

1R - 427 - 116

REPORTS

DATE:

12-6-2001

**RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT**

927-116

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
EME	E-12	E	12	20S	36E	LEA	Length 10	Width 10	Depth 6

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER _____ BYRD _____ OTHER _____

Depth to Groundwater _____ 28 _____ feet NMOCD SITE ASSESSMENT RANKING SCORE: _____ 20 _____

Date Started _____ 10/26/2001 _____ Date Completed _____ 11/27/2001 _____ OCD Witness _____ NO _____

Soil Excavated _____ 90 _____ cubic yards Excavation Length _____ 25 _____ Width _____ 15 _____ Depth _____ 8 _____ feet

Soil Disposed _____ 0 _____ cubic yards Offsite Facility _____ Location _____

FINAL ANALYTICAL RESULTS: Sample Date _____ 11/27/2001 _____ Sample Depth _____ 8' _____

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	< 0.050	< 0.050	< 0.050	<0.015	<50	<50	864
BOTTOM	< 0.050	< 0.050	< 0.050	<0.015	<50	<50	1376
Boring @ 20'	<0.025	0.026	<0.025	<0.025	<10	17	35

General Description of Remedial Action: _____ Dug to 11' and found chlorides exceeding

1000 ppm. A soil boring was completed 11/14/01 and the results demonstrated chlorides

stopped before reaching groundwater. No indication of TPH was found during delineation.

The junction box was excavated to 8' and a compacted clay barrier and water proof box was

installed and backfilled. The clay liner will act as a barrier to reduce the hydraulic conductivity and

vertical transmissivity of the impacted soil, inhibiting the migration of chlorides. Excavated soil was

blended below NMOCD guidelines and used as backfill.

CHLORIDE FIELD TESTS

LOCATION	DEPTH	mg/kg
SIDEWALLS	6'	220
BOTTOM	8'	1350
Vertical trench	11'	1070
Soil Boring	5'	50
	10'	50
	15'	50
	20'	50
	25'	50

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

DATE _____ December 6, 2001 _____

PRINTED NAME _____ D. E. Anderson _____

SIGNATURE _____ *[Signature]* _____

TITLE _____ Project Leader - Environmental _____

Atkins Engineering
Associates, Inc.

2904 W. 2nd St., Roswell, NM 88202-3156

LOG OF BORING Rice E12

(Page 1 of 1)

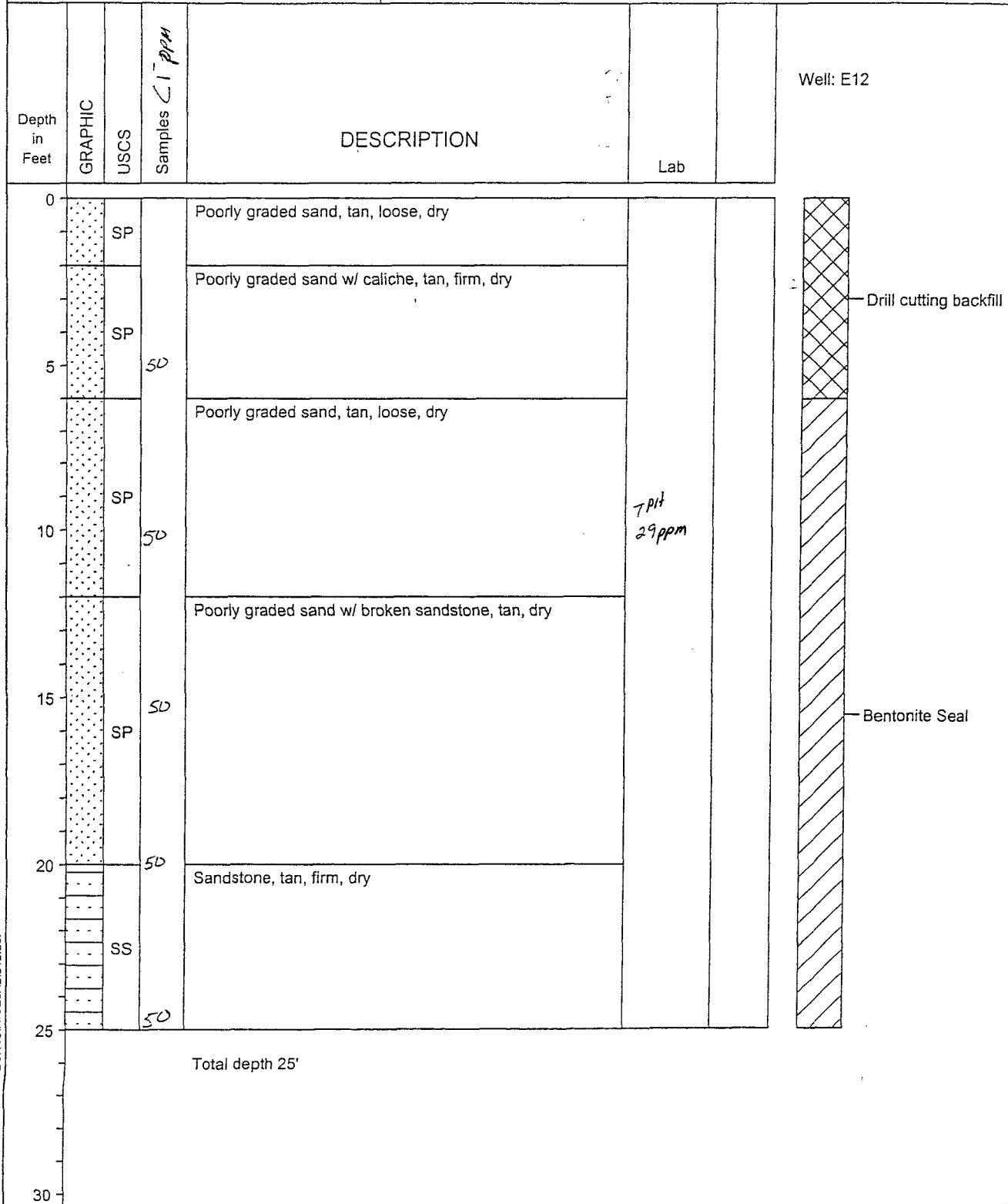
Rice Operating Co.
122 West Taylor
Hobbs, New Mexico 88240

Contact: Donnie Anderson

Job#: RICEENV.JAL.01

Date : 11-14-01
Drill Start :
Drill End :
Boring Location : Edge of pit

Site Location : Monument, NM
Auger Type : Air drill
Logged By : Mort Bates





PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Receiving Date: 11/27/01
Reporting Date: 11/28/01
Project Number: E-12
Project Name: E-12 BOX UPGRADE
Project Location: EME

Sampling Date: NOT GIVEN
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: HM
Analyzed By: BC/HM

LAB NUMBER	SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/Kg)	DRO (>C ₁₀ -C ₂₈) (mg/Kg)	CI* (mg/Kg)
ANALYSIS DATE		11/27/01	11/27/01	11/27/01
H8298-1	E-12 WALL COMPOSITE	<50	<50	864
H8298-2	E-12 BOTTOM COMPOSITE	<50	<50	1376
Quality Control		779	806	1050
True Value QC		800	800	1000
% Recovery		97.3	101	105
Relative Percent Difference		1.2	3.3	5.0

*Analyses performed on 1:4 w:v aqueous extracts.

Date _____

H6298A.XLS

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



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PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

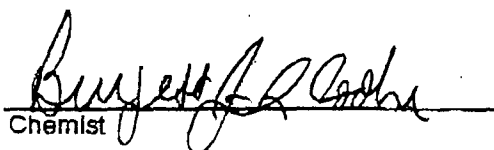
ANALYTICAL RESULTS FOR
RICE OPERATING CO.
ATTN: CHRIS RODRIGUEZ
122 W. TAYLOR
HOBBS, NM 88240
FAX TO: (505) 397-1471

Receiving Date: 11/27/01
Reporting Date: 11/28/01
Project Number: E-12
Project Name: E-12 BOX UPGRADE
Project Location: EME

Sampling Date: NOT GIVEN
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: HM
Analyzed By: BC

LAB NO.	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		11/27/01	11/27/01	11/27/01	11/27/01
H6298-1	E-12 WALL COMPOSITE	<0.005	<0.005	<0.005	<0.015
H6298-2	E-12 BOTTOM COMPOSITE	<0.005	<0.005	<0.005	<0.015
Quality Control		0.110	0.106	0.109	0.319
True Value QC		0.100	0.100	0.100	0.300
% Recovery		110	106	109	106
Relative Percent Difference		0.5	3.6	1.6	1.9

METHOD: EPA SW-846 8260


Chemist

11/28/01
Date

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

H6298B.XLS

22111 Beechwood, Abilene, TX 79603 101 East Mainland, Hobbs, NM 88240
(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

ANALYSIS REQUEST

+ Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476.

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

RICE OPERATING COMPANY
ATTN: DONNIE ANDERSON
122 W TAYLOR
HOBBS, NM 88240
FAX: 505-397-1471

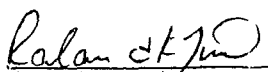
Sample Type: Soil
Sample Condition: Intact/ Iced/ 4 deg C
Project Name: EME Junction Box Upgrade
Project #: E-12
Project Location: Lea County, NM
PO#: 716

Sampling Date: 11/14/01
Receiving Date: 11/15/01
Analysis Date: 11/16/01

ELT#	FIELD CODE	Chloride mg/kg
0102026-01	20' Boring	35

QUALITY CONTROL	5050
TRUE VALUE	5000
% INSTRUMENT ACCURACY	101
SPIKED AMOUNT	625
ORIGINAL SAMPLE	22
SPIKE	654
SPIKE DUP	654
% EXTRACTION ACCURACY	101
BLANK	<5.00
RPD	0.0

Methods: SW 846-9253


Raland K. Tuttle

11-19-01
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

E.T.G.I.
ATTN: KEN DUTTON
2540 WEST MARLAND
HOBBS, NM 88240
FAX: 505-397-4701

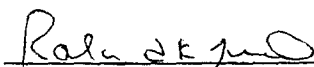
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Project #: E-12
Project Location: Lea County, NM
PO#: 716

Sampling Date: 11/14/01
Receiving Date: 11/15/01
Analysis Date: 11/16/01

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
0102026-01	20' Boring	<0.025	0.026	<0.025	<0.025	<0.025

QUALITY CONTROL	0.105	0.105	0.104	0.207	0.101
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% INSTRUMENT ACCURACY	105	105	104	104	101
SPIKED AMOUNT	0.100	0.100	0.100	0.200	0.100
ORIGINAL SAMPLE	<0.025	<0.025	<0.025	<0.025	<0.025
SPIKE	0.102	0.101	0.106	0.215	0.104
SPIKE DUP	0.103	0.102	0.106	0.216	0.104
% EXTRACTION ACCURACY	102	101	106	108	104
BLANK	<0.025	<0.025	<0.025	<0.025	<0.025
RPD	0.98	0.98	0.00	0.00	0.00

METHODS: EPA SW 846-8021B ,5030


Ralanda K. Tuttle

11-19-01
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

RICE OPERATING COMPANY
ATTN: DONNIE ANDERSON
122 W TAYLOR
HOBBS, NM 88240
FAX: 505-397-1471

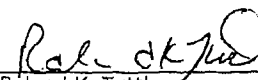
Sample Type: Soil
Sample Condition: Intact/ Iced/ 4 deg C
Project Name: EME Junction Box Upgrade
Project #: E-12
Project Location: Lea County, NM
PO#: 716

Sampling Date: 11/14/01
Receiving Date: 11/15/01
Analysis Date: 11/16/01

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg
0102026-01	20' Boring	<10	17

QUALITY CONTROL	458	519
TRUE VALUE	500	500
% INSTRUMENT ACCURACY	92	104
SPIKED AMOUNT	476	476
ORIGINAL SAMPLE	<10	47
SPIKE	494	564
SPIKE DUP	486	550
% EXTRACTION ACCURACY	102	106
BLANK	<10	<10
RPD	1.63	2.51

Methods: SW 846-8015M


Raland K. Tuttle

11-19-01
Date

12600 West I-20 East
Odessa, Texas 79763

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Company Name Rice Operating Company

City/State/Zip: Hobbs, NM 88240

Fax No: 505-397-1471

Sampler Signature:

Project #: E-12

Project Loc: Lea County NM

PO #: 716

[illegible]

**RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT**

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
EME	E-12	E	12	20S	36E	LEA	Length 10	Width 10	Depth 6

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER _____ BYRD _____ OTHER _____

Depth to Groundwater _____ 28 _____ feet NMOCD SITE ASSESSMENT RANKING SCORE: _____ 20 _____

Date Started _____ 10/26/2001 _____ Date Completed _____ 11/27/2001 _____ OCD Witness _____ NO _____

Soil Excavated _____ 90 _____ cubic yards Excavation Length _____ 25 _____ Width _____ 15 _____ Depth _____ 8 _____ feet

Soil Disposed _____ 0 _____ cubic yards Offsite Facility _____ Location _____

FINAL ANALYTICAL RESULTS: Sample Date _____ 11/27/2001 _____ Sample Depth _____ 8' _____

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	< 0.050	< 0.050	< 0.050	<0.015	<50	<50	864
BOTTOM	< 0.050	< 0.050	< 0.050	<0.015	<50	<50	1376

General Description of Remedial Action: Dug to 11' and found chlorides exceeding NMOCD guidelines. A soil boring was completed 11/14/01 and the results demonstrated chlorides have not impacted ground water. No indication of TPH was found during delineation or the soil bori The junction box was excavated to 8' and a compacted clay barrier and water proof box was installed and backfilled. The clay liner will act as a barrier to reduce the hydraulic conductivity and vertical transmissivity of the impacted soil, inhibiting the migration of chlorides. Excavated soil was blended below NMOCD guidelines and used as backfill.

CHLORIDE FIELD TESTS

LOCATION	DEPTH	mg/kg
SIDEWALLS	6'	220
BOTTOM	8'	1350
Soil Boring	5'	50
	10'	50
	15'	50
	20'	50
	25'	50

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

DATE _____ 12/06/2001 _____ PRINTED NAME _____ D. E. Anderson _____
SIGNATURE _____ *D. E. Anderson* _____ TITLE _____ Project Leader - Environmental _____

Atkins Engineering
Associates, Inc.

2904 W. 2nd St., Roswell, NM 88202-3156

LOG OF BORING Rice E12

(Page 1 of 1)

Rice Operating Co.
122 West Taylor
Hobbs, New Mexico 88240

Contact: Donnie Anderson

Job#: RICEENV.JAL.01

Date : 11-14-01
Drill Start :
Drill End :
Boring Location : Edge of pit

Site Location : Monument, NM
Auger Type : Air drill
Logged By : Mort Bates

Depth in Feet	GRAPHIC	USCS	Samples <i>C1 - pen</i>	DESCRIPTION	Lab	Well: E12
0		SP		Poorly graded sand, tan, loose, dry		
				Poorly graded sand w/ caliche, tan, firm, dry		
5		SP	<i>50</i>			
				Poorly graded sand, tan, loose, dry		
10		SP	<i>50</i>			
				Poorly graded sand w/ broken sandstone, tan, dry		
15		SP	<i>50</i>			
				Sandstone, tan, firm, dry		
20		SS	<i>50</i>			
25			<i>50</i>			
				Total depth 25'		
30						

*7 pit
29 ppm*

Drill cutting backfill

Bentonite Seal

**ANALYTICAL RESULTS FOR
RICE OPERATING CO.
ATTN: CHRIS RODRIGUEZ
122 W. TAYLOR
HOBBS, NM 88240
FAX TO: (505) 397-1471**

Receiving Date: 11/27/01
Reporting Date: 11/28/01
Project Number: E-12
Project Name: E-12 BOX UPGRADE
Project Location: EME

Sampling Date: NOT GIVEN
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: HM
Analyzed By: BC/HM

LAB NUMBER	SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/Kg)	DRO (>C ₁₀ -C ₂₈) (mg/Kg)	CI* (mg/Kg)
ANALYSIS DATE		11/27/01	11/27/01	11/27/01
H8298-1	E-12 WALL COMPOSITE	<50	<50	884
H8298-2	E-12 BOTTOM COMPOSITE	<50	<50	1376
Quality Control		779	806	1050
True Value QC		800	800	1000
% Recovery		97.3	101	105
Relative Percent Difference		1.2	3.3	5.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cr: Std. Methods 4500-CrB

***Analyses performed on 1:4 w:v aqueous extracts.**

Chemist

Date

H6298A.XLS

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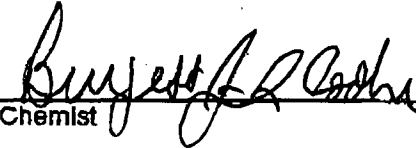
ANALYTICAL RESULTS FOR
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ATTN: CHRIS RODRIGUEZ
122 W. TAYLOR
HOBBS, NM 88240
FAX TO: (505) 397-1471

Receiving Date: 11/27/01
Reporting Date: 11/28/01
Project Number: E-12
Project Name: E-12 BOX UPGRADE
Project Location: EME

Sampling Date: NOT GIVEN
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: HM
Analyzed By: BC

LAB NO.	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		11/27/01	11/27/01	11/27/01	11/27/01
H6298-1	E-12 WALL COMPOSITE	<0.005	<0.005	<0.005	<0.015
H6298-2	E-12 BOTTOM COMPOSITE	<0.005	<0.005	<0.005	<0.015
Quality Control		0.110	0.106	0.109	0.319
True Value QC		0.100	0.100	0.100	0.300
% Recovery		110	106	109	106
Relative Percent Difference		0.5	3.6	1.6	1.9

METHOD: EPA SW-846 8260


Chemist

11/28/01
Date

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H6298B.XLS

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(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

Page _____ of _____

[illegible]

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ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

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122 W TAYLOR
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FAX: 505-397-1471

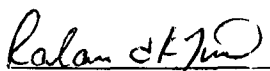
Sample Type: Soil
Sample Condition: Intact/ Iced/ 4 deg C
Project Name: EME Junction Box Upgrade
Project #: E-12
Project Location: Lea County, NM
PO#: 716

Sampling Date: 11/14/01
Receiving Date: 11/15/01
Analysis Date: 11/16/01

ELT#	FIELD CODE	Chloride mg/kg
0102026-01	20' Boring	35

QUALITY CONTROL	5050
TRUE VALUE	5000
% INSTRUMENT ACCURACY	101
SPIKED AMOUNT	625
ORIGINAL SAMPLE	22
SPIKE	654
SPIKE DUP	654
% EXTRACTION ACCURACY	101
BLANK	<5.00
RPD	0.0

Methods: SW 846-9253


Raland K. Tuttle

11-19-01
Date

ENVIRONMENTAL LAB OF , INC.

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E.T.G.I.
ATTN: KEN DUTTON
2540 WEST MARLAND
HOBBS, NM 88240
FAX: 505-397-4701

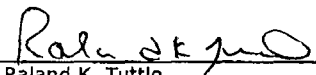
Sample Type: Soil
Sample Condition: Intact/ Iced/ 4 deg C
Project Name: EME Junction Box Upgrade
Project #: E-12
Project Location: Lea County, NM
PO#: 716

Sampling Date: 11/14/01
Receiving Date: 11/15/01
Analysis Date: 11/16/01

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
0102026-01	20' Boring	<0.025	0.026	<0.025	<0.025	<0.025

QUALITY CONTROL	0.105	0.105	0.104	0.207	0.101
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% INSTRUMENT ACCURACY	105	105	104	104	101
SPIKED AMOUNT	0.100	0.100	0.100	0.200	0.100
ORIGINAL SAMPLE	<0.025	<0.025	<0.025	<0.025	<0.025
SPIKE	0.102	0.101	0.106	0.215	0.104
SPIKE DUP	0.103	0.102	0.106	0.216	0.104
% EXTRACTION ACCURACY	102	101	106	108	104
BLANK	<0.025	<0.025	<0.025	<0.025	<0.025
RPD	0.98	0.98	0.00	0.00	0.00

METHODS: EPA SW 846-8021B ,5030


Raland K. Tuttle

11-19-01
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

RICE OPERATING COMPANY
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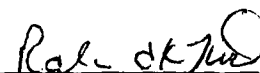
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Sample Condition: Intact/ Iced/ 4 deg C
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Project #: E-12
Project Location: Lea County, NM
PO#: 716

Sampling Date: 11/14/01
Receiving Date: 11/15/01
Analysis Date: 11/16/01

ELT#	FIELD CODE	GRO	DRO
		C6-C10 mg/kg	>C10-C28 mg/kg
0102026-01	20' Boring	<10	17

QUALITY CONTROL	458	519
TRUE VALUE	500	500
% INSTRUMENT ACCURACY	92	104
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SPIKE	494	564
SPIKE DUP	486	550
% EXTRACTION ACCURACY	102	106
BLANK	<10	<10
RPD	1.63	2.51

Methods: SW 846-8015M


Raland K. Tuttle

11-19-01
Date

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: EME JUNCTION BOX UPGRADE

Project #: E-12

Project Loc: Lea County NM

PO #: 716

Fax No: 505-397-1471

9114
J. L. Williams

Nov 19 01 02:07p