

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
REMED. 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
remed. 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

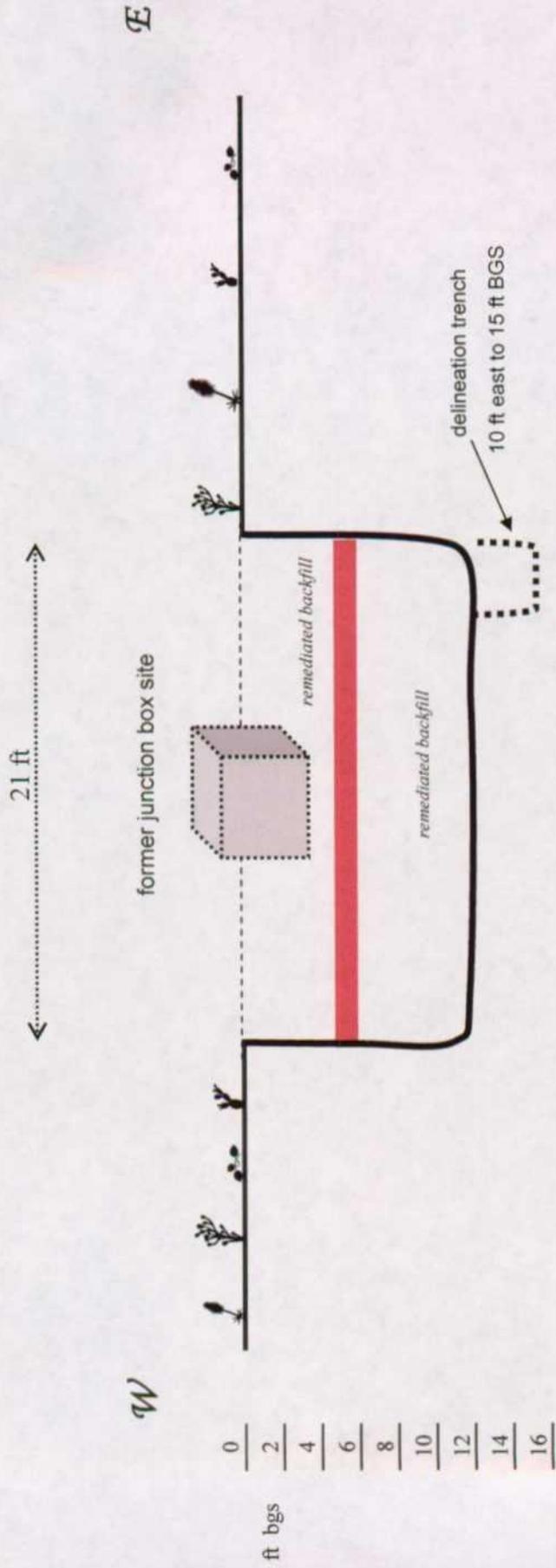
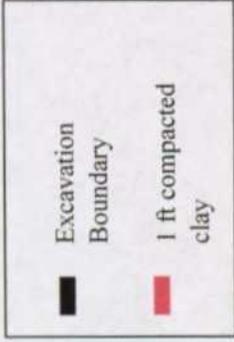


delineation & excavation 15 ft west of junction 6/15/2004

BD K-21-2 vent

21 x 19 x 12-ft-deep

Excavation Cross-Section



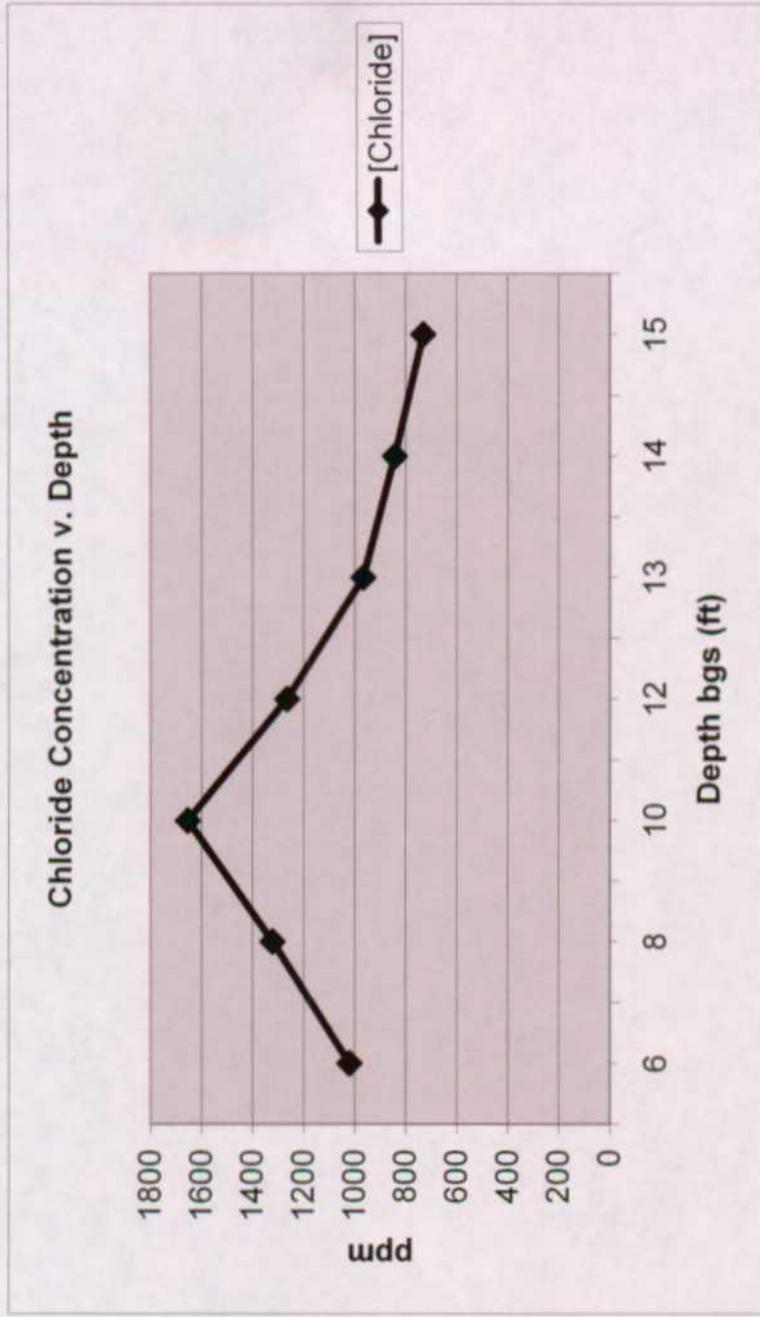
* New junction box has been built 15 ft southwest of the former box site.

BD K-21-2 vent

T21S, R37E

10 ft East of junction

Depth bgs (ft)	[Cl ⁻] ppm
6	1021
8	1322
10	1654
12	1265
13	966
14	843
15	731



Groundwater = 70 ft

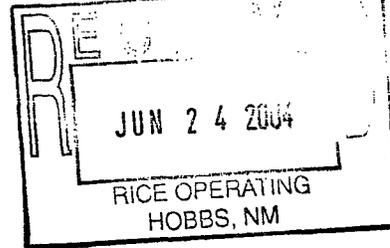


ARDINAL LABORATORIES

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



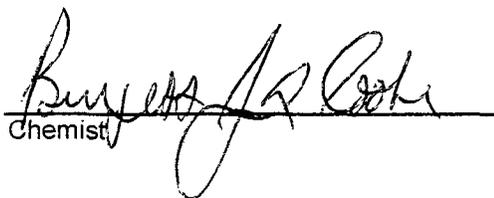
Receiving Date: 06/17/04
Reporting Date: 06/18/04
Project Number: NOT GIVEN
Project Name: K-21-2
Project Location: BD

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	DRO	CI*
		(C ₆ -C ₁₀) (mg/Kg)	(>C ₁₀ -C ₂₈) (mg/Kg)	(mg/Kg)

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; CI: Std. Methods 4500-CI'B
*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.



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

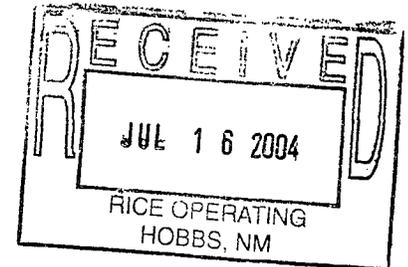
Test Method: ASTM: D 2922

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

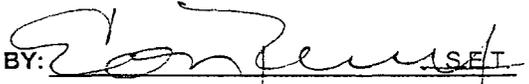
Optimum Moisture: 16.6

Required Compaction: 95%

Lab No.: 04 7402-7403

Copies To: Rice

PETTIGREW & ASSOCIATES

BY:  SET