

1R - 427-19

REPORTS

DATE:

4-11-2003

120427-~~18~~

-19

FINAL REPORT

**RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT**

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
EME	Cooper Fed. 'D' EOL	E	26	20 S	36 E	Lea	Length	Width	Depth
							8	5	5.5

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER _____ Tuffy Cooper _____ OTHER _____

Depth to Groundwater _____ 106 _____ feet NMOCD SITE ASSESSMENT RANKING SCORE: _____ 0 _____

Date Started _____ 3/12/2003 _____ Date Completed _____ 3/27/2003 _____ OCD Witness _____ No _____

Soil Excavated _____ 88 _____ cubic yards Excavation Length _____ 20 _____ Width _____ 10 _____ Depth _____ 12 _____ feet

Soil Disposed _____ 0 _____ cubic yards Offsite Facility _____ n/a _____ Location _____ n/a _____

FINAL ANALYTICAL RESULTS: Sample Date _____ 3/14/2003 _____ Sample Depth _____ 12' bgs _____

Procure 5-point composite sample of bottom and 4-point composite sample of sidewalls. TPH,
BTEX and Chloride laboratory test results completed by using an approved lab and testing
procedures pursuant to NMOCD guidelines.

Sample Location	Benzene mg/kg	Toluene mg/kg	Ethyl Benzene mg/kg	Total Xylenes mg/kg	GRO mg/kg	DRO mg/kg	Chlorides mg/kg
SIDEWALLS	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	478
BOTTOM	<0.025	<0.025	<0.025	<0.025	<10.0	71.8	443
REMEDIATED	<0.025	<0.025	<0.025	<0.025	<10.0	661	319

General Description of Remedial Action: This junction is located near an active production facility. The site was delineated vertically and laterally producing a 20' x 10' x 12' bgs excavation. Groundwater is 106'. There were no signs of TPH impact and samples taken to a lab resulted in concentrations below NMOCD guidelines. ROC believes that chloride concentrations of this magnitude does not present a threat to groundwater that is 90+ feet below. The excavated soil was blended at the location and then backfilled into the hole. A water-tight junction box has been build over the site.

CHLORIDE FIELD TESTS

LOCATION	DEPTH (ft)	ppm
Vertical	4	250
	6	350
	8	200
	10	400
	12	550
wall comp.	n/a	400
bottom comp.	12	580
remed. Comp.	n/a	319

cc: lab results, photos

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY
KNOWLEDGE AND BELIEF.

DATE _____ 4/11/2003 _____ PRINTED NAME _____ Kristin Farris _____

SIGNATURE _____ *Kristin Farris* _____ TITLE _____ Projects Scientist _____

EME Cooper Fed. 'D'



NORM Removal



Impact Excavation



Impact Excavation



Box Construction (with poly liner)

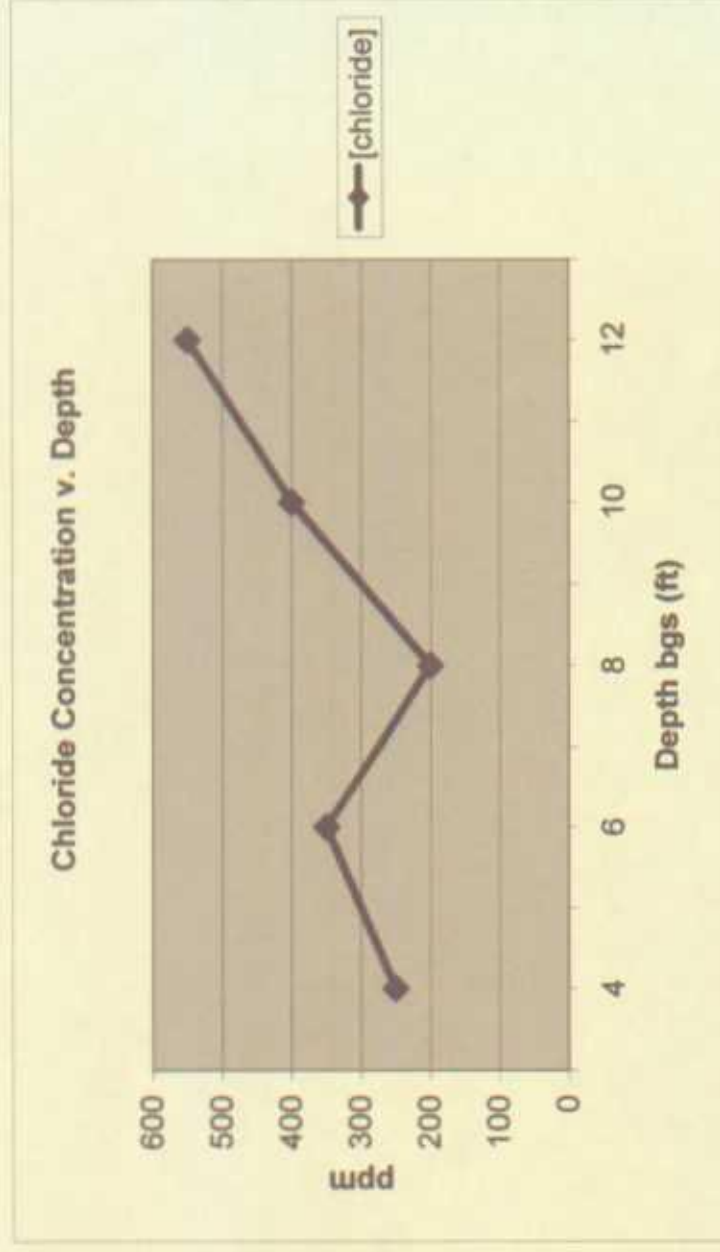


New Junction Box

EME Cooper Federal 'D' EOL
T20S, R36E

Depth bgs (ft)	[Cl ⁻] ppm
4	250
6	350
8	200
10	400
12	550

Groundwater = 106 ft



ANALYTICAL REPORT

Prepared for:

**Kristin Farris
Rice Operating
122 W. Taylor
Hobbs, NM 88240**

Project: Cooper Fed 'D' EOL
PO#: 757
Order#: G0305982
Report Date: 03/20/2003

Certificates

US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

Rice Operating
122 W. Taylor
Hobbs, NM 88240
505-397-1471

Order#: G0305982
Project:
Project Name: Cooper Fed 'D' EOL
Location: EME

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>
0305982-01	Wall Comp.	SOIL	3/14/03	3/14/03 19:30	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 2.0 C		
	8015M					
	8021B/5030 BTEX					
	Chloride					
0305982-02	Bottom Comp. @ 12'	SOIL	3/14/03	3/14/03 19:30	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 2.0 C		
	8015M					
	8021B/5030 BTEX					
	Chloride					

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Kristin Farris
Rice Operating
122 W. Taylor
Hobbs, NM 88240

Order#: G0305982
Project:
Project Name: Cooper Fed 'D' EOL
Location: EME

Lab ID: 0305982-01
Sample ID: Wall Comp.

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		3/17/03	1	1	CK	8015M

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

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	94%	70	130
1-Chlorooctadecane	86%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0004966-02		3/17/03 15:10	1	25	CK	8021B

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

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	95%	80	120
Bromofluorobenzene	114%	80	120

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Kristin Farris
Rice Operating
122 W. Taylor
Hobbs, NM 88240

Order#: G0305982
Project:
Project Name: Cooper Fed 'D' EOL
Location: EME

Lab ID: 0305982-02
Sample ID: Bottom Comp. @ 12'

8015M

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
		3/17/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	71.8	10.0
TOTAL, C6-C35	71.8	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	97%	70	130
1-Chlorooctadecane	94%	70	130

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
0004966-02		3/17/03 15:30	1	25	CK	8021B

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

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	88%	80	120
Bromofluorobenzene	111%	80	120

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

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

Page 2 of 2

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Kristin Farris
Rice Operating
122 W. Taylor
Hobbs, NM 88240

Order#: G0305982
Project:
Project Name: Cooper Fed 'D' EOL
Location: EME

Lab ID: 0305982-01

Sample ID: Wall Comp.

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	478	mg/kg	1	20	9253	3/20/03	SB

Lab ID: 0305982-02

Sample ID: Bottom Comp. @ 12'

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	443	mg/kg	1	20	9253	3/20/03	SB

Approval: Raland K. Tuttle 3-25-03
Raland K. Tuttle, Lab Director, QA Officer Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0305982

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0004968-02			<10.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0305982-01	0	952	811	85.2%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0305982-01	0	952	895	94.4%	9.8%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0004968-05		1000	960	96.0%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0305982

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0004966-02			<0.025		
Toluene-mg/kg		0004966-02			<0.025		
Ethylbenzene-mg/kg		0004966-02			<0.025		
p/m-Xylene-mg/kg		0004966-02			<0.025		
o-Xylene-mg/kg		0004966-02			<0.025		
CONTROL	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0004966-03		0.1	0.099	99.%	
Toluene-mg/kg		0004966-03		0.1	0.103	103.%	
Ethylbenzene-mg/kg		0004966-03		0.1	0.106	106.%	
p/m-Xylene-mg/kg		0004966-03		0.2	0.222	111.%	
o-Xylene-mg/kg		0004966-03		0.1	0.113	113.%	
CONTROL DUP	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0004966-04		0.1	0.094	94.%	5.2%
Toluene-mg/kg		0004966-04		0.1	0.097	97.%	6.%
Ethylbenzene-mg/kg		0004966-04		0.1	0.099	99.%	6.8%
p/m-Xylene-mg/kg		0004966-04		0.2	0.206	103.%	7.5%
o-Xylene-mg/kg		0004966-04		0.1	0.106	106.%	6.4%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0004966-05		0.1	0.094	94.%	
Toluene-mg/kg		0004966-05		0.1	0.098	98.%	
Ethylbenzene-mg/kg		0004966-05		0.1	0.101	101.%	
p/m-Xylene-mg/kg		0004966-05		0.2	0.212	106.%	
o-Xylene-mg/kg		0004966-05		0.1	0.108	108.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0305982

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0004978-01			<20.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0305982-01	478	500	939	92.2%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0305982-01	478	500	957	95.8%	1.9%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0004978-04		5000	4960	99.2%	

ANALYTICAL REPORT

Prepared for:

Kristin Farris
Rice Operating
122 W. Taylor
Hobbs, NM 88240

Project: Cooper Fed 'D' EOL

PO#: 757

Order#: G0306117

Report Date: 04/02/2003

Certificates

US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

Rice Operating
122 W. Taylor
Hobbs, NM 88240
505-397-1471

Order#: G0306117
Project:
Project Name: Cooper Fed 'D' EOL
Location: EME

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>
0306117-01	Remed. Comp.	SOIL	3/27/03	3/28/03 19:55	4 oz glass	Ice
<u>Lab Testing:</u>		Rejected: No	Temp:	2 C		
8015M						
8021B/5030 BTEX						
Chloride						

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Kristin Farris
Rice Operating
122 W. Taylor
Hobbs, NM 88240

Order#: G0306117
Project:
Project Name: Cooper Fed 'D' EOL
Location: EME

Lab ID: 0306117-01
Sample ID: Remed. Comp.

8015M

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		4/1/03	1	1	WL	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	661	10.0
TOTAL, C6-C35	661	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	113%	70	130
1-Chlorooctadecane	120%	70	130

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>		
0005116-02		4/1/03 18:23	1	25	CK	8021B

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

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	80%	80	120
Bromofluorobenzene	104%	80	120

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

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Kristin Farris
Rice Operating
122 W. Taylor
Hobbs, NM 88240

Order#: G0306117
Project:
Project Name: Cooper Fed 'D' EOL
Location: EME

Lab ID: 0306117-01
Sample ID: Remed. Comp.

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution</u> <u>Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date</u> <u>Analyzed</u>	<u>Analyst</u>
Chloride	319	mg/kg	1	20	9253	3/31/03	CK

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.

4/02/03
Date

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0306117

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0005102-02			<10.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0306116-01	0	952	898	94.3%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0306116-01	0	952	923	97.7%	2.7%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0005102-05		1000	907	90.7%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0306117

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0005116-02			<0.025		
Toluene-mg/kg		0005116-02			<0.025		
Ethylbenzene-mg/kg		0005116-02			<0.025		
p/m-Xylene-mg/kg		0005116-02			<0.025		
o-Xylene-mg/kg		0005116-02			<0.025		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0306119-01	0	0.1	0.089	89.%	
Toluene-mg/kg		0306119-01	0	0.1	0.092	92.%	
Ethylbenzene-mg/kg		0306119-01	0	0.1	0.100	100.%	
p/m-Xylene-mg/kg		0306119-01	0	0.2	0.209	104.5%	
o-Xylene-mg/kg		0306119-01	0	0.1	0.107	107.%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0306119-01	0	0.1	0.086	86.%	3.4%
Toluene-mg/kg		0306119-01	0	0.1	0.089	89.%	3.3%
Ethylbenzene-mg/kg		0306119-01	0	0.1	0.097	97.%	3.%
p/m-Xylene-mg/kg		0306119-01	0	0.2	0.204	102.%	2.4%
o-Xylene-mg/kg		0306119-01	0	0.1	0.103	103.%	3.8%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0005116-05		0.1	0.085	85.%	
Toluene-mg/kg		0005116-05		0.1	0.089	89.%	
Ethylbenzene-mg/kg		0005116-05		0.1	0.095	95.%	
p/m-Xylene-mg/kg		0005116-05		0.2	0.199	99.5%	
o-Xylene-mg/kg		0005116-05		0.1	0.099	99.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0306117

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0005095-01			<20.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0306109-02	0	500	532	106.4%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0306109-02	0	500	517	103.4%	2.9%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0005095-04		5000	4960	99.2%	

12600 West I-20 East
Odessa, Texas 79763

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: Cooper Fed. D' EOL

Project #:

Project Loc: EME

PO #: 757

Fax No: (505) 397-1471

Richard

[illegible]