1R - 426-198

REPORTS

DATE:

1-20-09

29

BD Jct J-1-2 Vent

1R426-198

RECEIVED
MAR 25 2009
Environmental Bureau
Oil Conservation Division

CLOSURE

RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
							Length	Width	Depth
Blinebry-Drinkard (BD)	Jct. J-1-2 vent	J	1	22S	36E	Lea	eliminated		

LAND TYPE: BLM X STATE ___ FEE LANDOWNER _____ OTHER _____

Depth to Groundwater 137 feet · NMOCD SITE ASSESSMENT RANKING SCORE: 10

Date Started 3/18/2008 Date Completed 10/24/2008 OCD Witness no

Soil Excavated 44.4 cubic yards Excavation Length 10 Width 10 Depth 12 feet

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

FINAL ANALYTICAL RESULTS:

Sample Date 4/18/2008, 10/24/2008 **Sample Depth** 12 ft, 40 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.

Sample Location	PID (field) ppm	GRO mg/kg	DRO mg/kg	Chloride mg/kg
4-WALL COMP.	0.3	<10.0	384	656
BOTTOM COMP.	0.0	<10.0	61.3	608
BLENDED BACKFILL	0.7	<10.0	302	528
SOIL BORING 15' grab		<10.0	137	416
SOIL BORING 40' grab		<10.0	<10.0	240

CHLORIDE FIELD TESTS

LOCATION	DEPTH	mg/kg
4-wall comp.	n/a	472
bottom comp.	12'	634
blended backfill	n/a	518
background	6"	99
SOIL BORING at 5 ft SW of the junction (source) 10/24/2008	15'	454
	20'	420
	25'	208
	30'	219
	35'	252
	40'	115

General Description of Remedial Action: This junction was eliminated during the pipeline replacement/upgrade program. After the former junction box was removed, an investigation was conducted using a backhoe to collect soil samples at regular intervals producing a 10x10x12-ft-deep excavation. Chloride field tests were performed on each sample yielding some elevated concentrations. Organic vapors were measured using a PID, which yielded low concentrations. Representative composite samples were sent to a commercial laboratory for analysis of chloride and TPH. The excavated soil was blended on site and returned to the excavation up to 6 ft below ground surface (BGS). At 6-5 ft BGS, a 1-ft thick clay barrier was installed with a clay density tests performed on 5/5/2008. The remaining fill was used to backfill the excavation to ground surface and contoured to the surrounding area. On 5/9/2008, the site was seeded with a blend of native vegetation and is expected to return to a productive capacity at a normal rate. An identification plate was placed on the surface at the former junction site to mark the presence of the clay below. To further investigate depth of chloride presence, a soil boring was initiated on 10/24/2008 at 5 ft SW of the former junction box. The boring was advanced to 40 ft BGS while soil samples were collected every 5 ft and field tested for chloride concentrations. The 15 and 40 ft sample was analyzed by a commercial laboratory for chlorides which confirmed low concentrations. The entire borehole was plugged with bentonite to ground surface.

enclosures: photos, lab results, PID field screenings, boring data, cross-section, clay test, chloride curve

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

REPORT ASSEMBLED BY Katie Jones INITIAL KJ COMPANY RICE OPERATING COMPANY

SITE SUPERVISOR Larry Bruce Baker Jr. SIGNATURE Larry Bruce Baker Jr.

DATE 1-20-09 TITLE PROJECT LEADER

BD Jct. J-1-2 vent

Unit J, Section 1, T22S, R36E

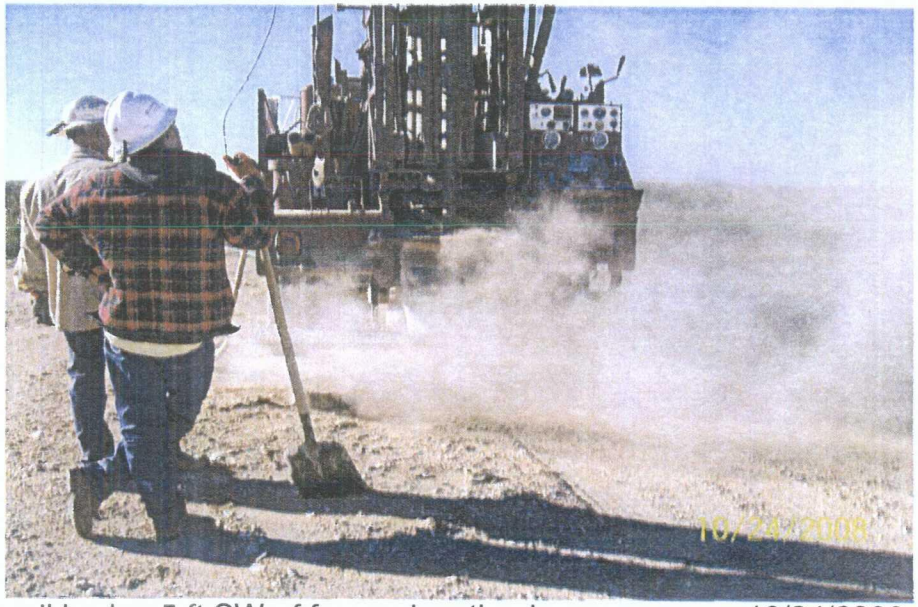
undisturbed junction box, facing north 2/14/2006

collecting a soil sample, facing west 3/18/2008

blending excavated soil 4/18/2008

clay density test 5/5/2008

seeding backfilled site 5/9/2008



soil boring 5 ft SW of former junction box 10/24/2008

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: BRUCE BAKER
122 W. TAYLOR
HOBBS, NM 88240
FAX TO: (575) 397-1471

Receiving Date: 04/18/08
Reporting Date: 04/22/08
Project Owner: NOT GIVEN
Project Name: BD JCT. J-1-2
Project Location: BD JCT. J-1-2

Sampling Date: 04/18/08
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: CK/HM

COPY

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)	Cl* (mg/kg)
ANALYSIS DATE		04/21/08	04/21/08	04/21/08
H14683-1	5 PT. BTTM COMP. @ 12'	<10.0	61.3	608
H14683-2	4 WALL COMP. 10X10	<10.0	384	656
H14683-3	BLENDED BACKFILL	<10.0	302	528
Quality Control		550	586	500
True Value QC		500	500	500
% Recovery		110	117	100
Relative Percent Difference		3.9	10.8	2.0

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

RECEIVED
APR 24 2008
RICE OPERATING
HOBBS, NM

Chemist

04/23/08
Date

H14683TCL RICE

CARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

Company Name:	Rice Operating Co
Project Manager:	Bruce Baker
Address:	122 W Taylor
City:	Hobbs State: NM Zip: 88240
Phone #:	393-9174 Fax #: 397-1471
Project #:	Project Owner:
Project Name:	BD Jct J-1-2
Project Location:	BD Jct J-1-2
Sampler Name:	Bruce Baker

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Cl-	TPH 8015M	BTEX 8021B
H14683-1	5pt. Bttm Comp. @12'	C				✓					✓		4-18-08	1:20pm	✓	✓	
-2	4 Wall Comp. 10x10	C				✓					✓		4-18-08	2:10pm	✓	✓	
-3	Blended Backfill	C				✓					✓		4-18-08	2:37pm	✓	✓	

Relinquished By: Bruce Baker	Date: 4-18-08 Time: 4:20	Received By: Vicki Colbert	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	Fax Result: ☐ Yes ☐ No Add'l Fax #:

REMARKS: Email results to bbaker@riceswd.com
& CC to jpurvis@ricswd.com

Delivered By: (Circle One) Sampler - UPS - Bus - Other:

Sample Condition: Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No

CHECKED BY: (Initials) MRB

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

RICE OPERATING COMPANY

122 West Tayor Hobbs, NM 88240
PHONE: (505) 393-9174 FAX: (505) 397-1471
PID METER CALIBRATION & FIELD REPORT FORM

CK. MODEL NO.		MODEL: PGM 7300	SERIAL NO: 590-000183
	✓	MODEL: PGM 7600	SERIAL NO: 110-013676
		MODEL: PGM 7600	SERIAL NO: 110-12383
		MODEL: PGM 7600	SERIAL NO: 110-023920

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

COPY

LOT NO : 07-3353	EXPIRATION DATE: 4/12/09
FILL DATE: 10/12/07	METER READING ACCURACY: 100ppm

ACCURACY : +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
BD	J-1-2	J	1	22S	36E

SAMPLE ID	PID	SAMPLE ID	PID
5pt. Bttm @ 12'	0		
4 wall Comp 10x10	0.3		
Blended Backfill	0.7		

I verify that I have calibrated the above insrument in accordance to the namufacture operation manual.

SIGNATUE: Bruce Baden DATE: 4-18-08

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: HACK CONDER
122 W. TAYLOR
HOBBS, NM 88240
FAX TO: (575) 397-1471

Receiving Date: 10/24/08
Reporting Date: 10/27/08
Project Number: NOT GIVEN
Project Name: BD JCT J-1-2
Project Location: BD JCT J-1-2

Sampling Date: 10/24/08
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: AB/HM

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)	Cl* (mg/kg)
ANALYSIS DATE		10/25/08	10/25/08	10/27/08
H16193-1	SB #1 @ 15'	<10.0	137	416
H16193-2	SB #1 @ 40'	<10.0	<10.0	240
Quality Control		597	537	490
True Value QC		500	500	500
% Recovery		119	107	98.0
Relative Percent Difference		17.8	9.4	2.0

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

10/28/08
Date

H16193 TCL RICE

CARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

Company Name: Rice Operating Company	**BILL TO**
Project Manager: Hack Conder	P.O. #:
Address: 122 West Taylor	Company:
City: Hobbs State: NM Zip: 88240	Attn:
Phone #: 393-9174 Fax #: 397-1471	Address:
Project #: Project Owner:	City:
Project Name: BD jct J-1-2	State: Zip:
Project Location: BD jct J-1-2	Phone #:
Sampler Name: Lara Weinheimer	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	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chlorides	TPH 8015M	COC								
H16193-1	SB #1 @ 15'	C	1			✓					✓		10-24-08	9:03	✓	✓									
-2	SB #1 @ 40'	C	1			✓					✓		10-24-08	9:13	✓	✓									

Relinquished By: L. Weinheimer	Date: 10-24-08 Time: 1150	Received By:	Phone Result: ☐ Yes ☑ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	Fax Result: ☐ Yes ☑ No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition Cool: ☑ Yes ☐ No Intact: ☐ Yes ☐ No	CHECKED BY: (Initials) MCAB	REMARKS: email results Hconder@riceswd.com; jpurvis@riceswd.com; Lweinheimer@riceswd.com

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

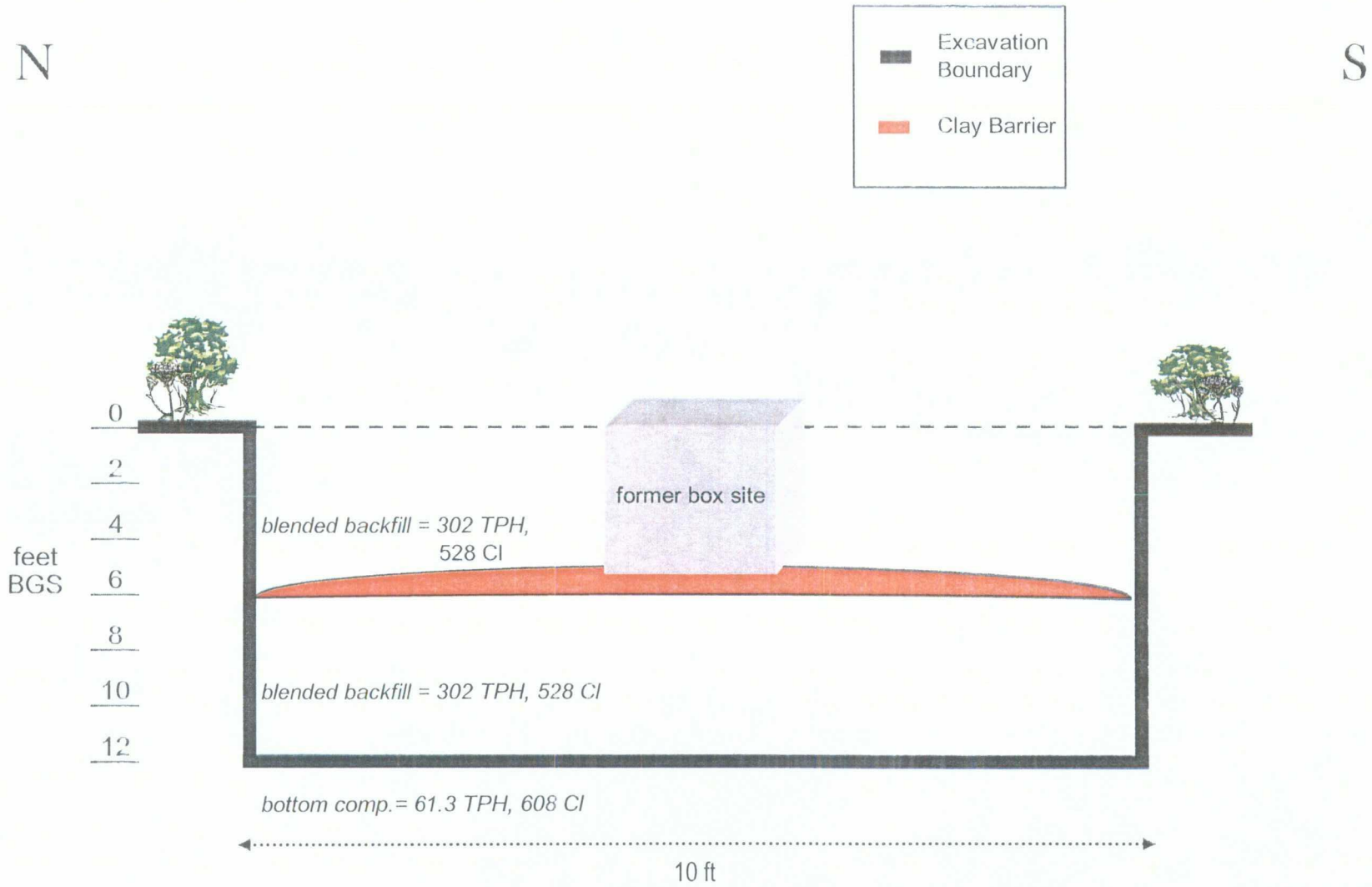
NEED SAMPLES BACK, PLEASE

Logger:	Lara Weinheimer	**Client:**	**Well ID:**
Driller:	Harrison & Cooper, Inc. Drilling	RICE Operating Company	
Drilling Method:	Air rotary	**Project Name:**	
Start Date:	10-24-08	BD jct. J-1-2	
End Date:	10-24-08	**Location:**	SB - 1
Comments: Located 5 ft SW of former junction box TD = 40 ft GW = 91 ft		BD SWD System unit 'J' Sec.1 T22S, R36E Lea County, NM	

Depth (feet)	chloride field tests	PID	Description	Lithology	Soil Bore Construction
			10 - 20 ft VERY FINE TO FINE SAND caliche, light brown, dry		bentonite seal
15	454				
Lab	416				
20	420				
			20 - 25 ft VERY FINE TO FINE SAND caliche, chert, light brown, dry		
25	208				
			25 - 35 ft VERY FINE TO FINE SAND light brown, dry		
30	219				
35	252				
			35 - 40 ft VERY FINE TO FINE SAND caliche, chert, light brown, dry		
40	115				
Lab	240				

BD Jct. J-1-2 vent
Unit 'J', Sec. 1, T22S, R36E

Excavation Cross-Section



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

AASHTO R18
DEBRA P. HICKS, P.E./L.S.I.
WILLIAM M. HICKS. III, P.E./P.S.

To: Rice Operating Company
Attn: Hack Conder
122 W. Taylor
Hobbs, NM 88240

Material: Wallach Red Clay

Test Method: ASTM: D 2922

Project: General Information
BDJC J-1-2
Project No. 2008.1069

Date of Test: May 5, 2008

Depth: See Below

Depth of Probe: 6"

Test No.	Location	Dry Density % Max	% Moisture	Depth
SG 3	BDJC J-1-2 7' N. & 7' E. of SW Corner	90.0	14.9	4' Below FSG

Control Density: 102.8
ASTM: D 698

Optimum Moisture: 22.6%

Required Compaction: 90% - 95%

Densometer ID: 815

Lab No.: 08 4680-4682

Copies To: Rice Operating

PETTIGREW & ASSOCIATES

BY: Jerica M Hart

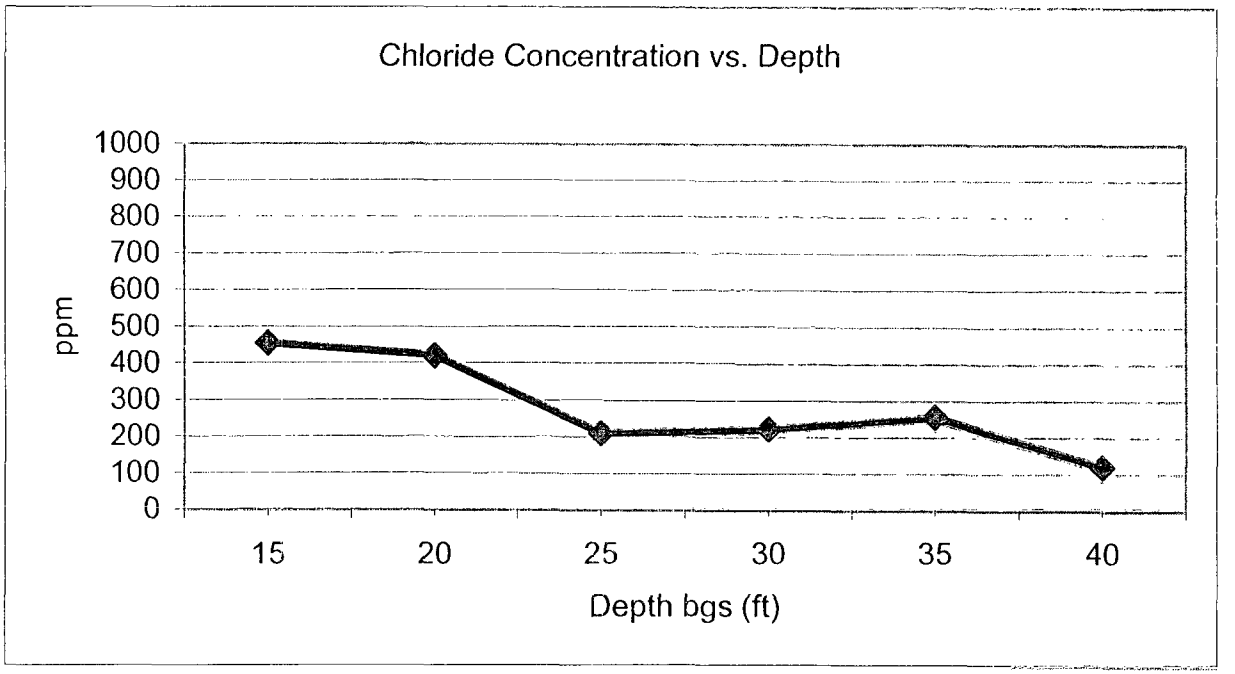
BY: _____ P.E.

BD Jct. J-1-2 vent

Unit 'J', Sec. 1, T22S, R36E

Soil boring samples at 5 ft southwest of the junction (source)

Depth bgs (ft)	[Cl-] ppm
15	454
20	420
25	208
30	219
35	252
40	115



Groundwater = 137 ft