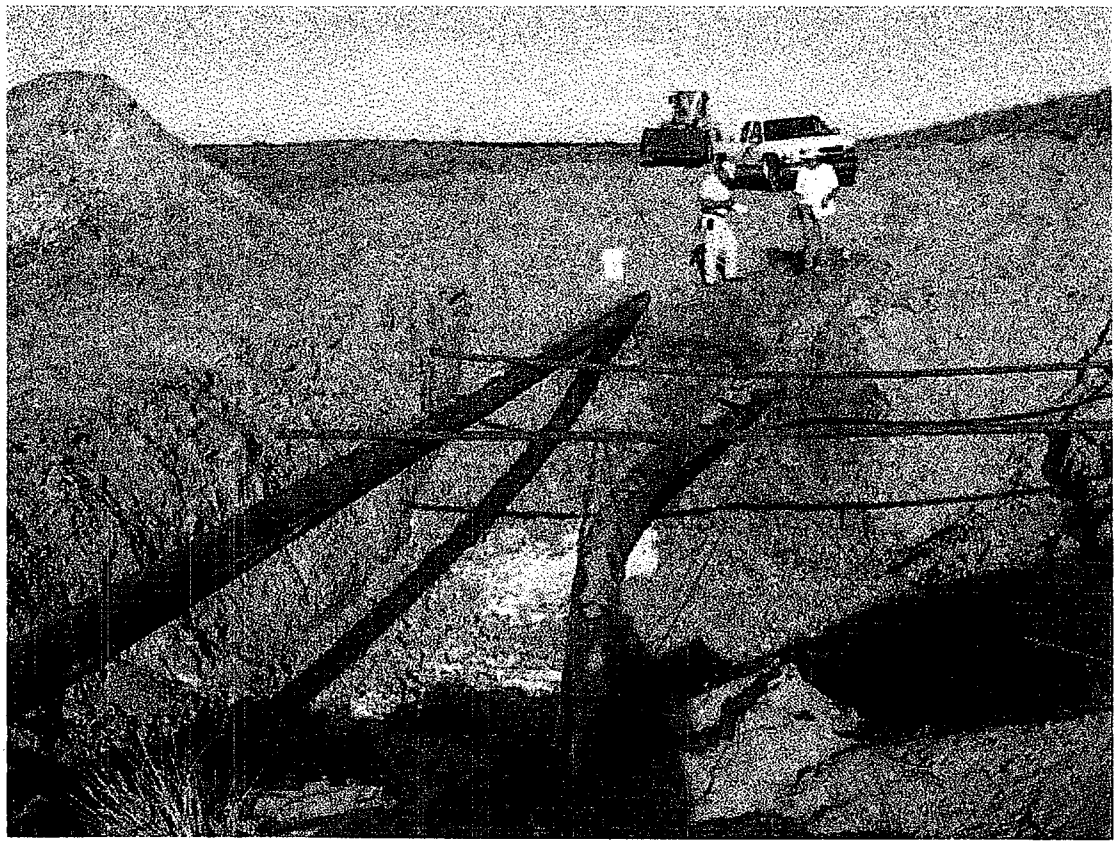
* Attach Additional Sheets If Necessary

10/23/02 closed

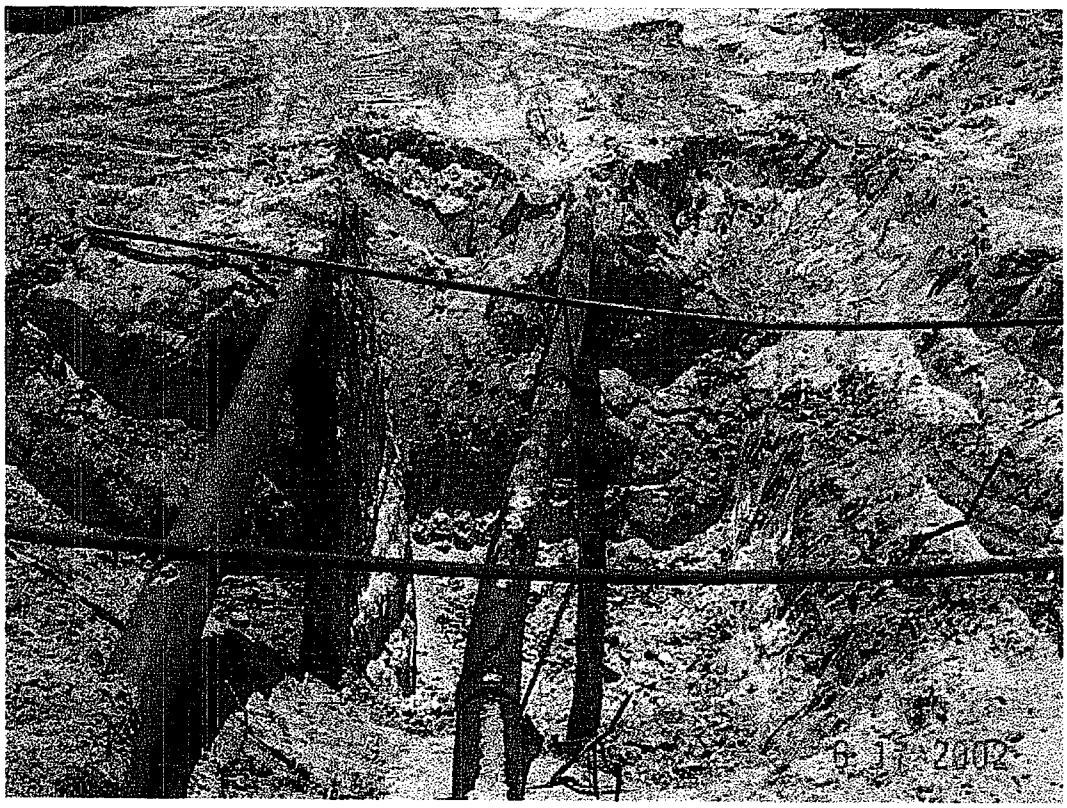
1 View facing northeast showing surface staining at CC-12 site prior to excavation (06-13-02).



2 View facing east showing area beneath the out of service 10-inch steel pipeline (right) and the in service 8-inch poly Driscol pipeline (left) during excavation activities (06-13-02).



3 View facing west showing hydrocarbon-stained soil on the west wall between the out of service pipeline (left) and in service (right) during excavation activities (06-13-02).



4 View facing west showing west wall at completion of excavation activities (06-17-02)

ATTACHMENT B

LABORATORY ANALYTICAL REPORTS

AND

CHAIN-OF-CUSTODY DOCUMENTATION

CC #12

ANALYTICAL REPORT

Prepared for:

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

Project:	Duke Energy Field Services
Order#:	G0203681
Report Date:	06/19/2002

Certificates
US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

TRIDENT ENVIRONMENTAL
P.O. BOX 7624
MIDLAND, TX 79708
689-4578

Order#: G0203681
Project: V-106
Project Name: Duke Energy Field Services
Location: CC No. 12

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.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0203681-01	N. Wall-2 (8')	SOIL	6/17/02 13:45	6/17/02 17:50	4 oz glass	Ice
	Lab Testing: 8015M	Rejected: No		Temp: -2.5 C		
0203681-02	Floor-2 (15')	SOIL	6/17/02 13:53	6/17/02 17:50	4 oz glass	Ice
	Lab Testing: 8015M	Rejected: No		Temp: -2.5 C		
0203681-03	W. Wall-2 (8')	SOIL	6/17/02 13:57	6/17/02 17:50	4 oz glass	Ice
	Lab Testing: 8015M	Rejected: No		Temp: -2.5 C		
0203681-04	S. Wall-2 (8')	SOIL	6/17/02 14:02	6/17/02 17:50	4 oz glass	Ice
	Lab Testing: 8015M	Rejected: No		Temp: -2.5 C		
0203681-05	West Stockpile-2	SOIL	6/17/02 14:30	6/17/02 17:50	4 oz glass	Ice
	Lab Testing: 8015M 8021B/5030 BTEX	Rejected: No		Temp: -2.5 C		

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0203681
Project: V-106
Project Name: Duke Energy Field Services
Location: CC No. 12

Lab ID: 0203681-01
Sample ID: N. Wall-2 (8')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		6/17/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Lab ID: 0203681-02
Sample ID: Floor-2 (15')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		6/17/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

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

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0203681
Project: V-106
Project Name: Duke Energy Field Services
Location: CC No. 12

Lab ID: 0203681-03
Sample ID: W. Wall-2 (8')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		6/17/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Lab ID: 0203681-04
Sample ID: S. Wall-2 (8')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		6/17/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

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

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0203681
Project: V-106
Project Name: Duke Energy Field Services
Location: CC No. 12

Lab ID: 0203681-05
Sample ID: West Stockpile-2

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		6/17/02	1	10	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	**1310**	100
DRO, >C12-C35	**3920**	100
TOTAL, C6-C35	**5230**	100

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0002079-02		6/18/02 13:34	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	**0.171**	0.025
Ethylbenzene	**0.250**	0.025
Toluene	**0.055**	0.025
p/m-Xylene	**0.312**	0.025
o-Xylene	**0.062**	0.025

Approval: Raland K Tuttle 6-19-02
Raland K. Tuttle, Lab Director, QA Officer Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

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

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0203681

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0002074-02			<10.0		
MS SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0203681-01	0	952	827	86.9%	
MSD SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0203681-01	0	952	840	88.2%	1.6%
SRM SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0002074-05		1000	878	87.8%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0203681

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg	0002079-02			<0.025		
Ethylbenzene-mg/kg	0002079-02			<0.025		
Toluene-mg/kg	0002079-02			<0.025		
p/m-Xylene-mg/kg	0002079-02			<0.025		
o-Xylene-mg/kg	0002079-02			<0.025		
MS SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/kg	0203669-06	0	0.1	0.108	108.%	
Ethylbenzene-mg/kg	0203669-06	0	0.1	0.105	105.%	
Toluene-mg/kg	0203669-06	0	0.1	0.104	104.%	
p/m-Xylene-mg/kg	0203669-06	0	0.2	0.213	106.5%	
o-Xylene-mg/kg	0203669-06	0	0.1	0.104	104.%	
MSD SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/kg	0203669-06	0	0.1	0.099	99.%	8.7%
Ethylbenzene-mg/kg	0203669-06	0	0.1	0.091	91.%	14.3%
Toluene-mg/kg	0203669-06	0	0.1	0.092	92.%	12.2%
p/m-Xylene-mg/kg	0203669-06	0	0.2	0.185	92.5%	14.1%
o-Xylene-mg/kg	0203669-06	0	0.1	0.091	91.%	13.3%
SRM SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/kg	0002079-05		0.1	0.099	99.%	
Ethylbenzene-mg/kg	0002079-05		0.1	0.096	96.%	
Toluene-mg/kg	0002079-05		0.1	0.094	94.%	
p/m-Xylene-mg/kg	0002079-05		0.2	0.195	97.5%	
o-Xylene-mg/kg	0002079-05		0.1	0.095	95.%	

TRIDENT ENVIRONMENTAL

Trident Environmental
P.O. Box 7624
Midland, Texas 79708
(915) 528-3878
(915) 689-4578 (Fax)

V-106-CC12-01

Chain of Custody

Date 6-17-02 Page 1 of 1

Lab Name: Environmental Labs of Texas
Address: 12600 West I-20 East
Odessa, TX 79763
Telephone: (505) 563-1800 Fax: (915) 563-1713

Samplers (SIGNATURES): Gil Van Deventer

03681

Sample Identification	Matrix	Date	Time	Sample Type: G - Grab, C- Composite	BTEX (EPA 8021B)	MTBE (EPA 8021B)	SVOC (EPA 8270)	PAH (EPA 8270)	VOC (EPA 8260)	TPH (EPA 418.1)	TPH (TX-1005)	TPH (TX-1006)	GRO (EPA 8015G) Extended	DRO (EPA 8015D)	TDS (EPA 160.1)	Anions/Cations	Total Metals	TCLP Metals	Number of Containers
-01 N. Wall-2 (8')	Soil	6-17-02	1345	G									✓	✓					1
-02 Floor-2 (15')	Soil	6-17-02	1353	G									✓	✓					1
-03 W. Wall-2 (8')	Soil	6-17-02	1357	G									✓	✓					1
-04 S. Wall-2 (8')	Soil	6-17-02	1402	G									✓	✓					1
-05 West stockpile-2	Soil	6-17-02	1430	C	✓								✓	✓					1

Analysis Request

Project Information		Sample Receipt	
Project Name:	Duke Energy Field Services	Total Containers:	
Project Location:	CC No. 12	COC Seals:	
Project Manager:	Gil Van Deventer	Rec'd Good Cond/Cold:	2.5°
Cost Center No.:	V-106	Conforms to Records:	✓
Shipping ID No.:	Hand Delivered to Lab	Lab No.:	
Bill to (see below):			

Special Instructions/Comments: Please send invoice direct to client:
Duke Energy Field Services, Attention: Steve Weathers
P. O. Box 5493, Denver, Colorado 80217

Relinquished By: (1) (Company)	Relinquished By: (2) (Company)	Relinquished By: (3) (Company)
Trident Environmental		
(Printed Name) Gil Van Deventer	(Printed Name)	(Printed Name)
(Signature) Gil Van Deventer	(Signature)	(Signature)
(Date) 6-17-02 (Time) 5:50pm	(Date) (Time)	(Date) (Time)
Received By: (1) (Company)	**Received By: (2) (Company)**	**Received By: (3) (Company)**
Env. Lab of Tx		
(Printed Name) Jeanne McMurrey	(Printed Name)	(Printed Name)
(Signature) Jeanne McMurrey	(Signature)	(Signature)
(Date) 06-17-02 (Time) 1750	(Date) (Time)	(Date) (Time)

Copy signed original form for Trident Environmental records

CC #12

ANALYTICAL REPORT

Prepared for:

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

Project:	Duke Energy Field Services
Order#:	G0203654
Report Date:	06/15/2002

Certificates
US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

TRIDENT ENVIRONMENTAL
P.O. BOX 7624
MIDLAND, TX 79708
689-4578

Order#: G0203654
Project: V-106
Project Name: Duke Energy Field Services
Location: CC No. 12

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.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0203654-01	Floor-1 (8')	SOIL	6/13/02 9:10	6/13/02 11:37	4 o glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 1.0 C		
0203654-02	N. Wall-1 (6')	SOIL	6/13/02 9:15	6/13/02 11:37	4 o glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 1.0 C		
0203654-03	S. Wall-1 (7')	SOIL	6/13/02 9:20	6/13/02 11:37	4 o glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 1.0 C		
0203654-04	E. Wall-1 (7')	SOIL	6/13/02 9:25	6/13/02 11:37	4 o glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 1.0 C		
0203654-05	W. Wall-1 (4')	SOIL	6/13/02 9:30	6/13/02 11:37	4 o glass	Ice
	Lab Testing: 8015M 8021B/5030 BTEX	**Rejected:** No		**Temp:** 1.0 C		
0203654-06	East Stockpile-1	SOIL	6/13/02 9:32	6/13/02 11:37	4 o glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 1.0 C		

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0203654
Project: V-106
Project Name: Duke Energy Field Services
Location: CC No. 12

Lab ID: 0203654-01
Sample ID: Floor-1 (8')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		6/13/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Lab ID: 0203654-02
Sample ID: N. Wall-1 (6')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		6/13/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

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

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0203654
Project: V-106
Project Name: Duke Energy Field Services
Location: CC No. 12

Lab ID: 0203654-03
Sample ID: S. Wall-1 (7')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		6/13/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Lab ID: 0203654-04
Sample ID: E. Wall-1 (7')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		6/13/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

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

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0203654
Project: V-106
Project Name: Duke Energy Field Services
Location: CC No. 12

Lab ID: 0203654-05
Sample ID: W. Wall-1 (4')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		6/13/02	1	5	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	1330	50.0
DRO, >C12-C35	2840	50.0
TOTAL, C6-C35	4170	50.0

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0002026-02		6/14/02 16:31	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	0.211	0.025
Toluene	0.159	0.025
p/m-Xylene	0.708	0.025
o-Xylene	0.122	0.025

Lab ID: 0203654-06
Sample ID: East Stockpile-1

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		6/13/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

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

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

GILBERT VAN DEVENTER	**Order#:**	G0203654
TRIDENT ENVIRONMENTAL	**Project:**	V-106
P.O. BOX 7624	**Project Name:**	Duke Energy Field Services
MIDLAND, TX 79708	**Location:**	CC No. 12

Approval: Raland K Tuttle 6-17-02

Raland K. Tuttle, Lab Director, QA Officer — Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

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

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0203654

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0002007-02			<10.0		
MS SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0203654-01	0	952	886	93.1%	
MSD SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0203654-01	0	952	883	92.8%	0.3%
SRM SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0002007-05		1000	830	83.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0203654

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg	0002026-02			<0.025		
Ethylbenzene-mg/kg	0002026-02			<0.025		
Toluene-mg/kg	0002026-02			<0.025		
p/m-Xylene-mg/kg	0002026-02			<0.025		
o-Xylene-mg/kg	0002026-02			<0.025		
MS SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/kg	0203605-35	0	0.1	0.101	101.%	
Ethylbenzene-mg/kg	0203605-35	0	0.1	0.099	99.%	
Toluene-mg/kg	0203605-35	0	0.1	0.096	96.%	
p/m-Xylene-mg/kg	0203605-35	0	0.2	0.199	99.5%	
o-Xylene-mg/kg	0203605-35	0	0.1	0.097	97.%	
MSD SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/kg	0203605-35	0	0.1	0.100	100.%	1.%
Ethylbenzene-mg/kg	0203605-35	0	0.1	0.098	98.%	1.%
Toluene-mg/kg	0203605-35	0	0.1	0.095	95.%	1.%
p/m-Xylene-mg/kg	0203605-35	0	0.2	0.200	100.%	0.5%
o-Xylene-mg/kg	0203605-35	0	0.1	0.098	98.%	1.%
SRM SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/kg	0002026-05		0.1	0.105	105.%	
Ethylbenzene-mg/kg	0002026-05		0.1	0.100	100.%	
Toluene-mg/kg	0002026-05		0.1	0.098	98.%	
p/m-Xylene-mg/kg	0002026-05		0.2	0.202	101.%	
o-Xylene-mg/kg	0002026-05		0.1	0.100	100.%	

TRIDENT ENVIRONMENTAL

Trident Environmental
P.O. Box 7624
Midland, Texas 79708
(915) 528-3878
(915) 689-4578 (Fax)

V-106-CC12-04

Chain of Custody

Date 6-13-02 Page 1 of 1

Lab Name: Environmental Labs of Texas
Address: 12600 West I-20 East
Odessa, TX 79763
Telephone: (505) 563-1800 Fax: (915) 563-1713

Samplers (SIGNATURES) Dale T Littlejohn

203654

	Sample Identification	Matrix	Date	Time	Sample Type: G - Grab, C- Composite	BTEX (EPA 8021B)	MTBE (EPA 8021B)	SVOC (EPA 8270)	PAH (EPA 8270)	VOC (EPA 8260)	TPH (EPA 418.1)	TPH (TX-1005)	TPH (TX-1006)	GRO (EPA 8015G) Extended	DRO (EPA 8015D)	TDS (EPA 160.1)	Anions/Cations	Total Metals	TCLP Metals	Number of Containers
01	Floor-1 (8')	Soil	6/13/02	0910	G									✓	✓					1
02	N. Wall-1 (6')	"	"	0915	G									✓	✓					1
03	S. Wall-1 (7')	"	"	0920	G									✓	✓					1
04	E. Wall-1 (7')	"	"	0925	G									✓	✓					1
05	W. Wall-1 (4')	"	"	0930	G	✓								✓	✓					1
06	East Stockpile-1	"	"	0932	C									✓	✓					1

Analysis Request

Project Information		Sample Receipt	
Project Name:	Duke Energy Field Services	Total Containers:	
Project Location:	CC No. 12	COC Seals:	
Project Manager:	Gil Van Deventer	Rec'd Good Cond/Cold:	1.0°
Cost Center No.:	V-106	Conforms to Records:	
Shipping ID No.:	Hand Delivered to Lab	Lab No.:	
Bill to (see below):			

Special Instructions/Comments: Please send invoice direct to client:
Duke Energy Field Services, Attention: Steve Weathers
P. O. Box 5493, Denver, Colorado 80217

Relinquished By: (1) (Company)	Relinquished By: (2) (Company)	Relinquished By: (3) (Company)
Trident Environmental		
(Printed Name) Dale T Littlejohn	(Printed Name)	(Printed Name)
(Signature) Dale T Littlejohn	(Signature)	(Signature)
(Date) 6/13/02 (Time) 1137	(Date) (Time)	(Date) (Time)
Received By: (1) (Company)	**Received By: (2) (Company)**	**Received By: (3) (Company)**
Env. Lab of Tx		
Jeanne McMurray		
(Printed Name) Jeanne McMurray	(Printed Name)	(Printed Name)
(Signature)	(Signature)	(Signature)
06-13-02 1137		
(Date) (Time)	(Date) (Time)	(Date) (Time)

Copy signed original form for Trident Environmental records

Need by first AM Fri 6/14
8015M

ATTACHMENT C

FIELD BOOK NOTES

(1) 6/13/02 DTL

0630 - Leave Midland for Clay Cooper #12 site

0820 (CT) - Arrive at Site
(1) Cat Bull Dozer
(1) Track hoe
(1) Front Loader
on site w/ 3 crew members

0825 Check Calib PID (97 ppm)

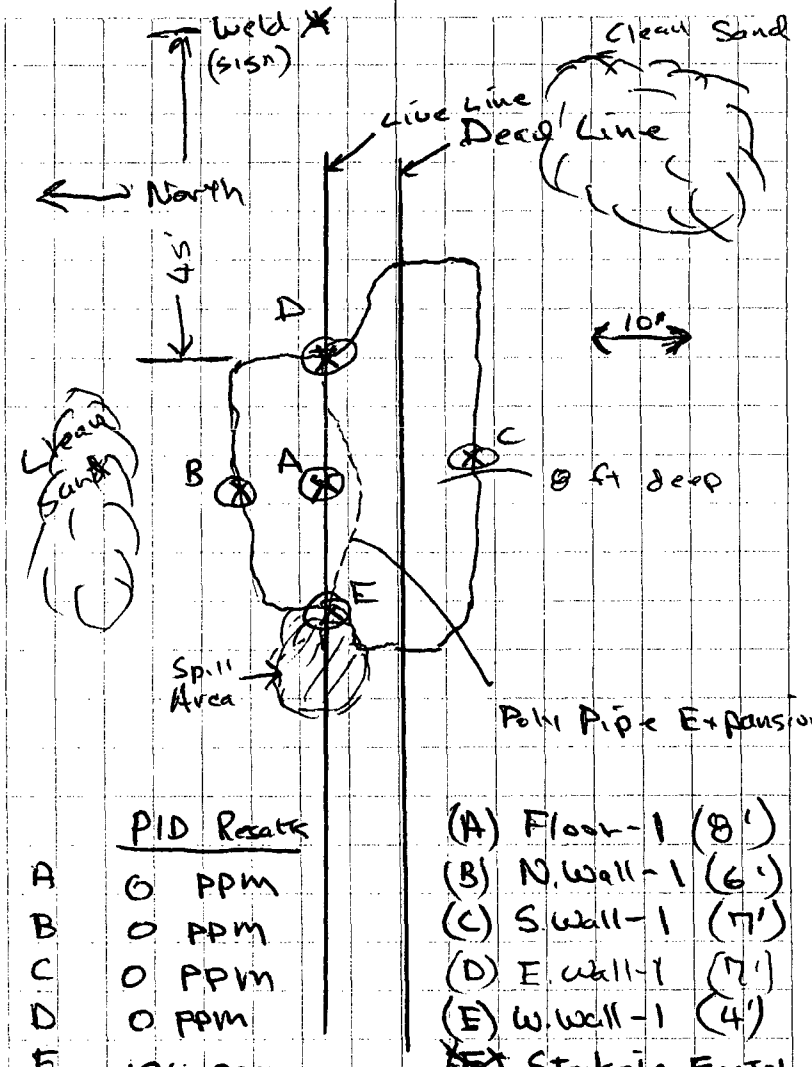
Clean fill piles (East & North) will stay near the excavation, Contaminated soil will be moved to the area near the road.

0855 Screened Excavation w/ PID
0 ppm from Floor, East, North, & South walls,
7 ppm from West Wall

0933 Recheck PID (95 ppm)

1000 Leave site for lab.,
1221 Arrive Midland 198 mi

DTL 6/13/02 (2)



	PID Results
A	0 ppm
B	0 ppm
C	0 ppm
D	0 ppm
E	124 ppm
F	0 ppm

(A) Floor-1 (8')
(B) N. Wall-1 (6')
(C) S. Wall-1 (7')
(D) E. Wall-1 (7')
(E) W. Wall-1 (4')
~~(F)~~ Stockpile East-1

6-17-02

1100 - 1300 MST Drive to CC #12 site from Midland

1300 Arrive at site. No one on site but pickup, track hoe & dozer is on site

GPS reading for CC-12

N 32° 33' 4.7"

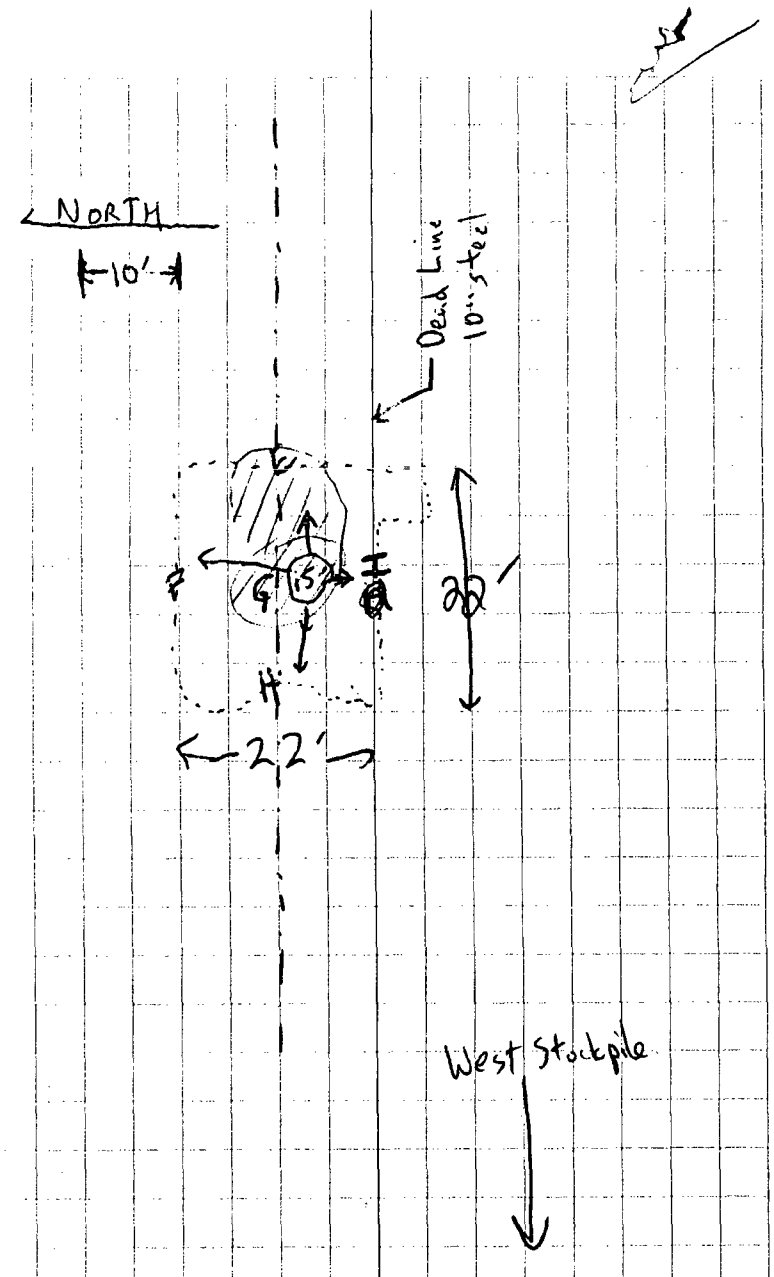
W 103° 18' 55.8"

Elev 3574

Calibrated OVM (100ppm)

Collected samples as follows:

Sample ID	OVM	Time
F) N. Wall-2 (8')	1 ppm	1345
G) Floor-2 (15')	0 ppm	1353
H) W. Wall-2 (8')	0 ppm	1357
I) S. Wall-2 (8')	0 ppm	1402
West Stockpile-1	199 ppm	1430



6-20-02

CC-12

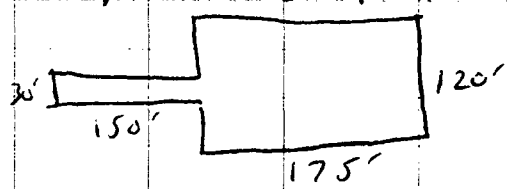
6/18 25 loads hauled to C-5
6/19 backfilled
6/20 ~20 loads hauled to C-5

Monty will repair Tuffy's road with 18 loads of caliche

6-25-02

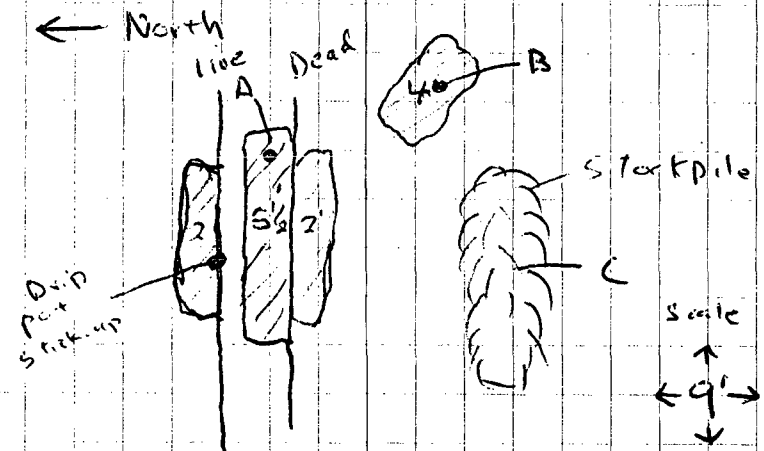
Received call from Ray with following information:

- 45 loads total contaminated soil hauled to cell C-5 at landfarm
- 16 loads caliche hauled in to repair Tuffy's road/drive
- Damaged area 30'×150' + 120'×175'



DTL 7-18-02 ①

0510 ct leave Midland for CC-13
0700 ct arrive at site, calb PID
- Checked PID - 98 ppm OK



Field Screened pit, all < 1 ppm, except Btm on east side, Bagged followins

*	BTM-E -5½'	PID = 59 ppm
	BTM-M -5½'	PID = 5 ppm
	BTM-W -5½'	PID = 3 ppm
*	SE BTM - 4'	PID = 15 ppm
*	Stackpile - C'	PID = 15 ppm

A) Floor-1 (5½') 020718072O (East)
B) SE Floor - 1 (4') 020718073O
C) Stackpile - 1 (C) 020718074O
0810 - leave site for Johns site