

# The Reno Creek Project - Monitor Well Sampling Report

# AUC LLC

Location ID	UM4	Sample Date:	8/30/11	Sampling Company:	TREC	Sampled By 1:	TN
Sample Event	Q3-2011					Sampled By 2:	WC
						Sampled By 3:	None

### Well Information:

Well Total Depth (TD)	430	ft	Well Measuring Point (MP) Location:	North Side-Marked
Sampled From:	Monitoring Well	Well Inside Diameter:	4.5	inches
Screened Interval:	410	Feet to	430	Feet
		Pump Type Used:	Dedicated Low Flow Bladder	
		Pump Intake Depth:	420	ft
				Tubing Type: Dedicated Plastic

### Well Fluid Measurements:

Time (military):	10:15	Weather:	Air Temp	70	(°F)	Conditions:	Sunny, breezy
Water level gauged using:	Electronic tape						
Depth to Water (DTW) below MP:	156.38	ft					
Water Column Height (TD-DTW):	273.62	ft					
Water volume = $\pi r^2 h$ (cf)	226.05	gallons					
3 Well Volumes:	678.15	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 <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	8/30/11	Purge Time Begin	10:20	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:	8/15/11
Volume Purged Prior to Sampling:	2	gallons			Meter Type(2):	Hach Turbidity	Meter Calibration Date:	8/11/11
					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
UM4-003-110830	08/30/11	10:30	150		15.87	1982	1.22	9.05	-288.4	1.7	157.18	
		10:33	150		14.88	1989	0.47	9.78	-288.0	1.3	157.27	
		10:36	150		14.78	1993	0.57	9.87	-279.5	1.2	157.37	
		10:39	150		14.7	1993	0.84	9.93	-273.6	1.1	157.49	
		10:42	150		14.3	2013	1.12	10.04	-274.0	1	157.59	Lowered exhaust
		10:45	150		14.61	2002	1.1	10.04	-272.7	0.9	157.73	Changed exhaust back
		10:48	150		14.6	1983	1.05	10.06	-269.4	0.9	157.86	
		10:51	150		14.64	1986	1.02	10.07	-269	0.9	157.94	
		10:54	150		14.77	1990	0.95	10.08	-269.7	1	158.10	
Repeat Last Stabilization Meas.												

### Sampling:

Sample Date	8/30/2011	Sample Collection Time (MT):	11:00	Meter Type(1):	YSI Multi	Meter 1 Calibration Date:	8/15/11
Sample Pump Type:	Dedicated Low Flow Bladder			Meter Type(2):	Hach Turbidity	Meter 2 Calibration Date:	8/11/11
				Meter Type(3):		Meter 3 Calibration Date:	

### Analysis:

QA/QC Sample	No	QA/QC Type		COC#1:	RC08366	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: Sample was very foamy with strong sulphur odor; slow recharge rate sampled with minimal drawdown

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