

1R - 426-19

REPORTS

DATE:

4/30/2003

IR-426-19

FINAL REPORT

**RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT**

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
Blinebry-Drinkard	K-4 North	K	4	22S	37E	Lea	Length	Width	Depth
							Moved 50' West		

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER _____ Priscilla West _____ OTHER _____

Depth to Groundwater _____ 93 _____ feet NMOCD SITE ASSESSMENT RANKING SCORE: _____ 10 _____

Date Started _____ 4/7/2003 _____ Date Completed _____ 4/23/2003 _____ OCD Witness _____ No _____

Soil Excavated _____ 222 _____ cubic yards Excavation Length _____ 25 _____ Width _____ 20 _____ Depth _____ 12 _____ feet

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

FINAL ANALYTICAL RESULTS: Sample Date _____ 4/14/2003 _____ 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	92	638
BOTTOM	<0.025	<0.025	<0.025	<0.025	<10.0	32.7	<20
REMEDIED	<0.025	<0.025	<0.025	<0.025	113	2073	372

General Description of Remedial Action: This was the site of two junctions boxes

located next to one another. The pipeline was re-plumbed and the boxes were removed. The box sites were combined to form one 25' x 20' x 12' bgs excavation. Chloride impact dissipated with depth, as did TPH concentrations. The excavated soil was landfarmed onsite and then backfilled into the excavation. Although TPH concentrations in the remediated backfill did not meet NMOCD guidelines, ROC contends that these concentrations do not pose a threat to groundwater at 81' below. The disturbed surface will be re-seeded with native vegetation and will be monitored for growth.

A new watertight junction box has been built 50' west of this site.

cc: lab results, photos, diagram

CHLORIDE FIELD TESTS

LOCATION	DEPTH (ft)	ppm
Vertical	4	400
	8	300
	12	320
12' E	comp.	240
12' W	comp.	300
10' S	comp.	900
10' N	comp.	220
bottom comp.	12	400
wall comp.	n/a	600
remed. comp.	n/a	350

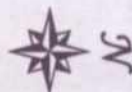
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATE _____ 4/30/2003 _____ PRINTED NAME _____ Kristin Farris _____

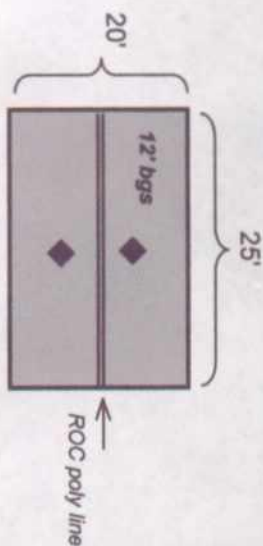
SIGNATURE _____ *Kristin Farris* _____ TITLE _____ Projects Scientist _____

BD K-4 North & South 20' x 25' x 12' Excavation

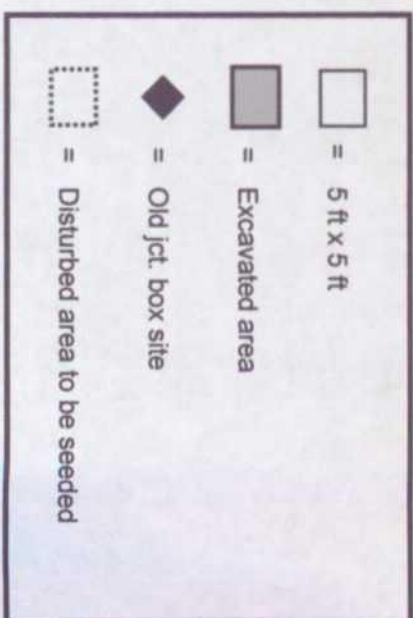
ROAD



NEW K-4
JCT. BOX



VEGETATION



BD jct. K-4 North & jct. K-4 South



↑ Impact Excavation ↓



BD jct. K-4 North & jct. K-4 South



New K-4 Junction Box Located 50 ft West of Old Box Locations



Barren Area That Will Be Re-Seeded (new K-4 box in background)

May 16, 2003

BD jct. K-4 North & South

SEEDING



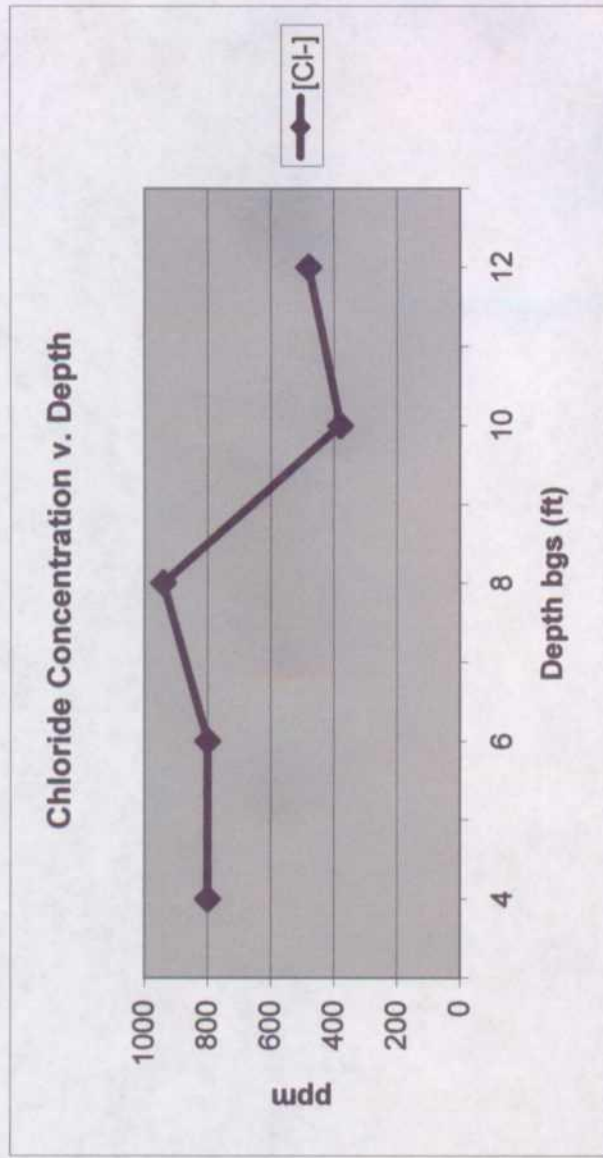
CHLORIDE CONCENTRATION CURVE

RICE Operating Company

BD jcts. K-4 North & K-4 South
T22S, R37E

Depth bgs (ft)	[Cl-] ppm
4	800
6	800
8	940
10	380
12	480

Groundwater = 93 ft



ANALYTICAL REPORT

Prepared for:

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

Project: K-4

PO#:

Order#: G0306331

Report Date: 04/29/2003

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#: G0306331
Project:
Project Name: K-4
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>
0306331-01	Rem. Pile Comp.	SOIL	4/23/03 13:00	4/24/03 10:20	4 oz glass	Ice
<u>Lab Testing:</u>		Rejected: No	Temp:	3.0 C		
8015M						
8021B/5030 BTEX						
Chloride						

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0306331
Project:
Project Name: K-4
Location: BD

Lab ID: 0306331-01
Sample ID: Rem. Pile Comp.

8015M

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		4/24/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	113	10.0
DRO, >C12-C35	1,960	10.0
TOTAL, C6-C35	2,073	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	107%	70	130
1-Chlorooctadecane	114%	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>		
0005320-02		4/24/03 19:57	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	97%	80	120
Bromofluorobenzene	100%	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

Raland K. Tuttle 4-29-03

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0306331
Project:
Project Name: K-4
Location: BD

Lab ID: 0306331-01
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	372	mg/kg	1	20	9253	4/28/03	SB

Approval:

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.

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#: G0306331

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0005326-02			<10.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0306328-04	0	952	796	83.6%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0306328-04	0	952	786	82.6%	1.3%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0005326-05		1000	815	81.5%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0306331

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0005320-02			<0.025		
Toluene-mg/kg		0005320-02			<0.025		
Ethylbenzene-mg/kg		0005320-02			<0.025		
p/m-Xylene-mg/kg		0005320-02			<0.025		
o-Xylene-mg/kg		0005320-02			<0.025		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0306328-04	0	0.1	0.096	96.%	
Toluene-mg/kg		0306328-04	0	0.1	0.093	93.%	
Ethylbenzene-mg/kg		0306328-04	0	0.1	0.091	91.%	
p/m-Xylene-mg/kg		0306328-04	0	0.2	0.186	93.%	
o-Xylene-mg/kg		0306328-04	0	0.1	0.088	88.%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0306328-04	0	0.1	0.102	102.%	6.1%
Toluene-mg/kg		0306328-04	0	0.1	0.099	99.%	6.3%
Ethylbenzene-mg/kg		0306328-04	0	0.1	0.097	97.%	6.4%
p/m-Xylene-mg/kg		0306328-04	0	0.2	0.199	99.5%	6.8%
o-Xylene-mg/kg		0306328-04	0	0.1	0.095	95.%	7.7%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0005320-05		0.1	0.107	107.%	
Toluene-mg/kg		0005320-05		0.1	0.105	105.%	
Ethylbenzene-mg/kg		0005320-05		0.1	0.100	100.%	
p/m-Xylene-mg/kg		0005320-05		0.2	0.205	102.5%	
o-Xylene-mg/kg		0005320-05		0.1	0.095	95.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0306331

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0005346-01			<20.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0306331-01	372	500	851	95.8%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0306331-01	372	500	868	99.2%	2.0%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0005346-04		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: Kristin Farris

Project Name: K-4

Company Name Rice

Project #:

Company Address: 122 W Taylor

Project Loc:

City/State/Zip: Ho 665, NM 88240

三〇五

Telephone No:

Fax No.:

Sampler Signature:

[illegible]

Special Instructions

Fax to Rice

Relinquished by:

Date	4-23-03
------	---------

Received by:

Received by: Antonio Garcia
Received by E-OT: 2/16/10

Received by:

[illegible]

Time

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

Time

Time

Sample Containers Intact?

Temperature Upon Receipt:

Laboratory Comments:

300

ANALYTICAL REPORT

Prepared for:

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

Project: K-4

PO#:

Order#: G0306253

Report Date: 04/16/2003

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#: G0306253
Project:
Project Name: K-4
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>
0306253-01	Bottom Comp.	SOIL	4/14/03 11:00	4/14/03 17:00	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 4 C		
	8015M					
	8021B/5030 BTEX					
	Chloride					
0306253-02	Wall Comp.	SOIL	4/14/03 11:05	4/14/03 17:00	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 4 C		
	8015M					
	8021B/5030 BTEX					
	Chloride					

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0306253
Project:
Project Name: K-4
Location: BD

Lab ID: 0306253-01
Sample ID: Bottom Comp.

8015M

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		4/15/03	1	1	WL	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	32.7	10.0
TOTAL, C6-C35	32.7	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	88%	70	130
1-Chlorooctadecane	82%	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>		
0005235-02		4/15/03 16:16	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	99%	80	120
Bromofluorobenzene	100%	80	120

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0306253
Project:
Project Name: K-4
Location: BD

Lab ID: 0306253-02
Sample ID: Wall Comp.

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		4/15/03	1	1	WL	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	92.0	10.0
TOTAL, C6-C35	92	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	90%	70	130
1-Chlorooctadecane	86%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0005235-02		4/15/03 16:34	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	100%	80	120
Bromofluorobenzene	97%	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

4-21-03

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0306253
Project:
Project Name: K-4
Location: BD

Lab ID: 0306253-01
Sample ID: Bottom 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	<20.0	mg/kg	1	20	9253	4/15/03	SB

Lab ID: 0306253-02
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	638	mg/kg	1	20	9253	4/15/03	SB

Approval:

Roland K. Tuttle
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.

4-21-03
Date

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0306253

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0005240-02			<10.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0306253-01	33	952	860	86.9%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0306253-01	33	952	1000	101.6%	15.1%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0005240-05		1000	760	76.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0306253

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0005235-02			<0.025		
Toluene-mg/kg		0005235-02			<0.025		
Ethylbenzene-mg/kg		0005235-02			<0.025		
p/m-Xylene-mg/kg		0005235-02			<0.025		
o-Xylene-mg/kg		0005235-02			<0.025		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0306253-02	0	2.5	2.78	111.2%	
Toluene-mg/kg		0306253-02	0	2.5	2.72	108.8%	
Ethylbenzene-mg/kg		0306253-02	0	2.5	2.72	108.8%	
p/m-Xylene-mg/kg		0306253-02	0	5	5.63	112.6%	
o-Xylene-mg/kg		0306253-02	0	2.5	2.71	108.4%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0306253-02	0	2.5	2.84	113.6%	2.1%
Toluene-mg/kg		0306253-02	0	2.5	2.70	108.%	0.7%
Ethylbenzene-mg/kg		0306253-02	0	2.5	2.64	105.6%	3.%
p/m-Xylene-mg/kg		0306253-02	0	5	5.43	108.6%	3.6%
o-Xylene-mg/kg		0306253-02	0	2.5	2.56	102.4%	5.7%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0005235-05		0.1	0.115	115.%	
Toluene-mg/kg		0005235-05		0.1	0.113	113.%	
Ethylbenzene-mg/kg		0005235-05		0.1	0.110	110.%	
p/m-Xylene-mg/kg		0005235-05		0.2	0.230	115.%	
o-Xylene-mg/kg		0005235-05		0.1	0.108	108.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0306253

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0005231-01			<20.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0306254-01	3170	500	3620	90.0%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0306254-01	3170	500	3600	86.0%	0.6%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0005231-04		5000	4960	99.2%	

