

The Reno Creek Project - Monitor Well Sampling Report

AUC LLC

Location ID	PZM10	Sample Date:	11/11/10	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)	320	ft	Well Measuring Point (MP) Location:	North Side-Marked
Sampled From:	Monitoring Well	Well Inside Diameter:	4.5	inches
Screened Interval:	300	Feet to	320	Feet
		Pump Type Used:	Non-Dedicated Low Flow Bladder	
		Pump Intake Depth:	310	ft
		Tubing Type:	Non-dedicated Plastic	

Well Fluid Measurements:

Time (military):	852	Weather:	Air Temp	26	(°F)	Conditions:	Sunny, cold, minimal wind
Water level gauged using:	Electronic tape	ft					
Depth to Water (DTW) below MP:	288.65	ft					
Water Column Height (TD-DTW):	31.35	ft					
Water volume = $\pi r^2 h$ (cf)	25.90	gallons					
3 Well Volumes:	77.70	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/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	11/11/10	Purge Time Begin	1025	Low Flow Pump Controller Settings:	Charge Time	9	Exhaust Time	23
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:	3.5	gallons			Meter Type(2):	Hach Turbidity	Meter Calibration Date:	11/11/10
					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
PZM10	11/11/10	1034	250		8.67	1.49	5.37	8.93	145.9	13.0	288.76	
		1037	300		8.87	1.88	4.73	9.02	137.1	15.0	288.80	
		1040	300		9.24	1.87	4.58	9.03	128.2	13.5	288.75	
		1043	250		9.49	1.86	4.52	9.08	121.3		288.75	calibrating meter
		1046	200		9.36	1.89	3.4	9.11	112.2		288.75	calibrating meter
		1049	300		9.46	1.88	3.18	9.12	107.5		288.75	calibrating meter
		1052	250		9.9	1.86	3.09	9.12	99		288.82	calibrating meter
		1055	250		9.79	1.84	3.08	9.13	95.6	26.2	288.75	
		1058	300		9.66	1.82	3.09	9.13	91.4	29.4	288.79	
		1101	250		9.78	1.8	3.09	9.13	86.7	25.8	288.81	
		1104	250		9.61	1.78	3.12	9.14	84.5	24	288.77	
		1107	250		9.68	1.756	3.06	9.14	81.5	22.8	288.81	
		1110	250		9.79	1.734	3.01	9.14	78.5	23	288.81	
		1113	250		9.81	1.719	2.97	9.14	76.3	19.6	288.80	
		1116	250		9.46	1.705	2.97	9.15	76	19.8	288.77	
1119	250		9.23	1.663	3.04	9.15	75	18.8	288.78			
Repeat Last Stabilization Meas.												

Sampling:

Sample Date	11/11/2010	Sample Collection Time (MT):	1120
Sample Pump Type:	Non-Dedicated Low Flow Bladder	Meter Type(1):	YSI Multi
		Meter 1 Calibration Date:	10/19/10
		Meter Type(2):	Hach Turbidity
		Meter 2 Calibration Date:	11/11/10
		Meter Type(3):	
		Meter 3 Calibration Date:	

Analysis:

QA/QC Sample	No	QA/QC Type	None	COC#1:	007	Lab 1	IML
Duplicate Name		Duplicate Sample Time		COC#2:	007-R	Lab 2	ALS
				COC#3:		Lab 3	

Analysis: Table 1- 4.14, Guide 8, & Radon 222

Comments: Turbidity was not taken from 10:43 to 10:52 due to re-calibrating the meter because of inconsistent readings.

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