Clay Cooper #2 Closure Report Duke Energy Field Services Lea County, New Mexico



AUGUST 31, 2001

Prepared For:

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

Site Name:

CLAY COOPER #2 (CC#2)

Site Location:

T20S, R36 E, SECTION 24, UNIT O

Prepared By:



PO Box 7624 Midland, Texas 79708



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON Governor Jennifer A. Salisbury Cabinet Secretary

November 16, 2001

Lori Wrotenbery Director Oil Conservation Division

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

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

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

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

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

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

Sincerely,

Paul Sheeley-Environmental Engineer

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



August 31, 2001

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

Re: Removal of Hydrocarbon-Impacted Soils from the CC#2 site Township 20 South, Range 36 East, Section 24, Unit O



Dear Mr. Weathers:

TRW Inc. – Energy & Environmental Integration Services (TRW) 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 #2) is located in Section 24 (Unit O), Township 20 South, Range 36 East on property owned by Dale Cooper and managed by Clay Cooper. The work was conducted in accordance with the work plan submitted to the New Mexico Oil Conservation Division (OCD). TRW 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, and one loader 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 TRW with stainless steel trowels. Floor samples were collected as a composite sample consisting of five aliquots. Composite samples consisting of a minimum of three aliquots were also collected from each wall (north, south, east, and west), unless noted otherwise. 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 not conducted since none of soil samples exceeded 100 ppm using the calibrated OVM.

Mr. Steve Weathers August 31, 2001 Page 2 of 2

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.

Hydrocarbon-impacted soils were transported by local hauling contractors (Walton Construction) to the South Monument Landfarm, owned and operated by Ms. Kena Kay Cooper (OCD Rule 711 Permit Approval NM-01-0032). Completed Request for Approval to Accept Solid Waste form (C-138), Generator Certificate of Waste Status form (C-143), and Release Notification and Corrective Action forms (C-141) are included in Attachment A.

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

Results

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

Sincerely

Gilbert J. Van Deventer, REM Project Manager

Attachments

cc: Clay Cooper, landowner - Hobbs, NM

C:DEFS\COOPER\CC2\CC2CLOSE.DOC

ATTACHMENT A

TOPOGRAPHIC MAP

SITE DATA FORM

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



TRIDEN	T			Site	e Dat	a Form						
TRW Technician: _JN												
Site Location: Latitude	e <u>/ 132° 33</u>	<u>'9" N</u>	<u>]</u> Long	gitude	<u>103°_1</u>	<u>8' 19" W</u> Co	unty:	<u>clæa</u>	<u> </u>	e: <u>New</u>	Mexi	ico
Township 20 Sc	outh	Ra	nge	<u>36 Ea</u>	st	Section	24	U	nit	0		
Begin Excavation (Dat	e/Time)	[02/2]	1/01,	C	omplete I	Excavation (Da	te/Time)	3/7/	01			
LAND USE:		Residen			Recreation			Farm				
(Check all that apply	n)	ndustri			School/L	Daycare		Range				
		Dil & G			Rural		L	l Other	•			
Depth to Groundwater Wellhead Protection A Distance to Nearest Su	rea: 🔳 >	> 1,000	feet from	a water s	ource	\Box < 200 fee				er source		
SURFACE SOILS		land Caliche			Gravel Clay		SiltOther		Sandy silt	ty clay at	depth	
EXCAVATION DIMENSIONS			ngth) fe	et	Wic 100	lth feet	Average D 12.5	epth fee		aximum 1 14	-	feet
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)						0, & DRO C						
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	02/27/01	0.0	< 10	< 10	0	Floor-3 (14')		0.0	< 10	< 10		
	02/27/01	22.2	< 10	< 10	P	N. Wall-4	03/07/01	0.0	< 10	< 10		
F N. Wall-2	02/27/01	0.0	< 10	< 10	Q	E. Wall-4	03/07/01	0.0	< 10	< 10		
G E. Wall-2	02/27/01	0.0	< 10	< 10	R	W. Wall-4	03/07/01	0.0	< 10	< 10		
H S. Wall-2	02/27/01	0.0	< 10	< 10	S	Floor-4 (11')	03/07/01	0.0	< 10	< 10		
I Floor-2 (13')	02/27/01	0.0	< 10	< 10	Т	E. Wall-5	03/07/01	2.8	< 10	< 10		
	02/27/01	0.0	< 10	< 10	U	Floor-5 (14')	03/07/01	0.0	< 10	< 10		
K N. Wall-3	03/02/01	0.0	< 10	< 10	_	Exc. Soil	02/27/01	31.9	25	328		
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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 Pachero, Santa Fe, NM 87505

Oil Conservation Division 2040 South Pacheco Santa Fe, NM 87505 Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

2040 South Pac	neco, santa i	re, INIVI 87505			0, 1101 07			side of form
			Relea	se Notification a	nd Cor	rective Action		
				OPERA	TOR	🗌 Init	ial Report	Final Report
Name of Co		Energy Fiel	d Somios	n Ino	Contact	Mr. Steve	Vonthore	
Address	Duke	Ellergy Fiel	u service	S IIIC.	Telephone		v cathers	
]		5493, Denve	er, Colora	ado 80217	-	(303) 605	5-1718	
Facility Nan		Site Name	. C.C. #2		Facility T	vpe Natural Gas	Dincline	
			. CC #2		L	(Natural Oas		
Surface Own		e Cooper	2	Mineral Owner	Unkno	N13770	Lease No	o. EMSU
			1					Livisu
Unit Letter	Section	Taunchin	Damaa	LOCATION Feet from the North/	OF RELE South Line		/est Line	Country
Unit Letter	Secuon	Township	Range	Feet from the North/	South Line	reet from the East/w	est Line	County
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				NATURE O	FRELEA	SE		
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		Pipeli	ne			Unknown	Date an	Unknown
Was Immediate Notice Given?								rigt 1
Yes No No								
By Whom? Date and Hour Steve Weathers								
Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. Yes No								
If a Watercou	rse was Im	pacted, Descr	ibe Fully.	*	I			
N/A								
Describe Cau	se of Probl	em and Reme	dial Actio	n Taken.*				
Historical cor	idensate re	lease caused l	w enbeurf	ace external corrosion) Pi	nalina ranlac	ed with 6" plastic line inse	rted into orig	rinal 10" steel nineline
prior to initia	tion of ove	r-excavation v	vork. Ren	noval of impacted soil req	uested by lar	idowner (Clay Cooper).	ried nito oriş	ginar 10° steer pipenne
Describe Are	a Affacted	and Clasnup	Action Tol	kon *			0,000,	
On 2/21/01 o	over-excava	ation was initi	ated. Exca	avation continued until 3/7	7/01 when to	al petroleum hydrocarbons	on floor and	d walls were below
100 mg/kg. F	inal excava C_{3} at the	ation dimension	ons were a	pprox. 30 ft wide x 100 lo	ong x 14 ft de	ep. Approximately 3,000 mpleted on 3/12/01. Closur	cu yds of soi	l was transported to
photographs,				ann. Dackinning of excav	attori was co	inpleted on 5/12/01. Closu	te report, an	alytical fesuits,
						knowledge and understan		
endanger pub	lic health o	or the environ	ment. The	acceptance of a C-141 rep	port by the N	ons and perform corrective MOCD marked as "Final R	eport" does	not relieve the operator
of liability sh	ould their	operations have	ve failed to	o adequately investigate and	nd remediate	contamination that pose a	threat to gro	und water, surface
compliance w	vith any oth	ier federal, sta	ate, or loca	al laws and/or regulations.	e of a C-141	report does not relieve the	operator of	responsibility for
	\bigcap	,		T		OIL CONSERVAT	TION DIV	VISION
Signature:		(1-			Approved	hv		
Drinted Morr	et et en	han Waatha-			District Su			
Printed Name	z. siep	hen Weathers	,	<u>,</u>	<u> </u>			
Title:		ironmental Sp	ecialist		Approval I	Date:	Expiration I	Date:
Date: "/	a/01		Pho	ne: (303) 605-1718	Conditions	of Approval:		Attached

* Attach Additional Sheets If Necessary

MAR-01-2001	17:27
Hobbs, NM 88240	
District II - (505) 748-12	83
811 S. First	
Artesia, NM 88210	,
District III - (505) 334-6	178
1000 Rio Brazos Road	
Aztec, NM 87410	
District IV - (505) 827-7	131
2040 S. Pacheco	
Santa Fe, NM 87505	

TRW-MIDLAND

Energy Minerals and Natural Resources Department

915 682 0028 4.02/02

3/15/0

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

Submit to OCI Permitted Surfac Waste Managemer Facilit

GENERATOR CERTIFICATE OF WASTE STATUS

1. Waste Generator Name and Address:
Duke Energy Field Services Inc. P. O. Box 5493

Denver, Colorado 80217

3. Description of Waste and Generating Process:

Hydrocarbon-impacted soil from historic pipeline leak

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

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

Sec 24 T20S R36E Unit O

6. Transporter: Walton Construction

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

7. Estimated Volume _______ cy/bbls

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

____ MSDS Information

RCRA Hazardous Waste Analysis (With Chain of Custody

_ Other (Description)

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

X____EXEMPT oilfield waste.

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

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

L (Date: 3/2/01

+		
Generator	Signature:	

Print Name: <u>Stephen W. Weathers</u>

Title: _____Environmental Specialist

District.] 1625 N. French Dr., Hobbs, NM 88240 District II	State of New Mexico Energy Minerals and Natural Resource	rces Revised March 17, 199
811 South First, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztoc, NM 87410 District IV 2040 South Pacheco, Santa Pc, NM 87505	Oil Conservation Division 2040 South Pacheco Santa Fe, NM 87505	Submit Origin Plus 1 Cop to Appropria District Office
REQUEST F	OR APPROVAL TO ACCEPT	SOLID WASTE
1. RCRA Exempt: Non-Exempt	: [_]	4. Generator: Duke Energy Field Svcs
Verbal Approval Received; Yes	s No	5. Originating Site T20S R36E S24 Unit (
2. Management Facility Destination: So	uth Monument Landfarm (NM-01-0032)	6. Transporter Walton Construction
3. Address of Facility Operator: 834 We	st Gold. Hobbs, NM 88240	8. State: New Mexico
7. Location of Material (Street Address of	or ULSTR): T20S R36E Sec24 Unit O	
 one certificate per job. B. All requests for approval to accept to 	olificid exempt wastes will be accompanied by a non-exempt wastes must be accompanied by not	cessary chemical analysis to PROVE the
approved	enerator's certification of origin. No waste clas a delivered are only those consigned for transpe	
approved All transporters must certify the waste BRIEF DESCRIPTION OF MATERIAL:	s delivered are only those consigned for transpe	ort.
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approved All transporters must certify the waste BRIEF DESCRIPTION OF MATERIAL:	s delivered are only those consigned for transpo	gas pipeline)
approved All transporters must certify the waste BRIEF DESCRIPTION OF MATERIAL: Oilfield exempt waste (hydrocarbon-impa	Known Volume (to be entered by the operato	gas pipeline) F at the end of the haul) $3,000$ cy
All transporters must certify the waste BRIEF DESCRIPTION OF MATERIAL: Oilfield exempt waste (hydrocarbon-impa Estimated Volume	Known Volume (to be entered by the operator United Soil generated from historic leak in natural Known Volume (to be entered by the operator	gas pipeline) The end of the haul) $3,000$ cy
All transporters must certify the waste BRIEF DESCRIPTION OF MATERIAL: Oilfield exempt waste (hydrocarbon-impa Estimated Volume	Known Volume (to be entered by the operator United Soil generated from historic leak in natural Known Volume (to be entered by the operator	gas pipelino) r at the end of the haul) $3,000$ cy DATE: $300/C1$
approved All transporters must certify the waste BRIEF DESCRIPTION OF MATERIAL: Oilfield exempt waste (hydrocarbon-impa Estimated Volume 1000 cy SIGNATURE Cy Waste Munagement Faotility A TYPE OR PRINT NAME: Kona	Known Volume (to be entered by the operator United Soil generated from historic leak in natural Known Volume (to be entered by the operator	gas pipelino) r at the end of the haul) $3,000$ cy DATE: $300/C1$



CC#2 - 11 View facing NE showing multiple holes caused by external corrosion along 12" steel pipeline prior to initiation of excavation activities.



CC#2 - 22

View of excavation showing hydrocarbon-stained soil and collapsed steel pipeline with Drisco pipeline insert.

DIGITAL PHOTOGRAPHS OF THE CLAY COOPER #2 SITE

Page 2 of 3





CC2 -31

View facing SE showing south & east walls and floor of excavation along north-middle portion





View facing NE showing floor and north & east walls of northernmost excavation





View facing northwest showing backfilled CC#2 site

ATTACHMENT B

LABORATORY ANALYTICAL REPORTS

AND

CHAIN-OF-CUSTODY DOCUMENTATION

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

TRW INC. ATTN: MR. GILBERT VAN DEVENTER 415 WEST WALL ST., STE. 1818 MIDLAND, TEXAS 79701 FAX: 915-682-0028

Sample Project :	Type: Soil Condition: Intact/Iced/ -3 deg C #: P/6846/1C Name: Duke Energy Field Services			Sampling Date: 02/27/01 Receiving Date: 02/28/01 Analysis Date: 02/28/01
Project l	ocation: Sec 24, T20S, R36E, Unit O			
		GRO C5-C10	DRO >C10-C28	
ELT#	FIELD CODE	mg/kg	mg/kg	
37769	CC #2 - (Excavated Soil)	25	328	

% IA	118	109
%EA	115	105
BLANK	<10	<10

Methods: EPA SW 846-8015M GRO/DRO

<u>3-0/-6/</u> Date



TRW INC. ATTN: MR. GILBERT VAN DEVENTER 415 WEST WALL ST., STE. 1818 MIDLAND, TEXAS 79701 FAX: 915-682-0028

Sample Type: Soil Sample Condition: Intact/Iced/ -3 deg C Project #: P/6846/1C Project Name: Duke Energy Field Services Project Location: Sec 24, T20S, R36E, Unit O Sampling Date: 02/27/01 Receiving Date: 02/28/01 Analysis Date: 02/28/01

•		GRO C6-C10	DRO >C10-C28	
ELT#	FIELD CODE	mg/kg	mg/kg	
27760		.10	(10)	
37760	CC #2-A (N. Wall)	<10	<10	
37761	CC #2-B (E. Wall)	<10	<10	
37762	CC #2-C (S. Wall)	<10	<10	
37763	CC #2-D (W. Wall)	<10	<10	
37764	CC #2-E (Floor) 13	<10	<10	
37765	CC #2-F (N. Wall)	<10	<10	
37766	CC #2-G (E. Wall)	<10	<10	
37767	CC #2-H (S. Wall)	<10	<10	
37768	CC #2-I (Floor) 13'	<10	<10	
	% IA	111	108	

117

<10

99

<10

Methods: EPA SW 846-8015M GRO/DRO

%EA

BLANK

ala dk Jun

3-01-01 Date



TRW INC. ATTN: MR. GILBERT VAN DEVENTER 415 WEST WALL ST., STE. 1818 MIDLAND, TEXAS 79701 FAX: 915-682-0028

25

328

Sample Type: Soil Sampling Date: 02/27/01 Sample Condition: Intact/Iced/ -3 deg C Receiving Date: 02/28/01 Project #: P/6846/1C Analysis Date: 02/28/01 Project Name: Duke Energy Field Services Project Location: Sec 24, T20S, R36E, Unit O GRO DRO C6-C10 >C10-C28 ELT# FIELD CODE mg/kg mg/kg

% IA	•	118	109
%EA		115	105
BLANK		<10	<10

Methods: EPA SW 846-8015M GRO/DRO

CC #2 - (Excavated Soil)

37769

R. L. d. Ju

3-01-01 Date



TRW Inc. Energy & Environmental Systems 415 West Wall St. Suite. 1818 Midland, Texas 79701 (915) 682-0008 FAX: (915) 682-0028

13522 N⁰

Chain of Custody

Lab Name: Environme	ntal Lab	of Tc	XGS										Ana	lysis	s Ree	ques	t								
Address: 12600 W.	I-20	É.																							
Lab Name: <u>Fiverroume</u> Address: <u>12600 W.</u> <u>Odess q</u> Telephone: <u>915-50</u>	<u>Tx 79</u>	765																							٤
Telephone: $413 - 52$	3 - 1800			â	â			1				6													aine
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John Fige				BTEX (EPA	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
Sample Ideptification	Matrix	Date	Time	BTEX	MTBE	svo	PAH	Š	H	Hd	ΗdΤ	GRO	DRO	TDS	Anion	Total	TCLP								Num
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CC #2-0 (W Wall)	Soil	2/27/01	1400									V	V									37	76	3	1
CC#2-E(Floor) 13	Soil	2/27/01	1410									V	1		1					×		37	76	4	1
CC#2-F (N. Wall)	Soil	2/22/01	14 20					Τ				V	\checkmark							×		3		65	1
CC#2-G (E. Wall)	Soil	2/27/01	1430									\checkmark	$\overline{\mathbf{V}}$									3	776	6	
CC #2 - H (S. Wall)	Soil	2/27/01	1440									V	/									37	176	2	
CC#2- I (Floor) 13'	Soil	2/27/01	1450										/							×		3	776	8	1
CC#2-(Excavated Soil)	Soil	2/27/01	1500									\bigvee	\checkmark								RJ		37		
Project Information		Sam	nple Receipt		Relinquished By: (1)			Relinquished By: (2)						Relinquished By: (3)											
Project Name: Duke Energy Fiel	ld Serv.	Total Contain	ers:		Jak	<u>LI</u>	es	-		09	10														
Project Location: Sec 24, T205, R	36 E O	COC Seals:	COC Seals:			ature) c m Fi	erser 10) Enc	rson		2/2		(Signature) (Time)						•	(Signature) (Time)						
Project Manager: Gil Van Deve			Rec'd Good Cond/Cold:		(Printe TR	ed Nam 2W 7	ie) ⁵ Lnc				Date)	(Print	(Printed Name) (Date)					(Date)	(Printed	d Name	ı) 			(D	Date)
Cost Center No.: P/6846/1C		Conforms to	Conforms to Records:			pany)							pany)						(Compa	any)					
Shipping ID No.:		Lab No.:			Rece	eived I	By: ∕∕	<i>i 4</i>	5	\backslash	(1)		eived B	By:				(2)	Recei	ived B	ly:			(;	(3)
P O No.:					k	/_(C	K	<i>J</i>	000	710														
Special Instructions/Comments: Pleas	e Invoic	le To			1 1	Kin	Kn	dK	Tur	HE.	Time)	(Signature) (Time)					Time)	(Signat	ure)				(Ti	ime)	
Special Instructions/Comments: Pleas Pute Energy Field Servi Attn: Sture weathers	cc)				(Printe	ed Nam	e) 07	r .		Z	284	(Printed Name) (Date)					(Date)	(Printer	d Name)			(D	Date)	
P.O. Box 5093, Denver,	CO	80217				pany)						(Com	pany)						(Comp	any)					
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Distribution: White, Canary-Laboratory / Pink-TRW



TRW INC.
ATTN: MR. GILBERT VAN DEVENTER
415 WEST WALL ST., STE. 1818
MIDLAND, TEXAS 79701
FAX: 915-682-0028

Sample Type: Soil Sample Condition: Intact/Iced/ -3 deg C Project #: P/6846/1C Project Name: Duke Energy Field Services Project Location: Sec 24, T20S, R36E, Unit O Sampling Date: 02/27/01 Receiving Date: 02/28/01 Analysis Date: 02/28/01

,	Location: Sec 24, 1205, R36E, Unit O	GRO C6-C10	DRO >C10-C28	
ELT#	FIELD CODE	mg/kg	mg/kg	
37759	CC #2-J (W. Wall)	<10	<10	

% IA	111	108
%EA	117	99
BLANK	<10	<10

Methods: EPA SW 846-8015M GRO/DRO

clc dr Jund

3-01-01 Date

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Samplers (SIGNATURES)	ly-			BTEX (EPA 8021B)	MTBE (EPA 8021B)	SVOC (EPA 8270)	PAH (EPA 8270)	VOC (EPA 8260)	TPH (EPA 418.1)	ТРН (ТХ-1005)	TPH (TX-1006)	GRO (EPA 8015G)	DRO (EPA 8015D)	TDS (EPA 160.1)	Anions/Cations	Total Metals	TCLP Metals								Number of Containers	
Sample Identification	Matrix	Date	Time	BT	Ψ	Š	PA	8	4	Ē	đ	ଞ	۲ ۲	<u>P</u>	- Ā	Tot	<u>٢</u>	ļ			╞	+	╇	_		4
CC#2-J (W, Wall)	Soil	2/27/01	1545								<u> </u>		<u> </u>	_	<u> </u>			-	3	<u>27</u>	华	4			$\downarrow \downarrow$	-
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Project Information			ple Receipt	<u> </u>	l							i veni	quisti	cuby	•			(4)	, com	quo) .			(0)	ľ
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Field Services					(Printed	d Name) ~		KT		0. 941	(Printe	d Name	B}	<u> </u>		(Date)	(Printe	d Nam	1e)			<u></u>	(Date)	+
Special Instructions/Comments: Inve Field Services Attn: Steve Weathers P.O. Box 5093 Penve	- 00	80717			(Comp	<u> 2</u> any)	0 [2	-00	(Comp	any)	<u></u>					(Com	pany)						-
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Distribution: White, Canary-Laboratory / Pink-TRW

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TRW INC. ATTN: MR. GILBERT VAN DEVENTER 415 WEST WALL ST., STE. 1818 MIDLAND, TEXAS 79701 FAX: 915-682-0028

Sample Type: Soil Sample Condition: Intact/Iced/ 1 deg C Project #: P/6846/1C Project Name: Duke Energy Field Services Project Location: Sec 24, T205, R36E, Unit O Sampling Date: 03/02/01 Receiving Date: 03/02/01 Analysis Date: 03/04/01

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg	
37863	CC#2-K (N. Wall)	<10	<10	
37864	CC#2-L (E. Wall)	<10	<10	
37865	CC#2-M (S. Wall)	<10	<10	
37866	CC#2-N (W. Wall)	<10	<10	
37867	CC#2-0 (Floor 14')	<10	<10	

% IA	114	107
%EA	119	103
BLANK	<10	<10

Methods: EPA SW 846-8015M GRO/DRO

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-5-0/





TRW INC. ATTN: MR. GILBERT VAN DEVENTER 415 WEST WALL ST., STE. 1818 MIDLAND, TEXAS 79701 FAX: 915-682-0028

Sample Type: Soil Sample Condition: Intact/Iced/ 2.5 deg C Project #: P/6846/1C Project Name: Duke Energy Field Services / Clay Cooper Site #2 Project Location: Sec 24, T20S, R36E, Unit O Sampling Date: 03/07/01 Receiving Date: 03/07/01 Analysis Date: 03/07/01

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg	
37956	CC#2-P (N. Wall)	<10	<10	
37957	CC#2-Q (E. Wall)	<10	<10	
37958	CC#2-R (W. Wall)	<10	<10	
37959	CC#2-5 (Floor 11')	<10	<10	
37960	CC#2-T (E. Wall)	<10	<10	
37961	CC#2-U (Floor 14')	<10	<10	
37962	CC#2-Native Backfill	<10	<10	

% IA	115	99
%EA	107	86
BLANK	<10	<10

Methods: EPA SW 846-8015M GRO/DRO

mdk Raland K. Tuttle

<u>B-0</u>1 Date

ATTACHMENT C

FIELD BOOK NOTES

2-21-01 Drove to Cooper (Clay) 5, 6 8 met and Ray Bascon (L'selfor to then Stare Weathers (PEF3) & clay Company. Recident to begin next project just not the of CCHI. Has stand sutac soil where ald 12" steel the (with cornession & alcares) was 1950 Ful uf 6" & 8" Dristo pipe. Louis like it could be two separate areas but steve suid to call it doe. Tool photos failing south houth shung complete section to be encavated a one phot- at con severely condet Pipeline utthe Q" (1972) Brisco insert Man per Ray is to nove some of Thee small dunes on east side of pipe Ine to clear area. No track hox available until Friday maring at confiest 30 Boy will work with backhoe and dig = 21 will a long card 5 de of Imi Ros said ki'd coll when he redul TRU TO SAmple Sky

1235 Arrive @ Pract Location (CC#2) * No one @ Site upon arrival Nalton Equipment - 930 Cat Front End Loader -- 320 B Cut Trachoe Believe excuration activity has Ceased due to collapse of casted -Steel dusing patting black - poly line - a strain. - See photos -1245 Trachoe Operator arrived on location Began cleaning vest of pipeline East of pipeline already executed out X Tulked to Roy (wulton) the will get Some sort of brace to hold pipe that back in place the the weekend.

2/27/01 2127/01 Sample Location Coscop Letter Depth Time PIC 0900 Lett Midland for CC#2 5.16 Excavated Suil Pile 317 Corp - Stopped for fuel + field Supplies 60 1100 Arrive @ Project Location . Ō. () V. Wall Comp Objective: Oversight of excavation - Had walton excavate more spil from W activity + collect soil su-ples Wall before Collectors J' Sumple Equipment, PPE, Deton, OVAL, Scil Sapplins Site Map E. Louit: Wenther: Cloudy + Quercast, Cool Liep 1=30 A--> 2 SSFT. Flild- nod Winds Personnel. John Fergerson - TRW Unexcaraled 1- Trachee Operator - Walton Areg 11 - Londer Operator - Walton Walton Equipment 1 - trachue 1 - peader Floor Surph Real Supre Location Opening Letter Depth Time PJD not taken A N.W.H G-p 0.0 tran This B C D E _;;⁴ BE.W.II 0.0 Areq **H**,0 0.4 1t ESWIL 14 Bunnil C.C 1 E Fluci 22,2 Elv. Wall <u>.</u> 0.0 6 & F.W.II 0.0 O.Ò F.S Wall H I Floor 0.0 1025 JAF

2/27/01	112 27 01
Ahote tog	
0730 View facing SE of inorthern most	
0731 View facing down into northern most	
exercated on the table	
0732 View facing cant of excavation just Sputh of northernmost excavation	
0133 - New taking SE of contaminted wall	
1600 Left CC # 2 for UC # 3	
Not Arrive @ JC #13	Rust Exercition
Super Location Descip Little Plath Time PID W Wall Comp &	化 经济口 化白香油 医白白色 化合金 网络大学 经济过 医子子体结束 化化学 化化学 化化学 化化学 化化学 化化学 化化学 化化学 化化学 化化
Site nap	
	CURA CONTINUED LICE FOR COMPANY
7/1	- 1+ 10 10 10 10 10 10 10 10 10 10 10 10 10
	- Coutomine 241
	A Antica in 8 loads of caliche to
1° Kant	By Backinnight execution south of pipeline
22/3/1	

3/2/01 0800 Left Midland for CCF12 Locution Edge of CCA - Stopped for fuel & field supplies 1000 Arrive @ Project location Objective: Collect Sail Samples, Document Excavation Activity Equipment: PPE, Decon, Soil Sa pling kit, PID (oun) Measuring Wheel Weather: Cloudy + Overcast Raining, Unexcar Cool (Tunp = 45°F) Culm- hild Wind Personnel! John Freyerson - TRur -Walton: 2 men @ location upon arrival Buckti Walton Equipment: - 320 B Trachoe (Cat) - 850 C Dozer (John Peere - 930 Loader (Cat) Area To Sample Location Lefter Depth Tind PID Jesc. O- Ere Corp 1240 0.0 N. Wall Photo 409 0.0 E. Wall 1250 Conf S. Wall 500 0.0 5 M Wall 310 0.0 View facily NE of sout Floor 14' Cp-p 1320 0738 0.0 exemption + backfilled ar View Facity north for Backfille area JAF JUTE

3/2/01 0789 (cont) and northernmost excaration 0740. View facing Ne ploom into of Northermoe excavation 1500 Laft Logation for Lab + Midland 1615 Arrive @ Lab 1930 Adrive Midland 29 loads of 12 yds of Contaminated Soil haved to landfam Total loads = 19 @ 12 yous eac * Contacted Billy Sullivan karly this Am. Problem with cell phones - Able to instruct Wim to get breakdown On number + size of loads for each day + total overall - He informed me they had completed backfilling southern most excaulation + was shutting down for the day (time & 0930 MST) JVAF

3/8/01 3/7/01 Samples collected on 3/7/01 are OGO Left Millard for CC#2 Site clean. This confletes excavation activity for CC #2 -Stopped for fuel + field supplies Older Walton Construction to Backfrid 0830 Arrive @ location ereavation Objective: Oversee excavation activity + Collect Soil Samples Walton continued clear + ercaratity Equipment: PPE, Decon, PED, So: 1 Semple CCH 3. Kit, Mcasuring Wheel Weather: Sunny-Pth Cloud, Cool (Tenp 245°E), Mild-Mod NE Winds Have haved an additional 84 lord for a total of 185 loads Personneli John Federson + TRW and farm Walton Construction: Compan Crew 30 #3 Walton Equipment No activity due to heavy ra the night before frucking report quailable Desc Letter Death Time PIO Sample Location CCH2PComp N. Wall 0920 0.0 Comp Continued exercite having E. Wall 0930 00 Rong W. Wall . An additions 0940 0.0 54 loads for a botal Floor 11 Sconp 0250 0.0 Comp comp E. Wall 1035 7.8 CC #3 Continued excavation FLOOR 1045 0.0 Native Backfill Comp 1055 0.0 JAF SMF

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Clay Cooper Site # 2



