

# The Reno Creek Project - Monitor Well Sampling Report

# AUC LLC

Location ID	SMS	Sample Date:	10/29/10	Sampling Company:	TREC	Sampled By 1:	TN
Sample Event	Q1-2010					Sampled By 2:	JS2
						Sampled By 3:	RD

### Well Information:

Well Total Depth (TD)	50	ft	Well Measuring Point (MP) Location:	North Side-Marked
Sampled From:	Monitoring Well	Well Inside Diameter:	4.5	inches
Screened Interval:	30	Feet to	50	Feet
		Pump Type Used:	Non-Dedicated Low Flow Bladder	
		Pump Intake Depth:	40	ft
		Tubing Type:	Non-dedicated Plastic	

### Well Fluid Measurements:

Time (military):	1050	Weather:	Air Temp	50	(°F)	Conditions:	Sunny, Breezy
Water level gauged using:	Electronic tape	ft					
Depth to Water (DTW) below MP:	36.45	ft					
Water Column Height (TD-DTW):	13.55	ft					
Water volume = $\pi r^2 h$ (cf)	11.19	gallons					
3 Well Volumes:	33.58	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/ft3)					
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	10/29/10	Purge Time Begin	11:36	Low Flow Pump Controller Settings:	Charge Time	18	Exhaust Time	25
Purge Pump Type:	Non-Dedicated Low Flow Bladder	Pumping Rate:	250	ml/min	Meter Type(1):	YSI Multi	Meter Calibration Date:	10/19/10
Volume Purged Prior to Sampling:	3	gallons			Meter Type(2):	Hach Turbidity	Meter Calibration Date:	10/29/10
					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 (mS/cm)	DO (mg/L)	pH (su)	ORP (mV)	Turbidity (NTU)	Water Level (ft)	Comments
SMS	10/29/10	1136	250		15.49	3.168	0.12	7.51		3.75	37.32	
		1140	300		15.65	3.18	0.17	7.34		2.31	37.51	
		1143	220		15.82	3.178	0.13	7.33		2.56	37.60	
		1146	230		15.85	3.184	0.11	7.33		2.9	37.71	
		1149	200		15.85	3.183	0.1	7.33		1.94	37.73	
		1152	200		15.81	3.182	0.1	7.33		2.12	37.75	
		1155	300		15.8	3.183	0.09	7.33		2.32	37.83	
		1158	200		15.7	3.185	0.09	7.34		2.6	37.88	
		1201	250		15.68	3.185	0.09	7.34		2.69	37.90	
		1204	200		15.97	3.186	0.09	7.35		2.8	37.91	
		1207	200		16.11	3.186	0.08	7.35		2.83	37.94	
		1210	200		16.19	3.186	0.08	7.36		2.81	37.95	
Repeat Last Stabilization Meas.												

### Sampling:

Sample Date	10/29/2010	Sample Collection Time (MT):	12:00	Meter Type(1):	YSI Multi	Meter 1 Calibration Date:	10/19/10
Sample Pump Type:	Non-Dedicated Low Flow Bladder			Meter Type(2):	Hach Turbidity	Meter 2 Calibration Date:	10/29/10
				Meter Type(3):		Meter 3 Calibration Date:	

### Analysis:

QA/QC Sample	No	QA/QC Type	None	COC#1:	002	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:  
OPR reading was very inconsistent so was not factored into stabilization.

Stabilization Parameters
Temp = +/- 3% in celsius
pH = +/- 0.1 unit
SC = +/- 3% in $\mu\text{mhos/cm}$
ORP/Eh = +/- 10 millivolts
DO = +/- 10% in mg/L
Turbidity = +/- 10% for values > 5

Range values for data entry				
Conductivity Range (mS/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