

# The Reno Creek Project - Monitor Well Sampling Report

# AUC LLC

Location ID	UM4	Sample Date:	2/17/11	Sampling Company:	TREC	Sampled By 1:	TN
Sample Event	Q1-2011					Sampled By 2:	JS2
						Sampled By 3:	None

### Well Information:

Well Total Depth (TD)	193	ft	Well Measuring Point (MP) Location:	North Side-Marked
Sampled From:	Monitoring Well	Well Inside Diameter:	4.5	inches
Screened Interval:	173	Feet to	193	Feet
		Pump Type Used:	Dedicated Low Flow Bladder	
		Pump Intake Depth:	183	ft
		Tubing Type:	Dedicated Plastic	

### Well Fluid Measurements:

Time (military):	1145	Weather:	Air Temp	35	(°F)	Conditions:	Very Windy, Cold
Water level gauged using:	Electronic tape	ft					
Depth to Water (DTW) below MP:	155.88	ft					
Water Column Height (TD-DTW):	37.12	ft					
Water volume = $\pi r^2 h$ (cf)	30.67	gallons					
3 Well Volumes:	92.00	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	2/17/11	Purge Time Begin	1200	Low Flow Pump Controller Settings:	Charge Time	5	Exhaust Time	20
Purge Pump Type:	Dedicated Low Flow Bladder	Pumping Rate:	150	ml/min	Meter Type(1):	YSI Multi	Meter Calibration Date:	1/26/11
Volume Purged Prior to Sampling:	3.5	gallons			Meter Type(2):	Hach Turbidity	Meter Calibration Date:	2/15/11
					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
UM4-001-110217	02/17/11	1205	200		8.46	686	0.68	7.34	209.8	9.8	157.97	
		1208	200		8.35	683	0.43	7.68	196.5	10.3	158.15	
		1211	150		8.81	689	0.34	7.83	184.0	10.3	158.38	
		1214	200		8.62	714	0.29	7.92	105.6	10.4	158.59	
		1217	150		8.58	755	0.3	7.88	-21.4	10.2	158.73	
		1220	150		8.55	830	0.28	7.8	-73.1	13.8	158.84	
		1223	150		8.5	950	0.25	7.69	-114.7	14.6	158.96	
		1226	150		8.12	1042	0.24	7.62	-137.9	13.4	159.06	
		1229	150		8.35	1106	0.2	7.56	-153.7	9.38	159.19	
		1232	150		8.28	1156	0.19	7.54	-164.8	8.28	159.37	
		1235	150		8.57	1194	0.19	7.53	-171.3	6.27	159.46	
		1238	150		8.54	1231	0.19	7.51	-179.9	4.82	159.58	
		1241	150		8.57	1258	0.19	7.51	185.6	4.03	159.71	
		1244	150		8.64	1271	0.19	7.5	-189	3.53	159.75	
		1247	150		8.55	1281	0.19	7.5	-193.5	2.93	159.95	
		1250	150		8.24	1277	0.19	7.5	-197.1	2.39	159.95	
		1253	150		8.25	1288	0.18	7.5	-199.5	2.05	160.04	
Repeat Last Stabilization Meas.												

### Sampling:

Sample Date	2/17/2011	Sample Collection Time (MT):	1300
Sample Pump Type:	Dedicated Low Flow Bladder	Meter Type(1):	YSI Multi
		Meter 1 Calibration Date:	1/26/11
		Meter Type(2):	Hach Turbidity
		Meter 2 Calibration Date:	2/15/11
		Meter Type(3):	
		Meter 3 Calibration Date:	

### Analysis:

QA/QC Sample	No	QA/QC Type		COC#1:	RC08009	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: Strong odor of methane, very foamy

### 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