

# The Reno Creek Project - Monitor Well Sampling Report

# AUC LLC

Location ID	UM6	Sample Date:	3/31/11	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)	435	ft	Well Measuring Point (MP) Location:	North Side-Marked			
Sampled From:	Monitoring Well	Well Inside Diameter:	4.5	inches	Pump Type Used:	Non-Dedicated Low Flow Bladder	
Screened Interval:	415	Feet to	435	Feet	Pump Intake Depth:	425	ft
						Tubing Type:	Non-dedicated Plastic

Well Fluid Measurements:							
Time (military):	815	Weather:	Air Temp	37	(°F)	Conditions:	Rainy, Cold, Overcast
Water level gauged using:	Electronic tape	ft					
Depth to Water (DTW) below MP:	211.65	ft					
Water Column Height (TD-DTW):	223.35	ft					
Water volume = $\pi r^2 h$ (cf)	184.52	gallons					
3 Well Volumes:	553.56	gallons					

Well volume (in gal / LF) = $\pi r^2 h$ 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	3/31/11	Purge Time Begin	915	Low Flow Pump Controller Settings:	Charge Time	9	Exhaust Time	28
Purge Pump Type:	Non-Dedicated Low Flow Bladder	Pumping Rate:	100	ml/min	Meter Type(1):	YSI Multi	Meter Calibration Date:	3/21/11
Volume Purged Prior to Sampling:	1	gallons			Meter Type(2):	Hach Turbidity	Meter Calibration Date:	3/21/11
					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	
UM6-001-110331	03/31/11	930	150		6.93	410	7.98	8.65	142.0	10.6	211.05		
		933	150		6.85	416	1.41	9.21	97.8	10.6	211.16		
		936	100		6.94	417	1.21	9.24	81.8	11.7	211.26		
		939	100		6.8	416	1.09	9.26	63.9	11	211.37		
		942	100		6.52	412	1.05	9.28	50.5	11.1	211.47		
		945	100		6.41	410	1.01	9.31	38.7	10.2	211.57		
		948	100		6.33	408	0.98	9.35	26.8	11.2	211.67		
		951	100		6.13	405	0.96	9.4	17.2	12.4	211.77		
		954	100		6.19	404	0.93	9.44	10.2	15	211.86		
		957	100		6.19	404	0.91	9.49	4.1	15.8	211.94		
		1000	100		6.06	402	0.9	9.51	0.1	15.9	212.00		
Repeat Last Stabilization Meas.													

Sampling:							
Sample Date	3/31/2011	Sample Collection Time (MT):	1003	Meter Type(1):	YSI Multi	Meter 1 Calibration Date:	3/21/11
Sample Pump Type:	Dedicated Low Flow Bladder			Meter Type(2):	Hach Turbidity	Meter 2 Calibration Date:	3/21/11
				Meter Type(3):		Meter 3 Calibration Date:	

Analysis:							
QA/QC Sample		QA/QC Type		COC#1:		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: Very slow recharge rate, ORP all over, did not use for stabilization

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