1R - 423-21

REPORTS

DATE:

3-8-10

IR 423-21

Justis Jct D-2
2009

DISCLOSURE

RECEIVED

APR - 6 2010

Environmental Bureau
Oil Conservation Division

RICE OPERATING COMPANY
JUNCTION BOX DISCLOSURE* REPORT

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
							Length	Width	Depth
Justis	Jct. D-2	D	2	25S	37E	Lea	eliminated		

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

Depth to Groundwater 80 feet NMOCD SITE ASSESSMENT RANKING SCORE: 20

Date Started 6/9/2009 Date Completed 7/8/2009 OCD Witness no

Soil Excavated 177.8 cubic yards Excavation Length 20 Width 20 Depth 12 feet

Soil Disposed 48 cubic yards Offsite Facility Sundance Location Eunice, NM

FINAL ANALYTICAL RESULTS:

Sample Date 6/17/2009, 6/22/2009, 7/8/2009 **Sample Depth** 12 ft, 20 ft, 80 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	Chlorides mg/kg
4-WALL COMP.	3.2	<10.0	211	240
5PT BOTTOM COMP.	6.3	<10.0	32.3	1,810
BLENDED BACKFILL	2.1	<10.0	<10.0	128
SB #1 @ 20'	0.2	<10.0	<10.0	5,760
SB #1 @ 80'		<10.0	<10.0	1,120

CHLORIDE FIELD TESTS

LOCATION	DEPTH	mg/kg
4-wall comp.	n/a	927
bottom comp.	12'	1601
blended backfill	n/a	584
background	6"	133
SOIL BORING at 8 ft northwest of the junction (7/8/2009)	15'	1,020
	20'	4,856
	25'	1,446
	30'	658
	35'	354
	40'	444
	45'	287
	50'	466
	55'	737
	60'	839
	65'	722
	70'	647
	75'	1,080
	80'	1,055

General Description of Remedial Action: This junction box 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 creating a 20x20x12-ft deep excavation. Each sample was field tested for chlorides which yielded elevated concentrations. Organic vapors, measured using a PID, yielded low concentrations. The excavated soil was blened on site and representative composite samples were collected from the blended backfill, the bottom of the excavation and the excavation walls. The representative samples were sent to a commercial laboratory for analysis of chloride and TPH, comfirming low concentrations of TPH and slightly elevated concentrations of chloride in the bottom composite. The blended backfill was returned to the excavation up to 5 ft below ground surface (BGS). A 5 ft-deep shelf was excavated extending 5 ft from the north and south walls to prepare the surface for a clay barrier. At 5-4 ft BGS, the 1-ft thick clay barrier was installed with a compaction test performed on 7/1/2009. The remaining fill was returned to the excavation to ground surface and contoured to the surrounding area. On 7/2/2009, the site was seeded with a blend of native vegetation and is expected to return to a produtive capacity at a normal rate. To further investigate depth of chloride presence, a soil boring was initiated on 7/8/2009 at 8 ft northwest of the former junction box. The soil bore was advanced to 80 ft BGS with soil samples collected every 5 ft and field tested for chloride concentrations. The 20 and 80 ft samples were sent to a commercial laboratory for analysis of chloride and TPH which confirmed elevated concentrations of chloride and low concentrations of TPH. The entire borehole was plugged with bentonite to the ground surface. NMOCD was notified of potential groundwater impact on 3/4/2010.

ADDITIONAL EVALUATION IS *HIGH* PRIORITY

enclosures: photos, boring log, lab results, PID (field) screenings, cross-section, compaction test, chloride curve

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

SITE SUPERVISOR Jordan Woodfin SIGNATURE Jordan Woodfin COMPANY RICE OPERATING COMPANY

REPORT ASSEMBLED BY Katie Jones INITIAL KJ

PROJECT LEADER Larry Bruce Baker Jr. SIGNATURE Larry Bruce Baker Jr. DATE 3-8-10

*This site is a "DISCLOSURE." It will be placed on a prioritized list of similar sites for further consideration.

Justis Jct. D-2

Unit D, Section 2, T25S, R37E

excavating the former junction box site 6/11/2009

collecting a soil sample 6/11/2009

clay compaction test 7/1/2009

seeding the backfilled site 7/2/2009

drilling SB #1 7/8/2009

plugging SB #1 with bentonite 7/8/2009

Logger:	Lara Weinheimer	Client: RICE Operating Company	Well ID: SB - 1
Driller:	Harrison & Cooper, Inc. Drilling		
Drilling Method:	Air rotary	Project Name: Justis jct. D-2	
Start Date:	7-8-09		
End Date:	7-8-09	Location: JUSTIS SWD System unit 'D' Sec.2 T25S, R37E Lea County, NM	
Comments: Located: 8 ft north-west of former jct. box site TD = 80 ft Estimated depth to GW = 80 ft			

Depth (feet)	chloride field	PID	Description
			10 - 15 ft
			VERY FINE TO FINE SAND
15	1020	0.1	sandstone rock, orangey-brown, dry
			15 - 20 ft
			VERY FINE TO FINE SAND
20	4856	0.2	sandstone particles, dark orangey-brown
LAB	5760	DRO < 10 GRO < 10	20 - 25 ft
			VERY FINE TO FINE SAND
25	1446	0.2	brownish-orange, slightly moist
			25 - 30 ft
			VERY FINE TO FINE SAND
30	658	0.1	consol. rock, brownish-orange, lsightly moist
35	354	0.2	
40	444	0.1	
45	287		
			30 - 80 ft
50	466		VERY FINE TO FINE SAND
			brownish-orange, slighly moist
55	737		
60	839		
65	722		
70	647		
75	1080		
80	1055		
LAB	1120	DRO < 10 GRO < 10	

Lithology

Soil Bore Construction

bentonite seal

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: 07/10/09
Reporting Date: 07/13/09
Project Owner: NOT GIVEN
Project Name: JUSTIS JCT. D-2
Project Location: JUSTIS JCT. D-2

Sampling Date: 07/08/09
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: CK
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		07/10/09	07/10/09	07/10/09
H17779-1	SB #1 @ 20'	<10.0	<10.0	5,760
H17779-2	SB #1 @ 80'	<10.0	<10.0	1,120
Quality Control		598	598	490
True Value QC		500	500	500
% Recovery		120	120	98.0
Relative Percent Difference		19.6	18.3	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. Reported on wet weight.

Chemist

07/14/09
Date

H17779 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: Justis jct. D-2	State: Zip:
Project Location: Justis jct. D-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 8015 M	BTEX	Texas TPH							
117779-1	SB #1 @ 20'	C	1			✓					✓		7/8/09	03:10	✓	✓									
-2	SB #1 @ 80'	G	1			✓					✓		7/8/09	03:58	✓	✓									

COPY

Relinquished By: L. Weinheimer	Date: 7-8-09 Time: 1035	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)	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

RICE OPERATING COMPANY

122 West Taylor ~ Hobbs, NM 88240
PHONE: (575) 393-9174 FAX: (575) 397-1471
PID METER CALIBRATION & FIELD REPORT FORM

CK MODEL NO.	✓	MODEL: PGM 7300	SERIAL NO: 590-000183
		MODEL: PGM 7300	SERIAL NO: 590-000504
		MODEL: PGM 7600	SERIAL NO: 110-12383
		MODEL: PGM 7600	SERIAL NO: 110-02920

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO: 08-3425	EXPIRATION DATE: 8-29-09
FILL DATE: 2-29-08	METER READING ACCURACY: 100.0

ACCURACY: +/- 2%

SYSTEM	SITE	UNIT	SECTION	TOWNSHIP	RANGE
Justis	JCT D-2	D	2	T25S	R37E

SAMPLE ID: Soil bore #1

DEPTH	PID
15'	0.1
20'	0.2
25'	0.2
30'	0.1
35'	0.2
40'	0.1

DEPTH	PID

DEPTH	PID

DEPTH	PID

DEPTH	PID

DEPTH	PID

DEPTH	PID

DEPTH	PID

I verify that I have calibrated the above instrument in accordance to the manufacture's operation manual.

Signature _____ Date 7-8-09

SITE MAP

N

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: JORDAN WOODFIN
122 W. TAYLOR
HOBBS, NM 88240

Receiving Date: 06/22/09
Reporting Date: 06/26/09
Project Number: NOT GIVEN
Project Name: JUSTIS JCT D-2
Project Location: JUSTIS JCT D-2

Sampling Date: 06/17/09 & 06/22/09
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		06/25/09	06/25/09	06/23/09
H17680-1	5PT BTM COMP.	<10.0	32.3	1,810
H17680-2	4 WALL COMP.	<10.0	211	240
H17680-3	BLENDED BACKFILL	<10.0	<10.0	128
Quality Control		526	574	490
True Value QC		500	500	500
% Recovery		105	115	98.0
Relative Percent Difference		2.5	3.9	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. Reported on wet weight.
Surrogates for GRO/DRO outside historical limits due to matrix interference.

Chemist

06/26/09
Date

H17680 TOL 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
Project Manager:	JORDAN WOODFIN
Address:	122 W. TAYLOR
City:	HOBBS State: NM Zip: 88240
Phone #:	393-9174 Fax #:
Project #:	Project Owner:
Project Name:	Justis Sct D-2
Project Location:	Justis Sct D-2
Sampler Name:	JORDAN WOODFIN

BILL TO

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

COD

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	ANALYSIS REQUEST: Cl-	TPH 8015M
H17680-1	Spt Btm Comp.	C	1			X					X		10-17-09	3:30 pm	X	X
-2	4 Wall Comp.	C	1			X					X		10-22-09	12:30 p	X	X
-3	Blended Backfill	C	1			X					X		10-22-09	3:35 p	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.

Relinquished By:	Date: 10-22-09	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
JORDAN WOODFIN	Time: 4:49		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS: Email Results to BBAKER@RICESWD.COM cc JPURVIS@RICESWD.COM cc JWOODFIN@RICESWD.COM
	Time:		

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

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

CHECKED BY: (Initials)

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

RICE OPERATING COMPANY

122 West Tayor Hobbs; NM 88240
PHONE: (575) 393-9174 FAX: (575) 397-1471

PID METER CALIBRATION & FIELD REPORT FORM

Check Model Number:

	Model: PGM 7300	Serial No: 590-000183		Model: PGM 7600	Serial No: 110-023920
✓	Model: PGM 7300	Serial No: 590-000508		Model: PGM 7600	Serial No: 110-013744
	Model: PGM 7300	Serial No: 590-000504		Model: PGM 7600	Serial No: 110-013676

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO: 08-3425	EXPIRATION DATE: 8-29-09
FILL DATE: 2-29-08	METER READING ACCURACY: 100.1

ACCURACY : +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
Justis	D-2	D	2	25s	37E

SAMPLE ID	PID	SAMPLE ID	PID
West Wall	1	Bleeder Backfill	2.1
South Wall	1.7		
North Wall	7		
EAST Wall	1.7		
4 Wall Comp	3.2		

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

SIGNATURE: Jordan Wolf DATE: 10-22-09

RICE OPERATING COMPANY

122 West Tayor Hobbs, NM 88240
PHONE: (575) 393-9174 FAX: (575) 397-1471

PID METER CALIBRATION & FIELD REPORT FORM

Check Model Number:

	Model: PGM 7300	Serial No: 590-000183			Model: PGM 7600	Serial No: 110-023920
✓	Model: PGM 7300	Serial No: 590-000508			Model: PGM 7600	Serial No: 110-013744
	Model: PGM 7300	Serial No: 590-000504			Model: PGM 7600	Serial No: 110-013676

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO : 08-3425	EXPIRATION DATE: 8-29-09
FILL DATE: 2-29-08	METER READING ACCURACY: 100

ACCURACY : +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
Justis	D-2	D	2	25s	37E

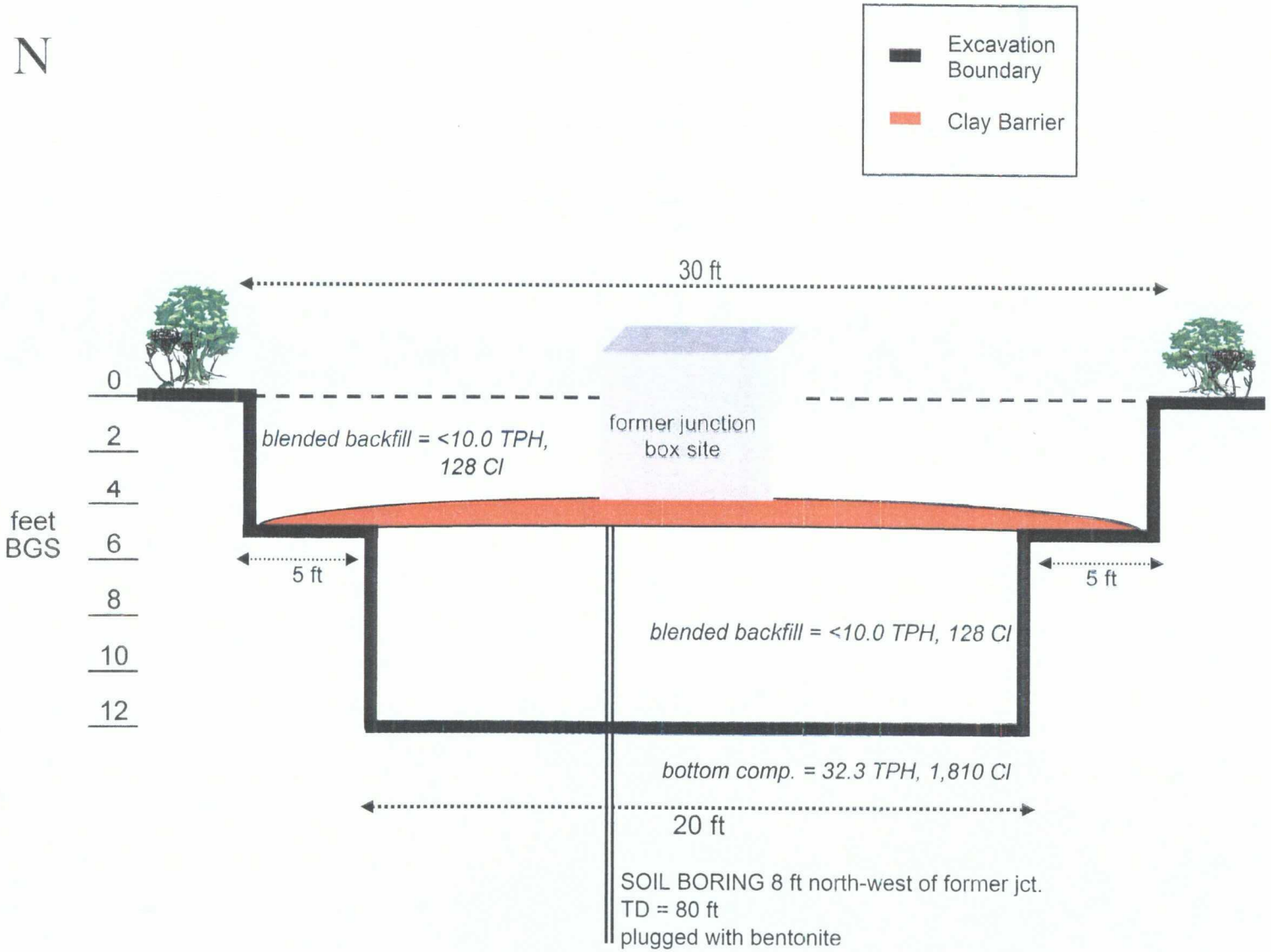
SAMPLE ID	PID	SAMPLE ID	PID
5pt Bottom Comp	0.3		

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

SIGNATURE: Jordan Woodley DATE: 6-17-09

Justis Jct. D-2
Unit 'D', Sec. 2, T25S, R37E

Excavation Cross-Section



LABORATORY TEST REPORT

PETTIGREW & ASSOCIATES, P.A.
1110 N. GRIMES
HOBBS, NM 88240
(575) 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: Bruce 122 W. Taylor Hobbs, NM 88240	Material:	Cooper Red Clay
		Test Method:	ASTM: D 2922
Project:	Justice Junction D-2 Project No. 2009.1145		
Date of Test:	July 1, 2009	Depth:	See Below
		Depth of Probe:	12"

Test No.	Location	Dry Density % Max	% Moisture	Depth
SG 1	Justice Junction D-2 - 6' E. & 15' S. of NW Corner	90.0	15.1	FSG

Control Density: 100.4
ASTM: D 698

Optimum Moisture: 21.6%

Required Compaction: 90 - 95%

Densometer ID: 815

Lab No.: 09 4073-4074

Copies To: Rice Operating

PETTIGREW & ASSOCIATES

BY: Erica M Hart

BY: _____ P.E.

Justis Jct. D-2

Unit 'D', Sec. 2, T25S, R37E

SOIL BORING samples at 8 ft northeast of the junction (source)

Depth bgs (ft)	[Cl] ppm
15	1,020
20	4,856
25	1,446
30	658
35	354
40	444
45	287
50	466
55	737
60	839
65	722
70	647
75	1,080
80	1,055

Groundwater = 80 ft