

1R - 426-94

## REPORTS

DATE:

3/18/2005

BD K-21-2 Vent

1R0426-94

# 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
BD	K-21-2 vent	K	21	21S	37E	Lea	moved 15 ft southwest		

LAND TYPE: BLM \_\_\_\_\_ STATE \_\_\_\_\_ FEE LANDOWNER Wantz Estate OTHER \_\_\_\_\_

Depth to Groundwater 70 feet NMOCD SITE ASSESSMENT RANKING SCORE: 10

Date Started 6/11/2004 Date Completed 7/9/2004 OCD Witness No

Soil Excavated 177 cubic yards Excavation Length 21 Width 19 Depth 12 feet

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

FINAL ANALYTICAL RESULTS: Sample Date 6/12/2004,  
6/16/2004 Sample Depth 12 ft

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.

**CHLORIDE FIELD TESTS**

Sample Location	PID ppm	GRO mg/kg	DRO mg/kg	Chloride mg/kg
4-WALL COMP.	12.1	<10.0	74.2	1570
BOTTOM COMP.	4.9	<10.0	71.9	1040
REMEDI. BACKFILL	44.5	<10.0	252	672
10 ft EAST @ 15 ft BGS	3.4	XXX	XXX	528

LOCATION	DEPTH (ft)	ppm
12 ft East of junction ~ area of highest impact	6	1021
	8	1322
	10	1654
	12	1265
	13	966
	14	843
	15	731
4-wall comp.	n/a	1573
bottom comp.	12	1121
remedi. backfill	n/a	607

General Description of Remedial Action: This junction box contained a vent.

The junction was moved approx. 15 ft southwest with the pipeline replacement. The box was removed from the former junction location and the site was delineated using a backhoe while chloride field tests and PID readings were conducted at regular intervals, producing

a 23 x 19 x 12 ft deep excavation. PID readings were relatively low and lab results on the

composite samples confirmed TPH concentrations met NMOCD guidelines. Chloride concentrations generally declined with depth. The excavated soil was blended on site and backfilled into the hole to 6 ft BGS. At 6 ft, a 1-ft-thick compacted clay barrier was installed to inhibit further migration of remaining chloride. The remaining spoils were backfilled on top of the clay and contoured to the surrounding surface. The disturbed surface was seeded with a blend of native vegetation. The area surrounding the disturbed area is covered with established, healthy vegetation.

An identification plate has been placed on the surface to mark the presence of a clay barrier below. The new watertight junction box was built 15 ft southwest of this location.

enclosures: chloride graph, photos, lab results, PID screenings, clay test, cross-section

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

SITE SUPERVISOR Joe Gatts SIGNATURE not available COMPANY RICE Operating Company

REPORT ASSEMBLED BY Kristin Farris Pope SIGNATURE Kristin Farris Pope

DATE 3/18/2005 TITLE Project Scientist

## BD K-21-2 vent



vertical delineation at former box site (looking north) 6/11/2004



delineation & excavation 10 ft north of junction 6/11/2004



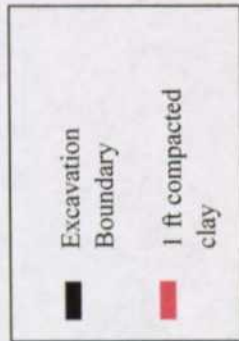
delineation & excavation 15 ft west of junction 6/15/2004



# BD K-21-2 vent

21 x 19 x 12-ft-deep

Excavation Cross-Section

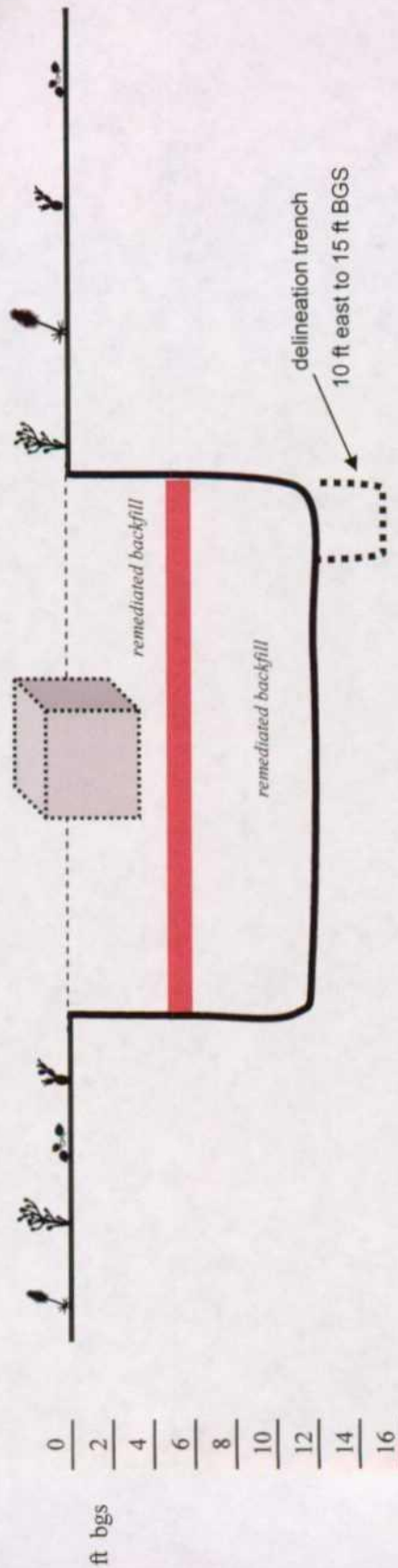


21 ft

W

former junction box site

E



\* New junction box has been built 15 ft southwest of the former box site.

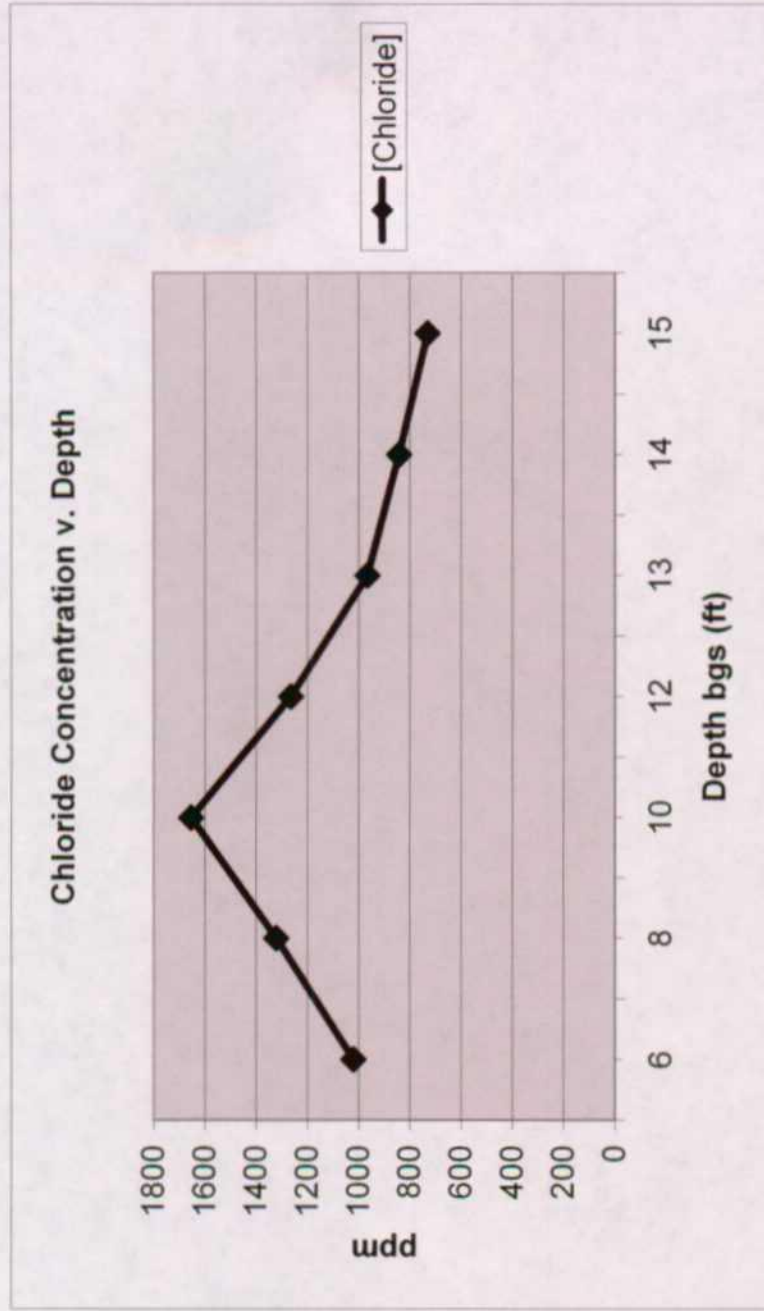
# BD K-21-2 vent

T21S, R37E

10 ft East of junction

Depth bgs (ft)	[Cl <sup>-</sup> ] ppm
6	1021
8	1322
10	1654
12	1265
13	966
14	843
15	731

Groundwater = 70 ft



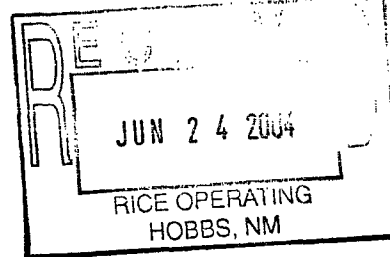


# ARDINAL LABORATORIES

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: J. GATTS  
122 W. TAYLOR  
HOBBS, NM 88240  
FAX TO: (505) 397-1471



Receiving Date: 06/17/04  
Reporting Date: 06/18/04  
Project Number: NOT GIVEN  
Project Name: K-21-2  
Project Location: BD

Sampling Date: 06/16/04 & 06/12/04  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: BC  
Analyzed By: BC/AH

LAB NUMBER	SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/Kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/Kg)	Cl* (mg/Kg)
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ANALYSIS DATE		06/17/04	06/17/04	06/18/04
H8833-1	BOTT. COMP. @ 12' BGS	<10.0	71.9	1040
H8833-2	4 WALL COMP.	<10.0	74.2	1570
H8833-3	REMD. BACKFILL	<10.0	252	672
H8833-4	10' EAST @ 15' BGS	-	-	528
Quality Control		803	808	1020
True Value QC		800	800	1000
% Recovery		100	101	102
Relative Percent Difference		3.9	1.8	1.0

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

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

Chemist

6/18/04  
Date

H8833.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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Page \_\_\_\_\_ of \_\_\_\_\_

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† Cardinal cannot accept verbal changes. Please fax written changes to (915) 673-7020.



FACE OPERATING COMPANY  
122 WEST TAYLOR  
HOBBS, NEW MEXICO 88240  
PHONE: (505) 393-9174 FAX: (505) 397-1471  
VOC FIELD TEST REPORT FORM  
MINI RAE PLUS CLASSIC PHOTOIONIZATION GAS DETECTOR

MODEL NO: PGM 761S  
CALIBRATION GAS  
GAS COMPOSITION: ISOBUTYLENE  
AIR  
LOT NO: 02-22-30  
EXP. DATE: 11/20/04  
METER READING  
ACCURACY: 100.1

SERIAL NO: 104412

100 PPM  
BALANCE  
FILL DATE: 5/20/03  
ACCURACY: ± 0.2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE
BD	K-21-2	K	21	21	37

SAMPLE	PID RESULT	SAMPLE	PID RESULT
10' N WALL	10.3		
9' S WALL	13.6		
11' W WALL	11.5		
10' E WALL	9.4		
4 WALL Comp	12.1		
Both Comp at 12' bgs	4.9		
REMP BACKFILL	44.5		

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

J. Smith  
Signature

6/16/04  
Date



LABORATORY TEST REPORT  
**PETTIGREW & ASSOCIATES, P.A.**  
1110 N. GRIMES  
HOBBS, NM 88240  
(505) 393-9827



DEBRA P. HICKS, P.E./L.S.I.  
WILLIAM M. HICKS, III, P.E./P.S.

**To:** Rice Operating  
Attn: Carolyn Haynes  
122 W. Taylor  
Hobbs, NM 88240

**Material:** Red Clay

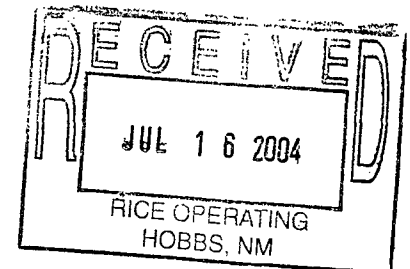
**Test Method:** ASTM: D 2922

**Project:** K-21-2-BD

**Date of Test:** July 8, 2004

**Depth:** Finished Subgrade

Test No.	Location	Dry Density % Maximum	% Moisture	Depth
SG-1	Pit - 10' E. & 10' S. of the NW Corner	98.4	24.1	



**Control Density:** 109.5  
ASTM: D 698

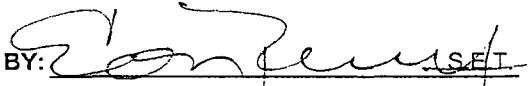
**Optimum Moisture:** 16.6

**Required Compaction:** 95%

**Lab No.:** 04 7402-7403

**Copies To:** Rice

**PETTIGREW & ASSOCIATES**

BY:  SET