

# The Reno Creek Project - Monitor Well Sampling Report

# AUC LLC

Location ID	PZM15	Sample Date:	11/15/11	Sampling Company:	TREC	Sampled By 1:	TN
Sample Event	Q4-2011					Sampled By 2:	RM
						Sampled By 3:	

### 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):	8:30	Weather:	Air Temp	19	(°F)	Conditions:	Breezy, snowing, very cold
Water level gauged using:	Electronic tape	ft					
Depth to Water (DTW) below MP:	225.94	ft					
Water Column Height (TD-DTW):	217.06	ft					
Water volume = $\pi r^2 h$ (cf)	179.32	gallons					
3 Well Volumes:	537.97	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	11/15/11	Purge Time Begin	8:45	Low Flow Pump Controller Settings:	Charge Time	5	Exhaust Time	25
Purge Pump Type:	Dedicated Low Flow Bladder	Pumping Rate:	450	ml/min	Meter Type(1):	YSI Multi	Meter Calibration Date:	10/14/11
Volume Purged Prior to Sampling:	3	gallons			Meter Type(2):	Hach Turbidity	Meter Calibration Date:	11/5/11
					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
PZM15-004-111115	11/15/11	8:50	500		9.11	882	5.39	8.44	-80.0	2.0	226.64	
		8:53	450		9.11	875	7.70	8.70	-180.0	2.9	226.71	
		8:56	450		9.02	872	3.94	8.73	-203.0	2.4	226.72	
		8:59	450		9.15	873	1.66	8.68	-213.9	2.5	226.79	
		9:02	450		9.18	877	0.91	8.61	-214.4	2.5	226.79	
		9:05	450		9.21	874	0.80	8.48	-206.7	2.7	226.84	
		9:08	450		9.29	875	0.82	8.40	-197.5	2.8	226.87	
Repeat Last Stabilization Meas.												

### Sampling:

Sample Date	11/15/2011	Sample Collection Time (MT):	9:15	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:	11/5/11
				Meter Type(3):		Meter 3 Calibration Date:	

### Analysis:

QA/QC Sample	No	QA/QC Type Duplicate	None	COC#1:	RC08401	Lab 1	IML
Duplicate Name		Sample Time		COC#2:		Lab 2	ALS
				COC#3:		Lab 3	

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

Comments:

### 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 0.01	Min -20	Min -400
Max 2000	Max 1000	Max 2000	Max 80	Max 700