

1R - 426-17

REPORTS

DATE:

5/27/2003

IR-426-17

FINAL REPORT

**RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT**

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
							Length	Width	Depth
Blinebry-Drinkard	N-9	N	9	22 S	37 E	Lea	11	8	7

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER _____ Charlie Bettis _____ OTHER _____

Depth to Groundwater _____ 75 _____ feet NMOCD SITE ASSESSMENT RANKING SCORE: _____ 10 _____

Date Started _____ 4/3/2003 _____ Date Completed _____ 4/7/2003 _____ OCD Witness _____ No _____

Soil Excavated _____ 300 _____ cubic yards Excavation Length _____ 15 _____ Width _____ 35 _____ Depth _____ 16 * _____ feet

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

FINAL ANALYTICAL RESULTS: Sample Date _____ 4/7/2003 _____ Sample Depth _____ 16' 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	248
BOTTOM	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	1200
REMEDIED	<0.025	<0.025	<0.025	<0.025	<10.0	101	248

General Description of Remedial Action: A vertical trench directly below the

junction box revealed only minimal chloride impact. However, a chloride "hot spot" was found 20' west of the center of the junction box. This area was delineated for lateral and vertical extent and excavated until a significant concentration decline was established (see field tests at right).

A 15' x 35' area was excavated to various depths from 6-16' bgs in order to encompass the "hot spot" within the excavation (see diagrams). The excavated soil was landfarmed on site and then backfilled into the hole. Per request of the surface owner, about 1 foot of backfill was removed from the surface and replaced with new soil. A new watertight junction box has been built over the location. The site has been re-seeded with native vegetation and is expected to renew at a normal rate. These activities do not present a risk to groundwater, livestock, or public health.

* The bottom of the excavation varied 6-16' bgs; composite samples were taken as indicated on diagram.

cc: lab results, photos, diagrams

CHLORIDE FIELD TESTS

LOCATION	DEPTH (ft)	ppm
Vertical	4	250
	6	100
20' W	5	550
	10	1100
	12	1500
	14	950
	16	650
bottom comp.	6-16	900
wall comp.	n/a	200
remed. Comp.	n/a	250

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

DATE _____ 5/27/2003 _____ PRINTED NAME _____ Kristin Farris _____

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

BD jct. N-9

15' x 35' x 16' Excavation

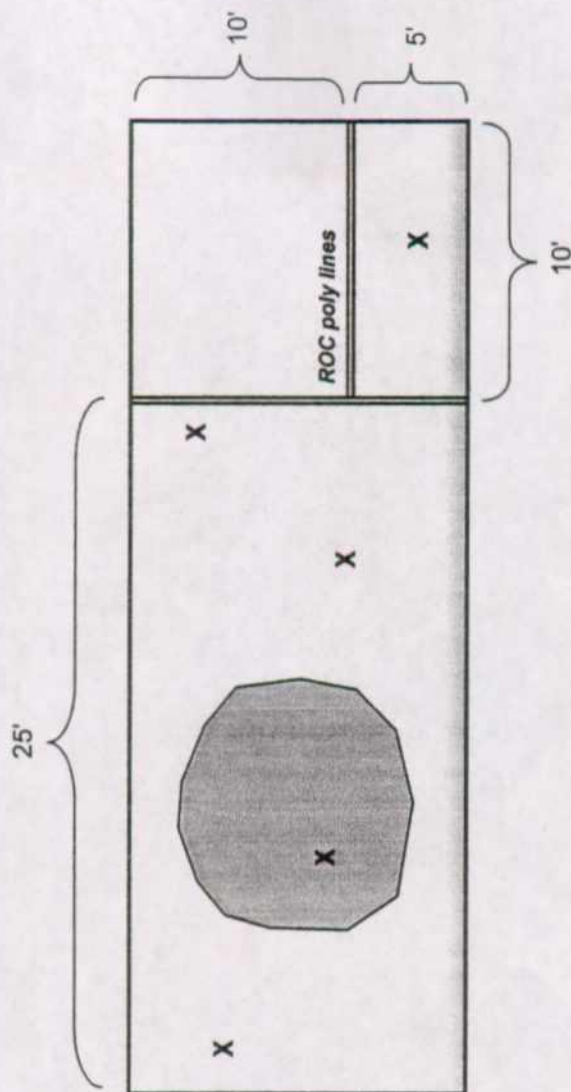
 = 6' bgs

 = 16' bgs



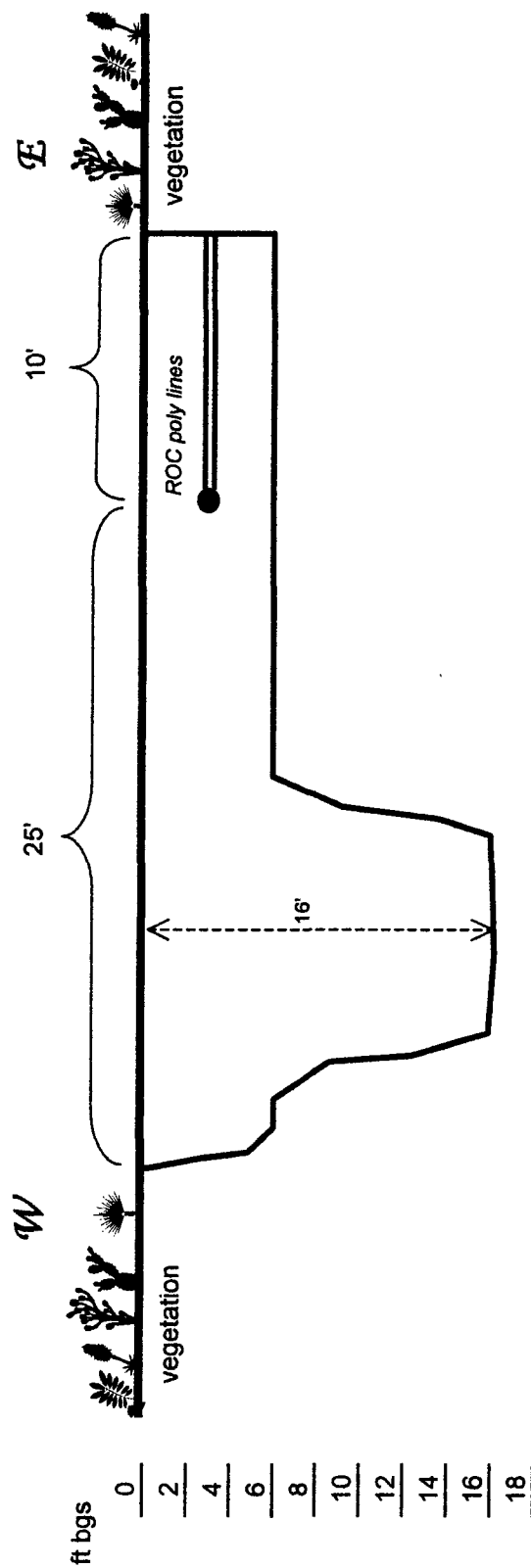
V E G E T A T I O N

V E G E T A T I O N



X = Sample point for bottom composite.

BD jct. N-9 **15' x 35' x 16' Excavation**



BD jct. N-9



Old Junction Box



NORM Removal



Excavation

BD jct. N-9



New Box Construction with Poly Liner



Backfilled



Seeding New Topsoil

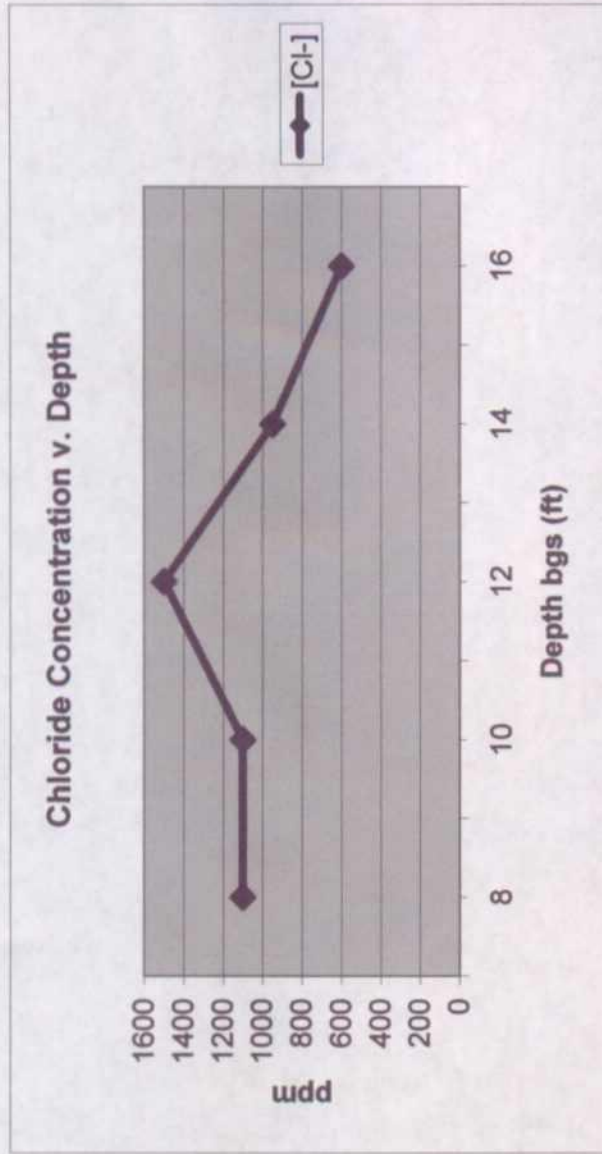
CHLORIDE CONCENTRATION CURVE

RICE Operating Company

BD jct. N-9
T22S, R37E

Depth bgs (ft)	[Cl ⁻] ppm
8	1100
10	1100
12	1500
14	950
16	600

Groundwater = 86 ft



ANALYTICAL REPORT

Prepared for:

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

Project: N-9

PO#:

Order#: G0306182

Report Date: 04/11/2003

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#: G0306182
Project:
Project Name: N-9
Location: BD

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>
0306182-01	Wall Comp.	SOIL	4/4/03 16:00	4/4/03 17:15	4 oz glass	Ice
<u>Lab Testing:</u>		Rejected: No	Temp: 10.0 C			
8015M						
8021B/5030 BTEX						
Chloride						

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0306182
Project:
Project Name: N-9
Location: BD

Lab ID: 0306182-01
Sample ID: Wall Comp.

8015M

Method	Date	Date	Sample	Dilution	Analyst	Method
Blank	Prepared	Analyzed	Amount	Factor		
		4/7/03	1	1	WL	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	83%	70	130
1-Chlorooctadecane	87%	70	130

8021B/5030 BTEX

Method	Date	Date	Sample	Dilution	Analyst	Method
Blank	Prepared	Analyzed	Amount	Factor		
0005183-02		4/10/03 10:15	1	25	RKT	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	116%	80	120
Bromofluorobenzene	109%	80	120

Approval:

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

Date

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

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ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0306182
Project:
Project Name: N-9
Location: BD

Lab ID: 0306182-01
Sample ID: Wall 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	248	mg/kg	1	20	9253	4/7/03	CK

Approval:

Raland K Tuttle 4-2-03
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.

RL = Reporting Limit N/A = Not Applicable

Page 1 of 1

ENVIRONMENTAL LAB OF TEXAS I, LTD.

12600 West I-20 East, Odessa, TX 79765 Ph: 915-563-1800

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0306182

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0005161-02			<10.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0306182-01	0	952	764	80.3%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0306182-01	0	952	729	76.6%	4.7%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0005161-05		1000	716	71.6%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0306182

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0005183-02			< 0.025		
Toluene-mg/kg		0005183-02			< 0.025		
Ethylbenzene-mg/kg		0005183-02			< 0.025		
p/m-Xylene-mg/kg		0005183-02			< 0.025		
o-Xylene-mg/kg		0005183-02			< 0.025		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0306172-07	0.045	2.5	3.02	119.9%	
Toluene-mg/kg		0306172-07	0.432	2.5	3.12	107.5%	
Ethylbenzene-mg/kg		0306172-07	0.118	2.5	3.22	124.1%	
p/m-Xylene-mg/kg		0306172-07	0.522	5	6.35	116.6%	
o-Xylene-mg/kg		0306172-07	0.545	2.5	3.61	122.6%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0306172-07	0.045	2.5	2.65	104.2%	13.1%
Toluene-mg/kg		0306172-07	0.432	2.5	2.82	95.5%	10.1%
Ethylbenzene-mg/kg		0306172-07	0.118	2.5	3.03	116.5%	6.1%
p/m-Xylene-mg/kg		0306172-07	0.522	5	6.08	111.2%	4.3%
o-Xylene-mg/kg		0306172-07	0.545	2.5	3.52	119.9%	2.5%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0005183-05		0.1	0.104	104.4%	
Toluene-mg/kg		0005183-05		0.1	0.104	104.4%	
Ethylbenzene-mg/kg		0005183-05		0.1	0.103	103.3%	
p/m-Xylene-mg/kg		0005183-05		0.2	0.212	106.6%	
o-Xylene-mg/kg		0005183-05		0.1	0.100	100.0%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0306182

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0005155-01			<20.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0306157-01	248	500	762	102.8%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0306157-01	248	500	762	102.8%	0.0%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0005155-04		5000	4870	97.4%	

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

Kristin Farris
Fax: 915-563-1713

29

Rice

58

122 W Taylor

Hobbs, NM 88240

Fax No:

М

[illegible]

ANALYTICAL REPORT

Prepared for:

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

Project: N-9

PO#:

Order#: G0306226

Report Date: 04/15/2003

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#: G0306226
Project:
Project Name: N-9
Location: BD

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<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>
0306226-01	5 pt. Bottom Comp. @ 16'	SOIL	4/7/03	4/10/03	4 oz glass	Ice
			14:00	14:50		
			<u>Lab Testing:</u>			
			Rejected: No			
			Temp: 6.0 C			
	8015M					
	8021B/5030 BTEX					
	Chloride					
0306226-02	Rem. Pile Comp.	SOIL	4/7/03	4/10/03	4 oz glass	Ice
			14:00	14:50		
			<u>Lab Testing:</u>			
			Rejected: No			
			Temp: 6.0 C			
	8015M					
	8021B/5030 BTEX					
	Chloride					

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0306226
Project:
Project Name: N-9
Location: BD

Lab ID: 0306226-01
Sample ID: 5 pt. Bottom Comp. @ 16'

8015M

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
		4/11/03	1	1	RKT	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	91%	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
0005219-02		4/11/03 17:37	1	25	RKT	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	92%	80	120
Bromofluorobenzene	107%	80	120

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0306226
Project:
Project Name: N-9
Location: BD

Lab ID: 0306226-02
Sample ID: Rem. Pile Comp.

8015M

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
		4/11/03	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	101	10.0
TOTAL, C6-C35	101	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	100%	70	130
1-Chlorooctadecane	103%	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
0005219-02		4/11/03 17:57	1	25	RKT	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	98%	80	120
Bromofluorobenzene	109%	80	120

Approval: Jeanne McMurrey 04-17-03
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

ANALYTICAL REPORT

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

Order#: G0306226
Project:
Project Name: N-9
Location: BD

Lab ID: 0306226-01
Sample ID: 5 pt. Bottom Comp. @ 16'

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	1200	mg/kg	1	20	9253	4/11/03	SB

Lab ID: 0306226-02
Sample ID: Rem. Pile 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	248	mg/kg	1	20	9253	4/11/03	SB

Approval: Jeanne McMurrey 04-17-03
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#: G0306226

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0005226-02			<10.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0306226-01	0	952	859	90.2%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0306226-01	0	952	830	87.2%	3.4%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0005226-05		1000	794	79.4%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0306226

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0005219-02			< 0.025		
Toluene-mg/kg		0005219-02			< 0.025		
Ethylbenzene-mg/kg		0005219-02			< 0.025		
p/m-Xylene-mg/kg		0005219-02			< 0.025		
o-Xylene-mg/kg		0005219-02			< 0.025		
CONTROL	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0005219-03		0.1	0.114	114.%	
Toluene-mg/kg		0005219-03		0.1	0.110	110.%	
Ethylbenzene-mg/kg		0005219-03		0.1	0.105	105.%	
p/m-Xylene-mg/kg		0005219-03		0.2	0.215	107.5%	
o-Xylene-mg/kg		0005219-03		0.1	0.100	100.%	
CONTROL DUP	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0005219-04		0.1	0.108	108.%	5.4%
Toluene-mg/kg		0005219-04		0.1	0.106	106.%	3.7%
Ethylbenzene-mg/kg		0005219-04		0.1	0.107	107.%	1.9%
p/m-Xylene-mg/kg		0005219-04		0.2	0.223	111.5%	3.7%
o-Xylene-mg/kg		0005219-04		0.1	0.110	110.%	9.5%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0005219-05		0.1	.111	111.%	
Toluene-mg/kg		0005219-05		0.1	0.110	110.%	
Ethylbenzene-mg/kg		0005219-05		0.1	0.106	106.%	
p/m-Xylene-mg/kg		0005219-05		0.2	0.218	109.%	
o-Xylene-mg/kg		0005219-05		0.1	0.102	102.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0306226

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0005196-01			<20.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0306197-01	0	500	496	99.2%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0306197-01	0	500	478	95.6%	3.7%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0005196-04		5000	4960	99.2%	

**12600 West I-20 East
Odessa, Texas 79763**

Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:

Justin Farris

Project Name:

2-9

Company Name

Rice department

Project #:

60

Project Loc:

City/State/Zip:

170665, Nm 88240

५६
०
५

Telephone No:

Fax No:

Sampler Signature:

1

[illegible]

Special Instructions

Far Results to Rice

Relinquished by:

Disinquired by:
Loaner Andrew

Date	Time
1/2/20	1:00

Received by:

ived by

Date _____

Time

Relinquished by:

Relinquished by:

Date	Time
------	------

Received by EL0T:

Received by ELOT: *Rease mcm*

Date _____

Time

Sample Containers Intact?

Temperature Upon Receipt:

Laboratory Comments:

10