

# The Reno Creek Project - Monitor Well Sampling Report

# AUC LLC

Location ID	PZM14	Sample Date:	10/19/11	Sampling Company:	TREC	Sampled By 1:	TN
Sample Event	Q4-2011					Sampled By 2:	KD
						Sampled By 3:	None

### Well Information:

Well Total Depth (TD)	347	ft	Well Measuring Point (MP) Location:	North Side-Marked
Sampled From:	Monitoring Well	Well Inside Diameter:	4.5	inches
Screened Interval:	327	Feet to	347	Feet
		Pump Type Used:	Dedicated Low Flow Bladder	
		Pump Intake Depth:	337	ft
		Tubing Type:	Dedicated Plastic	

### Well Fluid Measurements:

Time (military):	1100	Weather:	Air Temp	51	(°F)	Conditions:	Sunny, slight breeze
Water level gauged using:	Electronic tape						
Depth to Water (DTW) below MP:	198.68	ft					
Water Column Height (TD-DTW):	148.32	ft					
Water volume = $\pi r^2 h$ (cf)	122.53	gallons					
3 Well Volumes:	367.60	gallons					

Well volume (in gal / LF) = $\pi r^2 (cf)$ where: $\pi$ = pi (approximately 3.14); $r$ = radius of monitoring well (feet) cf = conversion factor (7.48 gal/ft <sup>3</sup> );					
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	10/19/11	Purge Time Begin	11:15	Low Flow Pump Controller Settings:	Charge Time	4	Exhaust Time	26
Purge Pump Type:	Dedicated Low Flow Bladder	Pumping Rate:	250	ml/min	Meter Type(1):	YSI Multi	Meter Calibration Date:	10/14/11
Volume Purged Prior to Sampling:	1.5	gallons			Meter Type(2):	Hach Turbidity	Meter Calibration Date:	10/5/11
					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
PZM14-004-111019	10/19/11	11:25	250		11.04	1166	10.30	7.66	45.9	2.9	199.17	
		11:28	250		10.80	1169	9.43	7.76	51.0	2.8	199.28	
		11:31	250		10.92	1167	4.36	7.76	32.3	3.0	199.39	
		11:34	250		11.03	1167	3.1	7.83	-30.9	3.8	199.46	
		11:37	250		11.03	1168	2.94	7.99	-132.6	3.5	199.56	
		11:40	250		11.1	1167	2.92	8.04	-148.9	3.3	199.66	
		11:43	250		11.14	1168	2.76	8.07	-152.5	3.1	199.70	
Repeat Last Stabilization Meas.												

### Sampling:

Sample Date	10/19/2011	Sample Collection Time (MT):	1145	Meter Type(1):	YSI Multi	Meter 1 Calibration Date:	10/14/11
Sample Pump Type:	Dedicated Low Flow Bladder			Meter Type(2):	Hach Turbidity	Meter 2 Calibration Date:	10/5/11
				Meter Type(3):		Meter 3 Calibration Date:	

### Analysis:

QA/QC Sample	No	QA/QC Type	None	COC#1:	RC08388	Lab 1	IML
Duplicate Name		Duplicate Sample Time		COC#2:		Lab 2	
				COC#3:		Lab 3	

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

Comments: Slow recharge-sampled with minimal draw down

Stabilization 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 4	Min -20	Min -400
Max 2000	Max 1000	Max 20	Max 80	Max 600