AP. 58

ANNUAL MONITORING REPORT

YEAR(S): 20/0





March 11, 2011

Mr. Edward Hansen New Mexico Energy, Minerals, & Natural Resources Oil Conservation Division, Environmental Bureau 1220 S. St. Francis Drive Santa Fe, New Mexico 87504 RECEIVED

MAR 1 2 2011

Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, NM 87505

RE:

2010 ANNUAL GROUNDWATER MONITORING REPORT BD SANTA RITA EOL RELEASE SITE (AP-58) T22S, R37E, SECTION 27, UNIT LETTER A LEA COUNTY, NEW MEXICO

Mr. Hansen:

As agent for Rice Operating Company (ROC), Trident Environmental submits this 2010 Annual Groundwater Monitoring Report for the BD Santa Rita EOL Release site (AP-58) located in the Blinebry-Drinkard (BD) Salt Water Disposal (SWD) System.

Groundwater recovery activities were initiated at recovery well RW-1 on June 22, 2010. As of November 26, 2010, approximately 6,847 bbls of groundwater has been removed when the system was shut down for the winter season to avoid any breakdowns from freezing conditions. On August 3, 2010, ROC submitted a *Stage 2 Progress Report* to the OCD which documented the excavation, backfilling, lining, re-seeding of the vadose zone, and re-establishment of native vegetation.

ROC is the service provider (agent) for the BD SWD System and has no ownership of any portion of pipeline, well, or facility. The BD SWD System is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

Thank you for your consideration concerning this annual summary of groundwater monitoring information. If you have any questions, please contact Hack Conder at (575) 393-9174.

Sincerely,

MAR 14 2011

Oil Conservation Division 1220 S. St. Finnels Drive Santa Fe, NM 87505

Gilbert J. Van Deventer, REM, PG

cc: Hack Conder (Rice Operating Co., Hobbs, NM)

enclosures: map, table, graphs, laboratory analytical report, and chain of custody documentation

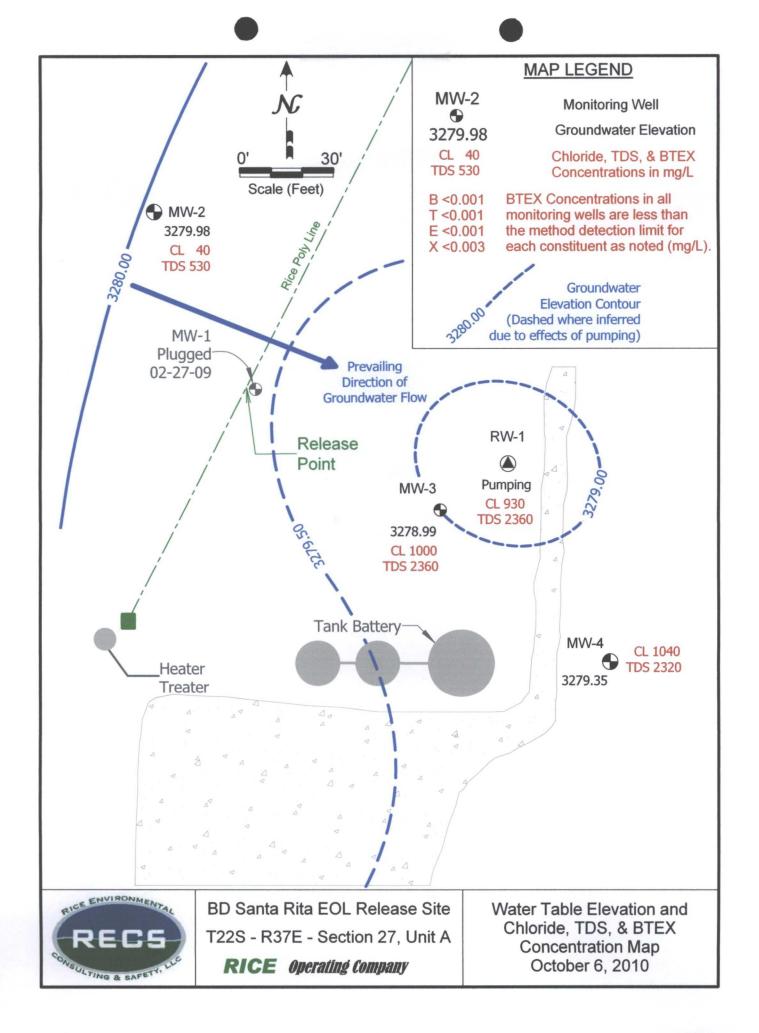


Table 1
Summary of Groundwater Monitoring Results

Monitoring Sample Depth to Groundwater Chloride TDS Benzene Toluene Ethyl-											
Monitoring	Sample	Groundwater	- 1		TDS	Benzene		benzene	Xylene		
Well	Date			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)		
	09/02/05 54.04 3280.28		`	4,480	7,600	<0.001	< 0.001	<0.001	< 0.001		
	10/24/05	53.85	3280.47	7,170	16,400	<0.001	< 0.001	< 0.001	< 0.001		
	01/23/06	53.98	3280.34	7,450	14,300	<0.001	< 0.001	< 0.001	< 0.001		
	04/24/06	54.07	3280.25	7,100	14,300	<0.001	< 0.001	< 0.001	< 0.001		
	07/19/06	54.08	3280.24	6,180	14,000	<0.001	< 0.001	< 0.001	< 0.001		
	10/11/06	53.99	3280.33	2,100	4,560	<0.001	< 0.001	<0.001	< 0.001		
	01/25/07	54.10	3280.22	2,740	4,560	<0.001	< 0.001	<0.001	< 0.001		
MW-1	04/04/07	54.11	3280.21	2,610	5,720	<0.001	< 0.001	<0.001	< 0.001		
141 44 - 1	07/09/07	53.80	3280.52	363	1,470	<0.001	< 0.001	<0.001	<0.003		
	11/12/07	53.87	3280.45	356	1,398	<0.001	< 0.001	<0.001	< 0.003		
	01/15/08	53.88	3280.44	408	1,499	< 0.001	< 0.001	< 0.001	< 0.003		
	04/07/08	53.98	3280.34	420	1,460	< 0.001	< 0.001	< 0.001	< 0.003		
	07/22/08	54.06	3280.26	440	1,460	<0.002	<0.002	< 0.002	< 0.006		
	10/02/08	54.11	3280.21	392	1,390	<0.001	< 0.001	< 0.001	< 0.003		
	01/14/09	54.08	3280.24	352	1,250	< 0.001	< 0.001	< 0.001	< 0.003		
_	02/27/09	This	source area w	prior to ex	cavation.						
	11/12/07	54.55	3280.48	160	930	<0.001	< 0.001	< 0.001	< 0.003		
	01/15/08	54.57	3280.46	128	1,001	<0.001	<0.001	< 0.001	< 0.003		
	04/07/08	54.65	3280.38	100	982	<0.001	<0.001	< 0.001	<0.003		
	07/22/08	54.74	3280.29	92	931	< 0.002	<0.002	< 0.002	< 0.006		
	10/02/08	54.81	3280.22	88	902	<0.001	<0.001	<0.001	< 0.003		
	01/14/09	54.78	3280.25	84	850	<0.001	< 0.001	< 0.001	< 0.003		
MW-2	04/14/09	54.82	3280.21	80	858	<0.001	< 0.001	< 0.001	< 0.003		
	07/13/09	54.79	3280.24	76	802	<0.001	<0.001	< 0.001	< 0.003		
	10/08/09	54.79	3280.24	64	776	<0.001	<0.001	<0.001	<0.003		
	01/06/10	54.83	3280.20	60	726	<0.001	<0.001	<0.001	< 0.003		
	04/09/10	54.85	3280.18	52	710	<0.001	<0.001	<0.001	< 0.003		
	07/09/10	55.10	3279.93	52	644	<0.001	<0.001	<0.001	<0.003		
	10/06/10	55.05	3279.98	40	530	< 0.001	<0.001	< 0.001	< 0.003		

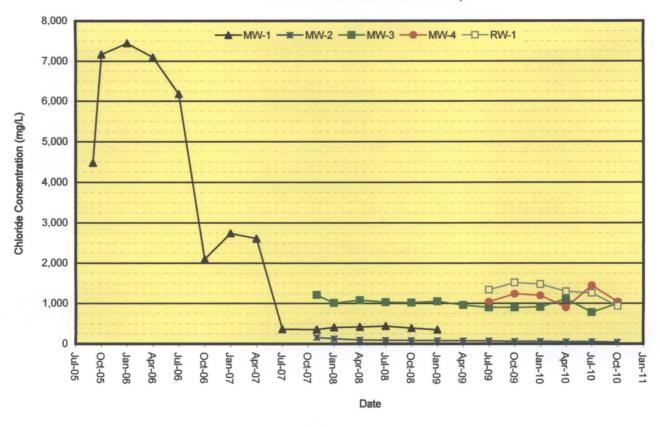
Continued on next page

Table 1
Summary of Groundwater Monitoring Results

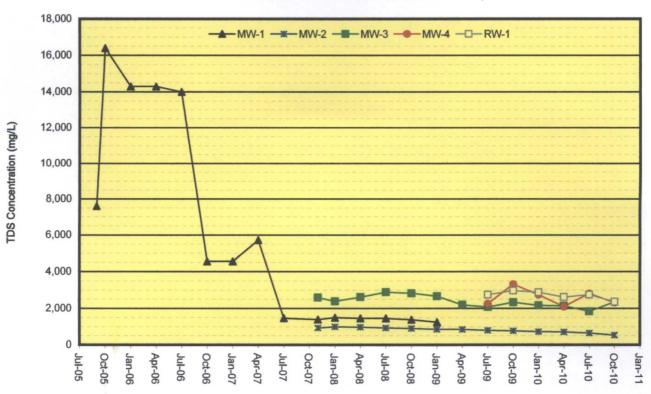
Monitoring Well	Sample Date	Depth to Groundwater		Chloride (mg/L)	TDS (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethyl- benzene	Xylene (mg/L)
			(feet AMSL)					(mg/L)	
	11/12/07	53.70	3280.27	1,210	2,596	< 0.001	<0.001	< 0.001	< 0.003
	01/15/08	53.69	3280.28	1,010	2,398	< 0.001	<0.001	< 0.001	< 0.003
	04/07/08	53.73	3280.24	1,080	2,620	< 0.001	<0.001	< 0.001	< 0.003
	07/22/08	53.82	3280.15	1,030	2,890	< 0.002	<0.002	<0.002	< 0.006
	10/02/08	53.86	3280.11	1,020	2,830	< 0.001	< 0.001	<0.001	< 0.003
	01/14/09	53.83	3280.14	1,050	2,670	< 0.001	<0.001	<0.001	< 0.003
MW-3	04/14/09	53.90	3280.07	960	2,200	< 0.001	<0.001	< 0.001	< 0.003
	07/13/09	53.88	3280.09	900	2,080	< 0.001	<0.001	< 0.001	< 0.003
	10/08/09	53.85	3280.12	900	2,340	<0.001	<0.001	< 0.001	< 0.003
	01/06/10	54.04	3279.93	910	2,170	< 0.001	<0.001	< 0.001	< 0.003
	04/09/10	53.94	3280.03	1,110	2,150	< 0.001	<0.001	< 0.001	< 0.003
	07/09/10	54.94	3279.03	780	1,840	< 0.001	<0.001	< 0.001	< 0.003
	10/06/10	54.98	3278.99	1,000	2,360	< 0.001	<0.001	< 0.001	< 0.003
	07/13/09	52.28	3279.90	1,040	2,260	< 0.001	<0.001	< 0.001	< 0.003
	10/08/09	52.23	3279.95	1,240	3,320	<0.001	<0.001	< 0.001	< 0.003
MW-4	01/06/10	52.23	3279.95	1,200	2,750	<0.001	<0.001	<0.001	< 0.003
IVI W -4	04/09/10	52.24	3279.94	900	2,100	<0.001	<0.001	< 0.001	< 0.003
	07/09/10	52.76	3279.42	1,450	2,810	<0.001	<0.001	< 0.001	< 0.003
	10/06/10	52.83	3279.35	1,040	2,320	<0.001	<0.001	< 0.001	< 0.003
	07/13/09	53.02	3280.05	1,340	2,750	< 0.001	< 0.001	< 0.001	< 0.003
	10/08/09	53.01	3280.06	1,520	2,970	<0.001	<0.001	<0.001	< 0.003
DW 1	01/06/10	53.04	3280.03	1,480	2,880	<0.001	<0.001	<0.001	< 0.003
RW-1	04/09/10	53.06	3280.01	1,300	2,620	<0.001	<0.001	<0.001	< 0.003
	07/09/10			1,260	2,750	<0.001	<0.001	<0.001	< 0.003
	10/06/10			930	2,360	<0.001	<0.001	<0.001	< 0.003

2010 Animal Groundwater Monitoring Report Santa Rita EOL Release (AP-58) T22S R37E Section 27 Unit Letter A Lea County, New Mexico

Chloride Concentrations Versus Time Graph



Total Dissolved Solids Concentrations Versus Time Graph



Date



October 14, 2010

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: BD SANTA RITA LEAK

Enclosed are the results of analyses for samples received by the laboratory on 10/08/10 11:10.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager





Rice Operating Company Hack Conder 112 W. Taylor Hobbs NM, 88240 (575) 397-1471

Fax To:

Received:

10/08/2010

Reported:

10/14/2010

Project Name: Project Number: **BD SANTA RITA LEAK** NOT GIVEN

Project Location:

T22S R37E SEC27 A-LEA CTY., NM

Sampling Date:

10/06/2010

Sampling Type:

Water

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

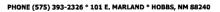
Sample ID: MONITOR WELL #2 (H021015-01)

BTEX 8021B	mg/	[/] L	Analyze	ed By: cms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	10/12/2010 ND		0.018	88.5	0.0200		
Toluene*	<0.001	0.001	10/12/2010	ND	0.017	87.4	0.0200		
Ethylbenzene*	<0.001	0.001	10/12/2010	ND	0.018	89.2	0.0200		
Total Xylenes*	<0.003	0.003	10/12/2010	ND	0.052	86.1	0.0600		
Surrogate: 4-Bromofluorobenzene (PIL	101 5	% 80-120)						
Chloride, SM4500CI-B	mg/	'L	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Analyzed Method Blank		% Recovery	True Value QC	RPD	Qualifier
Chloride	40.0	4.00	10/13/2010	ND	100	100	100	0.00	
Sulfate 375.4	mg/	/L	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate	115	10.0	10/13/2010	ND	38.9	97.2	40.0	5.36	
TDS 160.1	mg/	'L	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS	530	5.00	10/13/2010	ND				10.8	

Cardinal Laboratories *=Accredited Analyte

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 dar 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 the services hereunder by Cardinal, regardless of whether







Rice Operating Company Hack Conder 112 W. Taylor Hobbs NM, 88240

Fax To:

(575) 397-1471

Received:

10/08/2010

Reported:

10/14/2010

Project Name:

BD SANTA RITA LEAK

Project Number: Project Location: NOT GIVEN
T22S R37E SEC27 A-LEA CTY., NM

Sampling Date:

10/06/2010

Sampling Type:

Water

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: MONITOR WELL #3 (H021015-02)

BTEX 8021B	mg/L		· Annhan	d By: cms						
DILA 6021B	ing/	<u> </u>	Analyze	u by: cms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	< 0.001	0.001	10/12/2010	ND	0.018	88.5	0.0200			
Toluene*	<0.001	0.001	10/12/2010	ND	0.017 0.018	87.4	0.0200			
Ethylbenzene*	<0.001	0.001	10/12/2010	ND		89.2	0.0200			
Total Xylenes*	<0.003	0.003	10/12/2010	ND	0.052	86.1	0.0600			
Surrogate: 4-Bromofluorobenzene (PIL	. 102 % 80-120 mg/L									
Chloride, SM4500Cl-B			Analyze	d By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1000	4.00	10/13/2010	ND	100	100	100	0.00		
Sulfate 375.4	mg/	L	Analyze	d By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sulfate	266 10.0		10/13/2010	ND	38.9	97.2	40.0	5.36		
TDS 160.1	mg/L		Analyze	d By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS	2360	5.00	10/13/2010	ND				10.8		

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any daim 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 walved 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 subclidaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.







Rice Operating Company Hack Conder 112 W. Taylor Hobbs NM, 88240

Fax To:

(575) 397-1471

Received:

10/08/2010

Reported:

10/14/2010

Project Name:

BD SANTA RITA LEAK

Project Number: Project Location:

NOT GIVEN

Tabe

T22S R37E SEC27 A-LEA CTY., NM

Sampling Date:

10/06/2010

Sampling Type:

Water

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: MONITOR WELL #4 (H021015-03)

BTEX 8021B	mg/	/L	Analyze	d By: cms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	10/12/2010	ND	0.018	88.5	0.0200		
Toluene*	<0.001	0.001	10/12/2010	ND	0.017	87.4	0.0200		
Ethylbenzene*	<0.001	0.001	10/12/2010	ND	0.018	89.2	0.0200		
Total Xylenes*	<0.003	0.003	10/12/2010	ND	0.052	86.1	0.0600		
Surrogate: 4-Bromofluorobenzene (PIL	102 9	% 80-120	1			•			
Chloride, SM4500CI-B	mg/	/L	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1040	4.00	10/13/2010	ND	100	100	100	0.00	
Sulfate 375.4	mg/L		Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate	251	10.0	10/13/2010	ND	38.9	97.2	40.0	5.36	
TDS 160.1	mg/L		Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS	2320	5.00	10/13/2010	ND				10.8	

Cardinal Laboratories

*=Accredited Analyte

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 subclidaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approved of Cardinal Laboratories.







Rice Operating Company Hack Conder 112 W. Taylor Hobbs NM, 88240

Fax To:

(575) 397-1471

Received:

10/08/2010

Reported:

10/14/2010

Project Name:

BD SANTA RITA LEAK

Project Number: Project Location:

NOT GIVEN

T22S R37E SEC27 A-LEA CTY., NM

Sampling Date:

10/06/2010

Sampling Type:

Water

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: RECOVERY WELL #1 (H021015-04)

BTEX 8021B	mg/	/L	Analyze	d By: cms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	10/12/2010 ND		0.018	88.5	0.0200		
Toluene*	<0.001	0.001	10/12/2010	ND	0.017	87.4	0.0200		
Ethylbenzene*	< 0.001	0.001	10/12/2010	ND	0.018	89.2	0.0200		
Total Xylenes*	<0.003	0.003	10/12/2010	ND	0.052	86.1	0.0600		
Surrogate: 4-Bromofluorobenzene (PIL	100 9	% 80-120)						•
Chloride, SM4500CI-B	mg/	/L	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	930	4.00	10/13/2010	ND	100	100	100	0.00	
Sulfate 375.4	mg/	'L	Analyze	Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate	298	10.0	10/13/2010	ND	38.9	97.2	40.0	5.36	
TDS 160.1	mg/L		Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS	2360	5.00	10/13/2010	ND				10.8	

Cardinal Laboratories

*=Accredited Analyte

PLEASE. NOTE: Liability and Damages. Cardina's liability and client's exclusive remedy for any dama arising, whether based in contract or tort, shall be limited to the amount paid by dient 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 in includental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits inclumed by client, its subsidiaries, afflictes or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples Identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.





Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limi
----	---

RPD Relative Percent Difference

** Samples not received at proper temperature of 6°C or below.

*** Insufficient time to reach temperature.

Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Lability and Damagaes. Cardinat'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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



CHAIN OF CUSTODY AND ANALYSIS REQUEST	ANALYSIS REQUEST (Circle of Specify Method No.)	tro			73 X X X 对对对对对对例		灣極學作品 化低氢氢氯氯氢油厂 60万片函数医标片			Results [/	Results n Yes: No. Additional EaxiNumber;	MARKS:		kunes@nicesworchm <u>prozanne@valornet.com</u>					
Cardinal Laboratories, Inc.	BILL TO Company. RICE Operating	122 W. I Britor, Street C. Hobbs, New Mexico 88240. Fault (575):393-9174 (575):393-174	(57.5) 397÷1471.		OCH PROPERTY OF PRESERVE	BEEX 6021B/602 MUBE 6021B/602 DATE (2010) HANOS HANOS HANOS HOLE (2010) AIR SOIL SOIL						<u> </u>		Réceived by Date: Time:	Faite	Received By (Laboratory Staff) Date Time Time REMARKS	Sanita Condition of the Control of t	Cool Intent	
(10) East Marland : Hottos; New Marland : Ho	Company Name: [RICE Operating: Company] Project Manager.	FHack/Conder	Phone #: 152 152	BD:Santa Rita Leak:	T22S/R37E/Sec27/A/~1Lea/County/New/Mexicon	FEELD CODE VONY RECTORDED FEELD CODE	H2/0/5:// Monitor Well #2	A Z Nicontror Well #3	LA.C. S Monitor Well #4)	A-2二号 Recovery Well #1		The state of the s			Rozanne Ahnson (e t 2000 11.09)	Relinquished by:	Delivered By: ((Circle:One))	Sample - UPS - Bus - Other	

#20