1RP-211 10.25.05

### Clay Cooper #11 Closure Report Duke Energy Field Services Lea County, New Mexico

#### **AUGUST 7, 2002**

**Prepared** For:

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

Site Name:

### **CLAY COOPER #11 (CC#11)**

Site Location:

## T20S, R36 E, SECTION 25, UNIT D

**Prepared By:** 

PO Box 7624 Midland, Texas 79708



August 7, 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 #11 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 <u>hydrocarbon-impacted</u> soil from an area along a pipeline right-of-way operated by DEFS approximately 3 miles south-southwest of Monument, New Mexico in Lea County. The site (<u>CC</u>#11) is located in Section 25 (Unit D), <u>Township</u> 20 South, <u>Range</u> 36 East on property owned by <u>Dale Cooper</u> and managed by Clay Cooper. The location of the CC #11 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<sup>3</sup> dump trucks for earthmoving services. An area was excavated where Mr. Cooper identified indications of hydrocarbon-impacted soils. During excavation operations, subsurface soil samples were collected and submitted to an analytical laboratory to characterize the approximate lateral and vertical extent of hydrocarbon-impacted soil in each area. Samples were collected by Trident with stainless steel trowels. Grab samples were collected from the floor and walls (north, south, east, and west), as specified in the site data form in Attachment A. During the course of excavation activities, samples were also collected for headspace analysis using an organic vapor meter (OVM), which was calibrated to assume a benzene response factor. All soil sampling, headspace analysis, and laboratory analysis were performed in accordance with OCD "Guidelines for Remediation of Leaks, Spills, and Releases" (August 13, 1993). Excavation operations were completed when laboratory analysis of collected samples indicated the extent of hydrocarbon-impacted soils remaining in the excavation were below the following concentrations:

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

Soil samples were submitted to Environmental Laboratory of Texas (Odessa, Texas) and analyzed for gas and diesel range organics (GRO and DRO) using EPA Method 8015 to determine TPH concentrations. BTEX analyses were conducted only for the soil samples with OVM, GRO, and/or DRO concentrations exceeding 100 ppm.

#### Soil Stockpiling, Waste Disposition, and Backfilling

An effort to segregate clean versus impacted soil during excavation was made. Only hydrocarbonimpacted 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 <u>252</u> cubic yards of hydrocarbon-impacted soils were transported by Walton Construction to cell C-5 at the South Monument Landfarm, which is owned and operated by Ms. Kena Kay Cooper (OCD Rule 711 Permit Approval NM-01-0032). A completed *Release Notification and Corrective Action* (C-141) form is included in Attachment A.

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

#### **Results**

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

Sincerely,

Gilbert J. Van Deventer, REM Project Manager

Attachments

cc: Clay Cooper, landowner - Hobbs, NM

C:DEFS\COOPER\CC11\CC11CLOSE.DOC

# ATTACHMENT A

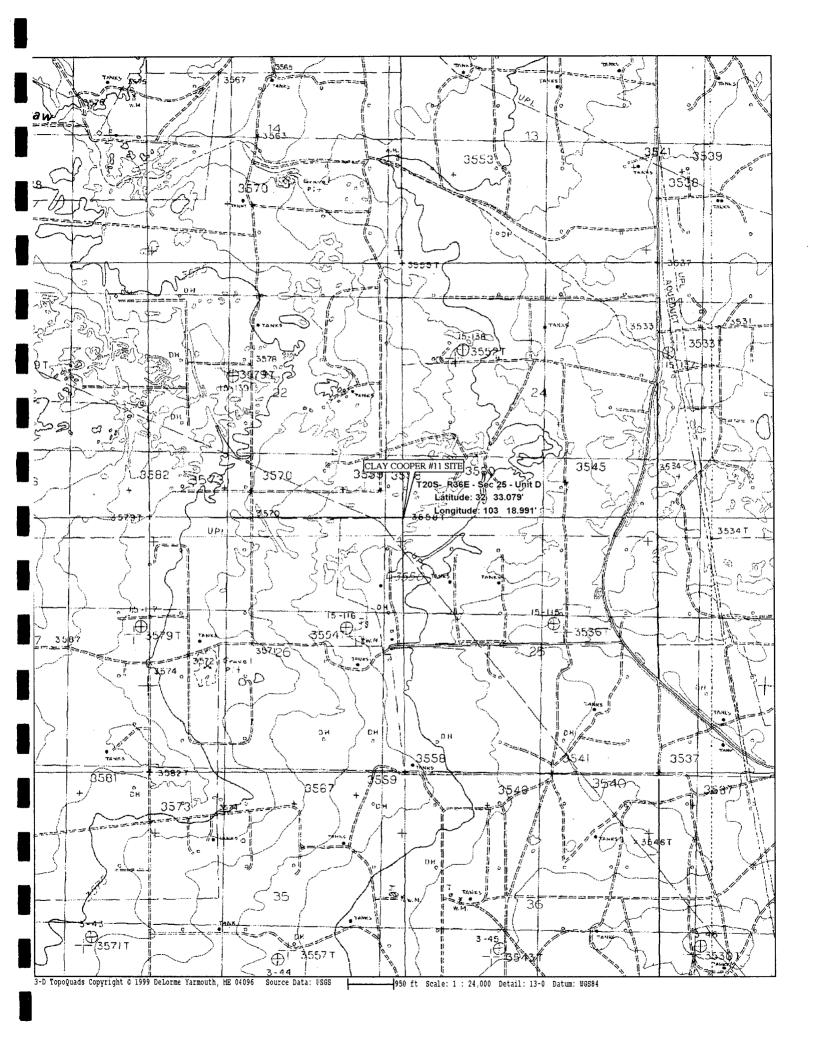
**TOPOGRAPHIC MAP** 

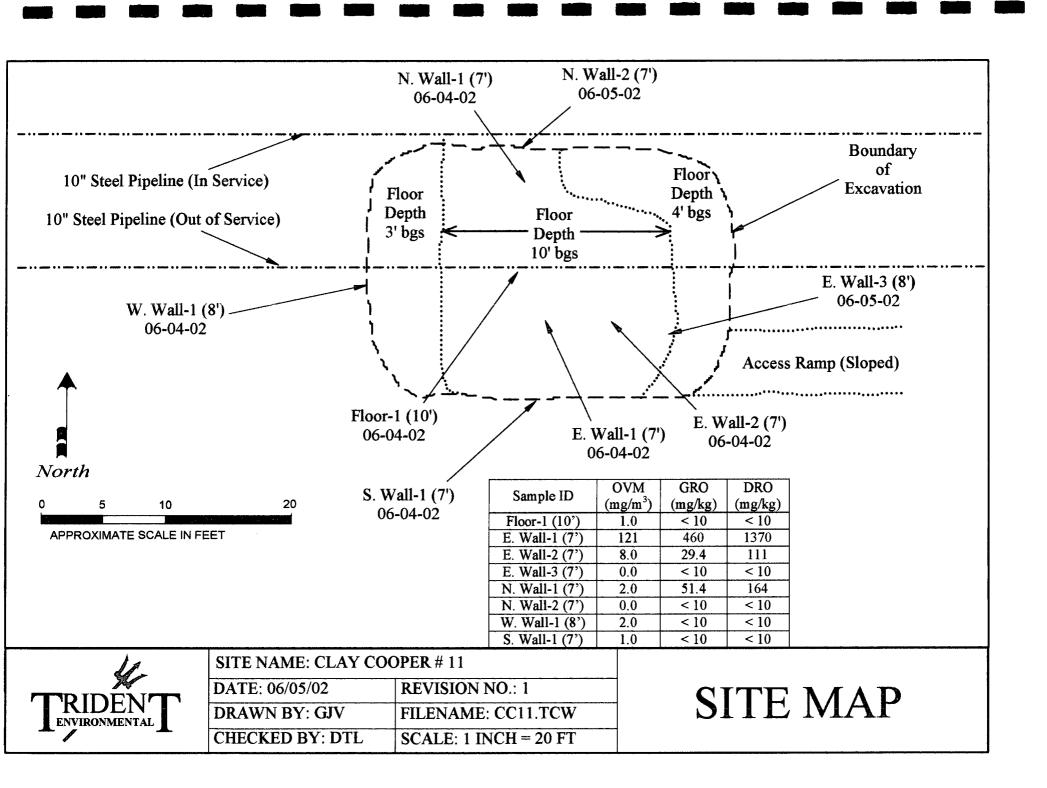
SITE MAP

SITE DATA FORM

C-141 FORM

PHOTODOCUMENTATION





				Site L	ata Fo	orm	<u> </u>		
TRW Technician:	DTL	Excavation	Crew Nam	es: <u>Walton</u>	n Construct	ion	Site ID:	Clay Cooper # 11	<u>l</u>
Site Location: La	titude <u>(32</u>	° 33.079' N	]_ Longitu	de <u>[1</u>	03° 18.991'	W County	/:L	<u>ea</u> State:	New Mexico
Township	20 South	Ran	ge	36 East	Se	ction	25	Unit	D
Begin Excavation	(Date/Time	e)06/04/	/02	_ Comp	lete Excava	tion (Date/I	ime) <u>0</u>	6/05/02	
LAND USI	annly)	<ul><li>Residenti</li><li>Industria</li><li>Oil &amp; Ga</li></ul>	1	🛛 Sch	reational ool/Daycaro al	e	🗖 Rai	m land nge land ner:	
Depth to Groundy Wellhead Protecti Distance to Neare	on Area:	■ > 1,000 f	feet from a	water sourc	e 🗆 <	200 feet fro			urce
SURFACE SC		Sand Caliche		Grav Clay	<i>r</i> el			Sandy silty cla	iy at depth
EXCAVATI DIMENSIO		Len 18	-	24	Width feet		rage Depth 3-10 1	Maxim feet <u>10</u>	um Depth feet
VOLUME EXC	AVATED:	~800	_, yd <sup>3</sup>	vo	LUME HA	ULED TO	LANDFAR	LM:	y
		/C	() · · · · · · · · · · · · · · · · · · ·						
	· · · · · · · · · · · · · · · · · · ·	1 <u>~2001</u>	SUMMAR	RY OF AN	ALYTICA	L RESULT	S		
Sample ID	Sample Type	Date	SUMMAF OVM (mg/m <sup>3</sup> )	GRO (mg/kg)	DRO	L RESULT Benzene (mg/m <sup>3</sup> )	S Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)
Sample ID Floor-1 (10')	Sample Type Grab	Date 06-04-02	OVM (mg/m <sup>3</sup> ) 1.0	GRO (mg/kg) < 10	DRO (mg/kg) < 10	Benzene (mg/m <sup>3</sup> )	Toluene (mg/kg)	(mg/kg)	(mg/kg)
Sample ID Floor-1 (10') E. Wall-1 (7')	Sample Type Grab Grab	Date 06-04-02 06-04-02	OVM (mg/m <sup>3</sup> ) 1.0 121	GRO (mg/kg) < 10 460	DRO (mg/kg) < 10 1370	Benzene (mg/m <sup>3</sup> )  < 0.025	Toluene	(mg/kg) <0.025	(mg/kg)  0.071
Sample ID Floor-1 (10') E. Wall-1 (7') E. Wall-2 (7')	Sample Type Grab Grab Grab	Date 06-04-02 06-04-02 06-04-02	OVM (mg/m <sup>3</sup> ) 1.0 121 8.0	GRO (mg/kg) < 10 460 29.4	DRO (mg/kg) < 10 1370 111	Benzene (mg/m <sup>3</sup> )	Toluene (mg/kg)	(mg/kg)	(mg/kg)
Sample ID Floor-1 (10') E. Wall-1 (7') E. Wall-2 (7') E. Wall-3 (7')	Sample Type Grab Grab	Date 06-04-02 06-04-02	OVM (mg/m <sup>3</sup> ) 1.0 121	GRO (mg/kg) < 10 460	DRO (mg/kg) < 10 1370	Benzene (mg/m <sup>3</sup> )  < 0.025 	Toluene (mg/kg)  < 0.025 	(mg/kg) 	(mg/kg)  0.071
Sample ID Floor-1 (10') E. Wall-1 (7') E. Wall-2 (7')	Sample Type Grab Grab Grab Grab	Date 06-04-02 06-04-02 06-04-02 06-05-02	OVM (mg/m <sup>3</sup> ) 1.0 121 8.0 0.0	GRO (mg/kg) < 10 460 29.4 < 10	DRO (mg/kg) < 10 1370 111 < 10	Benzene (mg/m <sup>3</sup> )  < 0.025 	Toluene (mg/kg)  < 0.025 	(mg/kg)  < 0.025  	(mg/kg)  0.071
Sample ID Floor-1 (10') E. Wall-1 (7') E. Wall-2 (7') E. Wall-3 (7') N. Wall-1 (7') N. Wall-2 (7') W. Wall-1 (8')	Sample Type Grab Grab Grab Grab Grab Grab Grab	Date 06-04-02 06-04-02 06-04-02 06-05-02 06-04-02 06-04-02	SUMMAR OVM (mg/m <sup>3</sup> ) 1.0 121 8.0 0.0 2.0 0.0 2.0	GRO (mg/kg) < 10 460 29.4 < 10 51.4 < 10 < 10	DRO (mg/kg) < 10 1370 1111 < 10 164 < 10 < 10	Benzene (mg/m <sup>3</sup> )  < 0.025  	Toluene (mg/kg)  < 0.025  	(mg/kg) 	(mg/kg)  0.071  
Sample ID Floor-1 (10') E. Wall-1 (7') E. Wall-2 (7') E. Wall-3 (7') N. Wall-3 (7') N. Wall-1 (7') W. Wall-1 (8') S. Wall-1 (7')	Sample Type Grab Grab Grab Grab Grab Grab	Date 06-04-02 06-04-02 06-04-02 06-05-02 06-04-02 06-05-02	OVM (mg/m <sup>3</sup> ) 1.0 121 8.0 0.0 2.0 0.0	GRO (mg/kg) < 10 460 29.4 < 10 51.4 < 10	DRO (mg/kg) < 10 1370 111 < 10 164 < 10	Benzene (mg/m <sup>3</sup> )  < 0.025   	Toluene (mg/kg)  < 0.025  	(mg/kg)  < 0.025   	(mg/kg)  0.071   
Sample ID Floor-1 (10') E. Wall-1 (7') E. Wall-2 (7') E. Wall-3 (7') N. Wall-1 (7') N. Wall-2 (7') W. Wall-1 (8')	Sample Type Grab Grab Grab Grab Grab Grab Grab	Date 06-04-02 06-04-02 06-04-02 06-05-02 06-04-02 06-04-02	SUMMAR OVM (mg/m <sup>3</sup> ) 1.0 121 8.0 0.0 2.0 0.0 2.0	GRO (mg/kg) < 10 460 29.4 < 10 51.4 < 10 < 10	DRO (mg/kg) < 10 1370 1111 < 10 164 < 10 < 10	Benzene (mg/m <sup>3</sup> )  < 0.025    	Toluene (mg/kg)  < 0.025   	(mg/kg)  < 0.025    	(mg/kg)  0.071   

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

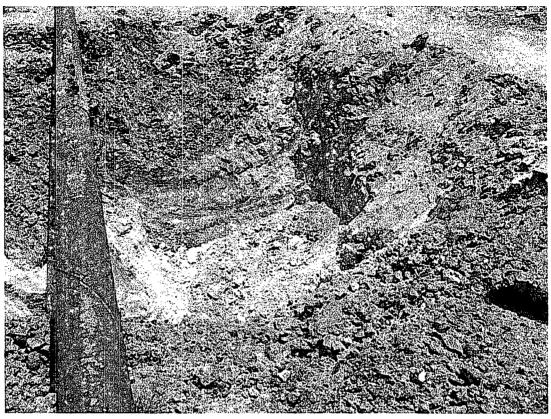
Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back

Form C-141

Revised March 17, 1999

District IV 2040 South Pac	heco, Santa F	e, NM 87505				Santa I	Fe, NM 87	7505			side of form
		<u> </u>	Releas	se Not	tifica	tion a	nd Cor	rective Act	ion		
					0	PERA	TOR		🗌 Initia	al Report	Final Report
Name of Co		Energy Field	d Services	Inc.			Contact	Mı	r. Steve W	eathers	
Address							Telephon	e No.			
Facility Nar		5493, Denve	r, Colorad	to 8021	17		Facility T		(303) 605-	1718	
		Site Name:	CC #11	]					tural Gas I	Pipeline	7
Surface Ow		Cooper		1	Minera	l Owner	Unkn	own		Lease N	0.
				L	DCAT	TION	OF RELI	EASE			
Unit Letter	Section	Township	Range	Feet fro			South Line	Feet from the	East/We	st Line	County
D	25	208	36E			532°-	3:079 <u>-</u> N⊅_		<u>[103°18</u> ]	991' W	Lea
				N			F RELEA	ASF			
Type of Relea	ase			<u>1</u>	AIU		Volume of				Recovered
Source of Re		Conden	sate				Dete and I	Unknown			2 yd <sup>3</sup> soil removed
		Pipeli	ne				Date and F	Hour of Occurrenc Unknown	æ	Date a	nd Hour of Discovery Unknown
Was Immedia	ate Notice G		Yes 🔲 N	No 🚺	Not Re	quired	If YES, To		eley, NMC	CD Distri	ct 1
By Whom?		Steve We	athers	<u></u> .			Date and H	lour			
Was a Water	course Reac		Yes N	No			lf YES, Vo N/A	olume Impacting t	he Waterco	urse.	
If a Watercou	irse was Imj	pacted, Descri	ibe Fully.*			*	L				
N/A											
Describe Cau	se of Proble	em and Reme	dial Action	Taken.	*			<u> </u>	<u> </u>		
Historical con	ndensate rel	ease caused b	vy subsurfac	ce exterr	nal corro	osion. I	Removal of i	mpacted soil requ	lested by la	ndowner (†	Clay Cooper).
approx. 18 ft excavation w	over-excave wide by 24 as complete	ation was init ft long. App ad on 06/13/02	iated. Exca roximately 2. Closure r	vation co 252 cu y report, ar	yds of so nalytica	oil was tr l results,	ansported to photographs	cell C-5 at the So s, and site map are	outh Monur e attached.	nent Land	t to 10 ft) and measured Farm. Backfilling of Sexcauated
and regulatio endanger put of liability sh water, human	ns all opera dic health or ould their o health or t	tors are requi r the environn perations hav	red to repor nent. The a ze failed to a ent. In addit	rt and/or acceptane adequate ition, NN	r file cer ce of a ( ely inve AOCD a	tain rele C-141 rep stigate an acceptance	ase notificat port by the N nd remediate	ions and perform MOCD marked as contamination th	corrective a s "Final Rep at pose a th	actions for port" does preat to gro	ant to NMOCD fules releases which may not relieve the operator bund water, surface responsibility for
	V							OIL CONS	ERVAT	ION DI	VISION
Signature:	e Steni	nen Weathers	<b>~</b>				Approved District Su				
Title:		ronmental Spe					Approval 1	Date:	E	xpiration ]	Date:
Date:			Phone	e: (303)	605-171	8	Conditions	s of Approval:			Attached

\* Attach Additional Sheets If Necessary

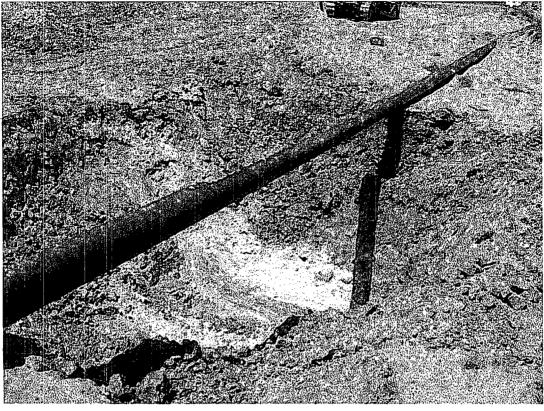


1 View facing east showing area beneath the 12-inch out of service pipeline at completion of excavation activities (06-05-02).

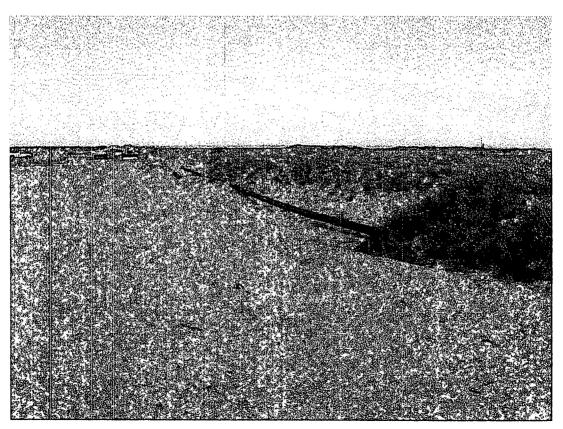


2 View facing north showing area beneath the 12-inch out of service pipeline at completion of excavation activities (06-05-02).

### DIGITAL PHOTOGRAPHS OF THE CLAY COOPER #11 SITE



<sup>3</sup> View facing southwest showing area beneath the out of service pipeline at completion of excavation activities (06-05-02).



4 View facing west showing CC # 11 site after backfilling (06-13-02)

# ATTACHMENT B

## LABORATORY ANALYTICAL REPORTS

## AND

## CHAIN-OF-CUSTODY DOCUMENTATION

CCAN

## ANALYTICAL REPORT

### **Prepared for:**

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

Project:Duke Energy Field ServicesOrder#:G0203508Report Date:06/06/2002

<u>Certificates</u> US EPA Laboratory Code TX00158

## ENVIRONMENTAL LAB OF TEXAS SAMPLE WORK LIST

TRIDENT ENVIRONMENTALOrder#:G0203508P.O. BOX 7624Project:V-106MIDLAND, TX 79708Project Name:Duke Energy Field Services689-4578Location:CC #11

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.

•				Date / Tin		Date / Time		
Lab ID:	Sample :	<u>Matrix:</u>		Collected	<u>d</u>	Received	<u>Container</u>	<u>Preservativ</u>
0203508-01	Floor-1 (10ft.)	SOIL		6/4/02		6/4/02	4 oz glass	Ice
· .		<b>n</b> . ( ).	Na	12:30		16:13		
<u>Lat</u>	Testing:	Rejected:	NO		Temp	: 2.5 C		
	8015M							·
0203508-02	E. Wall-1 (7 ft.)	SOIL		6/4/02		6/4/02	4 oz glass	Ice
				12:35		16:13		
Lat	<u>Testing:</u>	Rejected:	No		Temp	: 2.5 C		
	8015M							
L	8021B/5030 BTEX							
0203508-03	S. Wall-1 (7 ft.)	SOIL		6/4/02		6/4/02	4 oz glass	Ice
				12:40		16:13		
Lat	Testing:	Rejected:	No		Temp	: 2.5 C		
	8015M							
0203508-04	W. Wall-1 (8 ft.)	SOIL		6/4/02		6/4/02	4 oz glass	Ice
0203300 04				12:45		16:13	•	
Lab	Testing:	Rejected:	No		Temp:	2.5 C		
	8015M							
0203508-05	N. Wall-1 (7 ft.)	SOIL		6/4/02		6/4/02	4 oz glass	Ice
0203300 03				12:50		16:13	•	
Lab	Testing:	Rejected:	No		Temp:	2.5 C		
	8015M							
p203508-06	E. Stockpile-1	SOIL		6/4/02		6/4/02	4 oz glass	Ice
0203300 00				12:55		16:13	-	
Lab	Testing:	Rejected:	No		Temp:	2.5 C		
-	8015M							
0203508-07	W. Stockpile-1	SOIL		6/4/02		6/4/02	4 oz glass	Ice
				13:00		16:13	-	
Lab	Testing:	Rejected:	No		Temp:	2.5 C		
	8015M							
	8021B/5030 BTEX	<u> </u>						
203508-08	E. Wall-2 (7 ft.)	SOIL		6/4/02		6/4/02	4 oz glass	Ice
				14:05		16:13	-	
Lab	Testing:	Rejected:	No		Temp:	2.5 C		
-	8015M							

ILBERT VAN RIDENT ENVI .O. BOX 7624 IIDLAND, TX	RONMENTAL			Order#: Project: Project Nan Location:	G0203 V-106 ne: Duke CC #1	Energy Field S	Services
Lab ID: Sample ID:	0203508-01 Floor-1 (10ft.)						
				8015M			
	Method <u>Blank</u>	Date Prepared	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	<u>Analyst</u>	Method
			6/4/02	1	1	СК	8015M
		Parameter		Resu mg/k		RL	
		GRO, C6-C12	······	<10.	0	10.0	
		DRO, >C12-C35		<10.	0	10.0	
		TOTAL, C6-C35		<10.	0	10.0	

#### Lab ID: Sample ID:

0203508-02 E. Wall-1 (7 ft.)

			8015M			
Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u> 6/4/02	Sample <u>Amount</u> 1	Dilution <u>Factor</u> 5	<u>Analyst</u> CK	<u>Method</u> 8015M
	Parameter	<u> </u>	Resul mg/kg		RL	
	GRO, C6-C12		460		50.0	
	DRO, >C12-C35		1370		50.0	
	TOTAL, C6-C35		1830		50.0	

#### 8021B/5030 BTEX

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0001892-02		6/5/02	1	25	СК	8021B
	Parameter		Result mg/kg		RL	
	Benzene		<0.025	;	0.025	
	Ethylbenzene		<0.025	i –	0.025	
	Toluene		<0.025	<b>i</b>	0.025	
	p/m-Xylene		0.071		0.025	
	o-Xylene		<0.025	;	0.025	

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

Page 1 of 5

GILBERT VAN DEVENTER TRIDENT ENVIRONMENTAL	Order#: Project:	G0203508 V-106
P.O. BOX 7624	Project Name:	Duke Energy Field Services
MIDLAND, TX 79708	Location:	CC #11

Lab ID:	
Sample ID:	

0203508-03 S. Wall-1 (7 ft.)

			8015M			
Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u> 6/4/02	Sample <u>Amount</u> 1	Dilution <u>Factor</u> 1	<u>Analyst</u> CK	Method 8015M
	Parameter		Result mg/kg	- I	RL	
	GRO, C6-C12		<10.0		10.0	
	DRO, >C12-C35		<10.0		10.0	
	TOTAL, C6-C35		<10.0		10.0	

#### Lab ID: Sample ID:

0203508-04 W. Wall-1 (8 ft.)

			8015M			
Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u> 6/4/02	Sample <u>Amount</u> 1	Dilution <u>Factor</u> 1	<u>Analyst</u> CK	Method 8015M
	Parameter	. <u></u>	Resu mg/J		RL	
	GRO, C6-C12	· · · · · · · · · · · · · · · · · · ·	<10.	.0	10.0	
	DRO, >C12-C35		<10.	.0	10.0	
	TOTAL, C6-C35		<10.	0	10.0	

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

ENVIRONMENTAL LAB OF TEXAS I, LTD. 12600 West I-20 East, Odessa, TX 79765 Ph: 915-563-1800

Lab ID: 0203508-05	
Sample ID: N. Wall-1 (7 ft.)	
8015M	
Method Date Date Sample Dilution Blank Prepared Analyzed Amount Factor Analyst	Method
6/4/02 1 1 CK	8015M
Parameter Result RL mg/kg	
GRO, C6-C12 51.4 10.0	
DRO, >C12-C35 164 10.0	
TOTAL, C6-C35 215 10.0	

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

Amount

1

**Factor** 

1

**Analyst** 

СК

Method

8015M

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

Prepared

<u>Blank</u>

Analyzed

6/4/02

Page 3 of 5

GILBERT VAN DEVENTER TRIDENT ENVIRONMENTAL	Order#: Project:	G0203508 V-106
P.O. BOX 7624	Project Name:	Duke Energy Field Services
MIDLAND, TX 79708	Location:	CC #11

Lab ID: Sample ID: 0203508-07 W. Stockpile-1

			8015M			
Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u> 6/4/02	Sample <u>Amount</u> 1	Dilution <u>Factor</u> 5	<u>Analyst</u> CK	<u>Method</u> 8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	689	50.0
DRO, >C12-C35	1540	50.0
TOTAL, C6-C35	2229	50.0

#### 8021B/5030 BTEX

Method	Date	Date	Sample	Dilution		
<u>Blank</u>	Prepared	Analyzed	Amount	<b>Factor</b>	<u>Analyst</u>	Method
0001892-02		6/5/02	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	0.046	0.025
Ethylbenzene	0.045	0.025
Toluene	<0.025	0.025
p/m-Xylene	0.147	0.025
o-Xylene	<0.025	0.025

Lab ID: Sample ID: 0203508-08 E. Wall-2 (7 ft.)

8015M										
Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u> 6/4/02	Sample <u>Amount</u> 1	Dilution <u>Factor</u> 1	<u>Analyst</u> CK	Method 8015M				

Parameter	Result mg/kg	RL
GRO, C6-C12	29.4	10.0
DRO, >C12-C35	111	10.0
TOTAL, C6-C35	140	10.0

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

Page 4 of 5

ENVIRONMENTAL LAB OF TEXAS I, LTD. 12600 West I-20 East, Odessa, TX 79765 Ph: 915-563-1800

GILBERT VAN DEVENTER TRIDENT ENVIRONMENTAL P.O. BOX 7624 MIDLAND, TX 79708 Order#:G0203508Project:V-106Project Name:Duke Energy Field ServicesLocation:CC #11

aland K Jusel 606-02 Approval: Date

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.

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

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## ENVIRONMENTAL LAB OF TEXAS QUALITY CONTROL REPORT

### 8015M

Order#: G0203508

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0001882-02			<10.0		
CONTROL SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0001882-03		1000	1000	100.%	
CONTROL DUP	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0001882-04		1000	1010	101.%	1.%
SRM SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0001882-05		1000	1040	104.%	

### ENVIRONMENTAL LAB OF TEXAS QUALITY CONTROL REPORT 8021B/5030 BTEX

Order#: G0203508

BLANK SOIL		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0001892-02	·		<0.025		
Ethylbenzene-mg/kg		0001892-02		· · · · · · · · · · · · · · · · · · ·	<0.025		
Toluene-mg/kg		0001892-02			<0.025		
p/m-Xylene-mg/kg		0001892-02			<0.025		
o-Xylene-mg/kg		0001892-02			<0.025		
MS SOIL		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg	enzene-mg/kg		0	0.1	0.099	99.%	
Ethylbenzene-mg/kg		0203490-07	0	0.1	0.096	96.%	
Toluene-mg/kg		0203490-07	0	0.1	0.093	93.%	
p/m-Xylene-mg/kg		0203490-07	0	0.2	0.190	95.%	
o-Xylene-mg/kg		0203490-07	0	0.1	0.096	96.%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0203490-07	0	0.1	0.105	105.%	5.9%
Ethylbenzene-mg/kg		0203490-07	0	0.1	0.102	102.%	6.1%
Foluene-mg/kg		0203490-07	0	0.1	0.099	99.%	6.3%
p/m-Xylene-mg/kg		0203490-07	0	0.2	0.202	101.%	6.1%
o-Xylene-mg/kg		0203490-07	0	0.1	0.102	102.%	6.1%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0001892-05		0.1	0.100	100.%	
Ethylbenzene-mg/kg		0001892-05		0.1	0.095	95.%	
foluene-mg/kg		0001892-05		0.1	0.093	93.%	
/m-Xylene-mg/kg		0001892-05		0.2	0.188	94.%	
-Xylene-mg/kg		0001892-05		0.1	0.096	96.%	

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TRIDENT	P.O. Box 7 Midland, Te <del>(915) 682 (</del> <del>(915) 682 (</del>	<del>)808-</del> ) <del>727 (Fax)</del> -	. (915)	6	89	- 4	S	78	3							Ē						ust	tody	y	1
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Odessa, TX 7				9									ţ,											g	
Telephone: (915) 563-180	0	Fax: (915)	563-1713	lisoa	œ.	â	ົ							â										taine	
Samplers (SIGNATURES)				Sample Type: G - Grab, C- Com	BTEX (EPA 8021B)	MTBE (EPA 8021B)	SVOC (EPA 8270)	PAH (EPA 8270)	VOC (EPA 8260)	TPH (EPA 418.1)	тРН (ТХ-1005)		(EPA 8015G) EXT	DRO (EPA 8015D)	TDS (EPA 160.1)	Anions/Cations	Total Metals	P Metals						Number of Containers	
Sample Identification	Matrix	Date	Time	S S S	BTE	MTB	svo	PAH	٥ ٥	ΗdΤ	H	HdT	GRO	DRC	SQT	Anio	Tota	TCLP						NUN	020
Floor-1 (10ft)	Soil	6/4/02	1230	G									~	2							T			1	01
E.Wall-1 (7fr)	1 .	11	1235	6	1								r	5						T	T			1	0z
S. Wall-1 (7 fr)	15	1.	1240	6									V	V										1	03
W. Wall-1 (851)	) •	1.	1245	6									V	~										1	04
N- Wall- (754)	i.	11	1250	6									V	V							$\neg$			1	05
E. Stækpile-1	i i	11	1255	C									V	V						$\neg$	+			1	06
W. Stockpile - 1	11	11	1300	C	J								V	$\checkmark$	_					$\neg$				Ì	107
E. Wall-2 (74)	31	11	1405	15	<u> -</u>								v	$\overline{}$	<b>—</b>						$\neg$		+-1		OB
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Project Information		San	ple Receipt	 		uished mpany							luished ompanv					l	Relinqu (3) (Corr		By:		. <b>I.</b>		1
oject Name: Duke Energy Fi	eld Services	Total Contai	ners:	8	Trid	ent E																			1
oject Location: CC#11_		COC Seals:			(Printed N				enter				d Name	") 					(Printed						1
oject Manager: Gil Van Deven	ter	Rec'd Good	Cond/Cold:	2.54	L	Jol L	τh	ù <del>u</del>	en	4		(Signa	ture)						(Signatu	·e)					
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Denver, CO 802	217				(Date)				(Time)			(Date)				(Time)			(Date)			(Tim	e)		]

\*Add BTEX to W. Stockpile # 1 as per Dale 06-05.01@ 1000

## ANALYTICAL REPORT

### **Prepared for:**

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

Project:Duke Energy Field ServicesOrder#:G0203522Report Date:06/06/2002

<u>Certificates</u> US EPA Laboratory Code TX00158

## ENVIRONMENTAL LAB OF TEXAS SAMPLE WORK LIST

TRIDENT ENVIRONMENTAL	Order#:	G0203522
P.O. BOX 7624	Project:	
MIDLAND, TX 79708	Project Name:	Duke Energy Field Services
689-4578	Location:	CC #11

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.

<u>Lab ID:</u> 0203522-01					<u>Container</u> 4 oz glass	Preservative Ice	
La	<u>b Testing:</u> 8015M	Rejected:	No	Tem	р: -1.0 C		
0203522-02	North Wall-2 (7 ft)	SOIL		6/5/02 13:15	6/5/02 15:20	4 oz glass	Ice
	<u>b Testing:</u> 8015M	Rejected:	No	Tem	p: -1.0 C		

#### G0203522 GILBERT VAN DEVENTER Order#: TRIDENT ENVIRONMENTAL **Project: Project Name: Duke Energy Field Services** P.O. BOX 7624 MIDLAND, TX 79708 Location: CC #11

Lab ID: Sample ID: 0203522-01 East Wall-3 (8 ft)

	8015M												
Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u> 6/5/02	Sample <u>Amount</u> 1	Dilution <u>Factor</u> 1	<u>Analyst</u> CK	<u>Method</u> 8015M							
	Parameter		Res mg/		RL								

i di di li cici	mg/kg	10
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Lab ID: Sample ID: 0203522-02 North Wall-2 (7 ft)

thod <u>nk</u>	Date <u>Prepared</u>	Date <u>Analyzed</u> 6/5/02	8015M Sample <u>Amount</u> 1	Dilution <u>Factor</u> 1	<u>Analyst</u> CK	Method 8015M		
	Parameter		Resu mg/k		RL			
	GRO, C6-C12		<10.	)	10.0			
-	DRO, >C12-C35		<10.0	)	10.0			
	TOTAL, C6-C35		<10.0	)	10.0			

alandk Iu 6-06-02 Approval: R.

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

N/A = Not Applicable RL = Reporting Limit

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Page 1 of 1

## ENVIRONMENTAL LAB OF TEXAS QUALITY CONTROL REPORT

### 8015M

Order#: G0203522

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0001895-02			<10.0		
CONTROL SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0001895-03	1.8. Pl.,	952	853	89.6%	
CONTROL DUP	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0001895-04		952	808	84.9%	5.4%
SRM SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0001895-05		1000	1020	102.%	

		ENTAL	Trident Env P.O. Box 7 Midland, Te (915) <del>682 (</del> (915) <del>682 (</del>	exas 79708 <del>3808</del> 5ス(	8-387 689-4	8 S 7 (	8					_		1	r d)	١	Da	њË	<b>C</b>	;ha /oa	ain	0	fC	Cu	sto	dy
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	-	<u>(915) 563-180</u>	10	Fax: (915)	563-1713	sodu	1B)	18)	ô						) ()	â	_									l te
Š	amplers (SIGNATUR	ES) Dab	T Low	tip		Sample Type: G - Grab, C- Composite	CX (EPA 802	MTBE (EPA 8021B)	SVOC (EPA 8270)	PAH (EPA 8270)	VOC (EPA 8260)	TPH (EPA 418.1)	TPH (TX-1005)	тРН (ТХ-1006)	GRO (EPA 8015G)	DRO (EPA 8015D)	TDS (EPA 160.1)	Anions/Cations	Total Metals	TCLP Metals						Number of Containers
	Sample Ider	tification	Matrix	Date	Time	San G -	BTE	MTE	SVC	Ā	Š	ŧ	Ē	Ē	GR	DRC	а́н	Ank	Tote	ជ						2
	East Wall-	3 (854)	ا نط	6/5/02	1310	6									Y	V										
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	Project Information Sample Receipt						Relinquished By: Relinquished By: (1) (Company) (2) (Company)												nquished By: Company)							
f	Project Name:	Duke Energy Fi	eld Services	Total Contair	ners:		Trid	ent E	nviro	onme	ental															
F	Project Location:	CC#11		COC Seals:			_	_	_		(	مەرم 	.M	Ì.	d Name	») 						d Name	9) 			
F	Project Manager:	Gil Van Dever	nter	Rec'd Good	Cond/Cold:		(Skorta	٢	$\tau$	1th	te	In	<u>\</u>	(Signa							(Signa					
(	Cost Center No.:	V-106		Conforms to	Records:		(Date)	6/5	/02	2	(Time) /	52	J	(Date) (Time)							(Date)				(Time)	
\$	Shipping ID No.:			Lab No.:			Recei	ved By omoanv	r.						wed By ompany							ved By ompany				
	Bill to (see below):	Duke Energy Fi	eld Services	]							٨٩	۱ur	- en													
ŝ	Special Instructions:	Attn: Steve We					(Printe	d Name	)		SM		7	(Printe	d Name	<del>)</del> )					(Printe	d Name	)			
		POBox 5493				Ì	(Sigra	ture) 4-S	-2	<u> </u>	150		9	(Signa	iture)		······································				(Signa	ture)				
		Denver, CO 80	217				(Date)				(Time)			(Date)				(Time)			(Date)	·			(Time)	

# ATTACHMENT C

FIELD BOOK NOTES

6/1/02  $(\mathbf{J})$ (C-1/10) 3-13-02-DTL Octoo ((T) Leave Midian Stop -"ind deeper samples For "C- as Follows: 1155 currine at C.C. + 11 51-te Nor silves surve, ice, etc 1).IM (116 miles) No ore preserve · GPS - Cit IL, Febree Center Port · GPS - CC# 12 (ccst 25 (CCB 11) 1 1 (.E. steck pile Leve) Juzzpph <del>(</del>9'-) K-120.A1 3' BG 7'36 En 101 86 15 11,\_\_\_\_\_ \_\_\_\_\_ 540 Jd3 lise "deed" pipiline Fipeline D- Floor 7 (10') 2) - E. Wall - 1 (7') 3)-5 Wall-1(5') 4)-- 63 (20-11-1 (8) 5) - Niwn1 - ('7') Stertip.1-9 ( contomin. 3014.5 €3 cell

OTL 6/4/02 6/4/02  $\widehat{\mathbf{S}}$ (Z) DIL Final Pit Size as of 1400 ct 229 (CT) Checked PUD (101 ppm) Pit Serving Vesalts North Max reading in center of of deepest parties ===== (LOPPM) and at SE conner-Dear time of deepest portion (4.0 ppm) \_tise All other readings & 1 0 ppm line 1309 FID samples in bag 1) Flow-1 (10') 1.0 prom 2) E. 62=11-1 (7) 121 ppm 3) S, Weil- (71) 10 ppm 4) Well-1(3') 3 Bes 2.0 PPM (5) N. Wall -1 (7) 2.0 ppm (6) E. Studicpile-1 0.7 FPM (7) We stockpile 153 ppin 8) E. Wall-2(7) 8 ppm PID 1344 Had Mike excounte the SE Count a Seu more 1407 Check Pib Calibration feet to vemore the soil 98 PPM PID assoc. with sample & 2 above-1420 Leave CC-11 Site for Lah 1351 Called Gi tolo him about erced. said to rea BTPX outro or p. 0' 1 > 100, G-RO' > 100 + divty Steelepile.



Duke Energy Field Services P.O. Box 5493 Denver, Colorado 80217 370 17th Street, Suite 900 Denver, Colorado 80202 303/595-3331

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September 20, 2002

Mr. Paul Sheeley New Mexico Oil Conservation Division 1625 N. French Drive Hobbs, New Mexico 88240

#### RE: Spill Site Closure Report Duke Energy Field Services, LP Lea County, NM

Mr. Sheeley:

Enclosed please find for your review, one copy of the closure report summarizing remedial activities associated with the Duke Energy Field Services, LP spill site:

#### • Clay Cooper #11 – T20S, R36E, Sec 25 Unit D

Based on the information provided in the above referenced closure report, DEFS would like to request no further action for the spill site.

If you have any questions regarding the information provided in the closure reports, please give me a call at 303-605-1718.

Sincerely

#### **Duke Energy Field Services, LP**

Stephen Weathers Environmental Specialist

cc: Environmental Files

Enclosure



September 24, 2002

Mr. Gilbert J. Van Deventer Trident Environmental POB 7624 Midland, TX 79708

Re: Work Plan for Removal of Hydrocarbon-Impacted Soils for Duke Energy Field Services(DEFS) pipeline-right-of-way. (Clay Cooper #11 site). Site Location: UL-D, Sec 25-T20S-R36E Dated: August 7, 2002

Dear Mr. Van Deventer,

The work plan referenced above and submitted to the New Mexico Oil Conservation Division (OCD) by Trident Environmental for DEFS is hereby approved. Please notify The New Mexico Oil Conservation Division (OCD), at least 24 hours (preferably 48), before final closure sampling event(s).

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: <u>psheeelev@state.nm.us</u>

Sincerely,

Paul Sheeley-Environmental Engineer Cc: Roger Anderson - Environmental Bureau Chief Chris Williams - District I Supervisor Bill Olson - Hydrologist Larry Johnson - Environmental Engr. Stephen Weathers - DEFS