1R - 427 - 51

REPORTS

DATE:

2-27-2004

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
EME	L-6 EOL	L	6	22S	36E	Lea	box eliminated		

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER W. T. Tivis, Jr. OTHER _____

Depth to Groundwater 180 feet NMOCD SITE ASSESSMENT RANKING SCORE: 20 *

Date Started 12/16/2003 Date Completed 2/17/2004 OCD Witness No

Soil Excavated 52 cubic yards Excavation Length 10 Width 20 Depth 7 feet

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

FINAL ANALYTICAL RESULTS: **Sample Date** 12/18/2003 **Sample Depth** 7 ft bgs

Sample Location	PID ppm	GRO mg/kg	DRO mg/kg	Chloride mg/kg
SIDEWALLS	0.0	<10.0	<10.0	656
BOTTOM @ 7 ft	30.5	<10.0	<10.0	1170
REMEDIATED	52.1	<10.0	<10.0	656
SOIL BORE 80 ft	XXX	XXX	XXX	128

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

General Description of Remedial Action: The junction box was delineated vertically and laterally with a backhoe while PID readings and chloride tests were performed regularly. Although chloride concentrations were low and declined laterally, they did not exhibit a sufficient declination trend with depth. PID readings were minimal and laboratory TPH tests confirmed that concentrations are well below NMOCD guidelines. The 20 x 10 x 7-ft excavation was backfilled with the excavated soil that was landfarmed onsite. On 2/17/2004, a soil bore was performed to delineate the depth of chloride impact. Impact ceased at 80 ft while exhibiting a conclusive trend of decline; the bore hole was plugged with cuttings. The disturbed surface is expected to return to productive capacity at a normal rate. Chloride concentrations left in place at this site are not considered threatening to groundwater at 180 ft BGS. This box has been eliminated as it was re-plumbed straight through with a new poly pipeline.

** A windmill is located 440 ft North of the site.*

enclosures: chloride graph, photos, lab results, PID readings, soil bore log

CHLORIDE FIELD TESTS

LOCATION	DEPTH (ft)	ppm
Vertical	4	538
	5	599
	6	744
	7	683
4-wall comp.	n/a	659
bottom comp.	7	954
remed. comp.	n/a	531
Soil Bore	20	325
	40	794
	50	529

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

DATE 2/27/2004 PRINTED NAME Kristin Farris

SIGNATURE Kristin Farris TITLE Project Scientist

EME L-6 EOL

Undisturbed junction box 11/18/2003

Backhoe excavation 12/17/2003

Surface plate at backfilled site to identify former box and future soil bore location 12/30/2003

Soil bore delineation 2/17/2003

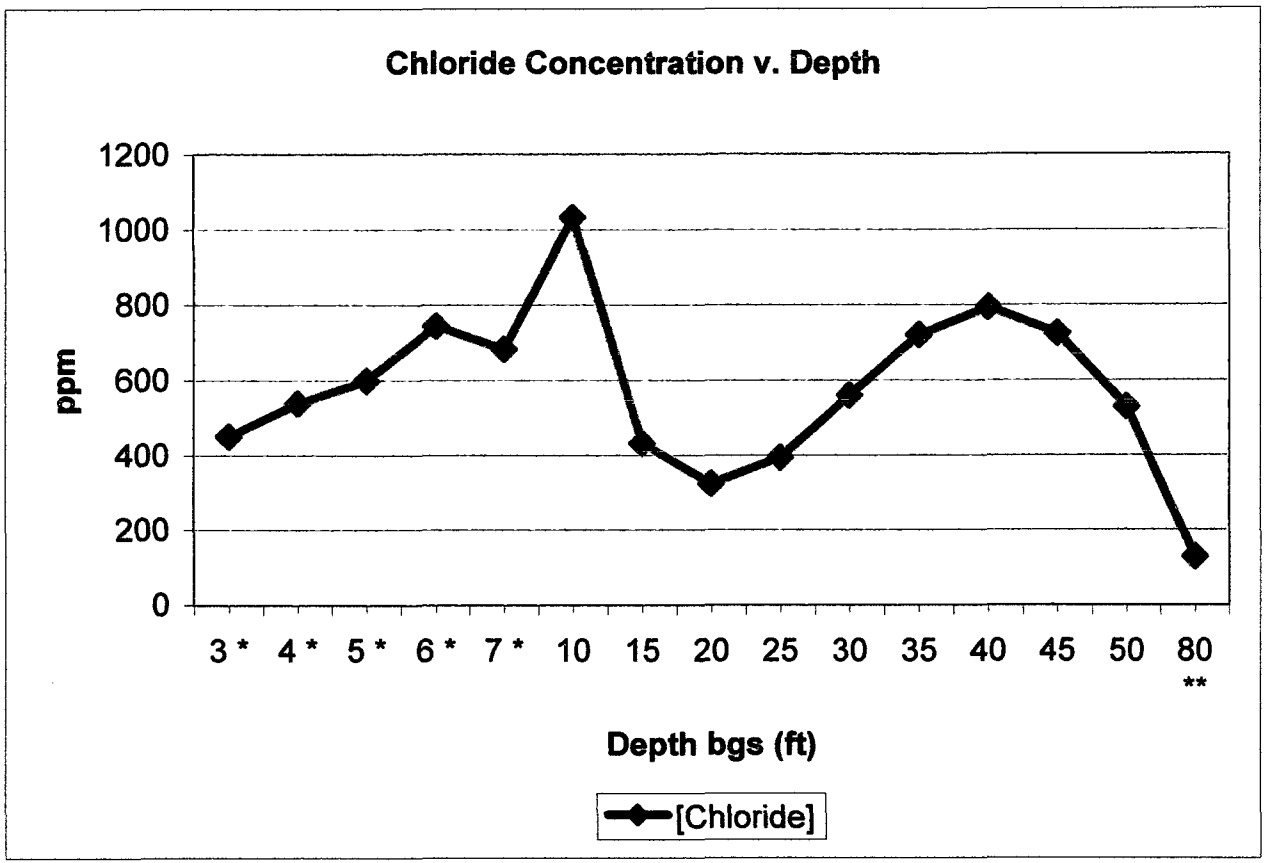
EME L-6 EOL

Unit L, Sec. 6, T22S, R36E

Vertical Delineation at Source

Depth bgs (ft)	[Cl⁻] ppm
3 *	451
4 *	538
5 *	599
6 *	744
7 *	683
10	1033
15	432
20	325
25	395
30	560
35	720
40	794
45	725
50	529
80 **	128

Groundwater = 180 ft



* *Backhoe samples*

** *laboratory test*

LOG OF BORING
K. Farris
RICE Operating Company

Logger:	Israel Juarez; Mort Bates	**Client:**	**Well ID:**
Driller:	Atkins Engineering Associates, Inc.	RICE Operating Company	
Drilling Method:	Hollow Stem Auger	**Project Name:**	
Start Date:	2/17/2004	L-6 EOL	
End Date:	2/17/2004	**Location:**	**SB-1**
Notes: TD = 80 ft Groundwater = 180 ft		EME SWD System	
		Sec. 6, T22S, R36E	
		Lea County, NM	

Depth (feet)	Split Spoon Sample		Description	Lithology	Additional Notes
	chloride	PID			
0.0			0-6 ft Silty Sand w/Caliche: loose, reddish tan, dry		Mixed lithology backfill from original excavation to 7 ft
5.0					
			6-10 ft Well Graded Sand w/Caliche: firm, tan, dry		
10.0	1033	*no*			
		odor	10-13 ft Caliche: hard, reddish tan, dry		
15.0	432	*no*	13-80 ft Silty Sands: loose, tan, dry		
		odor			
20.0	325	*no*			
		odor			
25.0	395	*no*			
		odor			remainder of bore backfilled with drill cuttings
30.0	560	*no*			
		odor			
35.0	720	*no*			
		odor			
40.0	794	*no*			
		odor			
45.0	725	*no*			
		odor			
50.0	529	*no*			
		odor			
55.0					
60.0					
65.0					
70.0					
75.0					
80.0					lab = 128 ppm

CARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

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

Receiving Date: 02/18/04
Reporting Date: 02/20/04
Project Number: NOT GIVEN
Project Name: INTRIPED EOL
Project Location: INTRIPED EOL 3.5 @ 80'

Analysis Date: 02/19/04
Sampling Date: 02/17/04
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: AH

LAB NUMBER	SAMPLE ID	Cl^- (mg/Kg)
H8472-1	INTRIDPED EOL 3.5 @ 80'	128
Quality Control		1010
True Value QC		1000
% Recovery		101
Relative Percent Difference		2.0

METHOD: Std. Methods	4500-Cl^-B

NOTE: Analysis performed on a 1:4 w:v aqueous extract.

Amy Hill
Chemist

2/20/04
Date

H8472.XLS

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

CARDINAL LABORATORIES, INC.
2111 Beechwood, Abilene, TX 79603 101 East Marland, Hobbs, NM 88240
(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

Page____ of ____

Company Name: RICE Operating	**BILL TO**
Project Manager: Kristin Farris	P.O. #:
Address: 122 W. Taylor	Company:
City: Hobbs State: NM Zip: 88240	Attn:
Phone #: (505) 393-9174 Fax #: (505) 397-1471	Address:
Project #: Project Owner:	City:
Project Name: Intrepid EOL	State: Zip:
Project Location: Intrepid EOL B.S. @ 80'	Phone #:
Sampler Name: K. Farris	Fax #:

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chlorides
H8472-1	Intrepid EOL BS. 80'	G	1			X					X		2/17/04	7:00pm	X

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 the client for the 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 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.

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished: Kristin Farris	Date:	Received By:	
Relinquished By:	Time:		
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Date: 2/18/04 Time:	Received By: (Lab Staff) Amy Hill	
		Sample Condition Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No	CHECKED BY: (Initials)

Phone Result:	☐ Yes	☐ No	Add'l Phone #:
Fax Result:	☐ Yes	☐ No	Add'l Fax #:
REMARKS:			

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

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PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

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

Receiving Date: 12/17/03
Reporting Date: 12/19/03
Project Number: NOT GIVEN
Project Name: BURGANDY L.H. B-31 EOL
Project Location: LEA CO., NM

Sampling Date: 12/17/03
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: BC/AH

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/Kg)	DRO (>C_{10}-C_{28}) (mg/Kg)	Cl* (mg/Kg)
ANALYSIS DATE		12/17/03	12/17/03	12/18/03
H8258-1	BOTTOM 10' COMP.	<10.0	<10.0	1540
H8258-2	4 WALL COMP	<10.0	<10.0	944
H8258-3	REMEDIATED BACKFILL	<10.0	<10.0	1090
Quality Control		744	810	940
True Value QC		800	800	1000
% Recovery		93.0	101	94.0
Relative Percent Difference		6.7	1.2	7.4

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl^-: Std. Methods 4500-Cl^-B
*Analyses performed on 1:4 w:v aqueous extracts.

Chemist

12/19/03
Date

H8258.XLS

CARDINAL LABORATORIES, INC.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

2111 Beechwood, Abilene, TX 79603 101 East Marland, Hobbs, NM 88240
(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

Page ____ of ____

Company Name: RICE Operating Company	BILL TO
Project Manager: Kristin Farris	P.O. #:
Address: 122 W. Taylor	Company: RICE
City: Hobbs, State: NM Zip: 88240	Attn:
Phone #: 393-9174 Fax #: 397-1471	Address:
Project #: Project Owner:	City:
Project Name: Intrepid Fed	State: Zip:
Project Location: Lea	Phone #:
Sampler Name: Gary Stell	Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER :	PRESERV: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: TPH 8015	Cl Chloride
H8271-1	Bottom 2' Comp	C	6			X					X		12/15	10:04	X	X
-2	4 Wall Comp	C	6			X					X		12/15	10:40	X	X
-3	Penetrated Landfill	C	6			X					X		12/15	10:31	X	X

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 the client for the 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 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.

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished:	Date:	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time:		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By: Gary Stell	Date: 12/15	Received By: (Lab Staff) Amy Hill	REMARKS: Fax a copy to me
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Time: 3:00	Sample Condition Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No	CHECKED BY: (Initials)

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

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
2540 WEST MARLAND
HOBBS, NEW MEXICO 88240
PHONE: (505) 397-4882 FAX: (505) 397-4701

VOC FIELD TEST REPORT FORM

MINI RAE PLUS CLASSIC PHOTOIONIZATION GAS DETECTOR

MODEL NO: PGM 761S
SERIAL NO: 103999
CALIBRATION GAS
GAS COMPOSITION: ISOBUTYLENE 100 PPM
AIR BALANCE
LOT NO: 67401
FILL DATE: 12-18-03
EXP. DATE: 11/04
ACCURACY: 100ppm ± 2%
METER READING
ACCURACY: 100.1

SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE
EMB	Intrepid E.L	L	6	22	36

Ralph C Barton

SAMPLE	PID RESULT	SAMPLE	PID RESULT
Composite		5' West	0.0
Sample			
		5' East	0.0
Bottom 7'	30.5		
4 Wall	0.0		
Remediated			
Backfill	52.1		
2' North	0.0		
10' South	0.0		

I certify that I have calibrated the above instrument in accordance to the manufacture operation manual.

[signature] — Signature
Field tech — Title
12-28-03 — Date