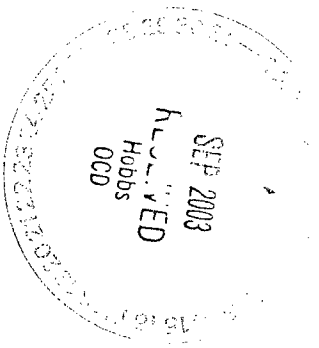
TRIDENT ENVIRONMENTAL

August 7, 2003

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



Re: Removal of Hydrocarbon-Impacted Soils from the C-23-2 (Site #1) site
Township 20 South, Range 36 East, Section 25, Unit C

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, C-23-2 (Site #1), is located in Section 25 (Unit C), Township 20 South, Range 36 East on property owned by Dale Cooper and managed by Clay Cooper. The location of the C-23-2 (Site #1) 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 adjacent to two pipelines was excavated where Mr. Cooper identified indications of hydrocarbon-impacted soils. A 4-inch riser rises above the 12-inch steel pipeline and is connected to the active 10-inch poly gas pipeline. The 10-inch poly line (C-23-2) is in service. The 12-inch steel pipeline (F-3) located approximately 10 feet south of the active line is temporarily out of service. An approximately 120' section of the inactive 12-inch steel pipeline (F-3) was removed one day prior to excavation activities. 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)

Duke - 229153
facility - fPAC0605347221
incident - nPAC0605347441
inspect - ePAC0605347401
application - pPAC0605348381

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 or GRO 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.

Walton Construction transported approximately 1,284 cubic yards of hydrocarbon-impacted soils to cell C-4 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\C-23-2(#1)\C-23-2-1CLOSE.DOC

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

September 19, 2003

Duke Energy Field Services (DEFS)
Attn: Stephen Weathers
370 17th Street, Suite 900
Denver, CO 80202

Re: Remediation Closure Approval for Removal of Hydrocarbon-Impacted Soils
C-23-2, (sites: 1, 2, 3)
Site Location: UL-B, Sec 25-T20S-R36E
All Dated: August 7, 2003

Dear Mr. Weathers,

The remediation closuresreferenced above and submitted to the New Mexico Oil Conservation Division (OCD) by Trident Environmental for DEFS are **hereby approved.** According to the information provided no further action is required at this time.

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 write or call: (505) 393-6161, ext. 113, 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.

ATTACHMENT A

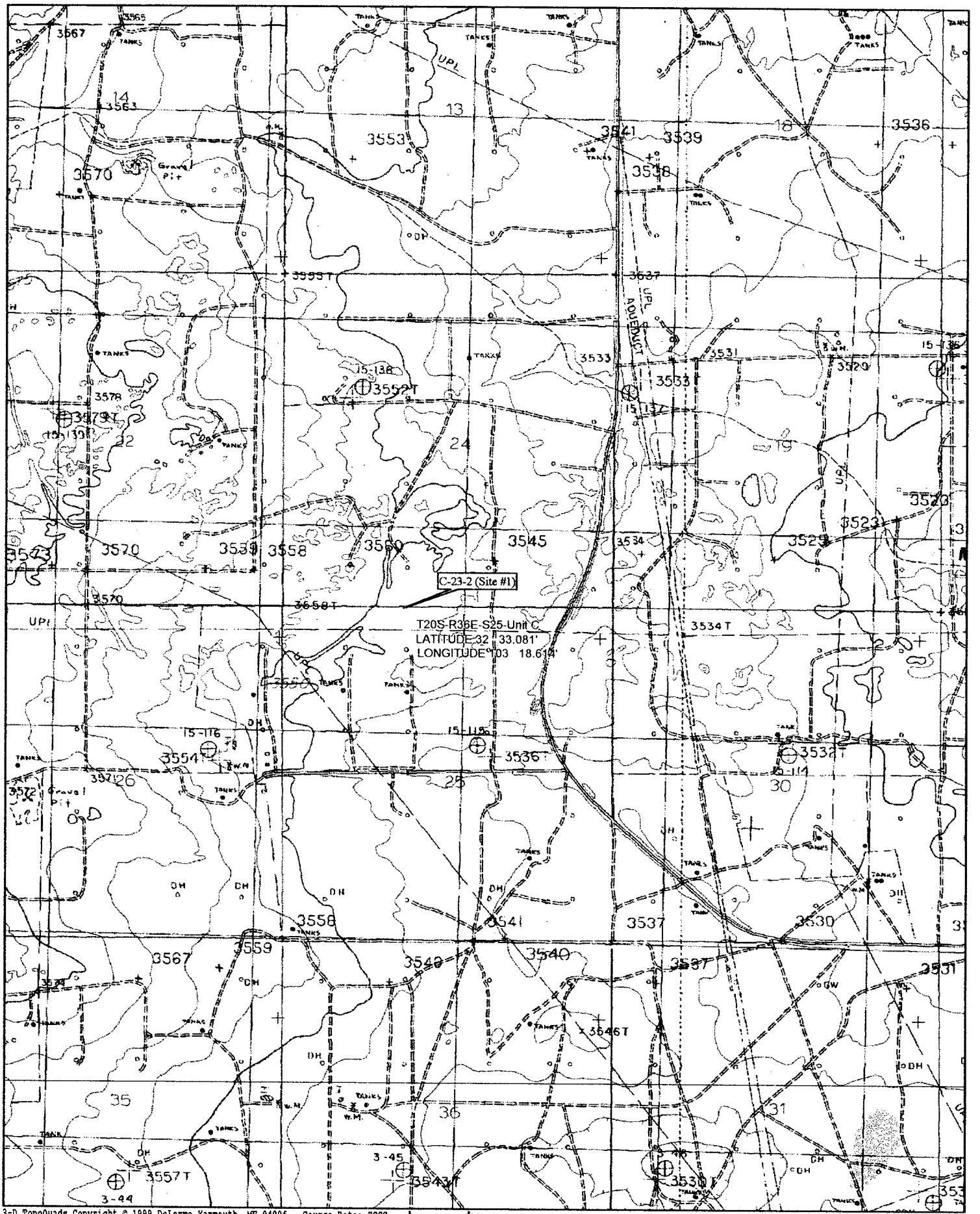
TOPOGRAPHIC MAP

SITE MAP

SITE DATA FORM

C-141 FORM

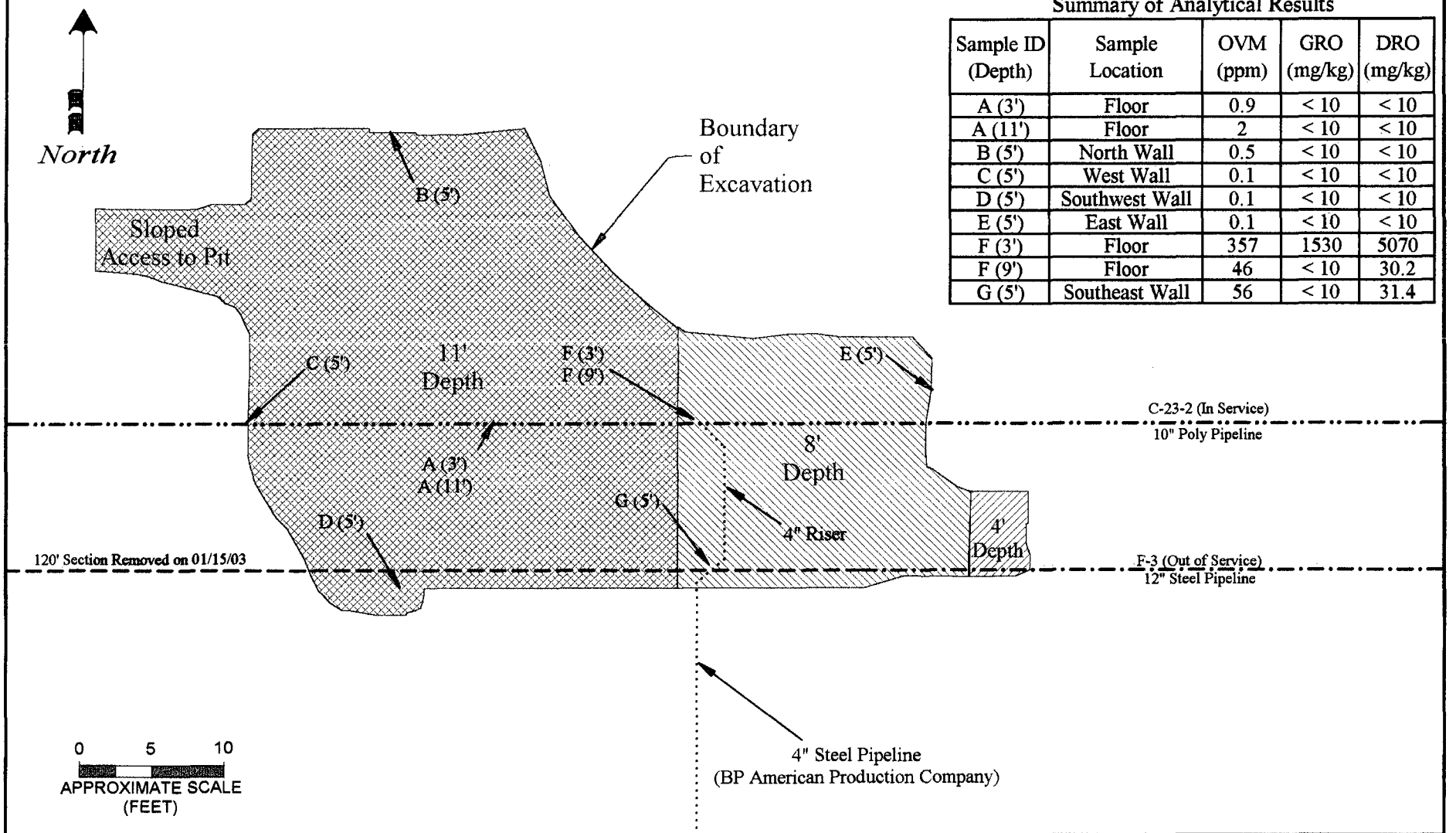
PHOTODOCUMENTATION



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

Summary of Analytical Results

Sample ID (Depth)	Sample Location	OVM (ppm)	GRO (mg/kg)	DRO (mg/kg)
A (3')	Floor	0.9	< 10	< 10
A (11')	Floor	2	< 10	< 10
B (5')	North Wall	0.5	< 10	< 10
C (5')	West Wall	0.1	< 10	< 10
D (5')	Southwest Wall	0.1	< 10	< 10
E (5')	East Wall	0.1	< 10	< 10
F (3')	Floor	357	1530	5070
F (9')	Floor	46	< 10	30.2
G (5')	Southeast Wall	56	< 10	31.4



TRIDENT ENVIRONMENTAL

CLIENT NAME: DUKE ENERGY FIELD SERVICES LP	
DATE: 01/018/03	REVISION NO.: 1
DRAWN BY: GJV	FILENAME: SITE1.TCW
CHECKED BY: DTL	SCALE: 1 INCH = 10 FT

SITE MAP

C-23-2 (Site #1)

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: C-23-2 (Site #1)	Natural Gas Pipeline

Surface Owner	Mineral Owner	Lease No.
Dale Cooper	Unknown	

68'

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	25	20S	36E		32° 33.081' N		103° 18.614' W	Lea

NATURE OF RELEASE

Type of Release	Volume of Release	Volume Recovered
Condensate	Unknown	1,284 yd^3 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?** Paul Sheeley, 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. Years prior to excavation activities the active 12" steel pipeline (C-23-2) was replaced with 10"polyline (Driscoll). An approximately 220' section of the inactive 12" steel pipeline (F-3), which was located approx. 10 feet south of the active pipeline, was removed one day prior to excavation activities. During excavation activities dark hydrocarbon-stained soil was visible along the active 12" polyline pipeline, particularly where it joined a 4-inch diameter riser. Removal of impacted soil was requested by landowner (Clay Cooper).

Describe Area Affected and Cleanup Action Taken:

On 01/14/03 over-excavation was initiated. Excavation continued until 01/17/03. The excavation varied from approximately 4 ft to 15 ft deep and measured approx. 30 ft wide by 50 ft long. Approximately 1,284 cubic yards of soil was transported to cell C-4 at the South Monument Land Farm. Backfilling of excavation was completed on 01/24/03. Closure report, analytical results, photographs, and site map are attached.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

	OIL CONSERVATION DIVISION	
Signature:	Approved by District Supervisor:	
Printed Name: Stephen Weathers		
Title: Environmental Specialist	Approval Date:	Expiration Date:
Date: Phone: (303) 605-1718	Conditions of Approval:	Attached ☐

TRIDENT ENVIRONMENTAL

Site Data Form

Trident Technician: GJV Excavation Crew Names: Walton Construction Site ID: C-23-2 (Site #1)

Site Location: Latitude 32° 33.081' N Longitude 103° 18.614' W County: Lea State: New Mexico

Township 20 South Range 36 East Section 25 Unit C

Begin Excavation (Date/Time) 01/14/03 Complete Excavation (Date/Time) 01/24/03

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

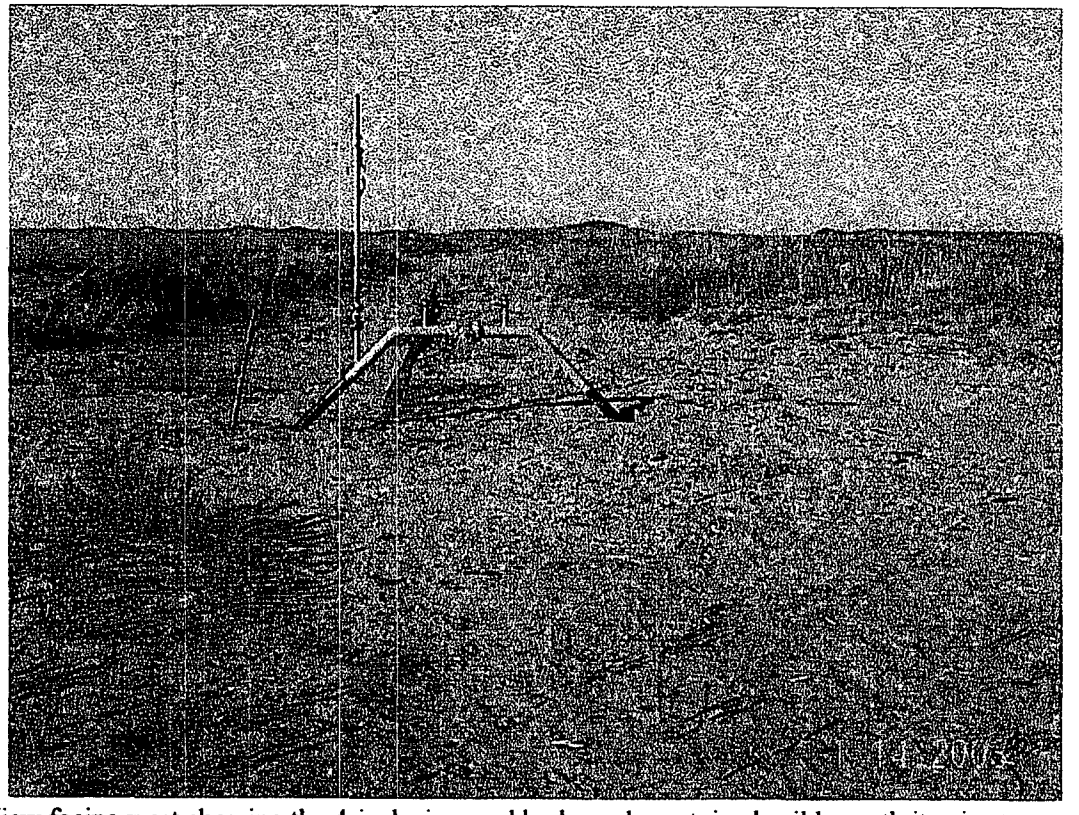
EXCAVATION DIMENSIONS	Length	Width	Average Depth	Maximum Depth
	~ 50 feet	~ 30 feet	4-11 feet	11 feet

VOLUME EXCAVATED: ~2,000 yd^3 **VOLUME HAULED TO LANDFARM:** 1,284 yd^3

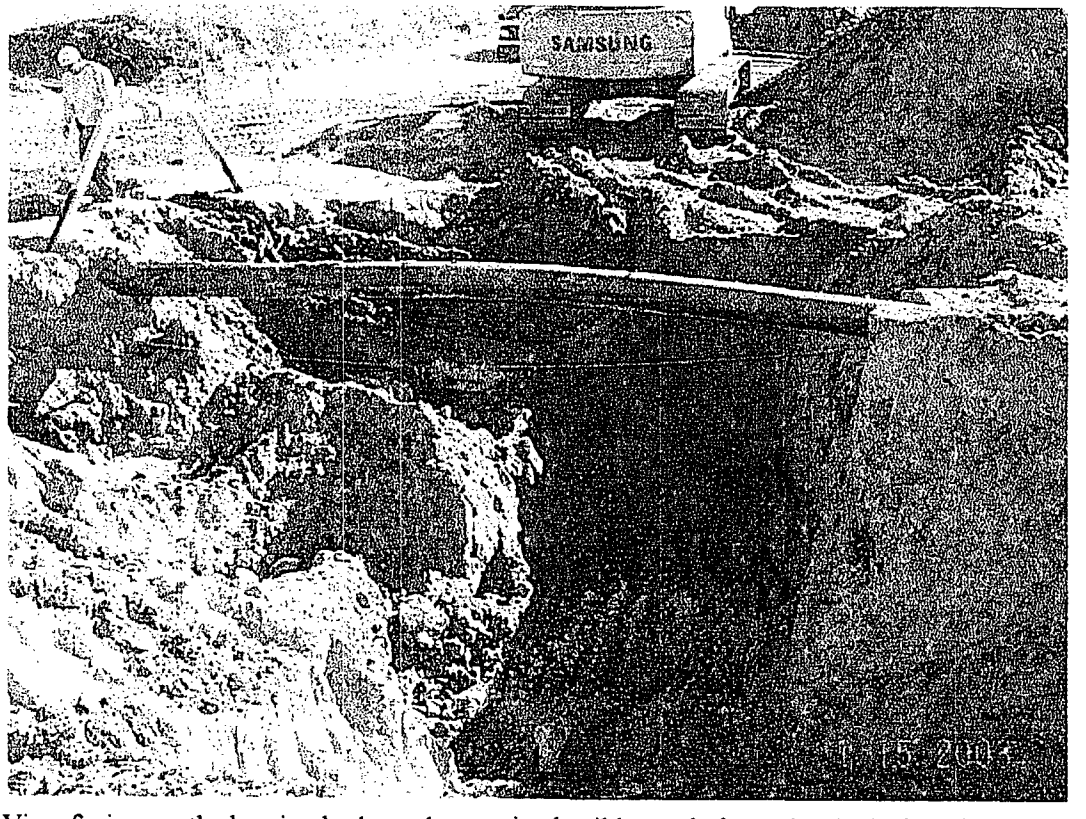
SUMMARY OF ANALYTICAL RESULTS

Sample ID (Depth)		OVM (ppm)	GRO (mg/kg)	DRO (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)
A (3')	Floor	0.9	< 10	< 10	NA	NA	NA	NA
A (11')	Floor	2	< 10	< 10	NA	NA	NA	NA
B (5')	North Wall	0.5	< 10	< 10	NA	NA	NA	NA
C (5')	West Wall	0.1	< 10	< 10	NA	NA	NA	NA
D (5')	Southwest Wall	0.1	< 10	< 10	NA	NA	NA	NA
E (5')	East Wall	0.1	< 10	< 10	NA	NA	NA	NA
F (3')	Floor	357	1530	5070	1.34	2.81	11.4	22.5
F (9')	Floor	46	< 10	30.2	NA	NA	NA	NA
G (5')	Southeast Wall	56	< 10	31.4	NA	NA	NA	NA
Backfill		0.5	< 10	< 10	NA	NA	NA	NA
Exc. Soil		70	11.1	108	<0.025	<0.025	0.032	0.078

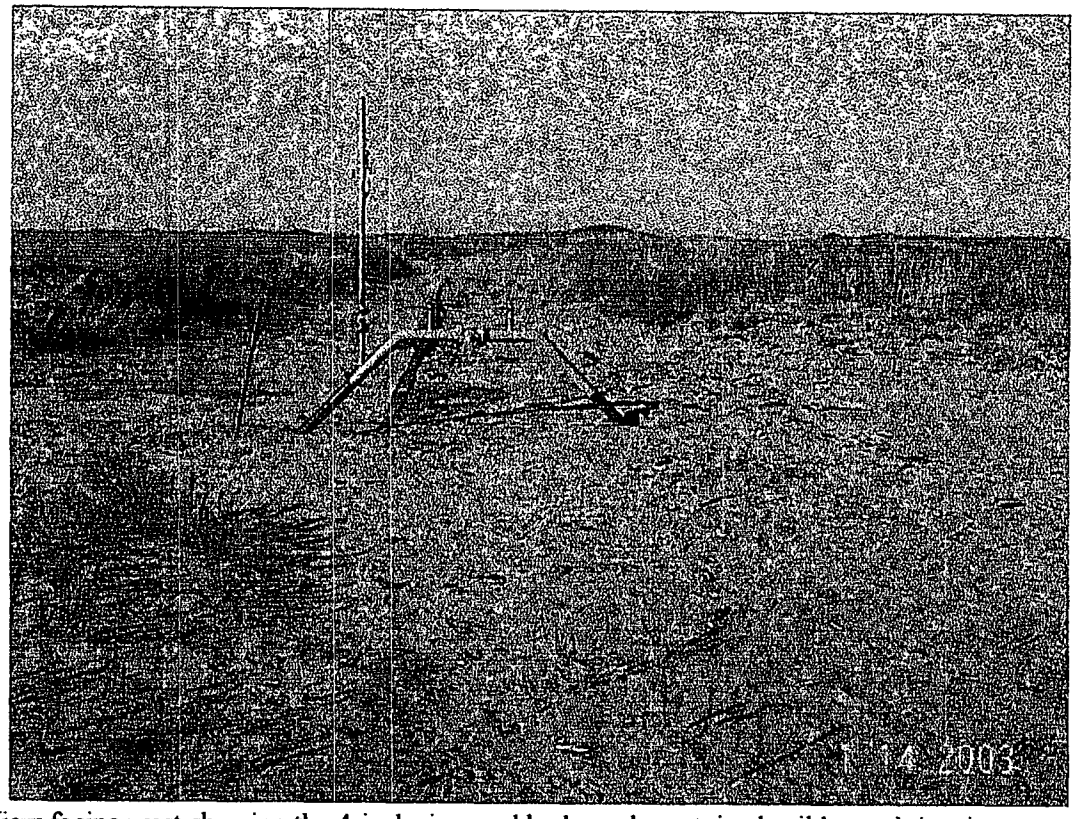
Note: The area below sample "F" (3' directly below the riser where it connects to the active 10" poly pipeline) was excavated further until concentrations were below OCD guidelines as confirmed by subsequent sample F (9').



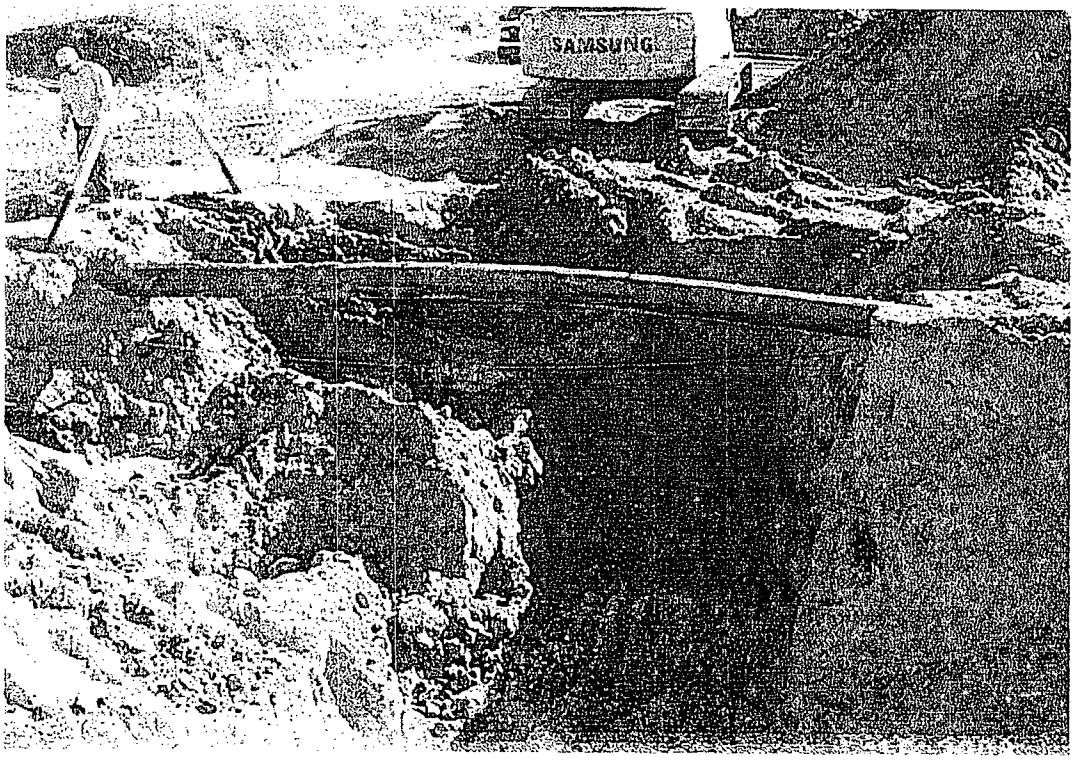
1 View facing west showing the 4-inch riser and hydrocarbon-stained soil beneath it prior to excavation activities. A 120-ft section of the inactive 12-inch steel (F-3) line, visible beneath the riser, was cut off and removed soon after this photo was taken.

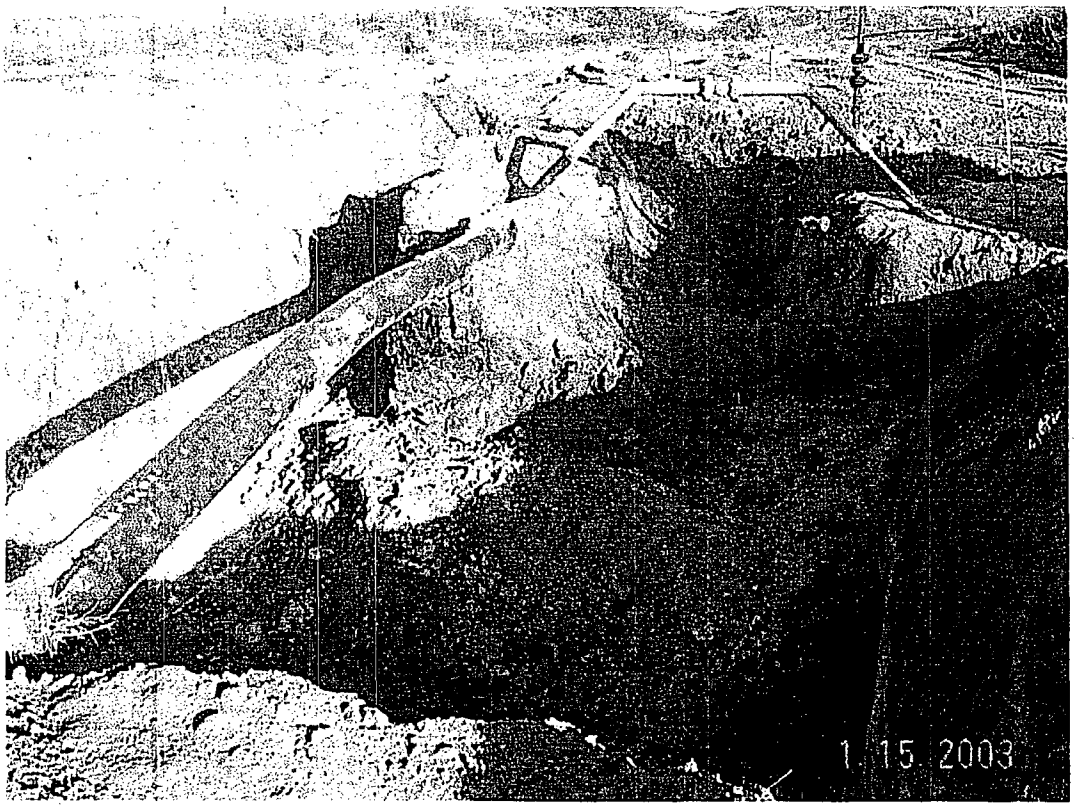


2 View facing south showing hydrocarbon-stained soil beneath the active 10-inch active pipeline (C-23-2).

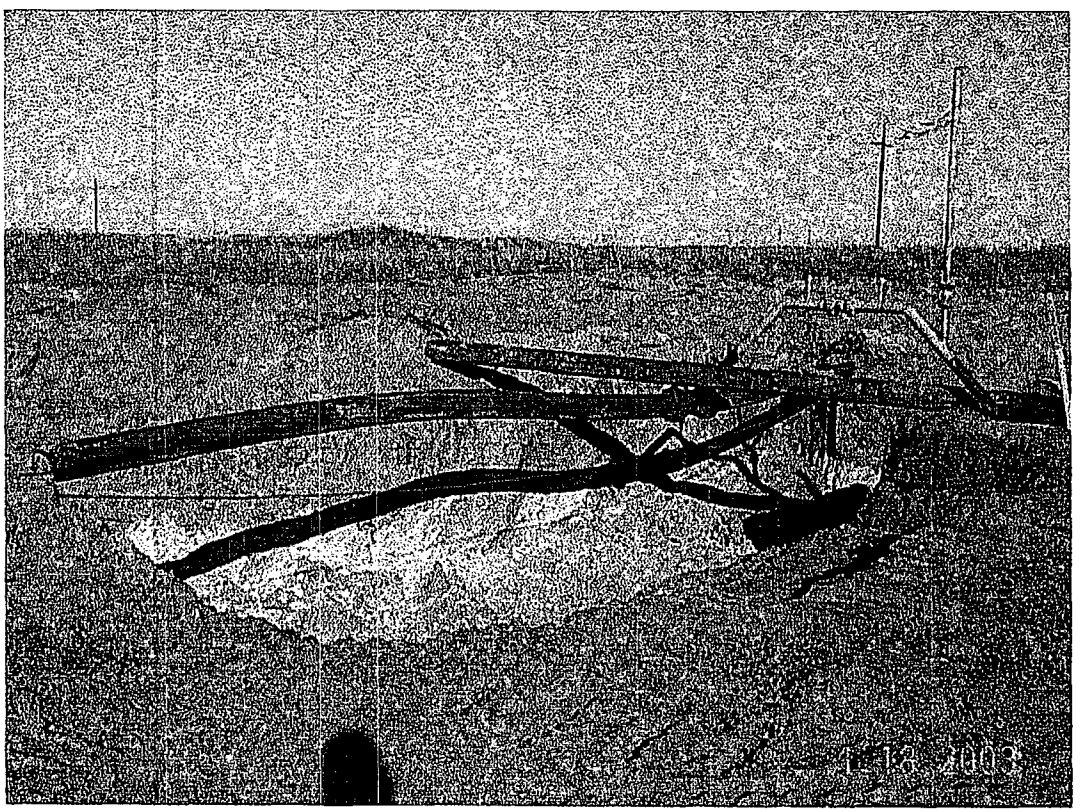


1 View facing west showing the 4-inch riser and hydrocarbon-stained soil beneath it prior to excavation activities. A 0-ft section of the inactive 12-inch steel (F-3) line, visible beneath the riser, was cut off and removed soon after this photo was taken.



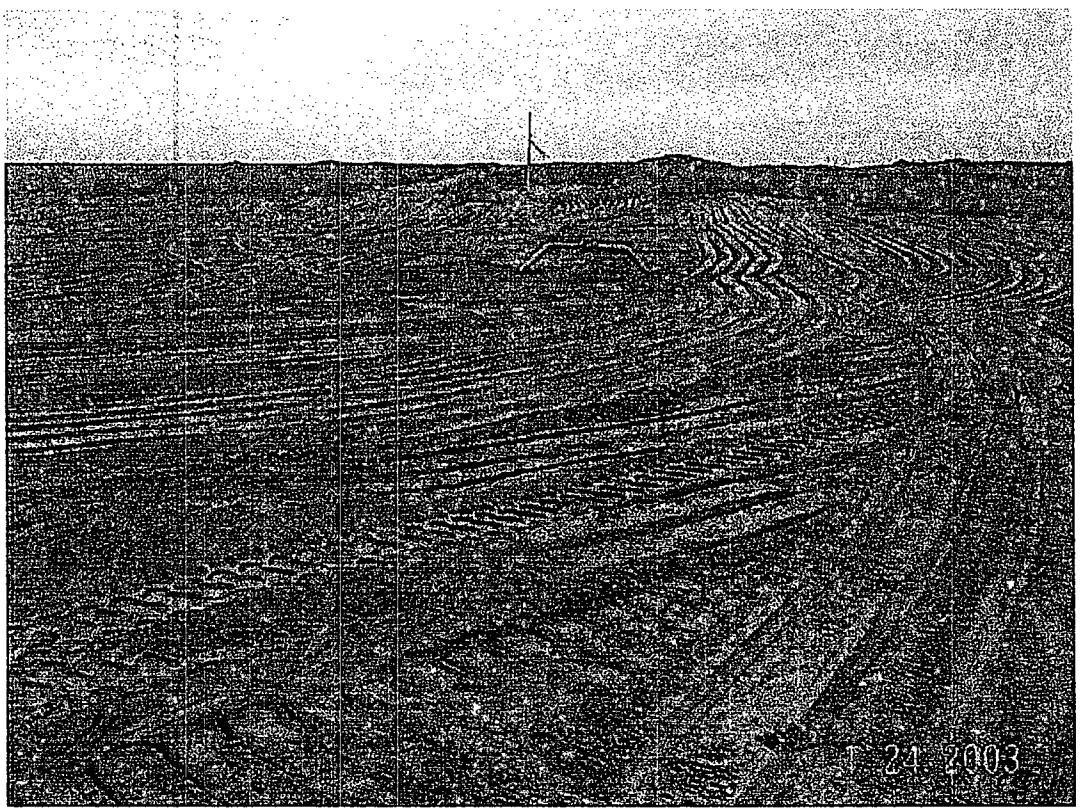


3 View facing east showing floor (11 feet depth) and east side of excavation.



4 View facing northeast showing floor, north wall, and east wall after completion of excavation.

5 View facing west showing and west side of excavation and completion of excavation activities.



6 View facing west showing site after completion of backfilling activities.

ATTACHMENT B

LABORATORY ANALYTICAL REPORTS

AND

CHAIN-OF-CUSTODY DOCUMENTATION

ANALYTICAL REPORT

Prepared for:

STEVE WEATHERS
DUKE ENERGY FIELD SERVICES
P.O. BOX 5493
DENVER, CO 80217

Project:	Duke Energy Field Services
PO#:	
Order#:	G0305498
Report Date:	01/21/2003

Certificates
US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

DUKE ENERGY FIELD SERVICES
P.O. BOX 5493
DENVER, CO 80217
303-389-1957

Order#: G0305498
Project: V-106
Project Name: Duke Energy Field Services
Location: C-23 (#1)

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, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0305498-01	G (5')	SOIL	1/18/03 14:45	1/20/03 10:40	4 oz Glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 4 C		
0305498-02	F (9')	SOIL	1/18/03 14:40	1/20/03 10:40	4 oz Glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 4 C		

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

STEVE WEATHERS
DUKE ENERGY FIELD SERVICES
P.O. BOX 5493
DENVER, CO 80217

Order#: G0305498
Project: V-106
Project Name: Duke Energy Field Services
Location: C-23 (#1)

Lab ID: 0305498-01
Sample ID: G (5')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/20/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	30.2	10.0
TOTAL, C6-C35	30.2	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	89%	70	130
1-Chlorooctadecane	77%	70	130

Lab ID: 0305498-02
Sample ID: F (9')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/20/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	31.4	10.0
TOTAL, C6-C35	31.4	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	85%	70	130
1-Chlorooctadecane	73%	70	130

Approval: Raland K Tuttle 1-21-03
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#: G0305498

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0004396-02			<10.0		
CONTROL SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0004396-03		1000	872	87.2%	
CONTROL DUP SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0004396-04		1000	876	87.6%	0.5%
SRM SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0004396-05		1000	851	85.1%	

Environmental Lab of Texas I, Ltd.

THIS AFTERNOON (1/20/03)

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Steve Weathers
Company Name: Duke Energy Field Services
Company Address: PO Box 5493
City/State/Zip: Denver CO 80217
Telephone No: 303/605-1718 Fax No:
Sampler Signature:

Project Name: Duke Energy Field Services C-23 (#1)
Project #: V-106
Project Loc: C-23 (#1)
PO #:

(lab use only)
ORDER #: 0305495

FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO_3	HCl	NaOH	H_2SO_4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify):	Analyze For: TCLP: TPH: 418.1 / 8015M / 1005 / 1006	TOTAL: Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	RCI	RUSH TAT (Pre-Schedule)	Standard TAT
01 G (5')	1-18-03	1445	1	✓									✓		✓									✓	
02 F (9')	1-18-03	1440	1	✓									✓		✓									✓	

Special Instructions: Run BTEX (8020) if GRO > 100 mg/kg
Fax to 915-682-0727 Send extra report copy to: Trident Environmental Midland, Tx 79708 PO Box 7624

Sample Containers Intact? Y N
Temperature Upon Receipt:
Laboratory Comments: 4C 4oz Glass
Called w/ verbal 1/20/03 4:42 pm CDL

Relinquished by:	Date	Time	Received by:	Date	Time
	1/20/03	1040a			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Dawn Caudill	1/20/03	10:40

ANALYTICAL REPORT

Prepared for:

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

Project:	C-23 (Site #1)
PO#:	V-106
Order#:	G0305473
Report Date:	01/20/2003

Certificates
US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

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

Order#: G0305473
Project: V-106
Project Name: C-23 (Site #1)
Location: DEFS-C-23 (Site #1)

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, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0305473-01	A (3')	SOIL	1/15/03 10:00	1/15/03 18:05	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 4.5 C		
0305473-02	A (11')	SOIL	1/15/03 11:00	1/15/03 18:05	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 4.5 C		
0305473-03	B (5')	SOIL	1/15/03 14:30	1/15/03 18:05	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 4.5 C		
0305473-04	C (5')	SOIL	1/15/03 14:35	1/15/03 18:05	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 4.5 C		
0305473-05	D (5')	SOIL	1/15/03 14:40	1/15/03 18:05	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 4.5 C		
0305473-06	E (5')	SOIL	1/15/03 15:00	1/15/03 18:05	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 4.5 C		
0305473-07	F (3')	SOIL	1/15/03 15:10	1/15/03 18:05	4 oz glass	Ice
	Lab Testing: 8015M 8021B/5030 BTEX	**Rejected:** No		**Temp:** 4.5 C		
0305473-08	Backfill	SOIL	1/15/03 11:10	1/15/03 18:05	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 4.5 C		

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

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

Order#: G0305473
Project: V-106
Project Name: C-23 (Site #1)
Location: DEFS-C-23 (Site #1)

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, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0305473-09	Exc. Soil	SOIL	1/15/03 11:20	1/15/03 18:05	4 oz glass	Ice

Lab Testing:
8015M
8021B/5030 BTEX

Rejected: No Temp: 4.5 C

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0305473
Project: V-106
Project Name: C-23 (Site #1)
Location: DEFS-C-23 (Site #1)

Lab ID: 0305473-01
Sample ID: A (3')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/16/03	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

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	76%	70	130
1-Chlorooctadecane	71%	70	130

Lab ID: 0305473-02
Sample ID: A (11')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/16/03	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

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	77%	70	130
1-Chlorooctadecane	70%	70	130

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#: G0305473
Project: V-106
Project Name: C-23 (Site #1)
Location: DEFS-C-23 (Site #1)

Lab ID: 0305473-03
Sample ID: B (5')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/16/03	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

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	75%	70	130
1-Chlorooctadecane	69%	70	130

Lab ID: 0305473-04
Sample ID: C (5')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/16/03	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

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	84%	70	130
1-Chlorooctadecane	78%	70	130

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ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0305473
Project: V-106
Project Name: C-23 (Site #1)
Location: DEFS-C-23 (Site #1)

Lab ID: 0305473-05
Sample ID: D (5')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/16/03	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

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	78%	70	130
1-Chlorooctadecane	70%	70	130

Lab ID: 0305473-06
Sample ID: E (5')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/16/03	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

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	79%	70	130
1-Chlorooctadecane	71%	70	130

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ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0305473
Project: V-106
Project Name: C-23 (Site #1)
Location: DEFS-C-23 (Site #1)

Lab ID: 0305473-07
Sample ID: F (3')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/16/03	1	10	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	**1530**	100
DRO, >C12-C35	**5070**	100
TOTAL, C6-C35	**6600**	100

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	**15%**	**70**	**130**
1-Chlorooctadecane	**13%**	**70**	**130**

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0004393-02		1/20/03 12:27	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	**1.34**	0.025
Toluene	**2.81**	0.025
Ethylbenzene	**11.4**	0.025
p/m-Xylene	**22.5**	0.025
o-Xylene	**7.07**	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	**741%**	**80**	**120**
Bromofluorobenzene	**136%**	**80**	**120**

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#: G0305473
Project: V-106
Project Name: C-23 (Site #1)
Location: DEFS-C-23 (Site #1)

Lab ID: 0305473-08
Sample ID: Backfill

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/16/03	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

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	80%	70	130
1-Chlorooctadecane	73%	70	130

Lab ID: 0305473-09
Sample ID: Exc. Soil

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/16/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	11.1	10.0
DRO, >C12-C35	108	10.0
TOTAL, C6-C35	119	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	80%	70	130
1-Chlorooctadecane	74%	70	130

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ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0305473
Project: V-106
Project Name: C-23 (Site #1)
Location: DEFS-C-23 (Site #1)

Lab ID: 0305473-09
Sample ID: Exc. Soil

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0004393-02		1/20/03 12:49	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	**<0.025**	0.025
Toluene	**<0.025**	0.025
Ethylbenzene	**0.032**	0.025
p/m-Xylene	**0.078**	0.025
o-Xylene	**<0.025**	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	**82%**	**80**	**120**
Bromofluorobenzene	**85%**	**80**	**120**

Approval: Raland K Tuttle 1-21-03
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#: G0305473

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0004373-02			<10.0		
MS SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0305473-08	0	952	797	83.7%	
MSD SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0305473-08	0	952	778	81.7%	2.4%
SRM SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0004373-05		1000	750	75.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0305473

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg	0004393-02			<0.025		
Toluene-mg/kg	0004393-02			<0.025		
Ethylbenzene-mg/kg	0004393-02			<0.025		
p/m-Xylene-mg/kg	0004393-02			<0.025		
o-Xylene-mg/kg	0004393-02			<0.025		
MS SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/kg	0305466-01	0	0.1	0.086	86.%	
Toluene-mg/kg	0305466-01	0	0.1	0.089	89.%	
Ethylbenzene-mg/kg	0305466-01	0	0.1	0.094	94.%	
p/m-Xylene-mg/kg	0305466-01	0	0.2	0.202	101.%	
o-Xylene-mg/kg	0305466-01	0	0.1	0.093	93.%	
MSD SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/kg	0305466-01	0	0.1	0.090	90.%	4.5%
Toluene-mg/kg	0305466-01	0	0.1	0.092	92.%	3.3%
Ethylbenzene-mg/kg	0305466-01	0	0.1	0.097	97.%	3.1%
p/m-Xylene-mg/kg	0305466-01	0	0.2	0.206	103.%	2.%
o-Xylene-mg/kg	0305466-01	0	0.1	0.094	94.%	1.1%
SRM SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/kg	0004393-05		0.1	0.109	109.%	
Toluene-mg/kg	0004393-05		0.1	0.110	110.%	
Ethylbenzene-mg/kg	0004393-05		0.1	0.109	109.%	
p/m-Xylene-mg/kg	0004393-05		0.2	0.228	114.%	
o-Xylene-mg/kg	0004393-05		0.1	0.110	110.%	

CASE NARRATIVE

ENVIRONMENTAL LAB OF TEXAS

Prepared for:

TRIDENT ENVIRONMENTAL
P.O. BOX 7624
MIDLAND, TX 79708

Order#: G0305473

Project: C-23 (Site #1)

The following samples were received as indicated below and on the attached Chain of Custody record. All analyses were performed within the holding time and with acceptable quality control results unless otherwise noted.

SAMPLE ID	LAB ID	MATRIX	Date Collected	Date Received
A (3')	0305473-01	SOIL	01/15/2003	01/15/2003
A (11')	0305473-02	SOIL	01/15/2003	01/15/2003
B (5')	0305473-03	SOIL	01/15/2003	01/15/2003
C (5')	0305473-04	SOIL	01/15/2003	01/15/2003
D (5')	0305473-05	SOIL	01/15/2003	01/15/2003
E (5')	0305473-06	SOIL	01/15/2003	01/15/2003
F (3')	0305473-07	SOIL	01/15/2003	01/15/2003
Backfill	0305473-08	SOIL	01/15/2003	01/15/2003
Exc. Soil	0305473-09	SOIL	01/15/2003	01/15/2003

Surrogate recoveries on the 8015M TPH are outside the control limits because they were diluted out. (0305473-07)

Surrogate recoveries on the 8021B BTEX are outside control limits due to matrix interference from coeluting compounds. (0305473-07)

The enclosed results of analyses are representative of the samples as received by the laboratory. Environmental Lab of Texas makes no representations or certifications as to the methods of sample collection, sample identification, or transportation handling procedures used prior to our receipt of samples. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved By: Rabert Jr Date: 1-21-03

Environmental Lab of Texas I, Ltd.

0305473

Trident Environmental
P.O. Box 7624
Midland, Texas 79708
(915) 682-0808
(915) 689-4578 (Fax)

V-106-C-23-1-01

Chain of Custody

Date 1-15-03 Page 1 of 1

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

Samplers (SIGNATURES)

Sample Type: G - Grab, C- Composite

Analysis Request

	Sample Identification	Matrix	Date	Time	Sample Type	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
01	A (3')	Soil	1-15-03	1000	G									✓	✓					
02	A (11')	Soil	1-15-03	1100	G									✓	✓					
03	B (5')	Soil	1-15-03	1430	G									✓	✓					
04	C (5')	Soil	1-15-03	1435	G									✓	✓					
05	D (5')	Soil	1-15-03	1440	G									✓	✓					
06	E (5')	Soil	1-15-03	1500	G									✓	✓					
07	F (3')	Soil	1-15-03	1510	G	✓								✓	✓					
08	Backfill	Soil	1-15-03	1110	C									✓	✓					
09	Exc. Soil	Soil	1-15-03	1120	C	✓								✓	✓					

Project Information		Sample Receipt	
Project Name:	Duke Energy Field Services	Total Containers:	9
Project Location:	C-23# (Site#1)	COC Seals:	
Project Manager:	Gil Van Deventer	Rec'd Good Cond/Cold:	4.5°
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) 1-15-03 (Time) 1805		
Received By: (1) (Company) Env. Lab of TX	**Received By: (2) (Company)**	**Received By: (3) (Company)**
(Printed Name) Jeanne McMurrey	(Printed Name)	(Printed Name)
(Signature) Jeanne McMurrey	(Signature)	(Signature)
(Date) 01-15-03 (Time) 1805	(Date) (Time)	(Date) (Time)

Run BTEX on sample A(3') if GRO > 100 mg/kg

Copy signed original form for Trident Environmental records

ATTACHMENT C

FIELD BOOK NOTES

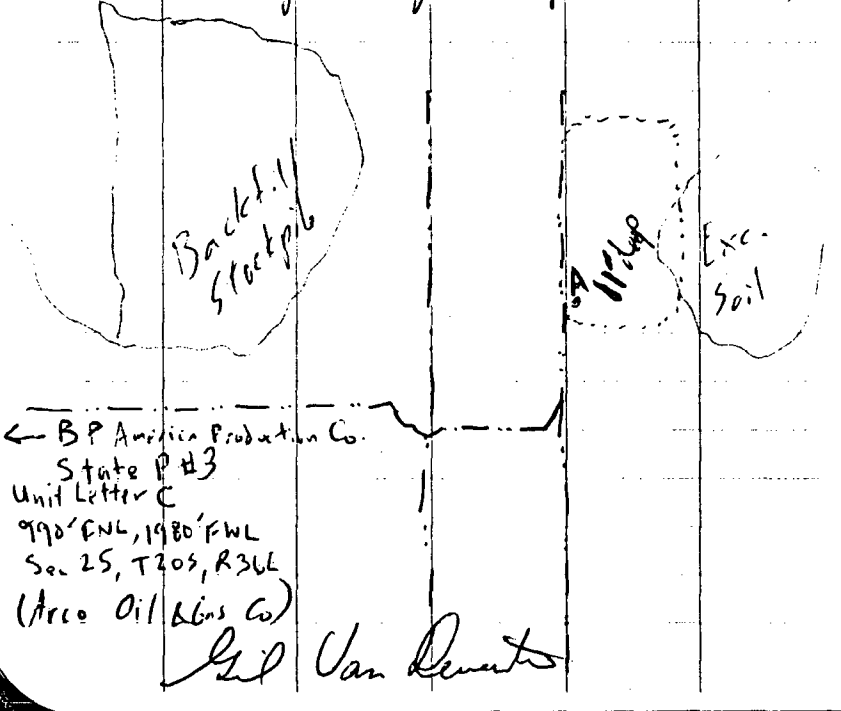
1-14-03

0730 - 1000 Onsite to begin Site #1 along C-23 DEFS gas line. Won't have time to sample today because Walton crew (Mike Nagley) needs to clear area to allow stockpiling of contaminated soil and clean backfill.

Took a few site photos.

1-15-03

Site Map (see separate map with more detail)



Gil Van Deventer

1-15-03

0730 - 0930 Drive to ~~site~~ C-23 (#1) site from Midland. Update Paul Sheeley (NMOCD) & Steve Weathers (DEFS) of project status.

Collected sample A (3') from area of most obvious (visual) contamination and deeper below same sample point A (11').

Welders came out to cut off ~20' section of the old F-3 12" steel inactive line. Welders also cut off sections of same line at next two scheduled excavation sites.

Calibrated OVM with 100 ppm iso-butylene (results 98 ppm).

Also collected a composite sample of backfill soil and contaminated excavated soil.

Sample ID	Time	Max. OVM (ppm)	
A (3')	1000	2.0	
A (11')	1100	0.9	Calibrated OVM
Backfill	1110	0.5	98 ppm before sampling
Exc. Soil	1120	70	98 ppm after sampling

Left site at 12 pm for lunch at Oil Patch Cafe' and O&M at Monument Booster Station.

Gil Van Deventer

1-15-03

1345 Back on site. Excavation proceeding well. Looks clean on north and south sides of excavation. Need to excavate a little more west directly below 10" C-23 poly line.

Mike said soil will be hauled to cell C-7 at South Monument Landfarm. If there isn't enough room there for all of the excavated soil then it will go to cell C-4.

Also need to excavate more to east (east of riser below C-23 line).

	Time	Max OVM
B(5')	1430	0.5
C(5')	1435	0.1
D(5')	1440	0.1
E(5')	1500	0.1
F(3')	1510	357

Mike Naegely will square off excavation, put brace under riser connection, and finish excavating dirty soil beneath riser. Left site at 1530 to deliver samples to Environmental Lab of TX.

Gil Van Deventer

1-17-03

0900 Received verbal GRO/DRO results from Celey at Env. Lab of Tx.:

	GRO / DRO	
A(3')	<10	
A(11')	<10	
B(5')	<10	Calibrated OVM
C(5')	<10	98 ppm before sampling
D(5')	<10	97 ppm after sampling
E(5')	<10	
F(3')	≈6,000	
Backfill	<10	
Exc Soil	≈100	

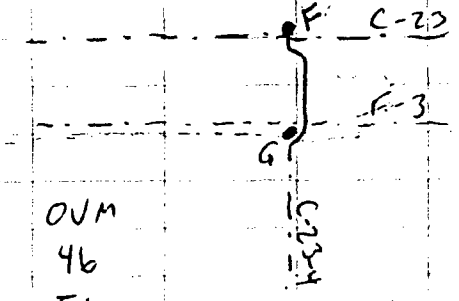
Left message with Paul Sheeley (Hobbs OCD) on preliminary results and plan to take final closure sample on Saturday. Will take sample directly below F(3') sample location (directly below 4" riser connection to 10" poly line). Will also collect sample near where 4" riser goes subsurface to south of the 12" (F-3) steel line (out of service).

Will need to backfill first if any further excavation to south is needed.

Gil Van Deventer

1-18-03 C-23(#1)

On site at 2:30 pm to collect floor sample beneath C-23 line below connection to 4" steel line (C-23-4) and a sample from the southeast wall beneath the C-23-4 line.



	Time	OVM
F(9')	1440	46
G(5')	1445	56

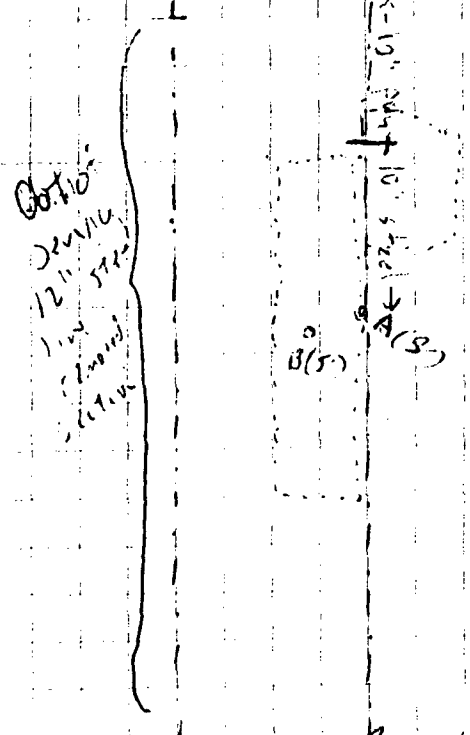
Calibrated OVM 98 ppm prior to sampling
98 ppm after sampling

Gil Van Deusen

1-24-03 C-23(#2)

1200 C-23(#2) Site

Backfilled soil was moved aside for access. Not much excavation was done at this point as there doesn't appear to be much contamination (two dark stained soil however top sand dune soil has strong odor (gasoline smell) light gray color



A(3') 1 ppm
B(5') 0
Back fill 0
Exc Soil 0

Gil Van Deusen