

The Reno Creek Project - Monitor Well Sampling Report

AUC LLC

| | | | | | | | |
|--------------|---------|--------------|---------|-------------------|------|---------------|------|
| Location ID | UM4 | Sample Date: | 8/30/11 | Sampling Company: | TREC | Sampled By 1: | TN |
| Sample Event | Q3-2011 | | | | | 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: | Dedicated Low Flow Bladder | |
| | | Pump Intake Depth: | 420 | ft |
| | | | | Tubing Type: Dedicated Plastic |

Well Fluid Measurements:

| | | | | | | | |
|---------------------------------|-----------------|----------|----------|----|------|-------------|---------------|
| Time (military): | 10:15 | Weather: | Air Temp | 70 | (°F) | Conditions: | Sunny, breezy |
| Water level gauged using: | Electronic tape | | | | | | |
| Depth to Water (DTW) below MP: | 156.38 | ft | | | | | |
| Water Column Height (TD-DTW): | 273.62 | ft | | | | | |
| Water volume = $\pi r^2 h$ (cf) | 226.05 | gallons | | | | | |
| 3 Well Volumes: | 678.15 | 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 | 8/30/11 | Purge Time Begin | 10:20 | Low Flow Pump Controller Settings: | Charge Time | 3 | Exhaust Time | 27 |
| Purge Pump Type: | Dedicated Low Flow Bladder | Pumping Rate: | 150 | ml/min | Meter Type(1): | YSI Multi | Meter Calibration Date: | 8/15/11 |
| Volume Purged Prior to Sampling: | 2 | gallons | | | Meter Type(2): | Hach Turbidity | Meter Calibration Date: | 8/11/11 |
| | | | | | 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 |
|---------------------------------|------------|-------------|---------------------|----------------------|-----------|-------------------------|-----------|---------|----------|-----------------|------------------|----------------------|
| UM4-003-110830 | 08/30/11 | 10:30 | 150 | | 15.87 | 1982 | 1.22 | 9.05 | -288.4 | 1.7 | 157.18 | |
| | | 10:33 | 150 | | 14.88 | 1989 | 0.47 | 9.78 | -288.0 | 1.3 | 157.27 | |
| | | 10:36 | 150 | | 14.78 | 1993 | 0.57 | 9.87 | -279.5 | 1.2 | 157.37 | |
| | | 10:39 | 150 | | 14.7 | 1993 | 0.84 | 9.93 | -273.6 | 1.1 | 157.49 | |
| | | 10:42 | 150 | | 14.3 | 2013 | 1.12 | 10.04 | -274.0 | 1 | 157.59 | Lowered exhaust |
| | | 10:45 | 150 | | 14.61 | 2002 | 1.1 | 10.04 | -272.7 | 0.9 | 157.73 | Changed exhaust back |
| | | 10:48 | 150 | | 14.6 | 1983 | 1.05 | 10.06 | -269.4 | 0.9 | 157.86 | |
| | | 10:51 | 150 | | 14.64 | 1986 | 1.02 | 10.07 | -269 | 0.9 | 157.94 | |
| | | 10:54 | 150 | | 14.77 | 1990 | 0.95 | 10.08 | -269.7 | 1 | 158.10 | |
| | | | | | | | | | | | | |
| Repeat Last Stabilization Meas. | | | | | | | | | | | | |

Sampling:

| | | | | | | | |
|-------------------|----------------------------|------------------------------|-------|----------------|----------------|---------------------------|---------|
| Sample Date | 8/30/2011 | Sample Collection Time (MT): | 11:00 | Meter Type(1): | YSI Multi | Meter 1 Calibration Date: | 8/15/11 |
| Sample Pump Type: | Dedicated Low Flow Bladder | | | Meter Type(2): | Hach Turbidity | Meter 2 Calibration Date: | 8/11/11 |
| | | | | Meter Type(3): | | Meter 3 Calibration Date: | |

Analysis:

| | | | | | | | |
|----------------|----|-----------------------|--|--------|---------|-------|-----|
| QA/QC Sample | No | QA/QC Type | | COC#1: | RC08366 | 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: Sample was very foamy with strong sulphur odor; slow recharge rate sampled with minimal drawdown

| 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 |