

# The Reno Creek Project - Monitor Well Sampling Report

# AUC LLC

Location ID	PZM2	Sample Date:	12/20/11	Sampling Company:	TREC	Sampled By 1:	TN
Sample Event	Q3-2011					Sampled By 2:	WC
						Sampled By 3:	

### Well Information:

Well Total Depth (TD)	370	ft	Well Measuring Point (MP) Location:	North Side-Marked
Sampled From:	Pump Test Well	Well Inside Diameter:	4.5	inches
Screened Interval:	350	Feet to	370	Feet
		Pump Type Used:	Dedicated Low Flow Bladder	
		Pump Intake Depth:	360	ft
		Tubing Type:	Dedicated Plastic	

### Well Fluid Measurements:

Time (military):	1245	Weather:	Air Temp	45	(°F)	Conditions:	Sunny, breezy
Water level gauged using:	Electronic tape	ft					
Depth to Water (DTW) below MP:	305.17	ft					
Water Column Height (TD-DTW):	0	ft					
Water volume = $\pi r^2 h$ (cf)	0.00	gallons					
3 Well Volumes:	0.00	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	12/20/11	Purge Time Begin	1255	Low Flow Pump Controller Settings:	Charge Time	11	Exhaust Time	19
Purge Pump Type:	Dedicated Low Flow Bladder	Pumping Rate:	350	ml/min	Meter Type(1):	YSI Multi	Meter Calibration Date:	12/19/11
Volume Purged Prior to Sampling:	2.5	gallons			Meter Type(2):	Hach Turbidity	Meter Calibration Date:	12/19/11
					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		
PZM2-003-111220	12/20/11	1315	350		9.90	1836	4.59	8.65	125.1	3.8	305.61			
		1318	350		9.81	1844	2.16	8.61	112.6	4.4	305.62			
		1321	350		9.80	1842	1.75	8.61	94.8	3.2	305.58	changed N2 tanks		
		1324	400		9.77	1840	1.53	8.60	56.4	3.7	305.57			
		1327	400		10.00	1833	1.35	8.59	-32.0	3.9	305.63			
		1330	400		10.19	1835	1.30	8.59	-77.1	4.6	305.64			
		1333	400		10.30	1833	1.26	8.60	-166.8	4.6	305.65			
Repeat Last Stabilization Meas.														

### Sampling:

Sample Date	12/20/2011	Sample Collection Time (MT):	1330	Meter Type(1):	YSI Multi	Meter 1 Calibration Date:	12/19/11
Sample Pump Type:	Dedicated Low Flow Bladder			Meter Type(2):	Hach Turbidity	Meter 2 Calibration Date:	12/19/11
				Meter Type(3):		Meter 3 Calibration Date:	

### Analysis:

QA/QC Sample	No	QA/QC Type		COC#1:	RC08160	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: Purged more than one gallon to flush lines prior to stabilization; good recharge in this well; could not stabilize ORP-did not use as stabilization factor

### 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