

1R - 427 - 59

REPORTS

DATE:

8-27-2002

100427-59

FINAL REPORT

**RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT**

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
EME	D-28	D	28	21 S	36 E	Lea	Length 10'	Width 8'	Depth 5'

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER Dasco Land Corporation OTHER _____

Depth to Groundwater 175 feet NMOCD SITE ASSESSMENT RANKING SCORE: 0

Date Started 6/17/2002 Date Completed 7/9/2002 OCD Witness No

Soil Excavated 130 cubic yards Excavation Length 20 Width 20 Depth 10 feet

Soil Disposed 0 cubic yards Offsite Facility N/A Location N/A

FINAL ANALYTICAL RESULTS: Sample Date 6/20/2002 Sample Depth 10 ft

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	<0.058	777	1210	576
BOTTOM	<0.025	<0.025	<0.025	<0.025	641	1130	620
REMEDIED	<0.025	<0.025	<0.025	<0.025	755	2290	275

General Description of Remedial Action: The sandy soil was excavated to a depth of 10 feet. The concentrations of 620 ppm chlorides and 1987 ppm TPH at this depth and beyond :
not considered a threat to the groundwater as the parameters exhibited a significant decline with depth. TPH left below the excavation is expected to naturally attenuate and surface vegetation is
expected to replenish at a normal rate. The excavated soil was landfarmed on location and
then backfilled into the excavation.
A water-tight box has since been installed over the junction.

CHLORIDE FIELD TESTS

LOCATION	DEPTH	ppm
vertical	4'	300
"	6'	180
"	8'	240
walls	8'	500
bottom	10'	600
remediated	XXX	397

cc: lab results; photos

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

DATE 8-27-02

PRINTED NAME Kristin Farris

SIGNATURE Kristin Farris

TITLE Environmental Project Scientist



EME jct. D-28 Before Remediation





EME jct. D-28 Impact Excavation (after plumbing)





EME jct. D-28 New Junction Box Construction



D-28

ANALYTICAL REPORT

Prepared for:

LOGAN ANDERSON
RE ENVIRONMENTAL
P.O. BOX 13418
ODESSA, TX 79768

Project: Rice
Order#: G0203865
Report Date: 07/16/2002

Certificates

US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

RE ENVIRONMENTAL
P.O. BOX 13418
ODESSA, TX 79768
366-0804

Order#: G0203865
Project:
Project Name: Rice
Location: D-28

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>	<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>
0203865-01	5 pt. Comp. Remediated Pile	SOIL	7/8/02 11:00	7/9/02 8:15	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No	Temp:	4.0 C		
	8015M					
	8021B/5030 BTEX					
	Chloride					

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

LOGAN ANDERSON
RE ENVIRONMENTAL
P.O. BOX 13418
ODESSA, TX 79768

Order#: G0203865
Project:
Project Name: Rice
Location: D-28

Lab ID: 0203865-01
Sample ID: 5 pt. Comp. Remediated Pile

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>		
		7/9/02	1	5	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	755	50.0
DRO, >C12-C35	2290	50.0
TOTAL, C6-C35	3045	50.0

8021B/5030 BTEX

<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>		
0002376-02		7/10/02 0:35	1	1	RKT	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	1.00
Ethylbenzene	<0.025	1.00
Toluene	<0.025	1.00
p/m-Xylene	<0.025	1.00
o-Xylene	<0.025	1.00

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

7-18-02

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

LOGAN ANDERSON
RE ENVIRONMENTAL
P.O. BOX 13418
ODESSA, TX 79768

Order#: G0203865
Project:
Project Name: Rice
Location: D-28

Lab ID: 0203865-01
Sample ID: 5 pt. Comp. Remediated Pile

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	275	mg/kg	1	10	9253	7/16/02	SB

Approval:

Raland K. Tuttle 7-17-02
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#: G0203865

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0002373-02			<10.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0203868-01	40.7	999.6	1320	128.%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0203868-01	40.7	999.6	1351	131.1%	2.3%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0002373-05		952	1014	106.5%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0203865

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0002376-02			<0.025		
Ethylbenzene-mg/kg		0002376-02			<0.025		
Toluene-mg/kg		0002376-02			<0.025		
p/m-Xylene-mg/kg		0002376-02			<0.025		
o-Xylene-mg/kg		0002376-02			<0.025		
CONTROL	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0002376-03		0.1	0.084	84.0%	
Ethylbenzene-mg/kg		0002376-03		0.1	0.084	84.0%	
Toluene-mg/kg		0002376-03		0.1	0.085	85.0%	
p/m-Xylene-mg/kg		0002376-03		0.2	0.177	88.5%	
o-Xylene-mg/kg		0002376-03		0.1	0.083	83.0%	
CONTROL DUP	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0002376-04		0.1	0.086	86.0%	2.4%
Ethylbenzene-mg/kg		0002376-04		0.1	0.087	87.0%	3.5%
Toluene-mg/kg		0002376-04		0.1	0.086	86.0%	1.2%
p/m-Xylene-mg/kg		0002376-04		0.2	0.180	90.0%	1.7%
o-Xylene-mg/kg		0002376-04		0.1	0.086	86.0%	3.6%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0002376-05		0.1	0.096	96.0%	
Ethylbenzene-mg/kg		0002376-05		0.1	0.096	96.0%	
Toluene-mg/kg		0002376-05		0.1	0.097	97.0%	
p/m-Xylene-mg/kg		0002376-05		0.2	0.196	98.0%	
o-Xylene-mg/kg		0002376-05		0.1	0.095	95.0%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0203865

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0002434-01			<5.00		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0203865-01	275	500	762	97.4%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0203865-01	275	500	771	99.2%	1.2%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0002434-04		5000	4960	99.2%	

ANALYTICAL REPORT

Prepared for:

LOGAN ANDERSON
RE ENVIRONMENTAL
P.O. BOX 13418
ODESSA, TX 79768

Project: Rice
Order#: G0203730
Report Date: 06/27/2002

Certificates

US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

RE ENVIRONMENTAL
P.O. BOX 13418
ODESSA, TX 79768
366-0804

Order#: G0203730
Project:
Project Name: Rice
Location: D-28

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>	<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>
0203730-01	4 pt. Wall Comp. @ 8'	SOIL	6/20/02 10:00	6/21/02 9:45	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 4.0 C		
	8015M					
	8021B/5030 BTEX					
	Chloride					
0203730-02	5 pt. Bottom Comp. @ 10'	SOIL	6/20/02 10:00	6/21/02 9:45	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 4.0 C		
	8015M					
	8021B/5030 BTEX					
	Chloride					

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

LOGAN ANDERSON
RE ENVIRONMENTAL
P.O. BOX 13418
ODESSA, TX 79768

Order#: G0203730
Project:
Project Name: Rice
Location: D-28

Lab ID: 0203730-01
Sample ID: 4 pt. Wall Comp. @ 8'

8015M

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		6/22/02	1	5	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	777	50.0
DRO, >C12-C35	1210	50.0
TOTAL, C6-C35	1987	50.0

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>		
0002184-02		6/25/02	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	<0.025	0.025
Toluene	<0.025	0.025
p/m-Xylene	0.033	0.025
o-Xylene	<0.025	0.025

Lab ID: 0203730-02
Sample ID: 5 pt. Bottom Comp. @ 10'

8015M

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		6/22/02	1	5	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	641	50.0
DRO, >C12-C35	1130	50.0
TOTAL, C6-C35	1771	50.0

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

Page 1 of 2

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

LOGAN ANDERSON
RE ENVIRONMENTAL
P.O. BOX 13418
ODESSA, TX 79768

Order#: G0203730
Project:
Project Name: Rice
Location: D-28

Lab ID: 0203730-02
Sample ID: 5 pt. Bottom Comp. @ 10'

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>		
0002215-02		6/26/02 3:02	1	25	CK	8021B

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

Approval: Raland K. Tuttle 6-28-02
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

ANALYTICAL REPORT

LOGAN ANDERSON
RE ENVIRONMENTAL
P.O. BOX 13418
ODESSA, TX 79768

Order#: G0203730
Project:
Project Name: Rice
Location: D-28

Lab ID: 0203730-01
Sample ID: 4 pt. Wall Comp. @ 8'

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	576	mg/kg	1	10.0	9253	6/23/02	SB

Lab ID: 0203730-02
Sample ID: 5 pt. Bottom Comp. @ 10'

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	620	mg/kg	1	10.0	9253	6/23/02	SB

Approval:

Roland K. Tuttle 6-28-02
Roland 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

RL = Reporting Limit N/A = Not Applicable

Page 1 of 1

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0203730

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0002134-02			<10.0		
CONTROL	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0002134-03		952	1050	110.3%	
CONTROL DUP	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0002134-04		952	998	104.8%	5.1%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0002134-05		1000	918	91.8%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0203730

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0002184-02			<0.025		
Benzene-mg/kg		0002215-02			<0.025		
Ethylbenzene-mg/kg		0002184-02			<0.025		
Ethylbenzene-mg/kg		0002215-02			<0.025		
Toluene-mg/kg		0002184-02			<0.025		
Toluene-mg/kg		0002215-02			<0.025		
p/m-Xylene-mg/kg		0002184-02			<0.025		
p/m-Xylene-mg/kg		0002215-02			<0.025		
o-Xylene-mg/kg		0002184-02			<0.025		
o-Xylene-mg/kg		0002215-02			<0.025		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0203723-01	0	0.1	0.107	107.%	
Benzene-mg/kg		0203733-07	0	0.1	0.100	100.%	
Ethylbenzene-mg/kg		0203723-01	0	0.1	0.106	106.%	
Ethylbenzene-mg/kg		0203733-07	0	0.1	0.100	100.%	
Toluene-mg/kg		0203723-01	0	0.1	0.108	108.%	
Toluene-mg/kg		0203733-07	0	0.1	0.099	99.%	
p/m-Xylene-mg/kg		0203723-01	0	0.2	0.212	106.%	
p/m-Xylene-mg/kg		0203733-07	0	0.2	0.202	101.%	
o-Xylene-mg/kg		0203723-01	0	0.1	0.102	102.%	
o-Xylene-mg/kg		0203733-07	0	0.1	0.099	99.%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0203723-01	0	0.1	0.102	102.%	4.8%
Benzene-mg/kg		0203733-07	0	0.1	0.098	98.%	2.%
Ethylbenzene-mg/kg		0203723-01	0	0.1	0.102	102.%	3.8%
Ethylbenzene-mg/kg		0203733-07	0	0.1	0.098	98.%	2.%
Toluene-mg/kg		0203723-01	0	0.1	0.101	101.%	6.7%
Toluene-mg/kg		0203733-07	0	0.1	0.098	98.%	1.%
p/m-Xylene-mg/kg		0203723-01	0	0.2	0.205	102.5%	3.4%
p/m-Xylene-mg/kg		0203733-07	0	0.2	0.200	100.%	1.%
o-Xylene-mg/kg		0203723-01	0	0.1	0.100	100.%	2.%
o-Xylene-mg/kg		0203733-07	0	0.1	0.097	97.%	2.%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0002184-05		0.1	0.107	107.%	
Benzene-mg/kg		0002215-05		0.1	0.091	91.%	
Ethylbenzene-mg/kg		0002184-05		0.1	0.108	108.%	
Ethylbenzene-mg/kg		0002215-05		0.1	0.090	90.%	
Toluene-mg/kg		0002184-05		0.1	0.102	102.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Toluene-mg/kg		0002215-05		0.1	0.090	90.0%	
p/m-Xylene-mg/kg		0002184-05		0.2	0.208	104.0%	
p/m-Xylene-mg/kg		0002215-05		0.2	0.182	91.0%	
o-Xylene-mg/kg		0002184-05		0.1	0.103	103.0%	
o-Xylene-mg/kg		0002215-05		0.1	0.090	90.0%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0203730

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0002146-01			<10.0		
CONTROL	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0002146-02		5000	5050	101.0	
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0203723-15	27.3	769	804	101.0	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0203723-15	27.3	769	804	101.0	0.0

