1R - 428-67

WORKPLANS

Date:

12-11-12

Rice Environmental Consulting & Safety
P.O. Box 5630 Hobbs, NM 88241
Phone 575.393.4411 Fax 575.393.0293

CERTIFIED MAIL
RETURN RECEIPT NO. 7011 2000 0002 0285 5063

December 11th, 2012

Mr. Edward Hansen
New Mexico Energy, Minerals, & Natural Resources
Oil Conservation Division, Environmental Bureau
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505

RE: **Update Report**
Rice Operating Company – Abandoned Hobbs SWD System
Hobbs Jct. E-33-1 (1R428-67): UL/E sec. 33 T18S R38E

Mr. Hansen:

RICE Operating Company (ROC) has retained Rice Environmental Consulting and Safety (RECS) to address potential environmental concerns at the above-referenced site in the abandoned Hobbs Salt Water Disposal (SWD) system. ROC is the service provider (agent) for the abandoned Hobbs SWD System and has no ownership of any portion of the pipeline, well, or facility. The system is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

Background and Previous Work

The site is located in Hobbs, New Mexico at UL/E sec. 33 T18S R38E as shown on the Site Location Map (Figure 1). Groundwater monitoring at the site establishes groundwater at a depth of +/- 67 ft.

With the abandonment of the Hobbs SWD system in 2002, ROC removed the Hobbs E-33-1 junction box and the upper four feet of the vadose zone. The resultant excavation was then backfilled with a mixture of silty loam and some caliche. On May 2nd, 2006, one soil bore was advanced through the former junction box site. The bore was field tested for chlorides and screened for hydrocarbons with a photo-ionization detector (PID). The highest chloride field numbers were between 20 and 40 ft bgs with a peak chloride reading at 35 ft bgs of 1,381 mg/kg which declined to 729 mg/kg at 60 ft bgs. All PID readings throughout the bore were 0 ppm. A representative sample from the bore was taken to a commercial laboratory for confirmation of chloride field numbers. At 24 ft bgs, the laboratory chloride reading was 1,640 mg/kg. Based on the elevated chloride readings in the bore, a monitor well was installed within the bore to a depth of 75 ft bgs.

The monitor well (MW-1) has been sampled quarterly since its installation (Figure 2). Laboratory chloride and TDS values for the well remain slightly above WQCC standards.

During the last sampling event on September 6th, 2012, the laboratory chloride reading was 343 mg/L and the TDS reading was 1,090 mg/L (Appendix A). Because of the elevated chloride and TDS readings in MW-1, RECS recommends that ROC install an up gradient monitor well to determine if an up gradient source exists to account for these elevated constituents. The monitor well (MW-2) will be sampled quarterly per NMOCD standards.

RECS appreciates the opportunity to work with you on this project. Please call Hack Conder at (575) 393-9174 or me if you have any questions or wish to discuss the site.

Sincerely,

Lara Weinheimer
Project Scientist
RECS
(575) 441-0431

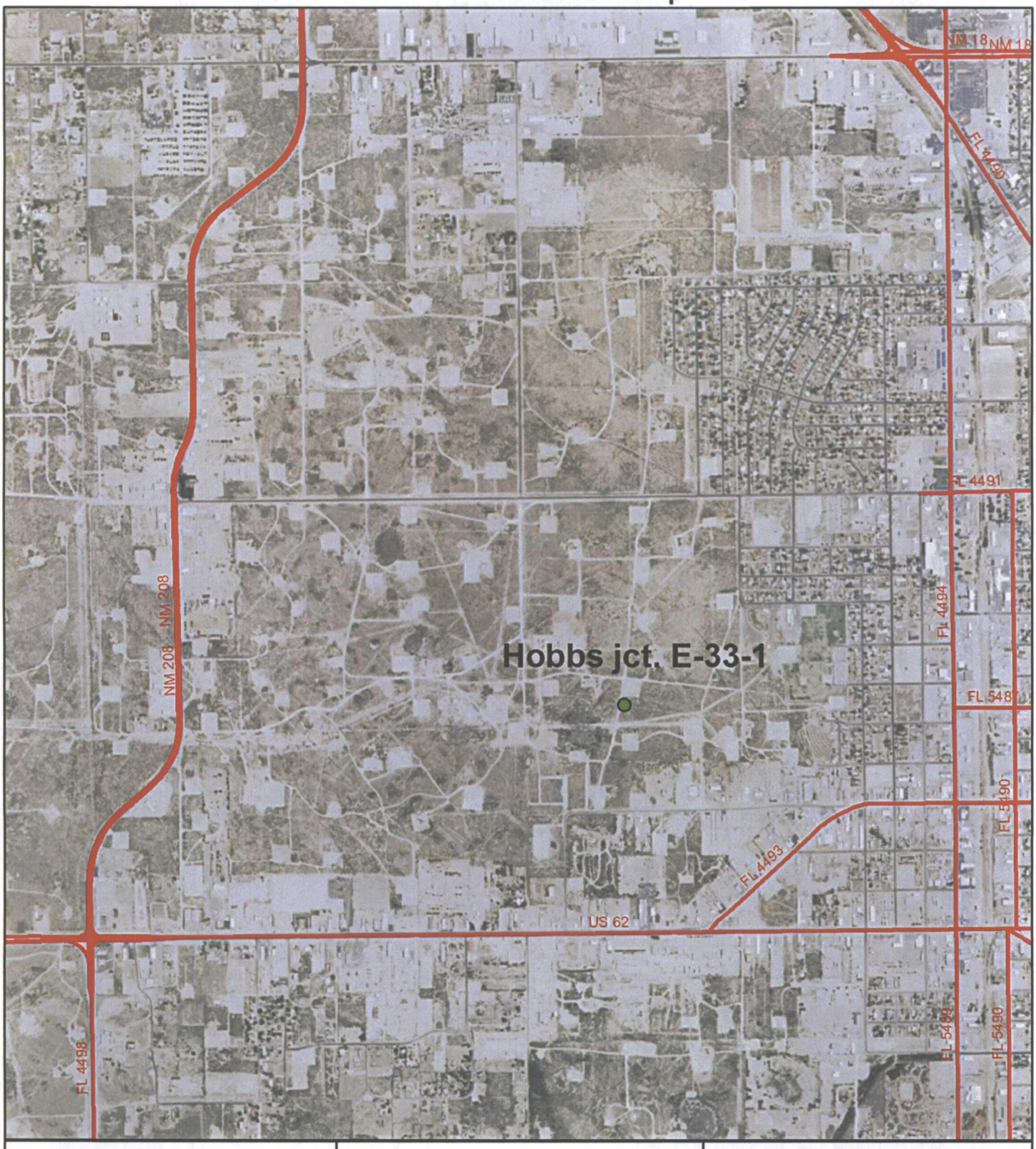
Attachments:

Figure 1 – Site Location Map
Figure 2 – Monitor Well Sampling Plat
Appendix A – Monitor Well Sampling Lab

Figures

RICE Environmental Consulting and Safety (RECS)
P.O. Box 5630 Hobbs, NM 88241
Phone 575.393.4411 Fax 575.393.0293

Site Location Map



RICE ENVIRONMENTAL CONSULTING & SAFETY, LLC
RECS

Hobbs jct. E-33-1

NMOCD Case #: 1R428-67

LEGALS: UL/E sec. 33
T-18-S E-38-E

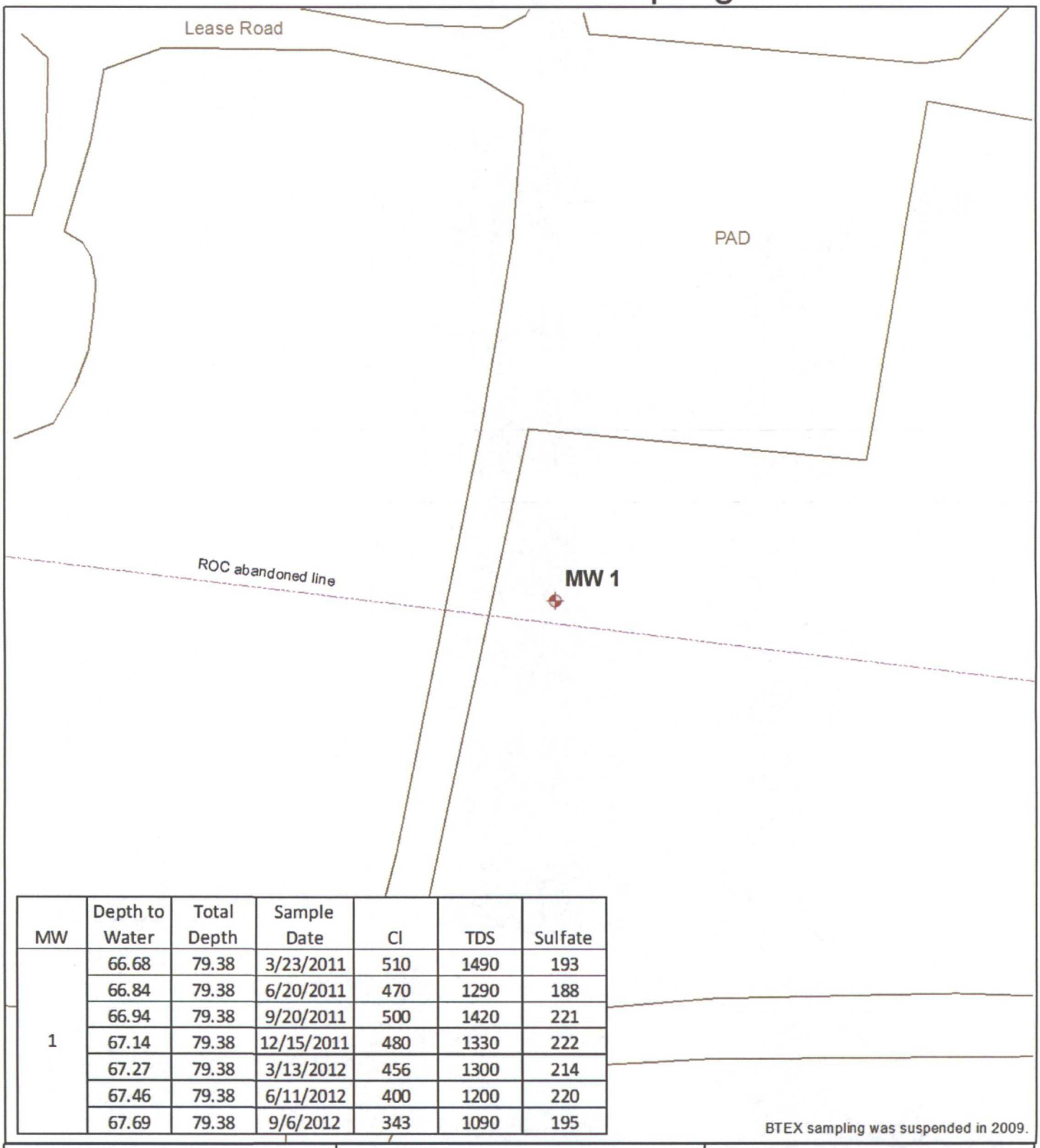
Figure 1

N
W E
S

0 0.25 0.5 Miles

Drawing date: 1/24/12
Drafted by: L. Weinheimer

Monitor Well Sampling



MW	Depth to Water	Total Depth	Sample Date	Cl	TDS	Sulfate
1	66.68	79.38	3/23/2011	510	1490	193
	66.84	79.38	6/20/2011	470	1290	188
	66.94	79.38	9/20/2011	500	1420	221
	67.14	79.38	12/15/2011	480	1330	222
	67.27	79.38	3/13/2012	456	1300	214
	67.46	79.38	6/11/2012	400	1200	220
	67.69	79.38	9/6/2012	343	1090	195

BTEX sampling was suspended in 2009.

RICE ENVIRONMENTAL RECS CONSULTING & SAFETY, LLC

Hobbs jct. E-33-1

NMOCD Case #: 1R428-67

LEGALS: UL/E sec. 33
T-18-S E-38-E

Figure 2

N W E S

0 25 50 100 Feet

Drawing date: 1/20/12
Drafted by: L. Weinheimer

Appendix A

Monitor Well Sampling Lab

RICE Environmental Consulting and Safety (RECS)
P.O. Box 5630 Hobbs, NM 88241
Phone 575.393.4411 Fax 575.393.0293

CARDINAL Laboratories

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

September 18, 2012

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: HOBBS JUNCTION E-33-1

Enclosed are the results of analyses for samples received by the laboratory on 09/11/12 11:16.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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 (V1, 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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	09/11/2012	Sampling Date:	09/06/2012
Reported:	09/18/2012	Sampling Type:	Water
Project Name:	HOBBS JUNCTION E-33-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	T18S-R38E-SEC33 E-LEA CTY., NM		

Sample ID: MONITOR WELL #1 (H202192-01)

Chloride, SM4500Cl-B mg/L **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**343**	4.00	09/14/2012	ND	104	104	100	0.00	

Sulfate 375.4 mg/L **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**195**	10.0	09/12/2012	ND	22.3	112	20.0	12.8	

TDS 160.1 mg/L **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1090**	5.00	09/12/2012	ND	231	96.2	240	0.322	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
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

Celey D. Keene, Lab Director/Quality Manager

101 East Marland - Hobbs, New Mexico 88240
Tel (575) 393-2326
Fax (575) 393-2476

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

Company Name:	BILL TO Company:	PO#
RICE Operating Company	RICE Operating Company	
Project Manager:	**Address:** (Street, City, Zip)	
Hack Conder	122 W Taylor Street ~ Hobbs, New Mexico 88240	
Address: (Street, City, Zip)	**Phone#:**	**Fax#:**
122 W Taylor Street ~ Hobbs, New Mexico 88240	(575) 393-9174	(575)397-1471
Phone #:	**Fax #:**	
(575) 393-9174	(575) 397-1471	
Project #:	**Project Name:**	
	Hobbs Junction E-33-1	
Project Location:	**Sampler Signature:**	Rozanne Johnson (575)631-9310
T18S-R38E-Sec33 E ~ Lea County - New Mexico		rozanne@valornet.com

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY) H20191	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (2 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1Liter HDPE)	NONE	SAMPLING: DATE (2012)	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005 / TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Sulfates	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
1	Monitor Well #1	G	1	X								1		9-6	10:55																		X	X	X	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Rozanne Johnson	9-11-2012	11:15			
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff)	Date:	Time:
			Jodi Henson	9-11-2012	11:16

Phone Results		Yes		No	
Fax Results		Yes		No	Additional Fax Number:

REMARKS:

Email Results to: hconder@riceswd.com
kweinheimer@rice-ecs.com
kjones@riceswd.com
rozanne@valornet.com

Delivered By: (Circle One)	Sample Condition				CHECKED BY:
	Cool		Intact		
Sampler - UPS - Bus - Other:	Yes	✓	Yes	✓	(Initials) GA
	No		No		

#26