

**Clay Cooper #6 Closure Report
Duke Energy Field Services
Lea County, New Mexico**

1RP-221
10.26.05

OCTOBER 24, 2001

Prepared For:

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

Site Name:

CLAY COOPER #6 (CC#6)

Site Location:

T20S, R36 E, SECTION 24, UNIT J

Prepared By:

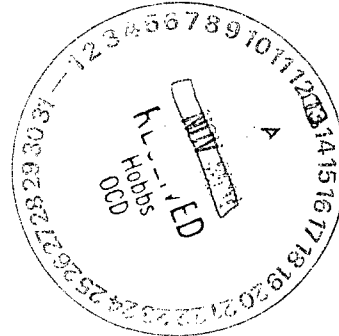


**PO Box 7624
Midland, Texas 79708**



October 24, 2001

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



Re: Removal of Hydrocarbon-Impacted Soils from the CC #6 site
Township 20 South, Range 36 East, Section 24, Unit J

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 #6) is located in Section 24 (Unit J), Township 20 South, Range 36 East on property owned by Dale Cooper and managed by Clay Cooper. The location of the CC #6 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. Composite samples consisting of a minimum of three aliquots and 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 for soil samples that exceeded OVM readings of 100 ppm or when GRO and/or DRO concentrations were above 100 mg/kg.

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 ^{8460'}2,820 cubic yards of hydrocarbon-impacted soils were transported by Walton Construction to cell B-6 at the South Monument Landfarm, which is owned and operated by Ms. Kena Kay Cooper (OCD Rule 711 Permit Approval NM-01-0032). Completed *Generator Certificate of Waste Status* (C-143) and *Release Notification and Corrective Action* (C-141) forms are 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 and site features are depicted on the site map in Attachment A. A Site Data Form that includes 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

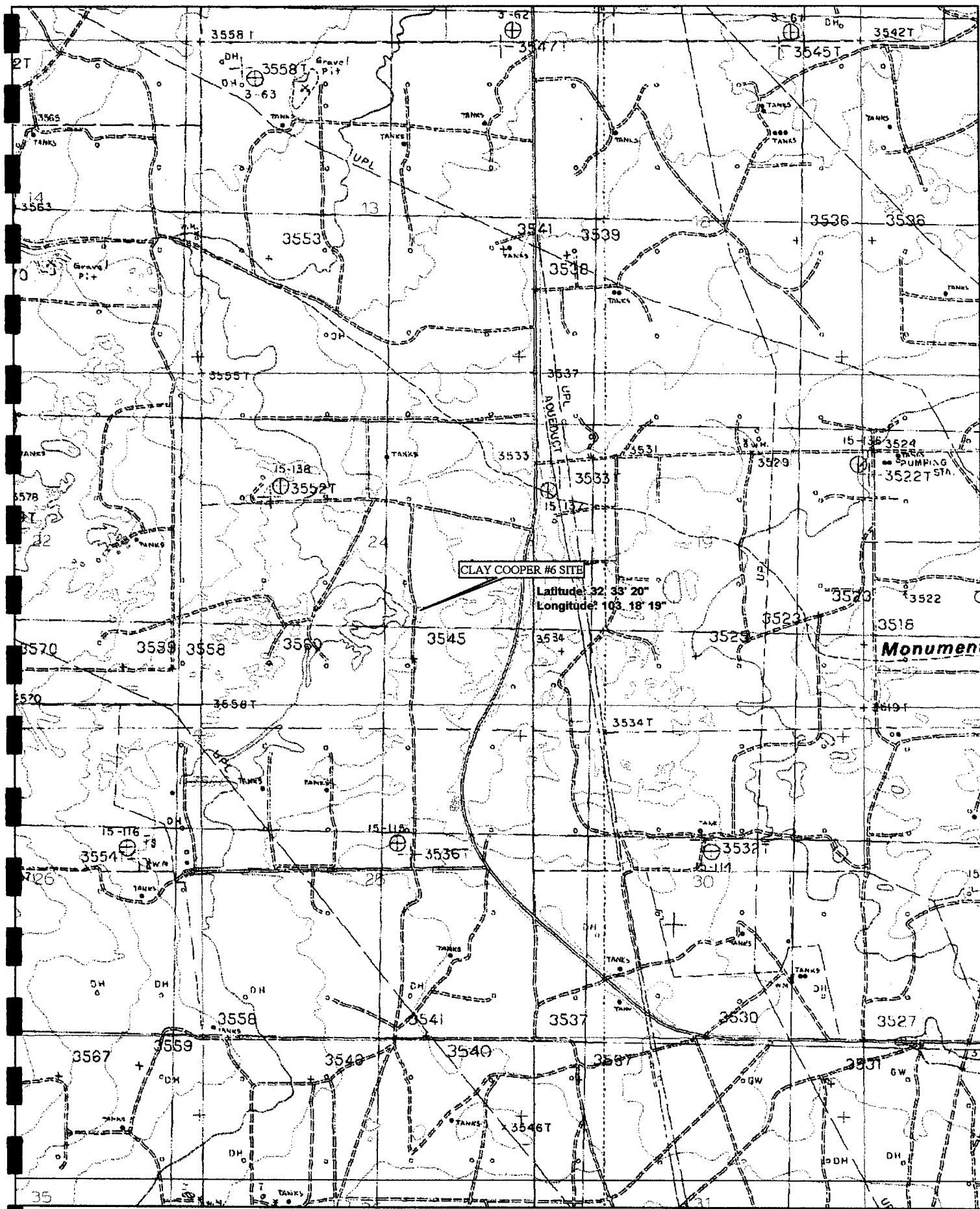
TOPOGRAPHIC MAP

SITE MAP

SITE DATA FORM

C-141 AND C-143 FORMS

PHOTODOCUMENTATION

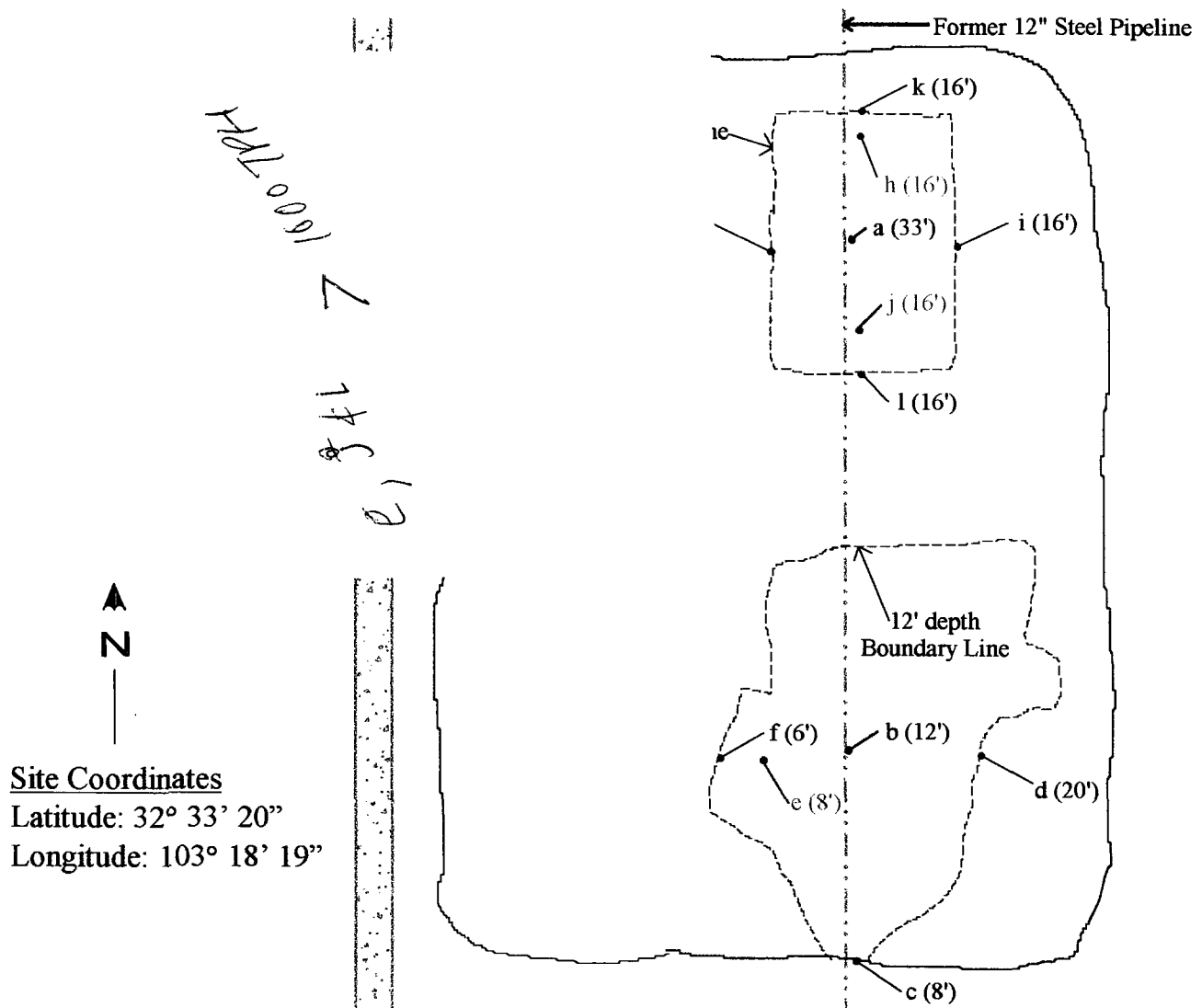


Ltr	Sample ID (Depth)	Sample Type	Sample Date	OVM (ppm)	GRO (mg/kg)	DRO (mg/kg)	Benzene (mg/kg)	BTEX (mg/kg)
a	N. Floor-1 (33')	Grab	08-02-01	0.0	< 50	< 50	NA	NA
b	S. Floor-1 (12')	Grab	08-02-01	0.0	< 50	< 50	NA	NA
c	S. Wall-1 (8')	Grab	08-02-01	0.0	< 50	< 50	NA	NA
d	SE Wall-1 (6')	Grab	08-02-01	0.0	< 50	< 50	NA	NA
e	SW Wall-1 (8')	Grab	08-02-01	423	1660	1650	< 0.010	2.05
f	SW Wall-2 (6')	Grab	08-30-01	0.0	< 10	49	NA	NA
g	NW Wall-1 (16')	Grab	08-30-01	0.0	< 10	< 10	NA	NA
h	N. Wall-1 (16')	Grab	08-30-01	156	< 10	106	NA	NA
i	NE Wall-1 (16')	Grab	08-30-01	0.0	< 10	< 10	NA	NA
j	S. Wall (North) -1 (16')	Grab	08-30-01	50	324	4550	< 0.025	0.270
k	N. Wall-2 (16')	Grab	08-31-01	0.0	< 10	< 10	NA	NA
l	S. Wall (North) -2 (16')	Grab	08-31-01	0.0	< 10	< 10	NA	NA
B6	Exc. Soil-1	Comp	08-30-01	40	80.2	1200	< 0.010	0.53
NMOCD Guidelines				100	100	100	10	50

Samples in red type indicate concentrations above NMOCD guidelines.

NA indicates sample was not analyzed for this constituent.

B6 indicates soil that was transported to cell B6 at South Monument Landfarm.



Site Coordinates

Latitude: 32° 33' 20"

Longitude: 103° 18' 19"

Trident Environmental

P. O. Box 7624
Midland, Texas 79708

SITE: CLAY COOPER #6

LOCATION: UNIT J, SEC. 24, T2OS, R36E

DATE: 8/31/01 DRN BY: GJV

APPROXIMATE SCALE: 1 INCH = 20 FEET

CC #6
SITE MAP



Site Data Form

TRW Technician: DTL/GJV Excavation Crew Names: Walton Construction Site ID: Clay Cooper # 6
Site Location: Latitude 32° 33' 20" N Longitude 103° 18' 19" W County: Lea State: New Mexico
Township 20 South Range 36 East Section 24 Unit J
Begin Excavation (Date/Time) 07/25/01 Complete Excavation (Date/Time) 9/18/01

LAND USE: ☐ Residential ☐ Recreational ☐ Farm land
☐ Industrial ☐ School/Daycare ☒ Range land
(Check all that apply) ☒ 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 ~120 feet Width ~18 feet Average Depth Varied 10-33 feet Maximum Depth 33 feet

VOLUME EXCAVATED: 2,000 ~4,000 yd³ **VOLUME HAULED TO LANDFARM:** 2,820 yd³

SUMMARY OF OVM, GRO, DRO, BENZENE & BTEX CONCENTRATIONS

Ltr	Sample ID (Depth)	Sample Type	Sample Date	OVM (ppm)	GRO (mg/kg)	DRO (mg/kg)	Benzene (mg/kg)	BTEX (mg/kg)
a	N. Floor-1 (33')	Grab	08-02-01	0.0	< 50	< 50	NA	NA
b	S. Floor-1 (12')	Grab	08-02-01	0.0	< 50	< 50	NA	NA
c	S. Wall-1 (8')	Grab	08-02-01	0.0	< 50	< 50	NA	NA
d	SE Wall-1 (6')	Grab	08-02-01	0.0	< 50	< 50	NA	NA
e	SW Wall-1 (8')	Grab	08-02-01	423	1660	1650	< 0.010	2.05
f	SW Wall-2 (6')	Grab	08-30-01	0.0	< 10	49	NA	NA
g	NW Wall-1 (16')	Grab	08-30-01	0.0	< 10	< 10	NA	NA
h	N. Wall-1 (16')	Grab	08-30-01	156	< 10	106	NA	NA
i	NE Wall-1 (16')	Grab	08-30-01	0.0	< 10	< 10	NA	NA
j	S. Wall (North) -1 (16')	Grab	08-30-01	50	324	4550	< 0.025	0.270
k	N. Wall-2 (16')	Grab	08-31-01	0.0	< 10	< 10	NA	NA
l	S. Wall (North) -2 (16')	Grab	08-31-01	0.0	< 10	< 10	NA	NA
B6	Exc. Soil-1	Comp	08-30-01	40	80.2	1200	< 0.010	0.53
NMOCD Guidelines				100	100	100	10	50

Samples in red type indicate concentrations above NMOCD guidelines.

NA indicates sample was not analyzed for this constituent.

B6 indicates soil that was transported to cell B6 at South Monument Landfarm.

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 #6	Facility Type Natural Gas Pipeline

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

Unit Letter	Section	Township	Range	Feet from the North/South Line	Feet from the East/West Line	County
J	24	20S	36E	32°-33° 20" N	103° 18' 19" W	Lea

NATURE OF RELEASE

Type of Release Condensate	Volume of Release Unknown	Volume Recovered ~2,820 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? Donna Williams, 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. Pipeline replaced with 6" plastic line inserted into original 10" steel pipeline prior to initiation of over-excavation work. Removal of impacted soil requested by landowner (Clay Cooper).

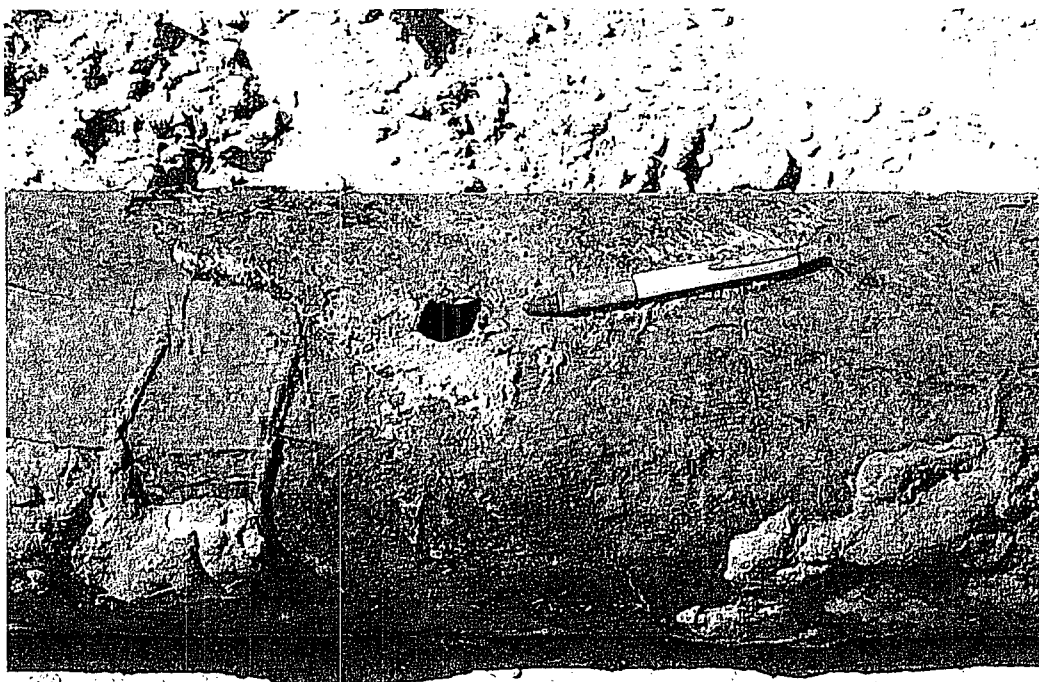
Describe Area Affected and Cleanup Action Taken.*

On 7/25/01 over-excavation was initiated. Excavation continued until 8/31/01 when total petroleum hydrocarbons on floor and walls were below 100 mg/kg. Final excavation dimensions were approx. ~13 ft wide x ~120 long x 10 -33 ft deep. Approximately 2,820 cu yds of soil was transported to cell B-6 at the South Monument Land Farm. Backfilling of excavation was completed on 9/18/01. Closure report, analytical results, photographs, and site map are attached. ⁹⁴⁶⁰ 12,000 excavated cu

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: 11/9/01 Phone: (303) 605-1718	Conditions of Approval:	Attached <input type="checkbox"/>

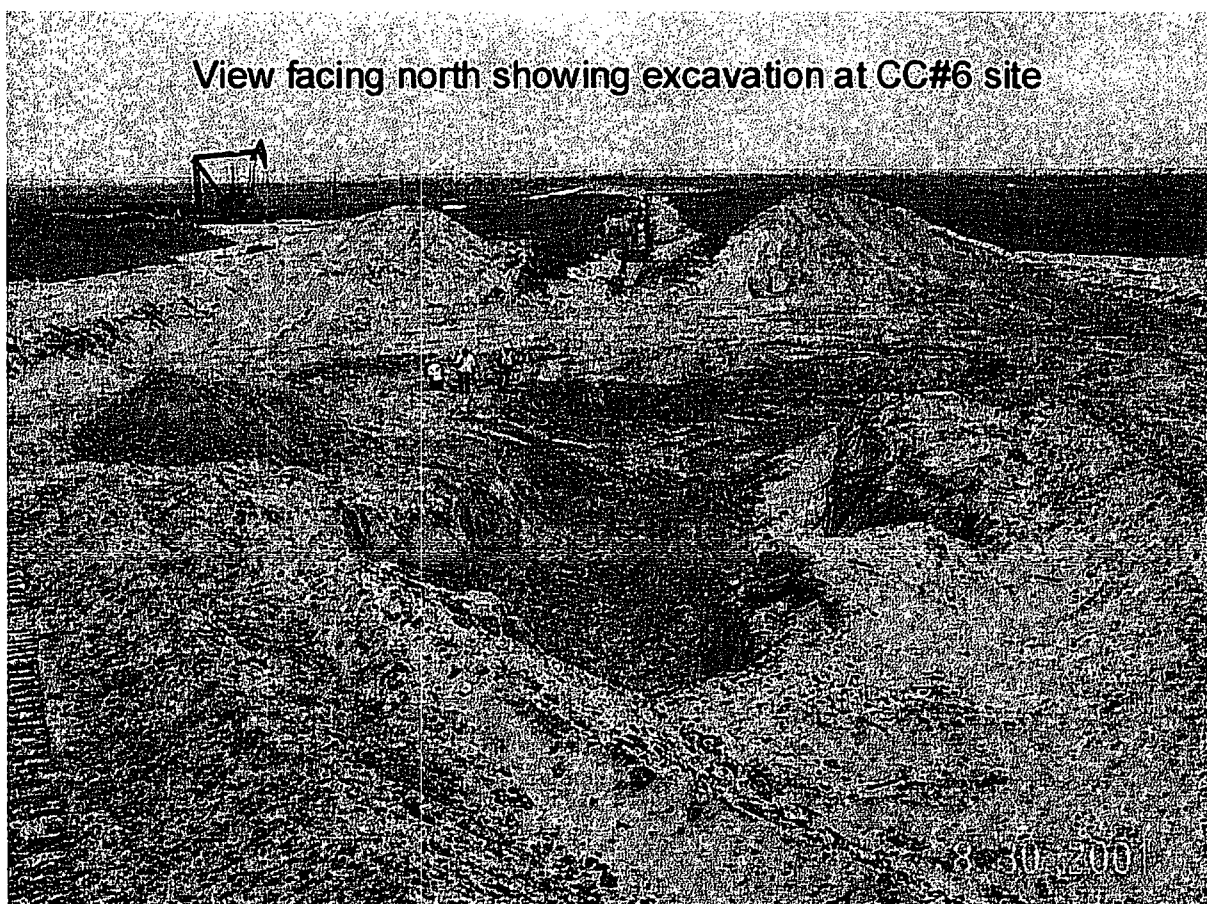
* Attach Additional Sheets If Necessary



7.25.2001

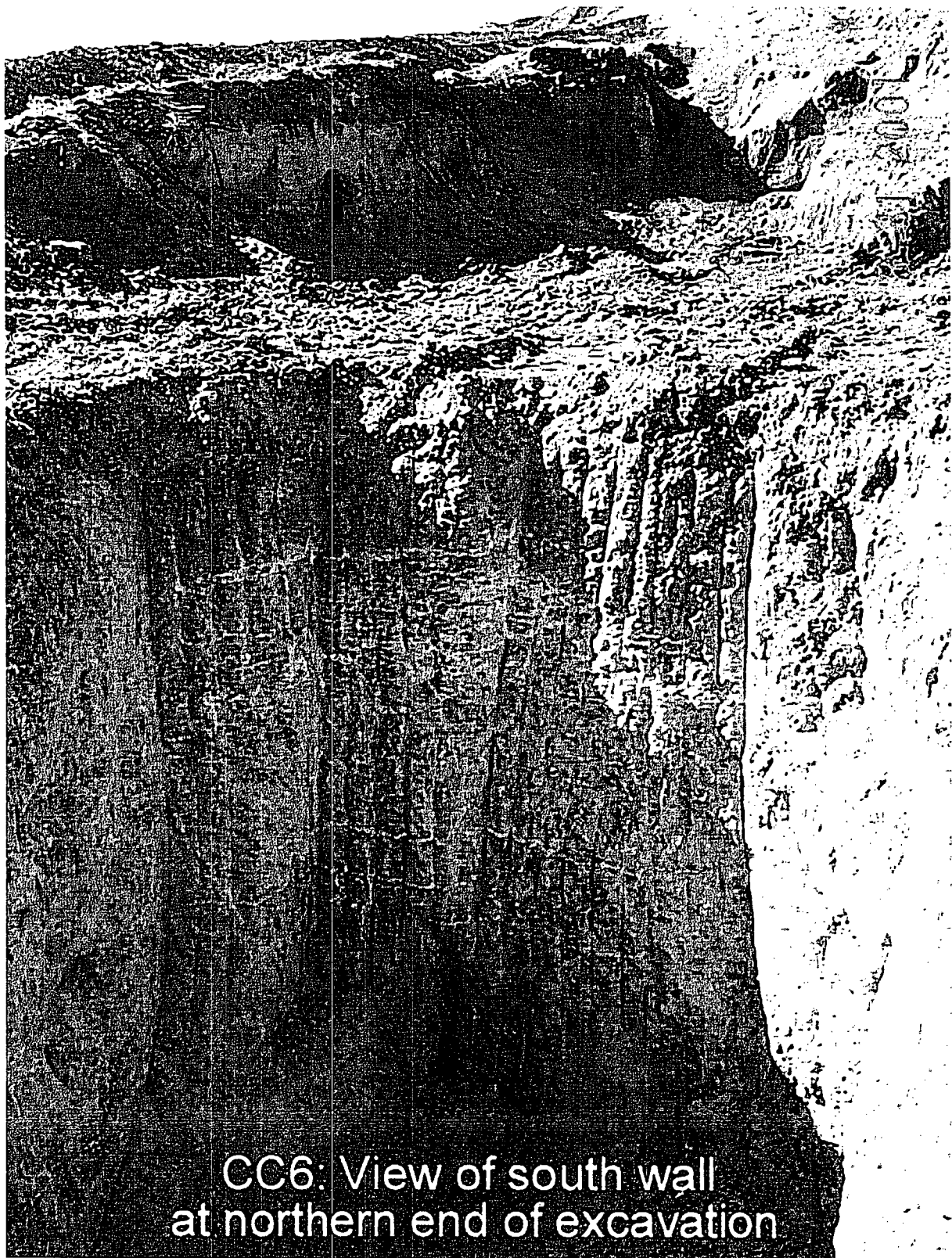
CC6
-1134

View 1.5" hole in steel pipeline after it was removed from right-of-way.



View facing north showing excavation at CC#6 site

8.30.2001



CC6: View of south wall
at northern end of excavation



CC6: View of bottom of
excavation (depth of 33 ft)

ATTACHMENT B

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



ARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

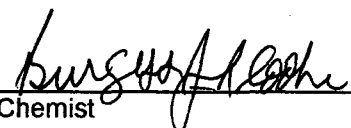
ANALYTICAL RESULTS FOR
TRIDENT ENVIRONMENTAL
ATTN: GILBERT J. VANDENTER
P.O. BOX 7624
MIDLAND, TX 79708
FAX TO: (915) 682-0727

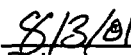
Receiving Date: 08/02/01
Reporting Date: 08/03/01
Project Number: NOT GIVEN
Project Name: DUKE ENRGY FIELD SERVICES
Project Location: CC#6

Sampling Date: 08/02/01
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: BC

LAB NUMBER	SAMPLE ID	GRO	DRO
		(C ₆ -C ₁₀) (mg/Kg)	(>C ₁₀ -C ₂₈) (mg/Kg)
ANALYSIS DATE:		08/02/01	08/02/01
H6044-1	a) N. FLOOR-1 (33')	<50	<50
H6044-2	b) S. FLOOR-1 (12')	<50	<50
H6044-3	c) S. WALL-1 (8')	<50	<50
H6044-4	d) SE WALL-1 (6')	<50	<50
H6044-5	e) SW WALL-1 (8')	1660	1650
Quality Control		730	728
True Value QC		800	800
% Recovery		91.3	91.0
Relative Percent Difference		2.5	3.8

METHOD: SW-846 8015 M


Chemist


Date

H6044A.XLS

PLEASE NOTE: **Liability and Damages.** Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



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

ANALYTICAL RESULTS FOR
TRIDENT ENVIRONMENTAL
ATTN: GILBERT J. VANDENTER
P.O. BOX 7624
MIDLAND, TX 79708
FAX TO: (915) 682-0727

Receiving Date: 08/02/01
Reporting Date: 08/03/01
Project Number: NOT GIVEN
Project Name: DUKE ENRGY FIELD SERVICES
Project Location: CC#6

Sampling Date: 08/02/01
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: BC

LAB NO.	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		08/02/01	08/02/01	08/02/01	08/02/01
H6044-5	e) SW WALL-1 (8')	<0.010	0.035	0.607	1.41
Quality Control		0.109	0.102	0.106	0.317
True Value QC		0.100	0.100	0.100	0.300
% Recovery		109	102	106	106
Relative Percent Difference		7.9	12.6	14.7	14.3

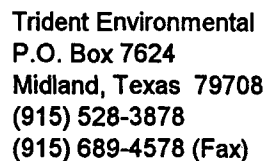
METHOD: EPA SW-846 8260

Bryant A. Cochrane
Chemist

8/3/01
Date

H6044B.XLS

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Chain of Custody

Date 8-2-01 Page 1 of 1

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Copy signed original form for Trident Environmental records



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ATTN: GILBERT J. VANDENTER
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MIDLAND, TX 79708
FAX TO: (915) 682-0727

Receiving Date: 08/02/01
Reporting Date: 08/03/01
Project Number: NOT GIVEN
Project Name: DUKE ENRGY FIELD SERVICES
Project Location: CC#6

Sampling Date: 08/02/01
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: BC

LAB NUMBER	SAMPLE ID	GRO	DRO
		(C ₆ -C ₁₀) (mg/Kg)	(>C ₁₀ -C ₂₈) (mg/Kg)
ANALYSIS DATE:		08/02/01	08/02/01
H6045-1	EXC. SOIL-1	80.2	1200
Quality Control		713	762
True Value QC		800	800
% Recovery		89.1	95.3
Relative Percent Difference		7.1	2.9

METHOD: SW-846 8015 M

Burgess J. Coche
Chemist

8/13/01
Date

H6045A.XLS

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

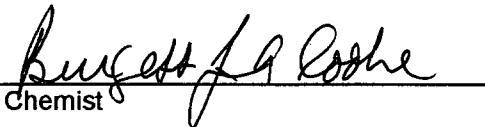
ANALYTICAL RESULTS FOR
TRIDENT ENVIRONMENTAL
ATTN: GILBERT J. VANDENTER
P.O. BOX 7624
MIDLAND, TX 79708
FAX TO: (915) 682-0727

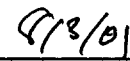
Receiving Date: 08/02/01
Reporting Date: 08/03/01
Project Number: NOT GIVEN
Project Name: DUKE ENRGY FIELD SERVICES
Project Location: CC#6

Sampling Date: 08/02/01
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: BC

LAB NO.	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		08/02/01	08/02/01	08/02/01	08/02/01
H6045-1	EXC. SOIL-1	<0.010	0.020	0.114	0.396
Quality Control		0.109	0.102	0.106	0.317
True Value QC		0.100	0.100	0.100	0.300
% Recovery		109	102	106	106
Relative Percent Difference		7.9	12.6	14.7	14.3

METHOD: EPA SW-846 8260


Chemist


Date

H6045B.XLS

PLEASE NOTE: **Liability and Damages.** Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

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

V-106-CC6-2

Chain of Custody

Date 8-2-01 Page 1 of 1

[illegible]

Copy signed original form for Trident Environmental records

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

TRIDENT ENVIRONMENTAL
ATTN: MR. GILBERT VAN DEVENTER
P.O. BOX 7624
MIDLAND, TEXAS 79708
FAX: 682-0727

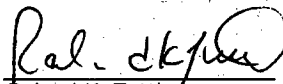
Sample Type: Soil
Sample Condition: Intact/ Iced/ 2.5 deg C
Project #: V-106
Project Name: Duke Energy Field Services
Project Location: CC#6

Sampling Date: 08/30/01
Receiving Date: 08/30/01
Analysis Date: 08/30/01

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg
0101467-01	SW-WALL-2 (6')	<10	49
0101467-02	NW-WALL-1 (16')	<10	<10
0101467-03	N. WALL-1 (16')	<10	106
0101467-04	NE-WALL-1 (16')	<10	<10
0101467-05	S.-WALL (North)-1 (16')	324	4550

QUALITY CONTROL	493	557
TRUE VALUE	500	500
% INSTRUMENT ACCURACY	99	111
SPIKED AMOUNT	476	476
ORIGINAL SAMPLE	<10	31
SPIKE	494	544
SPIKE DUP	483	518
% EXTRACTION ACCURACY	101	102
BLANK	<10	<10
RPD	2	5

Methods: EPA SW 846-8015M GRO/DRO


Raland K. Tuttle

8-31-01
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

TRIDENT ENVIRONMENTAL
ATTN: MR. GILBERT VAN DEVENTER
P.O. BOX 7624
MIDLAND, TEXAS 79708
FAX: 682-0727

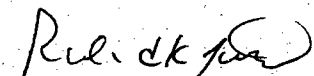
Sample Type: Soil
Sample Condition: Intact/ Iced/ 2.5 deg C
Project #: V-106
Project Name: Duke Energy Field Services
Project Location: CC#6

Sampling Date: 08/30/01
Receiving Date: 08/30/01
Analysis Date: 08/30/01

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
0101467-05	S-WALL(NORTH)-1 (16)	<0.025	<0.025	<0.025	0.270	<0.025

QUALITY CONTROL	0.101	0.098	0.104	0.187	0.103
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% INSTRUMENT ACCURACY	101	98	104	94	103
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	0.104	0.101	0.108	0.197	0.109
SPIKE DUP	0.093	0.092	0.097	0.177	0.098
% EXTRACTION ACCURACY	104	101	108	99	109
BLANK	<0.025	<0.025	<0.025	<0.025	<0.025
RPD	11	9	11	10	11

METHODS: EPA SW 846-8021B ,5030


Raland K. Tuttle

8-31-01
Date

Trident Environmental
P.O. Box 7624
Midland, Texas 79708
(915) 528-3878 - (915) 528-3879
(915) 689-4578 (Fax) (915) 689-4579

V-106-CC6-3

Chain of Custody

Date 8-30-01 Page 1 of 1

[illegible]

* Please RUSH (8015 only)

Copy signed original form for Trident Environmental records

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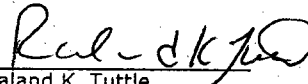
Sample Type: Soil
Sample Condition: Intact/ Iced/ 3 deg C
Project #: V-106
Project Name: Duke Energy Field Services
Project Location: CC#6

Sampling Date: 08/31/01
Receiving Date: 08/31/01
Analysis Date: 08/31/01

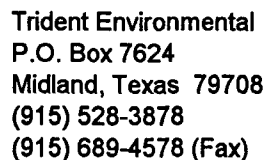
ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg
0101479-01	N. Wall-2 (16')	<10	<10
0101479-02	S. Wall (North)-2 (16')	<10	<10

QUALITY CONTROL	512	558
TRUE VALUE	500	500
% INSTRUMENT ACCURACY	102	112
SPIKED AMOUNT	476	476
ORIGINAL SAMPLE	<10	67
SPIKE	474	537
SPIKE DUP	474	537
% EXTRACTION ACCURACY	100	99
BLANK	<10	<10
RPD	0	0

Methods: EPA SW 846-8015M GRO/DRO


Raland K. Tuttle

9-4-01
Date



Chain of Custody

Date 8-31-01 Page 1 of 1

[illegible]

ATTACHMENT C

FIELD BOOK NOTES

7-23-01

CC#5

1584 yd³ to SB

Finished hauling Fri. 7/20

7-25-01 CC-6

0600-0630 Prep for field

0630-0830 Drive Midland to CC#6

Mileage (start) 97808

Objective: Start excavating new site (CC#6) on Clay Cooper property.

Operators on-site (Walter Construction):

Mike Neagle Trakhoe Samsung SE210

Ray

D6 Dozer Caterpillar

↳ New guy (Ray is breaking him in).

Operators still in process of clearing clean backfill (dune cover sand) from CC#6 & moving it over to CC#5

GPS N 32° 33' 19.8"
W 103° 18' 19.3"

→ Verified on topo map

J-4-2

7-26-01

Started excavating at source area
at 0945 am MST

Excavating area around
leak until noon

Collected composite sample of
excavated soil at 1155 am
256 ppm w/ OVM

Bease holder Faye Klein

CC#16

Returned to CC#16

Mike N. still excavating. Didn't
get very deep or wide because he
had to spend a lot of time
clearing/making clean done sand

One trackhoe & one loader working today

7-30-01
CC#16

Trackhoe still excavating. No other
equipment on site

Dozer working at land farm today

Took photos of excavation. West side
against road is still dirty. Mike
~~clearing~~ excavating east side first (almost
done) and floor before excavating more
to west. Will have to take road out.

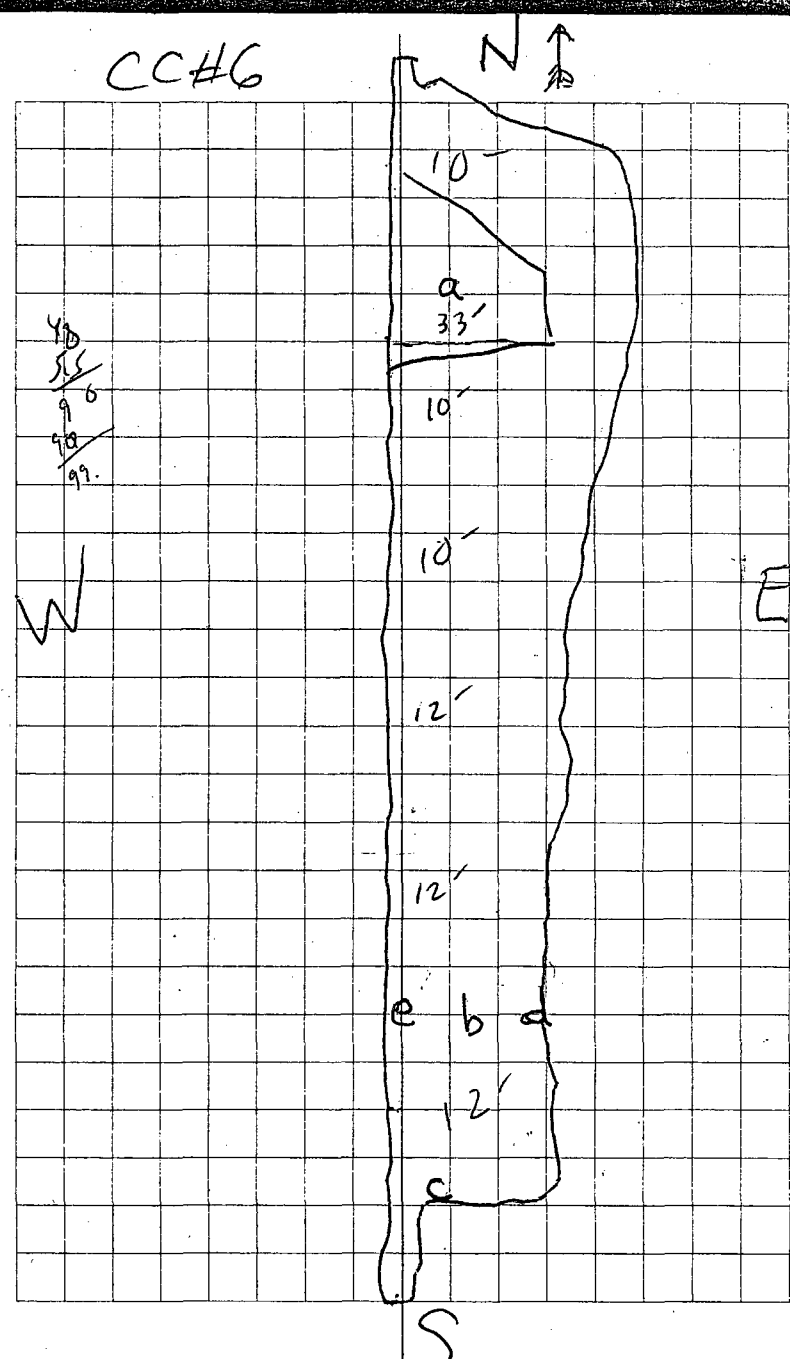
CC#6 8-2-01

Letter	Location (depth)	QUM	Time
a)	N. Floor-1 (33')	0	1400
b)	S. Floor-1 (12')	0	1416
c)	SW. Wall-1 (8')	0	1418
d)	SE. Wall-1 (6')	0	1420
e)	SW. Wall-1 (8')	423	1422

Collected Excess Soil-1 sample
@ 1500 MST

Left site to deliver samples
to Cardinal Labs in Hobbs
at 4:00 pm

CC#6



8-24-01

Per Ray w/ Walton

5-4.2

2772 oily dirt hauled to landfill
2592 backfill sand brought in
180 difference

Plan to use \approx 180 yd top soil
from nearby landfill

8-30-01

CC#6

7-9 Leave Midland Arrive at CC6

Called Paul Sheely en route to
notify of sampling activity. Paul
said he'd come out on site.

Mike w/ Walton Const. has
cleaned out & widened the north
end of excavation to a depth of 33'
He also extended west end of
south end of excavation to a
depth of 12'
He also took out the access
road to a depth of 8 feet.

7-30-01

Measured site took photos

~~North at~~
Facing N

Used probe/inner rod tool to
penetrate SW wall and
get "in-situ" OVM

readings at 5 points along
entire length of SW wall

All OVM readings 0

collected grab sample in
middle of SW-Wall Time OVM

SW-Wall-2 1020 0

collected samples of deep (33')

hole on north end at 16' depth

for each of 4 wall samples

Sample ~~Time~~ Time OVM

N.W.-Wall-1 (16') 1025 0 ppm

N.Wall-1 (16') 1030 156 ppm

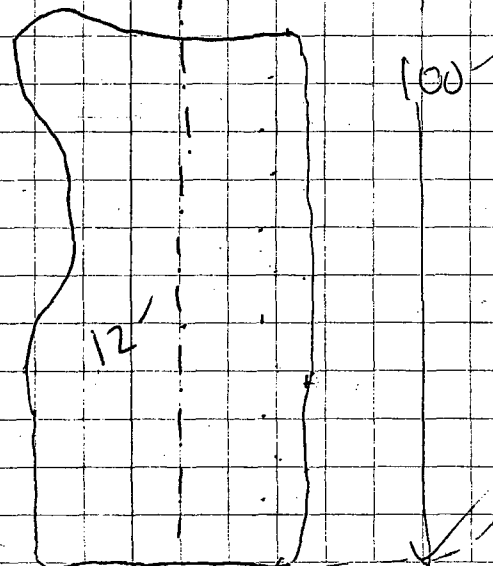
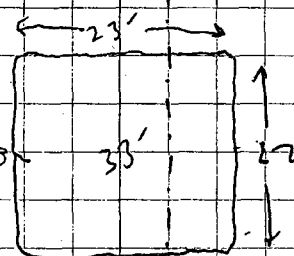
NE-Wall-1 (16') 1035 0 ppm

S.Wall (North)-1 (16') 1040 50 ppm

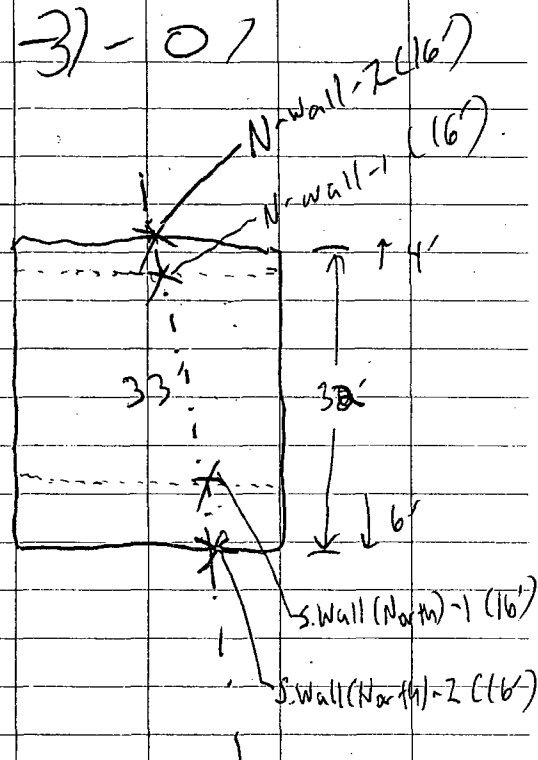
8-30-01

N

42'



CC#6 9-31-01



Photos: 1231 S. Wall (North end of excavation)
 1232 N. Wall " " "
 1233 Floor

Collected samples from north & south walls:

Sample ID	Time	QUM
N. Wall-2 (16')	0920 MST	0 ppm
S. Wall (North)-2 (16')	1025 0925 MST	0 ppm

9-31-01

Contaminated soil will be going to Cell B-6 at S. Monument Land Farm

Derek Robinson / RE Environmental was on site looking for land farm (He had some salt-contaminated soil from a Rice Engineering job).

Left site at 1120. to deliver samples to lab (Environmental Lab at TX)

1:00 pm Delivered samples to Lab

9-18-01

CCA6

Finished backfilling 9/17/01
Just needs leveling (should
be done today).

Hauled 2820 yd³ to Cell B-6
+ 2-4 loads

11-5-01

Objective: Begin CCA7 excavation
Left + Midland at 0700 MST

On site at 0845 MST

Gil Van Denter (Trident)

Mike Nagley (Walton Const.)

Equipment: Tractorhoe & pickup
Trident pickup, OVM, sampling equip

Started digging where there was
obvious hydrocarbon stained soil at
pipeline level (4') down to about
10' bgs. Took baggie sample for OVM
(56 ppm)

0925 Calibrated OVM before sample reading
OVM read 99.5 ppm w/ 100 ppm cal. b. g. 55

Waiting on dozer or loader to
move soil/level area west of pipeline
so tractorhoe can get in position to
excavate.