

The Reno Creek Project - Monitor Well Sampling Report

AUC LLC

| | | | | | | | |
|--------------|---------|--------------|----------|-------------------|------|---------------|------|
| Location ID | PZM17 | Sample Date: | 11/15/11 | Sampling Company: | TREC | Sampled By 1: | TN |
| Sample Event | Q4-2011 | | | | | Sampled By 2: | RM |
| | | | | | | Sampled By 3: | None |

Well Information:

| | | | | |
|-----------------------|-----------------|-----------------------|-------------------------------------|-------------------|
| Well Total Depth (TD) | 316 | ft | Well Measuring Point (MP) Location: | North Side-Marked |
| Sampled From: | Monitoring Well | Well Inside Diameter: | 4.5 | inches |
| Screened Interval: | 296 | Feet to | 316 | Feet |
| | | Pump Type Used: | Dedicated Low Flow Bladder | |
| | | Pump Intake Depth: | 306 | ft |
| | | Tubing Type: | Dedicated Plastic | |

Well Fluid Measurements:

| | | | | | | | |
|---------------------------------|-----------------|----------|----------|----|------|-------------|--------------------------------------|
| Time (military): | 10:00 | Weather: | Air Temp | 22 | (°F) | Conditions: | Slight breeze, light snow, very cold |
| Water level gauged using: | Electronic tape | | | | | | |
| Depth to Water (DTW) below MP: | 127.65 | ft | | | | | |
| Water Column Height (TD-DTW): | 188.35 | ft | | | | | |
| Water volume = $\pi r^2 h$ (cf) | 155.60 | gallons | | | | | |
| 3 Well Volumes: | 466.81 | 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 | 11/15/11 | Purge Time Begin | 10:15 | Low Flow Pump Controller Settings: | Charge Time | 2 | Exhaust Time | 28 |
| Purge Pump Type: | Dedicated Low Flow Bladder | Pumping Rate: | 400 | ml/min | Meter Type(1): | YSI Multi | Meter Calibration Date: | 10/14/11 |
| Volume Purged Prior to Sampling: | 2.5 | 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 |
|---------------------------------|------------|-------------|---------------------|----------------------|-----------|-------------------------|-----------|---------|----------|-----------------|------------------|----------|
| PZM17-004-111115 | 11/15/11 | 10:20 | 500 | | 8.91 | 1029 | 1.18 | 8.06 | -221.0 | 1.5 | 128.61 | |
| | | 10:23 | 450 | | 9.12 | 1031 | 0.31 | 8.02 | -226.7 | 0.8 | 128.62 | |
| | | 10:26 | 400 | | 9.12 | 1030 | 0.23 | 8.03 | -229.0 | 1.3 | 128.61 | |
| | | 10:29 | 400 | | 9.04 | 1033 | 0.22 | 8.05 | -229.8 | 0.9 | 128.61 | |
| | | | | | | | | | | | | |
| Repeat Last Stabilization Meas. | | | | | | | | | | | | |

Sampling:

| | | | | | | | |
|-------------------|----------------------------|------------------------------|-------|----------------|----------------|---------------------------|----------|
| Sample Date | 11/15/2011 | Sample Collection Time (MT): | 10:30 | Meter Type(1): | YSI Multi | Meter 1 Calibration Date: | 10/14/11 |
| Sample Pump Type: | 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 | | QA/QC Type | | COC#1: | | Lab 1 | IML |
| Duplicate Name | | Duplicate Sample Time | | COC#2: | | Lab 2 | IML |
| | | | | COC#3: | | Lab 3 | |

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

Comments:

| 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 |