

The Reno Creek Project - Monitor Well Sampling Report

AUC LLC

Location ID	UM4	Sample Date:	12/14/11	Sampling Company:	TREC	Sampled By 1:	TN
Sample Event	Q4-2011					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:	Non-Dedicated Low Flow Bladder	
		Pump Intake Depth:	420	ft
		Tubing Type:	Non-Dedicated Plastic	

Well Fluid Measurements:

Time (military):	11:40	Weather:	Air Temp	30	(°F)	Conditions:	Overcast, windy
Water level gauged using:	Electronic tape						
Depth to Water (DTW) below MP:	156.13	ft					
Water Column Height (TD-DTW):	273.87	ft					
Water volume = $\pi r^2 h$ (cf)	226.25	gallons					
3 Well Volumes:	678.76	gallons					

Well volume (in gal / LF) = πr^2 (cf) where: π = pi (approximately 3.14); r = radius of monitoring well (feet) cf = conversion factor (7.48 gal/ft ³);					
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	12/14/11	Purge Time Begin	12:50	Low Flow Pump Controller Settings:	Charge Time	11	Exhaust Time	19
Purge Pump Type:	Non-Dedicated Low Flow Bladder	Pumping Rate:	250	ml/min	Meter Type(1):	YSI Multi	Meter Calibration Date:	10/14/11
Volume Purged Prior to Sampling:	1	gallons			Meter Type(2):	Hach Turbidity	Meter Calibration Date:	11/5/11
					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
UM4-004-111214	12/14/11	13:20	250		5.27	1309	1.34	7.93	-220.8	3.6	155.30	
		13:23	250		5.37	1285	1.65	7.96	-216.0	3.0	155.60	
		13:26	250		5.40	1285	1.56	7.97	-216.1	2.7	155.65	
		13:29	250		5.47	1296	1.43	7.98	-217.4	1.9	155.75	
Repeat Last Stabilization Meas.												

Sampling:

Sample Date	12/14/2011	Sample Collection Time (MT):	13:30	Meter Type(1):	YSI Multi	Meter 1 Calibration Date:	10/14/11
Sample Pump Type:	Non-Dedicated Low Flow Bladder			Meter Type(2):	Hach Turbidity	Meter 2 Calibration Date:	11/5/11
				Meter Type(3):		Meter 3 Calibration Date:	

Analysis:

QA/QC Sample	No	QA/QC Type		COC#1:	RC08156	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: Had a difficult time pumping water; finally got water but developed water line leak in the reel; after repair still struggled to get water and used quite a bit of N2; water from well very murky with strong sulfur odor

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