

The Reno Creek Project - Monitor Well Sampling Report

AUC LLC

Location ID	UM7	Sample Date:	12/29/11	Sampling Company:	TREC	Sampled By 1:	TN
Sample Event	Q3-2011					Sampled By 2:	WC
						Sampled By 3:	

Well Information:

Well Total Depth (TD)	405	ft	Well Measuring Point (MP) Location:	North Side-Marked
Sampled From:	Monitoring Well	Well Inside Diameter:	4.5	inches
Screened Interval:	385	Feet to	405	Feet
		Pump Type Used:	Dedicated Low Flow Bladder	
		Pump Intake Depth:	395	ft
		Tubing Type:	Dedicated Plastic	

Well Fluid Measurements:

Time (military):	800	Weather:	Air Temp	40	(°F)	Conditions:	Overcast, very windy, very chilly
Water level gauged using:	Electronic tape	ft					
Depth to Water (DTW) below MP:	186.36	ft					
Water Column Height (TD-DTW):	0	ft					
Water volume = $\pi r^2 h$ (cf)	0.00	gallons					
3 Well Volumes:	0.00	gallons					

Well volume (in gal / LF) = $\pi r^2 (cf)$ 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	12/29/11	Purge Time Begin	805	Low Flow Pump Controller Settings:	Charge Time	5	Exhaust Time	22
Purge Pump Type:	Dedicated Low Flow Bladder	Pumping Rate:	400	ml/min	Meter Type(1):	YSI Multi	Meter Calibration Date:	12/19/11
Volume Purged Prior to Sampling:	3	gallons			Meter Type(2):	Hach Turbidity	Meter Calibration Date:	12/19/11
					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	
UM7-003-111229	12/29/11	905	210		10.43	641	7.43	10.58	10.7	7.8			
		908	300		10.37	642	6.53	10.59	5.2	8.6		Increased charge and exhaust	
		911	400		10.61	642	7.53	10.59	1.5	9.4			
		914	400		10.74	635	3.27	10.59	-8.1	6.5			
		917	400		10.74	640	3.14	10.58	-11.3	16.8			
		920	400		10.76	637	2.85	10.57	-13.8	55			
		923	400		10.76	636	2.8	10.56	-14.4	53.1			
		926	400		10.75	636	2.84	10.56	-14.4	54	194.60		
Repeat Last Stabilization Meas.													

Sampling:

Sample Date	12/29/2011	Sample Collection Time (MT):	9:30	Meter Type(1):	YSI Multi	Meter 1 Calibration Date:	12/19/11
Sample Pump Type:	Dedicated Low Flow Bladder			Meter Type(2):	Hach Turbidity	Meter 2 Calibration Date:	12/19/11
				Meter Type(3):		Meter 3 Calibration Date:	

Analysis:

QA/QC Sample	No	QA/QC Type		COC#1:	RC 08412	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:

Solinst kept hanging up on tubing downhole which interfered with water level readings during sampling event. Took a long time to get water but purged more than a gallon once purging began to clean out the line prior to stabilization. High pH and turbidity. Discovered an air leak when freeze-plug line came undone (fixed it). High turbidity. Took final water level after sampling-minimal draw down.

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 (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