Clay Cooper #4 Closure Report
Duke Energy Field Services
Lea County, New Mexico

OCTOBER 12, 2001

Prepared For:

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

Site Name:

CLAY COOPER #4 (CC#4)

Site Location:

T20S, R36 E, SECTION 24, UNIT O

Prepared By:

TRIDENT ENVIRONMENTAL

PO Box 7624
Midland, Texas 79708

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

November 16, 2001

Duke Energy Field Services
Attn: Stephen Weathers
POB 5493
Denver, CO 80217

Re: Spill Site Closure Approval for Duke Energy Field Services,LP (DEFS)
Clay Cooper sites #2, #3, #4 and #5.
Site Location(s): UL-O, Sec 24-T20S-R36E (#2, #3 and #4) and UL-J, Sec 24-T20S-R36E (#5)
Submitted: November 13, 2001

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

Clay Cooper #6, Jimmy Cooper #3 and J-4-2 are on hold pending further examination.

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.

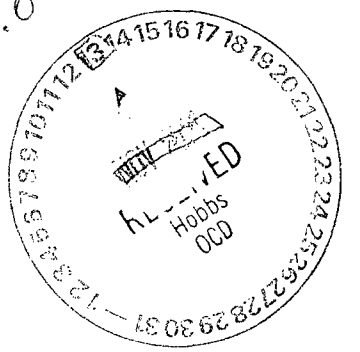
If you have any questions or need assistance please feel free to write or call me at (505) 393-6161, x113 or email psheeeley@state.nm.us

Sincerely,

Paul Sheeley-Environmental Engineer
Cc: Roger Anderson - Environmental Bureau Chief
Chris Williams - District I Supervisor
Bill Olson - Hydrologist
Larry Johnson - Environmental Engr.
Mr. Gilbert J. Van Deventer -Trident Environmental

TRIDENT ENVIRONMENTAL

IRP-209
10.25.05



October 12, 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 #4 site
Township 20 South, Range 36 East, Section 24, Unit O

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 #4) is located in Section 24 (Unit O), Township 20 South, Range 36 East on property owned by Dale Cooper and managed by Clay Cooper. The location of the CC #4 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. 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 2,328 cubic yards of hydrocarbon-impacted soils were transported by Walton Construction to cell B-5 at the South Monument Landfarm, which is owned and operated by Ms. Kena Kay Cooper (OCD Rule 711 Permit Approval NM-01-0032). Completed *Request for Approval to Accept Solid Waste* form (C-138), *Generator Certificate of Waste Status* form (C-143), and *Release Notification and Corrective Action* forms (C-141) 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

C:DEFS\COOPER\CC4\CC4CLOSE.DOC

ATTACHMENT A

TOPOGRAPHIC MAP

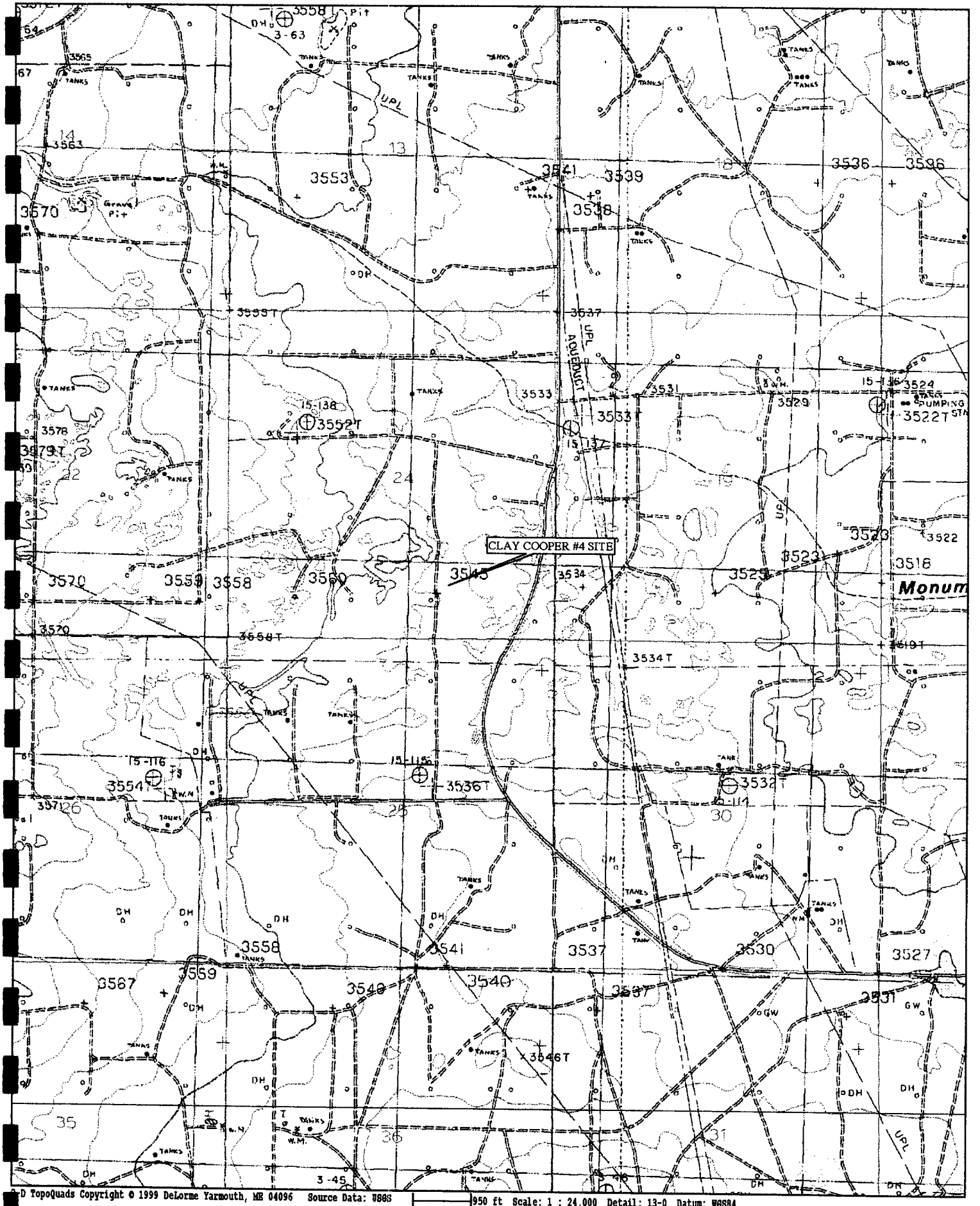
SITE MAP

SITE DATA FORM

SUMMARY OF ANALYTICAL RESULTS

C-138, C-141, AND C-143 FORMS

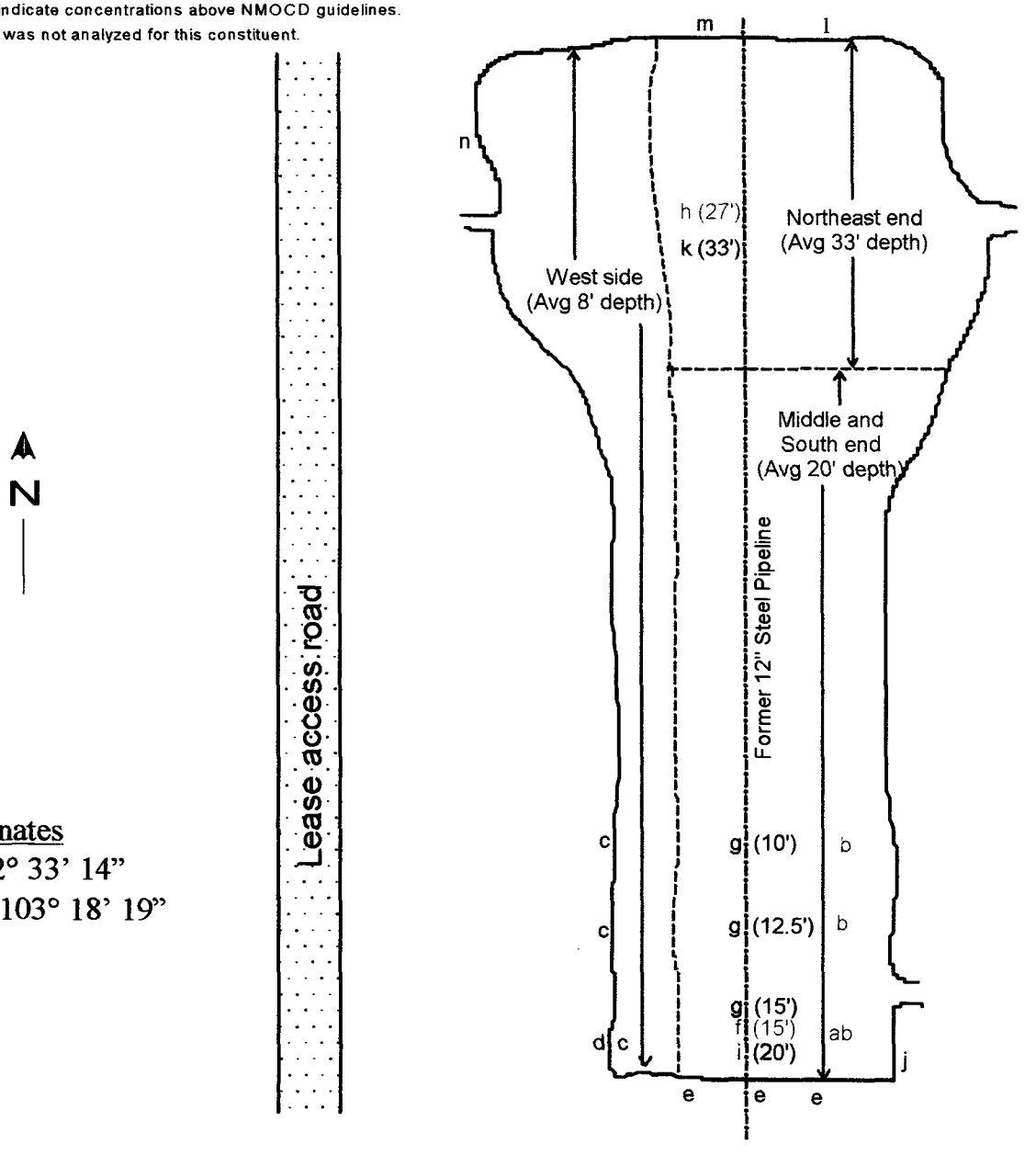
PHOTODOCUMENTATION



 Source Data: USGS 950 ft Scale: 1 : 24,000 Detail: 13-0 Datum: WGS84

Ltr	Sample ID (Depth)	Sample Type	Sample Date	OVM (ppm)	GRO (mg/kg)	DRO (mg/kg)	Benzene (mg/kg)	BTEX (mg/kg)
a	SE Wall-1	Grab	5/25/01	30	112	2411	<0.025	0.204
b	SE-Wall-2	Comp	5/25/01	9	30	501	NA	NA
c	SW-Wall-1	Comp	5/25/01	0	< 10	< 10	NA	NA
d	SW-Wall-2	Grab	5/25/01	0	< 10	< 10	NA	NA
e	S-Wall-1	Comp	5/25/01	0	< 10	< 10	NA	NA
f	S-Floor-1 (15')	Grab	5/25/01	6	152	3586	<0.025	<0.025
g	S-Floor-2 (10-15')	Comp	5/25/01	6	< 10	92	NA	NA
h	N-Floor-1 (27')	Grab	5/31/01	83	217	1107	<0.025	1.79
i	S-Floor-3 (20')	Grab	5/31/01	0	< 10	< 10	NA	NA
j	SE-Wall-3	Grab	5/31/01	0	< 10	< 10	NA	NA
k	N-Floor-2 (33')	Grab	5/31/01	0	< 10	< 10	NA	NA
l	NE-Wall-1	Grab	5/31/01	0	< 10	< 10	NA	NA
m	N-Wall-1	Grab	5/31/01	0	< 10	< 10	NA	NA
n	NW-Wall-1	Grab	6/1/01	0	< 10	62	NA	NA
		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.



Site Coordinates
Latitude: 32° 33' 14"
Longitude: 103° 18' 19"

Trident Environmental P. O. Box 7624 Midland, Texas 79708	SITE: CLAY COOPER #4	SITE MAP
	LOCATION: UNIT O, SEC. 24, T20S, R36E	
	DATE: 6/12/01 | DRN BY: GJV	
	APPROXIMATE SCALE: 1 INCH = 20 FEET	

TRIDENT ENVIRONMENTAL

Site Data Form

TRW Technician: JMF/GJV Excavation Crew Names: Walton Construction Site ID: Clay Cooper # 4

Site Location: Latitude 32° 33' 14" N Longitude 103° 18' 19" W County: Lea State: New Mexico

Township 20 South Range 36 East Section 24 Unit O

Begin Excavation (Date/Time) 03/25/01 Complete Excavation (Date/Time) 6/12/01

LAND USE: (Check all that apply)
☐ Residential ☐ Industrial ■ Oil & Gas ☐ Recreational ☐ School/Daycare ☐ Rural ☐ Farm land ■ Range land ☐ 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 ☐ Caliche ☐ Gravel ☐ Clay ☐ Silt ■ Other Sandy silty clay at depth

EXCAVATION DIMENSIONS	Length	Width	Average Depth	Maximum Depth
	114 feet	22-60 feet	Varied 5-33 feet	33 feet

VOLUME EXCAVATED: ~~4,000~~ 12,000 yd³ **VOLUME HAULED TO LANDFARM:** 2,328 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	SE Wall-1	Grab	05-25-01	30	112	2411	<0.025	0.204
b	SE-Wall-2	Comp	05-25-01	9.0	30	501	NA	NA
c	SW-Wall-1	Comp	05-25-01	0.0	< 10	< 10	NA	NA
d	SW-Wall-2	Grab	05-25-01	0.0	< 10	< 10	NA	NA
e	S-Wall-1	Comp	05-25-01	0.0	< 10	< 10	NA	NA
f	S-Floor-1 (15')	Grab	05-25-01	6.0	152	3586	<0.025	<0.025
g	S-Floor-2 (10-15')	Comp	05-25-01	6.0	< 10	92	NA	NA
h	N-Floor-1 (27')	Grab	05-31-01	83	217	1107	<0.025	1.79
i	S-Floor-3 (20')	Grab	05-31-01	0.0	< 10	< 10	NA	NA
j	SE-Wall-3	Grab	05-31-01	0.0	< 10	< 10	NA	NA
k	N-Floor-2 (33')	Grab	05-31-01	0.0	< 10	< 10	NA	NA
l	NE-Wall-1	Grab	05-31-01	0.0	< 10	< 10	NA	NA
m	N-Wall-1	Grab	05-31-01	0.0	< 10	< 10	NA	NA
n	NW-Wall-1	Grab	06-01-01	0.0	< 10	62	NA	NA
B5	Exc. Soil-1	Comp	05-25-01	6.0	176	1633	<0.025	2.125
B5	Exc. Soil-2	Comp	06-01-01	0.0	79	1128	<0.025	0.187
BF	Backfill-1	Comp	06-01-01	0.0	< 10	< 10	NA	NA
BF	Backfill-2	Comp	06-01-01	0.0	< 10	< 10	NA	NA
B5/BF	Backfill-3	Comp	06-01-01	4.0	< 10	121	NA	NA
B5	BF-3a	Comp	06-06-01	14	< 10	549	NA	NA
BF	BF-3b	Comp	06-06-01	31	< 10	< 10	<0.025	<0.025
BF	BF-3c	Comp	06-06-01	13	< 10	< 10	NA	NA
BF	BF-3d	Comp	06-06-01	16	< 10	< 10	<0.025	<0.025
		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.
B5 indicates soil that was transported to cell B-5 at South Monument Landfarm.
BF indicates soil that was returned as backfill into the excavation.

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 #4	Facility Type: Natural Gas Pipeline

Surface Owner: Dale Cooper	Mineral Owner: Unknown	Lease No.: EMSU

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	24	20S	36E		32° 33' 14" N		103° 18' 19" W	Lea

NATURE OF RELEASE

Type of Release: Condensate	Volume of Release: Unknown	Volume Recovered: ~2,328 yd³ soil removed
Source of Release: Pipeline	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: Unknown
Was Immediate Notice Given? ☐ Yes ☐ No ■ Not Required	If YES, To Whom? Donna Williams, 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. 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 5/25/01 over-excavation was initiated. Excavation continued until 6/1/01 when total petroleum hydrocarbons on floor and walls were below 100 mg/kg. Final excavation dimensions varied from approx. 22 - 60 ft wide x 114 long x 5 -33 ft deep. Approximately 2,328 cu yds of soil was transported to cell B-5 at the South Monument Land Farm. Backfilling of excavation was completed on 6/12/01. Closure report, analytical results, photographs, and site map are attached. 12000' excavated

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 ☐

* Attach Additional Sheets If Necessary

District I - (505) 393-6161
1625 N. French Dr
Hobbs, NM 88240
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410
District IV - (505) 827-7131
2040 S. Pacheco
Santa Fe, NM 87505

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-143
3/15/00

Submit to OCD
Permitted Surface
Waste Management
Facility

GENERATOR CERTIFICATE OF WASTE STATUS

1. Waste Generator Name and Address:

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

2. Permit Number (if waste generated at an OCD permitted facility)

3. Description of Waste and Generating Process:

Exempt oilfield waste
Hydrocarbon-impacted soil from pipeline leak

4. Location of Waste (Street address &/or ULSTR):

Sec 24 T20S R36E Unit J
Site Name: Clay Cooper #4

5. Destination (Surface Waste Management Facility):
South Monument Landfarm (Permit NM-01-0032)

6. Transporter: Walton Construction

7. Estimated Volume 1000 cy/bbls

For **NON-EXEMPT** waste only, the following documentation is attached (check appropriate items):

_____ MSDS Information

_____ RCRA Hazardous Waste Analysis (With Chain of Custody).

_____ Other (Description)

Generator certifies that, according to the Resource Conservation and Recovery Act (RCRA) and the Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (check appropriate classification)

__X__ **EXEMPT** oilfield waste.

_____ **NON-EXEMPT** oilfield waste that is non-hazardous pursuant to 40 CFR Part 261. (Attach appropriate documentation)

In addition, Generator certifies that nothing has been added to this exempt or non-exempt non-hazardous waste and that this waste does not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403.

Generator Signature: _____ Date: 6/4/01

Print Name: Steve Weathers

Title: Environmental Specialist

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-138
Revised March 17, 1999

Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: ■ Non-Exempt: ☐ Verbal Approval Received: Yes ■ No ☐	4. Generator: Duke Energy Field Svcs
	5. Originating Site T20S R36E S24 Unit J
2. Management Facility Destination: South Monument Landfarm (NM-01-0032)	6. Transporter: Walton Construction
3. Address of Facility Operator: 834 West Gold, Hobbs, NM 88240	8. State: New Mexico
7. Location of Material (Street Address or ULSTR): T20S R36E Sec24 Unit J	Site Name CC #4

9. Circle One:

A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator, one certificate per job.

B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved

All transporters must certify the wastes delivered are only those consigned for transport

BRIEF DESCRIPTION OF MATERIAL:

Oilfield exempt waste (hydrocarbon-impacted soil generated from historic leak in natural gas pipeline)

Estimated Volume 1000 cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE Kenc Kay Cooper Waste Management Facility Authorized Agent TITLE Operator DATE 5/30/01

TYPE OR PRINT NAME Kene Kay Cooper TELEPHONE NO. 505-393-3174

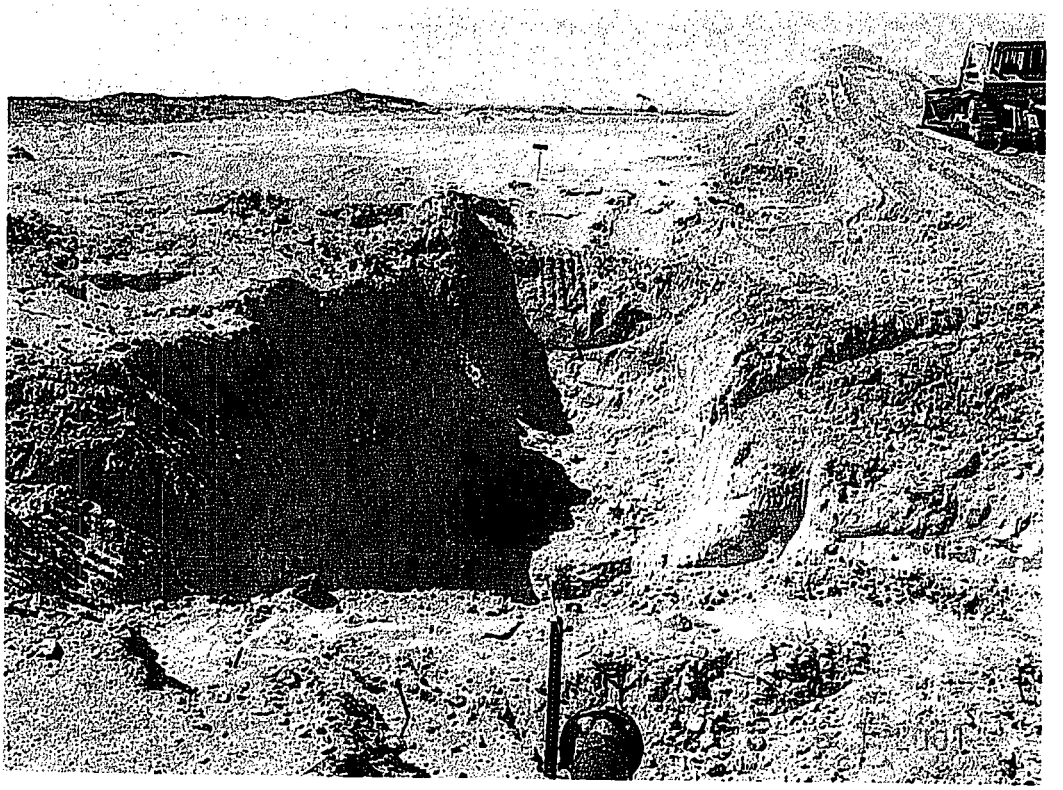
(This space for State Use)

APPROVED BY: [signature] TITLE: Environmental Geologist DATE: 6-5-01

APPROVED BY: _____ TITLE: _____ DATE: _____

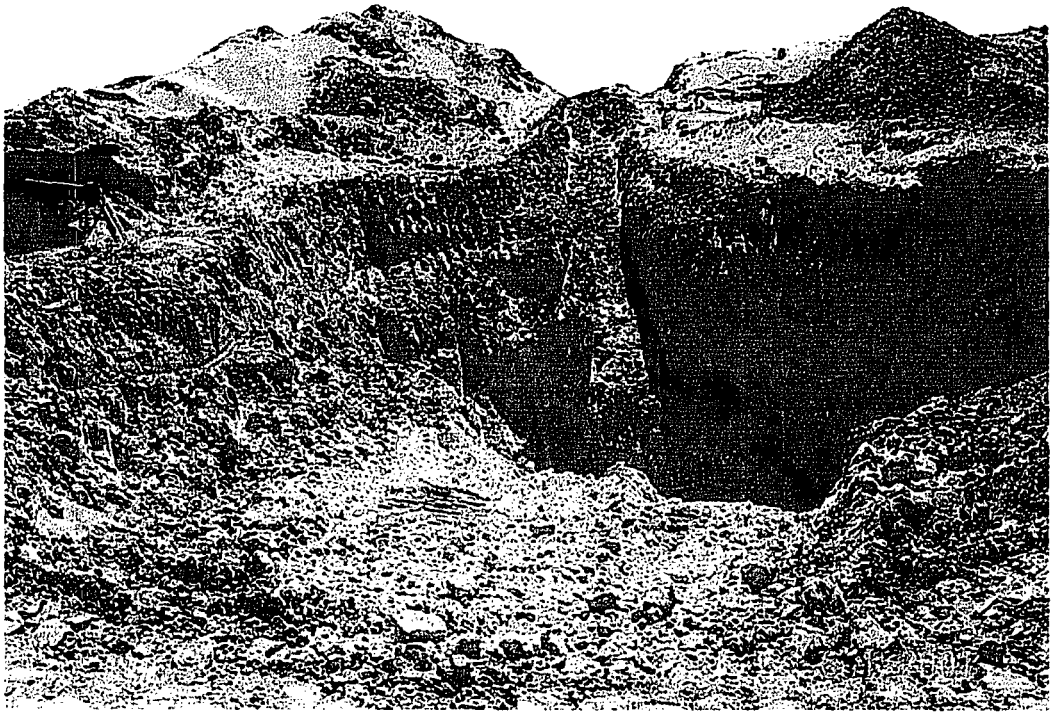
CC4
-985

View facing southwest showing hydrocarbon-stained soil along west wall of north end of excavation



CC4
-990

View facing south showing excavation of CC#4 site. Backfilled CC#3 site shown in background.



CC4
-984

View facing east showing east wall of completed excavation.

CC4
-987

View of completed excavation facing north.

ATTACHMENT B

LABORATORY ANALYTICAL REPORTS

AND

CHAIN-OF-CUSTODY DOCUMENTATION

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/ -1.0 deg C
Project #: V-106
Project Name: Duke Energy Field Services
Project Location: CC #4

Sampling Date: 06/01/01
Receiving Date: 06/01/01
Analysis Date: 06/01/01

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
40656	Exc. Soil-2	<0.025	<0.025	<0.025	0.117	0.070

QUALITY CONTROL	0.093	0.096	0.096	0.211	0.100
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% INSTRUMENT ACCURACY	93	96	96	106	100
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	0.097	0.099	0.098	0.219	0.103
SPIKE DUP	0.090	0.091	0.091	0.200	0.096
% EXTRACTION ACCURACY	97	99	98	110	103
BLANK	<0.025	<0.025	<0.025	<0.025	<0.025
RPD	7	7	7	9	7

METHODS: EPA SW 846-8021B ,5030

Celey D. Keene

Celey D. Keene

06/04/01
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/ -1.0 deg C
Project #: V-106
Project Name: Duke Energy Field Services
Project Location: CC #4

Sampling Date: 06/01/01
Receiving Date: 06/01/01
Analysis Date: 06/01/01

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg
40652	CC4-M-NW-Wall-1	<10	62
40653	CC4-Backfill-1	<10	<10
40654	CC4-Backfill-2	<10	<10
40655	CC4-Backfill-3	<10	121
40656	Exc. Soil-2	79	1128
	QUALITY CONTROL	551	539
	TRUE VALUE	500	500
	% INSTRUMENT ACCURACY	110	108
	SPIKED AMOUNT	476	476
	ORIGINAL SAMPLE	<10	62
	SPIKE	535	533
	SPIKE DUP	544	547
	% EXTRACTION ACCURACY	112	99
	BLANK	<10	<10
	RPD	2	3

Methods: EPA SW 846-8015M GRO/DRO

Celey D. Keene

Celey D. Keene

06/04/01
Date

TRIDENT ENVIRONMENTAL
P.O. Box 7624
Midland, Tx 79708
(915) 682-0808
(915) 682-0727 (Fax)

V-106-CC4-04

Chain of Custody

Date 6-1-01 Page 1 of 1

Lab Name: Environmental Lab of Texas
Address: 12600 W I-20 E
Odessa, Tx 79763
Telephone: (915) 563-1800

Samplers (SIGNATURES): Gil Van Deventer

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)	DRO (EPA 8015D)	TDS (EPA 160.1)	Anions/Cations	Total Metals	TCLP Metals							Number of Containers
CC4-m-NW-Wall-1	Soil	6-1-01	1035	G									✓	✓					4	0	6	5	2		1
CC4-Backfill-1	Soil	6-1-01	1040	C									✓	✓					4	0	6	5	3		1
CC4-Backfill-2	Soil	6-1-01	1050	C									✓	✓					4	0	6	5	4		1
CC4-Backfill-3	Soil	6-1-01	1100	C									✓	✓					4	0	6	5	5		1
Exc. Soil-2	Soil	6-1-01	1115	C	✓								✓	✓					4	0	6	5	6		1

Analysis Request

Project Information		Sample Receipt	
Project Name:	Duke Energy Field Svcs	Total Containers:	
Project Location:	CC#4	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.:		Lab No.:	
Bill to (see below):	Duke Energy Field Services		
Special Instructions:	Attn: Steve Weathers POBox 5493 Denver, CO 80217		

Relinquished By: (1) (Company)	Relinquished By: (2) (Company)	Relinquished By: (3) (Company)
Trident Environmental	(Printed Name)	(Printed Name)
(Printed Name) Gil Van Deventer	(Signature)	(Signature)
(Signature) Gil Van Deventer	(Date) (Time)	(Date) (Time)
(Date) 6-1-01 (Time) 3:25 pm		
Received By: (1) (Company)	**Received By: (2) (Company)**	**Received By: (3) (Company)**
Environmental Lab of Tx	(Printed Name)	(Printed Name)
(Printed Name) Jeanne McMurrey	(Signature)	(Signature)
(Signature) Jeanne McMurrey	(Date) (Time)	(Date) (Time)
(Date) 6-01-01 (Time) 1525		

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/ 4.0 deg C
Project #: V-106
Project Name: Duke Energy Field Services
Project Location: CC #4

Sampling Date: 06/06/01
Receiving Date: 06/06/01
Analysis Date: See Below

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
40747	BF-3b	<0.025	<0.025	<0.025	<0.025	<0.025
40749	BF-3d	<0.025	<0.025	<0.025	<0.025	<0.025
	QUALITY CONTROL	0.103	0.101	0.098	0.216	0.100
	TRUE VALUE	0.100	0.100	0.100	0.200	0.100
	% INSTRUMENT ACCURACY	103	101	98	108	100
	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	0.101	0.100	0.098	0.218	0.102
	SPIKE DUP	0.100	0.101	0.099	0.224	0.105
	% EXTRACTION ACCURACY	101	100	98	109	102
	BLANK	<0.025	<0.025	<0.025	<0.025	<0.025
	RPD	1	1	1	3	3
	ANALYSIS DATE	6/06/01	6/06/01	6/06/01	6/06/01	6/06/01
40746	BF-3a	<0.025	<0.025	<0.025	<0.025	<0.025
	QUALITY CONTROL	0.101	0.099	0.097	0.214	0.099
	TRUE VALUE	0.100	0.100	0.100	0.200	0.100
	%.INSTRUMENT ACCURACY	101	99	97	107	99
	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	0.104	0.103	0.223	0.108
	SPIKE DUP	0.108	0.109	0.107	0.223	0.112
	% EXTRACTION ACCURACY	104	104	103	112	112
	BLANK	<0.025	<0.025	<0.025	<0.025	<0.025
	RPD	4	5	4	0	4
	ANALYSIS DATE	6/07/01	6/07/01	6/07/01	6/07/01	6/07/01

METHODS: EPA SW 846-8021B ,5030

Raland K. Tuttle

6-8-01
Date

ENVIRONMENTAL LAB OF TEXAS, 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/ 4.0 deg C
Project #: V-106
Project Name: Duke Energy Field Services
Project Location: CC #4

Sampling Date: 06/06/01
Receiving Date: 06/06/01
Analysis Date: 06/06/01

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg
40746	BF-3a	<10	549
40747	BF-3b	<10	<10
40748	BF-3c	<10	<10
40749	BF-3d	<10	<10
	QUALITY CONTROL	443	427
	TRUE VALUE	500	500
	% INSTRUMENT ACCURACY	111	104
	SPIKED AMOUNT	476	476
	ORIGINAL SAMPLE	<10	<10
	SPIKE	534	506
	SPIKE DUP	530	494
	% EXTRACTION ACCURACY	111	104
	BLANK	<10	<10
	RPD	1	2

Methods: EPA SW 846-8015M GRO/DRO

Raland K. Tuttle

6-7-01
Date

RUSH 8015

TRIDENT ENVIRONMENTAL
P.O. Box 7624
Midland, Tx 79708
(915) 682-0808
(915) 682-0727

V-106-CC4-05

Chain of Custody

Date 6-6-01 Page 1 of 1

Lab Name: Environmental Lab of Tx
Address: 12600 W I-20 E
Odessa, Tx 79762
Telephone: (915) 563-1800

Samplers (SIGNATURES): Gil Van Deventer

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)	DRO (EPA 8015D)	TDS (EPA 160.1)	Anions/Cations	Total Metals	TCLP Metals						Number of Containers
BF-3 a	Soil	6-6-01	1400	C	✓								✓	✓					4	0	7	4	6	1
BF-3 b	Soil	6-6-01	1410	C	✓								✓	✓					4	0	7	4	7	1
BF-3 c	Soil	6-6-01	1420	C									✓	✓					4	0	7	4	8	1
BF-3 d	Soil	6-6-01	1430	C	✓								✓	✓					4	0	7	4	9	1

Project Information

Project Name: Duke Energy Field Services
Project Location: CC#4
Project Manager: Gil Van Deventer
Cost Center No.: V-106
Shipping ID No.:
Bill to (see below): Duke Energy Field Services
Special Instructions: Attn: Steve Weathers
POBox 5493
Denver, CO 80217

* Add BTEX BF-3a as per G. VanDeventer 6-7-01 @ 1130

Sample Receipt

Total Containers:
COC Seals:
Rec'd Good Cond/Cold: 4.0
Conforms to Records:
Lab No.:

Relinquished By: (1) (Company)	Relinquished By: (2) (Company)	Relinquished By: (3) (Company)
Trident Environmental	(Printed Name)	(Printed Name)
(Printed Name) Gil Van Deventer	(Signature)	(Signature)
(Signature) Gil Van Deventer	(Date) (Time)	(Date) (Time)
(Date) 6-6-01 (Time) 4:55pm		
Received By: (1) (Company)	**Received By: (2) (Company)**	**Received By: (3) (Company)**
Environmental Lab of Tx	(Printed Name)	(Printed Name)
(Printed Name) Jeanne McMurrey	(Signature)	(Signature)
(Signature) Jeanne McMurrey	(Date) (Time)	(Date) (Time)
(Date) 6-6-01 (Time) 1655		

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/ -0.5 deg C
Project #: V-106
Project Name: Duke Energy Field Services
Project Location: CC #4

Sampling Date: 05/31/01
Receiving Date: 05/31/01
Analysis Date: 05/31/01

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg
40604	N-Floor-1 (27')	217	1107
40605	S-Floor-3 (20')	<10	<10
40606	SE-Wall-3	<10	<10
40607	N-Floor-2 (33')	<10	<10
40608	NE-Wall-1	<10	<10
40609	N-Wall-1	<10	<10

QUALITY CONTROL	532	552
TRUE VALUE	500	500
% INSTRUMENT ACCURACY	106	110
SPIKED AMOUNT	476	476
ORIGINAL SAMPLE	<10	<10
SPIKE	549	539
SPIKE DUP	561	574
% EXTRACTION ACCURACY	115	113
BLANK	<10	<10
RPD	2	6

Methods: EPA SW 846-8015M GRO/DRO

Celey D. Keene

Celey D. Keene

06/01/01
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/ -0.5 deg C
Project #: V-106
Project Name: Duke Energy Field Services
Project Location: CC #4

Sampling Date: 05/31/01
Receiving Date: 05/31/01
Analysis Date: 05/31/01

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
40604	N-Floor-1 (27')	<0.025	0.430	0.278	0.745	0.337

QUALITY CONTROL	0.094	0.095	0.094	0.204	0.096
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% INSTRUMENT ACCURACY	94	95	94	102	96
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	0.100	0.101	0.101	0.226	0.105
SPIKE DUP	0.097	0.099	0.098	0.219	0.102
% EXTRACTION ACCURACY	100	101	101	113	105
BLANK	<0.025	<0.025	<0.025	<0.025	<0.025
RPD	3	2	3	3	3

METHODS: EPA SW 846-8021B ,5030

Celey D. Keene

Celey D. Keene

06/01/01
Date

TRIDENT ENVIRONMENTAL
P.O. Box 7624
Midland, TX 79708
(915) 682-0808
(915) 682-0727 Fax

V-106-CC4-03

Chain of Custody

Date 5-31-01 Page 1 of 1

Lab Name: Environmental Lab of Tx
Address: 12600 W I-20 E
Odessa, TX 79765
Telephone: (915) 563-1800

Samplers (SIGNATURES)

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)	DRO (EPA 8015D)	TDS (EPA 160.1)	Anions/Cations	Total Metals	TCLP Metals							Number of Containers
g N-Floor-1 (27')	Soil	5-31-01	10:30	G	✓								✓	✓					4	0	6	0	4		1
h S-Floor-3 (20')	Soil	5-31-01	1115	G									✓	✓					4	0	6	0	5		1
i SE-Wall-3	Soil	5-31-01	1120	G									✓	✓					4	0	6	0	6		1
j N-Floor-2 (33')	Soil	5-31-01	1140	G									✓	✓					4	0	6	0	7		1
k NE-Wall-1	Soil	5-31-01	1155	G									✓	✓					4	0	6	0	8		1
l N-Wall-1	Soil	5-31-01	1205	G									✓	✓					4	0	6	0	9		1

Project Information

Project Name: Duke Energy Field Svcs
Project Location: CC#4
Project Manager: Gil Van Deventer
Cost Center No.: V-106
Shipping ID No.:
Bill to (see below): Duke Energy Field Services
Special Instructions: Attn: Steve Weathers
POBox 5493
Denver, CO 80217
RUSH → 6/1 8 AM
call

Sample Receipt

Total Containers:
COC Seals:
Rec'd Good Cond/Cold: - 0.5°C
Conforms to Records:
Lab No.:

Relinquished By:
(1) (Company) Trident Environmental
(Printed Name) Gil Van Deventer
(Signature)
(Date) 5-31-01 (Time) 16.00

Received By:
(1) (Company) Env. Lab of Tx
(Printed Name) Jeanne McMurrey
(Signature)
(Date) 05-31-01 (Time) 16.00

Relinquished By: (2) (Company) / (Printed Name) / (Signature) / (Date) (Time)
Received By: (2) (Company) / (Printed Name) / (Signature) / (Date) (Time)
Relinquished By: (3) (Company) / (Printed Name) / (Signature) / (Date) (Time)
Received By: (3) (Company) / (Printed Name) / (Signature) / (Date) (Time)

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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/ 0.5 deg C
Project #: V-106
Project Name: Duke Energy Field Services
Project Location: CC#4

Sampling Date: 05/25/01
Receiving Date: 05/25/01
Analysis Date: 05/29/01

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg
40526	SE-Wall-1	112	2411
40527	SE-Wall-2	30	501
40528	SW-Wall-1	<10	<10
40529	SW-Wall-2	<10	<10
40530	S-Wall-1	<10	<10
40531	S-Floor-1	152	3586
40532	S-Floor-2	<10	92
	QUALITY CONTROL	518	509
	TRUE VALUE	500	500
	% INSTRUMENT ACCURACY	107	98
	SPIKED AMOUNT	500	500
	ORIGINAL SAMPLE	<10	<10
	SPIKE	543	481
	SPIKE DUP	552	476
	% EXTRACTION ACCURACY	114	101
	BLANK	<10	<10
	RDP	2	1

Methods: EPA SW 846-8015M GRO/DRO

Raland K. Tuttle

5-29-01
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/ 0.5 deg C
Project #: V-106
Project Name: Duke Energy Field Services
Project Location: CC#4

Sampling Date: 05/25/01
Receiving Date: 05/25/01
Analysis Date: 05/25/01

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
40526	SE-Wall-1	<0.025	<0.025	0.065	0.139	<0.025
40531	S-Floor-1	<0.025	<0.025	<0.025	<0.025	<0.025

QUALITY CONTROL	0.091	0.088	0.088	0.191	0.092
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% INSTRUMENT ACCURACY	91	88	88	96	92
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	0.107	0.109	0.107	0.241	0.113
SPIKE DUP	0.097	0.099	0.096	0.214	0.101
% EXTRACTION ACCURACY	97	99	96	107	101
BLANK	<0.025	<0.025	<0.025	<0.025	<0.025
RPD	10	10	11	12	12

METHODS: EPA SW 846-8021B ,5030

Raland K. Tuttle

5-29-01
Date

TRIDENT ENVIRONMENTAL

P.O. Box 7624
Midland, Tx 79708
(915) 682-0808 - office
(915) 682-0727 - Fax

V-106-CC4-01

Chain of Custody

Date 5-25-01 Page 1 of 1

Lab Name: Environmental Lab of Texas
Address: 12600 W I-20 E
Odessa, Tx
Telephone: 915-563-1800

Samplers (SIGNATURES): Gil Van Deventer

	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)	DRO (EPA 8015D)	TDS (EPA 160.1)	Anions/Cations	Total Metals	TCLP Metals							Number of Containers
K	a SE-Wall-1	Soil	5-25-01		G	✓						✓		✓	✓					4	0	5	2	6		1
K	b SE-Wall-2	Soil	5-25-01		C							✓		✓	✓					4	0	5	2	7		1
	c SW-Wall-1	Soil	5-25-01		C							✓		✓	✓					4	0	5	2	8		1
	d SW-Wall-2	Soil	5-25-01		G							✓		✓	✓					4	0	5	2	9		1
	e S-Wall-1	Soil	5-25-01		C							✓		✓	✓					4	0	5	3	0		1
K	f S-Floor-1	Soil	5-25-01		G	✓						✓		✓	✓					4	0	5	3	1		1
K	g S-Floor-2	Soil	5-25-01		C							✓		✓	✓					4	0	5	3	2		1

Analysis Request

Project Information		Sample Receipt	
Project Name:	Duke Energy Field Services	Total Containers:	
Project Location:	CC#4	COC Seals:	
Project Manager:	Gil Van Deventer	Rec'd Good Cond/Cold:	0.5 °C
Cost Center No.:	V-106	Conforms to Records:	
Shipping ID No.:		Lab No.:	
Bill to (see below):	Duke Energy Field Services		
Special Instructions:	Attn: Steve Weathers POBox 5493 Denver, CO 80217	* Need results by Tues a.m.	

Relinquished By: (1) (Company)	Relinquished By: (2) (Company)	Relinquished By: (3) (Company)
Trident Environmental	(Printed Name)	(Printed Name)
(Printed Name) Gil Van Deventer	(Signature)	(Signature)
(Signature) Gil Van Deventer	(Date) (Time)	(Date) (Time)
(Date) 5-25-01 (Time) 1645		
Received By: (1) (Company)	**Received By: (2) (Company)**	**Received By: (3) (Company)**
Environmental Lab of Texas	(Printed Name)	(Printed Name)
(Printed Name) Jeanne McMurrey	(Signature)	(Signature)
(Signature) Jeanne McMurrey	(Date) (Time)	(Date) (Time)
(Date) 5-25-01 (Time) 1645		

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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/ 0.5 deg C
Project #: V-106
Project Name: Duke Energy Field Services
Project Location: CC#4

Sampling Date: 05/25/01
Receiving Date: 05/25/01
Analysis Date: 05/29/01

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg
40533	Exc. Soil-1	176	1633
	QUALITY CONTROL	518	509
	TRUE VALUE	500	500
	% INSTRUMENT ACCURACY	107	98
	SPIKED AMOUNT	500	500
	ORIGINAL SAMPLE	<10	<10
	SPIKE	543	481
	SPIKE DUP	552	476
	% EXTRACTION ACCURACY	114	101
	BLANK	<10	<10
	RDP	2	1

Methods: EPA SW 846-8015M GRO/DRO

Raland K. Tuttle

5-29-01
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/ 0.5 deg C
Project #: V-106
Project Name: Duke Energy Field Services
Project Location: CC#4

Sampling Date: 05/25/01
Receiving Date: 05/25/01
Analysis Date: 05/25/01

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
40533	Exc. Soil-1	<0.025	0.528	0.293	0.837	0.467

QUALITY CONTROL	0.091	0.088	0.088	0.191	0.092
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% INSTRUMENT ACCURACY	91	88	88	96	92
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	0.107	0.109	0.107	0.241	0.113
SPIKE DUP	0.097	0.099	0.096	0.214	0.101
% EXTRACTION ACCURACY	97	99	96	107	101
BLANK	<0.025	<0.025	<0.025	<0.025	<0.025
RPD	10	10	11	12	12

METHODS: EPA SW 846-8021B ,5030

Raland K. Tuttle

5-29-01
Date

TRIDENT ENVIRONMENTAL

P.O. Box 7624
Midland, Tx 79708
(915) 682-0808 - Office
(915) 682-0727 - Fax

V-106-CC4-02

Chain of Custody

Date 5-25-01 Page 1 of 1

Lab Name: Environmental Lab of Texas
Address: 12600 W I-20 E
Odessa, TX
Telephone: 915-563-1800

Samplers (SIGNATURES)

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)	DRO (EPA 8015D)	TDS (EPA 160.1)	Anions/Cations	Total Metals	TCLP Metals							Number of Containers
Exc. Soil - 1	Soil	5-25-01	1345	C	✓								✓	✓					4	0	5	3	3		1

Analysis Request

Project Information		Sample Receipt	
Project Name:	Duke Energy, Fidd Services	Total Containers:	
Project Location:	CC#4	COC Seals:	
Project Manager:	Gil Van Deventer	Rec'd Good Cond/Cold:	0.5 °C
Cost Center No.:	V-106	Conforms to Records:	
Shipping ID No.:		Lab No.:	
Bill to (see below):	Duke Energy Field Services		
Special Instructions:	Attn: Steve Weathers POBox 5493 Denver, CO 80217		

Relinquished By: (1) (Company)	Relinquished By: (2) (Company)	Relinquished By: (3) (Company)
Trident Environmental	(Printed Name)	(Printed Name)
(Printed Name) Gil Van Deventer	(Signature)	(Signature)
(Signature)	(Date) (Time)	(Date) (Time)
(Date) 5-25-01 (Time) 1645		
Received By: (1) (Company) Environmental Lab of Tx	Received By: (2) (Company)	Received By: (3) (Company)
(Printed Name) Jeanne McMurrey	(Printed Name)	(Printed Name)
(Signature)	(Signature)	(Signature)
(Date) 5-25-01 (Time) 1645	(Date) (Time)	(Date) (Time)

Copy signed original form for Trident Environmental records

ATTACHMENT C

FIELD BOOK NOTES

5-24-01 CC4

On site at CC#4 to begin excavation. On site:
Mike Neagle Walton Const (trackhoe)
Martin Robledo " " (loader)

Equip on site Trackhoe Samsung SE210 LC-3
Loader JD 644C

Paul Sheeley w/ NMOCD called to say he's on the way.

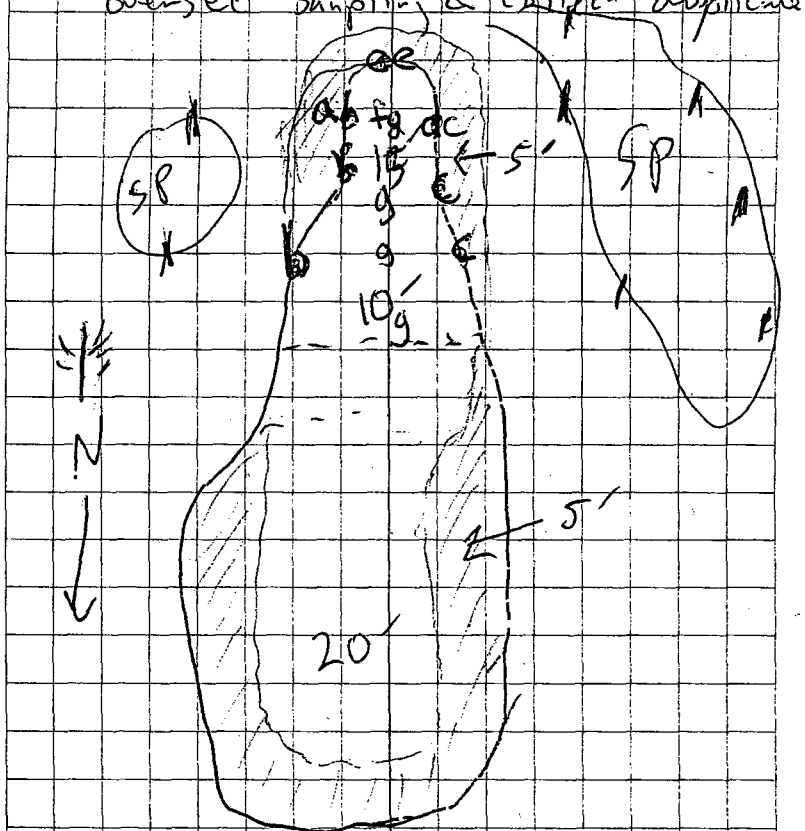
Clay Cooper said he's running late will arrive later

Stan Shaver plans to come out ~9:30am to discuss re-connecting line.

5-25-01			Time	OVM
a	SE-Wall-1	grab	1215	30
b	SE-Wall-2	comp	1220	9
c	SW-Wall-1	comp	1225	0
d	SW-Wall-2	grab	1240	0
e	S-Wall-1	comp	1245	0
f	S-Floor-1	grab	1320	6
g	S-Floor-2	comp	1330	6
Exc Soil-1		comp	1345	51

5-25-01 CC4

Collected Samples from initial dig along 30' ROW
Trackhue being getting maintenance work done so not digging today
Paul Sheeley w/ OCD on site to oversee sampling & collect duplicate



5-31-01

8:30 MST Drive Midland to CC#4

10:30

Collected floor sample at depth of 27' (grab sample directly below leak at north end of excavation) OVM = 83 ppm

Equipment on site:

Trackhoe (Mike Neagle)

~~Dozer~~ Loader

CAT (Walt Liason)

Collected the following grab samples

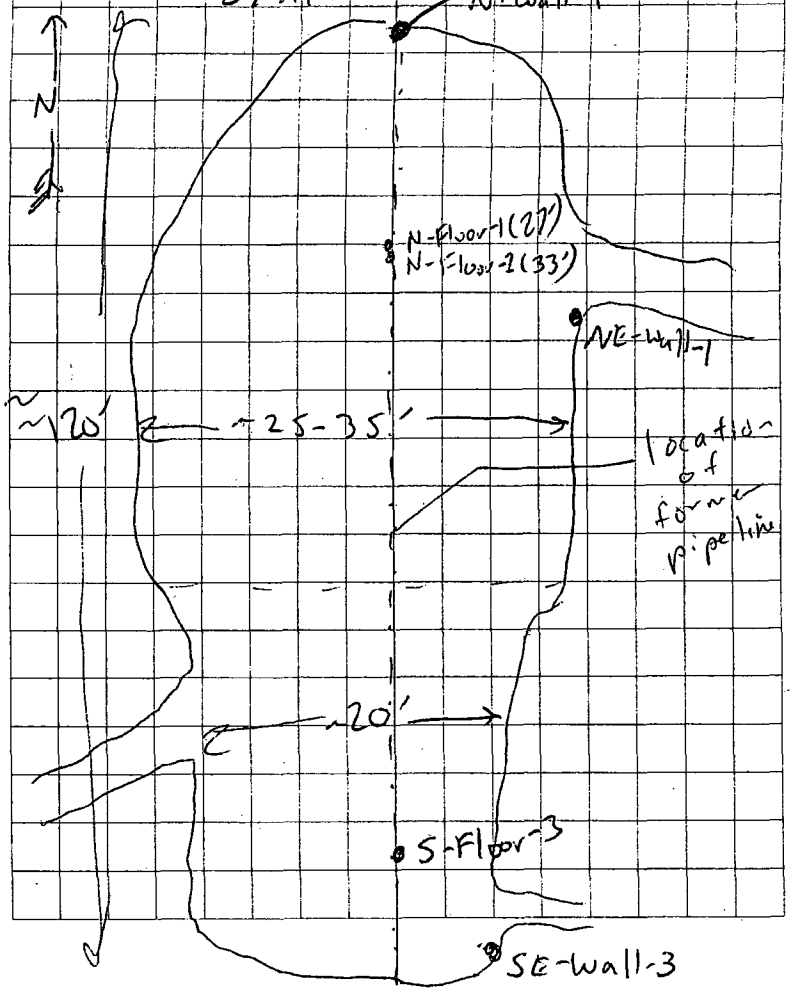
				Time
h	N. Floor-1	(27')	OVM = 83	10:30
i	S. Floor-3	(20')	0.0	11:15
j	SE-Wall-3		0.0	11:20
k	N-Floor-2	(33')	0.0	11:40
l	NE-Wall-1		0.0	11:55
m	N-Wall-1		0.0	12:05

DTL 6/28/01 ①

0700 Leave Midland for ~~Jimmy Cooper No. 5 Excavation.~~

0900 ~~Arrived at JC-5~~

5/31/01



6-1-01 | CC#4

Sampled remaining wall (west wall of north end of excavation

	Type	Time	OVM
~~NW~~ NW-Wall-1	grab	1035	0

Collected 3 samples from backfill soil piles (all 8pt composites)

	Time	OVM	
Backfill-1	1040	0	→ Surface soil
Backfill-2	1050	0	before excavating
Backfill-3	1100	4	→ During excavating

(south end / north end)

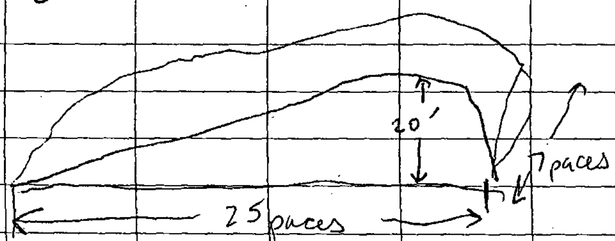
↳ Ramped soil from north end

Collected 8pt composite of (ramped) excavated soil pile.

Exc Soil-2 Time=1215 OVM=26

OVM reading = 33.5 ppm using 100 ppm isobutylene calib gas LOT 56636 C_4H_8

Exc Soil Pile



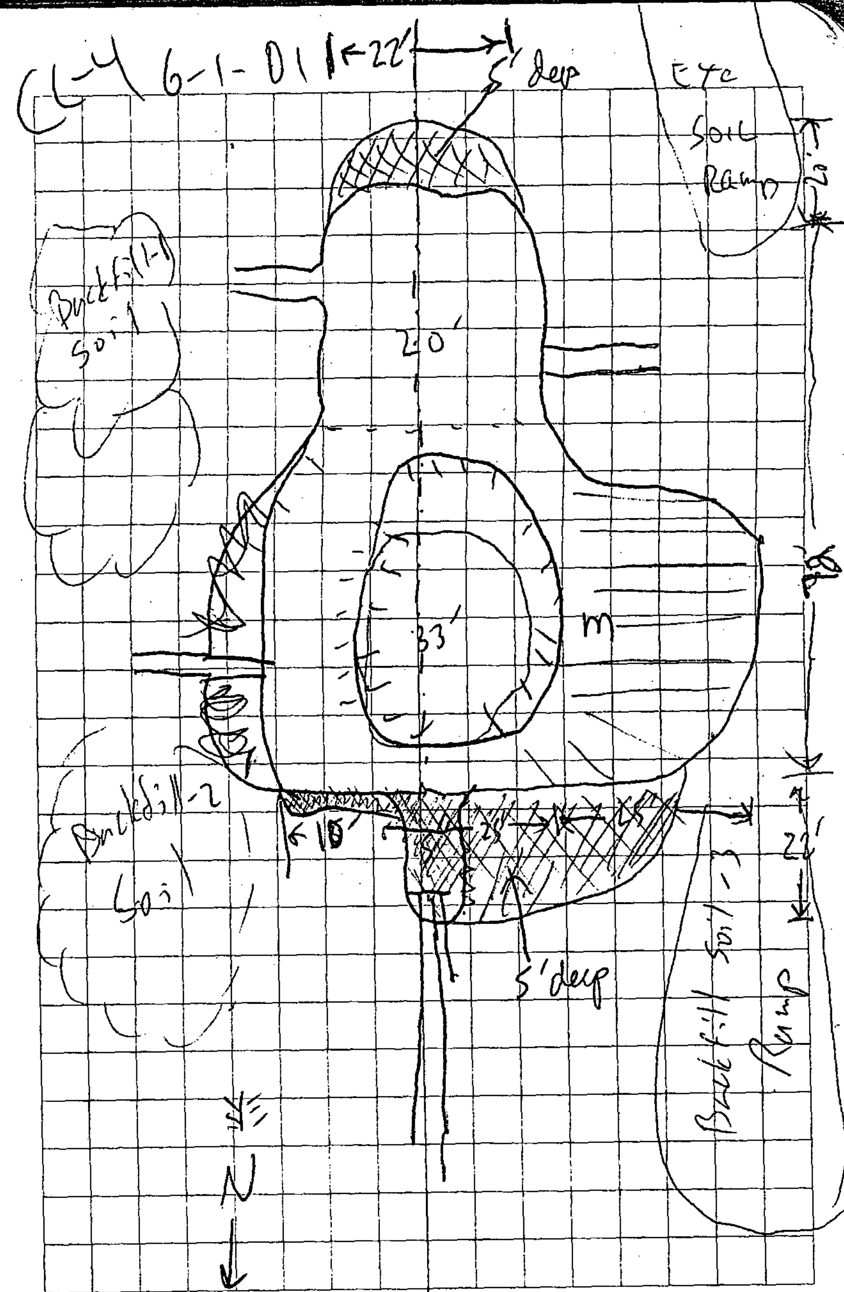
3.5 3.5
5.5 7
12.5 38.5
+25
137.5

140
x40
5600 f
x20
112,000 ft^3 = 56,000 ft^3
2 27

~ 2,000 yd^3 contaminated soil

13
5.5
6
6.5
7

CL-4 6-1-01



6-4-01 CC#4

Begin hauling contaminated soil to S. Monument landfarm today

37 loads (444 cu yds) per Mike Neagle

	GRO	DRO
NW-wall-1	<10	DRO=62
Backfill-1	<10	<10
Backfill-2	<10	<10
Backfill-3	<10	121
Exc. Soil-2		

6-5-01 CC#4

Confirmed w/ Steve Weathers that all samples were clean Steve said it would be alright to begin backfilling with clean soil.

Steve said to resample Backfill-3 pile into 4 sections Also removed some suspect soil from this stockpile w/ soil going to landfarm prior to resampling

Notified Paul Sheeley w/ Hobbs NMOCD that we were ready to initiate backfilling since all floor and wall samples were <100 mg/kg (<10 mg/kg in most cases).

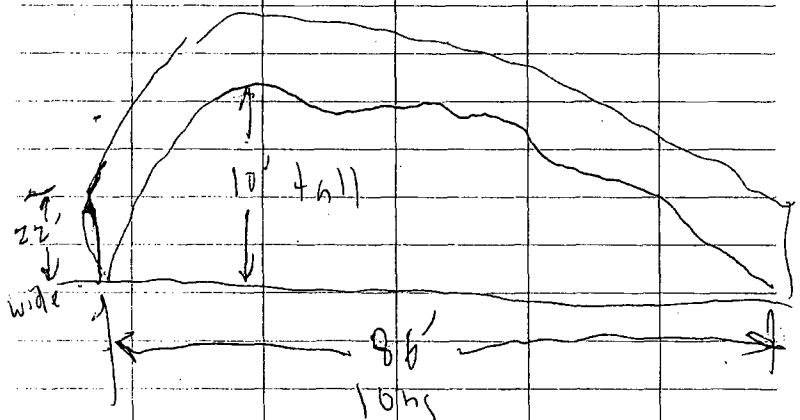
6-6-01

CC #4

Back on site to oversee hauling & backfilling, & resample Backfill-3 pile into 4 sections

Backfill-1 & Backfill-2 stockpiles were CLIO GRO & ORO so they gave back in the excavation.

Segregated approx. 30-40 yd^3 of soil from Backfill-3 as it ~~was from location~~ was taken from a location close to the tank area.



6-6-01

	Time	OVM
BF-3a	1400	14
BF-3b	1410	31
BF-3c	1420	13
BF-3d	1430	16

#11 Cpt composites of Backfill-3 stockpile

10 loads (1320 yd^3) hauled to Cell 5B yesterday 6-5-01 per Mike (ran 5 trucks)

T. dug just a dozer & backhoe (loader broke down)

1 dump truck showed up @ at 2pm to resume hauling remaining soil from Exc Soil-2 stockpile (~300 yd^3 left to 400

Left site at 2pm MST to rush samples to lab (Env. Lab of TX)

5-24-01 CC4

On site at CC#4 to begin excavation. On site:
Mike Neagle Walton Const (trackhoe)
Martin Robledo " " (loader)

Equip on site Trackhoe Samsung SE210 LC-3
Londer JD 644C

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Exc Soil-1		comp	1345	51

5-25-01 CC4

Collected Samples from initial dig along 80' ROW
Trackhoe being getting maintenance work done so not digging today.
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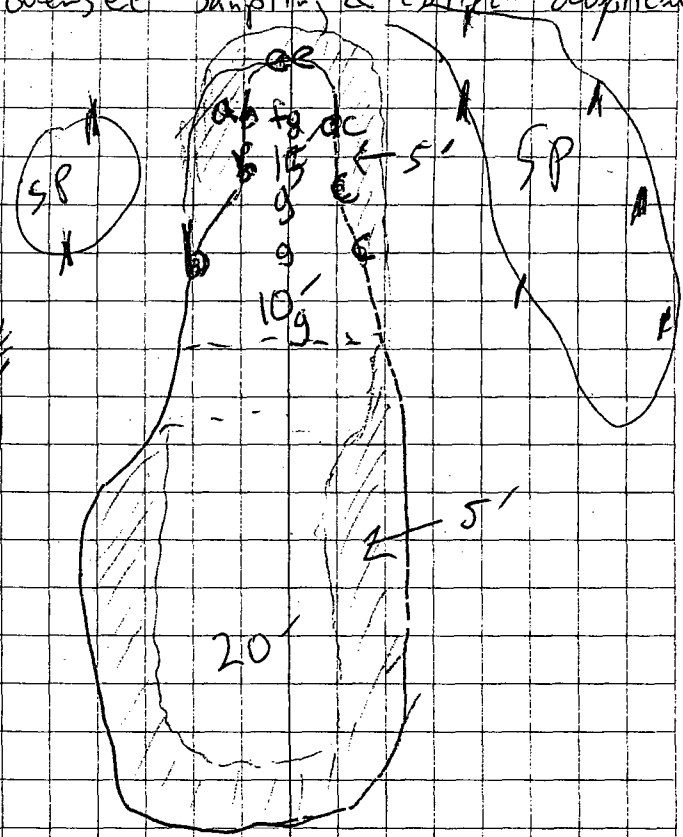

5-31-01

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~~Dozer~~ Loader

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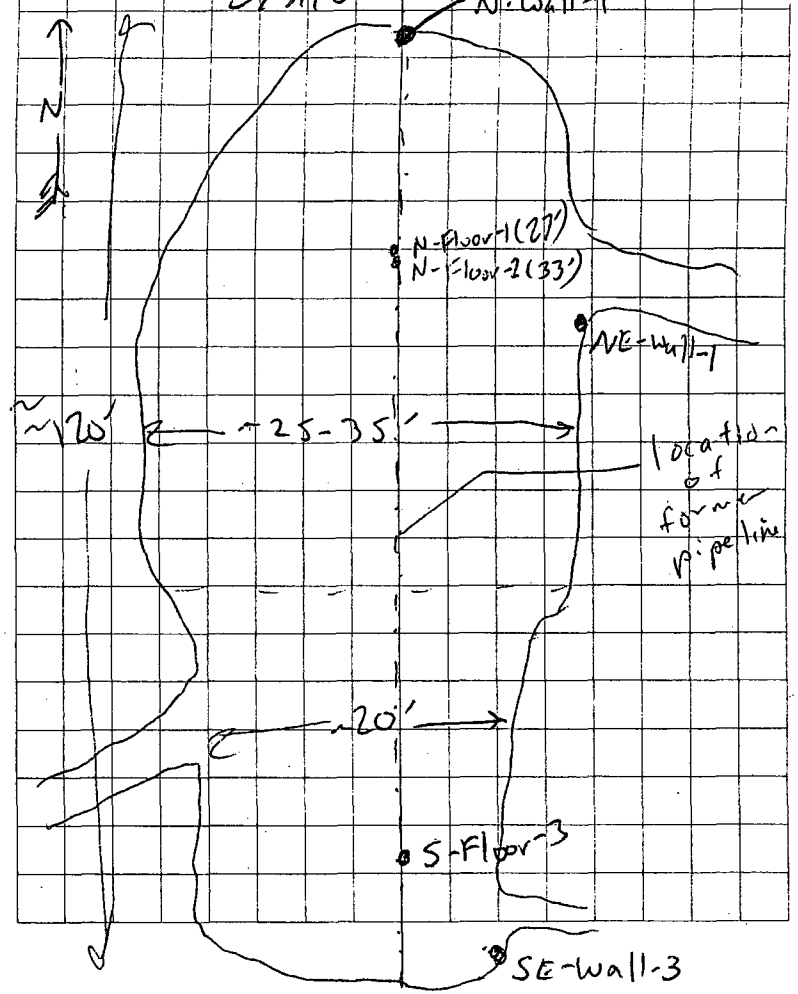
m	N-Wall-1		0.0	12:05

DTL 6/20/01 ①

0700 Leave Midland for ~~Jimmy Cooper No. 5 Excavation.~~

0900 ~~Arrived at JC-5~~

5/31/01



6-1-01 CC+L

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Backfill-3	1100	4	→ During excavating

(south end / north end)

↳ Ramped soil from north end

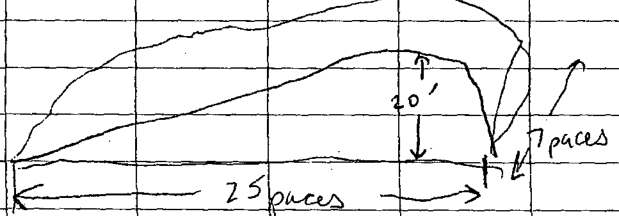
Collected 3pt composite of (ramped) excavated soil pile:

Exc Soil-2 Time=1215 OVM=26

OVM reading = 33.5 ppm using 100 ppm isobutylene calib gas LOT 56636

C_4H_8

Excv Soil Pile

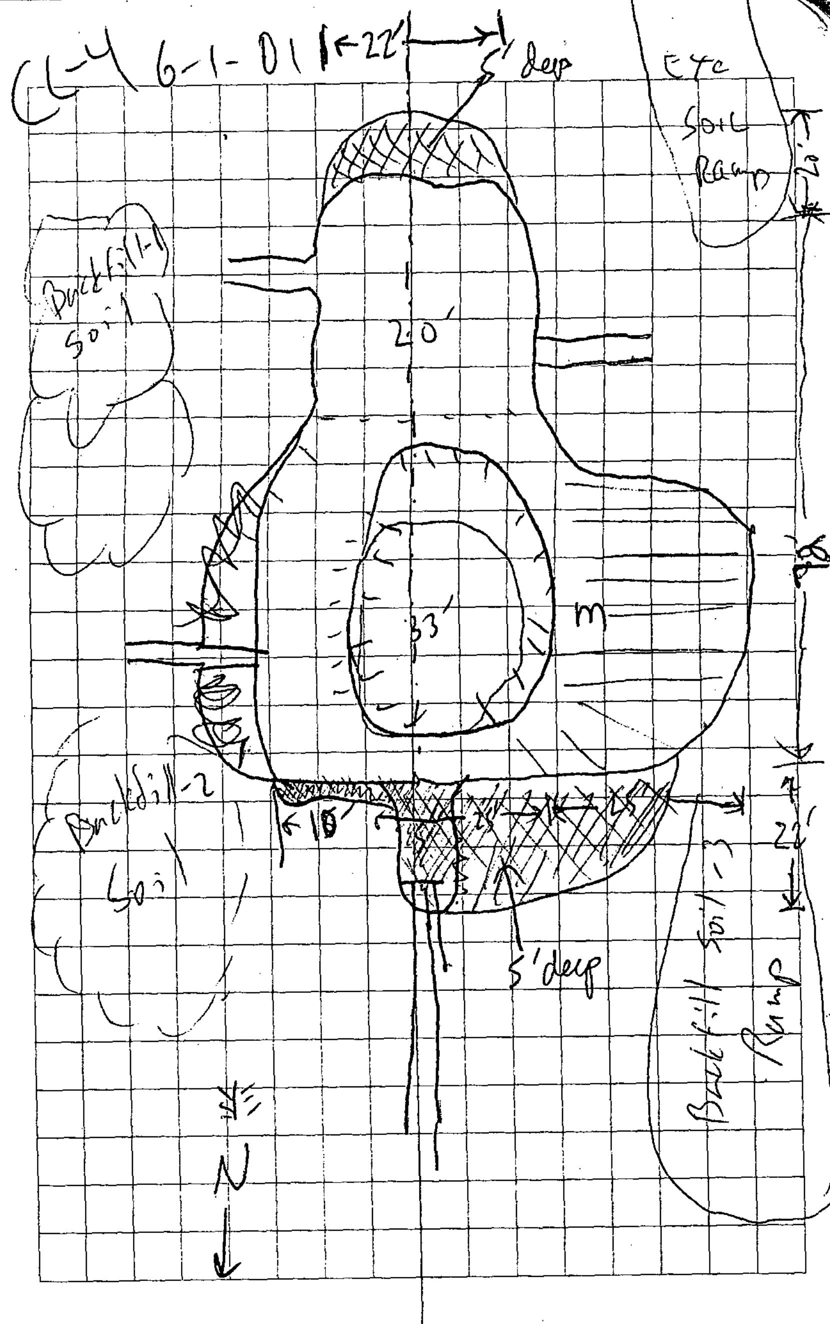


3.5 3.5
5.5 7
12.5 38.5
+25
137.5

140
x40
5600 f
x20
112,000 ft³ = 56,000 ft³
2 27

~ 2,000 yd³ contaminated soil

13
5.3
6.3
63
71



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Backfill-3	<10	121
Exc. Soil-2		

6-5-01 CC#4

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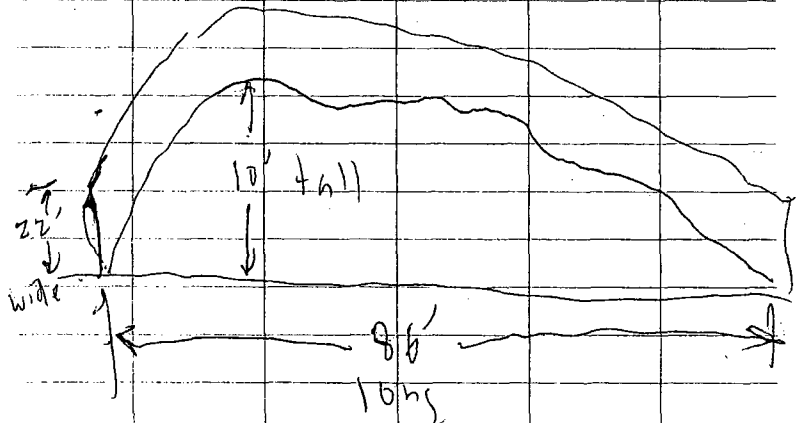
6-6-01

CCDH

Back on site to oversee hauling & backfilling & resample Backfill-3 pile into 4 sections

Backfill-1 & Backfill-2 stockpiles were C10 GRO & ORO so they are back in the excavation.

Segregated approx. 30-40 yd^3 of soil from Backfill-3 as it ~~From top~~ was taken from a location close to the leak area.



6-6-01

	Time	OVM
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BF-3c	1420	13
BF-3d	1430	16

All 6pt composites of Backfill-3 stockpile

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