The Reno Creek Project - Monitor Well Sampling Report

AUC LLC

Location ID	PZM16	Sample Date:	8/31/11	Sampling Company:	TREC	Sampled By 1:	TN
						Sampled By 2	WC
Sample Event	Q3-2011					Sampled By 3:	None

Well Information:

Well Total Depth (TD)	315	ft			Well Measuring Point (MP) Location:		North Side-Marked		
Sampled From:	Monitoring Well		Well Inside Diameter:	4.5	inches	Pump Type Used:	Dedicated Low Flow Bladder		
Screened Interval:	295	Feet to	315	Feet		Pump Intake Depth:	305	ft	Tubing Type: Dedicated Plastic

Well Fluid Measurements:

Time (military):	9:15	Weather:	Air Temp	81	(°F)	Conditions:	Windy, sunny, very warm

Water level gauged using:	Electronic tape	ft
Depth to Water (DTW) below MP:	137.48	ft
Water Column Height (TD-DTW):	177.52	ft
Water volume = pr^2h (cf)	146.66	gallons
3 Well Volumes:	439.97	gallons

Well volume (in gal / LF) = pr2 (cf) where: p = pi (approximately 3.14); r = radius of monitoring well (feet)
cf = conversion factor (7.48 gal/ft3);

Well ID (in)	2	3	4	4.5	5
Water Volume (gal/LF)	0.163188147	0.367173331	0.652752589	0.826139995	1.01992592

Purging:

Purge Date	8/31/11	Purge Time Begin	9:30		Low Flow Pump Controller Settings:		Charge Time	5	Exhaust Time 20
Purge Pump Type:	Dedicated Low Flow Bladder	Pumping Rate:	300	ml/min	Meter Type(1):	YSI Multi	Meter Calibration Date:	8/15/11	
Volume Purged Prior to Sampling:	3.5	gallons			Meter Type(2):	Hach Turbidity	Meter Calibration Date:	8/11/11	
					Meter Type(3):		Meter Calibration Date:		

Field Stabilization Measurements:

Sample ID	Purge Date	Time (min.)	Purge Rate (ml/min)	Purge Rate (gal/min)	Temp (°C)	Conductivity (µmhos/cm)	DO (mg/L)	pH (su)	ORP (mV)	Turbidity (NTU)	Water Level (ft)	Comments
PZM16-003-110831	08/31/11	9:40	300		14.60	1370	1.37	8.67	-168.0	1.5	137.38	
		9:43	300		14.58	1371	0.48	9.41	-206.4	0.5		Shut pump off
		9:46	300		17.09	1373	0.36	9.30	-210.5	0.6	137.38	
		9:50	300		15.1	1371	0.34	9.50	-213.8	0.6	137.38	
		9:53	300		14.97	1368	0.31	9.56	-215.1	0.6	137.38	Shut pump off
											137.64	ending water level
Repeat Last Stabilization Meas.												

Sampling:

Sample Date	8/31/2011	Sample Collection Time (MT):	10:00				
Sample Pump Type:	Non-Dedicated Low Flow Bladder			Meter Type(1):	YSI Multi	Meter 1 Calibration Date:	8/15/11
				Meter Type(2):	Hach Turbidity	Meter 2 Calibration Date:	8/11/11
				Meter Type(3):		Meter 3 Calibration Date:	

Analysis:

QA/QC Sample	No	QA/QC Type		COC#1:	RC08368	Lab 1	IML
Duplicate Name		Duplicate Sample Time		COC#2:		Lab 2	ALS
				COC#3:		Lab 3	

Analysis:	Table 1- 4.14, Guide 8, & Radon 222					

Comments:

Could not get Solinst to read water level while pumping, so took water levels every other reading to ensure no drawdown by shutting pump off; no drawdown at all; quit getting water at 10:10 after line developed air leak down in the well just above pump;

pulled line/pump out for repair; fixed & reinstalled line; ran system for 15 minutes to purge line exposed to light and heat (more than 2 gal); finished sampling at 11:30, 300 ml/min

Stablization Parameters
Temp = +/- 3% in celcius
pH = +/- 0.1 unit
SC = +/- 3% in µmhos/cm
ORP/Eh = +/- 10 millivolts
DO = +/- 10% in mg/L
Turbidity= +/_10% for values > 5

Range values for data entry

Conductivity Range (µmhos/cm)		Turbidity (NTU)		Dissolve Oxygen (DO) (mg/L)		Temperature Range (°C)		Ox/Reduc Potential (mV)	
Min	0	Min	0	Min	0.01	Min	-20	Min	-400
Max	2000	Max	1000	Max	2000	Max	80	Max	700