

The Reno Creek Project - Monitor Well Sampling Report

AUC LLC

Location ID	PZM15	Sample Date:	2/23/11	Sampling Company:	TREC	Sampled By 1:	TN
Sample Event	Q1-2010					Sampled By 2:	JS2
						Sampled By 3:	None

Well Information:

Well Total Depth (TD)	443	ft	Well Measuring Point (MP) Location:	North Side-Marked
Sampled From:	Monitoring Well	Well Inside Diameter:	4.5	inches
Screened Interval:	420	Feet to	440	Feet
		Pump Type Used:	Dedicated Low Flow Bladder	
		Pump Intake Depth:	430	ft
		Tubing Type:	Dedicated Plastic	

Well Fluid Measurements:

Time (military):	810	Weather:	Air Temp	17	(°F)	Conditions:	Cold, moderate wind
Water level gauged using:	Electronic tape	ft					
Depth to Water (DTW) below MP:	226.85	ft					
Water Column Height (TD-DTW):	216.15	ft					
Water volume = $\pi r^2 h$ (cf)	178.57	gallons					
3 Well Volumes:	535.71	gallons					

Well volume (in gal / LF) = $\pi r^2 (cf)$ where: $\pi = 3.14$; $r =$ radius of monitoring well (feet) cf = conversion factor (7.48 gal/ft ³);					
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	2/23/11	Purge Time Begin	825	Low Flow Pump Controller Settings:	Charge Time	5	Exhaust Time	23
Purge Pump Type:	Dedicated Low Flow Bladder	Pumping Rate:	400	ml/min	Meter Type(1):	YSI Multi	Meter Calibration Date:	1/26/11
Volume Purged Prior to Sampling:	6	gallons			Meter Type(2):	Hach Turbidity	Meter Calibration Date:	2/23/11
					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
PZM15-001-110223	02/23/11	840	400		7.78	816	9.50	11.66	101.7	4.78	226.41	
		843	400		8.52	607	2.93	10.60	76.8	2.09	226.47	
		846	400		8.73	577	2.09	9.23	76.5	2.03	226.50	
		849	400		8.68	576	1.77	8.81	63.7	0.99	226.55	
		852	400		8.87	579	1.65	8.64	54.2	1.27	226.60	
		855	400		8.87	582	1.53	8.54	44.7	12.7	226.60	
		858	400		8.93	581	0.69	8.52	22		226.60	calibrating turbidmeter
		901	400		8.99	583	0.42	8.51	-4.3		226.58	calibrating turbidmeter
		904	400		9.06	583	0.37	8.49	-13.1		226.58	calibrating turbidmeter
		907	400		8.69	577	0.33	8.48	-21.6	12.2	226.58	
		910	400		8.7	577	0.31	8.47	-26.1	12.5	226.54	
		913	400		8.59	575	0.3	8.46	-33.9	10.6	226.50	
		916	400		8.56	573	0.29	8.46	-36.3	8.55	226.30	
		919	400		9.26	583	0.29	8.43	-48.9	7.98	226.48	
		922	400		9.31	586	0.26	8.41	-59.5	8.48	226.58	
		925	400		9.28	586	0.23	8.46	-68.7	7.36	226.57	
		928	400		9.45	588	0.22	8.47	-76.2	7.39	226.65	
		931	400		9.43	586	0.21	8.47	-82	6.84	226.68	
Repeat Last Stabilization Meas.		934	400		9.37	584	0.2	8.48	-85.9	7.15	226.68	
		937	400		9.51	586	0.19	8.46	-90.2	7.88	226.70	

Sampling:

Sample Date	2/23/2011	Sample Collection Time (MT):	945
Sample Pump Type:	Dedicated Low Flow Bladder	Meter Type(1):	YSI Multi
		Meter 1 Calibration Date:	11/26/11
		Meter Type(2):	Hach Turbidity
		Meter 2 Calibration Date:	2/23/11
		Meter Type(3):	
		Meter 3 Calibration Date:	

Analysis:

QA/QC Sample	No	QA/QC Type	None	COC#1:	RC08007	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: Needed to calibrate turbidmeter during sampling due to some questionable readings.

Stabilization Parameters

Temp	= +/- 3% in celsius
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