

**Clay Cooper #14 Closure Report
Duke Energy Field Services
Lea County, New Mexico**

IRP-213
10.23.05

OCTOBER 2, 2002

Prepared For:

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

Site Name:

CLAY COOPER #14 (CC#14)

Site Location:

T20S, R36 E, SECTION 25, UNIT D

Prepared By:



**PO Box 7624
Midland, Texas 79708**

Sheeley, Paul

From: Gilbert J Van Deventer [kickbooty@juno.com]
Sent: Thursday, October 24, 2002 8:15 AM
To: PSheeley@state.nm.us
Subject: 1,284 correction



CC14Close.doc

Corrected the yardage from 1.284 to 1,284 yds on CC#14

Gilbert J. Van Deventer, REM gilvandeventer@yahoo.com
Trident Environmental
Office: 915-682-0808
Fax/Home: 915-682-0727
Mobile: 915-638-3106

Sheeley, Paul

To: 'swweathers@duke-energy.com'; 'kickbooty@juno.com'
Cc: Anderson, Roger; Williams, Chris; Johnson, Larry; Olson, William
Subject: CCooper #11,14 Closure approval

Please see attached.



Clay Cooper
asure #11,14, C

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



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor
Betty Rivera
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

October 25, 2002

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

Re: Spill Site Closure Approval for Duke Energy Field Services, LP
Clay Cooper #11: UL-D, Sec 26-T20S-R36E Dated: August 7, 2002
Clay Cooper #14: UL-D, Sec 25-T20S-R36E. Dated: October 2, 2002

Dear Mr. Weathers,

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

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

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

Sincerely,

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

Paul Sheeley-Environmental Engineer

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



October 2, 2002

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

Re: Removal of Hydrocarbon-Impacted Soils from the CC #14 site
Township 20 South, Range 36 East, Section 25, Unit D

Dear Mr. Weathers:

Trident Environmental (Trident) was retained by Duke Energy Field Services, LP. (DEFS) to oversee the removal of hydrocarbon-impacted soil from an area along a pipeline right-of-way operated by DEFS near Monument, New Mexico in Lea County. The site (CC #14) is located in Section 25 (Unit D), Township 20 South, Range 36 East on property owned by Dale Cooper and managed by Clay Cooper. The location of the CC #14 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 adjacent to two 10-inch steel pipelines was excavated where Mr. Cooper identified indications of hydrocarbon-impacted soils. A drip pot (liquid collection vessel) was attached beneath each of the two pipelines. One of the 10-inch lines is in service. The second 10-inch pipeline located approx. 10 feet south of the active line is temporarily out of service. Both drip pots were removed prior to over-excavating the area. Additional excavation was conducted beneath a 4-inch steel line that extended approximately 300 feet south of the two 10-inch pipelines. An approximately 40-foot section of the 4-inch line (between the active line and a valve riser) was removed. During excavation operations, subsurface soil samples were collected and submitted to an analytical laboratory to characterize the approximate lateral and vertical extent of hydrocarbon-impacted soil in each area. Samples were collected by Trident with stainless steel trowels. Grab samples were collected from the floor and walls (north, south, east, and west), as specified in the site data form in Attachment A. During the course of excavation activities, samples were also collected for headspace analysis using an organic vapor meter (OVM), which was calibrated to assume a benzene response factor. All soil sampling, headspace analysis, and laboratory analysis were performed in accordance with OCD "Guidelines for Remediation of Leaks, Spills, and Releases" (August 13, 1993). Excavation operations were completed when laboratory analysis of collected samples indicated the extent of hydrocarbon-impacted soils remaining in the excavation were below the following concentrations:

- 100 milligrams per kilogram (mg/kg) of total petroleum hydrocarbons (TPH),
- 10 mg/kg benzene,
- 50 mg/kg total benzene, toluene, ethylbenzene, and xylenes (BTEX)

Soil samples were submitted to Environmental Laboratory of Texas (Odessa, Texas) and analyzed for gas and diesel range organics (GRO and DRO) using EPA Method 8015 to determine TPH concentrations. BTEX analyses were conducted only for the soil samples with OVM 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.

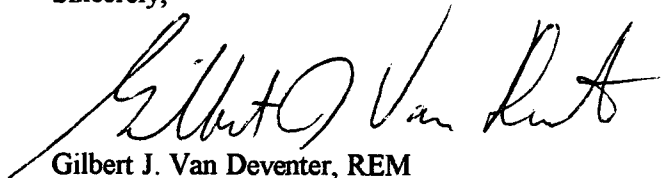
see attached page
Approximately ~~1,284~~ cubic yards of hydrocarbon-impacted soils were transported by Walton Construction to cell C-5 at the South Monument Landfarm, which is owned and operated by Ms. Kena Kay Cooper (OCD Rule 711 Permit Approval NM-01-0032). A completed *Release Notification and Corrective Action* (C-141) form is included in Attachment A.

Excavated soils below the remediation action levels and as agreed upon by Mr. Cooper were returned to the excavation after sampling and analysis verification. Also, native soil from adjacent sand dunes in the area was provided by Mr. Cooper and used as additional backfill in the excavation to restore the excavation to a level grade.

Results

At the completion of excavation activities all areas had petroleum hydrocarbon concentrations below the OCD standards listed above. Soil sample locations are depicted on the Site Map in Attachment A. A summary of the analytical results and photo documentation are also provided in Attachment A. Laboratory analytical reports, and chain-of-custody documentation for the samples collected are provided in Attachment B. Copies of the field logbook are in Attachment C.

Sincerely,



Gilbert J. Van Deventer, REM
Project Manager

Attachments

cc: Clay Cooper, landowner – Hobbs, NM

ATTACHMENT A

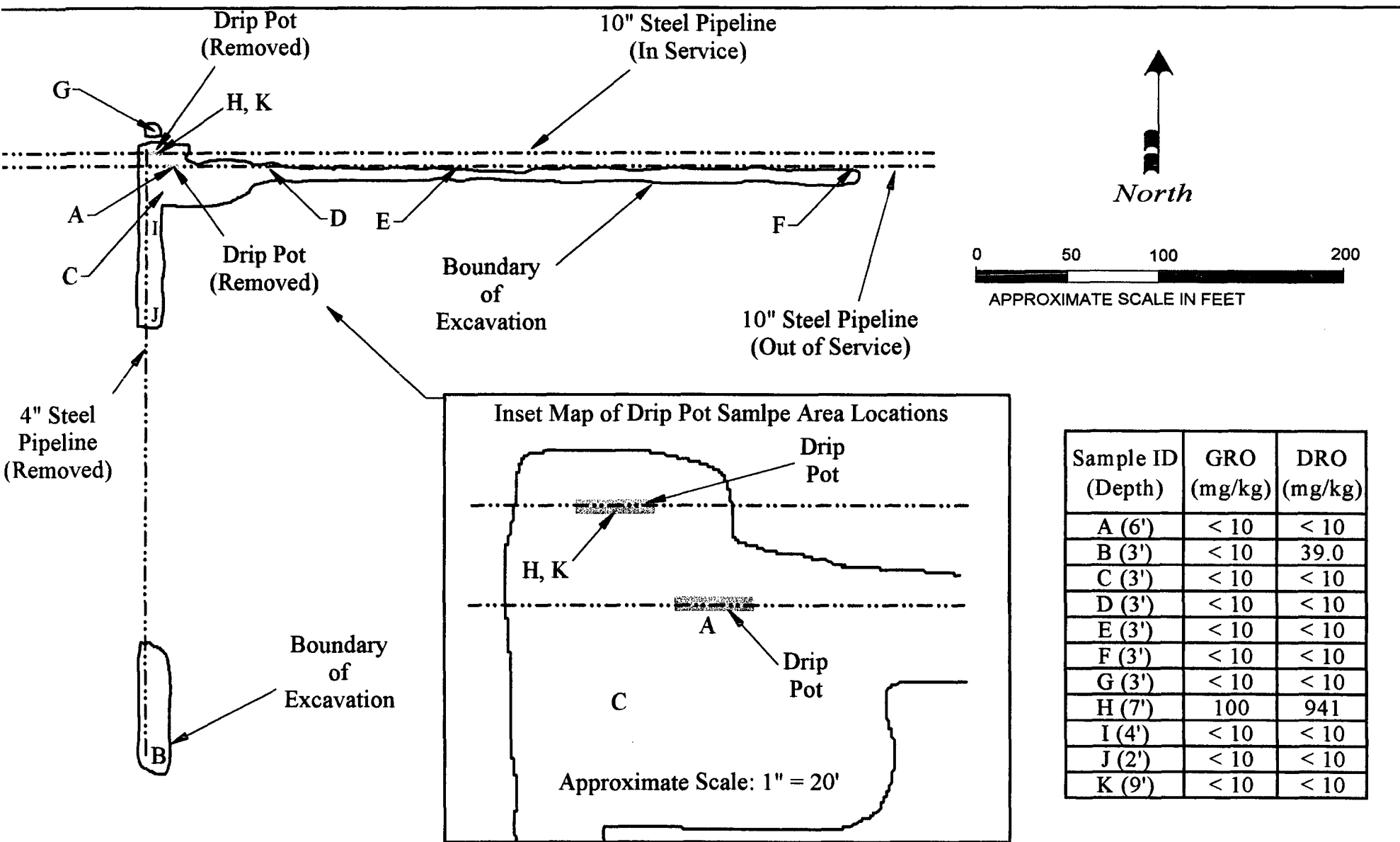
TOPOGRAPHIC MAP

SITE MAP

SITE DATA FORM

C-141 FORM

PHOTODOCUMENTATION



SITE NAME: CLAY COOPER # 14

DATE: 08/09/02

REVISION NO.: 1

DRAWN BY: GJV

FILENAME: CC12.TCW

CHECKED BY: DTL

SCALE: 1 INCH = 100 FT

SITE MAP

Site Data Form

Trident Technician: DTL Excavation Crew Names: Walton Construction Site ID: Clay Cooper #14
 Site Location: Latitude 32° 33' 4.5" N Longitude 103° 18' 46.4" W County: Lea State: New Mexico
 Township 20 South Range 36 East Section 25 Unit D
 Begin Excavation (Date/Time) 07/31/02 Complete Excavation (Date/Time) 08/09/02

LAND USE: ☐ Residential ☐ Recreational ☐ Farm land
 (Check all that apply) ☐ Industrial ☐ School/Daycare ☒ Range land
☒ Oil & Gas ☐ Rural ☐ Other: _____

Depth to Groundwater: ☐ > 100 feet ☐ 50 - 99 ☒ < 50 feet
 Wellhead Protection Area: ☒ > 1,000 feet from a water source ☐ < 200 feet from private domestic water source
 Distance to Nearest Surface Water Body: ☒ > 1,000 feet ☐ 200 - 1,000 feet ☐ < 200 feet

SURFACE SOILS: ☒ Sand ☐ Gravel ☐ Silt
☐ Caliche ☒ Clay ☒ Other Silty clay at depth

EXCAVATION DIMENSIONS Length ~400 feet Width 10-60 feet Average Depth 3-9 feet Maximum Depth 9 feet

VOLUME EXCAVATED: ~2,000 yd³ ^{6000'} **VOLUME HAULED TO LANDFARM:** 1,284 yd³

SUMMARY OF ANALYTICAL RESULTS

Sample ID	Sample Type	Date	OVM (mg/m ³)	GRO (mg/kg)	DRO (mg/kg)	Benzene (mg/m ³)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)
A (6')	Grab	07-31-02	0	< 10	< 10	---	---	---	---
B (3')	Grab	07-31-02	0	< 10	39.0	---	---	---	---
C (3')	Grab	08-05-02	0	< 10	< 10	---	---	---	---
D (3')	Grab	08-05-02	0	< 10	< 10	---	---	---	---
E (3')	Grab	08-05-02	0	< 10	< 10	---	---	---	---
F (3')	Grab	08-05-02	0	< 10	< 10	---	---	---	---
G (3')	Grab	08-05-02	0	< 10	< 10	---	---	---	---
H (7')	Grab	08-09-02	110	100	941	< 0.025	< 0.025	0.060	0.348
I (4')	Grab	08-09-02	1	< 10	< 10	---	---	---	---
J (2')	Grab	08-09-02	2	< 10	< 10	---	---	---	---
K (9')	Grab	08-09-02	0	< 10	< 10	---	---	---	---
Exc. Soil-1 (land farm)	Comp	08-05-02	114	1060	4840	< 0.025	0.036	0.178	0.614
Backfill-1	Comp	08-09-02	0	< 10	< 10	---	---	---	---

Note: The area below sample "H" (7' directly below drip pot that was removed from active 10" steel pipeline) was excavated further until concentrations were below OCD guidelines as confirmed by subsequent sample K(9').

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 #14	Facility Type Natural Gas Pipeline	
Surface Owner Dale Cooper	Mineral Owner Unknown	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the North/South Line	Feet from the East/West Line	County
D	25	20S	36E	32° 33' 4.5" N	103° 18' 46.4" W	Lea

NATURE OF RELEASE

Type of Release Condensate	Volume of Release Unknown	Volume Recovered 1,284 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? Larry Johnson, NMOCD District 1	
By Whom? Steve Weathers	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*

N/A

Describe Cause of Problem and Remedial Action Taken.*

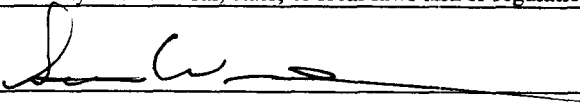
Historical condensate release caused by subsurface external corrosion. Removal of impacted soil requested by landowner (Clay Cooper).

Describe Area Affected and Cleanup Action Taken.*

On 07/31/02 over-excavation was initiated. Excavation continued until 08/09/02. The excavation was relatively shallow (3 ft to 9 ft) and measured approx. 10-60 ft wide by 400 ft long. Approximately 1,284 cu yds of soil was transported to cell C-5 at the South Monument Land Farm. Backfilling of excavation was completed on 08/21/02. Closure report, analytical results, photographs, and site map are attached.

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

Signature:



Printed Name: Stephen Weathers

Title: Environmental Specialist

Date: 10/8/02 Phone: (303) 605-1718

OIL CONSERVATION DIVISION

Approved by
District Supervisor:

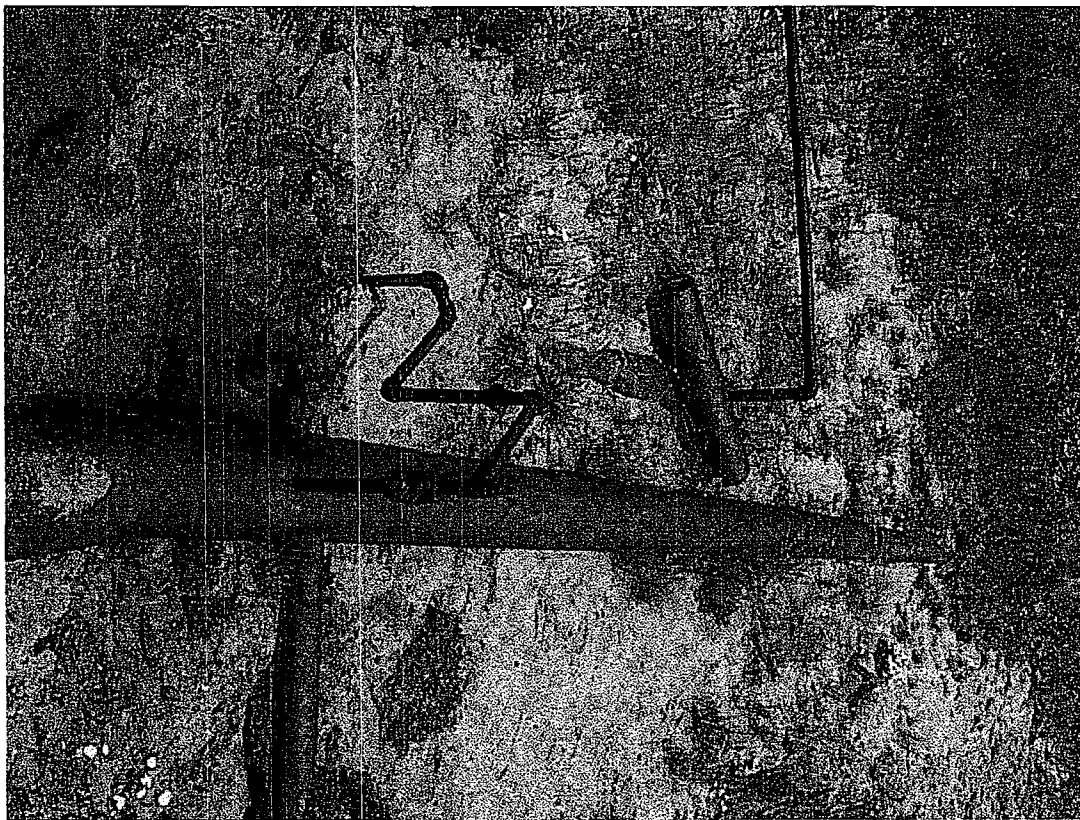
Approval Date:

Expiration Date:

Conditions of Approval:

Attached ☐

* Attach Additional Sheets If Necessary



- 1 View showing hydrocarbon-stained soil and drip pot location beneath active pipeline (left center). The 4-inch pipeline is shown at bottom of photo. The drip pot and 4-inch line were removed.



- 2 View facing southwest showing old drip pot beneath out of service pipeline prior to removal and over-excavation activities (07-31-02).



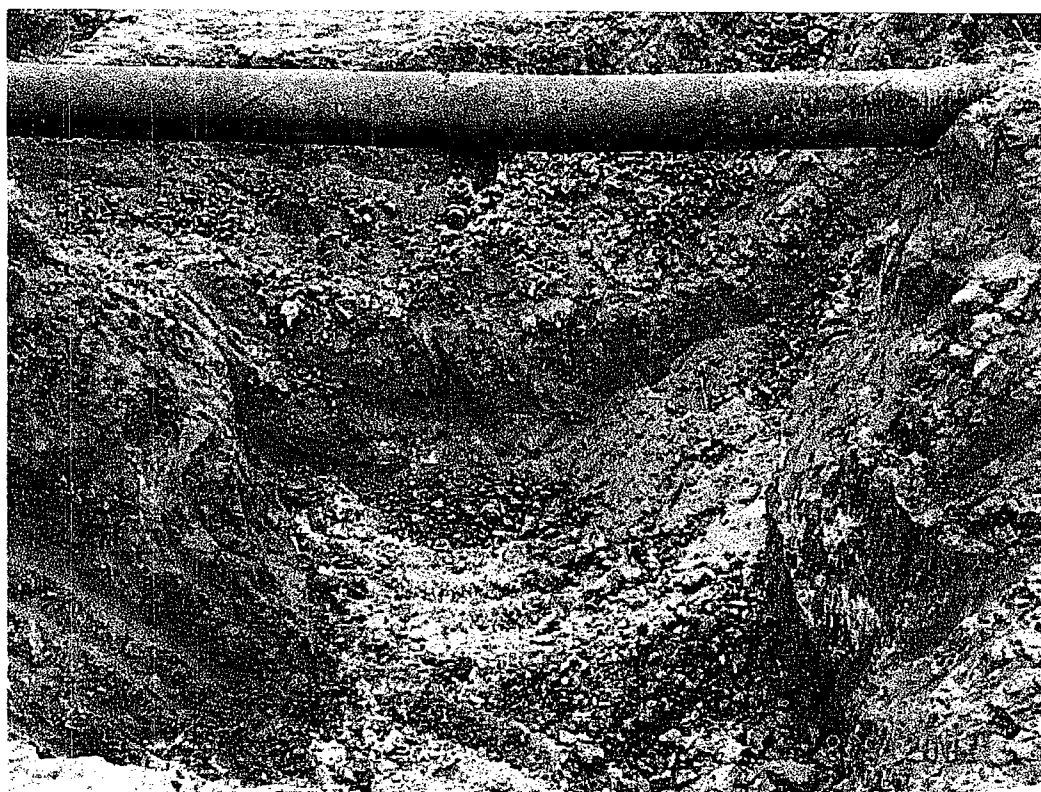
3 View showing early stage of excavation that extends approximately 400 feet east along the 10-inch steel pipeline (out of service). The 10-inch active pipeline (left center) and 4-inch line (foreground) are shown prior to excavation activity beneath them.



4 View facing south showing excavation beneath blowdown line (foreground) located north of the active pipeline (background).



- 5 View facing north showing shallow excavation directly beneath 4-inch pipeline, which was removed. Excavation extends approx. 140 ft. north to both 10-inch pipelines (background).



- 6 View showing floor of excavation (9' depth) directly beneath 10-inch steel active pipeline where drip pot was removed at completion of excavation activities.



ATTACHMENT B

LABORATORY ANALYTICAL REPORTS

AND

CHAIN-OF-CUSTODY DOCUMENTATION

CC-14

ANALYTICAL REPORT

Prepared for:

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

Project: Duke Energy Field Services
PO#: V-106
Order#: G0204079
Report Date: 08/01/2002

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#: G0204079
Project: V-106
Project Name: Duke Energy Field Services
Location: CC#14

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.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u> <u>Collected</u>	<u>Date / Time</u> <u>Received</u>	<u>Container</u>	<u>Preservative</u>
0204079-01	Old Drip Pot Pit (6')	SOIL	7/31/02 13:30	7/31/02 15:45	4 oz glass	Ice
<u>Lab Testing:</u>		Rejected: No	Temp: 2 C			
8015M						
0204079-02	Below S.Line Stain (3')	SOIL	7/31/02 13:40	7/31/02 15:45	4 oz glass	Ice
<u>Lab Testing:</u>		Rejected: No	Temp: 2 C			
8015M						

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0204079
Project: V-106
Project Name: Duke Energy Field Services
Location: CC#14

Lab ID: 0204079-01
Sample ID: Old Drip Pot Pit (6')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		8/1/02	1	1	CK	8015M

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

Lab ID: 0204079-02
Sample ID: Below S.Line Stain (3')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		8/1/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	39.0	10.0
TOTAL, C6-C35	39.0	10.0

Approval: Raland K. Tuttle 8-05-02
Raland K. Tuttle, Lab Director, QA Officer
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0204079

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0002635-02			<10.0		
CONTROL	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0002635-03		909	1070	117.7%	
CONTROL DUP	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0002635-04		909	883	97.1%	19.2%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0002635-05		1000	936	93.6%	

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

V-106-CC14-01

Chain of Custody

Date 7/31/02 Page 1 of 1

[illegible]

CL-14

ANALYTICAL REPORT

Prepared for:

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

Project: Duke Energy Field Services

PO#:

Order#: G0204123

Report Date: 08/08/2002

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#: G0204123
Project: V-106
Project Name: Duke Energy Field Services
Location: CC #14

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.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u> <u>Collected</u>	<u>Date / Time</u> <u>Received</u>	<u>Container</u>	<u>Preservative</u>
0204123-01	C (3')	SOIL	8/5/02 13:20	8/5/02 17:05	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M	Rejected: No		Temp: 2.5 C		
0204123-02	D (3')	SOIL	8/5/02 12:40	8/5/02 17:05	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M	Rejected: No		Temp: 2.5 C		
0204123-03	E (3')	SOIL	8/5/02 12:50	8/5/02 17:05	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M	Rejected: No		Temp: 2.5 C		
0204123-04	F (3')	SOIL	8/5/02 13:00	8/5/02 17:05	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M	Rejected: No		Temp: 2.5 C		
0204123-05	G (3')	SOIL	8/5/02 13:30	8/5/02 17:05	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M	Rejected: No		Temp: 2.5 C		
0204123-06	Exc. Soil 1	SOIL	8/5/02 13:40	8/5/02 17:05	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX	Rejected: No		Temp: 2.5 C		

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0204123
Project: V-106
Project Name: Duke Energy Field Services
Location: CC #14

Lab ID: 0204123-01

Sample ID: C (3')

8015M

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>	<u>Analyst</u>	<u>Method</u>
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
	8/6/02	8/6/02	1	1	CK	8015M

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

Lab ID: 0204123-02

Sample ID: D (3')

8015M

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>	<u>Analyst</u>	<u>Method</u>
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
	8/6/02	8/6/02	1	1	CK	8015M

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

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0204123
Project: V-106
Project Name: Duke Energy Field Services
Location: CC #14

Lab ID: 0204123-03
Sample ID: E (3')

8015M

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
	8/6/02	8/6/02	1	1	CK	8015M

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

Lab ID: 0204123-04
Sample ID: F (3')

8015M

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
	8/6/02	8/6/02	1	1	CK	8015M

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

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0204123
Project: V-106
Project Name: Duke Energy Field Services
Location: CC #14

Lab ID: 0204123-05
Sample ID: G (3')

8015M

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
	8/6/02	8/6/02	1	1	CK	8015M

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

Lab ID: 0204123-06
Sample ID: Exc. Soil 1

8015M

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
	8/6/02	8/6/02	1	10	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	1060	100
DRO, >C12-C35	4840	100
TOTAL, C6-C35	5900	100

8021B/5030 BTEX

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
0002741-02		8/7/02 16:24	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.0254
Ethylbenzene	0.178	0.0254
Toluene	0.036	0.0254
p/m-Xylene	0.459	0.0254
o-Xylene	0.155	0.0254

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

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ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0204123
Project: V-106
Project Name: Duke Energy Field Services
Location: CC #14

Approval: Raland K. Tuttle 8-10-02
Raland K. Tuttle, Lab Director, QA Officer Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0204123

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0002705-02			<10.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0204123-01	0	909	931	102.4%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0204123-01	0	909	906	99.7%	2.7%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0002705-05		1000	923	92.3%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0204123

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0002741-02			<0.025		
Ethylbenzene-mg/kg		0002741-02			<0.025		
Toluene-mg/kg		0002741-02			<0.025		
p/m-Xylene-mg/kg		0002741-02			<0.025		
o-Xylene-mg/kg		0002741-02			<0.025		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0204107-06	0	0.1	0.092	92.%	
Ethylbenzene-mg/kg		0204107-06	0	0.1	0.097	97.%	
Toluene-mg/kg		0204107-06	0	0.1	0.096	96.%	
p/m-Xylene-mg/kg		0204107-06	0	0.2	0.201	100.5%	
o-Xylene-mg/kg		0204107-06	0	0.1	0.097	97.%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0204107-06	0	0.1	0.090	90.%	2.2%
Ethylbenzene-mg/kg		0204107-06	0	0.1	0.095	95.%	2.1%
Toluene-mg/kg		0204107-06	0	0.1	0.094	94.%	2.1%
p/m-Xylene-mg/kg		0204107-06	0	0.2	0.197	98.5%	2.%
o-Xylene-mg/kg		0204107-06	0	0.1	0.095	95.%	2.1%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0002741-05		0.1	0.091	91.%	
Ethylbenzene-mg/kg		0002741-05		0.1	0.096	96.%	
Toluene-mg/kg		0002741-05		0.1	0.095	95.%	
p/m-Xylene-mg/kg		0002741-05		0.2	0.198	99.%	
o-Xylene-mg/kg		0002741-05		0.1	0.096	96.%	



Chain of Custody

Date 85-02 Page 1 of 1

[illegible]

CC-14

ANALYTICAL REPORT

Prepared for:

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

Project: Duke Energy Field Services
PO#: V-106
Order#: G0204168
Report Date: 08/15/2002

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#: G0204168
Project: V-106
Project Name: Duke Energy Field Services
Location: CC#14

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.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u>	<u>Date / Time</u>	<u>Container</u>	<u>Preservative</u>
			<u>Collected</u>	<u>Received</u>		
0204168-01	H (7')	SOIL	8/9/02 10:30	8/9/02 15:45	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX	Rejected: No		Temp: 4.0 C		
0204168-02	I (4')	SOIL	8/9/02 10:35	8/9/02 15:45	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M	Rejected: No		Temp: 4.0 C		
0204168-03	J (2')	SOIL	8/9/02 10:45	8/9/02 15:45	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M	Rejected: No		Temp: 4.0 C		
0204168-04	K (9')	SOIL	8/9/02 13:00	8/9/02 15:45	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M	Rejected: No		Temp: 4.0 C		
0204168-05	Backfill-1	SOIL	8/9/02 11:55	8/9/02 15:45	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M	Rejected: No		Temp: 4.0 C		

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0204168
Project: V-106
Project Name: Duke Energy Field Services
Location: CC#14

Lab ID: 0204168-01

Sample ID: H (7')

8015M

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		8/15/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	100	10.0
DRO, >C12-C35	941	10.0
TOTAL, C6-C35	1,041	10.0

8021B/5030 BTEX

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
0002771-02		8/10/02 21:25	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	0.060	0.025
Toluene	<0.025	0.025
p/m-Xylene	0.270	0.025
o-Xylene	0.078	0.025

Lab ID: 0204168-02

Sample ID: I (4')

8015M

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		8/15/02	1	1	CK	8015M

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

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

Page 1 of 3

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0204168
Project: V-106
Project Name: Duke Energy Field Services
Location: CC#14

Lab ID: 0204168-03
Sample ID: J (2')

8015M

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>	<u>Analyst</u>	<u>Method</u>
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		8/15/02	1	1	CK	8015M

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

Lab ID: 0204168-04
Sample ID: K (9')

8015M

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>	<u>Analyst</u>	<u>Method</u>
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		8/15/02	1	1	CK	8015M

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

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0204168
Project: V-106
Project Name: Duke Energy Field Services
Location: CC#14

Lab ID: 0204168-05
Sample ID: Backfill-1

8015M

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>	<u>Analyst</u>	<u>Method</u>
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		8/15/02	1	1	CK	8015M

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

Approval:

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

Date

8-15-02

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0204168

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0002819-02			<10.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0204168-04	0	909	1160	127.6%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0204168-04	0	909	1160	127.6%	0.0%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0002819-05		1000	1050	105.0%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0204168

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0002771-02			<0.025		
Ethylbenzene-mg/kg		0002771-02			<0.025		
Toluene-mg/kg		0002771-02			<0.025		
p/m-Xylene-mg/kg		0002771-02			<0.025		
o-Xylene-mg/kg		0002771-02			<0.025		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0204163-03	0	0.1	0.089	89.%	
Ethylbenzene-mg/kg		0204163-03	0	0.1	0.094	94.%	
Toluene-mg/kg		0204163-03	0	0.1	0.092	92.%	
p/m-Xylene-mg/kg		0204163-03	0	0.2	0.194	97.%	
o-Xylene-mg/kg		0204163-03	0	0.1	0.094	94.%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0204163-03	0	0.1	0.100	100.%	11.6%
Ethylbenzene-mg/kg		0204163-03	0	0.1	0.107	107.%	12.9%
Toluene-mg/kg		0204163-03	0	0.1	0.104	104.%	12.2%
p/m-Xylene-mg/kg		0204163-03	0	0.2	0.219	109.5%	12.1%
o-Xylene-mg/kg		0204163-03	0	0.1	0.105	105.%	11.1%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0002771-05		0.1	0.093	93.%	
Ethylbenzene-mg/kg		0002771-05		0.1	0.099	99.%	
Toluene-mg/kg		0002771-05		0.1	0.098	98.%	
p/m-Xylene-mg/kg		0002771-05		0.2	0.206	103.%	
o-Xylene-mg/kg		0002771-05		0.1	0.100	100.%	



Chain of Custody

Date 3-9-02 Page 1 of 1

Copy signed original form for Trident Environmental records



ATTACHMENT C

FIELD BOOK NOTES

CC # 14

7/31/02

Not to Scale

Slight
staining
along
4" line

5.0" stain

10' west south edge of pit
Sample: 5.1" below stain (3')

Dead line south of plug

Plug Valve w blind plate

Dead line

Dead

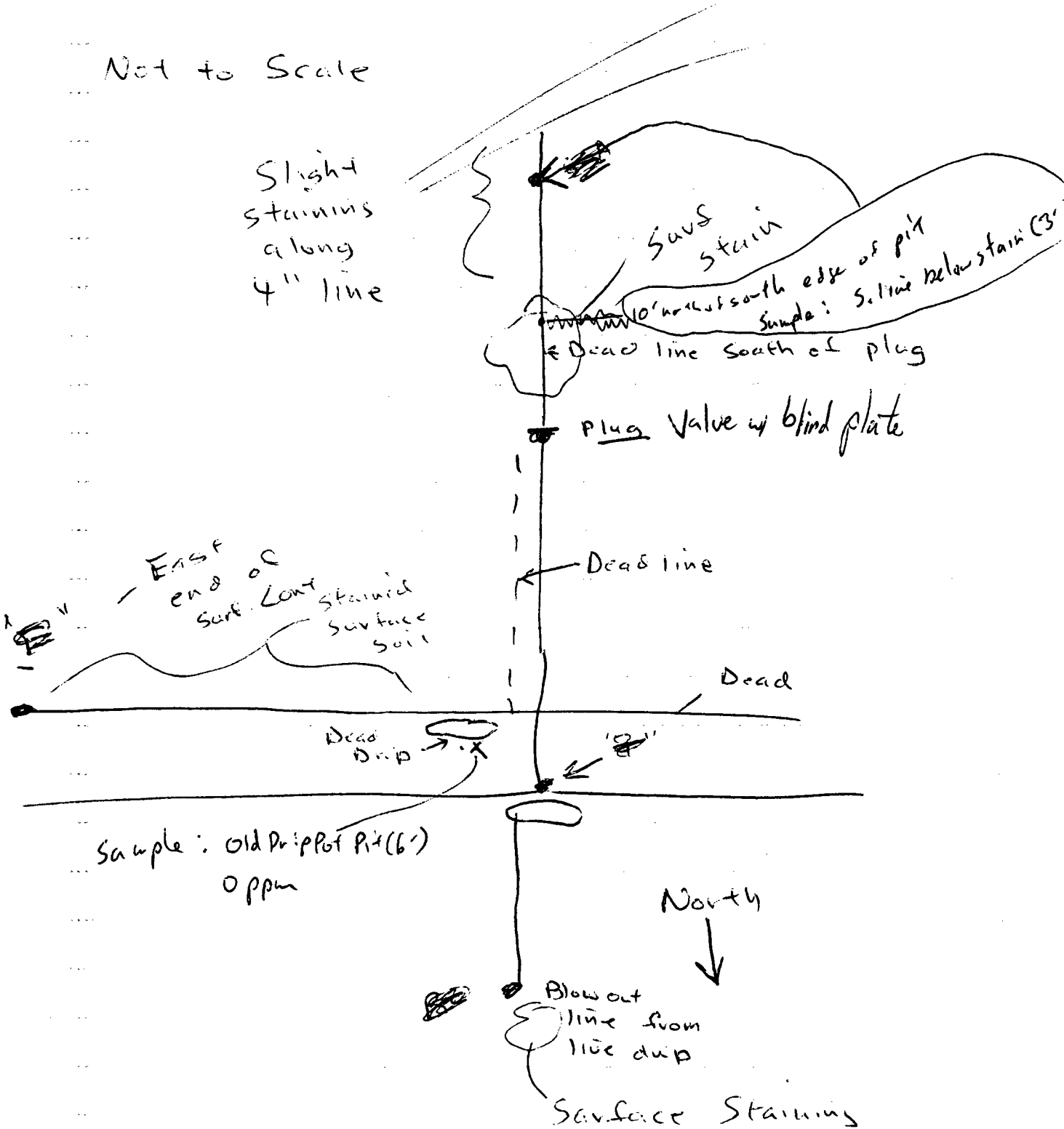
Dead Drip

Sample: Old Drip Pot Pit (6')
0 ppm

North

Blow out
line from
live drip

Surface Staining



(1)

7/31/02

LTL

1030 (CT) Leave Midland for
Clay Cooper #14 Site

1230 Arrive at Site (well loc
just south of site)

Rechecked the site, the only excavation
was at the old line drip pot (see map)

Soil Sample taken from base of pit @ 6'

Apparent Surface Contamination along
old E-W line and along 4" line
that extends from live line to south

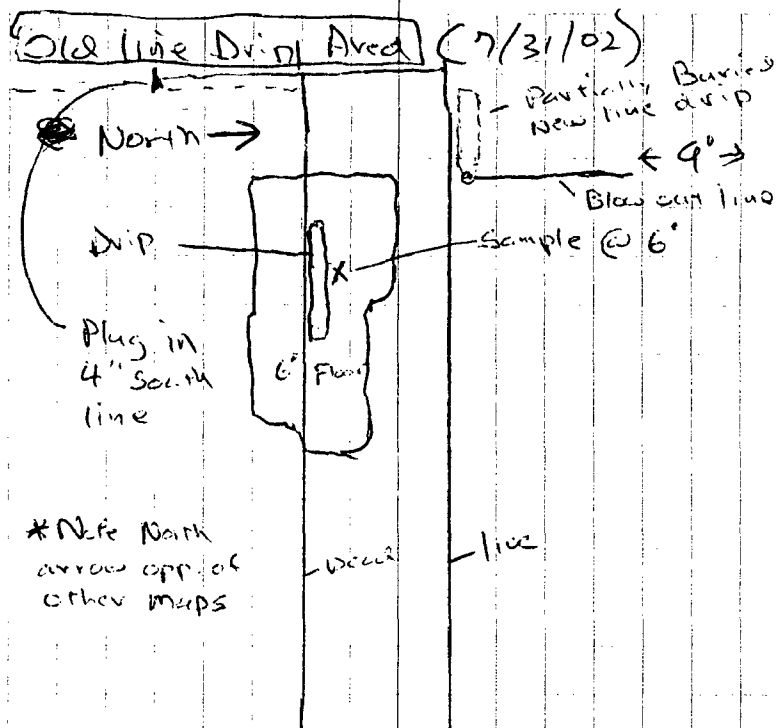
Soil Sample taken just below a
stained layer above 4" line pass.
from old 4" line that was cut off

- Walton will remove visible surface
stained soil and will call us if
it extends below 5 ft.
- Walton cannot dig near the drip
pots until Duke disconnects
the live line drip pot on Friday
(8/2/02)

PID Samples

Old Drip Pot Pit (6')	—	Results
South line below stain (3')	—	0 ppm
		0 ppm

check Calb. 9.3 ppm



* Note North
arrow opp. of
other maps

1870 leave Site for Lab
1630 Arrive in Midland 194 mi

* CC #13 Damages

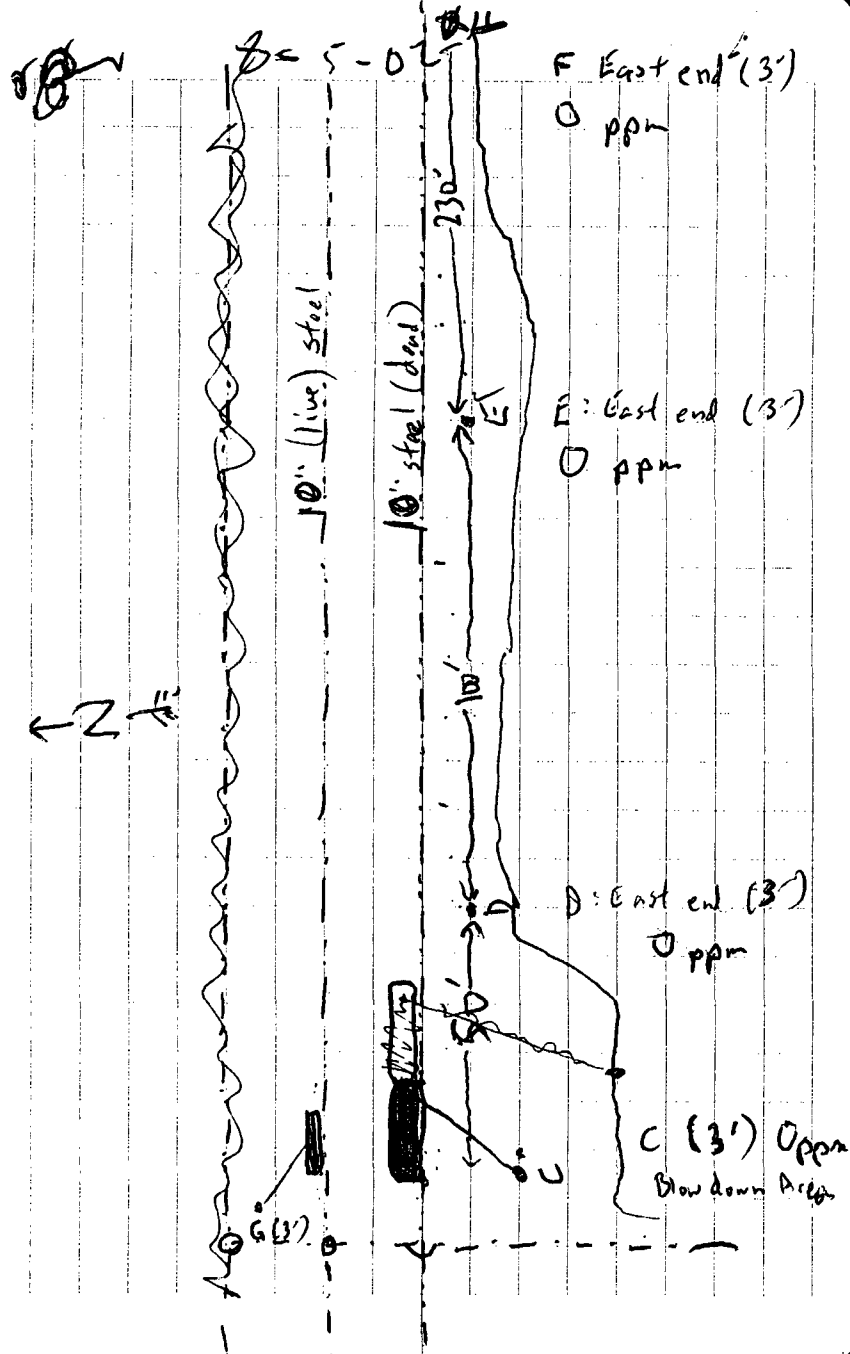
73 loads
876 yards

8-1-02

Called in to Mike on status.
Not much to dig until DEFS
replaces ventres digg pit from
active line. Should have some
contaminated soil dug out & be
ready for sampling on Friday
afternoon.

8-2-02

Called Mike again for status.
Due to heavy rain & thunderstorms
Thurs night / Fri morn. All work
was cancelled for today including
DEFS work. Will plan on
being at site ~ 12:30pm Monday
(MST) for sampling.



8-5-02

CC #14

Collected sample from stockpile
of contaminated soil

Sample ID	Time	OUM
C		0
D		0
E		0
F		0
G		0
Exc. Soil - 1		114

Notified Larry Johnson at
next sampling event for a room Friday

8-9-02

CC #14

0800 Drive to Site

1000 Meet with Walton Crew.

Drip pot from live 10" steel line
has been removed & line capped. Some
concern about integrity of bottom
of live 10" line due to corrosion
of remaining fitting that was
capped with a 2" plug & a
'possum fitting'

Collected sample H (7') directly beneath
drip pot of active 10" steel line. (1030)

Collected sample I (4') ^{at} ~~below~~ stained
area beneath 4" line located 20' south of
10" inactive line. (1035)

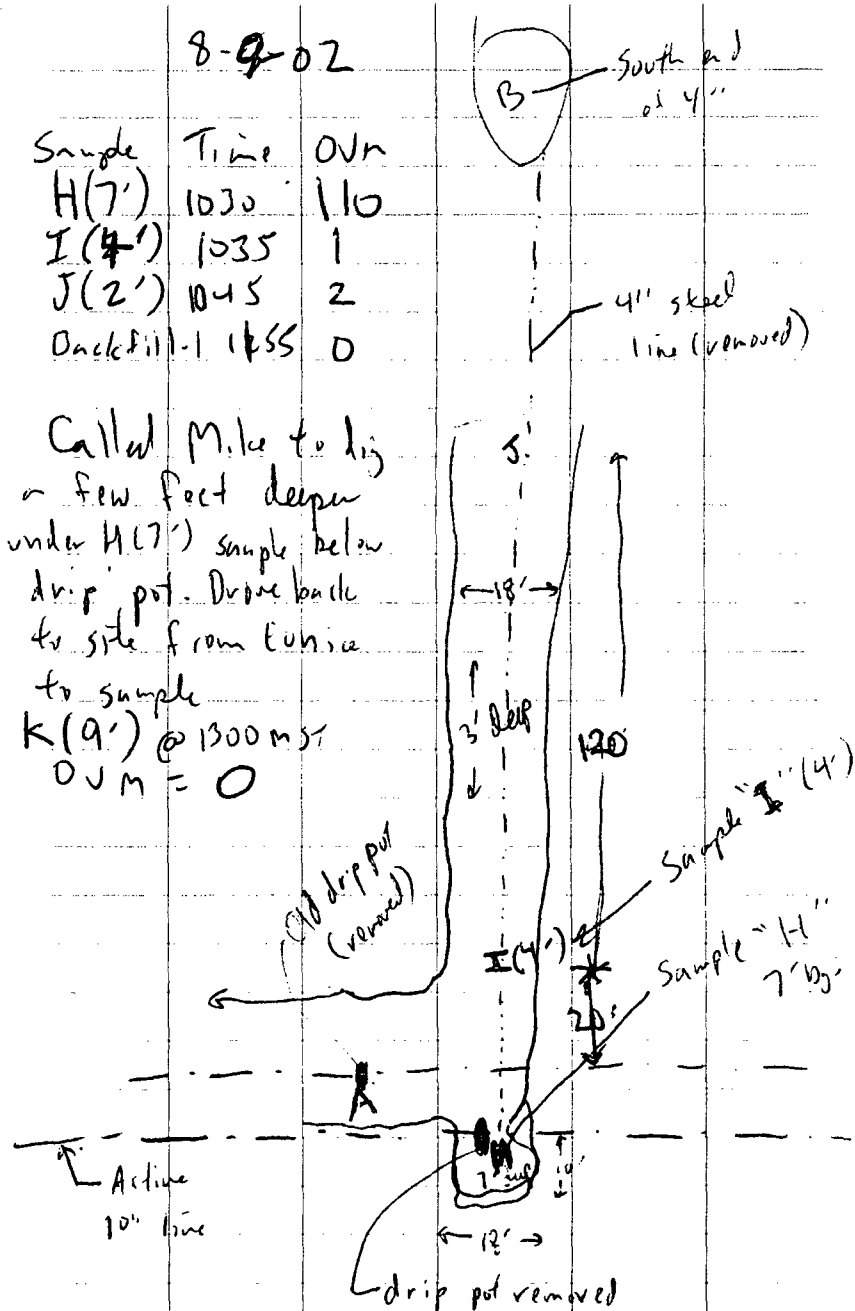
Collected sample J (2') at end of excavated
area along 4" line that was removed. (1045)

Collected backfill sample (Composite) from
all backfill stockpiles & east end of line
that is currently being backfilled.
Larry Johnson (Hobbs - DCD) on site to
witness all sampling.

8-9-02

Sample	Time	OVN
H(7')	1030	110
I(4')	1035	1
J(2')	1045	2
Darkfill	1055	0

Called Mike to dig
a few feet deeper
under H(7') sample below
drill pit. Drove back
to site from Eunice
to sample
K(9') @ 1300 mst
OJM = 0



800.543.5589

R/L CARRIERS

www.gorlc.com

8/29/02

	loads	Yards
8/1	10	120
8/2	4	48
8/6	11	132
8/7	30	360
8/8	33	396
8/9	16	192
8/21	3	36
	<hr/> 107	<hr/> 1284

44