

# The Reno Creek Project - Monitor Well Sampling Report

# AUC LLC

Location ID	UM6	Sample Date:	10/18/11	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)	435	ft	Well Measuring Point (MP) Location:	North Side-Marked
Sampled From:	Monitoring Well	Well Inside Diameter:	4.5	inches
Screened Interval:	415	Feet to	435	Feet
		Pump Type Used:	Dedicated Low Flow Bladder	
		Pump Intake Depth:	425	ft
		Tubing Type:	Dedicated Plastic	

### Well Fluid Measurements:

Time (military):	10:10	Weather:	Air Temp	48	(°F)	Conditions:	Windy, sunny, cool
Water level gauged using:	Electronic tape						
Depth to Water (DTW) below MP:	211.06	ft					
Water Column Height (TD-DTW):	223.94	ft					
Water volume = $\pi r^2 h$ (cf)	185.01	gallons					
3 Well Volumes:	555.02	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	10/18/11	Purge Time Begin	10:30	Low Flow Pump Controller Settings:	Charge Time	3	Exhaust Time	27
Purge Pump Type:	Dedicated Low Flow Bladder	Pumping Rate:	150	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			
UM6-004-111018	10/18/11	10:45	150		10.45	735	7.65	9.26	-26.4	5.3	212.18				
		10:48	150		10.25	614	7.67	9.53	-170.6	5.2	212.31				
		10:51	150		10.32	616	9.44	9.54	-210.1	3.0	212.40				
		10:54	150		10.17	614	9.46	9.56	-215.2	3.6	212.49				
		10:57	150		9.99	613	9.6	9.54	-200.8	2.2	212.56				
		11:00	150		10.01	611	9.75	9.56	-212.6	2.5	212.62				
Repeat Last Stabilization Meas.															

### Sampling:

Sample Date	10/18/2011	Sample Collection Time (MT):	11:00 AM	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		QA/QC Type		COC#1:	RC08395	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: No recharge-sampled with minimal draw down. Small leak in water line-air in line.

### 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