

**3R – 425**

**AGWMR**

**04 / 17 / 2013**

however, no liquids were recovered. The primary chemicals of concern are hydrocarbon constituents that originated from the condensate release.

Impacted soil was excavated from an area covering approximately 70 ft by 120 ft below the former above-ground storage tank location and the area of the condensate release (Figure 2). For safety reasons and due to limitations posed by surface structures, the vertical extent of the excavation was halted at approximately 30 ft-bgs.

The NMOCD remediation action levels for soil are dependent upon site-specific ranking criteria of:

- depth to groundwater;
- proximity of the wellhead to water sources or private domestic wells; and
- distance to surface water bodies to include but not limited to perennial rivers, streams, creeks, irrigation canals and ditches, lakes, ponds and playas.

The depth to groundwater at the Site is greater than 100 ft-bgs. The closest water well is greater than 1,000 feet away from the Site. There are no surface water bodies within 1,000 feet of the Site. However, there is a dry drainage located less than 200 feet southwest from the Site. There has not been an occasion when CRA personnel have observed any surface-water flow in this ditch. Due to the depth of groundwater (110 ft-bgs) it is unlikely that this ditch would exhibit a perennial stream. The ditch could potentially contain storm water following a major precipitation event.

Based on these ranking criteria and a discussion between ConocoPhillips personnel and Mr. Brandon Powell, of the NMOCD, the NMOCD action levels for hydrocarbons in soil for the Site are:

- 10 milligrams per kilogram (mg/kg) for benzene;
- 50 mg/kg for total BTEX;
- 100 mg/kg for TPH if a perennial stream is within 200 feet of the Site; and

The NMWQCC standards for hydrocarbons in groundwater are as follows:

- 0.01 milligrams per liter (mg/L) for benzene;
- 0.75 mg/L for toluene;
- 0.75 mg/L for ethylbenzene; and
- 0.62 mg/L for total xylenes.

The Site characterization of 2011 showed vadose zone soil impacts above NMOCD recommended action levels based on head space data and covered an approximate area of 5,950 ft<sup>2</sup> or an area covering approximately 70 ft by 85 ft to a depth of 40 ft-bgs to 110 ft-bgs. In general, in this area, the upper 30 feet of impacted soil was removed and the remaining impacted soil warranting remediation is estimated at 8,800 yd<sup>3</sup> based on the in-field head space data.

Groundwater was encountered at the Site at approximately 108 ft-bgs (Table 2). The October 2011 analytical results indicated that the concentrations in groundwater for benzene were above the NMWQCC standard of 0.01 mg/L at Monitor Wells MW-1, MW-6 and MW-8 (Table 2). No other monitor wells showed any hydrocarbon constituents above the NMWQCC standards (Table 2). In general, groundwater impacts were delineated in the area of the release (MW-1 and MW-8) and extended to approximately 60 feet down gradient from the release area (MW-6).

## 2.0 SITE REMEDIATION ACTIVITIES

The release from the above-ground storage tank was initially addressed by excavating impacted soil, followed by subsurface soil sampling and groundwater monitoring and sampling. For the remediation of soil and groundwater impacts at the Site, an in-situ chemical oxidation treatment technology was used in the area of the release.

### 2.1 COOL-OX™ IN-SITU TREATMENT

For in-situ site remediation activities, CRA retained DeepEarth Technologies, Inc. (DTI) to use the *Cool-Ox™* Technology which is a patented in-situ process that uses a solution of calcium peroxide that generates hydrogen peroxide slowly and facilitates the oxidation of petroleum hydrocarbons. A simple stoichiometric diagram for the reaction is included as **Appendix A**. The *Cool-Ox™* treatment facilitates an accelerated biodegradation of petroleum hydrocarbons following the oxidation phase by releasing nutrients without any exothermic reaction and reduces the mobility, toxicity and volume of the hydrocarbon impacts. The process is based on using hydrogen peroxide as the generator of the oxidizing radicals; however, unlike the traditional Fenton Reaction, or Fenton-like processes that use liquid hydrogen peroxide, the *Cool-Ox™* process generates hydrogen peroxide from solid, food-grade, peroxygens that are injected into the soil and/or groundwater in an aqueous suspension. Once in place, the peroxygens react to produce hydrogen peroxide without an exothermic reaction as would occur with a Fenton-like process. The *Cool-Ox™* process eliminates Fenton-like problems because the peroxygens employed are only sparingly soluble in aqueous solutions, and thus, the dissolution rate is quite slow. Once injected, they remain in the impacted media for an extended period of time before undergoing hydrolysis. The low solubility coupled with the buffered solution and the process taking place at a slightly basic pH of 8 eliminates the need to inject iron salts and results in greater control over the process.

From December 2011 to February 2012, the *Cool-Ox™* solution was injected in the area shown in **Figure 2**. DTI utilized a direct push technology (DPT) drill rig supported by DTI's mixing and injection trailer (the Deep-Shot-Rig™) to advance temporary 1.5-inch diameter injection points. Approximately 52,889 gallons were used to inject the solution into the subsurface soil and groundwater using 93 injection points on 8-foot spacings in an approximate area of 5,950 ft<sup>2</sup> (70 ft x 85 ft) to treat approximately 8,815 yd<sup>3</sup> of impacted soil. The solution was primarily injected into the subsurface from the bottom of the injection point to approximately 30 ft-bgs.

Although some injections were started at 30 ft-bgs and preceded to the bottom of the injection, the injections were primarily initiated at the bottom to ensure that the injection rods could be removed adequately using the solution as a lubricant. Each temporary injection point was sealed using hydrated bentonite following completion of the injection process. In addition to groundwater treatment using the direct-push rig, the solution was directly injected into groundwater Monitor Wells MW-1, MW-6, MW-7 and MW-8 with approximately 8,000 gallons of solution.

The reaction of the injected *Cool-Ox*<sup>TM</sup> with hydrocarbons is sometimes expressed on the surface if significant hydrocarbon concentrations are encountered in the subsurface. A characteristic of the *Cool-Ox*<sup>TM</sup> technology is the production of a lather (resembling dirty shaving cream), when the reagent reacts with hydrocarbons. This reaction was observed in the immediate area of the release near Monitor Wells MW-1 and MW-8 and in each of the wells that were directly injected with the solution.

## 2.2 CONFIRMATION SAMPLING

To evaluate the effectiveness of the *Cool-Ox*<sup>TM</sup> treatment, subsurface soil and groundwater conditions were analyzed at the Site after the treatment. Groundwater samples were collected and analyzed on a quarterly basis (February 2012, June 2012, September 2012 and January 2013). The subsurface soil was sampled in the area of the *Cool-Ox*<sup>TM</sup> treatment by advancing five (5) soil borings in August 2012.

Groundwater samples were collected for laboratory analysis for BTEX by Method 8260B, TPH-GRO by Method 8015B, TPH-DRO by Method 8015B and heterotrophic plate count (HPC) by Method SM 9215B, dissolved manganese and dissolved selenium by Method 6010, nitrate and sulfate by EPA Method 300.0 and total dissolved solids (TDS) by Method SM 2540C. In addition, field parameters, which included dissolved oxygen (DO), pH, temperature, oxidation reduction potential (ORP) and specific conductance were measured and recorded (**Appendix B**). Groundwater samples were collected using a disposable bailer and placed into the appropriate laboratory-provided containers following field parameter measurements.

Subsurface soil samples in the *Cool-Ox*<sup>TM</sup> treatment area were collected from five borings at a minimum of every five (5) feet depending on subsurface conditions, such as staining, using a hollow-stem auger (HSA) drill rig in conjunction with a split-spoon sampler.

The split-spoon samples were screened using the in-field head space analysis with a PID, which was calibrated daily. The samples selected for laboratory analyses were based on the olfactory, visual evidence and head space analysis. Soil samples were collected for laboratory analysis for BTEX by Method 8260B, TPH-GRO and TPH-DRO by Method 8015B and pH by Method 9045. At a minimum, the soil sample with either the highest head space concentration per boring and/or at the total depth of the boring was submitted for laboratory analysis. For head space analysis, a portion of the soil sample interval was placed into a clean Ziploc bag, allowed to warm for 30 minutes and then screened using the PID. The data was recorded in the site logbook and on the lithologic log form (**Appendix C**).

### **2.2.1      SOIL CONFIRMATION RESULTS**

The soil laboratory analytical results for August 2012 or post-treatment are summarized and presented in **Table 1** and **Figure 3**. Soil samples were collected for laboratory analyses as outlined in the work plan (CRA, August 2011). Boring logs are contained in **Appendix C**. Laboratory reports are contained in **Appendix D**.

The subsurface soil that was encountered included fill overlying predominantly a tight silt with interbedded fine sand and clay. The total depth of the borings was dependent on the head space readings of less than 100 ppm or the depth to groundwater.

**Figure 4** shows the outline of pre-treatment soil impacts based on the in-field head space readings greater than 100 ppm. Prior to treatment, field head space analysis of soil samples indicated impacts (greater than 100 ppm) in the immediate area of the release to depths ranging from 40 ft-bgs to 110 ft-bgs within an approximate surface area of 7,350 ft<sup>2</sup>. The analytical results indicated soil impacts exceeded the NMOCD action levels for Total BTEX and TPH to a maximum depth of 60 ft-bgs (B-4).

**Figure 5** shows the remaining post-treatment impacts based on subsurface soil sampling using head space results of 100 ppm or greater. Following treatment, field screening of soil samples (greater than 100 ppm) indicated impacts to depths ranging from 40 ft-bgs to 100 ft- bgs within a surface area of approximate 3,640 ft<sup>2</sup>. Although head space readings indicated impacts to 100 ft, the analytical data indicated soil impacts exceeded the NMOCD action levels for Total BTEX and TPH to a maximum depth of 67 ft-bgs (B-13).

The field screening and laboratory analysis of soil samples obtained after treatment indicated the following sample locations were above the NMOCD Action Levels of 100 ppm for in-field head space analysis, 50 mg/kg for total BTEX and 100 mg/kg for TPH:

- B-13 at a depth of 65 to 67 ft-bgs with a head space reading of 1,854 ppm, Total BTEX concentration of 71.6 mg/kg and a TPH concentration of 1,763 mg/kg;
- B-16 at a depth of 45 to 47 ft-bgs with a head space reading of 2,312 ppm, Total BTEX concentration of 258 mg/kg and a TPH concentration of 1,650 mg/kg; and
- B-17 at a depth of 45 to 47 ft-bgs with a head space reading of 2,163 ppm, Total BTEX concentration of 456 mg/kg and a TPH concentration of 3,156 mg/kg.

### 2.2.2 GROUNDWATER MONITORING

The subsurface geology at the Site consists of predominately silt interbedded with fine sands and clay overlying shale bedrock. In general, groundwater occurs in a fine to medium grained sand just above shale bedrock with a saturated thickness of 15 to 20 feet. A total of eight monitor wells have been installed to characterize groundwater conditions at the Site. Four monitor wells were installed in March 2011 and an additional four monitor wells were installed in September and October 2011. Two monitor wells were installed upgradient of the release with one located upgradient of the entire site (MW-4) and one monitor well was located immediately upgradient of the release (MW-7). Two monitor wells (MW-1 and MW-8) were installed within the area of the release and four monitor wells (MW-2, MW-3, MW-5 and MW-6) were installed at various distances down-gradient of the release (**Figure 2**).

The groundwater potentiometric surface maps for the February 2012, June 2012, September 2012 and January 2013 monitoring events are shown in **Figures 6, 7, 8 and 9**. Generally, groundwater was encountered across the Site at approximately 108 ft-bgs. For all of these monitoring periods, the groundwater flow at the site was towards the southwest and the average groundwater gradient across the Site was 0.016 feet/foot. Groundwater levels in each of the monitor wells varied less than 0.50 feet during these monitoring periods.

During the September 2012 sampling event, the casing in Monitor Well MW-8 was noted to be deformed, preventing sampling with a 1.5-inch polyethylene bailer. A 0.5-inch polyethylene bailer was utilized, but removal of three volumes of groundwater could not be achieved. Sampling was attempted again during the January 2013 sampling event with the same outcome. Due to this damage, likely caused by the settling of fill material

in the former excavation area, CRA discontinued sampling of this well and plans to reinstall it.

### 2.2.3 GROUNDWATER ANALYTICAL RESULTS

Groundwater samples were collected for laboratory analyses in August 2011 (pre-treatment) from Monitor Wells MW-1, MW-2, MW-3, and MW-4.

Groundwater samples were collected for laboratory analyses from monitor wells MW-5, MW- 6, MW-7 and MW-8 in October 2011 (pre-treatment) and from all eight wells in February 2012, June 2012 and September 2012 (post-treatment). All groundwater analytical results are summarized and presented in **Table 2** and on **Figures 10** and **11**. Laboratory reports are contained in **Appendix D**.

The pretreatment groundwater analytical results from August 2011 revealed the following:

- Benzene was detected above the NMWQCC standard of 0.01 mg/L at MW-1 with a concentration of 0.0189 mg/L;
- No other wells had any detections of BTEX above the NMWQCC standards;
- Manganese was detected above the NMWQCC standard of 0.2 mg/L in wells MW-1 and MW-3;
- Selenium was detected above the NMWQCC standard of 0.05 mg/L in wells MW-2 and MW-3;
- Nitrates were detected above the NMWQCC standard of 10 mg/L in wells MW-2 and MW-3;
- Sulfates were detected above the NMWQCC standard of 600 mg/L in wells MW-1, MW-2, MW-3 and MW-4; and
- TDS were detected above the NMWQCC standard of 1000 mg/L in wells MW-1, MW-2, MW-3 and MW-4.

The pretreatment groundwater analytical results from October 2011 revealed the following:

- Benzene was detected above the NMWQCC standard in wells MW-6 and MW-8 at concentrations of 0.033 mg/L and 0.15 mg/L respectively;
- Toluene was detected above the NMWQCC standard in well MW-8 at a concentration of 1.24 mg/L;



- Ethylbenzene was only detected in MW-8, but the concentration was below the NMWQCC standard;
- Total xylenes were detected above the NMWQCC standard in well MW-8 at a concentration of 1.43 mg/L;
- No other wells had any detections of BTEX above the NMWQCC standards; and
- Manganese, selenium, nitrates, sulfates and TDS were not analyzed for these wells in October 2011.

For the post-treatment sampling events that occurred in February 2012, June 2012, September 2012 and January 2013, the analytical results revealed the following:

- Benzene was only detected above the NMWQCC standard at MW-8 in February 2012, June 2012 and January 2013;
- Toluene was only detected above the NMWQCC standard at MW-8 in February 2012;
- Ethylbenzene was only detected in MW-8 during these periods but the concentrations were below the NMWQCC standard;
- Total xylenes were only detected above the NMWQCC standard at MW-8 in February 2012;
- MW-8 did not show any detections of BTEX above the NMWQCC standards in September 2012;
- No other wells had any detections of BTEX above the NMWQCC standards in February 2012, June 2012, September 2012 and January 2013;
- Manganese was detected at least once above the NMWQCC standard in wells MW-1, MW-3, MW-5 and MW-6 during these periods;
- Selenium was detected at least once above the NMWQCC standard in wells MW-1, MW-2, MW-3 and MW-6 during these periods;
- Nitrate were detected at least once above the NMWQCC standard in wells MW-1, MW-2, MW-3, MW-6 and MW-8 during these periods;
- Sulfate were detected at least once above the NMWQCC standard in all wells; and
- TDS were detected at least once above the NMWQCC standard in all wells.

The heterotrophic plate count (HPC) data were evaluated to assess biodegradation (i.e. increased hydrocarbon-degrading microbe populations) at the site prior to and after the *Cool-Ox*<sup>TM</sup> treatment. In the area of the release, samples that were collected for HPC analysis after treatment indicated a viable bacteria count for biodegradation at greater than 78,000 colony-forming units per milliliter (CFU/ml) in the area (Table 2). The dissolved oxygen concentration in groundwater after treatment was elevated above the background concentration (< 5 mg/L) in the area of the treatment. In addition, after

treatment the pH was greater than 9 and above the background pH of 7.5 indicating that the *Cool-Ox*<sup>TM</sup> reaction was continuing in the area of treatment. Field parameter data are summarized in **Appendix B**.

### 2.3 QA/QC RESULTS

Quality Assurance/Quality Control (QA/QC) measures were followed according to the remediation work plan that was submitted to the NMOCD in November 2011.

The field PID was calibrated daily using 100 ppm isobutylene. A duplicate groundwater sample was collected during the each groundwater sampling event. Each cooler that was shipped to the laboratory contained a temperature blank and laboratory prepared groundwater trip blanks. The groundwater duplicate samples and all soil and groundwater blanks were analyzed for BTEX. All results were within the normal range.

### 2.4 INVESTIGATION DERIVED WASTE

Soil cuttings were placed in 55 gallon drums and staged on Site until transported for treatment or disposal at a ConocoPhillips-approved facility. Purged water collected during well development was placed in the produced water tank located on Site.

### 3.0 CONCLUSION AND RECOMMENDATIONS

In-situ remediation at the Site using the *Cool-Ox*<sup>TM</sup> technology was completed in February 2012. The chemical oxidant was used in an approximate 5,950 ft<sup>2</sup> area surrounding the release location. The oxidant was injected into the subsurface using a direct push rig beginning below the excavation at approximately 35 ft-bgs and continuing to a maximum depth of 108 ft-bgs or to groundwater. In addition, the oxidant was directly injected into Monitor Wells MW-1, MW-6, MW-7 and MW-8.

The post-treatment sample analytical data indicate an overall reduction in the area of soil impacted by hydrocarbons (from 7,350 ft<sup>2</sup> to 3,640 ft<sup>2</sup>) and in the volume of hydrocarbon-impacted soil (from approximately 6,192 yd<sup>3</sup> to approximately 3,975 yd<sup>3</sup>). This is based on an overall reduction in total volatiles detected in the soil. In general, the majority of the remaining soil impacts are located along the southern edge of the release area near MW-8. The injection of *Cool-Ox*<sup>TM</sup> in this area was difficult due to numerous buried pipelines.

Benzene in soil was not detected above the NMOCD action level prior to or after the soil treatment. Total BTEX in soil was detected prior to treatment above the NMOCD action levels ranging from 122.5 mg/kg to 1515.5 mg/kg (B-10). Total BTEX was detected above the NMOCD action levels after treatment ranging from 71.6 mg/kg to 456 mg/kg. Prior to treatment Total BTEX was detected above NMOCD action levels to approximately 100 ft-bgs and after treatment to approximately 67 ft-bgs.

The groundwater samples collected prior to treatment showed detections of benzene, toluene and xylenes above the NMWQCC standards. Benzene was detected above the NMWQCC standard of 0.01 mg/L at Monitor Wells MW-1, MW-6 and MW-8. Toluene was detected above the standard of 0.75 mg/L at Monitor Well MW-8. Total xylenes were detected above the NMWQCC standard of 0.62 mg/L at Monitor Well MW-8. Prior to treatment the total BTEX was 0.132 mg/L at MW-1, 0.0457 mg/L at MW-6 and 3.04 mg/L at MW-8.

The groundwater samples collected post-treatment showed detections of benzene, toluene and xylenes above the NMWQCC standards at MW-8 only. Benzene was detected above the NMWQCC standard of 0.01 mg/L at Monitor Well MW-8 in February 2012, June 2012 and January 2013. Toluene was detected above the standard of 0.75 mg/L at Monitor Well MW-8 in February 2012. Total xylenes were detected above the NMWQCC standard of 0.62 mg/L at Monitor Well MW-8 in February 2012. After treatment the total BTEX was < 0.003 mg/L at MW-1, < 0.003 at MW-6 mg/L and 0.1443 mg/L at MW-8.

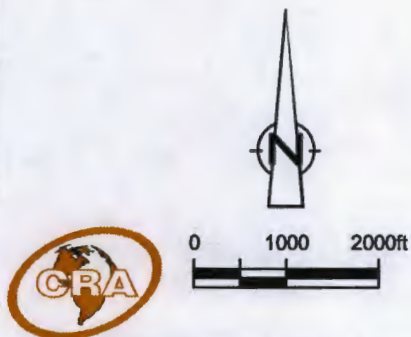
CRA will continue to monitor groundwater at the Site on a quarterly basis until BTEX constituents are below NMWQCC standards in every monitor well for eight consecutive quarters. Groundwater samples will be collected from all Site monitor wells and analyzed for BTEX, dissolved manganese and selenium, sulfate, nitrate, TDS, and HPC. Due to deformation of the casing of MW-8, likely caused by the settling of fill material in the former excavation area, CRA recommends that this well be plugged and abandoned and replaced with a new well adjacent to the current location. In its current condition, MW-8 cannot be adequately purged prior to sample collection.

## FIGURES





SOURCE: USGS 7.5 MINUTE QUAD  
"DELGADITA MESA, NEW MEXICO"



**FIGURE 1**  
**SITE LOCATION MAP**  
**SAN JUAN 29-7 UNIT 37**  
**UNIT LETTER N. SEC 12. T29N, R07W**  
**RIO ARRIBA COUNTY, NEW MEXICO**  
*ConocoPhillips Company*





Figure 2  
SITE DETAIL MAP  
SAN JUAN 29-7 UNIT 37  
NATURAL GAS WELL SITE  
UNIT LETTER N, SEC 12, T29N, R07W  
RIO ARRIBA COUNTY, NEW MEXICO  
ConocoPhillips Company

**Legend**

- Pre-treatment Soil Boring
- Post-treatment Soil Boring
- Monitor Well
- Wellhead
- Current Tank Placement
- Cool Ox Injection (approx.)
- 2010 Excavation (approx.)







B-13 (65-67)			
FIELD HEADSPACE		1834	
BENZENE		0.547	
TOTAL BTEX		71.6	
TOTAL TPH		1763	
(100)			
FIELD HEADSPACE		14.1	
BENZENE		< 0.005	
TOTAL BTEX		0.2398	
TOTAL TPH		17.4	

B-14 (55-57)			
FIELD HEADSPACE		29.6	
BENZENE		< 0.0064	
TOTAL BTEX		0.2339	
TOTAL TPH		< 12.5	

B-16 (45-47)			
FIELD HEADSPACE		2312	
BENZENE		< 2.88	
TOTAL BTEX		258	
TOTAL TPH		1650	
(100-102)			
FIELD HEADSPACE		78	
BENZENE		< 0.0058	
TOTAL BTEX		0.1189	
TOTAL TPH		< 12.0	

B-15 (55-57)			
FIELD HEADSPACE		1.5	
BENZENE		< 0.0053	
TOTAL BTEX		0.1759	
TOTAL TPH		< 10.3	

B-18 (35-37)			
FIELD HEADSPACE		821.6	
BENZENE		< 0.308	
TOTAL BTEX		1.16	
TOTAL TPH		25.0	
(55-57)			
FIELD HEADSPACE		2.6	
BENZENE		< 0.005	
TOTAL BTEX		< 0.005	
TOTAL TPH		< 10.3	

B-12 (55-57)			
FIELD HEADSPACE		2.7	
BENZENE		< 0.0059	
TOTAL BTEX		0.2039	
TOTAL TPH		< 10.3	

B-17 (45-47)			
FIELD HEADSPACE		2163	
BENZENE		< 2.62	
TOTAL BTEX		456	
TOTAL TPH		3156	
(100-102)			
FIELD HEADSPACE		62.9	
BENZENE		0.0085	
TOTAL BTEX		0.1499	
TOTAL TPH		< 10.8	

Legend

Pre-treatment Soil Boring

Post-treatment Soil Boring

Monitor Well

Wellhead

Current Tank Placement

Cool Ox Injection (approx.)

2010 Excavation (approx.)

0

15

30

Feet

Notes:

1. (45-47) Feet Below Ground Surface

2. Analytical results reported in mg/kg. BOLD notation indicates a level that exceeds the New Mexico Oil Conservation Division action level. Field readings shown in ppm.

Figure 3  
SUBSURFACE SOIL ANALYTICAL  
RESULTS MAP - AUG 2012  
SAN JUAN 29-7 UNIT 37  
NATURAL GAS WELL SITE  
UNIT LETTER N. SEC 12, T29N, R07W  
RIO ARriba COUNTY, NEW MEXICO  
ConocoPhillips Company









**Legend**

- Post-treatment Soil Boring
- Monitor Well
- Wellhead
- Soil Impact Contour (ft below ground), Post-Treatment. Based on Photoionization Detector readings over 100ppm
- Current Tank Placement
- Cool Ox Injection (approx.)
- 2010 Excavation (approx.)

0 15 30 Feet

**Figure 5**  
**SUBSURFACE SOIL IMPACTS MAP**  
**POST-TREATMENT**  
**SAN JUAN 29-7 UNIT 37**  
**NATURAL GAS WELL SITE**  
**UNIT LETTER N. SEC 12, T29N, R07W**  
**RIO ARriba COUNTY, NEW MEXICO**  
**ConocoPhillips Company**

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Notes:

1. Groundwater elevation contours indicate feet below ground surface (\* indicates potential anomaly)

Legend

- Pre-treatment Soil Boring
- Post-treatment Soil Boring
- Monitor Well
- Wellhead
- Groundwater Elevation Contour
- Current Tank Placement
- Cool Ox Injection (approx.)
- 2010 Excavation (approx.)



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Notes:

1. Groundwater elevation contours indicate feet below ground surface (\* indicates potential anomaly)

Legend

- Pre-treatment Soil Boring
- Post-treatment Soil Boring
- Monitor Well
- Wellhead

- Groundwater Elevation Contour
- Current Tank Placement
- Cool Ox Injection (approx.)
- 2010 Excavation (approx.)



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Figure 7  
JUNE 2012  
GROUNDWATER POTENTIOMETRIC SURFACE MAP  
SAN JUAN 29-7 UNIT 37  
NATURAL GAS WELL SITE  
UNIT LETTER N. SEC 12, T29N, R07W  
RIO ARriba COUNTY, NEW MEXICO  
ConocoPhillips Company

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The GIS User Community



Notes:

1. Groundwater elevation contours indicate feet below ground surface (\* indicates potential anomaly)

Legend

- Pre-treatment Soil Boring
- Post-treatment Soil Boring
- Monitor Well
- Wellhead
- Groundwater Elevation Contour
- Current Tank Placement
- Cool Ox Injection (approx.)
- 2010 Excavation (approx.)



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Notes:

1. Groundwater elevation contours indicate feet below ground surface (\* indicates potential anomaly)

Legend

- Pre-treatment Soil Boring
- Post-treatment Soil Boring
- ▲ Monitor Well
- ☀ Wellhead
- Groundwater Elevation Contour
- Current Tank Placement
- Cool Ox Injection (approx.)
- 2010 Excavation (approx.)



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Figure 9  
JANUARY 2013  
GROUNDWATER POTENTIOMETRIC SURFACE MAP  
SAN JUAN 29-7 UNIT 37  
NATURAL GAS WELL SITE  
UNIT LETTER N. SEC 12, T29N, R07W  
RIO ARriba COUNTY, NEW MEXICO  
ConocoPhillips Company

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Notes:

1. Analytical results reported in mg/L. BOLD notation indicates a level that exceeds the New Mexico Water Quality Control Commission standard.

MW-7				
Date	2/23/2012	6/5/2012	9/18/2012	1/8/2013
Benzene	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	< 0.001	< 0.001	< 0.001	< 0.001
Ethylbenzene	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	< 0.003	< 0.003	< 0.003	< 0.003

MW-8				
Date	2/23/2012	6/5/2012	9/18/2012	1/8/2013
Benzene	<b>0.036</b>	<b>0.013</b>	0.0098	<b>0.0369</b>
Toluene	<b>0.772</b>	0.120	0.002	0.0199
Ethylbenzene	0.054	0.025	0.006	0.0018
Xylenes	<b>1.35</b>	0.447	0.342	0.0488

MW-5				
Date	2/23/2012	6/5/2012	9/18/2012	1/8/2013
Benzene	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	< 0.001	< 0.001	< 0.001	< 0.001
Ethylbenzene	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	< 0.003	< 0.003	< 0.003	< 0.003

MW-4				
Date	2/23/2012	6/5/2012	9/18/2012	1/8/2013
Benzene	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	< 0.001	< 0.001	< 0.001	< 0.001
Ethylbenzene	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	< 0.003	< 0.003	< 0.003	< 0.003

MW-1				
Date	2/23/2012	6/5/2012	9/18/2012	1/8/2013
Benzene	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	< 0.001	0.002	< 0.001	< 0.001
Ethylbenzene	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	< 0.003	< 0.003	< 0.003	< 0.003

MW-6				
Date	2/23/2012	6/5/2012	9/18/2012	1/8/2013
Benzene	< 0.001	< 0.001	< 0.001	0.0012
Toluene	< 0.001	< 0.001	< 0.001	< 0.001
Ethylbenzene	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	< 0.003	< 0.003	< 0.003	< 0.003

MW-2				
Date	2/23/2012	6/5/2012	9/18/2012	1/8/2013
Benzene	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	< 0.001	< 0.001	< 0.001	< 0.001
Ethylbenzene	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	< 0.003	< 0.003	< 0.003	< 0.003

MW-3				
Date	2/23/2012	6/5/2012	9/18/2012	1/8/2013
Benzene	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	< 0.001	< 0.001	< 0.001	< 0.001
Ethylbenzene	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	< 0.003	< 0.003	< 0.003	< 0.003

MW-4

MW-2

MW-3

MW-5

Meter Run

Solar Panel

MW-7

MW-1

MW-8

Condensate Tank

Produced Water Tank

Separator

Legend

Pre-treatment Soil Boring

Post-treatment Soil Boring

Monitor Well

Wellhead

Current Tank Placement

Cool Ox Injection (approx.)

2010 Excavation (approx.)



Figure 10  
GROUNDWATER HYDROCARBON ANALYTICAL RESULTS MAP  
POST-TREATMENT  
SAN JUAN 29-7 UNIT 37  
NATURAL GAS WELL SITE  
UNIT LETTER N. SEC 12, T29N, R07W  
RIO ARriba COUNTY, NEW MEXICO  
ConocoPhillips Company



Notes:

1. Analytical results reported in mg/L. BOLD notation indicates a level that exceeds the New Mexico Water Quality Control Commission standard.

MW-7				
Date	2/23/2012	6/5/2012	9/18/2012	1/8/2013
Manganese	< 0.005	0.0188	0.0116	0.0093
Selenium	0.022	0.0302	0.0242	0.0164
Nitrate	4.6	1.1	0.97	1.3
Sulfate	3320	1820	1610	1770
TDS	4660	-	4280	3400

MW-8				
Date	2/23/2012	6/5/2012	9/18/2012	1/8/2013
Manganese	< 0.005	0.0218	-	-
Selenium	0.049	0.0452	-	-
Nitrate	3.2	18.1	21.8	30.4
Sulfate	813	793	1130	1260
TDS	5790	-	2960	2700

MW-5				
Date	2/23/2012	6/5/2012	9/18/2012	1/8/2013
Manganese	1.10	0.868	0.791	0.58
Selenium	< 0.015	< 0.015	< 0.015	< 0.015
Nitrate	0.12	< 0.10	< 0.10	< 0.10
Sulfate	3500	2040	1620	1710
TDS	2760	-	2830	2950

MW-4				
Date	2/23/2012	6/5/2012	9/18/2012	1/8/2013
Manganese	0.017	0.0814	0.103	0.0289
Selenium	0.035	0.0369	0.0394	0.0386
Nitrate	8.6	7.5	7.8	9.3
Sulfate	1380	1540	1190	1240
TDS	2070	-	2180	2230

MW-1				
Date	2/23/2012	6/5/2012	9/18/2012	1/8/2013
Manganese	6.40	5.15	2.6	1.10
Selenium	0.055	0.0334	0.0442	0.0568
Nitrate	0.78	9.4	27.5	25.3
Sulfate	1710	1520	1070	1150
TDS	2480	-	2140	2180

MW-6				
Date	2/23/2012	6/5/2012	9/18/2012	1/8/2013
Manganese	< 0.005	1.60	1.11	0.158
Selenium	0.059	0.0454	0.046	0.0536
Nitrate	25.8	35.0	29.5	25.6
Sulfate	950	1090	955	978
TDS	1760	-	1990	1980

MW-2				
Date	2/23/2012	6/5/2012	9/18/2012	1/8/2013
Manganese	0.036	0.0078	0.0194	0.0057
Selenium	0.059	0.0605	0.0674	0.0688
Nitrate	44.9	4.3	42.5	41.8
Sulfate	1350	1500	1150	1230
TDS	2220	-	2440	2590

MW-3				
Date	2/23/2012	6/5/2012	9/18/2012	1/8/2013
Manganese	1.60	1.43	1.24	1.62
Selenium	0.038	0.0478	0.0316	0.0673
Nitrate	22.0	15.0	12.2	24.6
Sulfate	1140	1380	1050	1140
TDS	2050	-	2150	2240

Legend

- Pre-treatment Soil Boring
- Post-treatment Soil Boring
- Monitor Well
- Wellhead

Current Tank Placement  
Cool Ox Injection (approx.)  
2010 Excavation (approx.)

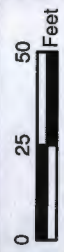


Figure 11  
GROUNDWATER INORGANIC ANALYTICAL RESULTS MAP  
POST-TREATMENT  
SAN JUAN 29-7 UNIT 37  
NATURAL GAS WELL SITE  
UNIT LETTER N. SEC 12, T29N, R07W  
RIO ARriba COUNTY, NEW MEXICO  
ConocoPhillips Company



## TABLES

**TABLE 1**  
**Laboratory Soil Analytical Results Summary**  
**ConocoPhillips Company San Juan 29-7 Unit 37**

Sample Name	Date	Headspace (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX	TPH DRO (mg/kg)	TPH GRO (mg/kg)	Total TPH (mg/kg)
B-1 (66-68)	1/14/2011	2686	0.25	48	11	374	433.25	780	5,300	5,680
B-1 (66-68)	1/14/2011	467	< 0.0064	0.11	0.082	1.88	2.072	11	14	25
B-1 (68-70)	1/14/2011	346	< 0.0058	0.014	< 0.0058	0.089	0.103	12	0.38	12.38
B-1 (86-88)	1/14/2011	103	< 0.0054	< 0.0054	< 0.0054	< 0.0054	--	< 5.0	< 0.1	< 5.0
B-1 (88-90)	1/14/2011	485	< 0.0051	< 0.0051	< 0.0051	0.017	0.017	< 5.0	< 0.1	< 5.0
B-1 (92-94)	1/14/2011	722	< 0.0056	0.006	< 0.0056	0.017	0.023	< 5.0	0.14	0.14
B-1 (122.5-123.5)	1/14/2011	0.5	< 0.005	0.096	0.022	0.347	0.465	< 5.0	0.11	0.11
B-2 (86-87)	3/1/2011	6190	< 0.25	6.6	4.9	111	122.5	50	630	680
B-2 (106-108)	3/1/2011	50.7	< 0.005	0.012	< 0.005	0.0343	0.0463	< 5.0	0.13	0.13
B-4 (106-108)	9/22/2011	2077	< 3.17	53.6	13.0	299	365	1,150	3,660	5,000
B-4 (106-108)	9/22/2011	7.1	< 0.006	0.0181	< 0.006	0.0364	0.0545	< 10.2	< 14.7	< 14.7
B-5 (51-53)	9/22/2011	2546	< 1.810	50.8	5.47	76.8	133	366	1,200	1,566
B-5 (103-105)	9/23/2011	210.1	< 0.0054	0.0286	< 0.0054	0.026	0.0546	< 10.2	< 13.4	< 13.4
B-6 (107-108)	9/26/2011	6.4	< 0.0054	< 0.0054	< 0.0054	< 0.0107	--	121	< 11.7	121
B-7 (20-22)	9/27/2011	2482	< 0.375	< 0.375	< 0.375	10.9	10.9	2,440	286	2,726
B-8 (108-110)	10/3/2011	0.4	< .0057	< .0057	< .0057	< 0.0057	--	< 10.3	< 16.2	< 16.2
B-9 (100-102)	10/13/2011	0.9	< 0.0056	< 0.0056	< 0.0056	< 0.0056	--	< 10.6	< 20.2	< 20.2
B-10 (46-48)	10/18/2011	2595	< 5.0	333	62.5	1120	1515.5	933	20,100	21,033
B-10 (105-107)*	10/18/2011	27.6	< .0055	0.0552	0.01	0.162	0.2272	< 10.5	17.6	17.6
B-11 (100-102.5)	10/20/2011	0.3	< 0.0064	< 0.0064	< 0.0064	< 0.0064	--	< 0.0102	< 0.0167	< 0.0167
MW-1 (50-52)	3/3/2011	2118	< 0.25	< 0.25	< 0.25	4.4	4.4	110	68	178
MW-1 (114-116)	3/3/2011	106.4	< 0.005	< 0.005	< 0.005	< 0.005	--	< 5.0	0.73	0.73
MW-2 (106-108)	3/2/2011	5.9	< 0.005	< 0.005	< 0.005	< 0.005	--	< 5.0	< 0.1	< 5.0
MW-3 (106-108)	3/2/2011	4.4	< 0.005	< 0.005	< 0.005	< 0.005	--	< 5.0	< 0.1	< 5.0
MW-4 (102-104)	2/28/2011	30.2	< 0.005	< 0.005	< 0.005	< 0.005	--	91	1.5	92.5
MW-4 (111-113)	2/28/2011	2.2	< 0.005	< 0.005	< 0.005	< 0.005	--	0.1	< 5.0	0.1
MW-5 (107-108.5)	9/24/2011	144.0	< 0.0054	< 0.0054	< 0.0054	< 0.0108	--	< 10	< 11.6	< 11.6
MW-6	9/26/2011	See Results for B-6								
MW-7 (105-107.5)	10/12/2011	8.4	< 0.0059	< 0.0059	< 0.0059	< 0.0059	--	< 11.1	< 20.3	< 20.3
MW-8	9/22/2011	See Results for B-5								
All Results Below Obtained From Samples Collected Post-treatment With CoolOx™										
B-12 (55-57)	8/15/2012	2.7	< 0.0059	0.0721	0.0088	0.123	0.2039	< 10.3	< 10.2	< 10.3
B-13 (86-87)	8/15/2012	1834	0.547	7.04	3.06	61	71.6	663	1,400	1,763
B-13 (100)	8/15/2012	14.1	< 0.005	0.0704	0.0114	0.158	0.2398	< 10.7	17.4	17.4
B-13 (100) dup	8/15/2012	14.1	< 0.005	0.0707	0.012	0.165	0.2477	< 10.9	< 10.9	< 10.9
B-14 (55-57)	8/15/2012	29.6	< 0.0064	0.0878	0.0091	0.137	0.2339	< 12.4	< 12.5	< 12.5
B-15 (55-57)	8/17/2012	1.5	< 0.0053	0.0562	0.0077	0.112	0.1759	< 10.1	< 10.3	< 10.3
B-16 (45-47)	8/17/2012	2312	< 2.88	53.3	11.7	193	258	< 11.6	1,650	1,650
B-16 (100-102)	8/17/2012	78	< 0.0058	0.0477	< 0.0058	0.0712	0.1189	< 11.9	< 12.0	< 12.0
B-17 (86-87)	8/17/2012	2163	< 2.67	81.2	19.1	336	456	986	3,170	3,156
B-17 (100-102)	8/17/2012	62.9	0.0085	0.062	< 0.0056	0.0794	0.1499	< 10.8	< 10.8	< 10.8
B-18 (55-57)	8/18/2012	821.6	< 0.308	< 0.308	< 0.308	1.16	1.16	25.0	< 12.4	25.0
B-18 (55-57)	8/18/2012	2.6	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 10.3	< 10.2	< 10.3
NMOC D Action Limits		100	10 mg/kg (dry)	NE	NE	NE	50 mg/kg (dry)	NE	NE	Total TPH = 100 mg/kg (dry)

**Notes:**

MW = monitoring well

B = Soil Boring

NMOC D = New Mexico Oil Conservation Division

BOLD = Exceeds NMWQCC Action Limits

mg/kg = milligrams per kilogram (parts per million)

< 0.005 = below laboratory detection limit

NE = Not Established

TPH DRO = total petroleum hydrocarbons diesel range organics

TPH GRO = total petroleum hydrocarbons gasoline range organics



**TABLE 1**  
**Laboratory Soil Analytical Results Summary**  
**ConocoPhillips Company San Juan 29-7 Unit 37**

Sample Name	Date	Headspace (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX	TPH DRO (mg/kg)	TPH GRO (mg/kg)	Total TPH (mg/kg)
B-1 (30-32) Pre-CoolOx™	1/14/2011	2686	0.25	48	11	374	433.25	380	5,300	5,680
B-13 (65-67) Post-CoolOx™	8/15/2012	1834	0.547	7.04	3.06	61	71.6	663	1,100	1,763
Percent Decrease Between B-1 and B-13		31.72					83.47			68.96
B-2 (54-56) Pre-CoolOx™	3/1/2011	6190	< 0.25	6.6	4.9	111	122.5	50	630	680
B-18 (53-55) Pre-CoolOx™	8/15/2012	821.6	<0.308	<0.308	<0.308	1.16	1.16	25.0	< 12.4	25.0
Percent Decrease Between B-2 and B-18		86.73					99.05			96.32
B-4 (34-36) Pre-CoolOx™	10/23/2011	2077	< 3.17	53.6	13.0	298	368	1,100	3,860	5,010
B-17 (43-45) Post-CoolOx™	8/17/2012	2163	< 2.63	81.2	19.1	356	456	986	2,100	3,156
Percent Decrease Between B-4 and B-17		4.14*					24.93*			37
B-10 (46-48) Pre-CoolOx™	10/18/2011	2595	< 5.0	333	62.5	1120	1515.5	933	20,100	21,033
B-16 (45-47) Post-CoolOx™	8/17/2012	2312	< 2.88	53.3	11.7	193	258	< 11.6	1,650	1,650
Percent Decrease between B-10 and B-16		10.9					82.98			92.16
NMOCD Action Limits		100	10 mg/kg (dry)	NE	NE	NE	50 mg/kg (dry)	NE	NE	Total TPH = 100 mg/kg (dry)

In the eight(8) most comparable samples taken, percent reduction in headspace, total BTEX, and total TPH are as follows

Headspace = 31.3

Total BTEX = 60.14

Total TPH = 73.61

**Notes:**

MW = monitoring well

B = Soil Boring

NMOCD = New Mexico Oil Conservation Division

BOLD = Exceeds NMWQCC Action Limits

mg/kg = milligrams per kilogram (parts per million)

< 0.005 = below laboratory detection limit

NE = Not Established

TPH DRO = total petroleum hydrocarbons diesel range organics

TPH GRO = total petroleum hydrocarbons gasoline range organics

\* = Percent increase

TABLE 2  
GROUNDWATER ELEVATIONS AND ANALYTICAL SUMMARY  
CONOCOPHILLIPS SAN JUAN 29-7 UNIT 37

Well ID	*TOC Elevation (ft)	Date	Depth to Groundwater (ft-below TOC)	Groundwater Elevation (ft)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	TPH-DRO (mg/L)	TPH-CRO (mg/L)	Manganese (dissolved) (mg/L)	Selenium (dissolved) (mg/L)	Nitrate (as N) (mg/L)	Sulfate (mg/L)	Total dissolved solids (TDS) (mg/L)	Heterotrophic Plate Count (CFU/ml)
MW-1	189.24	3/17/2011	108.91	80.33	0.066	0.39	0.011	0.084	0.28	1.5	2.77	<0.01	<0.500	1,610	2730	NA
		8/17/2011	108.81	80.43	0.0189	0.0068	<0.001	0.0044	<0.50	<0.50	0.318	<0.015	0.25	1,500	2480	180,000
		10/18/2011	108.87	80.37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	300,000
		2/23/2012	108.74	80.50	<0.001	<0.001	<0.001	<0.003	NA	NA	6.40	0.055	0.78	1,710	2,480	23,000
		6/5/2012	108.75	80.49	<0.001	0.002	<0.001	<0.003	NA	NA	5.15	0.033	9.4	1,520	NA	93,000
		6/5/2012 (DUP)	108.75	80.49	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA	NA	NA	NA	NA
		9/18/2012	108.68	80.56	<0.001	<0.001	<0.001	<0.003	NA	NA	2.60	0.044	27.5	1,070	2,140	>80,000
		9/18/2012 (DUP)	108.68	80.56	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA	NA	NA	NA	>80,000
		1/8/2013	108.62	80.62	<0.001	<0.001	<0.001	<0.003	NA	NA	1.10	0.568	25.3	1,150	2,180	76,000
		1/8/2013 (DUP)	108.62	80.62	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA	NA	NA	NA	142,000
		1/8/2013 (DUP)	108.62	80.62	<0.001	<0.001	<0.001	<0.003	NA	NA	NA	NA	NA	NA	NA	NA
		3/17/2011	109.20	80.40	<0.001	<0.001	<0.001	<0.001	<0.11	<0.1	0.334	0.0664	55.8	1,000	2950	NA
MW-2	189.6	8/17/2011	109.10	80.50	<0.001	<0.001	<0.001	<0.003	<0.50	<0.50	0.179	0.0726	71.9 E / 54.1	1,040	2110	61,000
		10/18/2011	109.13	80.47	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	124,000
		2/23/2012	109.05	80.55	<0.001	<0.001	<0.001	<0.003	NA	NA	0.036	0.059	44.9	1,350	2,220	14,900
		6/5/2012	109.10	80.50	<0.001	<0.001	<0.001	<0.003	NA	NA	0.008	0.061	4.3	1,500	NA	32,000
		9/18/2012	109.28	80.32	<0.001	<0.001	<0.001	<0.003	NA	NA	0.019	0.067	42.5	1,150	2,440	6,500
		1/8/2013	109.07	80.53	<0.001	<0.001	<0.001	<0.003	NA	NA	0.0057	0.0688	41.8	1,230	2,590	29,000
		3/17/2011	109.42	79.71	<0.001	0.013	<0.001	0.0042	<0.1	<0.1	1.79	0.0316	29.7	857	2360	NA
MW-3	189.13	8/17/2011	109.35	79.78	<0.001	<0.001	<0.001	<0.003	<0.50	<0.50	1.42	0.0524	33.0	972	1960	18,000
		10/18/2011	109.37	79.76	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	230,000
		2/23/2012	109.26	79.87	<0.001	<0.001	<0.001	<0.003	NA	NA	1.60	0.038	22.0	1,140	2,050	11,900
		6/5/2012	109.28	79.85	<0.001	<0.001	<0.001	<0.003	NA	NA	1.43	0.048	15.0	1,380	NA	22,000
		9/18/2012	109.3	79.83	<0.001	<0.001	<0.001	<0.003	NA	NA	1.24	0.032	12.2	1,050	2,150	23,000
		1/8/2013	109.28	79.85	<0.001	<0.001	<0.001	<0.003	NA	NA	1.62	0.0673	24.6	1,140	2,240	51,000
		3/17/2011	111.11	86.49	<0.001	<0.001	<0.001	<0.001	0.14	<0.1	0.022	0.042	10.4	1,290	2650	NA
MW-4	197.6	8/17/2011	111.10	86.50	<0.001	<0.001	<0.001	<0.003	<0.50	<0.50	0.0062	0.0402	9.4	1,240	2000	9800
		10/18/2011	111.16	86.44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	90,000
		2/23/2012	111.14	86.46	<0.001	<0.001	<0.001	<0.003	NA	NA	0.017	0.035	8.6	1,380	2,070	40,000
		6/5/2012	111.20	86.40	<0.001	<0.001	<0.001	<0.003	NA	NA	0.081	0.037	7.5	1,540	NA	49,000
		9/18/2012	111.12	86.48	<0.001	<0.001	<0.001	<0.003	NA	NA	0.103	0.039	7.8	1,190	2,180	4,000
		1/8/2013	111.14	86.46	<0.001	<0.001	<0.001	<0.003	NA	NA	0.0289	0.0386	9.3	1,240	2,230	202,000
		10/18/2011	118.05	70.65	<0.001	<0.001	<0.001	<0.003	<0.5	<0.5	NA	NA	NA	NA	NA	970,000
MW-5	188.7	2/23/2012	108.44	80.26	<0.001	<0.001	<0.001	<0.003	NA	NA	1.10	<0.015	0.12	3,500	2,760	252,000
		6/5/2012	108.38	80.32	<0.001	<0.001	<0.001	<0.003	NA	NA	0.868	<0.015	<0.10	2,040	NA	63,000
		9/18/2012	108.11	80.59	<0.001	<0.001	<0.001	<0.003	NA	NA	0.791	<0.015	<0.10	1,620	2,830	130,000
		1/8/2013	108.36	80.34	<0.001	<0.001	<0.001	<0.003	NA	NA	0.58	<0.015	<0.10	1,710	2,950	102,000
		10/18/2011	109.55	78.48	0.033	<0.001	<0.001	0.012	<0.5	<0.5	NA	NA	NA	NA	NA	720,000
MW-6	188.03	2/23/2012	108.01	80.02	<0.001	<0.001	<0.001	<0.003	NA	NA	<0.005	0.059	25.8	950	1,760	8,900
		6/5/2012	108.05	79.98	<0.001	<0.001	<0.001	<0.003	NA	NA	1.60	0.045	35.0	1,090	NA	35,000
		9/18/2012	108.06	79.97	<0.001	<0.001	<0.001	<0.003	NA	NA	1.11	0.046	29.5	955	1,990	12,000
		1/8/2013	108.07	79.96	0.0012	<0.001	<0.001	<0.003	NA	NA	0.158	0.0536	25.6	978	1,980	1,910,000

TABLE 2  
GROUNDWATER ELEVATIONS AND ANALYTICAL SUMMARY  
CONOCOPHILLIPS SAN JUAN 29-7 UNIT 37

Well ID	*TOC Elevation (ft)	Date	Depth to Groundwater (ft-below TOC)	Groundwater Elevation (ft)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	TPH-DRO (mg/L)	TPH-GRO (mg/L)	Manganese (dissolved) (mg/L)	Selenium (dissolved) (mg/L)	Nitrate (as N) (mg/L)	Sulfate (mg/L)	Total dissolved solids (TDS) (mg/L)	Heterotrophic Plate Count (CFU/mL)
MW-7 189.93		10/18/2011	119.70	70.23	<0.001	<0.001	<0.001	<0.003	< 0.5	< 0.5	NA	NA	NA	NA	NA	2,000,000
		2/23/2012	106.58	83.35	<0.001	0.001	<0.001	0.003	NA	NA	<0.005	0.022	4.6	3,320	4,660	<1
		6/5/2012	107.95	81.98	<0.001	<0.001	<0.001	<0.003	NA	NA	0.019	0.030	1.1	1,820	NA	8
		9/18/2012	108.1	81.83	<0.001	<0.001	<0.001	<0.003	NA	NA	0.012	0.024	1.0	1,610	4,280	1,900
		1/8/2013	108.13	81.8	<0.001	<0.001	<0.001	<0.003	NA	NA	0.0093	0.0164	1.3	1,770	3,400	145,000
MW-8 189.86		10/19/2011	-	-	0.15	1.24	0.070	1.43	< 0.5	7.1	NA	NA	NA	NA	NA	2,300,000
		2/23/2012	108.71	81.15	0.036	0.772	0.054	1.35	NA	NA	<0.005	0.049	3.2	813	5,790	14
		2/23/2012 (DUP)	108.71	81.15	0.069	0.876	0.109	1.66	NA	NA	NA	NA	NA	NA	NA	NA
		6/5/2012	108.65	81.21	0.013	0.120	0.025	0.447	NA	NA	0.022	0.045	18.1	793	NA	630
		9/20/2012	108.64	81.22	0.0098	0.002	0.006	0.342	NA	NA	NA	NA	21.8	1,130	2,960	NA
		1/8/2013	108.56	81.3	0.0369	0.0199	0.0018	0.0488	NA	NA	NA	NA	30.4	1,260	2,700	222,000
NMWQCC Standards					0.01	0.75	0.75	0.62	NE	NE	0.2	0.05	10	600	1,000	NE

**Notes:**  
MW = Monitoring Well  
NMWQCC = New Mexico Water Quality Control Commission  
BOLD = Exceeds NMWQCC Groundwater Quality Standard  
mg/L = milligrams per liter (parts per million)  
< ' = Analyte not detected above set laboratory detection limit  
E = Analyte concentration exceeded the calibration range  
ft = Feet  
TOC = Top of Casing  
\* = Elevation relative to an arbitrary 200 feet  
NE = Not Established  
NA = Not analyzed  
TPH DRO = total petroleum hydrocarbons diesel range organics  
TPH GRO = total petroleum hydrocarbons gasoline range organics  
– = No data  
Cells shaded in gray indicate groundwater samples collected prior to CoolOx™ treatment

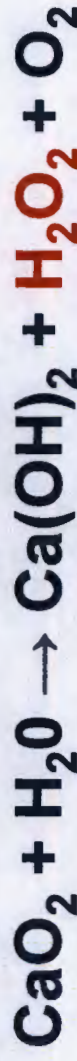
## APPENDIX A

### COOL-OX™ STOICHIOMETRIC DIAGRAM



# How Does it Work?

*(Produce Hydrogen Peroxide In-Situ)*



*(Chelates Activate Intrinsic Catalysts – Produces Radicals)*



*(Radicals React with Contaminants – Oxidation By-products)*



*(Biodegradable By-products Used by Microbes)*



APPENDIX B

FIELD PARAMETERS



APPENDIX B  
GROUNDWATER FIELD PARAMETERS SUMMARY  
CONOCOPHILLIPS SAN JUAN 29-7 UNIT 37

Well ID	Date	Temperature (degrees C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-1	8/17/2011	--	--	--	--	--
	10/18/2011	17.81	2516	--	7.22	218.5
	2/23/2012	14.47	2564	22.1	9.55	113.9
	6/5/2012	15.57	2408	--	9.56	104.6
	9/18/2012	15.88	2357	1.97	8.43	86.7
	1/8/2013	14.80	2368	3.88	7.65	68.7
MW-2	8/17/2011	14.79	2282	--	6.79	123.3
	10/18/2011	15.27	1933	--	7.08	183.8
	2/23/2012	13.69	2546	3.24	7.01	133.6
	6/5/2012	14.45	2544	--	7.95	104.8
	9/18/2012	14.47	2566	5.05	7.02	35.5
	1/8/2013	13.85	2550	5.81	7.14	142.2
MW-3	8/17/2011	15.51	2179	--	6.80	-19.6
	10/18/2011	15.98	1873	--	7.18	130.6
	2/23/2012	14.33	2378	1.21	7.49	189.0
	6/5/2012	15.21	2382	1.21	8.27	39.0
	9/18/2012	15.06	2381	0.4	6.95	-48.4
	1/8/2013	14.66	2444	4.71	7.19	-43.1
MW-4	8/17/2011	14.51	2239	--	7.42	191.1
	10/18/2011	15.12	1927	--	7.24	224.5
	2/23/2012	13.34	2392	2.81	7.38	147.5
	6/5/2012	14.05	2358	4.95	7.80	96.6
	9/18/2012	14.01	2347	1.7	7.30	94.4
	1/8/2013	13.80	2386	3.89	7.54	92.8
MW-5	10/18/2011	17.55	2357	--	6.13	167.5
	2/23/2012	14.56	3009	2.40	7.32	132.2
	6/5/2012	18.09	3153	--	6.69	119.3
	9/18/2012	15.30	2959	0.88	6.86	20.7
	1/8/2013	14.85	3008	7.08	6.94	135.4
MW-6	10/18/2011	--	--	--	--	--
	2/23/2012	14.85	1918	22.34	10.02	80.2
	6/5/2012	17.37	2351		6.96	158.9
	9/18/2012	15.48	2198	1.66	7.11	187.6
	1/8/2013	15.24	2198	3.68	7.01	55.8

**APPENDIX B**  
**GROUNDWATER FIELD PARAMETERS SUMMARY**  
**CONOCOPHILLIPS SAN JUAN 29-7 UNIT 37**

<i>Well ID</i>	<i>Date</i>	<i>Temperature (degrees C)</i>	<i>Conducti vity (uS/cm)</i>	<i>Dissolved Oxygen (mg/L)</i>	<i>pH</i>	<i>ORP (mV)</i>
MW-7	10/18/2011	17.11	2516	--	7.22	218.5
	2/23/2012	14.66	3510	22	11.14	6.7
	6/5/2012	15.25	3531	--	11.94	8.4
	9/18/2012	15.13	3322	8.75	11.79	18.6
	1/8/2013	14.07	2914	18.53	11.35	-23.1
MW-8	10/19/2011	21.93	2625	--	7.07	137.4
	2/23/2012	15.12	4088	21.49	11.68	-16.8
	6/5/2012	16.55	3205	--	11.89	-16.8
	9/20/2012*	18.97	2599	--	9.04	58.3
	1/8/2013**	--	--	--	--	--

**Notes:**

MW = Monitoring Well

mg/L = milligrams per liter (parts per million)

g/L = grams per liter

uS/cm = microSiemens per centimeter

mV = millivolts

NE = Not Established

NA = Not analyzed

-- = No data

\* = Damaged well casing resulted in data being collected prior to purging 3 well volumes

\*\* = Field parameters not collected due to damaged well casing and low volume per bailer

Cells shaded in gray indicate groundwater samples collected prior to CoolOx™ treatment

## APPENDIX C

### BORING LOGS

PROJECT NAME: San Juan 29-7 Unit 37

LOCATION: Rio Arriba County, NM

FIELD LOGGED BY: Cassie Brown

SURFACE ELEVATION (msl): ~6300

GROUNDWATER ELEVATION (msl): Not Encountered

REMARKS:

COORDINATES:

SOIL BORING NO: B-12

DRILL TYPE: CME-85

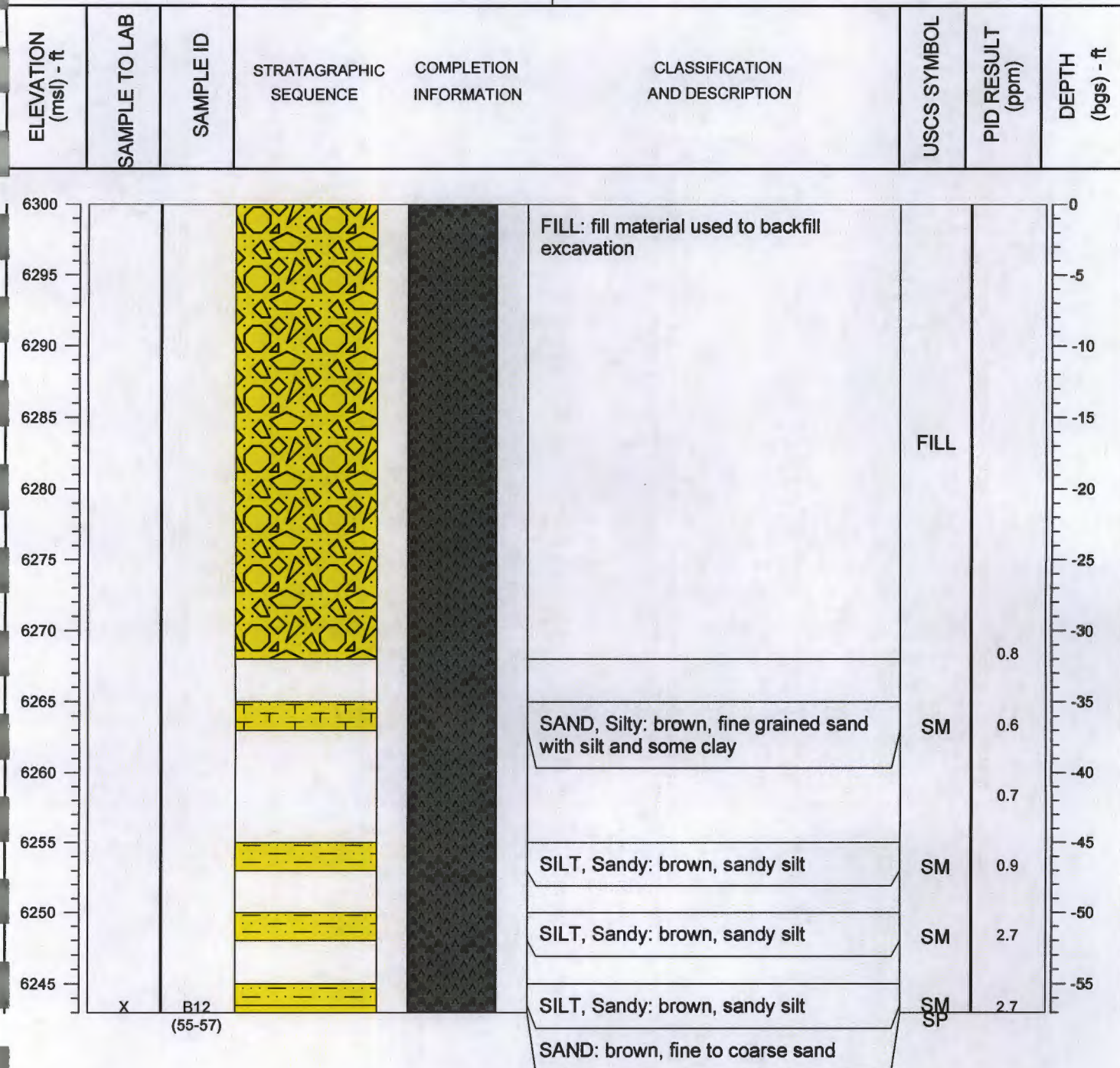
Hollow Stem Auger

BORE HOLE DIAMETER: 7 7/8 inches

DRILLED BY: National EWP

DATE/TIME HOLE STARTED: August 14, 2012 at 1605

DATE/TIME HOLE COMPLETED: August 15, 2012 at 0900



Total depth = 57 feet

CONESTOGA-ROVERS  
& ASSOCIATESBORING LOG AND  
WELL COMPLETION FORM

page 1 of 1



PROJECT NAME: San Juan 29-7 Unit 37

LOCATION: Rio Arriba County, NM

FIELD LOGGED BY: Brad Stevenson

SURFACE ELEVATION (msl): ~6300

GROUNDWATER ELEVATION (msl): Not Encountered

REMARKS:

COORDINATES:

SOIL BORING NO: B-13

DRILL TYPE: CME-85

Hollow Stem Auger

BORE HOLE DIAMETER: 7 7/8 inches

DRILLED BY: National EWP

DATE/TIME HOLE STARTED: August 15, 2012 at 0940

DATE/TIME HOLE COMPLETED: August 15, 2012 at 1400

ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	PID RESULT (ppm)	DEPTH (bgs) - ft
6300					FILL: fill material used to backfill excavation			0
6295								-5
6290								-10
6285						FILL		-15
6280								-20
6275								-25
6270					SILT, Sandy: brown, silt with 15% clay	SC	89.2	-30
6265					SAND: brown, fine grained sand with 10% silt	SM	2130	-35
6260					SAND: brown, fine grained sand with 5% silt	SM	784	-40
6255					SAND: brown, fine grained sand with 5% silt	SM	352	-45
6250					SAND: brown, fine grained sand with 5% silt	SM	563	-50
6245					SAND, Silty: light brown, silty, fine grained sand	SM	2091	-55
6240					SAND: light brown, fine grained sand with some silt	SM	2074	-60

Total depth = 102 feet

CONESTOGA-ROVERS  
& ASSOCIATESBORING LOG AND  
WELL COMPLETION FORM

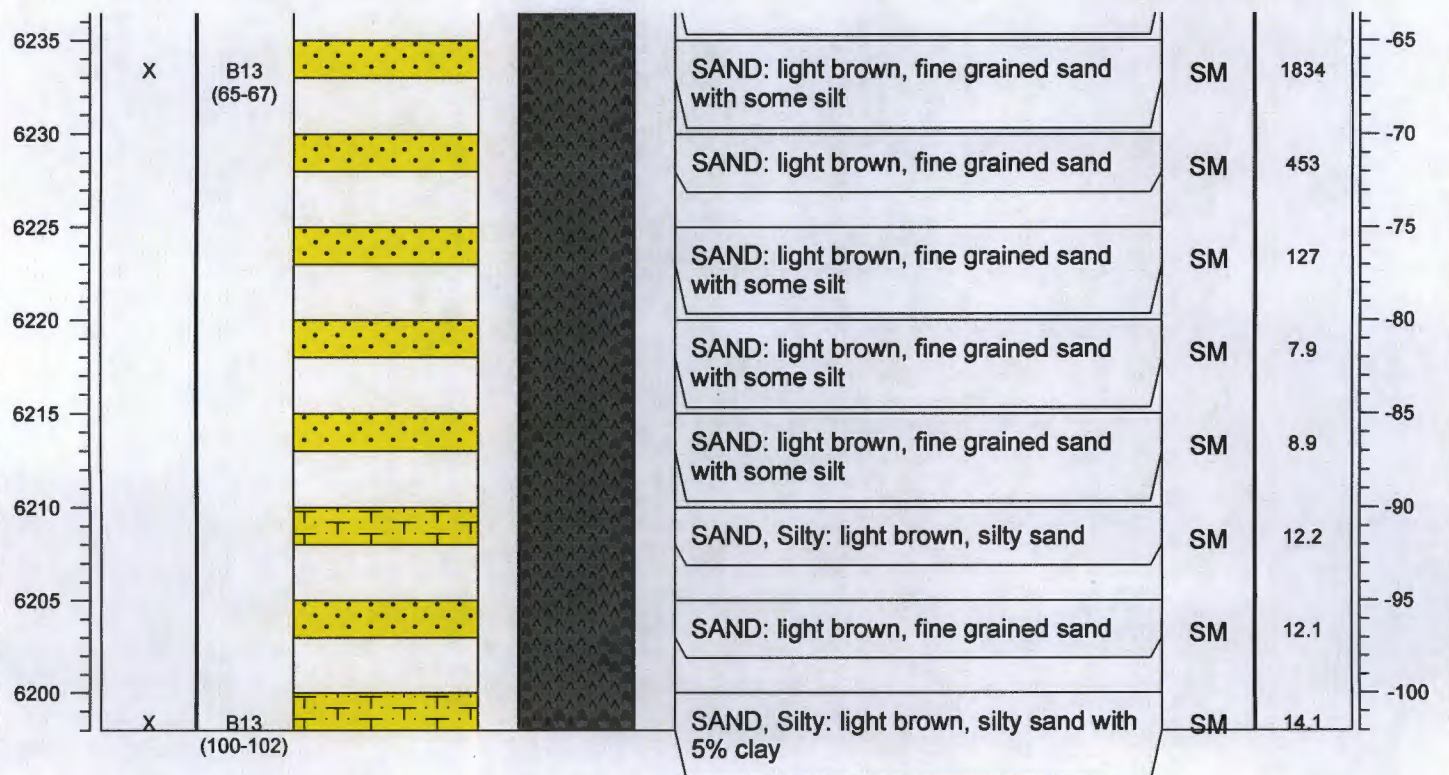
page 1 of 2



PROJECT NAME: San Juan 29-7 Unit 37  
 LOCATION: Rio Arriba County, NM  
 FIELD LOGGED BY: Brad Stevenson  
 SURFACE ELEVATION (msl): ~6300  
 GROUNDWATER ELEVATION (msl): Not Encountered  
 REMARKS:  
 COORDINATES:

SOIL BORING NO: B-13  
 DRILL TYPE: CME-85  
 Hollow Stem Auger  
 BORE HOLE DIAMETER: 7 7/8 inches  
 DRILLED BY: National EWP  
 DATE/TIME HOLE STARTED: August 15, 2012 at 0940  
 DATE/TIME HOLE COMPLETED: August 15, 2012 at 1400

ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	PID RESULT (ppm)	DEPTH (bgs) - ft
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Total depth = 102 feet



BORING LOG AND  
WELL COMPLETION FORM

page 2 of 2



PROJECT NAME: San Juan 29-7 Unit 37

LOCATION: Rio Arriba County, NM

FIELD LOGGED BY: Brad Stevenson

SURFACE ELEVATION (msl): ~6300

GROUNDWATER ELEVATION (msl): Not Encountered

REMARKS:

COORDINATES:

SOIL BORING NO: B-14

DRILL TYPE: CME-85

Hollow Stem Auger

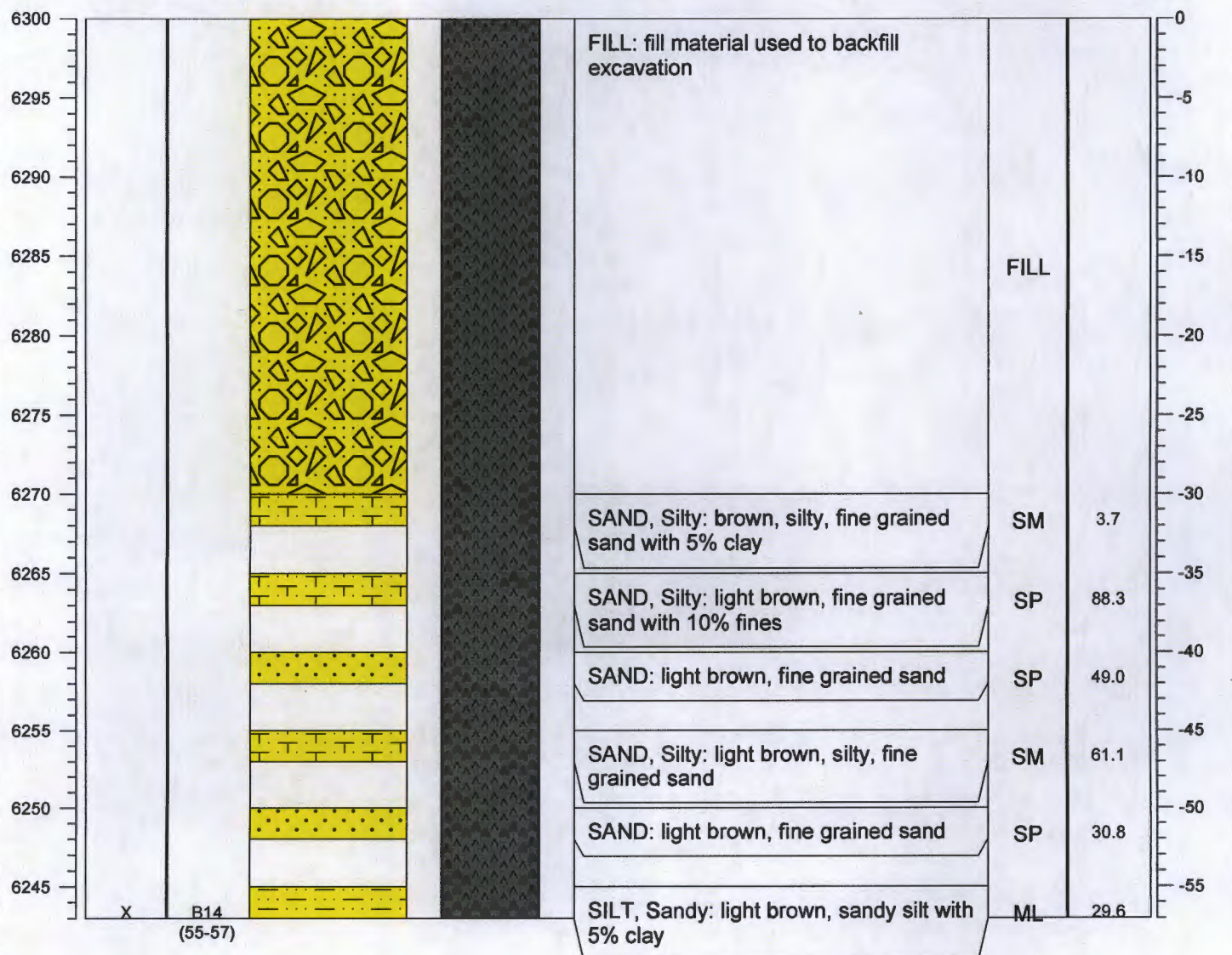
BORE HOLE DIAMETER: 7 7/8 inches

DRILLED BY: National EWP

DATE/TIME HOLE STARTED: August 15, 2012 at 1500

DATE/TIME HOLE COMPLETED: August 15, 2012 at 1600

ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	PID RESULT (ppm)	DEPTH (bgs) - ft
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Total depth = 57 feet

CONESTOGA-ROVERS  
& ASSOCIATESBORING LOG AND  
WELL COMPLETION FORM

page 1 of 1



PROJECT NAME: San Juan 29-7 Unit 37

LOCATION: Rio Arriba County, NM

FIELD LOGGED BY: Brad Stevenson

SURFACE ELEVATION (msl): ~6300

GROUNDWATER ELEVATION (msl): Not Encountered

REMARKS:

COORDINATES:

SOIL BORING NO: B-15

DRILL TYPE: CME-85

Hollow Stem Auger

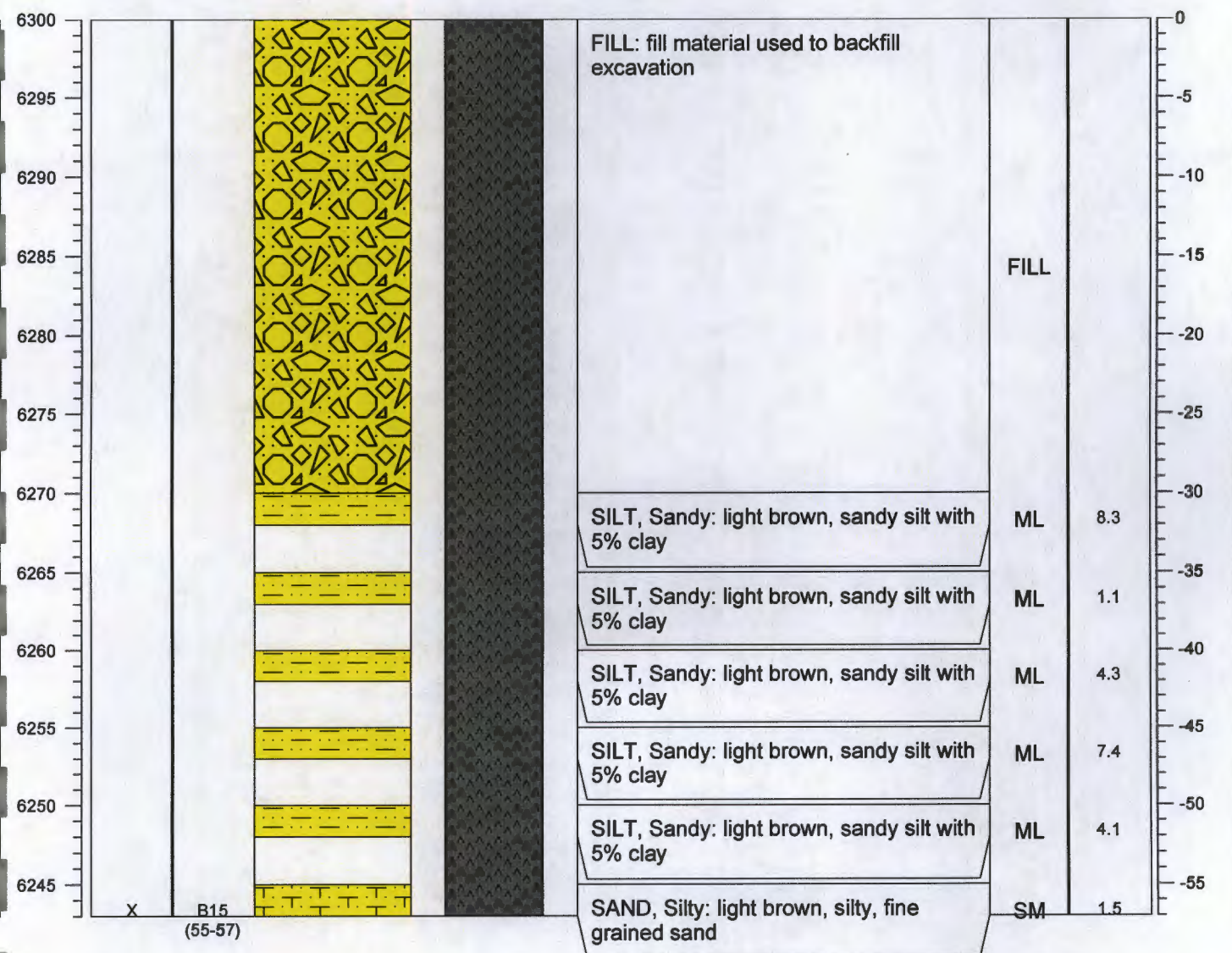
BORE HOLE DIAMETER: 7 7/8 inches

DRILLED BY: National EWP

DATE/TIME HOLE STARTED: August 15, 2012 at 1645

DATE/TIME HOLE COMPLETED: August 16, 2012 at 0830

ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	PID RESULT (ppm)	DEPTH (bgs) - ft
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Total depth = 57 feet



CONESTOGA-ROVERS  
& ASSOCIATES

BORING LOG AND  
WELL COMPLETION FORM

page 1 of 1



PROJECT NAME: San Juan 29-7 Unit 37

LOCATION: Rio Arriba County, NM

FIELD LOGGED BY: Brad Stevenson

SURFACE ELEVATION (msl): ~6300

GROUNDWATER ELEVATION (msl): Not Encountered

REMARKS:

COORDINATES:

SOIL BORING NO: B-16

DRILL TYPE: CME-85

Hollow Stem Auger

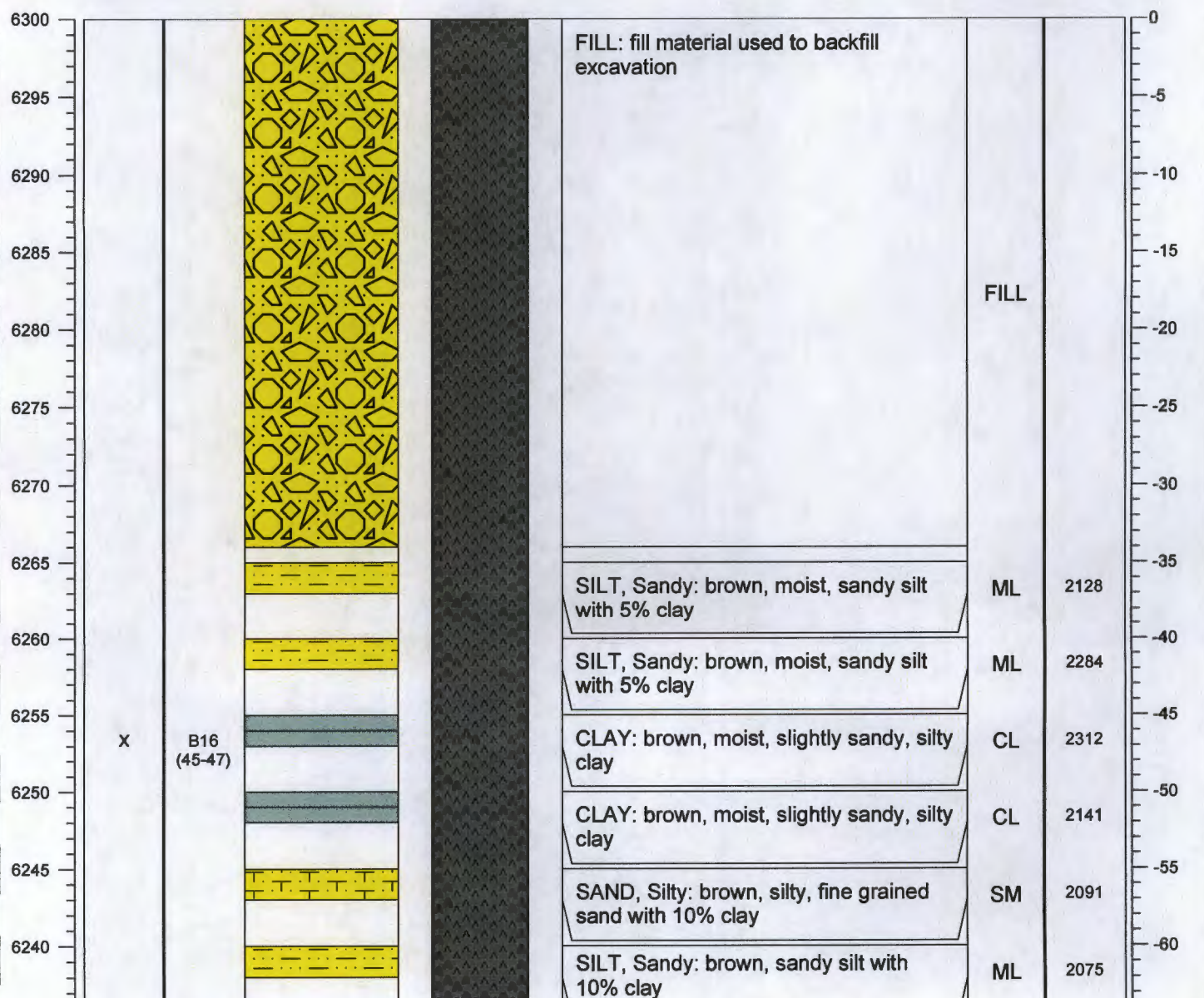
BORE HOLE DIAMETER: 7 7/8 inches

DRILLED BY: National EWP

DATE/TIME HOLE STARTED: August 17, 2012 at 0845

DATE/TIME HOLE COMPLETED: August 17, 2012 at 1115

ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	PID RESULT (ppm)	DEPTH (bgs) - ft
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Total depth = 102 feet



CONESTOGA-ROVERS  
& ASSOCIATES

BORING LOG AND  
WELL COMPLETION FORM

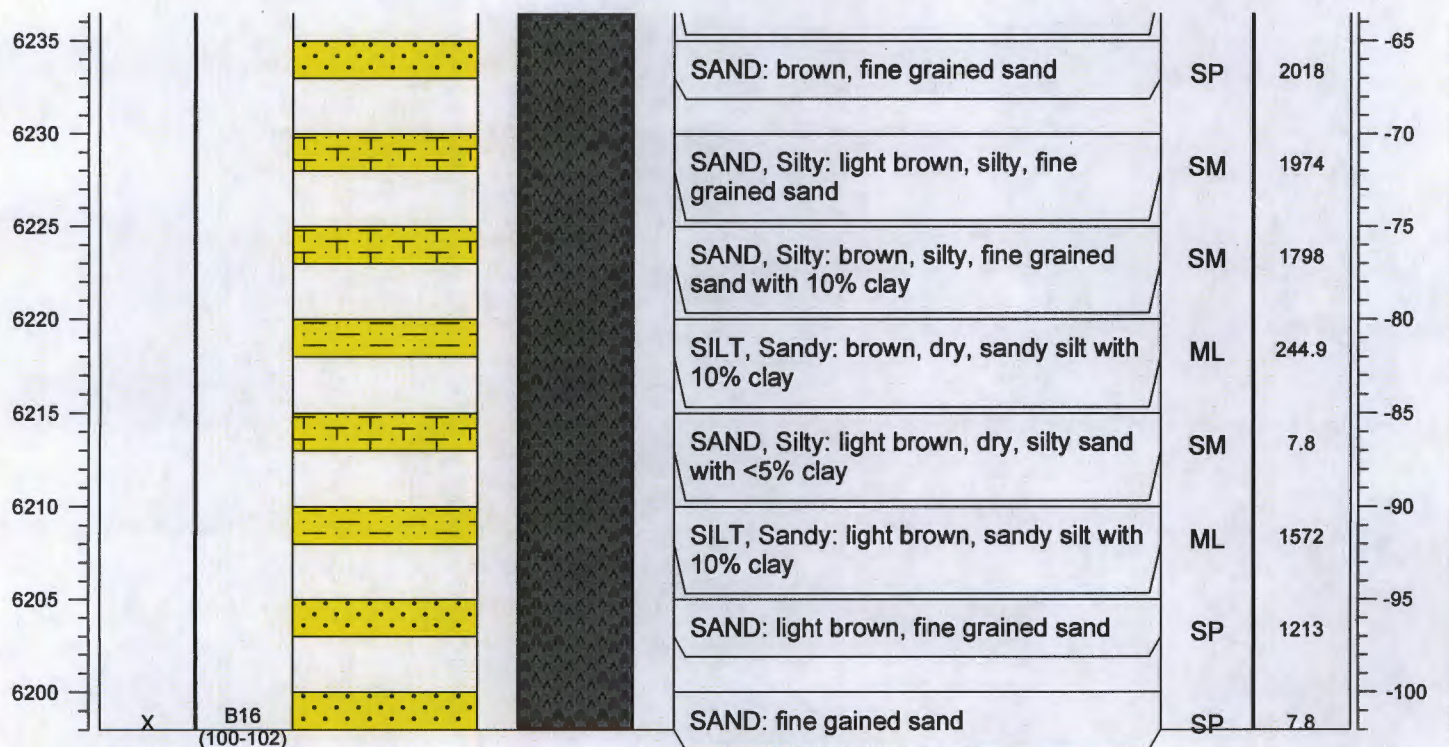
page 1 of 2



PROJECT NAME: San Juan 29-7 Unit 37  
 LOCATION: Rio Arriba County, NM  
 FIELD LOGGED BY: Brad Stevenson  
 SURFACE ELEVATION (msl): ~6300  
 GROUNDWATER ELEVATION (msl): Not Encountered  
 REMARKS:  
 COORDINATES:

SOIL BORING NO: B-16  
 DRILL TYPE: CME-85  
 Hollow Stem Auger  
 BORE HOLE DIAMETER: 7 7/8 inches  
 DRILLED BY: National EWP  
 DATE/TIME HOLE STARTED: August 17, 2012 at 0845  
 DATE/TIME HOLE COMPLETED: August 17, 2012 at 1115

ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	PID RESULT (ppm)	DEPTH (bgs) - ft
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PROJECT NAME: San Juan 29-7 Unit 37

LOCATION: Rio Arriba County, NM

FIELD LOGGED BY: Brad Stevenson

SURFACE ELEVATION (msl): ~6300

GROUNDWATER ELEVATION (msl): Not Encountered

REMARKS:

COORDINATES:

SOIL BORING NO: B-17

DRILL TYPE: CME-85

Hollow Stem Auger

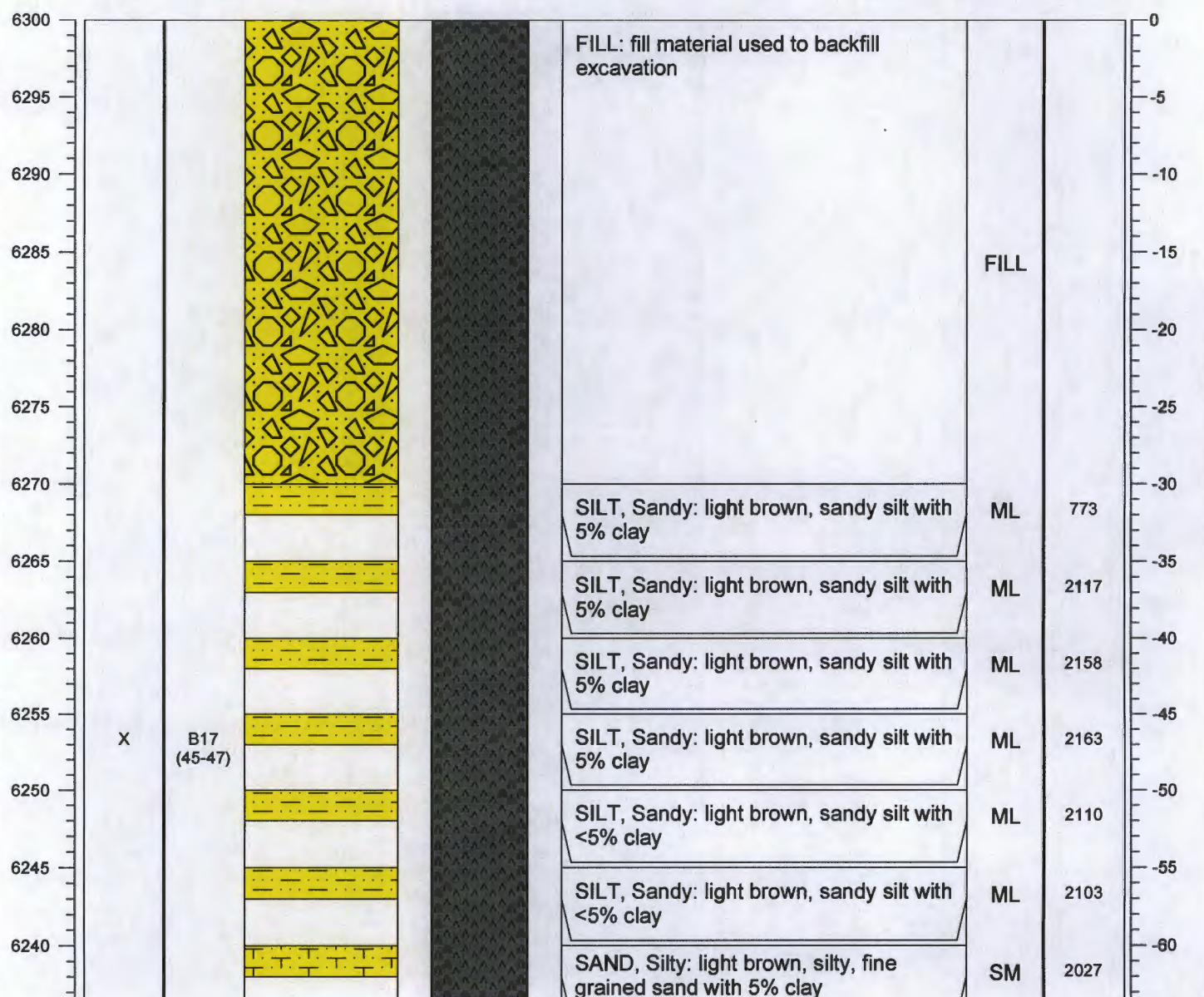
BORE HOLE DIAMETER: 7 7/8 inches

DRILLED BY: National EWP

DATE/TIME HOLE STARTED: August 17, 2012 at 1720

DATE/TIME HOLE COMPLETED: August 18, 2012 at 1030

ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	PID RESULT (ppm)	DEPTH (bgs) - ft
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Total depth = 102 feet

CONESTOGA-ROVERS  
& ASSOCIATESBORING LOG AND  
WELL COMPLETION FORM

page 1 of 2



PROJECT NAME: San Juan 29-7 Unit 37

LOCATION: Rio Arriba County, NM

FIELD LOGGED BY: Brad Stevenson

SURFACE ELEVATION (msl): ~6300

GROUNDWATER ELEVATION (msl): Not Encountered

REMARKS:

COORDINATES:

SOIL BORING NO: B-17

DRILL TYPE: CME-85

Hollow Stem Auger

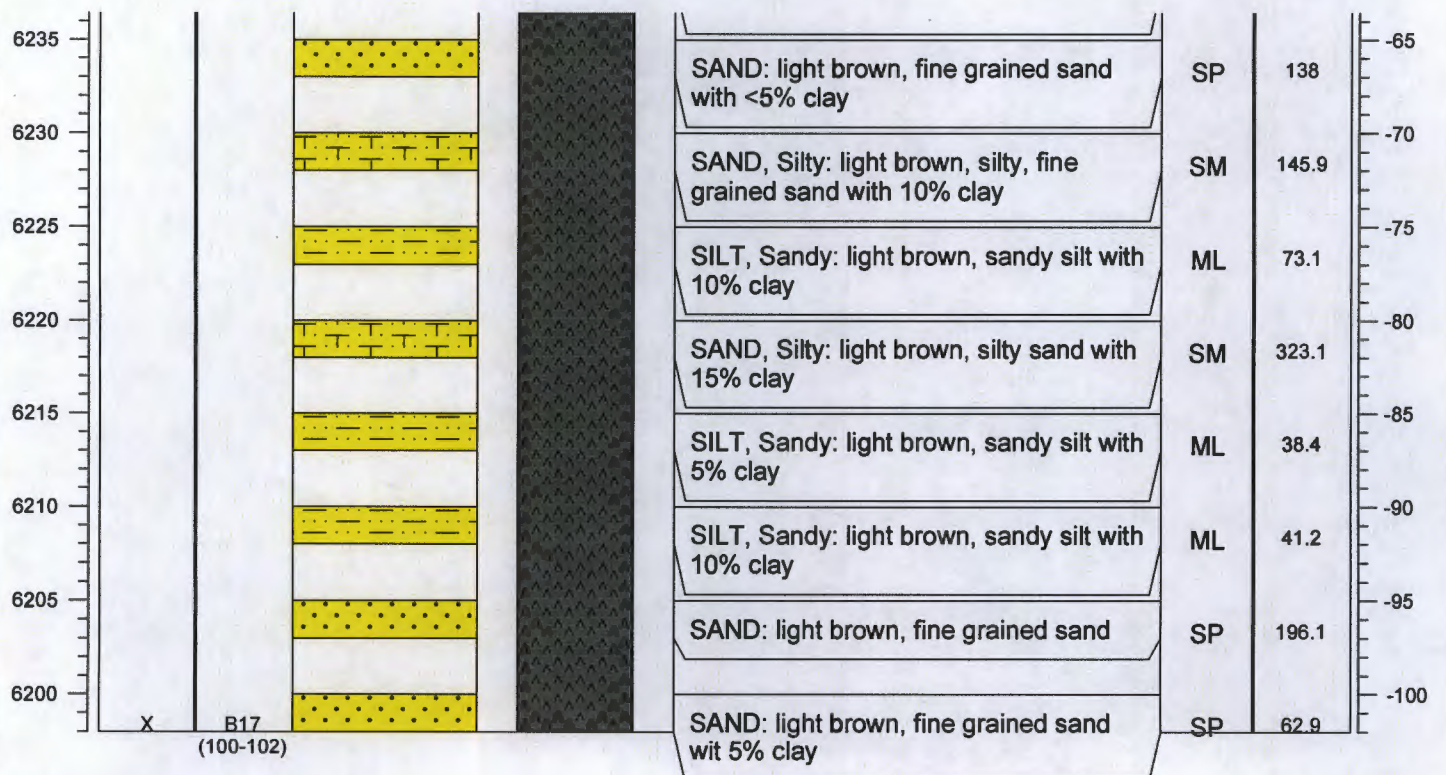
BORE HOLE DIAMETER: 7 7/8 inches

DRILLED BY: National EWP

DATE/TIME HOLE STARTED: August 17, 2012 at 1720

DATE/TIME HOLE COMPLETED: August 18, 2012 at 1030

ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	PID RESULT (ppm)	DEPTH (bgs) - ft
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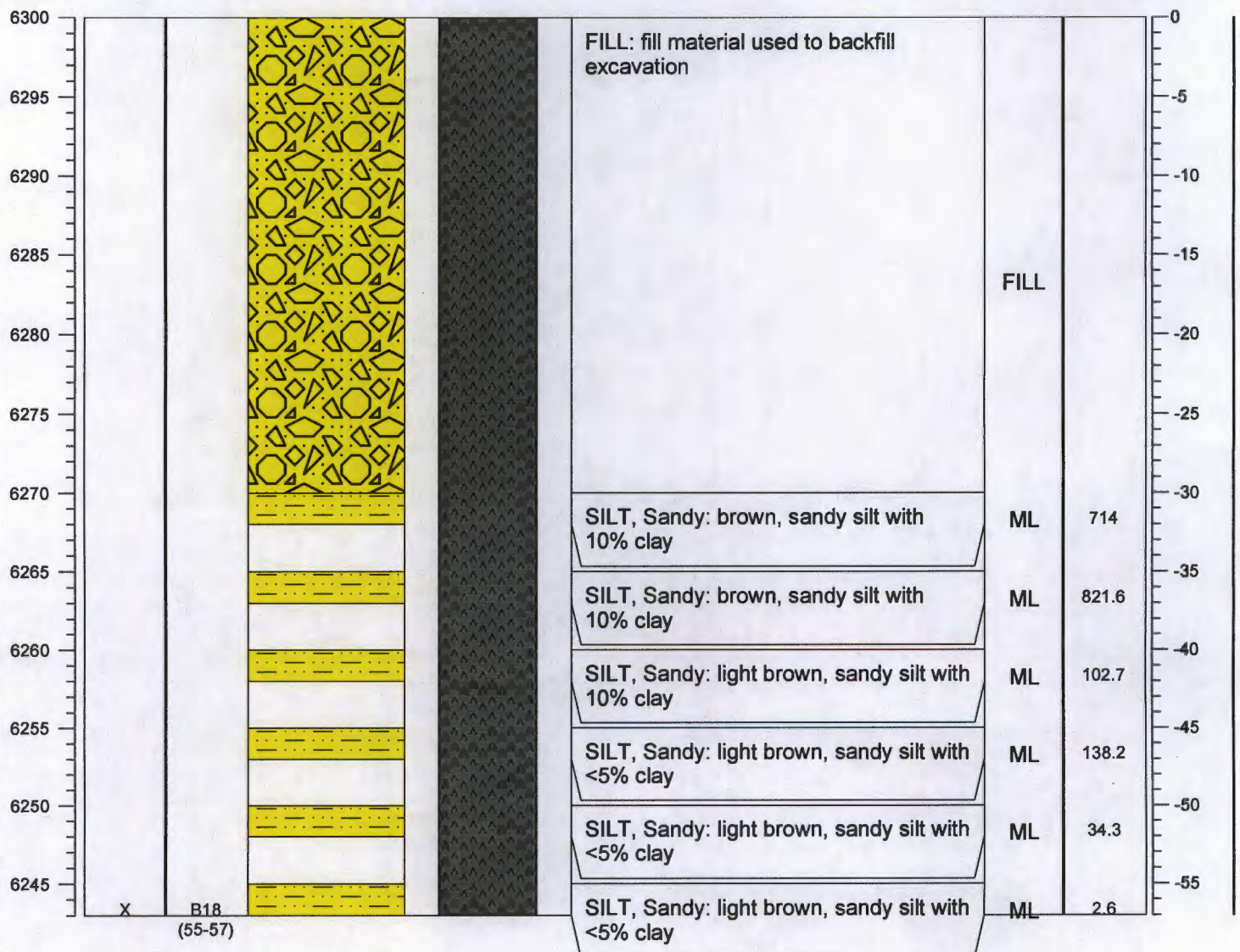




PROJECT NAME: San Juan 29-7 Unit 37  
 LOCATION: Rio Arriba County, NM  
 FIELD LOGGED BY: Brad Stevenson  
 SURFACE ELEVATION (msl): ~6300  
 GROUNDWATER ELEVATION (msl): Not Encountered  
 REMARKS:  
 COORDINATES:

SOIL BORING NO: B-18  
 DRILL TYPE: CME-85  
 Hollow Stem Auger  
 BORE HOLE DIAMETER: 7 7/8 inches  
 DRILLED BY: National EWP  
 DATE/TIME HOLE STARTED: August 18, 2012 at 1130  
 DATE/TIME HOLE COMPLETED: August 18, 2012 at 1230

ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	PID RESULT (ppm)	DEPTH (bgs) - ft
-------------------------	---------------	-----------	---------------------------	---------------------------	-----------------------------------	-------------	---------------------	---------------------



## APPENDIX D

### LABORATORY REPORTS





Pace Analytical Services, Inc.  
9608 Loiret Blvd.  
Lenexa, KS 66219  
(913)599-5665

September 13, 2012

Christine Matthews  
CRA  
6121 Indian School Rd NE  
Suite 200  
Albuquerque, NM 87110

RE: Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

Dear Christine Matthews:

Enclosed are the analytical results for sample(s) received by the laboratory on August 21, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alice Flanagan

alice.flanagan@pacelabs.com  
Project Manager

Enclosures

cc: Kelly Blanchard, COP Conestoga-Rovers & Associa  
Angela Bown, COP Conestoga-Rovers & Associa  
Cassie Brown, COP Conestoga-Rovers & Associa



## REPORT OF LABORATORY ANALYSIS

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Page 1 of 54

Pace Package 1 of 57



Pace Analytical Services, Inc.  
9608 Loiret Blvd.  
Lenexa, KS 66219  
(913)599-5665

## CERTIFICATIONS

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

---

### Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219  
A2LA Certification #: 2456.01  
Arkansas Certification #: 12-019-0  
Illinois Certification #: 002885  
Iowa Certification #: 118  
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055  
Nevada Certification #: KS000212008A  
Oklahoma Certification #: 9205/9935  
Texas Certification #: T104704407-12-3  
Utah Certification #: KS000212012-2

## REPORT OF LABORATORY ANALYSIS

Page 2 of 54

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## SAMPLE SUMMARY

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60127401001	S-07503A-081512-JK-B-12(55-57)	Solid	08/15/12 08:59	08/21/12 08:40
60127401002	S-07503A-081512-JK-B-13(65-67)	Solid	08/15/12 10:48	08/21/12 08:40
60127401003	S-07503A-081512-JK-B-13(100)	Solid	08/15/12 14:01	08/21/12 08:40
60127401004	S-07503A-081512-JK-(DUP)	Solid	08/15/12 14:01	08/21/12 08:40
60127401005	S-07503A-081512-JK-B-14(55-58)	Solid	08/15/12 15:56	08/21/12 08:40
60127401006	S-075034-081712-JK-B-15(55-57)	Solid	08/17/12 08:09	08/21/12 08:40
60127401007	S-075034-081712-JK-B-16(45-47)	Solid	08/17/12 09:25	08/21/12 08:40
60127401008	S-075034-081712JK-B16(100-102)	Solid	08/17/12 11:12	08/21/12 08:40
60127401009	S-075034-081712-JK-B17(45-47)	Solid	08/17/12 17:56	08/21/12 08:40
60127401010	S-075034-081712JK-B17(100-102)	Solid	08/17/12 10:33	08/21/12 08:40
60127401011	S-075034-081812-JK-B18(35-37)	Solid	08/18/12 11:44	08/21/12 08:40
60127401012	S-075034-081812-JK-B18(55-57)	Solid	08/18/12 12:04	08/21/12 08:40
60127401013	TRIP BLANK1	Solid	08/18/12 00:00	08/21/12 08:40
60127401014	TRIP BLANK2	Solid	08/18/12 00:00	08/21/12 08:40
60127401015	WC-075034-081812-JK-WASTE	Solid	08/18/12 14:00	08/21/12 08:40

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60127401

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60127401001	S-07503A-081512-JK-B-12(55-57)	EPA 8015B	JDH	3
		EPA 8015B	SDR	2
		EPA 8260	RAB	8
		ASTM D2974	DWC	1
		EPA 9045	AJM	1
60127401002	S-07503A-081512-JK-B-13(65-67)	EPA 8015B	JDH	3
		EPA 8015B	SDR	2
		EPA 8260	RAB	8
		ASTM D2974	DWC	1
		EPA 9045	AJM	1
60127401003	S-07503A-081512-JK-B-13(100)	EPA 8015B	JDH	3
		EPA 8015B	SDR	2
		EPA 8260	RAB	8
		ASTM D2974	DWC	1
		EPA 9045	AJM	1
60127401004	S-07503A-081512-JK-(DUP)	EPA 8015B	JDH	3
		EPA 8015B	SDR	2
		EPA 8260	RAB	8
		ASTM D2974	DWC	1
		EPA 9045	AJM	1
60127401005	S-07503A-081512-JK-B-14(55-58)	EPA 8015B	JDH	3
		EPA 8015B	SDR	2
		EPA 8260	RAB	8
		ASTM D2974	DWC	1
		EPA 9045	AJM	1
60127401006	S-075034-081712-JK-B-15(55-57)	EPA 8015B	JDH	3
		EPA 8015B	SDR	2
		EPA 5035A/8260	JTS	1
		EPA 8260	RAB	8
		ASTM D2974	DWC	1
60127401007	S-075034-081712-JK-B-16(45-47)	EPA 9045	AJM	1
		EPA 8015B	NAW	3
		EPA 8015B	SDR	2
		EPA 5035A/8260	JTS	1
		EPA 8260	RAB	8
		ASTM D2974	DWC	1
		EPA 9045	AJM	1

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60127401008	S-075034-081712JK-B16(100-102)	EPA 8015B	NAW	3
		EPA 8015B	SDR	2
		EPA 5035A/8260	JTS	1
		EPA 8260	RAB	8
		ASTM D2974	DWC	1
		EPA 9045	AJM	1
60127401009	S-075034-081712-JK-B17(45-47)	EPA 8015B	NAW	3
		EPA 8015B	SDR	2
		EPA 5035A/8260	JTS	1
		EPA 8260	RAB	8
		ASTM D2974	DWC	1
		EPA 9045	AJM	1
60127401010	S-075034-081712JK-B17(100-102)	EPA 8015B	NAW	3
		EPA 8015B	SDR	2
		EPA 5035A/8260	JTS	1
		EPA 8260	RAB	8
		ASTM D2974	DWC	1
		EPA 9045	AJM	1
60127401011	S-075034-081812-JK-B18(35-37)	EPA 8015B	NAW	3
		EPA 8015B	SDR	2
		EPA 5035A/8260	JTS	1
		EPA 8260	RAB	8
		ASTM D2974	DWC	1
		EPA 9045	AJM	1
60127401012	S-075034-081812-JK-B18(55-57)	EPA 8015B	NAW	3
		EPA 5035A/8260	JTS	1
		EPA 8260	RAB	8
		ASTM D2974	DWC	1
		EPA 9045	AJM	1
		EPA 8015B	NAW	3
60127401013	TRIP BLANK1	EPA 8260	RAB	8
60127401014	TRIP BLANK2	EPA 8260	RAB	8
60127401015	WC-075034-081812-JK-WASTE	EPA 8015B	NAW	3
		EPA 6010	JGP	7
		EPA 7470	TJT	1
		EPA 5035A/8260	JTS	4
		ASTM D2974	DWC	1
		SW-846 7.3.4.2	PWH	1
		EPA 9045	AJM	1

### REPORT OF LABORATORY ANALYSIS

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9608 Loiret Blvd.  
Lenexa, KS 66219  
(913)599-5665

### SAMPLE ANALYTE COUNT

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60127401

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		ASTM D92	SRM1	1
		SW-846 7.3.3.2	SRM1	1

### REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

---

**Method:** EPA 8015B  
**Description:** 8015B Diesel Range Organics  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** September 13, 2012

**General Information:**

13 samples were analyzed for EPA 8015B. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: OEXT/34625

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60127313001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 1048897)
- TPH-DRO

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

---

**Method:** EPA 8015B  
**Description:** Gasoline Range Organics  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** September 13, 2012

### General Information:

10 samples were analyzed for EPA 8015B. All samples were received in acceptable condition with any exceptions noted below.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

- H1: Analysis conducted outside the EPA method holding time.
- S-075034-081712-JK-B-15(55-57) (Lab ID: 60127401006)
  - S-075034-081712-JK-B-16(45-47) (Lab ID: 60127401007)
  - S-075034-081712JK-B16(100-102) (Lab ID: 60127401008)
  - S-075034-081712JK-B17(100-102) (Lab ID: 60127401010)

### Sample Preparation:

The samples were prepared in accordance with EPA 5035A/5030B with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

QC Batch: GCV/4052

S2: Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).

- S-07503A-081512-JK-B-13(65-67) (Lab ID: 60127401002)
- 4-Bromofluorobenzene (S)

### Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: GCV/4052

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 1052619)
- TPH-GRO

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

---

**Method:** EPA 8015B  
**Description:** Gasoline Range Organics  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** September 13, 2012

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: GCV/4058

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

**Additional Comments:**

## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60127401

---

**Method:** EPA 6010

**Description:** 6010 MET ICP, TCLP

**Client:** COP Conestoga-Rovers & Associates, Inc. NM

**Date:** September 13, 2012

**General Information:**

1 sample was analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

---

**Method:** EPA 7470  
**Description:** 7470 Mercury, TCLP  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** September 13, 2012

**General Information:**

1 sample was analyzed for EPA 7470. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 7470 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60127401

---

**Method:** EPA 5035A/8260

**Description:** 8260 MSV GRO and Oxygenates

**Client:** COP Conestoga-Rovers & Associates, Inc. NM

**Date:** September 13, 2012

**General Information:**

8 samples were analyzed for EPA 5035A/8260. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/48213

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

---

**Method:** EPA 8260  
**Description:** 8260 MSV 5035A VOA  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** September 13, 2012

### General Information:

14 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

QC Batch: MSV/48018

S0: Surrogate recovery outside laboratory control limits.

- MS (Lab ID: 1049863)
  - 4-Bromofluorobenzene (S)
  - Toluene-d8 (S)
- MSD (Lab ID: 1049864)
  - 4-Bromofluorobenzene (S)
  - Toluene-d8 (S)

S1: Surrogate recovery outside laboratory control limits (confirmed by re-analysis).

- S-07503A-081512-JK-B-13(65-67) (Lab ID: 60127401002)
  - 4-Bromofluorobenzene (S)
  - Toluene-d8 (S)

### Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/47964

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60127356001

D6: The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.

- MSD (Lab ID: 1048632)

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

---

**Method:** EPA 8260  
**Description:** 8260 MSV 5035A VOA  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** September 13, 2012

QC Batch: MSV/47964

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60127356001

D6: The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.

- Benzene
- Ethylbenzene
- Toluene

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 1048632)
  - Benzene
  - Ethylbenzene
  - Toluene

QC Batch: MSV/48013

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/48107

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60127625001

D6: The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.

- MSD (Lab ID: 1051541)
  - Benzene
  - Ethylbenzene
  - Toluene

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 1051541)
  - Ethylbenzene

**Additional Comments:**

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

---

**Method:** SW-846 7.3.4.2  
**Description:** Reactive Sulfide  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** September 13, 2012

**General Information:**

1 sample was analyzed for SW-846 7.3.4.2. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

---

**Method:** EPA 9045  
**Description:** 9045 pH Soil  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** September 13, 2012

**General Information:**

13 samples were analyzed for EPA 9045. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

---

**Method:** ASTM D92  
**Description:** Flashpoint, Open Cup  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** September 13, 2012

**General Information:**

1 sample was analyzed for ASTM D92. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60127401

---

**Method:** SW-846 7.3.3.2

**Description:** 733C S Reactive Cyanide

**Client:** COP Conestoga-Rovers & Associates, Inc. NM

**Date:** September 13, 2012

**General Information:**

1 sample was analyzed for SW-846 7.3.3.2. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

**Sample:** S-07503A-081512-JK-B-12(55-57) **Lab ID:** 60127401001 **Collected:** 08/15/12 08:59 **Received:** 08/21/12 08:40 **Matrix:** Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 3546									
TPH-DRO	ND	mg/kg	10.3	1.6	1	08/22/12 00:00	08/30/12 23:34		
<b>Surrogates</b>									
n-Tetracosane (S)	82	%	20-159		1	08/22/12 00:00	08/30/12 23:34	646-31-1	
p-Terphenyl (S)	84	%	24-147		1	08/22/12 00:00	08/30/12 23:34	92-94-4	
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
TPH-GRO	ND	mg/kg	10.2		1	08/28/12 00:00	08/29/12 13:42		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	109	%	70-130		1	08/28/12 00:00	08/29/12 13:42	460-00-4	
<b>8260 MSV 5035A VOA</b>									
Analytical Method: EPA 8260									
Benzene	ND	ug/kg	5.9	0.53	1		08/22/12 18:41	71-43-2	
Ethylbenzene	8.8	ug/kg	5.9	0.28	1		08/22/12 18:41	100-41-4	
Toluene	72.1	ug/kg	5.9	0.80	1		08/22/12 18:41	108-88-3	
Xylene (Total)	123	ug/kg	5.9	1.2	1		08/22/12 18:41	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	102	%	78-122		1		08/22/12 18:41	1868-53-7	
Toluene-d8 (S)	105	%	80-123		1		08/22/12 18:41	2037-26-5	
4-Bromofluorobenzene (S)	101	%	78-125		1		08/22/12 18:41	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	73-135		1		08/22/12 18:41	17060-07-0	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Percent Moisture	2.9	%	0.50	0.50	1		08/23/12 00:00		
<b>9045 pH Soil</b>									
Analytical Method: EPA 9045									
pH at 25 Degrees C	8.7	Std. Units	0.10	0.10	1		08/22/12 17:00		

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60127401

Sample: S-07503A-081512-JK-B- Lab ID: 60127401002 Collected: 08/15/12 10:48 Received: 08/21/12 08:40 Matrix: Solid  
13(65-67)

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 3546									
TPH-DRO	663	mg/kg	54.0	8.6	5	08/22/12 00:00	08/30/12 23:56		
<b>Surrogates</b>									
n-Tetracosane (S)	77	%	20-159		5	08/22/12 00:00	08/30/12 23:56	646-31-1	
p-Terphenyl (S)	75	%	24-147		5	08/22/12 00:00	08/30/12 23:56	92-94-4	
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
TPH-GRO	1100	mg/kg	106		10	08/28/12 00:00	08/29/12 14:04		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	134	%	70-130		10	08/28/12 00:00	08/29/12 14:04	460-00-4	S2
<b>8260 MSV 5035A VOA</b>									
Analytical Method: EPA 8260									
Benzene	ND	ug/kg	547	49.3	100		08/24/12 22:40	71-43-2	
Ethylbenzene	3060	ug/kg	547	26.3	100		08/24/12 22:40	100-41-4	
Toluene	7040	ug/kg	547	74.4	100		08/24/12 22:40	108-88-3	
Xylene (Total)	61000	ug/kg	547	109	100		08/24/12 22:40	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	93	%	78-122		100		08/24/12 22:40	1868-53-7	
Toluene-d8 (S)	130	%	80-123		100		08/24/12 22:40	2037-26-5	S1
4-Bromofluorobenzene (S)	134	%	78-125		100		08/24/12 22:40	460-00-4	S1
1,2-Dichloroethane-d4 (S)	114	%	73-135		100		08/24/12 22:40	17060-07-0	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Percent Moisture	7.6	%	0.50	0.50	1		08/23/12 00:00		
<b>9045 pH Soil</b>									
Analytical Method: EPA 9045									
pH at 25 Degrees C	7.9	Std. Units	0.10	0.10	1		08/22/12 17:00		

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

Sample: S-07503A-081512-JK-B-13(100) Lab ID: 60127401003 Collected: 08/15/12 14:01 Received: 08/21/12 08:40 Matrix: Solid

### Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 3546									
TPH-DRO	ND	mg/kg	10.7	1.7	1	08/22/12 00:00	08/31/12 00:17		
<b>Surrogates</b>									
n-Tetracosane (S)	65	%	20-159		1	08/22/12 00:00	08/31/12 00:17	646-31-1	
p-Terphenyl (S)	58	%	24-147		1	08/22/12 00:00	08/31/12 00:17	92-94-4	
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
TPH-GRO	17.4	mg/kg	10.9		1	08/28/12 00:00	08/29/12 14:26		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	113	%	70-130		1	08/28/12 00:00	08/29/12 14:26	460-00-4	
<b>8260 MSV 5035A VOA</b>									
Analytical Method: EPA 8260									
Benzene	ND	ug/kg	5.0	0.45	1		08/24/12 12:46	71-43-2	
Ethylbenzene	11.4	ug/kg	5.0	0.24	1		08/24/12 12:46	100-41-4	
Toluene	70.4	ug/kg	5.0	0.68	1		08/24/12 12:46	108-88-3	
Xylene (Total)	158	ug/kg	5.0	1.0	1		08/24/12 12:46	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	94	%	78-122		1		08/24/12 12:46	1868-53-7	
Toluene-d8 (S)	110	%	80-123		1		08/24/12 12:46	2037-26-5	
4-Bromofluorobenzene (S)	117	%	78-125		1		08/24/12 12:46	460-00-4	
1,2-Dichloroethane-d4 (S)	134	%	73-135		1		08/24/12 12:46	17060-07-0	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Percent Moisture	8.3	%	0.50	0.50	1		08/23/12 00:00		
<b>9045 pH Soil</b>									
Analytical Method: EPA 9045									
pH at 25 Degrees C	8.6	Std. Units	0.10	0.10	1		08/22/12 17:00		

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60127401

Sample: S-07503A-081512-JK-(DUP) Lab ID: 60127401004 Collected: 08/15/12 14:01 Received: 08/21/12 08:40 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b> Analytical Method: EPA 8015B Preparation Method: EPA 3546									
TPH-DRO	ND	mg/kg	10.9	1.7	1	08/22/12 00:00	08/31/12 01:22		
<b>Surrogates</b>									
n-Tetracosane (S)	78 %		20-159		1	08/22/12 00:00	08/31/12 01:22	646-31-1	
p-Terphenyl (S)	74 %		24-147		1	08/22/12 00:00	08/31/12 01:22	92-94-4	
<b>Gasoline Range Organics</b> Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
TPH-GRO	ND	mg/kg	10.9		1	08/28/12 00:00	08/29/12 14:47		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	114 %		70-130		1	08/28/12 00:00	08/29/12 14:47	460-00-4	
<b>8260 MSV 5035A VOA</b> Analytical Method: EPA 8260									
Benzene	ND	ug/kg	5.0	0.45	1		08/24/12 13:01	71-43-2	
Ethylbenzene	12.0	ug/kg	5.0	0.24	1		08/24/12 13:01	100-41-4	
Toluene	70.7	ug/kg	5.0	0.68	1		08/24/12 13:01	108-88-3	
Xylene (Total)	165	ug/kg	5.0	1.0	1		08/24/12 13:01	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	96 %		78-122		1		08/24/12 13:01	1868-53-7	
Toluene-d8 (S)	106 %		80-123		1		08/24/12 13:01	2037-26-5	
4-Bromofluorobenzene (S)	120 %		78-125		1		08/24/12 13:01	460-00-4	
1,2-Dichloroethane-d4 (S)	131 %		73-135		1		08/24/12 13:01	17060-07-0	
<b>Percent Moisture</b> Analytical Method: ASTM D2974									
Percent Moisture	8.4 %		0.50	0.50	1		08/23/12 00:00		
<b>9045 pH Soil</b> Analytical Method: EPA 9045									
pH at 25 Degrees C	8.5	Std. Units	0.10	0.10	1		08/22/12 17:00		



## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

Sample: S-07503A-081512-JK-B-14(55-58) Lab ID: 60127401005 Collected: 08/15/12 15:56 Received: 08/21/12 08:40 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 3546									
TPH-DRO	ND	mg/kg	12.4	2.0	1	08/22/12 00:00	08/31/12 01:44		
<b>Surrogates</b>									
n-Tetracosane (S)	61	%	20-159		1	08/22/12 00:00	08/31/12 01:44	646-31-1	
p-Terphenyl (S)	62	%	24-147		1	08/22/12 00:00	08/31/12 01:44	92-94-4	
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
TPH-GRO	ND	mg/kg	12.5		1	08/28/12 00:00	08/29/12 15:09		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	92	%	70-130		1	08/28/12 00:00	08/29/12 15:09	460-00-4	
<b>8260 MSV 5035A VOA</b>									
Analytical Method: EPA 8260									
Benzene	ND	ug/kg	6.4	0.57	1		08/24/12 13:16	71-43-2	
Ethylbenzene	9.1	ug/kg	6.4	0.31	1		08/24/12 13:16	100-41-4	
Toluene	87.8	ug/kg	6.4	0.86	1		08/24/12 13:16	108-88-3	
Xylene (Total)	137	ug/kg	6.4	1.3	1		08/24/12 13:16	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	91	%	78-122		1		08/24/12 13:16	1868-53-7	
Toluene-d8 (S)	107	%	80-123		1		08/24/12 13:16	2037-26-5	
4-Bromofluorobenzene (S)	119	%	78-125		1		08/24/12 13:16	460-00-4	
1,2-Dichloroethane-d4 (S)	127	%	73-135		1		08/24/12 13:16	17060-07-0	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Percent Moisture	19.8	%	0.50	0.50	1		08/23/12 00:00		
<b>9045 pH Soil</b>									
Analytical Method: EPA 9045									
pH at 25 Degrees C	7.7	Std. Units	0.10	0.10	1		08/22/12 17:00		



## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60127401

**Sample:** S-075034-081712-JK-B-15(55-57) **Lab ID:** 60127401006 **Collected:** 08/17/12 08:09 **Received:** 08/21/12 08:40 **Matrix:** Solid**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b> Analytical Method: EPA 8015B Preparation Method: EPA 3546									
TPH-DRO	ND	mg/kg	10.1	1.6	1	08/22/12 00:00	08/31/12 02:06		
<b>Surrogates</b>									
n-Tetracosane (S)	77	%	20-159		1	08/22/12 00:00	08/31/12 02:06	646-31-1	
p-Terphenyl (S)	79	%	24-147		1	08/22/12 00:00	08/31/12 02:06	92-94-4	
<b>Gasoline Range Organics</b> Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
TPH-GRO	ND	mg/kg	10.3		1	08/28/12 00:00	09/02/12 15:54		H1,L1
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	95	%	70-130		1	08/28/12 00:00	09/02/12 15:54	460-00-4	
<b>8260 MSV GRO and Oxygenates</b> Analytical Method: EPA 5035A/8260									
TPH-GRO	9.7	mg/kg	0.49		1		08/31/12 22:23		
<b>8260 MSV 5035A VOA</b> Analytical Method: EPA 8260									
Benzene	ND	ug/kg	5.3	0.48	1		08/24/12 13:31	71-43-2	
Ethylbenzene	7.7	ug/kg	5.3	0.25	1		08/24/12 13:31	100-41-4	
Toluene	56.2	ug/kg	5.3	0.72	1		08/24/12 13:31	108-88-3	
Xylene (Total)	112	ug/kg	5.3	1.1	1		08/24/12 13:31	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	95	%	78-122		1		08/24/12 13:31	1868-53-7	
Toluene-d8 (S)	101	%	80-123		1		08/24/12 13:31	2037-26-5	
4-Bromofluorobenzene (S)	117	%	78-125		1		08/24/12 13:31	460-00-4	
1,2-Dichloroethane-d4 (S)	131	%	73-135		1		08/24/12 13:31	17060-07-0	
<b>Percent Moisture</b> Analytical Method: ASTM D2974									
Percent Moisture	3.6	%	0.50	0.50	1		08/23/12 00:00		
<b>9045 pH Soil</b> Analytical Method: EPA 9045									
pH at 25 Degrees C	8.1	Std. Units	0.10	0.10	1		08/22/12 17:00		

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

**Sample:** S-075034-081712-JK-B-16(45-47) **Lab ID:** 60127401007 **Collected:** 08/17/12 09:25 **Received:** 08/21/12 08:40 **Matrix:** Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 3546									
TPH-DRO	ND	mg/kg	11.6	2.2	1	08/23/12 00:00	08/24/12 17:04		
<b>Surrogates</b>									
n-Tetracosane (S)	60	%	20-159		1	08/23/12 00:00	08/24/12 17:04	646-31-1	
p-Terphenyl (S)	62	%	24-147		1	08/23/12 00:00	08/24/12 17:04	92-94-4	
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
TPH-GRO	1650	mg/kg	116		10	08/28/12 00:00	09/02/12 16:16		H1,L1
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	117	%	70-130		10	08/28/12 00:00	09/02/12 16:16	460-00-4	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 5035A/8260									
TPH-GRO	3270	mg/kg	284		500		08/31/12 22:40		
<b>8260 MSV 5035A VOA</b>									
Analytical Method: EPA 8260									
Benzene	ND	ug/kg	2860	257	500		08/29/12 11:17	71-43-2	
Ethylbenzene	11700	ug/kg	2860	137	500		08/29/12 11:17	100-41-4	
Toluene	53300	ug/kg	2860	388	500		08/29/12 11:17	108-88-3	
Xylene (Total)	193000	ug/kg	2860	571	500		08/29/12 11:17	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	98	%	78-122		500		08/29/12 11:17	1868-53-7	
Toluene-d8 (S)	115	%	80-123		500		08/29/12 11:17	2037-26-5	
4-Bromofluorobenzene (S)	110	%	78-125		500		08/29/12 11:17	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	73-135		500		08/29/12 11:17	17060-07-0	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Percent Moisture	14.9	%	0.50	0.50	1		08/23/12 00:00		
<b>9045 pH Soil</b>									
Analytical Method: EPA 9045									
pH at 25 Degrees C	8.0	Std. Units	0.10	0.10	1		08/22/12 17:00		

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60127401

Sample: S-075034-081712JK- Lab ID: 60127401008 Collected: 08/17/12 11:12 Received: 08/21/12 08:40 Matrix: Solid  
B16(100-102)

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b> Analytical Method: EPA 8015B Preparation Method: EPA 3546									
TPH-DRO	ND	mg/kg	11.9	2.3	1	08/23/12 00:00	08/24/12 17:14		
<b>Surrogates</b>									
n-Tetracosane (S)	62	%	20-159		1	08/23/12 00:00	08/24/12 17:14	646-31-1	
p-Terphenyl (S)	66	%	24-147		1	08/23/12 00:00	08/24/12 17:14	92-94-4	
<b>Gasoline Range Organics</b> Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
TPH-GRO	ND	mg/kg	12.0		1	08/28/12 00:00	09/02/12 17:01		H1,L1
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	97	%	70-130		1	08/28/12 00:00	09/02/12 17:01	460-00-4	
<b>8260 MSV GRO and Oxygenates</b> Analytical Method: EPA 5035A/8260									
TPH-GRO	0.97	mg/kg	0.55		1		08/31/12 22:57		
<b>8260 MSV 5035A VOA</b> Analytical Method: EPA 8260									
Benzene	ND	ug/kg	5.8	0.52	1		08/24/12 14:02	71-43-2	
Ethylbenzene	ND	ug/kg	5.8	0.28	1		08/24/12 14:02	100-41-4	
Toluene	47.7	ug/kg	5.8	0.78	1		08/24/12 14:02	108-88-3	
Xylene (Total)	71.2	ug/kg	5.8	1.2	1		08/24/12 14:02	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	89	%	78-122		1		08/24/12 14:02	1868-53-7	
Toluene-d8 (S)	98	%	80-123		1		08/24/12 14:02	2037-26-5	
4-Bromofluorobenzene (S)	113	%	78-125		1		08/24/12 14:02	460-00-4	
1,2-Dichloroethane-d4 (S)	125	%	73-135		1		08/24/12 14:02	17060-07-0	
<b>Percent Moisture</b> Analytical Method: ASTM D2974									
Percent Moisture	17.5	%	0.50	0.50	1		08/23/12 00:00		
<b>9045 pH Soil</b> Analytical Method: EPA 9045									
pH at 25 Degrees C	8.2	Std. Units	0.10	0.10	1		08/22/12 17:00		



## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

**Sample:** S-075034-081712-JK-B17(45-47) **Lab ID:** 60127401009 **Collected:** 08/17/12 17:56 **Received:** 08/21/12 08:40 **Matrix:** Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 3546									
TPH-DRO	986	mg/kg	54.1	10.3	5	08/23/12 00:00	08/28/12 02:42		
<b>Surrogates</b>									
n-Tetracosane (S)	119	%	20-159		5	08/23/12 00:00	08/28/12 02:42	646-31-1	
p-Terphenyl (S)	64	%	24-147		5	08/23/12 00:00	08/28/12 02:42	92-94-4	
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
TPH-GRO	2170	mg/kg	107		10	08/28/12 00:00	09/02/12 17:23		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	123	%	70-130		10	08/28/12 00:00	09/02/12 17:23	460-00-4	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 5035A/8260									
TPH-GRO	7260	mg/kg	262		500		08/31/12 23:13		
<b>8260 MSV 5035A VOA</b>									
Analytical Method: EPA 8260									
Benzene	ND	ug/kg	2620	236	500		08/24/12 00:57	71-43-2	
Ethylbenzene	19900	ug/kg	2620	126	500		08/24/12 00:57	100-41-4	
Toluene	81200	ug/kg	2620	357	500		08/24/12 00:57	108-88-3	
Xylene (Total)	356000	ug/kg	2620	524	500		08/24/12 00:57	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	89	%	78-122		500		08/24/12 00:57	1868-53-7	
Toluene-d8 (S)	118	%	80-123		500		08/24/12 00:57	2037-26-5	
4-Bromofluorobenzene (S)	119	%	78-125		500		08/24/12 00:57	460-00-4	
1,2-Dichloroethane-d4 (S)	120	%	73-135		500		08/24/12 00:57	17060-07-0	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Percent Moisture	7.8	%	0.50	0.50	1		08/23/12 00:00		
<b>9045 pH Soil</b>									
Analytical Method: EPA 9045									
pH at 25 Degrees C	7.5	Std. Units	0.10	0.10	1		08/22/12 17:00		



## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60127401

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Sample: S-075034-081712JK- Lab ID: 60127401010 Collected: 08/17/12 10:33 Received: 08/21/12 08:40 Matrix: Solid  
B17(100-102)

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b> Analytical Method: EPA 8015B Preparation Method: EPA 3546									
TPH-DRO	ND	mg/kg	10.8	2.0	1	08/23/12 00:00	08/24/12 17:33		
<b>Surrogates</b>									
n-Tetracosane (S)	61	%	20-159		1	08/23/12 00:00	08/24/12 17:33	646-31-1	
p-Terphenyl (S)	62	%	24-147		1	08/23/12 00:00	08/24/12 17:33	92-94-4	
<b>Gasoline Range Organics</b> Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
TPH-GRO	ND	mg/kg	10.8		1	08/28/12 00:00	09/02/12 18:07		H1,L1
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	96	%	70-130		1	08/28/12 00:00	09/02/12 18:07	460-00-4	
<b>8260 MSV GRO and Oxygenates</b> Analytical Method: EPA 5035A/8260									
TPH-GRO	0.74	mg/kg	0.49		1		08/31/12 23:30		
<b>8260 MSV 5035A VOA</b> Analytical Method: EPA 8260									
Benzene	8.5	ug/kg	5.6	0.51	1		08/24/12 14:17	71-43-2	
Ethylbenzene	ND	ug/kg	5.6	0.27	1		08/24/12 14:17	100-41-4	
Toluene	62.0	ug/kg	5.6	0.76	1		08/24/12 14:17	108-88-3	
Xylene (Total)	79.4	ug/kg	5.6	1.1	1		08/24/12 14:17	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	85	%	78-122		1		08/24/12 14:17	1868-53-7	
Toluene-d8 (S)	98	%	80-123		1		08/24/12 14:17	2037-26-5	
4-Bromofluorobenzene (S)	114	%	78-125		1		08/24/12 14:17	460-00-4	
1,2-Dichloroethane-d4 (S)	127	%	73-135		1		08/24/12 14:17	17060-07-0	
<b>Percent Moisture</b> Analytical Method: ASTM D2974									
Percent Moisture	7.7	%	0.50	0.50	1		08/23/12 00:00		
<b>9045 pH Soil</b> Analytical Method: EPA 9045									
pH at 25 Degrees C	8.8	Std. Units	0.10	0.10	1		08/22/12 17:00		

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

Sample: S-075034-081812-JK-B18(35-37) Lab ID: 60127401011 Collected: 08/18/12 11:44 Received: 08/21/12 08:40 Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 3546									
TPH-DRO	25.0	mg/kg	12.4	2.3	1	08/23/12 00:00	08/28/12 02:52		
<b>Surrogates</b>									
n-Tetracosane (S)	89	%	20-159		1	08/23/12 00:00	08/28/12 02:52	646-31-1	
p-Terphenyl (S)	72	%	24-147		1	08/23/12 00:00	08/28/12 02:52	92-94-4	
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
TPH-GRO	ND	mg/kg	12.4		1	08/28/12 00:00	09/02/12 19:13		H1,L1
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	98	%	70-130		1	08/28/12 00:00	09/02/12 19:13	460-00-4	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 5035A/8260									
TPH-GRO	3.0	mg/kg	0.47		1		08/31/12 23:46		
<b>8260 MSV 5035A VOA</b>									
Analytical Method: EPA 8260									
Benzene	ND	ug/kg	308	27.7	50		08/24/12 01:28	71-43-2	
Ethylbenzene	ND	ug/kg	308	14.8	50		08/24/12 01:28	100-41-4	
Toluene	ND	ug/kg	308	41.8	50		08/24/12 01:28	108-88-3	
Xylene (Total)	1160	ug/kg	308	61.5	50		08/24/12 01:28	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	81	%	78-122		50		08/24/12 01:28	1868-53-7	
Toluene-d8 (S)	102	%	80-123		50		08/24/12 01:28	2037-26-5	
4-Bromofluorobenzene (S)	120	%	78-125		50		08/24/12 01:28	460-00-4	
1,2-Dichloroethane-d4 (S)	118	%	73-135		50		08/24/12 01:28	17060-07-0	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Percent Moisture	20.0	%	0.50	0.50	1		08/23/12 00:00		
<b>9045 pH Soil</b>									
Analytical Method: EPA 9045									
pH at 25 Degrees C	7.9	Std. Units	0.10	0.10	1		08/22/12 17:00		



## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60127401

Sample: S-075034-081812-JK- Lab ID: 60127401012 Collected: 08/18/12 12:04 Received: 08/21/12 08:40 Matrix: Solid  
B18(55-57)

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 3546									
TPH-DRO	ND	mg/kg	10.2	1.9	1	08/23/12 00:00	08/28/12 03:02		
<b>Surrogates</b>									
n-Tetracosane (S)	77	%	20-159		1	08/23/12 00:00	08/28/12 03:02	646-31-1	
p-Terphenyl (S)	61	%	24-147		1	08/23/12 00:00	08/28/12 03:02	92-94-4	
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
TPH-GRO	ND	mg/kg	10.3		1	08/28/12 00:00	09/02/12 19:35		H1,L1
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	102	%	70-130		1	08/28/12 00:00	09/02/12 19:35	460-00-4	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 5035A/8260									
TPH-GRO	ND	mg/kg	0.50		1		09/01/12 00:03		
<b>8260 MSV 5035A VOA</b>									
Analytical Method: EPA 8260									
Benzene	ND	ug/kg	5.1	0.46	1		08/28/12 16:38	71-43-2	
Ethylbenzene	ND	ug/kg	5.1	0.25	1		08/28/12 16:38	100-41-4	
Toluene	ND	ug/kg	5.1	0.70	1		08/28/12 16:38	108-88-3	
Xylene (Total)	ND	ug/kg	5.1	1.0	1		08/28/12 16:38	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	103	%	78-122		1		08/28/12 16:38	1868-53-7	
Toluene-d8 (S)	104	%	80-123		1		08/28/12 16:38	2037-26-5	
4-Bromofluorobenzene (S)	110	%	78-125		1		08/28/12 16:38	460-00-4	
1,2-Dichloroethane-d4 (S)	127	%	73-135		1		08/28/12 16:38	17060-07-0	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Percent Moisture	2.7	%	0.50	0.50	1		08/23/12 00:00		
<b>9045 pH Soil</b>									
Analytical Method: EPA 9045									
pH at 25 Degrees C	8.7	Std. Units	0.10	0.10	1		08/22/12 17:00		

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60127401

Sample: TRIP BLANK1 Lab ID: 60127401013 Collected: 08/18/12 00:00 Received: 08/21/12 08:40 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV 5035A VOA</b>									
Analytical Method: EPA 8260									
Benzene	ND	ug/kg	5.0	0.45	1		08/24/12 12:15	71-43-2	
Ethylbenzene	ND	ug/kg	5.0	0.24	1		08/24/12 12:15	100-41-4	
Toluene	8.7	ug/kg	5.0	0.68	1		08/24/12 12:15	108-88-3	
Xylene (Total)	7.8	ug/kg	5.0	1.0	1		08/24/12 12:15	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	88	%	78-122		1		08/24/12 12:15	1868-53-7	
Toluene-d8 (S)	96	%	80-123		1		08/24/12 12:15	2037-26-5	
4-Bromofluorobenzene (S)	109	%	78-125		1		08/24/12 12:15	460-00-4	
1,2-Dichloroethane-d4 (S)	112	%	73-135		1		08/24/12 12:15	17060-07-0	

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60127401

Sample: TRIP BLANK2 Lab ID: 60127401014 Collected: 08/18/12 00:00 Received: 08/21/12 08:40 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV 5035A VOA</b>		Analytical Method: EPA 8260							
Benzene	ND	ug/kg	5.0	0.45	1		08/24/12 12:30	71-43-2	
Ethylbenzene	ND	ug/kg	5.0	0.24	1		08/24/12 12:30	100-41-4	
Toluene	ND	ug/kg	5.0	0.68	1		08/24/12 12:30	108-88-3	
Xylene (Total)	ND	ug/kg	5.0	1.0	1		08/24/12 12:30	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	88 %		78-122		1		08/24/12 12:30	1868-53-7	
Toluene-d8 (S)	97 %		80-123		1		08/24/12 12:30	2037-26-5	
4-Bromofluorobenzene (S)	109 %		78-125		1		08/24/12 12:30	460-00-4	
1,2-Dichloroethane-d4 (S)	112 %		73-135		1		08/24/12 12:30	17060-07-0	



## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

**Sample:** WC-075034-081812-JK-  
**WASTE**      **Lab ID:** 60127401015      **Collected:** 08/18/12 14:00      **Received:** 08/21/12 08:40      **Matrix:** Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 3546									
TPH-DRO	ND	mg/kg	10.5	2.0	1	08/23/12 00:00	08/28/12 03:11		
<b>Surrogates</b>									
n-Tetracosane (S)	62	%	20-159		1	08/23/12 00:00	08/28/12 03:11	646-31-1	
p-Terphenyl (S)	49	%	24-147		1	08/23/12 00:00	08/28/12 03:11	92-94-4	
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
TPH-GRO	ND	mg/kg	10.6		1	08/28/12 00:00	09/02/12 19:57		H1,L1
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	95	%	70-130		1	08/28/12 00:00	09/02/12 19:57	460-00-4	
<b>6010 MET ICP, TCLP</b>									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Leachate Method/Date: EPA 1311; 08/23/12 00:00									
Arsenic	ND	mg/L	0.50	0.052	1	08/24/12 14:35	08/27/12 15:01	7440-38-2	
Barium	ND	mg/L	2.5	0.0078	1	08/24/12 14:35	08/27/12 15:01	7440-39-3	
Cadmium	ND	mg/L	0.050	0.0039	1	08/24/12 14:35	08/27/12 15:01	7440-43-9	
Chromium	ND	mg/L	0.10	0.0084	1	08/24/12 14:35	08/27/12 15:01	7440-47-3	
Lead	ND	mg/L	0.50	0.028	1	08/24/12 14:35	08/27/12 15:01	7439-92-1	
Selenium	ND	mg/L	0.50	0.038	1	08/24/12 14:35	08/27/12 15:01	7782-49-2	
Silver	ND	mg/L	0.10	0.011	1	08/24/12 14:35	08/27/12 15:01	7440-22-4	
<b>7470 Mercury, TCLP</b>									
Analytical Method: EPA 7470 Preparation Method: EPA 7470									
Leachate Method/Date: EPA 1311; 08/23/12 00:00									
Mercury	ND	ug/L	2.0	1.0	1	08/27/12 11:10	08/27/12 15:56	7439-97-6	
<b>8260 MSV GRO and Oxygenates</b>									
Analytical Method: EPA 5035A/8260									
TPH-GRO	ND	mg/kg	0.52		1		09/01/12 00:20		
<b>Surrogates</b>									
Toluene-d8 (S)	103	%	80-123		1		09/01/12 00:20	2037-26-5	
4-Bromofluorobenzene (S)	94	%	78-125		1		09/01/12 00:20	460-00-4	
1,2-Dichloroethane-d4 (S)	79	%	73-135		1		09/01/12 00:20	17060-07-0	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974									
Percent Moisture	5.8	%	0.50	0.50	1		08/23/12 00:00		
<b>Reactive Sulfide</b>									
Analytical Method: SW-846 7.3.4.2									
Sulfide, Reactive	ND	mg/kg	100	12.9	1		08/27/12 14:30		
<b>9045 pH Soil</b>									
Analytical Method: EPA 9045									
pH at 25 Degrees C	8.3	Std. Units	0.10	0.10	1		08/22/12 17:00		
<b>Flashpoint, Open Cup</b>									
Analytical Method: ASTM D92									
Flashpoint	>210	deg F			1		08/31/12 14:22		

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60127401

Sample: WC-075034-081812-JK- Lab ID: 60127401015 Collected: 08/18/12 14:00 Received: 08/21/12 08:40 Matrix: Solid  
WASTE

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
733C S Reactive Cyanide									
Analytical Method: SW-846 7.3.3.2									
Cyanide, Reactive	ND	mg/kg	0.025		1		08/28/12 10:19		

### QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

QC Batch:	GCV/4052	Analysis Method:	EPA 8015B
QC Batch Method:	EPA 5035A/5030B	Analysis Description:	Gasoline Range Organics
Associated Lab Samples:	60127401001, 60127401002, 60127401003, 60127401004, 60127401005, 60127401006, 60127401007, 60127401008, 60127401009, 60127401010, 60127401011, 60127401012, 60127401015		

METHOD BLANK: 1051080		Matrix: Solid			
Associated Lab Samples: 60127401001, 60127401002, 60127401003, 60127401004, 60127401005, 60127401006, 60127401007, 60127401008, 60127401009, 60127401010, 60127401011, 60127401012, 60127401015					
Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	mg/kg	ND	10.0	08/29/12 12:37	
4-Bromofluorobenzene (S)	%	96	70-130	08/29/12 12:37	

METHOD BLANK: 1052618		Matrix: Solid			
Associated Lab Samples: 60127401001, 60127401002, 60127401003, 60127401004, 60127401005, 60127401006, 60127401007, 60127401008, 60127401009, 60127401010, 60127401011, 60127401012, 60127401015					
Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	mg/kg	ND	10.0	09/02/12 15:32	
4-Bromofluorobenzene (S)	%	99	70-130	09/02/12 15:32	

LABORATORY CONTROL SAMPLE: 1051081						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	50	61.0	122	70-130	
4-Bromofluorobenzene (S)	%			106	70-130	

LABORATORY CONTROL SAMPLE: 1052619						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	50	53.2	106	70-130	L0
4-Bromofluorobenzene (S)	%			98	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		1051082	1051083									
Parameter	Units	60127401001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual	
TPH-GRO	mg/kg	ND	51.1	51.1	39.6	42.6	72	78	70-130	7	30	
4-Bromofluorobenzene (S)	%						108	108	70-130			



### QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

QC Batch: MERP/6553 Analysis Method: EPA 7470  
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury TCLP  
Associated Lab Samples: 60127401015

METHOD BLANK: 1050918 Matrix: Water  
Associated Lab Samples: 60127401015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	2.0	08/27/12 15:38	

LABORATORY CONTROL SAMPLE: 1050919

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	5.3	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1050920 1050921

Parameter	Units	60127401015 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	15	15	14.8	15.6	98	104	75-125	5	19	

### QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

QC Batch: MPRP/19250	Analysis Method: EPA 6010
QC Batch Method: EPA 3010	Analysis Description: 6010 MET TCLP
Associated Lab Samples: 60127401015	

METHOD BLANK: 1050020 Matrix: Water  
Associated Lab Samples: 60127401015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.50	08/27/12 14:40	
Barium	mg/L	ND	2.5	08/27/12 14:40	
Cadmium	mg/L	ND	0.050	08/27/12 14:40	
Chromium	mg/L	ND	0.10	08/27/12 14:40	
Lead	mg/L	ND	0.50	08/27/12 14:40	
Selenium	mg/L	ND	0.50	08/27/12 14:40	
Silver	mg/L	ND	0.10	08/27/12 14:40	

LABORATORY CONTROL SAMPLE: 1050021

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	1	0.99	99	80-120	
Barium	mg/L	1	1.0	103	80-120	
Cadmium	mg/L	1	0.98	98	80-120	
Chromium	mg/L	1	0.99	99	80-120	
Lead	mg/L	1	1.0	100	80-120	
Selenium	mg/L	1	0.95	95	80-120	
Silver	mg/L	.5	0.46	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1050022 1050023

Parameter	Units	60127401015		MS		MSD		MS		MSD		% Rec		Max		Qual
		Result	Conc.	Spike Conc.	Result	Spike Conc.	Result	% Rec	Result	% Rec	Result	Limits	RPD	RPD	RPD	
Arsenic	mg/L	ND	10	10	9.7	9.8	97	98	75-125	1	20					
Barium	mg/L	ND	10	10	10.7	10.8	98	98	75-125	0	20					
Cadmium	mg/L	ND	10	10	9.5	9.7	95	97	75-125	1	20					
Chromium	mg/L	ND	10	10	9.2	9.3	92	93	75-125	1	20					
Lead	mg/L	ND	10	10	9.6	9.6	95	96	75-125	1	20					
Selenium	mg/L	ND	10	10	9.5	9.6	95	96	75-125	2	20					
Silver	mg/L	ND	5	5	4.5	4.6	91	92	75-125	1	20					

## QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60127401

QC Batch:	MSV/48213	Analysis Method:	EPA 5035A/8260
QC Batch Method:	EPA 5035A/8260	Analysis Description:	8260 MSV GRO and Oxygenates
Associated Lab Samples:	60127401006, 60127401007, 60127401008, 60127401009, 60127401010, 60127401011, 60127401012, 60127401015		

METHOD BLANK: 1053690

Matrix: Solid

Associated Lab Samples: 60127401006, 60127401007, 60127401008, 60127401009, 60127401010, 60127401011, 60127401012, 60127401015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	mg/kg	ND	0.50	08/31/12 20:44	
1,2-Dichloroethane-d4 (S)	%	76	73-135	08/31/12 20:44	
4-Bromofluorobenzene (S)	%	98	78-125	08/31/12 20:44	
Toluene-d8 (S)	%	99	80-123	08/31/12 20:44	

LABORATORY CONTROL SAMPLE: 1053691

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	4	3.0	75	64-131	
1,2-Dichloroethane-d4 (S)	%			81	73-135	
4-Bromofluorobenzene (S)	%			94	78-125	
Toluene-d8 (S)	%			97	80-123	



### QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

QC Batch: MSV/47964	Analysis Method: EPA 8260
QC Batch Method: EPA 8260	Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 60127401001	

METHOD BLANK: 1048629 Matrix: Solid

Associated Lab Samples: 60127401001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/kg	ND	5.0	08/22/12 13:51	
Ethylbenzene	ug/kg	ND	5.0	08/22/12 13:51	
Toluene	ug/kg	ND	5.0	08/22/12 13:51	
Xylene (Total)	ug/kg	ND	5.0	08/22/12 13:51	
1,2-Dichloroethane-d4 (S)	%	101	73-135	08/22/12 13:51	
4-Bromofluorobenzene (S)	%	100	78-125	08/22/12 13:51	
Dibromofluoromethane (S)	%	102	78-122	08/22/12 13:51	
Toluene-d8 (S)	%	101	80-123	08/22/12 13:51	

LABORATORY CONTROL SAMPLE: 1048630

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	100	93.9	94	78-120	
Ethylbenzene	ug/kg	100	94.2	94	77-120	
Toluene	ug/kg	100	91.5	92	76-120	
Xylene (Total)	ug/kg	300	275	92	76-120	
1,2-Dichloroethane-d4 (S)	%			100	73-135	
4-Bromofluorobenzene (S)	%			98	78-125	
Dibromofluoromethane (S)	%			104	78-122	
Toluene-d8 (S)	%			100	80-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1048631 1048632

Parameter	Units	60127356001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Benzene	ug/kg	ND	108	109	50.3	35.2	47	32	40-141	35	34 D6,M1
Ethylbenzene	ug/kg	ND	108	109	46.5	30.6	43	28	40-149	41	39 D6,M1
Toluene	ug/kg	ND	108	109	47.7	31.8	44	29	40-143	40	39 D6,M1
Xylene (Total)	ug/kg	ND	324	327	131	87.6	40	27	40-147	40	40 ES
1,2-Dichloroethane-d4 (S)	%						113	120	73-135		
4-Bromofluorobenzene (S)	%						101	102	78-125		
Dibromofluoromethane (S)	%						108	110	78-122		
Toluene-d8 (S)	%						101	102	80-123		

## QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

QC Batch: MSV/47994 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics  
Associated Lab Samples: 60127401009

METHOD BLANK: 1049180 Matrix: Solid  
Associated Lab Samples: 60127401009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/kg	ND	5.0	08/23/12 19:50	
Ethylbenzene	ug/kg	ND	5.0	08/23/12 19:50	
Toluene	ug/kg	ND	5.0	08/23/12 19:50	
Xylene (Total)	ug/kg	ND	5.0	08/23/12 19:50	
1,2-Dichloroethane-d4 (S)	%	110	73-135	08/23/12 19:50	
4-Bromofluorobenzene (S)	%	108	78-125	08/23/12 19:50	
Dibromofluoromethane (S)	%	87	78-122	08/23/12 19:50	
Toluene-d8 (S)	%	98	80-123	08/23/12 19:50	

LABORATORY CONTROL SAMPLE: 1049181

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	100	92.5	93	78-120	
Ethylbenzene	ug/kg	100	89.3	89	77-120	
Toluene	ug/kg	100	84.7	85	76-120	
Xylene (Total)	ug/kg	300	262	87	76-120	
1,2-Dichloroethane-d4 (S)	%			103	73-135	
4-Bromofluorobenzene (S)	%			107	78-125	
Dibromofluoromethane (S)	%			97	78-122	
Toluene-d8 (S)	%			100	80-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1049182 1049183

Parameter	Units	60127511007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/kg		120	120	105	122	87	102	40-141	15	34	
Ethylbenzene	ug/kg		120	120	87.7	110	73	92	40-149	22	39	
Toluene	ug/kg		120	120	89.8	105	75	88	40-143	16	39	
Xylene (Total)	ug/kg		360	360	252	319	70	88	40-147	23	40	
1,2-Dichloroethane-d4 (S)	%						122	116	73-135			
4-Bromofluorobenzene (S)	%						113	113	78-125			
Dibromofluoromethane (S)	%						99	97	78-122			
Toluene-d8 (S)	%						98	98	80-123			

## QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

QC Batch: MSV/48013 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics  
Associated Lab Samples: 60127401003, 60127401004, 60127401005, 60127401006, 60127401008, 60127401010, 60127401011, 60127401013, 60127401014

METHOD BLANK: 1049796 Matrix: Solid  
Associated Lab Samples: 60127401003, 60127401004, 60127401005, 60127401006, 60127401008, 60127401010, 60127401013, 60127401014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/kg	ND	5.0	08/24/12 09:43	
Ethylbenzene	ug/kg	ND	5.0	08/24/12 09:43	
Toluene	ug/kg	ND	5.0	08/24/12 09:43	
Xylene (Total)	ug/kg	ND	5.0	08/24/12 09:43	
1,2-Dichloroethane-d4 (S)	%	112	73-135	08/24/12 09:43	
4-Bromofluorobenzene (S)	%	110	78-125	08/24/12 09:43	
Dibromofluoromethane (S)	%	88	78-122	08/24/12 09:43	
Toluene-d8 (S)	%	97	80-123	08/24/12 09:43	

METHOD BLANK: 1051125 Matrix: Solid  
Associated Lab Samples: 60127401011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/kg	ND	5.0	08/23/12 19:50	
Ethylbenzene	ug/kg	ND	5.0	08/23/12 19:50	
Toluene	ug/kg	ND	5.0	08/23/12 19:50	
Xylene (Total)	ug/kg	ND	5.0	08/23/12 19:50	
1,2-Dichloroethane-d4 (S)	%	110	73-135	08/23/12 19:50	
4-Bromofluorobenzene (S)	%	108	78-125	08/23/12 19:50	
Dibromofluoromethane (S)	%	87	78-122	08/23/12 19:50	
Toluene-d8 (S)	%	98	80-123	08/23/12 19:50	

LABORATORY CONTROL SAMPLE: 1049797

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	100	102	102	78-120	
Ethylbenzene	ug/kg	100	97.2	97	77-120	
Toluene	ug/kg	100	93.3	93	76-120	
Xylene (Total)	ug/kg	300	289	96	76-120	
1,2-Dichloroethane-d4 (S)	%			108	73-135	
4-Bromofluorobenzene (S)	%			120	78-125	
Dibromofluoromethane (S)	%			88	78-122	
Toluene-d8 (S)	%			99	80-123	



### QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60127401

LABORATORY CONTROL SAMPLE: 1051126

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	100	92.5	93	78-120	
Ethylbenzene	ug/kg	100	89.3	89	77-120	
Toluene	ug/kg	100	84.7	85	76-120	
Xylene (Total)	ug/kg	300	262	87	76-120	
1,2-Dichloroethane-d4 (S)	%			103	73-135	
4-Bromofluorobenzene (S)	%			107	78-125	
Dibromofluoromethane (S)	%			97	78-122	
Toluene-d8 (S)	%			100	80-123	

## QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

QC Batch:	MSV/48018	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV 5035A Volatile Organics
Associated Lab Samples:	60127401002		

METHOD BLANK: 1049861 Matrix: Solid

Associated Lab Samples: 60127401002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/kg	ND	5.0	08/24/12 20:07	
Ethylbenzene	ug/kg	ND	5.0	08/24/12 20:07	
Toluene	ug/kg	ND	5.0	08/24/12 20:07	
Xylene (Total)	ug/kg	ND	5.0	08/24/12 20:07	
1,2-Dichloroethane-d4 (S)	%	112	73-135	08/24/12 20:07	
4-Bromofluorobenzene (S)	%	108	78-125	08/24/12 20:07	
Dibromofluoromethane (S)	%	88	78-122	08/24/12 20:07	
Toluene-d8 (S)	%	97	80-123	08/24/12 20:07	

LABORATORY CONTROL SAMPLE: 1049862

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	100	104	104	78-120	
Ethylbenzene	ug/kg	100	97.2	97	77-120	
Toluene	ug/kg	100	92.8	93	76-120	
Xylene (Total)	ug/kg	300	283	94	76-120	
1,2-Dichloroethane-d4 (S)	%			113	73-135	
4-Bromofluorobenzene (S)	%			112	78-125	
Dibromofluoromethane (S)	%			80	78-122	
Toluene-d8 (S)	%			96	80-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1049863 1049864

Parameter	Units	60127401002		MS		MSD		MS	MSD	% Rec	MSD	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Conc.	Result	Result									
Benzene	ug/kg	ND	10900	10900	10900	11100	11400	102	104	40-141	2	34				
Ethylbenzene	ug/kg	3060	10900	10900	10900	12700	13000	88	91	40-149	2	39				
Toluene	ug/kg	7040	10900	10900	10900	16500	16500	87	87	40-143	0	39				
Xylene (Total)	ug/kg	61000	32900	32900	32900	88400	86400	83	77	40-147	2	40				
1,2-Dichloroethane-d4 (S)	%							114	114	73-135						
4-Bromofluorobenzene (S)	%							134	133	78-125						S0
Dibromofluoromethane (S)	%							95	95	78-122						
Toluene-d8 (S)	%							129	130	80-123						S0

## QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

QC Batch: MSV/48107 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics  
Associated Lab Samples: 60127401012

METHOD BLANK: 1051538 Matrix: Solid  
Associated Lab Samples: 60127401012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/kg	ND	5.0	08/28/12 16:23	
Ethylbenzene	ug/kg	ND	5.0	08/28/12 16:23	
Toluene	ug/kg	ND	5.0	08/28/12 16:23	
Xylene (Total)	ug/kg	ND	5.0	08/28/12 16:23	
1,2-Dichloroethane-d4 (S)	%	111	73-135	08/28/12 16:23	
4-Bromofluorobenzene (S)	%	107	78-125	08/28/12 16:23	
Dibromofluoromethane (S)	%	99	78-122	08/28/12 16:23	
Toluene-d8 (S)	%	100	80-123	08/28/12 16:23	

LABORATORY CONTROL SAMPLE: 1051539

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	100	96.6	97	78-120	
Ethylbenzene	ug/kg	100	96.7	97	77-120	
Toluene	ug/kg	100	92.7	93	76-120	
Xylene (Total)	ug/kg	300	293	98	76-120	
1,2-Dichloroethane-d4 (S)	%			109	73-135	
4-Bromofluorobenzene (S)	%			107	78-125	
Dibromofluoromethane (S)	%			103	78-122	
Toluene-d8 (S)	%			100	80-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1051540 1051541

Parameter	Units	60127625001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
Benzene	ug/kg	ND	110	112	89.4	59.6	81	53	40-141	40	34	D6
Ethylbenzene	ug/kg	ND	110	112	80.6	42.4	73	38	40-149	62	39	D6,M1
Toluene	ug/kg	ND	110	112	81.2	50.6	74	45	40-143	46	39	D6
Xylene (Total)	ug/kg	ND	330	335	233	121	71	36	40-147	63	40	ES
1,2-Dichloroethane-d4 (S)	%						112	122	73-135			
4-Bromofluorobenzene (S)	%						103	111	78-125			
Dibromofluoromethane (S)	%						100	105	78-122			
Toluene-d8 (S)	%						98	100	80-123			



## QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

QC Batch: MSV/48132 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics  
Associated Lab Samples: 60127401007

METHOD BLANK: 1052076 Matrix: Solid

Associated Lab Samples: 60127401007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/kg	ND	5.0	08/29/12 11:02	
Ethylbenzene	ug/kg	ND	5.0	08/29/12 11:02	
Toluene	ug/kg	ND	5.0	08/29/12 11:02	
Xylene (Total)	ug/kg	ND	5.0	08/29/12 11:02	
1,2-Dichloroethane-d4 (S)	%	113	73-135	08/29/12 11:02	
4-Bromofluorobenzene (S)	%	106	78-125	08/29/12 11:02	
Dibromofluoromethane (S)	%	101	78-122	08/29/12 11:02	
Toluene-d8 (S)	%	99	80-123	08/29/12 11:02	

LABORATORY CONTROL SAMPLE: 1052077

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	100	97.6	98	78-120	
Ethylbenzene	ug/kg	100	96.9	97	77-120	
Toluene	ug/kg	100	94.9	95	76-120	
Xylene (Total)	ug/kg	300	296	99	76-120	
1,2-Dichloroethane-d4 (S)	%			114	73-135	
4-Bromofluorobenzene (S)	%			111	78-125	
Dibromofluoromethane (S)	%			98	78-122	
Toluene-d8 (S)	%			100	80-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1052078 1052079

Parameter	Units	60127772001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Benzene	ug/kg	ND	125	125	69.9	87.4	56	70	40-141	22	34
Ethylbenzene	ug/kg	ND	125	125	66.1	83.8	53	67	40-149	24	39
Toluene	ug/kg	ND	125	125	67.4	83.0	54	66	40-143	21	39
Xylene (Total)	ug/kg	ND	374	376	198	254	53	68	40-147	25	40
1,2-Dichloroethane-d4 (S)	%						131	132	73-135		
4-Bromofluorobenzene (S)	%						114	114	78-125		
Dibromofluoromethane (S)	%						110	108	78-122		
Toluene-d8 (S)	%						101	100	80-123		

## QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60127401

QC Batch: OEXT/34625 Analysis Method: EPA 8015B  
QC Batch Method: EPA 3546 Analysis Description: EPA 8015B  
Associated Lab Samples: 60127401001, 60127401002, 60127401003, 60127401004, 60127401005, 60127401006

METHOD BLANK: 1048894

Matrix: Solid

Associated Lab Samples: 60127401001, 60127401002, 60127401003, 60127401004, 60127401005, 60127401006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-DRO	mg/kg	ND	9.8	08/30/12 21:24	
n-Tetracosane (S)	%	87	20-159	08/30/12 21:24	
p-Terphenyl (S)	%	88	24-147	08/30/12 21:24	

LABORATORY CONTROL SAMPLE: 1048895

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO	mg/kg	82.5	75.5	92	64-120	
n-Tetracosane (S)	%			94	20-159	
p-Terphenyl (S)	%			92	24-147	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1048896 1048897

Parameter	Units	60127313001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
TPH-DRO	mg/kg	138	101	102	275	363	136	221	10-150	27	45	M1
n-Tetracosane (S)	%						105	116	20-159			
p-Terphenyl (S)	%						97	108	24-147			

## QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60127401

QC Batch: OEXT/34628

Analysis Method: EPA 8015B

QC Batch Method: EPA 3546

Analysis Description: EPA 8015B

Associated Lab Samples: 60127401007, 60127401008, 60127401009, 60127401010, 60127401011, 60127401012, 60127401015

METHOD BLANK: 1048914

Matrix: Solid

Associated Lab Samples: 60127401007, 60127401008, 60127401009, 60127401010, 60127401011, 60127401012, 60127401015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-DRO	mg/kg	ND	9.9	08/24/12 16:26	
n-Tetracosane (S)	%	66	20-159	08/24/12 16:26	
p-Terphenyl (S)	%	69	24-147	08/24/12 16:26	

LABORATORY CONTROL SAMPLE: 1048915

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO	mg/kg	82.6	73.7	89	64-120	
n-Tetracosane (S)	%			70	20-159	
p-Terphenyl (S)	%			73	24-147	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1048916 1048917

Parameter	Units	60127401015 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
TPH-DRO	mg/kg	ND	87.7	88.2	66.3	70.8	70	75	10-150	7	45
n-Tetracosane (S)	%						55	61	20-159		
p-Terphenyl (S)	%						56	60	24-147		





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## QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

QC Batch: PMST/7623 Analysis Method: ASTM D2974  
QC Batch Method: ASTM D2974 Analysis Description: Dry Weight/Percent Moisture  
Associated Lab Samples: 60127401001, 60127401002, 60127401003, 60127401004, 60127401005, 60127401006, 60127401007,  
60127401008, 60127401009, 60127401010, 60127401011, 60127401012, 60127401015

METHOD BLANK: 1048937 Matrix: Solid  
Associated Lab Samples: 60127401001, 60127401002, 60127401003, 60127401004, 60127401005, 60127401006, 60127401007,  
60127401008, 60127401009, 60127401010, 60127401011, 60127401012, 60127401015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	08/23/12 00:00	

SAMPLE DUPLICATE: 1048938

Parameter	Units	60127401001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	2.9	2.7	7	20	

## QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60127401

QC Batch:	WET/36745	Analysis Method:	SW-846 7.3.4.2
QC Batch Method:	SW-846 7.3.4.2	Analysis Description:	Reactive Sulfide
Associated Lab Samples:	60127401015		

METHOD BLANK: 1050489 Matrix: Solid

Associated Lab Samples: 60127401015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Reactive	mg/kg	ND	100	08/27/12 14:30	

LABORATORY CONTROL SAMPLE: 1050490

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Reactive	mg/kg	200	184	92	77-110	

MATRIX SPIKE SAMPLE: 1050491

Parameter	Units	10203153001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Reactive	mg/kg	ND	500	460	92	67-116	

SAMPLE DUPLICATE: 1050492

Parameter	Units	92128146001 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Reactive	mg/kg	ND	ND		30	



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## QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60127401

QC Batch: WET/36695

Analysis Method: EPA 9045

QC Batch Method: EPA 9045

Analysis Description: 9045 pH

Associated Lab Samples: 60127401001, 60127401002, 60127401003, 60127401004, 60127401005, 60127401006, 60127401007, 60127401008, 60127401009, 60127401010, 60127401011, 60127401012, 60127401015

SAMPLE DUPLICATE: 1048687

Parameter	Units	60127401001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	8.7	8.6	1	3	



### QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

QC Batch:	WETA/21422	Analysis Method:	SW-846 7.3.3.2
QC Batch Method:	SW-846 7.3.3.2	Analysis Description:	733C Reactive Cyanide
Associated Lab Samples:	60127401015		

METHOD BLANK: 1051314      Matrix: Solid  
Associated Lab Samples: 60127401015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide, Reactive	mg/kg	ND	0.025	08/28/12 10:15	

LABORATORY CONTROL SAMPLE: 1051315

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/kg	.5	0.51	100	71-123	

MATRIX SPIKE SAMPLE: 1051316

Parameter	Units	92128146001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/kg	ND	.5	0.48	96	57-132	

SAMPLE DUPLICATE: 1051317

Parameter	Units	60127401015 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide, Reactive	mg/kg	ND	ND		23	

## QUALIFIERS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60127401

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### BATCH QUALIFIERS

Batch: MSV/48013

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: GCV/4058

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/48213

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

### ANALYTE QUALIFIERS

D6 The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.

ES The reported result is estimated because one or more of the constituent results are qualified as such.

H1 Analysis conducted outside the EPA method holding time.

L0 Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

L1 Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

S0 Surrogate recovery outside laboratory control limits.

S1 Surrogate recovery outside laboratory control limits (confirmed by re-analysis).

S2 Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).

## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60127401

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60127401001	S-07503A-081512-JK-B-12(55-57)	EPA 3546	OEXT/34625	EPA 8015B	GCSV/13030
60127401002	S-07503A-081512-JK-B-13(65-67)	EPA 3546	OEXT/34625	EPA 8015B	GCSV/13030
60127401003	S-07503A-081512-JK-B-13(100)	EPA 3546	OEXT/34625	EPA 8015B	GCSV/13030
60127401004	S-07503A-081512-JK-(DUP)	EPA 3546	OEXT/34625	EPA 8015B	GCSV/13030
60127401005	S-07503A-081512-JK-B-14(55-58)	EPA 3546	OEXT/34625	EPA 8015B	GCSV/13030
60127401006	S-07503A-081712-JK-B-15(55-57)	EPA 3546	OEXT/34625	EPA 8015B	GCSV/13030
60127401007	S-07503A-081712-JK-B-16(45-47)	EPA 3546	OEXT/34628	EPA 8015B	GCSV/13026
60127401008	S-07503A-081712JK-B16(100-102)	EPA 3546	OEXT/34628	EPA 8015B	GCSV/13026
60127401009	S-07503A-081712-JK-B17(45-47)	EPA 3546	OEXT/34628	EPA 8015B	GCSV/13026
60127401010	S-07503A-081712JK-B17(100-102)	EPA 3546	OEXT/34628	EPA 8015B	GCSV/13026
60127401011	S-07503A-081812-JK-B18(35-37)	EPA 3546	OEXT/34628	EPA 8015B	GCSV/13026
60127401012	S-07503A-081812-JK-B18(55-57)	EPA 3546	OEXT/34628	EPA 8015B	GCSV/13026
60127401015	WC-07503A-081812-JK-WASTE	EPA 3546	OEXT/34628	EPA 8015B	GCSV/13026
60127401001	S-07503A-081512-JK-B-12(55-57)	EPA 5035A/5030B	GCV/4052	EPA 8015B	GCV/4056
60127401002	S-07503A-081512-JK-B-13(65-67)	EPA 5035A/5030B	GCV/4052	EPA 8015B	GCV/4056
60127401003	S-07503A-081512-JK-B-13(100)	EPA 5035A/5030B	GCV/4052	EPA 8015B	GCV/4056
60127401004	S-07503A-081512-JK-(DUP)	EPA 5035A/5030B	GCV/4052	EPA 8015B	GCV/4056
60127401005	S-07503A-081512-JK-B-14(55-58)	EPA 5035A/5030B	GCV/4052	EPA 8015B	GCV/4056
60127401006	S-07503A-081712-JK-B-15(55-57)	EPA 5035A/5030B	GCV/4052	EPA 8015B	GCV/4058
60127401007	S-07503A-081712-JK-B-16(45-47)	EPA 5035A/5030B	GCV/4052	EPA 8015B	GCV/4058
60127401008	S-07503A-081712JK-B16(100-102)	EPA 5035A/5030B	GCV/4052	EPA 8015B	GCV/4058
60127401009	S-07503A-081712-JK-B17(45-47)	EPA 5035A/5030B	GCV/4052	EPA 8015B	GCV/4058
60127401010	S-07503A-081712JK-B17(100-102)	EPA 5035A/5030B	GCV/4052	EPA 8015B	GCV/4058
60127401015	WC-07503A-081812-JK-WASTE	EPA 3010	MPRP/19250	EPA 6010	ICP/15929
60127401015	WC-07503A-081812-JK-WASTE	EPA 7470	MERP/6553	EPA 7470	MERC/6512
60127401006	S-07503A-081712-JK-B-15(55-57)	EPA 5035A/8260	MSV/48213		
60127401007	S-07503A-081712-JK-B-16(45-47)	EPA 5035A/8260	MSV/48213		
60127401008	S-07503A-081712JK-B16(100-102)	EPA 5035A/8260	MSV/48213		
60127401009	S-07503A-081712-JK-B17(45-47)	EPA 5035A/8260	MSV/48213		
60127401010	S-07503A-081712JK-B17(100-102)	EPA 5035A/8260	MSV/48213		
60127401011	S-07503A-081812-JK-B18(35-37)	EPA 5035A/8260	MSV/48213		
60127401012	S-07503A-081812-JK-B18(55-57)	EPA 5035A/8260	MSV/48213		
60127401015	WC-07503A-081812-JK-WASTE	EPA 5035A/8260	MSV/48213		
60127401001	S-07503A-081512-JK-B-12(55-57)	EPA 8260	MSV/47964		
60127401002	S-07503A-081512-JK-B-13(65-67)	EPA 8260	MSV/48018		
60127401003	S-07503A-081512-JK-B-13(100)	EPA 8260	MSV/48013		
60127401004	S-07503A-081512-JK-(DUP)	EPA 8260	MSV/48013		
60127401005	S-07503A-081512-JK-B-14(55-58)	EPA 8260	MSV/48013		
60127401006	S-07503A-081712-JK-B-15(55-57)	EPA 8260	MSV/48013		
60127401007	S-07503A-081712-JK-B-16(45-47)	EPA 8260	MSV/48132		
60127401008	S-07503A-081712JK-B16(100-102)	EPA 8260	MSV/48013		
60127401009	S-07503A-081712-JK-B17(45-47)	EPA 8260	MSV/47994		
60127401010	S-07503A-081712JK-B17(100-102)	EPA 8260	MSV/48013		



## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60127401

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60127401011	S-075034-081812-JK-B18(35-37)	EPA 8260	MSV/48013		
60127401012	S-075034-081812-JK-B18(55-57)	EPA 8260	MSV/48107		
60127401013	TRIP BLANK1	EPA 8260	MSV/48013		
60127401014	TRIP BLANK2	EPA 8260	MSV/48013		
60127401001	S-07503A-081512-JK-B-12(55-57)	ASTM D2974	PMST/7623		
60127401002	S-07503A-081512-JK-B-13(65-67)	ASTM D2974	PMST/7623		
60127401003	S-07503A-081512-JK-B-13(100)	ASTM D2974	PMST/7623		
60127401004	S-07503A-081512-JK-(DUP)	ASTM D2974	PMST/7623		
60127401005	S-07503A-081512-JK-B-14(55-58)	ASTM D2974	PMST/7623		
60127401006	S-075034-081712-JK-B-15(55-57)	ASTM D2974	PMST/7623		
60127401007	S-075034-081712-JK-B-16(45-47)	ASTM D2974	PMST/7623		
60127401008	S-075034-081712JK-B16(100-102)	ASTM D2974	PMST/7623		
60127401009	S-075034-081712-JK-B17(45-47)	ASTM D2974	PMST/7623		
60127401010	S-075034-081712JK-B17(100-102)	ASTM D2974	PMST/7623		
60127401011	S-075034-081812-JK-B18(35-37)	ASTM D2974	PMST/7623		
60127401012	S-075034-081812-JK-B18(55-57)	ASTM D2974	PMST/7623		
60127401015	WC-075034-081812-JK-WASTE	ASTM D2974	PMST/7623		
60127401015	WC-075034-081812-JK-WASTE	SW-846 7.3.4.2	WET/36745		
60127401001	S-07503A-081512-JK-B-12(55-57)	EPA 9045	WET/36695		
60127401002	S-07503A-081512-JK-B-13(65-67)	EPA 9045	WET/36695		
60127401003	S-07503A-081512-JK-B-13(100)	EPA 9045	WET/36695		
60127401004	S-07503A-081512-JK-(DUP)	EPA 9045	WET/36695		
60127401005	S-07503A-081512-JK-B-14(55-58)	EPA 9045	WET/36695		
60127401006	S-075034-081712-JK-B-15(55-57)	EPA 9045	WET/36695		
60127401007	S-075034-081712-JK-B-16(45-47)	EPA 9045	WET/36695		
60127401008	S-075034-081712JK-B16(100-102)	EPA 9045	WET/36695		
60127401009	S-075034-081712-JK-B17(45-47)	EPA 9045	WET/36695		
60127401010	S-075034-081712JK-B17(100-102)	EPA 9045	WET/36695		
60127401011	S-075034-081812-JK-B18(35-37)	EPA 9045	WET/36695		
60127401012	S-075034-081812-JK-B18(55-57)	EPA 9045	WET/36695		
60127401015	WC-075034-081812-JK-WASTE	EPA 9045	WET/36695		
60127401015	WC-075034-081812-JK-WASTE	ASTM D92	WET/36866		
60127401015	WC-075034-081812-JK-WASTE	SW-846 7.3.3.2	WETA/21422		



COC NO.: 32507

PAGE OF

**Fax:**

(See Reverse Side for Instructions)

Project No/ Phase/Task Code:		Laboratory Name:		Lab Location:		SSOW ID:	
Project Name:		Lab Contact:		Lab Quote No:		Cooler No:	
Project Location:		Chemistry Contact:		Carrier:		Airbill No:	
Samples(s):		Date Shipped:		MS/MSD Request		Comments/ SPECIAL INSTRUCTIONS:	
Item	SAMPLE IDENTIFICATION (Containers for each sample must be numbered on the label)	DATE (month/day/year)	TIME (hour/minute)	SAMPLE TYPE	CONTAINER QUANTITY & PRESERVATION	ANALYSIS REQUESTED (COCs Back of COC for Definitions)	MS/MSD Request
1	5-075034-081512-JK-B12(65-57)	8/15/12	0857	5	Unpreserved	Grab (G) or Comp (C)	Matrix Code (see back of COC)
2	5-075034-081512-JK-B13(65-57)	8/15/12	1018	5	Unpreserved	Grab (G) or Comp (C)	Matrix Code (see back of COC)
3	5-075034-081512-JK-B13(106)	8/15/12	1401	5	Unpreserved	Grab (G) or Comp (C)	Matrix Code (see back of COC)
4	5-075034-081512-JK-B13(000)	8/15/12	1401	5	Unpreserved	Grab (G) or Comp (C)	Matrix Code (see back of COC)
5	5-075034-081512-JK-B14(55-57)	8/15/12	1506	5	Unpreserved	Grab (G) or Comp (C)	Matrix Code (see back of COC)
6	5-075034-081512-JK-B14(55-57)	8/15/12	1506	5	Unpreserved	Grab (G) or Comp (C)	Matrix Code (see back of COC)
7	5-075034-081712-JK-B15(55-57)	8/17/12	0809	5	Unpreserved	Grab (G) or Comp (C)	Matrix Code (see back of COC)
8	5-075034-081712-JK-B16(45-47)	8/17/12	0915	5	Unpreserved	Grab (G) or Comp (C)	Matrix Code (see back of COC)
9	5-075034-081712-JK-B16(100-102)	8/17/12	1112	5	Unpreserved	Grab (G) or Comp (C)	Matrix Code (see back of COC)
10	5-075034-081712-JK-B17(45-47)	8/17/12	1756	5	Unpreserved	Grab (G) or Comp (C)	Matrix Code (see back of COC)
11	5-075034-081812-JK-B17(100-102)	8/18/12	1033	5	Unpreserved	Grab (G) or Comp (C)	Matrix Code (see back of COC)
12	5-075034-081812-JK-B18(35-37)	8/18/12	1144	5	Unpreserved	Grab (G) or Comp (C)	Matrix Code (see back of COC)
13	5-075034-081812-JK-B18(55-57)	8/18/12	1201	5	Unpreserved	Grab (G) or Comp (C)	Matrix Code (see back of COC)
14							
15							

TAT Required In business days (use separate COCs for different TATs):		Total Number of Containers:		Notes/ Special Requirements:	
1 Day	2 Days	3 Days	1 Week	2 Week	Other:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

RELINQUISHED BY	COMPANY	DATE	RECEIVED BY	COMPANY	DATE	TIME
	CRA	8/21/12	1500	1. John Kitchner (CRA)	8/21/12	840
				2.		
				3.		

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT - ALL FIELDS MUST BE COMPLETED ACCURATELY

## GOLDENROD – Sampling Crew

CRA Form: COC-10B (20110804)



## CHAIN OF CUSTODY RECORD

COC NO.: 32508

**Address:**

PAGE OF

**Phone:**

**Fax:**

(See Reverse Side for Instructions)

Project No/Phase/Task Code:		Laboratory Name:		Lab Location:		SSOW ID:	
Project Name:		Lab Contact:		Lab Quote No:		Cooler No:	
Project Location:		GO CONTAINER QUANTITY & PRESERVATION		ANALYSIS REQUESTED (See Back of Cooler for Details)		Carrier:	
Chemistry Contact:		SAMPLE TYPE		Total Containers/Sample		Airbill No:	
Sampler(s):		Matrix Code		Other:		Date Shipped:	
		Grab (c) or Comp (c)		EnCores 3x5-g, 1x25-g		MS/MSD Request	
		(see back of COC)		Methanol/Water (Soil)		SPECIAL INSTRUCTIONS:	
		Unpreserved		Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )		6 (wet)	
		Hydrochloric Acid (HCl)		Nitric Acid (HNO <sub>3</sub> )		015	
		Grab (c) or Comp (c)		Sodium Hydroxide (NaOH)			
		Grab (c) or Comp (c)		Methanol/Water (Soil)			
		Grab (c) or Comp (c)		EnCores 3x5-g, 1x25-g			
		Grab (c) or Comp (c)		Other:			
		Grab (c) or Comp (c)		Total Containers/Sample			
1	WASTE WC-015034-081812-JK-WASTE	DATE TIME (mm/dd/yyyy)	8/18/12	1400			
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

TAT Required In business days (use separate COCs for different TATs):

1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☐ Other: ☐

RELINQUISHED BY: *[Signature]* DATE: 8-20-12

RECEIVED BY: *[Signature]* DATE: 8/21/12

1. *[Signature]* 2. *[Signature]* 3. *[Signature]*

**THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT - ALL FIELDS MUST BE COMPLETED ACCURATELY**

**5 Distribution:**

WHITE – Fully Executed Copv (CRA)

**YELLOW – Receiving Laboratory Copy**

**PINK – Shipper**

## GOLDENROD – Sampling Crew

CRA Form: COC-108 (20110804)





# Sample Condition Upon Receipt – ESI Tech Specs

Client Name: LOP CPA NM

Project #: 60127401

Courier: Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Optional

Tracking #: 8006 9577 7250; 8006 9577 3260 Pace Shipping Label Used? Yes ☐ No ☒

Proj Due Date: 8/31/12  
Proj Name:

Custody Seal on Cooler/Box Present: Yes ☒ No ☐ Seals intact: Yes ☒ No ☐

Packing Material: Bubble Wrap ☒ Bubble Bags ☐ Foam ☐ None ☐ Other ☐

Thermometer Used: T-191 / T-194

Type of Ice: Wet Blue None ☐ Samples received on ice, cooling process has begun.  
(circle one)

Cooler Temperature: 2.1

Date and Initials of person examining contents: JMS 8/24/12

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
-Includes date/time/ID/analyses Matrix: <u>soils</u>		13.
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed <u>N/A</u> Lot # of added preservative
Trip Blank present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15.
Pace Trip Blank lot # (if purchased): <u>052012-3</u>		15.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	17. List State: <u>NM</u>

Client Notification/ Resolution:

Copy COC to Client? Y / N

Field Data Required? Y / N

Person Contacted: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Temp Log: Record start and finish times when unpacking cooler, if >20 min, recheck sample temps.

Start: 930 Start:

End: 949 End:

Temp: Temp:

Project Manager Review: AMF

Date: 8/24/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the NCDENR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers).



Pace Analytical Services, Inc.  
9608 Loiret Blvd.  
Lenexa, KS 66219  
(913)599-5665

March 15, 2012

Christine Matthews  
CRA  
6121 Indian School Rd NE  
Suite 200  
Albuquerque, NM 87110

RE: Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60115894

Dear Christine Matthews:

Enclosed are the analytical results for sample(s) received by the laboratory on February 24, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alice Tracy

alice.tracy@pacelabs.com  
Project Manager

Enclosures

cc: Kelly Blanchard, COP Conestoga-Rovers & Associa  
Angela Bown, COP Conestoga-Rovers & Associa



## REPORT OF LABORATORY ANALYSIS

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Pace Package 1 of 47



Pace Analytical Services, Inc.

9608 Loiret Blvd.

Lenexa, KS 66219

(913)599-5665

## CERTIFICATIONS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60115894

### Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219

A2LA Certification #: 2456.01

Arkansas Certification #: 05-008-0

Illinois Certification #: 001191

Iowa Certification #: 118

Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055

Nevada Certification #: KS000212008A

Oklahoma Certification #: 9205/9935

Texas Certification #: T104704407-08-TX

Utah Certification #: 9135995665

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60115894

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60115894001	GW-075034-22312-CB-MW-1	Water	02/23/12 13:05	02/24/12 09:10
60115894002	GW-075034-22312-CB-MW-2	Water	02/23/12 15:00	02/24/12 09:10
60115894003	GW-075034-22312-CB-MW-3	Water	02/23/12 14:35	02/24/12 09:10
60115894004	GW-075034-22312-CB-MW-4	Water	02/23/12 15:30	02/24/12 09:10
60115894005	GW-075034-22312-CB-MW-5	Water	02/23/12 12:20	02/24/12 09:10
60115894006	GW-075034-22312-CB-MW-6	Water	02/23/12 14:00	02/24/12 09:10
60115894007	GW-075034-22312-CB-MW-7	Water	02/23/12 10:50	02/24/12 09:10
60115894008	GW-075034-22312-CB-MW-8	Water	02/23/12 11:15	02/24/12 09:10
60115894009	GW-075034-22312-CB-DUP	Water	02/23/12 11:20	02/24/12 09:10
60115894010	TRIP BLANK	Water	02/23/12 00:00	02/24/12 09:10
60115894011	GW-075034-22312-CB-MW1	Water	02/23/12 13:05	02/24/12 10:50
60115894012	GW-075034-22312-CB-MW2	Water	02/23/12 15:00	02/24/12 10:50
60115894013	GW-075034-22312-CB-MW3	Water	02/23/12 14:35	02/24/12 10:50
60115894014	GW-075034-22312-CB-MW4	Water	02/23/12 15:30	02/24/12 10:50
60115894015	GW-075034-22312-CB-MW5	Water	02/23/12 12:20	02/24/12 10:50
60115894016	GW-075034-22312-CB-MW6	Water	02/23/12 14:00	02/24/12 10:50
60115894017	GW-075034-22312-CB-MW7	Water	02/23/12 10:50	02/24/12 10:50
60115894018	GW-075034-22312-CB-MW8	Water	02/23/12 11:15	02/24/12 10:50

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60115894

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60115894001	GW-075034-22312-CB-MW-1	EPA 6010	JGP	2
		EPA 6010	JGP	2
		EPA 8260	RNS	9
		SM 2540C	CMG	1
		EPA 300.0	JML	1
		EPA 353.2	LAJ	1
60115894002	GW-075034-22312-CB-MW-2	EPA 6010	JGP	2
		EPA 6010	JGP	2
		EPA 8260	RNS	9
		SM 2540C	CMG	1
		EPA 300.0	JML	1
		EPA 353.2	LAJ	1
60115894003	GW-075034-22312-CB-MW-3	EPA 6010	JGP	2
		EPA 6010	JGP	2
		EPA 8260	RNS	9
		SM 2540C	CMG	1
		EPA 300.0	JML	1
		EPA 353.2	LAJ	1
60115894004	GW-075034-22312-CB-MW-4	EPA 6010	JGP	2
		EPA 6010	JGP	2
		EPA 8260	RNS	9
		SM 2540C	CMG	1
		EPA 300.0	JML	1
		EPA 353.2	LAJ	1
60115894005	GW-075034-22312-CB-MW-5	EPA 6010	JGP	2
		EPA 6010	JGP	2
		EPA 8260	RNS	9
		SM 2540C	CMG	1
		EPA 300.0	JML	1
		EPA 353.2	LAJ	1
60115894006	GW-075034-22312-CB-MW-6	EPA 6010	JGP	2
		EPA 6010	JGP	2
		EPA 8260	PRG	9
		SM 2540C	CMG	1
		EPA 300.0	JML	1
		EPA 353.2	LAJ	1
60115894007	GW-075034-22312-CB-MW-7	EPA 6010	JGP	2

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### SAMPLE ANALYTE COUNT

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60115894

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60115894008	GW-075034-22312-CB-MW-8	EPA 6010	JGP	2
		EPA 8260	RNS	9
		SM 2540C	CMG	1
		EPA 300.0	JML	1
		EPA 353.2	LAJ	1
		EPA 6010	JGP	2
		EPA 6010	JGP	2
		EPA 8260	PRG, RNS	9
		SM 2540C	CMG	1
		EPA 300.0	JML	1
60115894009	GW-075034-22312-CB-MW1	EPA 353.2	LAJ	1
		EPA 8260	PRG, RNS	9
		EPA 8260	PRG, RNS	9
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
60115894010	GW-075034-22312-CB-MW2	SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
60115894011	GW-075034-22312-CB-MW3	SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
60115894012	GW-075034-22312-CB-MW4	SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
60115894013	GW-075034-22312-CB-MW5	SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
60115894014	GW-075034-22312-CB-MW6	SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
60115894015	GW-075034-22312-CB-MW7	SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
60115894016	GW-075034-22312-CB-MW8	SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1
		SM 9215B	MEB	1

### REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60115894

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**Method:** EPA 6010  
**Description:** 6010 MET ICP  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** March 15, 2012

**General Information:**

8 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

Workorder Comments:

03/15/12 Revised report to include same reporting units for all metals results.

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60115894

**Method:** EPA 6010

**Description:** 6010 MET ICP, Dissolved (LF)

**Client:** COP Conestoga-Rovers & Associates, Inc. NM

**Date:** March 15, 2012

**General Information:**

8 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MPRP/17161

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60115894001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MSD (Lab ID: 958114)
- Manganese, Dissolved

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

Workorder Comments:

03/15/12 Revised report to include same reporting units for all metals results.

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60115894

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**Method:** SM 9215B  
**Description:** MBIO HPC (Drinking Water)  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** March 15, 2012

### General Information:

8 samples were analyzed for SM 9215B. All samples were received in acceptable condition with any exceptions noted below.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

u3: Analysis initiated more than 6 hours but less than 24 hours after sample collection.

- GW-075034-22312-CB-MW2 (Lab ID: 60115894012)
- GW-075034-22312-CB-MW3 (Lab ID: 60115894013)
- GW-075034-22312-CB-MW4 (Lab ID: 60115894014)
- GW-075034-22312-CB-MW6 (Lab ID: 60115894016)

u6: Analysis initiated more than 24 hours after sample collection.

- GW-075034-22312-CB-MW1 (Lab ID: 60115894011)
- GW-075034-22312-CB-MW5 (Lab ID: 60115894015)
- GW-075034-22312-CB-MW7 (Lab ID: 60115894017)
- GW-075034-22312-CB-MW8 (Lab ID: 60115894018)

### Sample Preparation:

The samples were prepared in accordance with SM 9215B with any exceptions noted below.

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

Workorder Comments:

03/15/12 Revised report to include same reporting units for all metals results.

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60115894

**Method:** EPA 8260

**Description:** 8260 MSV UST, Water

**Client:** COP Conestoga-Rovers & Associates, Inc. NM

**Date:** March 15, 2012

### General Information:

10 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

pH: Post-analysis pH measurement indicates insufficient VOA sample preservation.

- GW-075034-22312-CB-DUP (Lab ID: 60115894009)
- GW-075034-22312-CB-MW-8 (Lab ID: 60115894008)

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/43896

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/43930

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/43955

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60115894

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**Method:** EPA 8260

**Description:** 8260 MSV UST, Water

**Client:** COP Conestoga-Rovers & Associates, Inc. NM

**Date:** March 15, 2012

**Workorder Comments:**

03/15/12 Revised report to include same reporting units for all metals results.

**Analyte Comments:**

QC Batch: MSV/43896

B: Analyte was detected in the associated method blank.

- GW-075034-22312-CB-MW-1 (Lab ID: 60115894001)
  - Benzene
  - Toluene
- GW-075034-22312-CB-MW-2 (Lab ID: 60115894002)
  - Benzene
- GW-075034-22312-CB-MW-3 (Lab ID: 60115894003)
  - Benzene
- GW-075034-22312-CB-MW-5 (Lab ID: 60115894005)
  - Benzene
- GW-075034-22312-CB-MW-7 (Lab ID: 60115894007)
  - Benzene
  - Toluene
- GW-075034-22312-CB-MW-8 (Lab ID: 60115894008)
  - Benzene

QC Batch: MSV/43955

B: Analyte was detected in the associated method blank.

- GW-075034-22312-CB-DUP (Lab ID: 60115894009)
  - Toluene
- TRIP BLANK (Lab ID: 60115894010)
  - Toluene

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60115894

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**Method:** SM 2540C  
**Description:** 2540C Total Dissolved Solids  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** March 15, 2012

**General Information:**

8 samples were analyzed for SM 2540C. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

Workorder Comments:

03/15/12 Revised report to include same reporting units for all metals results.

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60115894

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**Method:** EPA 300.0  
**Description:** 300.0 IC Anions 28 Days  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** March 15, 2012

**General Information:**

8 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

Workorder Comments:

03/15/12 Revised report to include same reporting units for all metals results.

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60115894

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**Method:** EPA 353.2  
**Description:** 353.2 Nitrogen, NO<sub>2</sub>/NO<sub>3</sub> unpres  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** March 15, 2012

### General Information:

8 samples were analyzed for EPA 353.2. All samples were received in acceptable condition with any exceptions noted below.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/19318

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60115894004,60115894007

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 956287)
- Nitrogen, Nitrate

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

Workorder Comments:

03/15/12 Revised report to include same reporting units for all metals results.

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219  
(913)599-5665

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60115894

Sample: **GW-075034-22312-CB-MW-** Lab ID: **60115894001** Collected: 02/23/12 13:05 Received: 02/24/12 09:10 Matrix: Water  
1

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese	6.7	mg/L	0.0050	0.00090	1	02/27/12 15:45	02/29/12 17:32	7439-96-5	
Selenium	0.064	mg/L	0.015	0.0046	1	02/27/12 15:45	02/29/12 17:32	7782-49-2	
<b>6010 MET ICP, Dissolved (LF)</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese, Dissolved	6.4	mg/L	0.0050	0.00090	1	03/01/12 13:35	03/02/12 12:25	7439-96-5	
Selenium, Dissolved	0.055	mg/L	0.015	0.0046	1	03/01/12 13:35	03/02/12 12:25	7782-49-2	
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.040	1		02/29/12 00:55	71-43-2	B
Ethylbenzene	ND	ug/L	1.0	0.10	1		02/29/12 00:55	100-41-4	
Toluene	ND	ug/L	1.0	0.10	1		02/29/12 00:55	108-88-3	B
Xylene (Total)	ND	ug/L	3.0	0.30	1		02/29/12 00:55	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	93	%	86-112		1		02/29/12 00:55	1868-53-7	
Toluene-d8 (S)	102	%	90-110		1		02/29/12 00:55	2037-26-5	
4-Bromofluorobenzene (S)	101	%	87-113		1		02/29/12 00:55	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	82-119		1		02/29/12 00:55	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		02/29/12 00:55		
<b>2540C Total Dissolved Solids</b> Analytical Method: SM 2540C									
Total Dissolved Solids	2480	mg/L	5.0	5.0	1		03/01/12 14:38		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0									
Sulfate	1710	mg/L	100	7.6	100		03/06/12 10:05	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2									
Nitrogen, Nitrate	0.78	mg/L	0.10	0.032	1		02/24/12 14:38		



## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60115894

Sample: **GW-075034-22312-CB-MW-2** Lab ID: **60115894002** Collected: 02/23/12 15:00 Received: 02/24/12 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese	0.048	mg/L	0.0050	0.00090	1	02/27/12 15:45	02/29/12 17:46	7439-96-5	
Selenium	0.070	mg/L	0.015	0.0046	1	02/27/12 15:45	02/29/12 17:46	7782-49-2	
<b>6010 MET ICP, Dissolved (LF)</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese, Dissolved	0.036	mg/L	0.0050	0.00090	1	03/01/12 13:35	03/02/12 12:39	7439-96-5	
Selenium, Dissolved	0.059	mg/L	0.015	0.0046	1	03/01/12 13:35	03/02/12 12:39	7782-49-2	
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.040	1		02/29/12 01:12	71-43-2	B
Ethylbenzene	ND	ug/L	1.0	0.10	1		02/29/12 01:12	100-41-4	
Toluene	ND	ug/L	1.0	0.10	1		02/29/12 01:12	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.30	1		02/29/12 01:12	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	92	%	86-112		1		02/29/12 01:12	1868-53-7	
Toluene-d8 (S)	101	%	90-110		1		02/29/12 01:12	2037-26-5	
4-Bromofluorobenzene (S)	104	%	87-113		1		02/29/12 01:12	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	82-119		1		02/29/12 01:12	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		02/29/12 01:12		
<b>2540C Total Dissolved Solids</b> Analytical Method: SM 2540C									
Total Dissolved Solids	2220	mg/L	5.0	5.0	1		03/01/12 14:39		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0									
Sulfate	1350	mg/L	100	7.6	100		03/06/12 12:17	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2									
Nitrogen, Nitrate	44.9	mg/L	1.0	0.32	10		02/24/12 14:57		

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60115894

Sample: **GW-075034-22312-CB-MW-3** Lab ID: **60115894003** Collected: 02/23/12 14:35 Received: 02/24/12 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese	1.6	mg/L	0.0050	0.00090	1	02/27/12 15:45	02/29/12 17:50	7439-96-5	
Selenium	0.051	mg/L	0.015	0.0046	1	02/27/12 15:45	02/29/12 17:50	7782-49-2	
<b>6010 MET ICP, Dissolved (LF)</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese, Dissolved	1.6	mg/L	0.0050	0.00090	1	03/01/12 13:35	03/02/12 12:43	7439-96-5	D9
Selenium, Dissolved	0.038	mg/L	0.015	0.0046	1	03/01/12 13:35	03/02/12 12:43	7782-49-2	
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.040	1		02/29/12 01:30	71-43-2	B
Ethylbenzene	ND	ug/L	1.0	0.10	1		02/29/12 01:30	100-41-4	
Toluene	ND	ug/L	1.0	0.10	1		02/29/12 01:30	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.30	1		02/29/12 01:30	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	92	%	86-112		1		02/29/12 01:30	1868-53-7	
Toluene-d8 (S)	103	%	90-110		1		02/29/12 01:30	2037-26-5	
4-Bromofluorobenzene (S)	99	%	87-113		1		02/29/12 01:30	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	82-119		1		02/29/12 01:30	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		02/29/12 01:30		
<b>2540C Total Dissolved Solids</b> Analytical Method: SM 2540C									
Total Dissolved Solids	2050	mg/L	5.0	5.0	1		03/01/12 14:39		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0									
Sulfate	1140	mg/L	100	7.6	100		03/06/12 12:50	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2									
Nitrogen, Nitrate	22.0	mg/L	1.0	0.32	10		02/24/12 14:56		

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60115894

Sample: **GW-075034-22312-CB-MW-4** Lab ID: **60115894004** Collected: 02/23/12 15:30 Received: 02/24/12 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese	0.0092	mg/L	0.0050	0.00090	1	02/27/12 15:45	02/29/12 17:54	7439-96-5	
Selenium	0.037	mg/L	0.015	0.0046	1	02/27/12 15:45	02/29/12 17:54	7782-49-2	
<b>6010 MET ICP, Dissolved (LF)</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese, Dissolved	0.017	mg/L	0.0050	0.00090	1	03/01/12 13:35	03/02/12 12:54	7439-96-5	D9
Selenium, Dissolved	0.035	mg/L	0.015	0.0046	1	03/01/12 13:35	03/02/12 12:54	7782-49-2	
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.040	1		02/29/12 01:47	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.10	1		02/29/12 01:47	100-41-4	
Toluene	ND	ug/L	1.0	0.10	1		02/29/12 01:47	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.30	1		02/29/12 01:47	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	91	%	86-112		1		02/29/12 01:47	1868-53-7	
Toluene-d8 (S)	103	%	90-110		1		02/29/12 01:47	2037-26-5	
4-Bromofluorobenzene (S)	108	%	87-113		1		02/29/12 01:47	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	82-119		1		02/29/12 01:47	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		02/29/12 01:47		
<b>2540C Total Dissolved Solids</b> Analytical Method: SM 2540C									
Total Dissolved Solids	2070	mg/L	5.0	5.0	1		03/01/12 14:39		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0									
Sulfate	1380	mg/L	100	7.6	100		03/06/12 13:24	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2									
Nitrogen, Nitrate	8.6	mg/L	0.20	0.064	2		02/24/12 14:58		

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60115894

Sample: **GW-075034-22312-CB-MW-** Lab ID: **60115894005** Collected: 02/23/12 12:20 Received: 02/24/12 09:10 Matrix: Water  
**5**

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese	1.1 mg/L		0.0050	0.00090	1	02/27/12 15:45	02/29/12 17:57	7439-96-5	
Selenium	ND mg/L		0.015	0.0046	1	02/27/12 15:45	02/29/12 17:57	7782-49-2	
<b>6010 MET ICP, Dissolved (LF)</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese, Dissolved	1.1 mg/L		0.0050	0.00090	1	03/01/12 13:35	03/02/12 12:57	7439-96-5	D9
Selenium, Dissolved	ND mg/L		0.015	0.0046	1	03/01/12 13:35	03/02/12 12:57	7782-49-2	
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260									
Benzene	ND ug/L		1.0	0.040	1		02/29/12 02:04	71-43-2	B
Ethylbenzene	ND ug/L		1.0	0.10	1		02/29/12 02:04	100-41-4	
Toluene	ND ug/L		1.0	0.10	1		02/29/12 02:04	108-88-3	
Xylene (Total)	ND ug/L		3.0	0.30	1		02/29/12 02:04	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	93 %		86-112		1		02/29/12 02:04	1868-53-7	
Toluene-d8 (S)	102 %		90-110		1		02/29/12 02:04	2037-26-5	
4-Bromofluorobenzene (S)	108 %		87-113		1		02/29/12 02:04	460-00-4	
1,2-Dichloroethane-d4 (S)	100 %		82-119		1		02/29/12 02:04	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		02/29/12 02:04		
<b>2540C Total Dissolved Solids</b> Analytical Method: SM 2540C									
Total Dissolved Solids	2760 mg/L		5.0	5.0	1		03/01/12 14:39		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0									
Sulfate	3500 mg/L		200	15.2	200		03/06/12 13:57	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2									
Nitrogen, Nitrate	0.12 mg/L		0.10	0.032	1		02/24/12 14:53		



## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60115894

Sample: **GW-075034-22312-CB-MW-6** Lab ID: **60115894006** Collected: 02/23/12 14:00 Received: 02/24/12 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese	1.7	mg/L	0.0050	0.00090	1	02/27/12 15:45	02/29/12 18:01	7439-96-5	
Selenium	0.062	mg/L	0.015	0.0046	1	02/27/12 15:45	02/29/12 18:01	7782-49-2	
<b>6010 MET ICP, Dissolved (LF)</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese, Dissolved	ND	mg/L	0.0050	0.00090	1	03/01/12 13:35	03/02/12 13:01	7439-96-5	
Selenium, Dissolved	0.059	mg/L	0.015	0.0046	1	03/01/12 13:35	03/02/12 13:01	7782-49-2	
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.050	1		02/29/12 23:08	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.080	1		02/29/12 23:08	100-41-4	
Toluene	ND	ug/L	1.0	0.070	1		02/29/12 23:08	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.18	1		02/29/12 23:08	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	103	%	86-112		1		02/29/12 23:08	1868-53-7	
Toluene-d8 (S)	99	%	90-110		1		02/29/12 23:08	2037-26-5	
4-Bromofluorobenzene (S)	102	%	87-113		1		02/29/12 23:08	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	82-119		1		02/29/12 23:08	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		02/29/12 23:08		
<b>2540C Total Dissolved Solids</b> Analytical Method: SM 2540C									
Total Dissolved Solids	1760	mg/L	5.0	5.0	1		03/01/12 14:39		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0									
Sulfate	950	mg/L	100	7.6	100		03/06/12 15:03	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2									
Nitrogen, Nitrate	25.8	mg/L	1.0	0.32	10		02/24/12 14:55		

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60115894

Sample: **GW-075034-22312-CB-MW-7** Lab ID: **60115894007** Collected: 02/23/12 10:50 Received: 02/24/12 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese	ND	mg/L	0.0050	0.00090	1	02/27/12 15:45	03/01/12 11:59	7439-96-5	
Selenium	<b>0.024</b>	mg/L	0.015	0.0046	1	02/27/12 15:45	02/29/12 18:04	7782-49-2	
<b>6010 MET ICP, Dissolved (LF)</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese, Dissolved	ND	mg/L	0.0050	0.00090	1	03/01/12 13:35	03/02/12 13:05	7439-96-5	
Selenium, Dissolved	<b>0.022</b>	mg/L	0.015	0.0046	1	03/01/12 13:35	03/02/12 13:05	7782-49-2	
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.040	1		02/29/12 02:38	71-43-2	B
Ethylbenzene	ND	ug/L	1.0	0.10	1		02/29/12 02:38	100-41-4	
Toluene	<b>1.1</b>	ug/L	1.0	0.10	1		02/29/12 02:38	108-88-3	B
Xylene (Total)	<b>3.4</b>	ug/L	3.0	0.30	1		02/29/12 02:38	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	94	%	86-112		1		02/29/12 02:38	1868-53-7	
Toluene-d8 (S)	101	%	90-110		1		02/29/12 02:38	2037-26-5	
4-Bromofluorobenzene (S)	104	%	87-113		1		02/29/12 02:38	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	82-119		1		02/29/12 02:38	17060-07-0	
Preservation pH	<b>2.0</b>		1.0	0.10	1		02/29/12 02:38		
<b>2540C Total Dissolved Solids</b> Analytical Method: SM 2540C									
Total Dissolved Solids	<b>4660</b>	mg/L	5.0	5.0	1		03/01/12 14:39		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0									
Sulfate	<b>3320</b>	mg/L	200	15.2	200		03/06/12 15:36	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2									
Nitrogen, Nitrate	<b>4.6</b>	mg/L	0.20	0.064	2		02/24/12 14:51		

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60115894

Sample: **GW-075034-22312-CB-MW-8** Lab ID: **60115894008** Collected: 02/23/12 11:15 Received: 02/24/12 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese	ND	mg/L	0.0050	0.00090	1	02/27/12 15:45	02/29/12 18:08	7439-96-5	
Selenium	0.061	mg/L	0.015	0.0046	1	02/27/12 15:45	02/29/12 18:08	7782-49-2	
<b>6010 MET ICP, Dissolved (LF)</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese, Dissolved	ND	mg/L	0.0050	0.00090	1	03/01/12 13:35	03/02/12 13:09	7439-96-5	
Selenium, Dissolved	0.049	mg/L	0.015	0.0046	1	03/01/12 13:35	03/02/12 13:09	7782-49-2	
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260									
Benzene	36.4	ug/L	1.0	0.040	1		02/29/12 02:55	71-43-2	B
Ethylbenzene	53.9	ug/L	1.0	0.10	1		02/29/12 02:55	100-41-4	
Toluene	772	ug/L	5.0	0.35	5		02/29/12 23:22	108-88-3	
Xylene (Total)	1350	ug/L	15.0	0.90	5		02/29/12 23:22	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	93	%	86-112		1		02/29/12 02:55	1868-53-7	
Toluene-d8 (S)	104	%	90-110		1		02/29/12 02:55	2037-26-5	
4-Bromofluorobenzene (S)	106	%	87-113		1		02/29/12 02:55	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	82-119		1		02/29/12 02:55	17060-07-0	
Preservation pH	7.0		1.0	0.10	1		02/29/12 02:55		pH
<b>2540C Total Dissolved Solids</b> Analytical Method: SM 2540C									
Total Dissolved Solids	5790	mg/L	5.0	5.0	1		03/01/12 14:39		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0									
Sulfate	813	mg/L	100	7.6	100		03/06/12 16:09	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2									
Nitrogen, Nitrate	3.2	mg/L	0.10	0.032	1		02/24/12 14:52		

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60115894

Sample: GW-075034-22312-CB-DUP Lab ID: 60115894009 Collected: 02/23/12 11:20 Received: 02/24/12 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260									
Benzene	68.9	ug/L	1.0	0.050	1		02/29/12 23:37	71-43-2	
Ethylbenzene	109	ug/L	1.0	0.080	1		02/29/12 23:37	100-41-4	
Toluene	876	ug/L	10.0	1.0	10		03/01/12 10:50	108-88-3	B
Xylene (Total)	1660	ug/L	30.0	3.0	10		03/01/12 10:50	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	108	%	86-112		1		02/29/12 23:37	1868-53-7	
Toluene-d8 (S)	102	%	90-110		1		02/29/12 23:37	2037-26-5	
4-Bromofluorobenzene (S)	106	%	87-113		1		02/29/12 23:37	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	82-119		1		02/29/12 23:37	17060-07-0	
Preservation pH	10.0		1.0	0.10	1		02/29/12 23:37		pH



## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60115894

Sample: TRIP BLANK      Lab ID: 60115894010      Collected: 02/23/12 00:00      Received: 02/24/12 09:10      Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.050	1		02/29/12 23:51	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.080	1		02/29/12 23:51	100-41-4	
Toluene	ND	ug/L	1.0	0.10	1		03/01/12 11:07	108-88-3	B
Xylene (Total)	ND	ug/L	3.0	0.30	1		03/01/12 11:07	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	100	%	86-112		1		02/29/12 23:51	1868-53-7	
Toluene-d8 (S)	101	%	90-110		1		02/29/12 23:51	2037-26-5	
4-Bromofluorobenzene (S)	105	%	87-113		1		02/29/12 23:51	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	82-119		1		02/29/12 23:51	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		02/29/12 23:51		



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## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60115894

Sample: GW-075034-22312-CB-MW1 Lab ID: 60115894011 Collected: 02/23/12 13:05 Received: 02/24/12 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>MBIO HPC (Drinking Water)</b>									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	23000	CFU/mL	1.0	1.0	1	02/24/12 13:50	02/26/12 12:45		u6

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60115894

Sample: **GW-075034-22312-CB-MW2** Lab ID: **60115894012** Collected: 02/23/12 15:00 Received: 02/24/12 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>MBIO HPC (Drinking Water)</b>									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	<b>14900</b>	CFU/mL	1.0	1.0	1	02/24/12 13:50	02/26/12 12:45		u3

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60115894

Sample: **GW-075034-22312-CB-MW3** Lab ID: **60115894013** Collected: 02/23/12 14:35 Received: 02/24/12 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>MBIO HPC (Drinking Water)</b>									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	<b>11900</b>	CFU/mL	1.0	1.0	1	02/24/12 13:50	02/26/12 12:45		u3





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## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60115894

Sample: GW-075034-22312-CB-MW4 Lab ID: 60115894014 Collected: 02/23/12 15:30 Received: 02/24/12 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>MBIO HPC (Drinking Water)</b>									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	40000	CFU/mL	1.0	1.0	1	02/24/12 13:50	02/26/12 12:45		u3



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## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60115894

Sample: GW-075034-22312-CB-MW5 Lab ID: 60115894015 Collected: 02/23/12 12:20 Received: 02/24/12 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
MBIO HPC (Drinking Water)									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	252000	CFU/mL	1.0	1.0	1	02/24/12 13:50	02/26/12 12:45		u6

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60115894

Sample: GW-075034-22312-CB-MW6 Lab ID: 60115894016 Collected: 02/23/12 14:00 Received: 02/24/12 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>MBIO HPC (Drinking Water)</b>									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	8900	CFU/mL	1.0	1.0	1	02/24/12 13:50	02/26/12 12:45		u3



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## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60115894

Sample: GW-075034-22312-CB-MW7 Lab ID: 60115894017 Collected: 02/23/12 10:50 Received: 02/24/12 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
MBIO HPC (Drinking Water) Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	<1	CFU/mL	1.0	1.0	1	02/24/12 13:50	02/26/12 12:45		u6





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## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60115894

Sample: GW-075034-22312-CB-MW8 Lab ID: 60115894018 Collected: 02/23/12 11:15 Received: 02/24/12 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>MBIO HPC (Drinking Water)</b>									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	14	CFU/mL	1.0	1.0	1	02/24/12 13:50	02/26/12 12:45		u6

### QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60115894

QC Batch:	MBIO/9143	Analysis Method:	SM 9215B
QC Batch Method:	SM 9215B	Analysis Description:	9215B Heterotrophic Plate Count
Associated Lab Samples:	60115894011, 60115894012, 60115894013, 60115894014, 60115894015, 60115894016, 60115894017, 60115894018		

METHOD BLANK:	957268	Matrix:	Solid
Associated Lab Samples:	60115894011, 60115894012, 60115894013, 60115894014, 60115894015, 60115894016, 60115894017, 60115894018		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Heterotrophic Plate Count	CFU/mL	<1	1.0	02/26/12 12:45	

SAMPLE DUPLICATE: 957269

Parameter	Units	60115894017 Result	Dup Result	RPD	Max RPD	Qualifiers
Heterotrophic Plate Count	CFU/mL	<1	<1			

### QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60115894

QC Batch: MPRP/17129 Analysis Method: EPA 6010  
QC Batch Method: EPA 3010 Analysis Description: 6010 MET  
Associated Lab Samples: 60115894001, 60115894002, 60115894003, 60115894004, 60115894005, 60115894006, 60115894007, 60115894008

METHOD BLANK: 957080 Matrix: Water  
Associated Lab Samples: 60115894001, 60115894002, 60115894003, 60115894004, 60115894005, 60115894006, 60115894007, 60115894008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Manganese	mg/L	ND	0.0050	02/29/12 17:00	
Selenium	mg/L	ND	0.015	02/29/12 17:00	

LABORATORY CONTROL SAMPLE: 957081

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Manganese	mg/L	1	0.97	97	80-120	
Selenium	mg/L	1	1.0	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 957082 957083

Parameter	Units	60115800001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Manganese	mg/L	2590 ug/L	1	1	3.5	3.5	92	91	75-125	0	20
Selenium	mg/L	ND	1	1	1.0	1.0	102	102	75-125	0	20

### QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60115894

QC Batch: MPRP/17161 Analysis Method: EPA 6010  
QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved  
Associated Lab Samples: 60115894001, 60115894002, 60115894003, 60115894004, 60115894005, 60115894006, 60115894007, 60115894008

METHOD BLANK: 958111 Matrix: Water  
Associated Lab Samples: 60115894001, 60115894002, 60115894003, 60115894004, 60115894005, 60115894006, 60115894007, 60115894008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Manganese, Dissolved	mg/L	ND	0.0050	03/02/12 12:18	
Selenium, Dissolved	mg/L	ND	0.015	03/02/12 12:18	

LABORATORY CONTROL SAMPLE: 958112

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Manganese, Dissolved	mg/L	1	1.0	101	80-120	
Selenium, Dissolved	mg/L	1	0.99	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 958113 958114

Parameter	Units	60115894001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Manganese, Dissolved	mg/L	6.4	1	1	7.2	7.1	84	73	75-125	2	20	M0
Selenium, Dissolved	mg/L	0.055	1	1	1.1	1.1	102	102	75-125	0	20	



## QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60115894

QC Batch: MSV/43896 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER  
Associated Lab Samples: 60115894001, 60115894002, 60115894003, 60115894004, 60115894005, 60115894007, 60115894008

METHOD BLANK: 957274

Matrix: Water

Associated Lab Samples: 60115894001, 60115894002, 60115894003, 60115894004, 60115894005, 60115894007, 60115894008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	02/28/12 21:47	
Ethylbenzene	ug/L	ND	1.0	02/28/12 21:47	
Toluene	ug/L	ND	1.0	02/28/12 21:47	
Xylene (Total)	ug/L	ND	3.0	02/28/12 21:47	
1,2-Dichloroethane-d4 (S)	%	101	82-119	02/28/12 21:47	
4-Bromofluorobenzene (S)	%	105	87-113	02/28/12 21:47	
Dibromofluoromethane (S)	%	95	86-112	02/28/12 21:47	
Toluene-d8 (S)	%	101	90-110	02/28/12 21:47	

LABORATORY CONTROL SAMPLE: 957275

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.4	102	82-117	
Ethylbenzene	ug/L	20	19.4	97	79-121	
Toluene	ug/L	20	20.9	104	80-120	
Xylene (Total)	ug/L	60	59.1	99	79-120	
1,2-Dichloroethane-d4 (S)	%			99	82-119	
4-Bromofluorobenzene (S)	%			97	87-113	
Dibromofluoromethane (S)	%			100	86-112	
Toluene-d8 (S)	%			103	90-110	

### QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60115894

QC Batch: MSV/43930 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER  
Associated Lab Samples: 60115894006, 60115894008, 60115894009, 60115894010

METHOD BLANK: 957902 Matrix: Water  
Associated Lab Samples: 60115894006, 60115894008, 60115894009, 60115894010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	02/29/12 22:12	
Ethylbenzene	ug/L	ND	1.0	02/29/12 22:12	
Toluene	ug/L	ND	1.0	02/29/12 22:12	
Xylene (Total)	ug/L	ND	3.0	02/29/12 22:12	
1,2-Dichloroethane-d4 (S)	%	98	82-119	02/29/12 22:12	
4-Bromofluorobenzene (S)	%	100	87-113	02/29/12 22:12	
Dibromofluoromethane (S)	%	102	86-112	02/29/12 22:12	
Toluene-d8 (S)	%	100	90-110	02/29/12 22:12	

LABORATORY CONTROL SAMPLE: 957903

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.9	104	82-117	
Ethylbenzene	ug/L	20	21.5	108	79-121	
Toluene	ug/L	20	21.3	106	80-120	
Xylene (Total)	ug/L	60	63.4	106	79-120	
1,2-Dichloroethane-d4 (S)	%			98	82-119	
4-Bromofluorobenzene (S)	%			100	87-113	
Dibromofluoromethane (S)	%			101	86-112	
Toluene-d8 (S)	%			98	90-110	

## QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60115894

QC Batch: MSV/43955

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV UST-WATER

Associated Lab Samples: 60115894009, 60115894010

METHOD BLANK: 958364

Matrix: Water

Associated Lab Samples: 60115894009, 60115894010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Toluene	ug/L	ND	1.0	03/01/12 10:33	
Xylene (Total)	ug/L	ND	3.0	03/01/12 10:33	
1,2-Dichloroethane-d4 (S)	%	101	82-119	03/01/12 10:33	
4-Bromofluorobenzene (S)	%	103	87-113	03/01/12 10:33	
Dibromofluoromethane (S)	%	97	86-112	03/01/12 10:33	
Toluene-d8 (S)	%	100	90-110	03/01/12 10:33	

LABORATORY CONTROL SAMPLE: 958365

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	20	20.2	101	80-120	
Xylene (Total)	ug/L	60	58.5	98	79-120	
1,2-Dichloroethane-d4 (S)	%			99	82-119	
4-Bromofluorobenzene (S)	%			97	87-113	
Dibromofluoromethane (S)	%			101	86-112	
Toluene-d8 (S)	%			100	90-110	

### QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60115894

QC Batch:	WET/33727	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples:	60115894001, 60115894002, 60115894003, 60115894004, 60115894005, 60115894006, 60115894007, 60115894008		

METHOD BLANK:	958278	Matrix:	Water
Associated Lab Samples:	60115894001, 60115894002, 60115894003, 60115894004, 60115894005, 60115894006, 60115894007, 60115894008		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	5.0	03/01/12 14:38	

SAMPLE DUPLICATE: 958279

Parameter	Units	60115894001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2480	2330	6	17	

SAMPLE DUPLICATE: 958280

Parameter	Units	60116057001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1440	1350	7	17	

### QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60115894

QC Batch: WETA/19391 Analysis Method: EPA 300.0  
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions  
Associated Lab Samples: 60115894001, 60115894002, 60115894003, 60115894004, 60115894005, 60115894006, 60115894007, 60115894008

METHOD BLANK: 959982 Matrix: Water  
Associated Lab Samples: 60115894001, 60115894002, 60115894003, 60115894004, 60115894005, 60115894006, 60115894007, 60115894008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	03/06/12 09:15	

METHOD BLANK: 961121 Matrix: Water  
Associated Lab Samples: 60115894001, 60115894002, 60115894003, 60115894004, 60115894005, 60115894006, 60115894007, 60115894008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	03/05/12 09:05	

LABORATORY CONTROL SAMPLE: 959983

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	5	5.2	103	90-110	

LABORATORY CONTROL SAMPLE: 961122

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	5	5.0	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 959984 959985

Parameter	Units	60115894001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Sulfate	mg/L	1710	500	500	2110	2120	82	83	61-119	0 10	



## QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60115894

QC Batch: WETA/19318 Analysis Method: EPA 353.2  
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.  
Associated Lab Samples: 60115894001, 60115894002, 60115894003, 60115894004, 60115894005, 60115894006, 60115894007, 60115894008

METHOD BLANK: 956283 Matrix: Water  
Associated Lab Samples: 60115894001, 60115894002, 60115894003, 60115894004, 60115894005, 60115894006, 60115894007, 60115894008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	02/24/12 14:31	

LABORATORY CONTROL SAMPLE: 956284

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.6	101	90-110	

MATRIX SPIKE SAMPLE: 956285

Parameter	Units	60115894007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	4.6	3.2	7.9	104	90-110	

MATRIX SPIKE SAMPLE: 956287

Parameter	Units	60115894004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	8.6	3.2	11.0	75	90-110	M0

SAMPLE DUPLICATE: 956286

Parameter	Units	60115894005 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.12	.098J		15	

## QUALIFIERS

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60115894

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

### WORKORDER QUALIFIERS

WO: 60115894

[1] 03/15/12 Revised report to include same reporting units for all metals results.

### BATCH QUALIFIERS

Batch: MSV/43896

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/43930

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/43955

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

### ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

D9 Dissolved result is greater than the total. Data is within laboratory control limits.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

pH Post-analysis pH measurement indicates insufficient VOA sample preservation.

u3 Analysis initiated more than 6 hours but less than 24 hours after sample collection.

u6 Analysis initiated more than 24 hours after sample collection.

## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SAN JUAN 29-7 UNIT 37  
Pace Project No.: 60115894

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60115894001	GW-075034-22312-CB-MW-1	EPA 3010	MPRP/17129	EPA 6010	ICP/14644
60115894002	GW-075034-22312-CB-MW-2	EPA 3010	MPRP/17129	EPA 6010	ICP/14644
60115894003	GW-075034-22312-CB-MW-3	EPA 3010	MPRP/17129	EPA 6010	ICP/14644
60115894004	GW-075034-22312-CB-MW-4	EPA 3010	MPRP/17129	EPA 6010	ICP/14644
60115894005	GW-075034-22312-CB-MW-5	EPA 3010	MPRP/17129	EPA 6010	ICP/14644
60115894006	GW-075034-22312-CB-MW-6	EPA 3010	MPRP/17129	EPA 6010	ICP/14644
60115894007	GW-075034-22312-CB-MW-7	EPA 3010	MPRP/17129	EPA 6010	ICP/14644
60115894008	GW-075034-22312-CB-MW-8	EPA 3010	MPRP/17129	EPA 6010	ICP/14644
60115894001	GW-075034-22312-CB-MW-1	EPA 3010	MPRP/17161	EPA 6010	ICP/14674
60115894002	GW-075034-22312-CB-MW-2	EPA 3010	MPRP/17161	EPA 6010	ICP/14674
60115894003	GW-075034-22312-CB-MW-3	EPA 3010	MPRP/17161	EPA 6010	ICP/14674
60115894004	GW-075034-22312-CB-MW-4	EPA 3010	MPRP/17161	EPA 6010	ICP/14674
60115894005	GW-075034-22312-CB-MW-5	EPA 3010	MPRP/17161	EPA 6010	ICP/14674
60115894006	GW-075034-22312-CB-MW-6	EPA 3010	MPRP/17161	EPA 6010	ICP/14674
60115894007	GW-075034-22312-CB-MW-7	EPA 3010	MPRP/17161	EPA 6010	ICP/14674
60115894008	GW-075034-22312-CB-MW-8	EPA 3010	MPRP/17161	EPA 6010	ICP/14674
60115894011	GW-075034-22312-CB-MW1	SM 9215B	MBIO/9143	SM 9215B	MBIO/9144
60115894012	GW-075034-22312-CB-MW2	SM 9215B	MBIO/9143	SM 9215B	MBIO/9144
60115894013	GW-075034-22312-CB-MW3	SM 9215B	MBIO/9143	SM 9215B	MBIO/9144
60115894014	GW-075034-22312-CB-MW4	SM 9215B	MBIO/9143	SM 9215B	MBIO/9144
60115894015	GW-075034-22312-CB-MW5	SM 9215B	MBIO/9143	SM 9215B	MBIO/9144
60115894016	GW-075034-22312-CB-MW6	SM 9215B	MBIO/9143	SM 9215B	MBIO/9144
60115894017	GW-075034-22312-CB-MW7	SM 9215B	MBIO/9143	SM 9215B	MBIO/9144
60115894018	GW-075034-22312-CB-MW8	SM 9215B	MBIO/9143	SM 9215B	MBIO/9144
60115894001	GW-075034-22312-CB-MW-1	EPA 8260	MSV/43896		
60115894002	GW-075034-22312-CB-MW-2	EPA 8260	MSV/43896		
60115894003	GW-075034-22312-CB-MW-3	EPA 8260	MSV/43896		
60115894004	GW-075034-22312-CB-MW-4	EPA 8260	MSV/43896		
60115894005	GW-075034-22312-CB-MW-5	EPA 8260	MSV/43896		
60115894006	GW-075034-22312-CB-MW-6	EPA 8260	MSV/43930		
60115894007	GW-075034-22312-CB-MW-7	EPA 8260	MSV/43896		
60115894008	GW-075034-22312-CB-MW-8	EPA 8260	MSV/43896		
60115894008	GW-075034-22312-CB-MW-8	EPA 8260	MSV/43930		
60115894009	GW-075034-22312-CB-DUP	EPA 8260	MSV/43930		
60115894009	GW-075034-22312-CB-DUP	EPA 8260	MSV/43955		
60115894010	TRIP BLANK	EPA 8260	MSV/43930		
60115894010	TRIP BLANK	EPA 8260	MSV/43955		
60115894001	GW-075034-22312-CB-MW-1	SM 2540C	WET/33727		
60115894002	GW-075034-22312-CB-MW-2	SM 2540C	WET/33727		
60115894003	GW-075034-22312-CB-MW-3	SM 2540C	WET/33727		
60115894004	GW-075034-22312-CB-MW-4	SM 2540C	WET/33727		
60115894005	GW-075034-22312-CB-MW-5	SM 2540C	WET/33727		
60115894006	GW-075034-22312-CB-MW-6	SM 2540C	WET/33727		
60115894007	GW-075034-22312-CB-MW-7	SM 2540C	WET/33727		

Date: 03/15/2012 12:46 PM

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60115894

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60115894008	GW-075034-22312-CB-MW-8	SM 2540C	WET/33727		
60115894001	GW-075034-22312-CB-MW-1	EPA 300.0	WETA/19391		
60115894002	GW-075034-22312-CB-MW-2	EPA 300.0	WETA/19391		
60115894003	GW-075034-22312-CB-MW-3	EPA 300.0	WETA/19391		
60115894004	GW-075034-22312-CB-MW-4	EPA 300.0	WETA/19391		
60115894005	GW-075034-22312-CB-MW-5	EPA 300.0	WETA/19391		
60115894006	GW-075034-22312-CB-MW-6	EPA 300.0	WETA/19391		
60115894007	GW-075034-22312-CB-MW-7	EPA 300.0	WETA/19391		
60115894008	GW-075034-22312-CB-MW-8	EPA 300.0	WETA/19391		
60115894001	GW-075034-22312-CB-MW-1	EPA 353.2	WETA/19318		
60115894002	GW-075034-22312-CB-MW-2	EPA 353.2	WETA/19318		
60115894003	GW-075034-22312-CB-MW-3	EPA 353.2	WETA/19318		
60115894004	GW-075034-22312-CB-MW-4	EPA 353.2	WETA/19318		
60115894005	GW-075034-22312-CB-MW-5	EPA 353.2	WETA/19318		
60115894006	GW-075034-22312-CB-MW-6	EPA 353.2	WETA/19318		
60115894007	GW-075034-22312-CB-MW-7	EPA 353.2	WETA/19318		
60115894008	GW-075034-22312-CB-MW-8	EPA 353.2	WETA/19318		

# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	CRA	Report To:	Christine Mathews	Attention:	ENFOS
Address:	6121 Indian School Rd NE, Ste 200	Copy To:	Kelly Blanchard, Angela Bown	Company Name:	
	Albuquerque, NM 87110			Address:	
Email To:	cmathews@craworld.com	Purchase Order No.:		Pace Quote Reference:	
Phone:	(505)884-0672	Project Name:	San Juan 29-7 Unit 37	Pace Project Manager:	Alice Tracy
Requested Due Date/TAT:	standard	Project Number:		Pace Profile #:	

REGULATORY AGENCY	
<input type="checkbox"/> NPDES	<input type="checkbox"/> GROUND WATER
<input type="checkbox"/> UST	<input checked="" type="checkbox"/> RCRA
<input type="checkbox"/> OTHER	<input checked="" type="checkbox"/> DRINKING WATER
Site Location	NM
STATE:	

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WW WASTE WATER WP PRODUCT SL SOIL/SOLID AR OIL WP WIPE AR AIR OT OTHER TS TISSUE TS	SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	COLLECTED				SAMPLE TYPE (G=GRAB C=COMP)	SAMPLE TEMP AT COLLECTION		# OF CONTAINERS	Preservatives								Analysis Test Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.					
				COMPOSITE START	COMPOSITE END/GRAB	DATE	TIME		DATE	TIME		Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> SO <sub>3</sub>	Methanol	Other									
1			GW-01503A-22312-CB-MW-1			7-23-12	1305	WTG			5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	60115804	60115804
2			GW-01503A-22312-CB-MW-2			7-23-12	1500	WTG			5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	60115804	60115804
3			GW-01503A-22312-CB-MW-3			7-23-12	1435	WTG			5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	60115804	60115804
4			GW-01503A-22312-CB-MW-4			7-23-12	1530	WTG			5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	60115804	60115804
5			GW-01503A-22312-CB-MW-5			7-23-12	1700	WTG			5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	60115804	60115804
6			GW-01503A-22312-CB-MW-6			7-23-12	1400	WTG			5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	60115804	60115804
7			GW-01503A-22312-CB-MW-7			7-23-12	1050	WTG			5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	60115804	60115804
8			GW-01503A-22312-CB-MW-8			7-23-12	1115	WTG			5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	60115804	60115804
9			GW-01503A-22312-CB-MW-9			7-23-12	1120	WTG			3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	60115804	60115804
10			trip blank			7-23-12	1400	WT			3																60115804	60115804
11			temp blank			7-23-12	1000	WT			1	X															60115804	60115804
12																												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Cassie Bown / CRA	2-23-12	1700		2/24/12	0910	3.0 Y Y Y

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on	Cooler (Y/N)	Custody Sealed	Samples Intact
PRINT Name of SAMPLER: Alice Bown						
SIGNATURE of SAMPLER: Cassie Bown						
DATE Signed (MM/DD/YY): 2.23.12						





# Sample Condition Upon Receipt

Client Name:

CRA

Project #

6045844

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #: 8993 6864 6793

Pace Shipping Label Used? ☐ Yes ☐ No

Custody Seal on Cooler/Box Present: ☒ Yes ☐ No Seals intact: ☒ Yes ☐ No

Optional
Proj. Due Date: 3/7
Proj. Name:

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Other

Thermometer Used: T-191 / T-194

Type of Ice: Wet Blue None

☐ Samples on ice, cooling process has begun

Cooler Temperature: 3.0

Temperature should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: 2/24/12 LG

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6. NO
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
-Includes date/time/ID/analyses Matrix:	W	
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed: 6 Lot # of added preservative:
Trip Blank present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15.
Pace Trip Blank lot # (if purchased):		
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State: an

Client Notification/ Resolution:

Copy COC to Client?

Y / N

Field Data Required?

Y / N

Person Contacted:

Date/Time:

Comments/ Resolution:

Project Manager Review:

APK

Date:

2/24/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office ( i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

Page:

6015-894

Gasie Brown  
Gasie Brown



# Sample Condition Upon Receipt

Client Name: CRA

Project # 6015894

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other  
Tracking #: \_\_\_\_\_ Pace Shipping Label Used? ☐ Yes ☐ No  
Custody Seal on Cooler/Box Present: ☒ Yes ☐ No Seals intact: ☒ Yes ☐ No  
Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Foam ☒ None ☐ Other  
Thermometer Used: 1-111 Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun  
Cooler Temperature: 2-6  
Temperature should be above freezing to 6°C

Optional  
Proj. Due Date: 3/7  
Proj. Name: \_\_\_\_\_

Date and Initials of person examining contents: 2/24/12, 1050 MB

## Comments:

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	5. <u>&gt; 6hr ~ 4 out of 8 &gt; 24hr</u>
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6. <u>will be after setup</u>
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
-Includes date/time/ID/analyses Matrix:	<u>W1</u>	
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed _____ Lot # of added preservative _____
Trip Blank present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Pace Trip Blank lot # (if purchased):	_____	
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State: <u>NC</u>

Client Notification/ Resolution: \_\_\_\_\_ Copy COC to Client? Y / N Field Data Required? Y / N  
Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
Comments/ Resolution: \_\_\_\_\_

Project Manager Review: RAA

Date: 2/27/12

June 19, 2012

Cassie Brown  
COP Conestoga-Rovers & Associa

RE: Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60122740

Dear Cassie Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on June 07, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

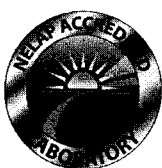


Alice Flanagan

alice.flanagan@pacelabs.com  
Project Manager

Enclosures

cc: Kelly Blanchard, COP Conestoga-Rovers & Associa  
Angela Bown, COP Conestoga-Rovers & Associa  
Christine Matthews, CRA



## REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.  
9608 Loiret Blvd.  
Lenexa, KS 66219  
(913)599-5665

## CERTIFICATIONS

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60122740

---

### Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219  
A2LA Certification #: 2456.01  
Arkansas Certification #: 05-008-0  
Illinois Certification #: 001191  
Iowa Certification #: 118  
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055  
Nevada Certification #: KS000212008A  
Oklahoma Certification #: 9205/9935  
Texas Certification #: T104704407-08-TX  
Utah Certification #: 9135995665

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60122740

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60122740001	GW-075034-060512-CB-MW-1	Water	06/05/12 14:55	06/07/12 09:00
60122740002	GW-075034-060512-CB-MW-2	Water	06/05/12 14:30	06/07/12 09:00
60122740003	GW-075034-060512-CB-MW-3	Water	06/05/12 13:15	06/07/12 09:00
60122740004	GW-075034-060512-CB-MW-4	Water	06/05/12 15:15	06/07/12 09:00
60122740005	GW-075034-060512-CB-MW-5	Water	06/05/12 09:45	06/07/12 09:00
60122740006	GW-075034-060512-CB-MW-6	Water	06/05/12 10:40	06/07/12 09:00
60122740007	GW-075034-060512-CB-MW-8	Water	06/05/12 11:40	06/07/12 09:00
60122740008	GW-075034-060512-CB-MW-7	Water	06/05/12 14:00	06/07/12 09:00
60122740009	GW-075034-060512-CB-MW-DUP	Water	06/05/12 15:00	06/07/12 09:00
60122740010	TRIP BLANK	Water	06/05/12 00:00	06/07/12 09:00

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60122740

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60122740001	GW-075034-060512-CB-MW-1	EPA 6010	JDH	2
		EPA 8260	PRG	9
		EPA 300.0	JML	1
		EPA 353.2	JML	1
60122740002	GW-075034-060512-CB-MW-2	EPA 6010	JDH	2
		EPA 8260	PRG	9
		EPA 300.0	JML	1
		EPA 353.2	JML	1
60122740003	GW-075034-060512-CB-MW-3	EPA 6010	JDH	2
		EPA 8260	PRG	9
		EPA 300.0	JML	1
		EPA 353.2	JML	1
60122740004	GW-075034-060512-CB-MW-4	EPA 6010	JDH	2
		EPA 8260	PRG	9
		EPA 300.0	JML	1
		EPA 353.2	JML	1
60122740005	GW-075034-060512-CB-MW-5	EPA 6010	JDH	2
		EPA 8260	PRG	9
		EPA 300.0	JML	1
		EPA 353.2	JML	1
60122740006	GW-075034-060512-CB-MW-6	EPA 6010	JDH	2
		EPA 8260	PRG	9
		EPA 300.0	JML	1
		EPA 353.2	JML	1
60122740007	GW-075034-060512-CB-MW-8	EPA 6010	JDH	2
		EPA 8260	HNS	9
		EPA 300.0	JML	1
		EPA 353.2	JML	1
60122740008	GW-075034-060512-CB-MW-7	EPA 6010	JDH	2
		EPA 8260	PRG	9
		EPA 300.0	JML	1
		EPA 353.2	JML	1
60122740009	GW-075034-060512-CB-MW-DUP	EPA 8260	PRG	9
60122740010	TRIP BLANK	EPA 8260	PRG	9

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60122740

---

**Method:** EPA 6010  
**Description:** 6010 MET ICP, Dissolved  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** June 19, 2012

**General Information:**

7 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60122740

---

**Method:** EPA 6010  
**Description:** 6010 MET ICP, Dissolved (LF)  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** June 19, 2012

**General Information:**

1 sample was analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60122740

---

**Method:** EPA 8260  
**Description:** 8260 MSV UST, Water  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** June 19, 2012

### General Information:

10 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

QC Batch: MSV/46122

S0: Surrogate recovery outside laboratory control limits.

- GW-075034-060512-CB-MW-3 (Lab ID: 60122740003)
  - Toluene-d8 (S)
- GW-075034-060512-CB-MW-4 (Lab ID: 60122740004)
  - Toluene-d8 (S)

### Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/46122

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/46219

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/46343

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37 QUARTERL

Pace Project No.: 60122740

---

**Method:** EPA 8260

**Description:** 8260 MSV UST, Water

**Client:** COP Conestoga-Rovers & Associates, Inc. NM

**Date:** June 19, 2012

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60122740

---

**Method:** EPA 300.0  
**Description:** 300.0 IC Anions 28 Days  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** June 19, 2012

**General Information:**

8 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37 QUARTERL

Pace Project No.: 60122740

**Method:** EPA 353.2

**Description:** 353.2 Nitrogen, NO<sub>2</sub>/NO<sub>3</sub> unpres

**Client:** COP Conestoga-Rovers & Associates, Inc. NM

**Date:** June 19, 2012

### General Information:

8 samples were analyzed for EPA 353.2. All samples were received in acceptable condition with any exceptions noted below.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

H3: Sample was received or analysis requested beyond the recognized method holding time.

- GW-075034-060512-CB-MW-5 (Lab ID: 60122740005)
- GW-075034-060512-CB-MW-6 (Lab ID: 60122740006)
- GW-075034-060512-CB-MW-8 (Lab ID: 60122740007)

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/20459

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60122739001, 60122740001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1009800)
- Nitrogen, Nitrate

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60122740

Sample: **GW-075034-060512-CB-MW-1** Lab ID: **60122740001** Collected: 06/05/12 14:55 Received: 06/07/12 09:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>								
Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Manganese, Dissolved	5150	ug/L	5.0	1	06/13/12 16:58	06/14/12 18:02	7439-96-5	
Selenium, Dissolved	33.4	ug/L	15.0	1	06/13/12 16:58	06/14/12 18:02	7782-49-2	
<b>8260 MSV UST, Water</b>								
Analytical Method: EPA 8260								
Benzene	ND	ug/L	1.0	1		06/11/12 00:17	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		06/11/12 00:17	100-41-4	
Toluene	1.8	ug/L	1.0	1		06/11/12 00:17	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		06/11/12 00:17	1330-20-7	
<b>Surrogates</b>								
Dibromofluoromethane (S)	95 %		86-112	1		06/11/12 00:17	1868-53-7	
Toluene-d8 (S)	109 %		90-110	1		06/11/12 00:17	2037-26-5	
4-Bromofluorobenzene (S)	97 %		87-113	1		06/11/12 00:17	460-00-4	
1,2-Dichloroethane-d4 (S)	100 %		82-119	1		06/11/12 00:17	17060-07-0	
Preservation pH	1.0		1.0	1		06/11/12 00:17		
<b>300.0 IC Anions 28 Days</b>								
Analytical Method: EPA 300.0								
Sulfate	1520	mg/L	100	100		06/17/12 16:23	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b>								
Analytical Method: EPA 353.2								
Nitrogen, Nitrate	9.4	mg/L	0.20	2		06/07/12 11:48		M1

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37 QUARTERL

Pace Project No.: 60122740

**Sample:** GW-075034-060512-CB-MW-2      **Lab ID:** 60122740002      **Collected:** 06/05/12 14:30      **Received:** 06/07/12 09:00      **Matrix:** Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved (LF)</b> Analytical Method: EPA 6010      Preparation Method: EPA 3010								
Manganese, Dissolved	7.8	ug/L	5.0	1	06/16/12 13:30	06/18/12 11:16	7439-96-5	
Selenium, Dissolved	60.5	ug/L	15.0	1	06/16/12 13:30	06/18/12 11:16	7782-49-2	
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260								
Benzene	ND	ug/L	1.0	1		06/11/12 00:31	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		06/11/12 00:31	100-41-4	
Toluene	ND	ug/L	1.0	1		06/11/12 00:31	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		06/11/12 00:31	1330-20-7	
<b>Surrogates</b>								
Dibromofluoromethane (S)	97	%	86-112	1		06/11/12 00:31	1868-53-7	
Toluene-d8 (S)	110	%	90-110	1		06/11/12 00:31	2037-26-5	
4-Bromofluorobenzene (S)	95	%	87-113	1		06/11/12 00:31	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	82-119	1		06/11/12 00:31	17060-07-0	
Preservation pH	1.0		1.0	1		06/11/12 00:31		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0								
Sulfate	1500	mg/L	100	100		06/17/12 17:00	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2								
Nitrogen, Nitrate	4.3	mg/L	0.10	1		06/07/12 11:33		



## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60122740

Sample: **GW-075034-060512-CB-MW-3** Lab ID: **60122740003** Collected: 06/05/12 13:15 Received: 06/07/12 09:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>								
Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Manganese, Dissolved	1430	ug/L	5.0	1	06/13/12 16:58	06/14/12 18:05	7439-96-5	
Selenium, Dissolved	47.8	ug/L	15.0	1	06/13/12 16:58	06/14/12 18:05	7782-49-2	
<b>8260 MSV UST, Water</b>								
Analytical Method: EPA 8260								
Benzene	ND	ug/L	1.0	1		06/11/12 00:46	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		06/11/12 00:46	100-41-4	
Toluene	ND	ug/L	1.0	1		06/11/12 00:46	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		06/11/12 00:46	1330-20-7	
<b>Surrogates</b>								
Dibromofluoromethane (S)	98	%	86-112	1		06/11/12 00:46	1868-53-7	
Toluene-d8 (S)	111	%	90-110	1		06/11/12 00:46	2037-26-5	S0
4-Bromofluorobenzene (S)	97	%	87-113	1		06/11/12 00:46	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	82-119	1		06/11/12 00:46	17060-07-0	
Preservation pH	1.0		1.0	1		06/11/12 00:46		
<b>300.0 IC Anions 28 Days</b>								
Analytical Method: EPA 300.0								
Sulfate	1380	mg/L	100	100		06/17/12 17:18	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b>								
Analytical Method: EPA 353.2								
Nitrogen, Nitrate	15.0	mg/L	0.50	5		06/07/12 11:47		

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37 QUARTERL

Pace Project No.: 60122740

Sample: **GW-075034-060512-CB-MW-4**      Lab ID: **60122740004**      Collected: 06/05/12 15:15      Received: 06/07/12 09:00      Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b> Analytical Method: EPA 6010      Preparation Method: EPA 3010								
Manganese, Dissolved	81.4	ug/L	5.0	1	06/13/12 16:58	06/14/12 18:09	7439-96-5	
Selenium, Dissolved	36.9	ug/L	15.0	1	06/13/12 16:58	06/14/12 18:09	7782-49-2	
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260								
Benzene	ND	ug/L	1.0	1		06/11/12 01:00	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		06/11/12 01:00	100-41-4	
Toluene	ND	ug/L	1.0	1		06/11/12 01:00	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		06/11/12 01:00	1330-20-7	
<b>Surrogates</b>								
Dibromofluoromethane (S)	97	%	86-112	1		06/11/12 01:00	1868-53-7	
Toluene-d8 (S)	111	%	90-110	1		06/11/12 01:00	2037-26-5	S0
4-Bromofluorobenzene (S)	96	%	87-113	1		06/11/12 01:00	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	82-119	1		06/11/12 01:00	17060-07-0	
Preservation pH	1.0		1.0	1		06/11/12 01:00		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0								
Sulfate	1540	mg/L	100	100		06/17/12 17:36	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2								
Nitrogen, Nitrate	7.5	mg/L	0.20	2		06/07/12 11:50		

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60122740

**Sample:** GW-075034-060512-CB-MW-5    **Lab ID:** 60122740005    **Collected:** 06/05/12 09:45    **Received:** 06/07/12 09:00    **Matrix:** Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>								
Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Manganese, Dissolved	868	ug/L	5.0	1	06/13/12 16:58	06/14/12 18:13	7439-96-5	
Selenium, Dissolved	ND	ug/L	15.0	1	06/13/12 16:58	06/14/12 18:13	7782-49-2	
<b>8260 MSV UST, Water</b>								
Analytical Method: EPA 8260								
Benzene	ND	ug/L	1.0	1		06/11/12 01:14	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		06/11/12 01:14	100-41-4	
Toluene	ND	ug/L	1.0	1		06/11/12 01:14	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		06/11/12 01:14	1330-20-7	
<b>Surrogates</b>								
Dibromofluoromethane (S)	98	%	86-112	1		06/11/12 01:14	1868-53-7	
Toluene-d8 (S)	110	%	90-110	1		06/11/12 01:14	2037-26-5	
4-Bromofluorobenzene (S)	98	%	87-113	1		06/11/12 01:14	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	82-119	1		06/11/12 01:14	17060-07-0	
Preservation pH	1.0		1.0	1		06/11/12 01:14		
<b>300.0 IC Anions 28 Days</b>								
Analytical Method: EPA 300.0								
Sulfate	2040	mg/L	200	200		06/17/12 17:54	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b>								
Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	1		06/07/12 11:26		H3

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37 QUARTERL

Pace Project No.: 60122740

**Sample:** GW-075034-060512-CB-MW-6      **Lab ID:** 60122740006      Collected: 06/05/12 10:40      Received: 06/07/12 09:00      Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b> Analytical Method: EPA 6010      Preparation Method: EPA 3010								
Manganese, Dissolved	1600	ug/L	5.0	1	06/13/12 16:58	06/14/12 18:24	7439-96-5	
Selenium, Dissolved	45.4	ug/L	15.0	1	06/13/12 16:58	06/14/12 18:24	7782-49-2	
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260								
Benzene	ND	ug/L	1.0	1		06/11/12 01:29	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		06/11/12 01:29	100-41-4	
Toluene	ND	ug/L	1.0	1		06/11/12 01:29	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		06/11/12 01:29	1330-20-7	
<b>Surrogates</b>								
Dibromofluoromethane (S)	100	%	86-112	1		06/11/12 01:29	1868-53-7	
Toluene-d8 (S)	109	%	90-110	1		06/11/12 01:29	2037-26-5	
4-Bromofluorobenzene (S)	95	%	87-113	1		06/11/12 01:29	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	82-119	1		06/11/12 01:29	17060-07-0	
Preservation pH	1.0		1.0	1		06/11/12 01:29		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0								
Sulfate	1090	mg/L	100	100		06/17/12 18:12	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2								
Nitrogen, Nitrate	35.0	mg/L	1.0	10		06/07/12 11:45		H3

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60122740

Sample: **GW-075034-060512-CB-MW-8**      Lab ID: **60122740007**      Collected: 06/05/12 11:40      Received: 06/07/12 09:00      Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b> Analytical Method: EPA 6010      Preparation Method: EPA 3010								
Manganese, Dissolved	21.8	ug/L	5.0	1	06/13/12 16:58	06/14/12 18:34	7439-96-5	
Selenium, Dissolved	45.2	ug/L	15.0	1	06/13/12 16:58	06/14/12 18:34	7782-49-2	
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260								
Benzene	12.9	ug/L	5.0	5		06/14/12 19:27	71-43-2	
Ethylbenzene	24.8	ug/L	5.0	5		06/14/12 19:27	100-41-4	
Toluene	120	ug/L	5.0	5		06/14/12 19:27	108-88-3	
Xylene (Total)	447	ug/L	15.0	5		06/14/12 19:27	1330-20-7	
<b>Surrogates</b>								
Dibromofluoromethane (S)	102	%	86-112	5		06/14/12 19:27	1868-53-7	
Toluene-d8 (S)	99	%	90-110	5		06/14/12 19:27	2037-26-5	
4-Bromofluorobenzene (S)	104	%	87-113	5		06/14/12 19:27	460-00-4	
1,2-Dichloroethane-d4 (S)	87	%	82-119	5		06/14/12 19:27	17060-07-0	
Preservation pH	1.0		1.0	5		06/14/12 19:27		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0								
Sulfate	793	mg/L	100	100		06/17/12 18:30	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2								
Nitrogen, Nitrate	18.1	mg/L	1.0	10		06/07/12 11:45		H3



## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37 QUARTERL

Pace Project No.: 60122740

Sample: **GW-075034-060512-CB-MW-7** Lab ID: **60122740008** Collected: 06/05/12 14:00 Received: 06/07/12 09:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Manganese, Dissolved	18.8	ug/L	5.0	1	06/13/12 16:58	06/14/12 18:38	7439-96-5	
Selenium, Dissolved	30.2	ug/L	15.0	1	06/13/12 16:58	06/14/12 18:38	7782-49-2	
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260								
Benzene	ND	ug/L	1.0	1		06/11/12 01:58	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		06/11/12 01:58	100-41-4	
Toluene	ND	ug/L	1.0	1		06/11/12 01:58	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		06/11/12 01:58	1330-20-7	
<b>Surrogates</b>								
Dibromofluoromethane (S)	101	%	86-112	1		06/11/12 01:58	1868-53-7	
Toluene-d8 (S)	110	%	90-110	1		06/11/12 01:58	2037-26-5	
4-Bromofluorobenzene (S)	96	%	87-113	1		06/11/12 01:58	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	82-119	1		06/11/12 01:58	17060-07-0	
Preservation pH	1.0		1.0	1		06/11/12 01:58		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0								
Sulfate	1820	mg/L	100	100		06/17/12 19:25	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2								
Nitrogen, Nitrate	1.1	mg/L	0.10	1		06/07/12 11:31		

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37 QUARTERL

Pace Project No.: 60122740

Sample: **GW-075034-060512-CB-MW-DUP** Lab ID: **60122740009** Collected: 06/05/12 15:00 Received: 06/07/12 09:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b>		Analytical Method: EPA 8260						
Benzene	ND	ug/L	1.0	1		06/11/12 02:12	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		06/11/12 02:12	100-41-4	
Toluene	<b>1.6</b>	ug/L	1.0	1		06/11/12 02:12	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		06/11/12 02:12	1330-20-7	
<b>Surrogates</b>								
Dibromofluoromethane (S)	94	%	86-112	1		06/11/12 02:12	1868-53-7	
Toluene-d8 (S)	105	%	90-110	1		06/11/12 02:12	2037-26-5	
4-Bromofluorobenzene (S)	93	%	87-113	1		06/11/12 02:12	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	82-119	1		06/11/12 02:12	17060-07-0	
Preservation pH	<b>1.0</b>		1.0	1		06/11/12 02:12		

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60122740

Sample: TRIP BLANK		Lab ID: 60122740010	Collected: 06/05/12 00:00	Received: 06/07/12 09:00	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b>		Analytical Method: EPA 8260						
Benzene	ND ug/L		1.0	1		06/12/12 05:41	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		06/12/12 05:41	100-41-4	
Toluene	ND ug/L		1.0	1		06/12/12 05:41	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		06/12/12 05:41	1330-20-7	
<b>Surrogates</b>								
Dibromofluoromethane (S)	98 %		86-112	1		06/12/12 05:41	1868-53-7	
Toluene-d8 (S)	99 %		90-110	1		06/12/12 05:41	2037-26-5	
4-Bromofluorobenzene (S)	101 %		87-113	1		06/12/12 05:41	460-00-4	
1,2-Dichloroethane-d4 (S)	95 %		82-119	1		06/12/12 05:41	17060-07-0	
Preservation pH	1.0		1.0	1		06/12/12 05:41		

### QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60122740

QC Batch: MPRP/18349 Analysis Method: EPA 6010  
QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved  
Associated Lab Samples: 60122740001, 60122740003, 60122740004, 60122740005, 60122740006, 60122740007, 60122740008

METHOD BLANK: 1013093 Matrix: Water  
Associated Lab Samples: 60122740001, 60122740003, 60122740004, 60122740005, 60122740006, 60122740007, 60122740008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Manganese, Dissolved	ug/L	ND	5.0	06/14/12 17:58	
Selenium, Dissolved	ug/L	ND	15.0	06/14/12 17:58	

LABORATORY CONTROL SAMPLE: 1013094

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Manganese, Dissolved	ug/L	1000	1000	100	80-120	
Selenium, Dissolved	ug/L	1000	951	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1013095 1013096

Parameter	Units	60122740006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Manganese, Dissolved	ug/L	1600	1000	1000	2550	2540	95	94	75-125	0	20
Selenium, Dissolved	ug/L	45.4	1000	1000	960	955	91	91	75-125	1	20

### QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60122740

QC Batch: MPRP/18402 Analysis Method: EPA 6010  
QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved  
Associated Lab Samples: 60122740002

METHOD BLANK: 1015546 Matrix: Water  
Associated Lab Samples: 60122740002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Manganese, Dissolved	ug/L	ND	5.0	06/18/12 11:12	
Selenium, Dissolved	ug/L	ND	15.0	06/18/12 11:12	

LABORATORY CONTROL SAMPLE: 1015547

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Manganese, Dissolved	ug/L	1000	926	93	80-120	
Selenium, Dissolved	ug/L	1000	990	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1015548 1015549

Parameter	Units	60122740002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Manganese, Dissolved	ug/L	7.8	1000	1000	872	877	86	87	75-125	1	20	
Selenium, Dissolved	ug/L	60.5	1000	1000	984	994	92	93	75-125	1	20	



## QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37 QUARTERL

Pace Project No.: 60122740

QC Batch:	MSV/46122	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV UST-WATER
Associated Lab Samples:	60122740001, 60122740002, 60122740003, 60122740004, 60122740005, 60122740006, 60122740008, 60122740009		

METHOD BLANK: 1010084

Matrix: Water

Associated Lab Samples: 60122740001, 60122740002, 60122740003, 60122740004, 60122740005, 60122740006, 60122740008, 60122740009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	06/10/12 21:10	
Ethylbenzene	ug/L	ND	1.0	06/10/12 21:10	
Toluene	ug/L	ND	1.0	06/10/12 21:10	
Xylene (Total)	ug/L	ND	3.0	06/10/12 21:10	
1,2-Dichloroethane-d4 (S)	%	100	82-119	06/10/12 21:10	
4-Bromofluorobenzene (S)	%	95	87-113	06/10/12 21:10	
Dibromofluoromethane (S)	%	94	86-112	06/10/12 21:10	
Toluene-d8 (S)	%	107	90-110	06/10/12 21:10	

LABORATORY CONTROL SAMPLE: 1010085

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.3	97	82-117	
Ethylbenzene	ug/L	20	22.7	113	79-121	
Toluene	ug/L	20	22.9	115	80-120	
Xylene (Total)	ug/L	60	66.3	111	79-120	
1,2-Dichloroethane-d4 (S)	%			101	82-119	
4-Bromofluorobenzene (S)	%			95	87-113	
Dibromofluoromethane (S)	%			97	86-112	
Toluene-d8 (S)	%			109	90-110	

## QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60122740

QC Batch: MSV/46219 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER  
Associated Lab Samples: 60122740010

METHOD BLANK: 1012030 Matrix: Water  
Associated Lab Samples: 60122740010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	06/12/12 03:32	
Ethylbenzene	ug/L	ND	1.0	06/12/12 03:32	
Toluene	ug/L	ND	1.0	06/12/12 03:32	
Xylene (Total)	ug/L	ND	3.0	06/12/12 03:32	
1,2-Dichloroethane-d4 (S)	%	96	82-119	06/12/12 03:32	
4-Bromofluorobenzene (S)	%	101	87-113	06/12/12 03:32	
Dibromofluoromethane (S)	%	100	86-112	06/12/12 03:32	
Toluene-d8 (S)	%	100	90-110	06/12/12 03:32	

LABORATORY CONTROL SAMPLE: 1012031

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.8	104	82-117	
Ethylbenzene	ug/L	20	20.5	102	79-121	
Toluene	ug/L	20	21.2	106	80-120	
Xylene (Total)	ug/L	60	60.9	101	79-120	
1,2-Dichloroethane-d4 (S)	%			102	82-119	
4-Bromofluorobenzene (S)	%			100	87-113	
Dibromofluoromethane (S)	%			106	86-112	
Toluene-d8 (S)	%			102	90-110	

### QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60122740

QC Batch:	MSV/46343	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV UST-WATER
Associated Lab Samples:	60122740007		

METHOD BLANK: 1014000 Matrix: Water

Associated Lab Samples: 60122740007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	06/14/12 18:22	
Ethylbenzene	ug/L	ND	1.0	06/14/12 18:22	
Toluene	ug/L	ND	1.0	06/14/12 18:22	
Xylene (Total)	ug/L	ND	3.0	06/14/12 18:22	
1,2-Dichloroethane-d4 (S)	%	85	82-119	06/14/12 18:22	
4-Bromofluorobenzene (S)	%	103	87-113	06/14/12 18:22	
Dibromofluoromethane (S)	%	101	86-112	06/14/12 18:22	
Toluene-d8 (S)	%	98	90-110	06/14/12 18:22	

LABORATORY CONTROL SAMPLE: 1014001

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	22.5	113	82-117	
Ethylbenzene	ug/L	20	22.5	112	79-121	
Toluene	ug/L	20	21.4	107	80-120	
Xylene (Total)	ug/L	60	67.9	113	79-120	
1,2-Dichloroethane-d4 (S)	%			86	82-119	
4-Bromofluorobenzene (S)	%			102	87-113	
Dibromofluoromethane (S)	%			104	86-112	
Toluene-d8 (S)	%			98	90-110	

### QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37 QUARTERL

Pace Project No.: 60122740

QC Batch: WETA/20542 Analysis Method: EPA 300.0  
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions  
Associated Lab Samples: 60122740001, 60122740002, 60122740003, 60122740004, 60122740005, 60122740006, 60122740007, 60122740008

METHOD BLANK: 1015963 Matrix: Water  
Associated Lab Samples: 60122740001, 60122740002, 60122740003, 60122740004, 60122740005, 60122740006, 60122740007, 60122740008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	06/17/12 13:21	

LABORATORY CONTROL SAMPLE: 1015964

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	5	5.3	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1013831 1013832

Parameter	Units	60122624004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
Sulfate	mg/L	1280	500	500	1700	1660	84	75	61-119	3	10	

MATRIX SPIKE SAMPLE: 1013833

Parameter	Units	60122740001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	1520	500	2110	117	61-119	

### QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60122740

QC Batch: WETA/20459 Analysis Method: EPA 353.2  
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.  
Associated Lab Samples: 60122740001, 60122740002, 60122740003, 60122740004, 60122740005, 60122740006, 60122740007, 60122740008

METHOD BLANK: 1009797 Matrix: Water  
Associated Lab Samples: 60122740001, 60122740002, 60122740003, 60122740004, 60122740005, 60122740006, 60122740007, 60122740008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	06/07/12 11:25	

LABORATORY CONTROL SAMPLE: 1009798

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.7	106	90-110	

MATRIX SPIKE SAMPLE: 1009800

Parameter	Units	60122740001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	9.4	3.2	12.0	81	90-110	M1

MATRIX SPIKE SAMPLE: 1009801

Parameter	Units	60122739001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	ND	1.6	1.6	98	90-110	

SAMPLE DUPLICATE: 1009799

Parameter	Units	60122740007 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	18.1	18.1	0	15	



## QUALIFIERS

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60122740

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.  
ND - Not Detected at or above adjusted reporting limit.  
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.  
MDL - Adjusted Method Detection Limit.  
PRL - Pace Reporting Limit.  
RL - Reporting Limit.  
S - Surrogate  
1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.  
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.  
LCS(D) - Laboratory Control Sample (Duplicate)  
MS(D) - Matrix Spike (Duplicate)  
DUP - Sample Duplicate  
RPD - Relative Percent Difference  
NC - Not Calculable.  
SG - Silica Gel - Clean-Up  
U - Indicates the compound was analyzed for, but not detected.  
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.  
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.  
TNI - The NELAC Institute.

### BATCH QUALIFIERS

Batch: MSV/46122

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/46219

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/46343

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

### ANALYTE QUALIFIERS

H3 Sample was received or analysis requested beyond the recognized method holding time.  
M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.  
S0 Surrogate recovery outside laboratory control limits.

## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60122740

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60122740001	GW-075034-060512-CB-MW-1	EPA 3010	MPRP/18349	EPA 6010	ICP/15382
60122740003	GW-075034-060512-CB-MW-3	EPA 3010	MPRP/18349	EPA 6010	ICP/15382
60122740004	GW-075034-060512-CB-MW-4	EPA 3010	MPRP/18349	EPA 6010	ICP/15382
60122740005	GW-075034-060512-CB-MW-5	EPA 3010	MPRP/18349	EPA 6010	ICP/15382
60122740006	GW-075034-060512-CB-MW-6	EPA 3010	MPRP/18349	EPA 6010	ICP/15382
60122740007	GW-075034-060512-CB-MW-8	EPA 3010	MPRP/18349	EPA 6010	ICP/15382
60122740008	GW-075034-060512-CB-MW-7	EPA 3010	MPRP/18349	EPA 6010	ICP/15382
60122740002	GW-075034-060512-CB-MW-2	EPA 3010	MPRP/18374	EPA 6010	ICP/15395
60122740002	GW-075034-060512-CB-MW-2	EPA 3010	MPRP/18402	EPA 6010	ICP/15408
60122740001	GW-075034-060512-CB-MW-1	EPA 8260	MSV/46122		
60122740002	GW-075034-060512-CB-MW-2	EPA 8260	MSV/46122		
60122740003	GW-075034-060512-CB-MW-3	EPA 8260	MSV/46122		
60122740004	GW-075034-060512-CB-MW-4	EPA 8260	MSV/46122		
60122740005	GW-075034-060512-CB-MW-5	EPA 8260	MSV/46122		
60122740006	GW-075034-060512-CB-MW-6	EPA 8260	MSV/46122		
60122740007	GW-075034-060512-CB-MW-8	EPA 8260	MSV/46343		
60122740008	GW-075034-060512-CB-MW-7	EPA 8260	MSV/46122		
60122740009	GW-075034-060512-CB-MW-DUP	EPA 8260	MSV/46122		
60122740010	TRIP BLANK	EPA 8260	MSV/46219		
60122740001	GW-075034-060512-CB-MW-1	EPA 300.0	WETA/20542		
60122740002	GW-075034-060512-CB-MW-2	EPA 300.0	WETA/20542		
60122740003	GW-075034-060512-CB-MW-3	EPA 300.0	WETA/20542		
60122740004	GW-075034-060512-CB-MW-4	EPA 300.0	WETA/20542		
60122740005	GW-075034-060512-CB-MW-5	EPA 300.0	WETA/20542		
60122740006	GW-075034-060512-CB-MW-6	EPA 300.0	WETA/20542		
60122740007	GW-075034-060512-CB-MW-8	EPA 300.0	WETA/20542		
60122740008	GW-075034-060512-CB-MW-7	EPA 300.0	WETA/20542		
60122740001	GW-075034-060512-CB-MW-1	EPA 353.2	WETA/20459		
60122740002	GW-075034-060512-CB-MW-2	EPA 353.2	WETA/20459		
60122740003	GW-075034-060512-CB-MW-3	EPA 353.2	WETA/20459		
60122740004	GW-075034-060512-CB-MW-4	EPA 353.2	WETA/20459		
60122740005	GW-075034-060512-CB-MW-5	EPA 353.2	WETA/20459		
60122740006	GW-075034-060512-CB-MW-6	EPA 353.2	WETA/20459		
60122740007	GW-075034-060512-CB-MW-8	EPA 353.2	WETA/20459		
60122740008	GW-075034-060512-CB-MW-7	EPA 353.2	WETA/20459		

# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

## Section A Required Client Information

## Section B Required Project Information

## Section C Invoice Information

Page: 1 of 1

Company: CRA

Report To: Christine Matthews

Attention: ENFOS

Address: 6121 Indian School Rd NE, Ste 200

Copy To: Kelly Blanchard, Angela Bown

Company Name:

Albuquerque, NM 87110

Purchase Order No.:

Address:

Email To: cmatthews@cravworld.com

Project Name:

Pace Quote Reference:

Phone (505)884-0672 Fax (505)884-4932

San Juan 29-7 Unit 37 Quarterly GW

Pace Project Manager: Alice Tracy

Requested Due Date/AT: standard

Project Number: 075034-95

Pace Profile #:

REGULATORY AGENCY

☒ NPDES ☒ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: NM

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information  Valid Matrix Codes CODE DW WATER WASTE WATER PRODUCT SOLID SOL SL WP WP AIR OTHER TSS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Analysis Test	Y/N	Residual Chlorine (Y/N)	Pace Project No./ Lab ID
				COMPOSITE START	COMPOSITE END/GRAB							
1	612105034-000512-CB-MW-1	WT 5	---	10/5/12	1455	5	5	X	6010 Dissolved Mn & Se			306441, 18P34, 15
2	612105034-000512-CB-MW-2	WT 6	---	10/5/12	1430	5	5	X	8260 BTEX			2 BP34 18P34, 15
3	612105034-000512-CB-MW-3	WT 6	---	10/5/12	1315	5	5	X	300.0 Sulfate			18P34, 15
4	612105034-000512-CB-MW-4	WT 6	---	10/5/12	1515	5	5	X	300.0/353.2 Nitrate			18P34, 15
5	612105034-000512-CB-MW-5	WT 6	---	10/5/12	1545	5	5	X	HPC by 9215			18P34, 15
6	612105034-000512-CB-MW-6	WT 6	---	10/5/12	1540	5	5	X	Total Dissolved Solids			18P34, 15
7	612105034-000512-CB-MW-7	WT 6	---	10/5/12	1140	5	5	X				18P34, 15
8	612105034-000512-CB-MW-8	WT 6	---	10/5/12	1400	5	5	X				18P34, 15
9	612105034-000512-CB-MW-9	WT 6	---	10/5/12	1500	3	3	X				18P34, 15
10	612105034-000512-CB-MW-10	WT 6	---	10/5/12	1500	3	3	X				18P34, 15
11	612105034-000512-CB-MW-11	WT 6	---	10/5/12	1500	3	3	X				18P34, 15
12	612105034-000512-CB-MW-12	WT 6	---	10/5/12	1500	3	3	X				18P34, 15

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
---------------------	-------------------------------	------	------	---------------------------	------	------	-------------------

Return HPC directly to Frontenac Lab: %

808 West McKay

Frontenac, KS 66763

Frontenac, KS 66763

Frontenac, KS 66763

Frontenac, KS 66763

Frontenac, KS 66763

Frontenac, KS 66763

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Cassie Brown

SIGNATURE of SAMPLER: Cassie Brown

DATE Signed (MM/DD/YY): 10/10/12

Temp in °C

Received on Ice (Y/N)

Custody Sealed Cooler (Y/N)

Samples Intact (Y/N)

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.



# Sample Condition Upon Receipt – ESI Tech Specs

Client Name: COP-CRA

Project #: 60127740

Courier: Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Tracking #: 8993 90016530

Pace Shipping Label Used? Yes ☐ No ☒

Optional

Proj Due Date: 6/19

Proj Name: 6/19

Custody Seal on Cooler/Box Present: Yes ☒ No ☐ Seals intact: Yes ☒ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☒ None ☐ Other ☒ EPLC

Thermometer Used: T-191 / T-194

Type of Ice: ☒ Wet ☐ Blue ☐ None ☐ Samples received on ice, cooling process has begun.  
(circle one)

Cooler Temperature: 2.2

Date and initials of person examining contents: 7/7/12

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6. <u>NO3</u>
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Includes date/time/ID/analyses Matrix:	<u>W1</u>	13.
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
Exceptions: <u>VOA</u> coliform, TOC, O&G, WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed
Trip Blank present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Lot # of added preservative
Pace Trip Blank lot # (if purchased): <u>052112-3</u>		15.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State: <u>NC</u>

Client Notification/ Resolution:

Copy COC to Client? Y / N

Field Data Required? Y / N

Person Contacted: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Temp Log: Record start and finish times when unpacking cooler, if >20 min, recheck sample temps.

Start: 9:35 Start:

End: 10:55 End:

Temp: \_\_\_\_\_ Temp:

Project Manager Review: AKT

Date: 6/7/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the NCDENR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers).



Pace Analytical Services, Inc.  
9608 Loiret Blvd.  
Lenexa, KS 66219  
(913)599-5665

June 12, 2012

Christine Matthews  
CRA  
6121 Indian School Rd NE  
Suite 200  
Albuquerque, NM 87110

RE: Project: SAN JUAN 29-7 UNITS 075034  
Pace Project No.: 60122970

Dear Christine Matthews:

Enclosed are the analytical results for sample(s) received by the laboratory on June 06, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alice Flanagan

alice.flanagan@pacelabs.com  
Project Manager

Enclosures

cc: Kelly Blanchard, COP Conestoga-Rovers & Associa  
Angela Bown, COP Conestoga-Rovers & Associa



## REPORT OF LABORATORY ANALYSIS

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Page 1 of 16

Pace Package 1 of 18



**Pace Analytical Services, Inc.**

9608 Loiret Blvd.

Lenexa, KS 66219

(913)599-5665

## CERTIFICATIONS

Project: SAN JUAN 29-7 UNITS 075034

Pace Project No.: 60122970

### Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219

A2LA Certification #: 2456.01

Arkansas Certification #: 05-008-0

Illinois Certification #: 001191

Iowa Certification #: 118

Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055

Nevada Certification #: KS000212008A

Oklahoma Certification #: 9205/9935

Texas Certification #: T104704407-08-TX

Utah Certification #: 9135995665

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: SAN JUAN 29-7 UNITS 075034

Pace Project No.: 60122970

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60122970001	GW-075034-060512-CB-MW-1	Water	06/05/12 15:00	06/06/12 10:45
60122970002	GW-075034-060512-CB-MW-2	Water	06/05/12 15:20	06/06/12 10:45
60122970003	GW-075034-060512-CB-MW-3	Water	06/05/12 15:25	06/06/12 10:45
60122970004	GW-075034-060512-CB-MW-4	Water	06/05/12 15:15	06/06/12 10:45
60122970005	GW-075034-060512-CB-MW-5	Water	06/05/12 15:35	06/06/12 10:45
60122970006	GW-075034-060512-CB-MW-6	Water	06/05/12 15:27	06/06/12 10:45
60122970007	GW-075034-060512-CB-MW-7	Water	06/05/12 15:30	06/06/12 10:45
60122970008	GW-075034-060512-CB-MW-8	Water	06/05/12 15:10	06/06/12 10:45

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: SAN JUAN 29-7 UNITS 075034  
Pace Project No.: 60122970

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60122970001	GW-075034-060512-CB-MW-1	SM 9215B	TDH	1
60122970002	GW-075034-060512-CB-MW-2	SM 9215B	TDH	1
60122970003	GW-075034-060512-CB-MW-3	SM 9215B	TDH	1
60122970004	GW-075034-060512-CB-MW-4	SM 9215B	TDH	1
60122970005	GW-075034-060512-CB-MW-5	SM 9215B	TDH	1
60122970006	GW-075034-060512-CB-MW-6	SM 9215B	TDH	1
60122970007	GW-075034-060512-CB-MW-7	SM 9215B	TDH	1
60122970008	GW-075034-060512-CB-MW-8	SM 9215B	TDH	1

## REPORT OF LABORATORY ANALYSIS

Page 4 of 16

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNITS 075034  
Pace Project No.: 60122970

---

**Method:** SM 9215B  
**Description:** MBIO HPC (Drinking Water)  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** June 12, 2012

### General Information:

8 samples were analyzed for SM 9215B. All samples were received in acceptable condition with any exceptions noted below.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

u3: Analysis initiated more than 6 hours but less than 24 hours after sample collection.

- GW-075034-060512-CB-MW-1 (Lab ID: 60122970001)
- GW-075034-060512-CB-MW-2 (Lab ID: 60122970002)
- GW-075034-060512-CB-MW-3 (Lab ID: 60122970003)
- GW-075034-060512-CB-MW-4 (Lab ID: 60122970004)
- GW-075034-060512-CB-MW-5 (Lab ID: 60122970005)
- GW-075034-060512-CB-MW-6 (Lab ID: 60122970006)
- GW-075034-060512-CB-MW-7 (Lab ID: 60122970007)
- GW-075034-060512-CB-MW-8 (Lab ID: 60122970008)

### Sample Preparation:

The samples were prepared in accordance with SM 9215B with any exceptions noted below.

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNITS 075034

Pace Project No.: 60122970

**Sample:** GW-075034-060512-CB-MW-1 **Lab ID:** 60122970001 **Collected:** 06/05/12 15:00 **Received:** 06/06/12 10:45 **Matrix:** Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>MBIO HPC (Drinking Water)</b>									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	93000	CFU/mL	1.0	1.0	1	06/06/12 13:00	06/08/12 11:30		u3



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## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNITS 075034

Pace Project No.: 60122970

Sample: **GW-075034-060512-CB-MW-2** Lab ID: **60122970002** Collected: 06/05/12 15:20 Received: 06/06/12 10:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	32000	CFU/mL	1.0	1.0	1	06/06/12 13:00	06/08/12 11:30		u3

Date: 06/12/2012 01:51 PM

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNITS 075034

Pace Project No.: 60122970

Sample: **GW-075034-060512-CB-MW-3** Lab ID: **60122970003** Collected: 06/05/12 15:25 Received: 06/06/12 10:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>MBIO HPC (Drinking Water)</b>									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	<b>22000</b>	CFU/mL	1.0	1.0	1	06/06/12 13:00	06/08/12 11:30		u3

Date: 06/12/2012 01:51 PM

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNITS 075034

Pace Project No.: 60122970

Sample: **GW-075034-060512-CB-MW-4** Lab ID: **60122970004** Collected: 06/05/12 15:15 Received: 06/06/12 10:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
MBIO HPC (Drinking Water)									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	<b>49000</b>	CFU/mL	1.0	1.0	1	06/06/12 13:00	06/08/12 11:30		u3

Date: 06/12/2012 01:51 PM

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNITS 075034

Pace Project No.: 60122970

Sample: **GW-075034-060512-CB-MW-5** Lab ID: **60122970005** Collected: 06/05/12 15:35 Received: 06/06/12 10:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>MBIO HPC (Drinking Water)</b>									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	<b>63000</b>	CFU/mL	1.0	1.0	1	06/06/12 13:00	06/08/12 11:30		u3



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## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNITS 075034  
Pace Project No.: 60122970

Sample: **GW-075034-060512-CB-MW-6** Lab ID: **60122970006** Collected: 06/05/12 15:27 Received: 06/06/12 10:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>MBIO HPC (Drinking Water)</b>									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	<b>35000</b>	CFU/mL	1.0	1.0	1	06/06/12 13:00	06/08/12 11:30		u3



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## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNITS 075034

Pace Project No.: 60122970

Sample: **GW-075034-060512-CB-MW-7** Lab ID: **60122970007** Collected: 06/05/12 15:30 Received: 06/06/12 10:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>MBIO HPC (Drinking Water)</b>									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	8	CFU/mL	1.0	1.0	1	06/06/12 13:00	06/08/12 11:30		u3



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## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNITS 075034

Pace Project No.: 60122970

Sample: GW-075034-060512-CB-MW-8 Lab ID: 60122970008 Collected: 06/05/12 15:10 Received: 06/06/12 10:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
MBIO HPC (Drinking Water)									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	630	CFU/mL	1.0	1.0	1	06/06/12 13:00	06/08/12 11:30		u3

Date: 06/12/2012 01:51 PM

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNITS 075034  
Pace Project No.: 60122970

QC Batch: MBIO/9645 Analysis Method: SM 9215B  
QC Batch Method: SM 9215B Analysis Description: 9215B Heterotrophic Plate Count  
Associated Lab Samples: 60122970001, 60122970002, 60122970003, 60122970004, 60122970005, 60122970006, 60122970007, 60122970008

METHOD BLANK: 1012079 Matrix: Solid  
Associated Lab Samples: 60122970001, 60122970002, 60122970003, 60122970004, 60122970005, 60122970006, 60122970007, 60122970008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Heterotrophic Plate Count	CFU/mL	<1	1.0	06/08/12 11:30	

SAMPLE DUPLICATE: 1012080

Parameter	Units	60122970001 Result	Dup Result	RPD	Max RPD	Qualifiers
Heterotrophic Plate Count	CFU/mL	93000	87000			



## QUALIFIERS

Project: SAN JUAN 29-7 UNITS 075034  
Pace Project No.: 60122970

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

u3 Analysis initiated more than 6 hours but less than 24 hours after sample collection.

## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SAN JUAN 29-7 UNITS 075034  
Pace Project No.: 60122970

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60122970001	GW-075034-060512-CB-MW-1	SM 9215B	MBIO/9645	SM 9215B	MBIO/9646
60122970002	GW-075034-060512-CB-MW-2	SM 9215B	MBIO/9645	SM 9215B	MBIO/9646
60122970003	GW-075034-060512-CB-MW-3	SM 9215B	MBIO/9645	SM 9215B	MBIO/9646
60122970004	GW-075034-060512-CB-MW-4	SM 9215B	MBIO/9645	SM 9215B	MBIO/9646
60122970005	GW-075034-060512-CB-MW-5	SM 9215B	MBIO/9645	SM 9215B	MBIO/9646
60122970006	GW-075034-060512-CB-MW-6	SM 9215B	MBIO/9645	SM 9215B	MBIO/9646
60122970007	GW-075034-060512-CB-MW-7	SM 9215B	MBIO/9645	SM 9215B	MBIO/9646
60122970008	GW-075034-060512-CB-MW-8	SM 9215B	MBIO/9645	SM 9215B	MBIO/9646

# Sample Condition Upon Receipt

Pace Analytical

Client Name: COPCRA

Project # 60122970

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #: \_\_\_\_\_ Pace Shipping Label Used? ☐ Yes ☐ No

Custody Seal on Cooler/Box Present: ☒ Yes ☐ No Seals intact: ☒ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Foam ☒ None ☐ Other

Thermometer Used: T-111 Type of Ice: ☒ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 1.0

Temperature should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: 11/6/12 10:45

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
Sample labels match COC:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
-Includes date/time/ID/analyses Matrix:		
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Exceptions VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	<input type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed
		Lot # of added preservative
Trip Blank present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Pace Trip Blank lot # (if purchased):		
Headspace in VOA vials (>6mm)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State: <u>NC</u>

Client Notification/ Resolution:

Copy COC to Client? Y / N

Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Project Manager Review ARC

Date: 6/11/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Package 17 of 18

F-KS-C-003-Rev.05, 19February2010

# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

<b>Section A</b> Required Client Information: Company: COP CRA NM Address: 6121 Indian School Rd NE, Ste 200 Albuquerque, NM 87110 Email To: cmathews@craworld.com Phone: (505)884-0672 Fax: (505)884-4932 Requested Due Date/TAT: standard		<b>Section B</b> Invoice Information: Report To: Christine Mathews Copy To: Kelly Blanchard, Angela Bowlin Purchase Order No.: Project Name: <u>Madia-34 No. 2</u> Project Number: <u>075055-075055</u>		<b>Section C</b> Company Name: <u>ENFOS</u> Address: <u>6122970</u> Site Location: <u>6122970</u> STATE: <u>NM</u>	
--	--	---	--	--	--

ITEM #	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WASTE WATER WW PRODUCT P SOILS/SLURRY SL OIL OIL WIPE WIP AIR AIR OTHER OT TISSUE TS	SAMPLE ID (A-Z, 0-9, /, -) Sample IDs must be unique	COLLECTED		SAMPLE TYPE (G=GRAB C=COMP) (see valid codes to left)	MATRIX CODE (see valid codes to left)	# OF CONTAINERS	PRESERVATIVES										Analysis Test ↑ Analysis Test ↓	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
			COMPOSITE START	COMPOSITE END/GRAB				DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME				
1		GW-075053A-000512-CB-MW-1			WTG	WTG	1											6122970			
2		GW-075053A-000512-CB-MW-2			WTG	WTG	1											6122970			
3		GW-075053A-000512-CB-MW-3			WTG	WTG	1											6122970			
4		GW-075053A-000512-CB-MW-4			WTG	WTG	1											6122970			
5		GW-075053A-000512-CB-MW-5			WTG	WTG	1											6122970			
6		GW-075053A-000512-CB-MW-6			WTG	WTG	1											6122970			
7		GW-075053A-000512-CB-MW-7			WTG	WTG	1											6122970			
8		GW-075053A-000512-CB-MW-8			WTG	WTG	1											6122970			
9																					
10																					
11																					
12																					

<b>Section D</b> ADDITIONAL COMMENTS Pace Package 18 of 18		RELINQUISHED BY / AFFILIATION Date: 6/5/12 Time: 1700		ACCEPTED BY / AFFILIATION Date: 6/5/12 Time: 1700		SAMPLE CONDITIONS Temp in °C: 1.0 Y Y Y Y			
SAMPLE NAME AND SIGNATURE PRINT Name of SAMPLER: <u>Cassie Brown</u> SIGNATURE OF SAMPLER: <u>Cassie Brown</u>		DATE SIGNED (MM/DD/YYYY): <u>6.5.12</u>		Received on Ice (Y/N)		Custody Sealed (Y/N)		Samples Intact (Y/N)	

September 28, 2012

Christine Matthews  
CRA  
6121 Indian School Rd NE  
Suite 200  
Albuquerque, NM 87110

RE: Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60129245

Dear Christine Matthews:

Enclosed are the analytical results for sample(s) received by the laboratory on September 19, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Alice Flanagan

alice.flanagan@pacelabs.com  
Project Manager

Enclosures

cc: Kelly Blanchard, COP Conestoga-Rovers & Associa  
Angela Bown, COP Conestoga-Rovers & Associa  
Cassie Brown, COP Conestoga-Rovers & Associa



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## CERTIFICATIONS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60129245

---

### Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219

A2LA Certification #: 2456.01

Arkansas Certification #: 12-019-0

Illinois Certification #: 002885

Iowa Certification #: 118

Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055

Nevada Certification #: KS000212008A

Oklahoma Certification #: 9205/9935

Texas Certification #: T104704407-12-3

Utah Certification #: KS000212012-2

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60129245

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60129245001	GW-075034-091812-CM-MW-4	Water	09/18/12 12:45	09/19/12 08:00
60129245002	GW-075034-091812-CM-MW-7	Water	09/18/12 13:00	09/19/12 08:00
60129245003	GW-075034-091812-CM-MW-1	Water	09/18/12 13:10	09/19/12 08:00
60129245004	GW-075034-091812-CM-DUP	Water	09/18/12 13:20	09/19/12 08:00
60129245005	GW-075034-091812-CM-MW-2	Water	09/18/12 13:25	09/19/12 08:00
60129245006	GW-075034-091812-CM-MW-3	Water	09/18/12 13:45	09/19/12 08:00
60129245007	GW-075034-091812-CM-MW-5	Water	09/18/12 14:15	09/19/12 08:00
60129245008	GW-075034-091812-CM-MW-6	Water	09/18/12 14:20	09/19/12 08:00
60129245009	TB-075034-091812-CM-001	Water	09/18/12 00:00	09/19/12 08:00
60129245010	GW-075034-091812-CM-MW-4	Water	09/18/12 12:45	09/19/12 10:40
60129245011	GW-075034-091812-CM-MW-7	Water	09/18/12 13:00	09/19/12 10:40
60129245012	GW-075034-091812-CM-MW-1	Water	09/18/12 13:10	09/19/12 10:40
60129245013	GW-075034-091812-CM-DUP	Water	09/18/12 13:20	09/19/12 10:40
60129245014	GW-075034-091812-CM-MW-2	Water	09/18/12 13:25	09/19/12 10:40
60129245015	GW-075034-091812-CM-MW-3	Water	09/18/12 13:45	09/19/12 10:40
60129245016	GW-075034-091812-CM-MW-5	Water	09/18/12 14:15	09/19/12 10:40
60129245017	GW-075034-091812-CM-MW-6	Water	09/18/12 14:20	09/19/12 10:40

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60129245

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60129245001	GW-075034-091812-CM-MW-4	EPA 6010	SMW	2
		EPA 5030B/8260	PRG	9
		SM 2540C	FJF	1
		EPA 300.0	AJM	1
		EPA 353.2	NDL	1
60129245002	GW-075034-091812-CM-MW-7	EPA 6010	SMW	2
		EPA 5030B/8260	PRG	9
		SM 2540C	FJF	1
		EPA 300.0	AJM	1
		EPA 353.2	NDL	1
60129245003	GW-075034-091812-CM-MW-1	EPA 6010	SMW	2
		EPA 5030B/8260	PRG	9
		SM 2540C	FJF	1
		EPA 300.0	AJM	1
		EPA 353.2	NDL	1
60129245004	GW-075034-091812-CM-DUP	EPA 5030B/8260	PRG	9
60129245005	GW-075034-091812-CM-MW-2	EPA 6010	SMW	2
		EPA 5030B/8260	PRG	9
		SM 2540C	FJF	1
		EPA 300.0	AJM	1
		EPA 353.2	NDL	1
60129245006	GW-075034-091812-CM-MW-3	EPA 6010	SMW	2
		EPA 5030B/8260	PRG	9
		SM 2540C	FJF	1
		EPA 300.0	AJM	1
		EPA 353.2	NDL	1
60129245007	GW-075034-091812-CM-MW-5	EPA 6010	SMW	2
		EPA 5030B/8260	PRG	9
		SM 2540C	FJF	1
		EPA 300.0	AJM	1
		EPA 353.2	NDL	1
60129245008	GW-075034-091812-CM-MW-6	EPA 6010	SMW	2
		EPA 5030B/8260	PRG	9
		SM 2540C	FJF	1
		EPA 300.0	AJM	1
		EPA 353.2	NDL	1
60129245009	TB-075034-091812-CM-001	EPA 5030B/8260	JKL	9

### REPORT OF LABORATORY ANALYSIS

### SAMPLE ANALYTE COUNT

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60129245

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60129245010	GW-075034-091812-CM-MW-4	SM 9215B	MEB	1
60129245011	GW-075034-091812-CM-MW-7	SM 9215B	MEB	1
60129245012	GW-075034-091812-CM-MW-1	SM 9215B	MEB	1
60129245013	GW-075034-091812-CM-DUP	SM 9215B	MEB	1
60129245014	GW-075034-091812-CM-MW-2	SM 9215B	MEB	1
60129245015	GW-075034-091812-CM-MW-3	SM 9215B	MEB	1
60129245016	GW-075034-091812-CM-MW-5	SM 9215B	MEB	1
60129245017	GW-075034-091812-CM-MW-6	SM 9215B	MEB	1

### REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60129245

---

**Method:** EPA 6010  
**Description:** 6010 MET ICP, Dissolved  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** September 28, 2012

### General Information:

7 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Sample Preparation:

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

### Additional Comments:

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60129245

---

**Method:** SM 9215B  
**Description:** MBIO HPC (Drinking Water)  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** September 28, 2012

### General Information:

8 samples were analyzed for SM 9215B. All samples were received in acceptable condition with any exceptions noted below.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

u3: Analysis initiated more than 6 hours but less than 24 hours after sample collection.

- GW-075034-091812-CM-DUP (Lab ID: 60129245013)
- GW-075034-091812-CM-MW-1 (Lab ID: 60129245012)
- GW-075034-091812-CM-MW-2 (Lab ID: 60129245014)
- GW-075034-091812-CM-MW-3 (Lab ID: 60129245015)
- GW-075034-091812-CM-MW-4 (Lab ID: 60129245010)
- GW-075034-091812-CM-MW-5 (Lab ID: 60129245016)
- GW-075034-091812-CM-MW-6 (Lab ID: 60129245017)
- GW-075034-091812-CM-MW-7 (Lab ID: 60129245011)

### Sample Preparation:

The samples were prepared in accordance with SM 9215B with any exceptions noted below.

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

Analyte Comments:

QC Batch: MBIO/10187

u2: Colonies are too numerous to count. Actual result may be greater than reported.

- GW-075034-091812-CM-DUP (Lab ID: 60129245013)
  - Heterotrophic Plate Count
- GW-075034-091812-CM-MW-1 (Lab ID: 60129245012)
  - Heterotrophic Plate Count

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60129245

---

**Method:** EPA 5030B/8260  
**Description:** 8260 MSV  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** September 28, 2012

### General Information:

9 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

pH: Post-analysis pH measurement indicates insufficient VOA sample preservation.  
• GW-075034-091812-CM-MW-2 (Lab ID: 60129245005)

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/48636

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/48733

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

### Additional Comments:

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60129245

---

**Method:** SM 2540C

**Description:** 2540C Total Dissolved Solids

**Client:** COP Conestoga-Rovers & Associates, Inc. NM

**Date:** September 28, 2012

**General Information:**

7 samples were analyzed for SM 2540C. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60129245

---

**Method:** EPA 300.0  
**Description:** 300.0 IC Anions 28 Days  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** September 28, 2012

**General Information:**

7 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60129245

---

**Method:** EPA 353.2  
**Description:** 353.2 Nitrogen, NO<sub>2</sub>/NO<sub>3</sub> unpres  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** September 28, 2012

### General Information:

7 samples were analyzed for EPA 353.2. All samples were received in acceptable condition with any exceptions noted below.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60129245

Sample: **GW-075034-091812-CM-MW-4** Lab ID: **60129245001** Collected: 09/18/12 12:45 Received: 09/19/12 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese, Dissolved	<b>103</b>	ug/L	5.0	0.60	1	09/24/12 13:45	09/26/12 14:52	7439-96-5	
Selenium, Dissolved	<b>39.4</b>	ug/L	15.0	2.7	1	09/24/12 13:45	09/26/12 14:52	7782-49-2	
<b>8260 MSV</b> Analytical Method: EPA 5030B/8260									
Benzene	ND	ug/L	1.0	0.098	1		09/21/12 16:25	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.23	1		09/21/12 16:25	100-41-4	
Toluene	ND	ug/L	1.0	0.15	1		09/21/12 16:25	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.41	1		09/21/12 16:25	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	100 %		80-120		1		09/21/12 16:25	460-00-4	
Dibromofluoromethane (S)	107 %		80-120		1		09/21/12 16:25	1868-53-7	
1,2-Dichloroethane-d4 (S)	104 %		80-120		1		09/21/12 16:25	17060-07-0	
Toluene-d8 (S)	99 %		80-120		1		09/21/12 16:25	2037-26-5	
Preservation pH	<b>7.0</b>		0.10	0.10	1		09/21/12 16:25		
<b>2540C Total Dissolved Solids</b> Analytical Method: SM 2540C									
Total Dissolved Solids	<b>2180</b>	mg/L	5.0	5.0	1		09/24/12 16:32		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0									
Sulfate	<b>1190</b>	mg/L	100	15.0	100		09/27/12 11:41	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2									
Nitrogen, Nitrate	<b>7.8</b>	mg/L	0.20	0.064	2		09/19/12 16:26		

## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60129245

Sample: **GW-075034-091812-CM-MW-7** Lab ID: **60129245002** Collected: 09/18/12 13:00 Received: 09/19/12 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese, Dissolved	11.6	ug/L	5.0	0.60	1	09/24/12 13:45	09/26/12 14:56	7439-96-5	
Selenium, Dissolved	24.2	ug/L	15.0	2.7	1	09/24/12 13:45	09/26/12 14:56	7782-49-2	
<b>8260 MSV</b> Analytical Method: EPA 5030B/8260									
Benzene	ND	ug/L	1.0	0.098	1		09/21/12 16:40	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.23	1		09/21/12 16:40	100-41-4	
Toluene	ND	ug/L	1.0	0.15	1		09/21/12 16:40	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.41	1		09/21/12 16:40	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	100	%	80-120		1		09/21/12 16:40	460-00-4	
Dibromofluoromethane (S)	104	%	80-120		1		09/21/12 16:40	1868-53-7	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		09/21/12 16:40	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		09/21/12 16:40	2037-26-5	
Preservation pH	7.0		0.10	0.10	1		09/21/12 16:40		
<b>2540C Total Dissolved Solids</b> Analytical Method: SM 2540C									
Total Dissolved Solids	4280	mg/L	5.0	5.0	1		09/24/12 16:32		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0									
Sulfate	1610	mg/L	200	30.0	200		09/27/12 12:13	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2									
Nitrogen, Nitrate	0.97	mg/L	0.10	0.032	1		09/19/12 15:50		

## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60129245

**Sample:** GW-075034-091812-CM-MW-1    **Lab ID:** 60129245003    **Collected:** 09/18/12 13:10    **Received:** 09/19/12 08:00    **Matrix:** Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b> Analytical Method: EPA 6010    Preparation Method: EPA 3010									
Manganese, Dissolved	2600	ug/L	5.0	0.60	1	09/24/12 13:45	09/26/12 14:59	7439-96-5	
Selenium, Dissolved	44.2	ug/L	15.0	2.7	1	09/24/12 13:45	09/26/12 14:59	7782-49-2	
<b>8260 MSV</b> Analytical Method: EPA 5030B/8260									
Benzene	ND	ug/L	1.0	0.098	1		09/21/12 16:55	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.23	1		09/21/12 16:55	100-41-4	
Toluene	ND	ug/L	1.0	0.15	1		09/21/12 16:55	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.41	1		09/21/12 16:55	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	98 %		80-120		1		09/21/12 16:55	460-00-4	
Dibromofluoromethane (S)	103 %		80-120		1		09/21/12 16:55	1868-53-7	
1,2-Dichloroethane-d4 (S)	101 %		80-120		1		09/21/12 16:55	17060-07-0	
Toluene-d8 (S)	98 %		80-120		1		09/21/12 16:55	2037-26-5	
Preservation pH	7.0		0.10	0.10	1		09/21/12 16:55		
<b>2540C Total Dissolved Solids</b> Analytical Method: SM 2540C									
Total Dissolved Solids	2140	mg/L	5.0	5.0	1		09/24/12 16:32		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0									
Sulfate	1070	mg/L	100	15.0	100		09/27/12 13:32	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2									
Nitrogen, Nitrate	27.5	mg/L	1.0	0.32	10		09/19/12 16:40		





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## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60129245

Sample: **GW-075034-091812-CM-DUP** Lab ID: **60129245004** Collected: 09/18/12 13:20 Received: 09/19/12 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 5030B/8260									
Benzene	ND	ug/L	1.0	0.098	1		09/21/12 17:10	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.23	1		09/21/12 17:10	100-41-4	
Toluene	ND	ug/L	1.0	0.15	1		09/21/12 17:10	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.41	1		09/21/12 17:10	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	100 %		80-120		1		09/21/12 17:10	460-00-4	
Dibromofluoromethane (S)	99 %		80-120		1		09/21/12 17:10	1868-53-7	
1,2-Dichloroethane-d4 (S)	102 %		80-120		1		09/21/12 17:10	17060-07-0	
Toluene-d8 (S)	101 %		80-120		1		09/21/12 17:10	2037-26-5	
Preservation pH	7.0		0.10	0.10	1		09/21/12 17:10		

## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60129245

**Sample:** GW-075034-091812-CM-MW-2      **Lab ID:** 60129245005      Collected: 09/18/12 13:25      Received: 09/19/12 08:00      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b> Analytical Method: EPA 6010      Preparation Method: EPA 3010									
Manganese, Dissolved	19.4	ug/L	5.0	0.60	1	09/24/12 13:45	09/26/12 15:03	7439-96-5	
Selenium, Dissolved	67.4	ug/L	15.0	2.7	1	09/24/12 13:45	09/26/12 15:03	7782-49-2	
<b>8260 MSV</b> Analytical Method: EPA 5030B/8260									
Benzene	ND	ug/L	1.0	0.098	1		09/21/12 17:24	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.23	1		09/21/12 17:24	100-41-4	
Toluene	ND	ug/L	1.0	0.15	1		09/21/12 17:24	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.41	1		09/21/12 17:24	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	100	%	80-120		1		09/21/12 17:24	460-00-4	
Dibromofluoromethane (S)	103	%	80-120		1		09/21/12 17:24	1868-53-7	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		09/21/12 17:24	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		09/21/12 17:24	2037-26-5	
Preservation pH	1.0		0.10	0.10	1		09/21/12 17:24		pH
<b>2540C Total Dissolved Solids</b> Analytical Method: SM 2540C									
Total Dissolved Solids	2440	mg/L	5.0	5.0	1		09/24/12 16:33		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0									
Sulfate	1150	mg/L	100	15.0	100		09/27/12 13:48	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2									
Nitrogen, Nitrate	42.5	mg/L	1.0	0.32	10		09/19/12 16:40		

## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60129245

Sample: **GW-075034-091812-CM-MW-3** Lab ID: **60129245006** Collected: 09/18/12 13:45 Received: 09/19/12 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese, Dissolved	1240	ug/L	5.0	0.60	1	09/24/12 13:45	09/26/12 15:06	7439-96-5	
Selenium, Dissolved	31.6	ug/L	15.0	2.7	1	09/24/12 13:45	09/26/12 15:06	7782-49-2	
<b>8260 MSV</b> Analytical Method: EPA 5030B/8260									
Benzene	ND	ug/L	1.0	0.098	1		09/21/12 17:39	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.23	1		09/21/12 17:39	100-41-4	
Toluene	ND	ug/L	1.0	0.15	1		09/21/12 17:39	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.41	1		09/21/12 17:39	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	98	%	80-120		1		09/21/12 17:39	460-00-4	
Dibromofluoromethane (S)	105	%	80-120		1		09/21/12 17:39	1868-53-7	
1,2-Dichloroethane-d4 (S)	107	%	80-120		1		09/21/12 17:39	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		09/21/12 17:39	2037-26-5	
Preservation pH	7.0		0.10	0.10	1		09/21/12 17:39		
<b>2540C Total Dissolved Solids</b> Analytical Method: SM 2540C									
Total Dissolved Solids	2150	mg/L	5.0	5.0	1		09/24/12 16:34		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0									
Sulfate	1050	mg/L	100	15.0	100		09/27/12 14:04	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2									
Nitrogen, Nitrate	12.2	mg/L	1.0	0.32	10		09/19/12 16:43		

## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60129245

**Sample:** GW-075034-091812-CM-MW-5    **Lab ID:** 60129245007    **Collected:** 09/18/12 14:15    **Received:** 09/19/12 08:00    **Matrix:** Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b> Analytical Method: EPA 6010    Preparation Method: EPA 3010									
Manganese, Dissolved	791	ug/L	5.0	0.60	1	09/24/12 13:45	09/26/12 15:10	7439-96-5	
Selenium, Dissolved	ND	ug/L	15.0	2.7	1	09/24/12 13:45	09/26/12 15:10	7782-49-2	
<b>8260 MSV</b> Analytical Method: EPA 5030B/8260									
Benzene	ND	ug/L	1.0	0.098	1		09/21/12 17:54	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.23	1		09/21/12 17:54	100-41-4	
Toluene	ND	ug/L	1.0	0.15	1		09/21/12 17:54	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.41	1		09/21/12 17:54	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	99 %		80-120		1		09/21/12 17:54	460-00-4	
Dibromofluoromethane (S)	105 %		80-120		1		09/21/12 17:54	1868-53-7	
1,2-Dichloroethane-d4 (S)	103 %		80-120		1		09/21/12 17:54	17060-07-0	
Toluene-d8 (S)	101 %		80-120		1		09/21/12 17:54	2037-26-5	
Preservation pH	7.0		0.10	0.10	1		09/21/12 17:54		
<b>2540C Total Dissolved Solids</b> Analytical Method: SM 2540C									
Total Dissolved Solids	2830	mg/L	5.0	5.0	1		09/24/12 16:34		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0									
Sulfate	1620	mg/L	200	30.0	200		09/27/12 14:20	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2									
Nitrogen, Nitrate	ND	mg/L	0.10	0.032	1		09/19/12 15:53		

## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60129245

Sample: **GW-075034-091812-CM-MW-6** Lab ID: **60129245008** Collected: 09/18/12 14:20 Received: 09/19/12 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese, Dissolved	1110	ug/L	5.0	0.60	1	09/24/12 13:45	09/26/12 15:13	7439-96-5	
Selenium, Dissolved	40.6	ug/L	15.0	2.7	1	09/24/12 13:45	09/26/12 15:13	7782-49-2	
<b>8260 MSV</b> Analytical Method: EPA 5030B/8260									
Benzene	ND	ug/L	1.0	0.098	1		09/21/12 18:09	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.23	1		09/21/12 18:09	100-41-4	
Toluene	ND	ug/L	1.0	0.15	1		09/21/12 18:09	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.41	1		09/21/12 18:09	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	97 %		80-120		1		09/21/12 18:09	460-00-4	
Dibromofluoromethane (S)	106 %		80-120		1		09/21/12 18:09	1868-53-7	
1,2-Dichloroethane-d4 (S)	102 %		80-120		1		09/21/12 18:09	17060-07-0	
Toluene-d8 (S)	102 %		80-120		1		09/21/12 18:09	2037-26-5	
Preservation pH	7.0		0.10	0.10	1		09/21/12 18:09		
<b>2540C Total Dissolved Solids</b> Analytical Method: SM 2540C									
Total Dissolved Solids	1990	mg/L	5.0	5.0	1		09/24/12 16:35		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0									
Sulfate	955	mg/L	100	15.0	100		09/27/12 14:36	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2									
Nitrogen, Nitrate	29.5	mg/L	1.0	0.32	10		09/19/12 16:44		

## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60129245

Sample: TB-075034-091812-CM-001 Lab ID: 60129245009 Collected: 09/18/12 00:00 Received: 09/19/12 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 5030B/8260									
Benzene	ND	ug/L	1.0	0.12	1		09/26/12 16:39	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.060	1		09/26/12 16:39	100-41-4	
Toluene	ND	ug/L	1.0	0.054	1		09/26/12 16:39	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.67	1		09/26/12 16:39	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	105 %		80-120		1		09/26/12 16:39	460-00-4	
Dibromofluoromethane (S)	99 %		80-120		1		09/26/12 16:39	1868-53-7	
1,2-Dichloroethane-d4 (S)	98 %		80-120		1		09/26/12 16:39	17060-07-0	
Toluene-d8 (S)	100 %		80-120		1		09/26/12 16:39	2037-26-5	
Preservation pH	1.0		0.10	0.10	1		09/26/12 16:39		





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## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60129245

Sample: **GW-075034-091812-CM-MW-4** Lab ID: **60129245010** Collected: 09/18/12 12:45 Received: 09/19/12 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
MBIO HPC (Drinking Water)									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	4000	CFU/mL	1.0	1.0	1	09/19/12 12:15	09/21/12 13:00		u3



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## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60129245

Sample: **GW-075034-091812-CM-MW-7** Lab ID: **60129245011** Collected: 09/18/12 13:00 Received: 09/19/12 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Analytical Method: SM 9215B Preparation Method: SM 9215B									
<b>MBIO HPC (Drinking Water)</b>									
Heterotrophic Plate Count	<b>1900</b>	CFU/mL	1.0	1.0	1	09/19/12 12:15	09/21/12 13:00		u3



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## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60129245

Sample: **GW-075034-091812-CM-MW-1** Lab ID: **60129245012** Collected: 09/18/12 13:10 Received: 09/19/12 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>MBIO HPC (Drinking Water)</b>									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	>80000	CFU/mL	1.0	1.0	1	09/19/12 12:15	09/21/12 13:00		u2,u3



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## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60129245

Sample: **GW-075034-091812-CM-DUP** Lab ID: **60129245013** Collected: 09/18/12 13:20 Received: 09/19/12 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Analytical Method: SM 9215B Preparation Method: SM 9215B									
<b>MBIO HPC (Drinking Water)</b> Heterotrophic Plate Count	<b>&gt;80000</b>	CFU/mL	1.0	1.0	1	09/19/12 12:15	09/21/12 13:00		u2,u3

## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60129245

**Sample:** GW-075034-091812-CM-MW-2      **Lab ID:** 60129245014      Collected: 09/18/12 13:25      Received: 09/19/12 10:40      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>MBIO HPC (Drinking Water)</b>									
Analytical Method: SM 9215B    Preparation Method: SM 9215B									
Heterotrophic Plate Count	6500	CFU/mL	1.0	1.0	1	09/19/12 12:15	09/21/12 13:00		u3



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## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60129245

Sample: **GW-075034-091812-CM-MW-3** Lab ID: **60129245015** Collected: 09/18/12 13:45 Received: 09/19/12 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>MBIO HPC (Drinking Water)</b>									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	<b>23000</b>	CFU/mL	1.0	1.0	1	09/19/12 12:15	09/21/12 13:00		u3





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## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60129245

Sample: **GW-075034-091812-CM-MW-5** Lab ID: **60129245016** Collected: 09/18/12 14:15 Received: 09/19/12 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	130000	CFU/mL	1.0	1.0	1	09/19/12 12:15	09/21/12 13:00		u3



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## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60129245

Sample: **GW-075034-091812-CM-MW-6** Lab ID: **60129245017** Collected: 09/18/12 14:20 Received: 09/19/12 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>MBIO HPC (Drinking Water)</b>									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	<b>12000</b>	CFU/mL	1.0	1.0	1	09/19/12 12:15	09/21/12 13:00		u3

### QUALITY CONTROL DATA

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60129245

QC Batch:	MBIO/10187	Analysis Method:	SM 9215B
QC Batch Method:	SM 9215B	Analysis Description:	9215B Heterotrophic Plate Count
Associated Lab Samples:	60129245010, 60129245011, 60129245012, 60129245013, 60129245014, 60129245015, 60129245016, 60129245017		

METHOD BLANK:	1066281	Matrix:	Solid
Associated Lab Samples:	60129245010, 60129245011, 60129245012, 60129245013, 60129245014, 60129245015, 60129245016, 60129245017		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Heterotrophic Plate Count	CFU/mL	<1	1.0	09/21/12 13:00	

SAMPLE DUPLICATE: 1066282

Parameter	Units	60129245010 Result	Dup Result	RPD	Max RPD	Qualifiers
Heterotrophic Plate Count	CFU/mL	4000	4200			

### QUALITY CONTROL DATA

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60129245

QC Batch: MPRP/19623 Analysis Method: EPA 6010  
QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved  
Associated Lab Samples: 60129245001, 60129245002, 60129245003, 60129245005, 60129245006, 60129245007, 60129245008

METHOD BLANK: 1066229 Matrix: Water  
Associated Lab Samples: 60129245001, 60129245002, 60129245003, 60129245005, 60129245006, 60129245007, 60129245008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Manganese, Dissolved	ug/L	ND	5.0	09/26/12 14:46	
Selenium, Dissolved	ug/L	ND	15.0	09/26/12 14:46	

LABORATORY CONTROL SAMPLE: 1066230

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Manganese, Dissolved	ug/L	1000	1020	102	80-120	
Selenium, Dissolved	ug/L	1000	985	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1066231 1066232

Parameter	Units	60129627003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Manganese, Dissolved	ug/L	0.054 mg/L	1000	1000	1060	1060	100	101	75-125	0	20
Selenium, Dissolved	ug/L	ND	1000	1000	954	966	95	97	75-125	1	20

## QUALITY CONTROL DATA

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60129245

QC Batch:	MSV/48733	Analysis Method:	EPA 5030B/8260
QC Batch Method:	EPA 5030B/8260	Analysis Description:	8260 MSV Water 10 mL Purge
Associated Lab Samples:	60129245009		

METHOD BLANK: 1067453 Matrix: Water  
Associated Lab Samples: 60129245009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	09/26/12 13:02	
Ethylbenzene	ug/L	ND	1.0	09/26/12 13:02	
Toluene	ug/L	ND	1.0	09/26/12 13:02	
Xylene (Total)	ug/L	ND	3.0	09/26/12 13:02	
1,2-Dichloroethane-d4 (S)	%	95	80-120	09/26/12 13:02	
4-Bromofluorobenzene (S)	%	107	80-120	09/26/12 13:02	
Dibromofluoromethane (S)	%	98	80-120	09/26/12 13:02	
Toluene-d8 (S)	%	104	80-120	09/26/12 13:02	

LABORATORY CONTROL SAMPLE: 1067454

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.6	93	74-123	
Ethylbenzene	ug/L	20	20.1	101	76-123	
Toluene	ug/L	20	19.7	98	75-123	
Xylene (Total)	ug/L	60	59.2	99	76-123	
1,2-Dichloroethane-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			103	80-120	
Dibromofluoromethane (S)	%			99	80-120	
Toluene-d8 (S)	%			104	80-120	

### QUALITY CONTROL DATA

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60129245

QC Batch: MSV/48636 Analysis Method: EPA 5030B/8260  
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day  
Associated Lab Samples: 60129245001, 60129245002, 60129245003, 60129245004, 60129245005, 60129245006, 60129245007, 60129245008

METHOD BLANK: 1064561 Matrix: Water  
Associated Lab Samples: 60129245001, 60129245002, 60129245003, 60129245004, 60129245005, 60129245006, 60129245007, 60129245008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	09/21/12 16:10	
Ethylbenzene	ug/L	ND	1.0	09/21/12 16:10	
Toluene	ug/L	ND	1.0	09/21/12 16:10	
Xylene (Total)	ug/L	ND	3.0	09/21/12 16:10	
1,2-Dichloroethane-d4 (S)	%	103	80-120	09/21/12 16:10	
4-Bromofluorobenzene (S)	%	99	80-120	09/21/12 16:10	
Dibromofluoromethane (S)	%	103	80-120	09/21/12 16:10	
Toluene-d8 (S)	%	102	80-120	09/21/12 16:10	

LABORATORY CONTROL SAMPLE: 1064562

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.5	93	74-123	
Ethylbenzene	ug/L	20	19.9	100	76-123	
Toluene	ug/L	20	19.5	98	75-123	
Xylene (Total)	ug/L	60	61.3	102	76-123	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Dibromofluoromethane (S)	%			108	80-120	
Toluene-d8 (S)	%			102	80-120	

## QUALITY CONTROL DATA

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60129245

QC Batch:	WET/37297	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples: 60129245001, 60129245002, 60129245003, 60129245005, 60129245006, 60129245007, 60129245008			

METHOD BLANK:	1066329	Matrix:	Water
Associated Lab Samples: 60129245001, 60129245002, 60129245003, 60129245005, 60129245006, 60129245007, 60129245008			

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	5.0	09/25/12 13:47	

SAMPLE DUPLICATE: 1066330

Parameter	Units	60129235002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	603	607	1	17	

SAMPLE DUPLICATE: 1066331

Parameter	Units	60129245006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2150	2070	4	17	



### QUALITY CONTROL DATA

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60129245

QC Batch: WETA/21778 Analysis Method: EPA 300.0  
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions  
Associated Lab Samples: 60129245001, 60129245002, 60129245003, 60129245005, 60129245006, 60129245007, 60129245008

METHOD BLANK: 1068197 Matrix: Water  
Associated Lab Samples: 60129245001, 60129245002, 60129245003, 60129245005, 60129245006, 60129245007, 60129245008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	09/27/12 11:09	

LABORATORY CONTROL SAMPLE: 1068198

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	5	5.1	102	90-110	

MATRIX SPIKE SAMPLE: 1067378

Parameter	Units	60129245001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	1190	500	1640	90	61-119	

MATRIX SPIKE SAMPLE: 1067379

Parameter	Units	60129245002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	1610	1000	2560	95	61-119	

### QUALITY CONTROL DATA

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60129245

QC Batch: WETA/21683 Analysis Method: EPA 353.2  
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.  
Associated Lab Samples: 60129245001, 60129245002, 60129245003, 60129245005, 60129245006, 60129245007, 60129245008

METHOD BLANK: 1062938 Matrix: Water  
Associated Lab Samples: 60129245001, 60129245002, 60129245003, 60129245005, 60129245006, 60129245007, 60129245008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	09/19/12 15:31	

LABORATORY CONTROL SAMPLE: 1062939

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.8	110	90-110	

MATRIX SPIKE SAMPLE: 1062940

Parameter	Units	60129229001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.0	1.6	2.7	105	90-110	

MATRIX SPIKE SAMPLE: 1062942

Parameter	Units	60129242004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	17.8	16	32.7	94	90-110	

SAMPLE DUPLICATE: 1062941

Parameter	Units	60129240002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	9.2	9.1	1	15	

## QUALIFIERS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60129245

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### BATCH QUALIFIERS

Batch: MSV/48636

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/48733

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

### ANALYTE QUALIFIERS

pH Post-analysis pH measurement indicates insufficient VOA sample preservation.

u2 Colonies are too numerous to count. Actual result may be greater than reported.

u3 Analysis initiated more than 6 hours but less than 24 hours after sample collection.

## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60129245

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60129245001	GW-075034-091812-CM-MW-4	EPA 3010	MPRP/19623	EPA 6010	ICP/16167
60129245002	GW-075034-091812-CM-MW-7	EPA 3010	MPRP/19623	EPA 6010	ICP/16167
60129245003	GW-075034-091812-CM-MW-1	EPA 3010	MPRP/19623	EPA 6010	ICP/16167
60129245005	GW-075034-091812-CM-MW-2	EPA 3010	MPRP/19623	EPA 6010	ICP/16167
60129245006	GW-075034-091812-CM-MW-3	EPA 3010	MPRP/19623	EPA 6010	ICP/16167
60129245007	GW-075034-091812-CM-MW-5	EPA 3010	MPRP/19623	EPA 6010	ICP/16167
60129245008	GW-075034-091812-CM-MW-6	EPA 3010	MPRP/19623	EPA 6010	ICP/16167
60129245010	GW-075034-091812-CM-MW-4	SM 9215B	MBIO/10187	SM 9215B	MBIO/10188
60129245011	GW-075034-091812-CM-MW-7	SM 9215B	MBIO/10187	SM 9215B	MBIO/10188
60129245012	GW-075034-091812-CM-MW-1	SM 9215B	MBIO/10187	SM 9215B	MBIO/10188
60129245013	GW-075034-091812-CM-DUP	SM 9215B	MBIO/10187	SM 9215B	MBIO/10188
60129245014	GW-075034-091812-CM-MW-2	SM 9215B	MBIO/10187	SM 9215B	MBIO/10188
60129245015	GW-075034-091812-CM-MW-3	SM 9215B	MBIO/10187	SM 9215B	MBIO/10188
60129245016	GW-075034-091812-CM-MW-5	SM 9215B	MBIO/10187	SM 9215B	MBIO/10188
60129245017	GW-075034-091812-CM-MW-6	SM 9215B	MBIO/10187	SM 9215B	MBIO/10188
60129245009	TB-075034-091812-CM-001	EPA 5030B/8260	MSV/48733		
60129245001	GW-075034-091812-CM-MW-4	EPA 5030B/8260	MSV/48636		
60129245002	GW-075034-091812-CM-MW-7	EPA 5030B/8260	MSV/48636		
60129245003	GW-075034-091812-CM-MW-1	EPA 5030B/8260	MSV/48636		
60129245004	GW-075034-091812-CM-DUP	EPA 5030B/8260	MSV/48636		
60129245005	GW-075034-091812-CM-MW-2	EPA 5030B/8260	MSV/48636		
60129245006	GW-075034-091812-CM-MW-3	EPA 5030B/8260	MSV/48636		
60129245007	GW-075034-091812-CM-MW-5	EPA 5030B/8260	MSV/48636		
60129245008	GW-075034-091812-CM-MW-6	EPA 5030B/8260	MSV/48636		
60129245001	GW-075034-091812-CM-MW-4	SM 2540C	WET/37297		
60129245002	GW-075034-091812-CM-MW-7	SM 2540C	WET/37297		
60129245003	GW-075034-091812-CM-MW-1	SM 2540C	WET/37297		
60129245005	GW-075034-091812-CM-MW-2	SM 2540C	WET/37297		
60129245006	GW-075034-091812-CM-MW-3	SM 2540C	WET/37297		
60129245007	GW-075034-091812-CM-MW-5	SM 2540C	WET/37297		
60129245008	GW-075034-091812-CM-MW-6	SM 2540C	WET/37297		
60129245001	GW-075034-091812-CM-MW-4	EPA 300.0	WETA/21778		
60129245002	GW-075034-091812-CM-MW-7	EPA 300.0	WETA/21778		
60129245003	GW-075034-091812-CM-MW-1	EPA 300.0	WETA/21778		
60129245005	GW-075034-091812-CM-MW-2	EPA 300.0	WETA/21778		
60129245006	GW-075034-091812-CM-MW-3	EPA 300.0	WETA/21778		
60129245007	GW-075034-091812-CM-MW-5	EPA 300.0	WETA/21778		
60129245008	GW-075034-091812-CM-MW-6	EPA 300.0	WETA/21778		
60129245001	GW-075034-091812-CM-MW-4	EPA 353.2	WETA/21683		
60129245002	GW-075034-091812-CM-MW-7	EPA 353.2	WETA/21683		
60129245003	GW-075034-091812-CM-MW-1	EPA 353.2	WETA/21683		
60129245005	GW-075034-091812-CM-MW-2	EPA 353.2	WETA/21683		
60129245006	GW-075034-091812-CM-MW-3	EPA 353.2	WETA/21683		
60129245007	GW-075034-091812-CM-MW-5	EPA 353.2	WETA/21683		
60129245008	GW-075034-091812-CM-MW-6	EPA 353.2	WETA/21683		



# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

## Section A Required Client Information:

Company:	COP CRA NM	Report To:	Christine Mathews	Attention:	ENFOS
Address:	6121 Indian School Rd NE, Ste 200	Copy To:	Kelly Blanchard, Angela Bown	Company Name:	
	Albuquerque, NM 87110	Purchase Order No.:	4517146303	Address:	
Email To:	cmathews@craworld.com	Project Name:	San Juan 29-7 Unit 37 Quarterly GW	Pace Quote Reference:	
Phone:	(505)884-0672	Project Number:	75034	Pace Project Manager:	Alice Flanagan
Requested Due Date(TAT):	standard			Pace Profile #:	

## Section B Required Project Information:

Valid Matrix Codes	MATRIX CODE	DRINKING WATER	DW	WASTE WATER	WW	WASTE PRODUCT	P	SOIL/SOLID	SL	CL	WP	AR	OT	TS
Sample ID (A-Z, 0-9, /, -)														
Sample IDs MUST BE UNIQUE														

## Section C Invoices Information:

REGULATORY AGENCY	NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER <input type="checkbox"/>
Site Location	NM
STATE:	

ITEM #	Section D Required Client Information	Valid Matrix Codes	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Y/N	Requested Analysis Filtered (Y/N)						Pace Project No./ Lab I.D.
					COMPOSITE START	COMPOSITE END					6010 Dissolved Mn & Se	8260 BTEX	300.0 Sulfate	300.0/353.2 Nitrate	HPC by 9215	Total Dissolved Solids	
1	511-075034-091812-01-MW-4	DRINKING WATER	DW	WT G	9/18/12	1245		7	X	X	X	X	X	X	X	X	30694
2	511-075034-091812-01-MW-7	WASTE WATER	WW	WT G	9/18/12	1300		7	X	X	X	X	X	X	X	X	30694
3	511-075034-091812-01-MW-1	WASTE WATER	WW	WT G	9/18/12	1310		7	X	X	X	X	X	X	X	X	30694
4	511-075034-091812-01-MW-2	WASTE WATER	WW	WT G	9/18/12	1320		7	X	X	X	X	X	X	X	X	30694
5	511-075034-091812-01-MW-3	WASTE WATER	WW	WT G	9/18/12	1325		7	X	X	X	X	X	X	X	X	30694
6	511-075034-091812-01-MW-4	WASTE WATER	WW	WT G	9/18/12	1345		7	X	X	X	X	X	X	X	X	30694
7	511-075034-091812-01-MW-5	WASTE WATER	WW	WT G	9/18/12	1415		7	X	X	X	X	X	X	X	X	30694
8	511-075034-091812-01-MW-6	WASTE WATER	WW	WT G	9/18/12	1420		7	X	X	X	X	X	X	X	X	30694
9	511-075034-091812-01-MW-001	WASTE WATER	WW	WT G	9/18/12	1600		3	X	X	X	X	X	X	X	X	30694
10																	
11																	
12																	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Return HPC directly to Frontenac Lab	Christine Mathews / CRA	9/18/12	1630	E. Breckert	9/19/12	1300	Y Y Y Y
808 West Mckay							
Frontenac, KS 66763							
Temp in °C	Received on	Cooler (Y/N)	Custody Sealed	Samples Intact			

**Signature Mathews**  
DATE SIGNED (MM/DD/YY): 09/18/12  
PRINT NAME OF SAMPLER: Christine Mathews  
SIGNATURE OF SAMPLER: [Signature]  
SAMPLER NAME AND SIGNATURE: Christine Mathews  
PRESERVED SAMPLES. ALL HAD LEAKED OUT. PLEASE PLAN AS UNPRESERVED 7DAY HOLD  
IMPORTANT Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days  
F-FALL-O-020rev 08, 12-Oct-2007



### Sample Condition Upon Receipt – ESI Tech Specs

Client Name: COP- CRA NM

Project #: 60129245

Courier: Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Tracking #: 800695270927

Pace Shipping Label Used? Yes ☐ No ☒

Optional

Proj Due Date: 6/1/01

Proj Name:

Custody Seal on Cooler/Box Present: Yes ☒ No ☐ Seals intact: Yes ☒ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☐ None ☐ Other ☒ Ziploc

Thermometer Used: T-191 / T-194

Type of Ice: Wet Blue ☐ None ☐ Samples received on ice, cooling process has begun.  
(circle one)

Cooler Temperature: 2-4

Date and initials of person examining contents: 9/19/12 AS

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6. <u>NO<sup>3</sup></u>
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	61W-075034-071812-cm-Dup only
-Includes date/time/ID/analyses Matrix: <u>WT</u>		13. <u>Received 3 Data, no unpres. and no metals</u>
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Initial when completed
Trip Blank present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Lot # of added preservative
Pace Trip Blank lot # (if purchased): <u>080612-3</u>		15.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State: <u>NC</u>

Client Notification/ Resolution:

Copy COC to Client? Y / N

Field Data Required? Y / N

Person Contacted:

Date/Time:

Comments/ Resolution: per client - Dup sample for VOC BTEX only

Temp Log: Record start and finish times when unpacking cooler, if >20 min, recheck sample temps.

Start: Start:

End: End:

Temp: Temp:

Project Manager Review: AAF

Date: 9/19/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the NCDENR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers).





Copy 2 of 2

## Sample Condition Upon Receipt

Client Name: COPCRA NM Project # 00129245Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ OtherTracking #: \_\_\_\_\_ Pace Shipping Label Used? ☐ Yes ☐ NoCustody Seal on Cooler/Box Present: ☒ Yes ☐ No Seals intact: ☒ Yes ☐ No

Optional

Proj. Due Date:

Proj. Name:

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Foam ☒ None ☐ OtherThermometer Used: T-192Type of Ice: ☒ Wet ☐ Blue ☐ None☐ Samples on ice, cooling process has begunCooler Temperature: 24

Temperature should be above freezing to 6 C

Comments:

Date and Initials of person examining

contents: MB 9/19/12 1040

Chain of Custody present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1
Chain of Custody filled out	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2
Chain of Custody relinquished	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4
Samples arrived within holding time	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	5
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7
Correct volume	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8
Correct containers used	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9
Pace containers used	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11
Filtered volume received for dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12
Sample labels match COC	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13
Includes date/time/ID/analyses Matrix:	<u>WT</u>	
All containers needing preservation have been checked	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14
All containers needing preservation are found to be in compliance with EPA recommendation	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Exceptions VOA coliform TOC O&G WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed
Trip Blank present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	lot # of added preservative
Pace Trip Blank lot # (if purchased)		
Headspace in VOA vials (>6mm)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16
Project sampled in USDA Regulated Area	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State

Client Notification/ Resolution:

Copy COC to Client?

Y / N

Field Data Required?

Y / N

Person Contacted

Date/Time:

Comments/ Resolution:

Project Manager Review

Date

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Package 41 of 41

F-KS-C-003-Rev 05. 19 February 2010



Pace Analytical Services, Inc.  
9608 Loiret Blvd.  
Lenexa, KS 66219  
(913)599-5665

October 04, 2012

Christine Matthews  
CRA  
6121 Indian School Rd NE  
Suite 200  
Albuquerque, NM 87110

RE: Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60129584

Dear Christine Matthews:

Enclosed are the analytical results for sample(s) received by the laboratory on September 22, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alice Flanagan

alice.flanagan@pacelabs.com  
Project Manager

Enclosures

cc: Kelly Blanchard, COP Conestoga-Rovers & Associa  
Angela Bown, COP Conestoga-Rovers & Associa  
Cassie Brown, COP Conestoga-Rovers & Associa



## REPORT OF LABORATORY ANALYSIS

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Page 1 of 16

Pace Package 1 of 18



Pace Analytical Services, Inc.

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Lenexa, KS 66219

(913)599-5665

## CERTIFICATIONS

Project: SAN JUAN 29-7 UNIT 37 QUARTERL

Pace Project No.: 60129584

---

### Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219

A2LA Certification #: 2456.01

Arkansas Certification #: 12-019-0

Illinois Certification #: 002885

Iowa Certification #: 118

Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055

Nevada Certification #: KS000212008A

Oklahoma Certification #: 9205/9935

Texas Certification #: T104704407-12-3

Utah Certification #: KS000212012-2

## REPORT OF LABORATORY ANALYSIS

Page 2 of 16

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## SAMPLE SUMMARY

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60129584

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60129584001	GW-075034-092012-JP-MW-8	Water	09/20/12 10:30	09/22/12 08:50
60129584002	TB-075034-092112	Water	09/21/12 00:00	09/22/12 08:50

## REPORT OF LABORATORY ANALYSIS

Page 3 of 16

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Lenexa, KS 66219  
(913)599-5665

### SAMPLE ANALYTE COUNT

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60129584

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60129584001	GW-075034-092012-JP-MW-8	EPA 8260	PRG	9
		SM 2540C	FJF	1
		EPA 300.0	AJM	1
		EPA 353.2	JML	1
60129584002	TB-075034-092112	EPA 8260	PRG	9

### REPORT OF LABORATORY ANALYSIS

Page 4 of 16

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60129584

---

**Method:** EPA 8260  
**Description:** 8260 MSV UST, Water  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** October 04, 2012

**General Information:**

2 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/48823

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

Page 5 of 16

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60129584

---

**Method:** SM 2540C  
**Description:** 2540C Total Dissolved Solids  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** October 04, 2012

**General Information:**

1 sample was analyzed for SM 2540C. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

Page 6 of 16

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60129584

---

**Method:** EPA 300.0  
**Description:** 300.0 IC Anions 28 Days  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** October 04, 2012

**General Information:**

1 sample was analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

Page 7 of 16

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## PROJECT NARRATIVE

Project: SAN JUAN 29-7 UNIT 37 QUARTERL

Pace Project No.: 60129584

---

**Method:** EPA 353.2

**Description:** 353.2 Nitrogen, NO<sub>2</sub>/NO<sub>3</sub> unpres

**Client:** COP Conestoga-Rovers & Associates, Inc. NM

**Date:** October 04, 2012

**General Information:**

1 sample was analyzed for EPA 353.2. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (Including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

Page 8 of 16

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## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60129584

Sample: **GW-075034-092012-JP-MW-8** Lab ID: **60129584001** Collected: 09/20/12 10:30 Received: 09/22/12 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260									
Benzene	9.8	ug/L	1.0	0.098	1		10/01/12 03:15	71-43-2	
Ethylbenzene	1.5	ug/L	1.0	0.23	1		10/01/12 03:15	100-41-4	
Toluene	5.5	ug/L	1.0	0.15	1		10/01/12 03:15	108-88-3	
Xylene (Total)	34.2	ug/L	3.0	0.41	1		10/01/12 03:15	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	110	%	80-120		1		10/01/12 03:15	1868-53-7	
Toluene-d8 (S)	115	%	80-120		1		10/01/12 03:15	2037-26-5	
4-Bromofluorobenzene (S)	102	%	80-120		1		10/01/12 03:15	460-00-4	
1,2-Dichloroethane-d4 (S)	118	%	80-120		1		10/01/12 03:15	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		10/01/12 03:15		
<b>2540C Total Dissolved Solids</b> Analytical Method: SM 2540C									
Total Dissolved Solids	2960	mg/L	5.0	5.0	1		09/26/12 14:24		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0									
Sulfate	1130	mg/L	100	34.0	100		10/03/12 13:10	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2									
Nitrogen, Nitrate	21.8	mg/L	2.0	0.64	20		09/22/12 10:28		

## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37 QUARTERL

Pace Project No.: 60129584

Sample: TB-075034-092112 Lab ID: 60129584002 Collected: 09/21/12 00:00 Received: 09/22/12 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.098	1		10/01/12 03:29	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.23	1		10/01/12 03:29	100-41-4	
Toluene	ND	ug/L	1.0	0.15	1		10/01/12 03:29	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.41	1		10/01/12 03:29	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	113	%	80-120		1		10/01/12 03:29	1868-53-7	
Toluene-d8 (S)	104	%	80-120		1		10/01/12 03:29	2037-26-5	
4-Bromofluorobenzene (S)	97	%	80-120		1		10/01/12 03:29	460-00-4	
1,2-Dichloroethane-d4 (S)	118	%	80-120		1		10/01/12 03:29	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		10/01/12 03:29		

## QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60129584

QC Batch: MSV/48823 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER  
Associated Lab Samples: 60129584001, 60129584002

METHOD BLANK: 1069198 Matrix: Water

Associated Lab Samples: 60129584001, 60129584002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	10/01/12 03:00	
Ethylbenzene	ug/L	ND	1.0	10/01/12 03:00	
Toluene	ug/L	ND	1.0	10/01/12 03:00	
Xylene (Total)	ug/L	ND	3.0	10/01/12 03:00	
1,2-Dichloroethane-d4 (S)	%	118	80-120	10/01/12 03:00	
4-Bromofluorobenzene (S)	%	98	80-120	10/01/12 03:00	
Dibromofluoromethane (S)	%	111	80-120	10/01/12 03:00	
Toluene-d8 (S)	%	105	80-120	10/01/12 03:00	

LABORATORY CONTROL SAMPLE: 1069199

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.8	94	74-123	
Ethylbenzene	ug/L	20	19.0	95	76-123	
Toluene	ug/L	20	18.4	92	75-123	
Xylene (Total)	ug/L	60	56.5	94	76-123	
1,2-Dichloroethane-d4 (S)	%			114	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Dibromofluoromethane (S)	%			112	80-120	
Toluene-d8 (S)	%			101	80-120	

### QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37 QUARTERL

Pace Project No.: 60129584

QC Batch:	WET/37332	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples:	60129584001		

METHOD BLANK: 1067517 Matrix: Water

Associated Lab Samples: 60129584001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	5.0	09/26/12 14:23	

SAMPLE DUPLICATE: 1067518

Parameter	Units	60129472001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	988	989	0	17	

SAMPLE DUPLICATE: 1067519

Parameter	Units	60129673004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1190	1200	1	17	

### QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60129584

QC Batch:	WETA/21858	Analysis Method:	EPA 300.0
QC Batch Method:	EPA 300.0	Analysis Description:	300.0 IC Anions
Associated Lab Samples:	60129584001		

METHOD BLANK: 1071943 Matrix: Water

Associated Lab Samples: 60129584001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	10/03/12 12:00	

LABORATORY CONTROL SAMPLE: 1071944

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	5	4.8	97	90-110	

MATRIX SPIKE SAMPLE: 1071238

Parameter	Units	60129584001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	1130	500	1560	87	61-119	



### QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37 QUARTERL

Pace Project No.: 60129584

QC Batch: WETA/21728

Analysis Method: EPA 353.2

QC Batch Method: EPA 353.2

Analysis Description: 353.2 Nitrate + Nitrite, Unpres.

Associated Lab Samples: 60129584001

METHOD BLANK: 1065507

Matrix: Water

Associated Lab Samples: 60129584001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	09/22/12 10:22	

LABORATORY CONTROL SAMPLE: 1065508

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.7	109	90-110	

MATRIX SPIKE SAMPLE: 1065509

Parameter	Units	60129584001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	21.8	32	55.5	105	90-110	

## QUALIFIERS

Project: SAN JUAN 29-7 UNIT 37 QUARTERL  
Pace Project No.: 60129584

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### BATCH QUALIFIERS

Batch: MSV/48823

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SAN JUAN 29-7 UNIT 37 QUARTERL

Pace Project No.: 60129584

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60129584001	GW-075034-092012-JP-MW-8	EPA 8260	MSV/48823		
60129584002	TB-075034-092112	EPA 8260	MSV/48823		
60129584001	GW-075034-092012-JP-MW-8	SM 2540C	WET/37332		
60129584001	GW-075034-092012-JP-MW-8	EPA 300.0	WETA/21858		
60129584001	GW-075034-092012-JP-MW-8	EPA 353.2	WETA/21728		





### Sample Condition Upon Receipt

Client Name: CRA NM

Project # 60129584

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #: 899390016595

Pace Shipping Label Used? ☐ Yes ☒ No

Custody Seal on Cooler/Box Present: ☒ Yes ☐ No Seals intact: ☒ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☒ Other 2PLC

Thermometer Used: T-191 / T-194

Type of Ice: ☒ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 3.0

Temperature should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: 9-22-12 NA

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6. <u>NO3</u>
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
-Includes date/time/ID/analyses Matrix: <u>WT</u>		
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Exceptions: <u>VOA</u> , coliform, TOC, O&G, WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed _____ Lot # of added preservative _____
Trip Blank present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15.
Pace Trip Blank lot # (if purchased): <u>080612-3</u>		
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State: _____ <u>th</u>

Client Notification/ Resolution:

Copy COC to Client?

Y / N

Field Data Required?

Y / N

Person Contacted: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Project Manager Review: AAF

Date: 9/24/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

January 23, 2013

Christine Matthews  
CRA  
6121 Indian School Rd NE  
Suite 200  
Albuquerque, NM 87110

RE: Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

Dear Christine Matthews:

Enclosed are the analytical results for sample(s) received by the laboratory on January 09, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Alice Flanagan

alice.flanagan@pacelabs.com  
Project Manager

Enclosures

cc: Kelly Blanchard, COP Conestoga-Rovers & Associa  
Angela Bown, COP Conestoga-Rovers & Associa  
Cassie Brown, COP Conestoga-Rovers & Associa  
Jason Ploss, COP Conestoga-Rovers & Associa



## REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.  
9608 Loiret Blvd.  
Lenexa, KS 66219  
(913)599-5665

## CERTIFICATIONS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60136522

### Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219  
A2LA Certification #: 2456.01  
Arkansas Certification #: 12-019-0  
Illinois Certification #: 002885  
Iowa Certification #: 118  
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055  
Nevada Certification #: KS000212008A  
Oklahoma Certification #: 9205/9935  
Texas Certification #: T104704407-12-3  
Utah Certification #: KS000212012-2

### Southeast Kansas Certification IDs

808 West McKay, Frontenac, KS 66763  
Arkansas Certification #: 12-019-0  
Iowa Certification #: 118  
Kansas/NELAP Certification #: E-10116  
Louisiana Certification #: 03055

Oklahoma Certification #: 2012-051  
Texas Certification #: T104704407-12-3  
Utah Certification #: KS000212012-2  
Minnesota Certification #: 495004

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60136522001	GW-075034-010813-CM-MW-8	Water	01/08/13 11:00	01/09/13 08:25
60136522002	GW-075034-010813-CM-MW-2	Water	01/08/13 11:15	01/09/13 08:25
60136522003	GW-075034-010813-CM-MW-3	Water	01/08/13 11:30	01/09/13 08:25
60136522004	GW-075034-010813-CM-MW-6	Water	01/08/13 12:15	01/09/13 08:25
60136522005	GW-075034-010813-CM-MW-4	Water	01/08/13 12:30	01/09/13 08:25
60136522006	GW-075034-010813-CM-MW-1	Water	01/08/13 13:20	01/09/13 08:25
60136522007	GW-075034-010813-CM-MW-5	Water	01/08/13 13:30	01/09/13 08:25
60136522008	GW-075034-010813-CM-MW-7	Water	01/08/13 14:00	01/09/13 08:25
60136522009	GW-075030-010813-CM-DUP	Water	01/08/13 13:30	01/09/13 08:25
60136522010	TB-075034-01083-CM-001	Water	01/08/13 15:30	01/09/13 08:25
60136522011	GW-075034-010813-CM-MW-1	Water	01/08/13 13:20	01/09/13 10:20
60136522012	GW-075034-010813-CM-DUP	Water	01/08/13 13:30	01/09/13 10:20
60136522013	GW-075034-010813-CM-MW-5	Water	01/08/13 13:45	01/09/13 10:20
60136522014	GW-075034-010813-CM-MW-8	Water	01/08/13 13:55	01/09/13 10:20
60136522015	GW-075034-010813-CM-MW-7	Water	01/08/13 14:00	01/09/13 10:20
60136522016	GW-075034-010813-CM-MW-6	Water	01/08/13 14:15	01/09/13 10:20
60136522017	GW-075034-010813-CM-MW-2	Water	01/08/13 14:25	01/09/13 10:20
60136522018	GW-075034-010813-CM-MW-3	Water	01/08/13 14:30	01/09/13 10:20
60136522019	GW-075034-010813-CM-MW-4	Water	01/08/13 14:40	01/09/13 10:20

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60136522

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60136522001	GW-075034-010813-CM-MW-8	EPA 8260	JTK, PRG	9
		SM 2540C	SEL	1
		EPA 300.0	AJM	1
		EPA 353.2	OL	1
60136522002	GW-075034-010813-CM-MW-2	EPA 6010	TDS	2
		EPA 8260	PRG	9
		SM 2540C	SEL	1
		EPA 300.0	AJM	1
60136522003	GW-075034-010813-CM-MW-3	EPA 353.2	OL	1
		EPA 6010	TDS	2
		EPA 8260	PRG	9
		SM 2540C	SEL	1
60136522004	GW-075034-010813-CM-MW-6	EPA 300.0	AJM	1
		EPA 353.2	OL	1
		EPA 6010	TDS	2
		EPA 8260	PRG	9
60136522005	GW-075034-010813-CM-MW-4	SM 2540C	SEL	1
		EPA 300.0	AJM	1
		EPA 353.2	OL	1
		EPA 6010	TDS	2
60136522006	GW-075034-010813-CM-MW-1	EPA 8260	PRG	9
		SM 2540C	SEL	1
		EPA 300.0	AJM	1
		EPA 353.2	JML	1
60136522007	GW-075034-010813-CM-MW-5	EPA 6010	TDS	2
		EPA 8260	PRG	9
		SM 2540C	SEL	1
		EPA 300.0	AJM	1
60136522008	GW-075034-010813-CM-MW-7	EPA 353.2	OL	1
		EPA 6010	TDS	2
		EPA 8260	PRG	9
		SM 2540C	SEL	1

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 300.0	AJM	1
		EPA 353.2	OL	1
60136522009	GW-075030-010813-CM-DUP	EPA 8260	JTK	9
60136522010	TB-075034-01083-CM-001	EPA 8260	JTK	9
60136522011	GW-075034-010813-CM-MW-1	SM 9215B	TDH	1
60136522012	GW-075034-010813-CM-DUP	SM 9215B	TDH	1
60136522013	GW-075034-010813-CM-MW-5	SM 9215B	TDH	1
60136522014	GW-075034-010813-CM-MW-8	SM 9215B	TDH	1
60136522015	GW-075034-010813-CM-MW-7	SM 9215B	TDH	1
60136522016	GW-075034-010813-CM-MW-6	SM 9215B	TDH	1
60136522017	GW-075034-010813-CM-MW-2	SM 9215B	TDH	1
60136522018	GW-075034-010813-CM-MW-3	SM 9215B	TDH	1
60136522019	GW-075034-010813-CM-MW-4	SM 9215B	TDH	1

### REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

---

**Method:** EPA 6010  
**Description:** 6010 MET ICP, Dissolved  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** January 23, 2013

**General Information:**

7 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

---

**Method:** SM 9215B  
**Description:** MBIO HPC (Drinking Water)  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** January 23, 2013

### General Information:

9 samples were analyzed for SM 9215B. All samples were received in acceptable condition with any exceptions noted below.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

u3: Analysis initiated more than 6 hours but less than 24 hours after sample collection.

- GW-075034-010813-CM-DUP (Lab ID: 60136522012)
- GW-075034-010813-CM-MW-1 (Lab ID: 60136522011)
- GW-075034-010813-CM-MW-2 (Lab ID: 60136522017)
- GW-075034-010813-CM-MW-3 (Lab ID: 60136522018)
- GW-075034-010813-CM-MW-4 (Lab ID: 60136522019)
- GW-075034-010813-CM-MW-5 (Lab ID: 60136522013)
- GW-075034-010813-CM-MW-6 (Lab ID: 60136522016)
- GW-075034-010813-CM-MW-7 (Lab ID: 60136522015)
- GW-075034-010813-CM-MW-8 (Lab ID: 60136522014)

### Sample Preparation:

The samples were prepared in accordance with SM 9215B with any exceptions noted below.

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

---

**Method:** EPA 8260  
**Description:** 8260 MSV UST, Water  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** January 23, 2013

### General Information:

10 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: MSV/51224

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 1124092)
- Toluene

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/51224

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/51235

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/51307

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

### Additional Comments:

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

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**Method:** SM 2540C  
**Description:** 2540C Total Dissolved Solids  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** January 23, 2013

### General Information:

8 samples were analyzed for SM 2540C. All samples were received in acceptable condition with any exceptions noted below.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

---

**Method:** EPA 300.0  
**Description:** 300.0 IC Anions 28 Days  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** January 23, 2013

**General Information:**

8 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

---

**Method:** EPA 353.2  
**Description:** 353.2 Nitrogen, NO<sub>2</sub>/NO<sub>3</sub> unpres  
**Client:** COP Conestoga-Rovers & Associates, Inc. NM  
**Date:** January 23, 2013

### General Information:

8 samples were analyzed for EPA 353.2. All samples were received in acceptable condition with any exceptions noted below.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/23142

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60136487005, 60136519003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1123625)
- Nitrogen, Nitrate

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

**Sample:** GW-075034-010813-CM-MW-8      **Lab ID:** 60136522001      **Collected:** 01/08/13 11:00      **Received:** 01/09/13 08:25      **Matrix:** Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b>									
Analytical Method: EPA 8260									
Benzene	36.9	ug/L	1.0	0.098	1		01/10/13 18:48	71-43-2	
Ethylbenzene	1.8	ug/L	1.0	0.23	1		01/10/13 18:48	100-41-4	
Toluene	19.9	ug/L	1.0	0.070	1		01/17/13 02:28	108-88-3	
Xylene (Total)	48.8	ug/L	3.0	0.41	1		01/10/13 18:48	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	101	%	80-120		1		01/10/13 18:48	1868-53-7	
Toluene-d8 (S)	106	%	80-120		1		01/10/13 18:48	2037-26-5	
4-Bromofluorobenzene (S)	103	%	80-120		1		01/10/13 18:48	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		01/10/13 18:48	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		01/10/13 18:48		
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C									
Total Dissolved Solids	2700	mg/L	5.0	5.0	1		01/15/13 13:59		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0									
Sulfate	1260	mg/L	100	5.9	100		01/14/13 20:16	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b>									
Analytical Method: EPA 353.2									
Nitrogen, Nitrate	30.4	mg/L	1.0		10		01/09/13 14:25		

## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

Sample: **GW-075034-010813-CM-MW-2** Lab ID: **60136522002** Collected: 01/08/13 11:15 Received: 01/09/13 08:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese, Dissolved	5.7	ug/L	5.0	0.60	1	01/11/13 13:10	01/18/13 09:34	7439-96-5	
Selenium, Dissolved	68.8	ug/L	15.0	2.7	1	01/11/13 13:10	01/18/13 09:34	7782-49-2	
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.098	1		01/10/13 19:03	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.23	1		01/10/13 19:03	100-41-4	
Toluene	ND	ug/L	1.0	0.15	1		01/10/13 19:03	108-88-3	L1
Xylene (Total)	ND	ug/L	3.0	0.41	1		01/10/13 19:03	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	102	%	80-120		1		01/10/13 19:03	1868-53-7	
Toluene-d8 (S)	103	%	80-120		1		01/10/13 19:03	2037-26-5	
4-Bromofluorobenzene (S)	100	%	80-120		1		01/10/13 19:03	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120		1		01/10/13 19:03	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		01/10/13 19:03		
<b>2540C Total Dissolved Solids</b> Analytical Method: SM 2540C									
Total Dissolved Solids	2590	mg/L	5.0	5.0	1		01/15/13 13:59		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0									
Sulfate	1230	mg/L	100	5.9	100		01/14/13 20:34	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2									
Nitrogen, Nitrate	41.8	mg/L	1.0		10		01/09/13 14:28		

## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60136522

Sample: **GW-075034-010813-CM-MW-3** Lab ID: **60136522003** Collected: 01/08/13 11:30 Received: 01/09/13 08:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese, Dissolved	<b>1620</b>	ug/L	5.0	0.60	1	01/11/13 13:10	01/18/13 09:39	7439-96-5	
Selenium, Dissolved	<b>67.3</b>	ug/L	15.0	2.7	1	01/11/13 13:10	01/18/13 09:39	7782-49-2	
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.098	1		01/10/13 19:17	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.23	1		01/10/13 19:17	100-41-4	
Toluene	ND	ug/L	1.0	0.15	1		01/10/13 19:17	108-88-3	L3
Xylene (Total)	ND	ug/L	3.0	0.41	1		01/10/13 19:17	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	103	%	80-120		1		01/10/13 19:17	1868-53-7	
Toluene-d8 (S)	105	%	80-120		1		01/10/13 19:17	2037-26-5	
4-Bromofluorobenzene (S)	101	%	80-120		1		01/10/13 19:17	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120		1		01/10/13 19:17	17060-07-0	
Preservation pH	<b>1.0</b>		1.0	0.10	1		01/10/13 19:17		
<b>2540C Total Dissolved Solids</b> Analytical Method: SM 2540C									
Total Dissolved Solids	<b>2240</b>	mg/L	5.0	5.0	1		01/15/13 13:59		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0									
Sulfate	<b>1140</b>	mg/L	100	5.9	100		01/14/13 20:52	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2									
Nitrogen, Nitrate	<b>24.6</b>	mg/L	1.0		10		01/09/13 14:59		

## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

**Sample:** GW-075034-010813-CM-MW-6 **Lab ID:** 60136522004 **Collected:** 01/08/13 12:15 **Received:** 01/09/13 08:25 **Matrix:** Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese, Dissolved	158	ug/L	5.0	0.60	1	01/11/13 13:10	01/18/13 09:41	7439-96-5	
Selenium, Dissolved	53.6	ug/L	15.0	2.7	1	01/11/13 13:10	01/18/13 09:41	7782-49-2	
<b>8260 MSV UST, Water</b>									
Analytical Method: EPA 8260									
Benzene	1.2	ug/L	1.0	0.098	1		01/10/13 19:31	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.23	1		01/10/13 19:31	100-41-4	
Toluene	ND	ug/L	1.0	0.15	1		01/10/13 19:31	108-88-3	L3
Xylene (Total)	ND	ug/L	3.0	0.41	1		01/10/13 19:31	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	103	%	80-120		1		01/10/13 19:31	1868-53-7	
Toluene-d8 (S)	105	%	80-120		1		01/10/13 19:31	2037-26-5	
4-Bromofluorobenzene (S)	100	%	80-120		1		01/10/13 19:31	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		01/10/13 19:31	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		01/10/13 19:31		
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C									
Total Dissolved Solids	1980	mg/L	5.0	5.0	1		01/15/13 13:59		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0									
Sulfate	978	mg/L	100	5.9	100		01/14/13 21:09	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b>									
Analytical Method: EPA 353.2									
Nitrogen, Nitrate	25.6	mg/L	1.0		10		01/09/13 14:35		

## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

Sample: **GW-075034-010813-CM-MW-4** Lab ID: **60136522005** Collected: 01/08/13 12:30 Received: 01/09/13 08:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese, Dissolved	28.9	ug/L	5.0	0.60	1	01/11/13 13:10	01/18/13 09:43	7439-96-5	
Selenium, Dissolved	38.6	ug/L	15.0	2.7	1	01/11/13 13:10	01/18/13 09:43	7782-49-2	
<b>8260 MSV UST, Water</b>									
Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.098	1		01/10/13 19:46	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.23	1		01/10/13 19:46	100-41-4	
Toluene	ND	ug/L	1.0	0.15	1		01/10/13 19:46	108-88-3	L3
Xylene (Total)	ND	ug/L	3.0	0.41	1		01/10/13 19:46	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	98	%	80-120		1		01/10/13 19:46	1868-53-7	
Toluene-d8 (S)	103	%	80-120		1		01/10/13 19:46	2037-26-5	
4-Bromofluorobenzene (S)	100	%	80-120		1		01/10/13 19:46	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		01/10/13 19:46	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		01/10/13 19:46		
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C									
Total Dissolved Solids	2230	mg/L	5.0	5.0	1		01/15/13 13:59		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0									
Sulfate	1240	mg/L	100	5.9	100		01/14/13 21:27	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b>									
Analytical Method: EPA 353.2									
Nitrogen, Nitrate	9.3	mg/L	0.20		2		01/09/13 15:01		



## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60136522

Sample: **GW-075034-010813-CM-MW-1** Lab ID: **60136522006** Collected: 01/08/13 13:20 Received: 01/09/13 08:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese, Dissolved	1100	ug/L	5.0	0.60	1	01/11/13 13:10	01/18/13 09:45	7439-96-5	
Selenium, Dissolved	56.8	ug/L	15.0	2.7	1	01/11/13 13:10	01/18/13 09:45	7782-49-2	
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.098	1		01/10/13 20:00	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.23	1		01/10/13 20:00	100-41-4	
Toluene	ND	ug/L	1.0	0.15	1		01/10/13 20:00	108-88-3	L3
Xylene (Total)	ND	ug/L	3.0	0.41	1		01/10/13 20:00	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	102	%	80-120		1		01/10/13 20:00	1868-53-7	
Toluene-d8 (S)	107	%	80-120		1		01/10/13 20:00	2037-26-5	
4-Bromofluorobenzene (S)	100	%	80-120		1		01/10/13 20:00	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		01/10/13 20:00	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		01/10/13 20:00		
<b>2540C Total Dissolved Solids</b> Analytical Method: SM 2540C									
Total Dissolved Solids	2180	mg/L	5.0	5.0	1		01/15/13 14:00		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0									
Sulfate	1150	mg/L	100	5.9	100		01/14/13 22:20	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2									
Nitrogen, Nitrate	25.3	mg/L	2.0		20		01/10/13 11:23		

## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60136522

Sample: **GW-075034-010813-CM-MW-5** Lab ID: **60136522007** Collected: 01/08/13 13:30 Received: 01/09/13 08:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Manganese, Dissolved	580	ug/L	5.0	0.60	1	01/11/13 13:10	01/18/13 09:47	7439-96-5	
Selenium, Dissolved	ND	ug/L	15.0	2.7	1	01/11/13 13:10	01/18/13 09:47	7782-49-2	
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.098	1		01/10/13 20:15	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.23	1		01/10/13 20:15	100-41-4	
Toluene	ND	ug/L	1.0	0.15	1		01/10/13 20:15	108-88-3	L3
Xylene (Total)	ND	ug/L	3.0	0.41	1		01/10/13 20:15	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	102	%	80-120		1		01/10/13 20:15	1868-53-7	
Toluene-d8 (S)	104	%	80-120		1		01/10/13 20:15	2037-26-5	
4-Bromofluorobenzene (S)	103	%	80-120		1		01/10/13 20:15	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		01/10/13 20:15	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		01/10/13 20:15		
<b>2540C Total Dissolved Solids</b> Analytical Method: SM 2540C									
Total Dissolved Solids	2950	mg/L	5.0	5.0	1		01/15/13 14:00		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0									
Sulfate	1710	mg/L	100	5.9	100		01/14/13 22:38	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2									
Nitrogen, Nitrate	ND	mg/L	0.10		1		01/09/13 14:52		

## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60136522

**Sample:** GW-075034-010813-CM-MW-7      **Lab ID:** 60136522008      Collected: 01/08/13 14:00      Received: 01/09/13 08:25      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b> Analytical Method: EPA 6010      Preparation Method: EPA 3010									
Manganese, Dissolved	9.3	ug/L	5.0	0.60	1	01/11/13 13:10	01/18/13 09:53	7439-96-5	
Selenium, Dissolved	16.4	ug/L	15.0	2.7	1	01/11/13 13:10	01/18/13 09:53	7782-49-2	
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.098	1		01/10/13 20:29	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.23	1		01/10/13 20:29	100-41-4	
Toluene	ND	ug/L	1.0	0.15	1		01/10/13 20:29	108-88-3	L3
Xylene (Total)	ND	ug/L	3.0	0.41	1		01/10/13 20:29	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	106	%	80-120		1		01/10/13 20:29	1868-53-7	
Toluene-d8 (S)	105	%	80-120		1		01/10/13 20:29	2037-26-5	
4-Bromofluorobenzene (S)	102	%	80-120		1		01/10/13 20:29	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/10/13 20:29	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		01/10/13 20:29		
<b>2540C Total Dissolved Solids</b> Analytical Method: SM 2540C									
Total Dissolved Solids	3400	mg/L	5.0	5.0	1		01/15/13 14:00		
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0									
Sulfate	1770	mg/L	100	5.9	100		01/14/13 22:55	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 unpres</b> Analytical Method: EPA 353.2									
Nitrogen, Nitrate	1.3	mg/L	0.20		2		01/09/13 15:18		

## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60136522

Sample: **GW-075030-010813-CM-DUP** Lab ID: **60136522009** Collected: 01/08/13 13:30 Received: 01/09/13 08:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b>									
Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.12	1		01/10/13 22:01	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.060	1		01/10/13 22:01	100-41-4	
Toluene	ND	ug/L	1.0	0.054	1		01/10/13 22:01	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.67	1		01/10/13 22:01	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	108 %		80-120		1		01/10/13 22:01	1868-53-7	
Toluene-d8 (S)	96 %		80-120		1		01/10/13 22:01	2037-26-5	
4-Bromofluorobenzene (S)	97 %		80-120		1		01/10/13 22:01	460-00-4	
1,2-Dichloroethane-d4 (S)	106 %		80-120		1		01/10/13 22:01	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		01/10/13 22:01		

## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

**Sample:** TB-075034-01083-CM-001    **Lab ID:** 60136522010    Collected: 01/08/13 15:30    Received: 01/09/13 08:25    Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST, Water</b> Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.12	1		01/10/13 22:17	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.060	1		01/10/13 22:17	100-41-4	
Toluene	ND	ug/L	1.0	0.054	1		01/10/13 22:17	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.67	1		01/10/13 22:17	1330-20-7	
<b>Surrogates</b>									
Dibromofluoromethane (S)	106	%	80-120		1		01/10/13 22:17	1868-53-7	
Toluene-d8 (S)	96	%	80-120		1		01/10/13 22:17	2037-26-5	
4-Bromofluorobenzene (S)	101	%	80-120		1		01/10/13 22:17	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	80-120		1		01/10/13 22:17	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		01/10/13 22:17		



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## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60136522

Sample: **GW-075034-010813-CM-MW-1** Lab ID: **60136522011** Collected: 01/08/13 13:20 Received: 01/09/13 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>MBIO HPC (Drinking Water)</b>									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	<b>76000</b>	CFU/mL	1.0	1.0	1	01/09/13 13:00	01/11/13 12:00		u3



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## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60136522

Sample: **GW-075034-010813-CM-DUP** Lab ID: **60136522012** Collected: 01/08/13 13:30 Received: 01/09/13 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>MBIO HPC (Drinking Water)</b>									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	<b>142000</b>	CFU/mL	1.0	1.0	1	01/09/13 13:00	01/11/13 12:00		u3





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## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60136522

Sample: **GW-075034-010813-CM-MW-5** Lab ID: **60136522013** Collected: 01/08/13 13:45 Received: 01/09/13 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
MBIO HPC (Drinking Water)									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	102000	CFU/mL	1.0	1.0	1	01/09/13 13:00	01/11/13 12:00		u3

## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

**Sample:** GW-075034-010813-CM-MW-8 **Lab ID:** 60136522014 **Collected:** 01/08/13 13:55 **Received:** 01/09/13 10:20 **Matrix:** Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>MBIO HPC (Drinking Water)</b>									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	<b>222000</b>	CFU/mL	1.0	1.0	1	01/09/13 13:00	01/11/13 12:00		u3



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## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60136522

Sample: **GW-075034-010813-CM-MW-7** Lab ID: **60136522015** Collected: 01/08/13 14:00 Received: 01/09/13 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>MBIO HPC (Drinking Water)</b>									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	<b>145000</b>	CFU/mL	1.0	1.0	1	01/09/13 13:00	01/11/13 12:00		u3



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## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

Sample: **GW-075034-010813-CM-MW-6** Lab ID: **60136522016** Collected: 01/08/13 14:15 Received: 01/09/13 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>MBIO HPC (Drinking Water)</b>									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	<b>1910000</b>	CFU/mL	1.0	1.0	1	01/09/13 13:00	01/11/13 12:00		u3



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## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60136522

Sample: **GW-075034-010813-CM-MW-2** Lab ID: **60136522017** Collected: 01/08/13 14:25 Received: 01/09/13 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>MBIO HPC (Drinking Water)</b>									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	<b>29000</b>	CFU/mL	1.0	1.0	1	01/09/13 13:00	01/11/13 12:00		u3



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## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

Sample: **GW-075034-010813-CM-MW-3** Lab ID: **60136522018** Collected: 01/08/13 14:30 Received: 01/09/13 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>MBIO HPC (Drinking Water)</b>									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	<b>51000</b>	CFU/mL	1.0	1.0	1	01/09/13 13:00	01/11/13 12:00		u3



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## ANALYTICAL RESULTS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60136522

Sample: **GW-075034-010813-CM-MW-4** Lab ID: **60136522019** Collected: 01/08/13 14:40 Received: 01/09/13 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
MBIO HPC (Drinking Water)									
Analytical Method: SM 9215B Preparation Method: SM 9215B									
Heterotrophic Plate Count	202000	CFU/mL	1.0	1.0	1	01/09/13 13:00	01/11/13 12:00		u3

Date: 01/23/2013 08:33 AM

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

QC Batch:	MBIO/10717	Analysis Method:	SM 9215B
QC Batch Method:	SM 9215B	Analysis Description:	9215B Heterotrophic Plate Count
Associated Lab Samples:	60136522011, 60136522012, 60136522013, 60136522014, 60136522015, 60136522016, 60136522017, 60136522018, 60136522019		

METHOD BLANK:	1126218	Matrix:	Solid
Associated Lab Samples:	60136522011, 60136522012, 60136522013, 60136522014, 60136522015, 60136522016, 60136522017, 60136522018, 60136522019		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Heterotrophic Plate Count	CFU/mL	<1	1.0	01/11/13 12:00	

SAMPLE DUPLICATE: 1126219

Parameter	Units	60136522011 Result	Dup Result	RPD	Max RPD	Qualifiers
Heterotrophic Plate Count	CFU/mL	76000	73000			

## QUALITY CONTROL DATA

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60136522

QC Batch: MPRP/21154 Analysis Method: EPA 6010  
QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved  
Associated Lab Samples: 60136522002, 60136522003, 60136522004, 60136522005, 60136522006, 60136522007, 60136522008

METHOD BLANK: 1125008

Matrix: Water

Associated Lab Samples: 60136522002, 60136522003, 60136522004, 60136522005, 60136522006, 60136522007, 60136522008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Manganese, Dissolved	ug/L	ND	5.0	01/18/13 09:30	
Selenium, Dissolved	ug/L	ND	15.0	01/18/13 09:30	

LABORATORY CONTROL SAMPLE: 1125009

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Manganese, Dissolved	ug/L	1000	973	97	80-120	
Selenium, Dissolved	ug/L	1000	988	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1125010

1125011

Parameter	Units	60136522002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Manganese, Dissolved	ug/L	5.7	1000	1000	990	992	98	99	75-125	0	20
Selenium, Dissolved	ug/L	68.8	1000	1000	1130	1100	106	103	75-125	3	20

### QUALITY CONTROL DATA

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

QC Batch: MSV/51224 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER  
Associated Lab Samples: 60136522001, 60136522002, 60136522003, 60136522004, 60136522005, 60136522006, 60136522007, 60136522008

METHOD BLANK: 1124091 Matrix: Water  
Associated Lab Samples: 60136522001, 60136522002, 60136522003, 60136522004, 60136522005, 60136522006, 60136522007, 60136522008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	01/10/13 15:55	
Ethylbenzene	ug/L	ND	1.0	01/10/13 15:55	
Toluene	ug/L	ND	1.0	01/10/13 15:55	
Xylene (Total)	ug/L	ND	3.0	01/10/13 15:55	
1,2-Dichloroethane-d4 (S)	%	100	80-120	01/10/13 15:55	
4-Bromofluorobenzene (S)	%	99	80-120	01/10/13 15:55	
Dibromofluoromethane (S)	%	100	80-120	01/10/13 15:55	
Toluene-d8 (S)	%	105	80-120	01/10/13 15:55	

LABORATORY CONTROL SAMPLE: 1124092

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	22.0	110	74-123	
Ethylbenzene	ug/L	20	24.1	120	76-123	
Toluene	ug/L	20	25.7	128	75-123	L0
Xylene (Total)	ug/L	60	71.7	119	76-123	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			104	80-120	
Dibromofluoromethane (S)	%			102	80-120	
Toluene-d8 (S)	%			106	80-120	

## QUALITY CONTROL DATA

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60136522

QC Batch: MSV/51235

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV UST-WATER

Associated Lab Samples: 60136522009, 60136522010

METHOD BLANK: 1124497

Matrix: Water

Associated Lab Samples: 60136522009, 60136522010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	01/10/13 19:08	
Ethylbenzene	ug/L	ND	1.0	01/10/13 19:08	
Toluene	ug/L	ND	1.0	01/10/13 19:08	
Xylene (Total)	ug/L	ND	3.0	01/10/13 19:08	
1,2-Dichloroethane-d4 (S)	%	105	80-120	01/10/13 19:08	
4-Bromofluorobenzene (S)	%	98	80-120	01/10/13 19:08	
Dibromofluoromethane (S)	%	104	80-120	01/10/13 19:08	
Toluene-d8 (S)	%	100	80-120	01/10/13 19:08	

LABORATORY CONTROL SAMPLE: 1124498

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	22.1	111	74-123	
Ethylbenzene	ug/L	20	21.5	107	76-123	
Toluene	ug/L	20	21.1	105	75-123	
Xylene (Total)	ug/L	60	62.9	105	76-123	
1,2-Dichloroethane-d4 (S)	%			110	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Dibromofluoromethane (S)	%			106	80-120	
Toluene-d8 (S)	%			99	80-120	

### QUALITY CONTROL DATA

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

QC Batch:	MSV/51307	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV UST-WATER
Associated Lab Samples:	60136522001		

METHOD BLANK: 1126950 Matrix: Water

Associated Lab Samples: 60136522001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Toluene	ug/L	ND	1.0	01/17/13 00:11	
1,2-Dichloroethane-d4 (S)	%	96	80-120	01/17/13 00:11	
4-Bromofluorobenzene (S)	%	98	80-120	01/17/13 00:11	
Dibromofluoromethane (S)	%	94	80-120	01/17/13 00:11	
Toluene-d8 (S)	%	110	80-120	01/17/13 00:11	

LABORATORY CONTROL SAMPLE: 1126951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	20	24.0	120	75-123	
1,2-Dichloroethane-d4 (S)	%			95	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Dibromofluoromethane (S)	%			94	80-120	
Toluene-d8 (S)	%			111	80-120	

## QUALITY CONTROL DATA

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60136522

QC Batch: WET/39272 Analysis Method: SM 2540C  
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids  
Associated Lab Samples: 60136522001, 60136522002, 60136522003, 60136522004, 60136522005, 60136522006, 60136522007, 60136522008

METHOD BLANK: 1126373 Matrix: Water  
Associated Lab Samples: 60136522001, 60136522002, 60136522003, 60136522004, 60136522005, 60136522006, 60136522007, 60136522008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	5.0	01/15/13 13:56	

SAMPLE DUPLICATE: 1126374

Parameter	Units	60136514001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	550	565	3	17	

SAMPLE DUPLICATE: 1126375

Parameter	Units	60136519002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	830	840	1	17	

## QUALITY CONTROL DATA

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60136522

QC Batch: WETA/23193 Analysis Method: EPA 300.0  
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions  
Associated Lab Samples: 60136522001, 60136522002, 60136522003, 60136522004, 60136522005, 60136522006, 60136522007, 60136522008

METHOD BLANK: 1125950 Matrix: Water  
Associated Lab Samples: 60136522001, 60136522002, 60136522003, 60136522004, 60136522005, 60136522006, 60136522007, 60136522008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	01/14/13 12:54	

LABORATORY CONTROL SAMPLE: 1125951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	5	4.9	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1125952 1125953

Parameter	Units	60136723001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Sulfate	mg/L	396	250	250	569	631	69	94	61-119	10	10

MATRIX SPIKE SAMPLE: 1125954

Parameter	Units	60136560001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	84.8	250	306	89	61-119	

### QUALITY CONTROL DATA

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

QC Batch: WETA/23142 Analysis Method: EPA 353.2  
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.  
Associated Lab Samples: 60136522001, 60136522002, 60136522003

METHOD BLANK: 1123623 Matrix: Water  
Associated Lab Samples: 60136522001, 60136522002, 60136522003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	01/09/13 14:08	

LABORATORY CONTROL SAMPLE: 1123624

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.6	97	90-110	

MATRIX SPIKE SAMPLE: 1123625

Parameter	Units	60136487005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	9.1	3.2	10.1	29	90-110	M1

MATRIX SPIKE SAMPLE: 1123627

Parameter	Units	60136519003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.0	1.6	2.6	99	90-110	

SAMPLE DUPLICATE: 1123768

Parameter	Units	60136517001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.6	2	15	



### QUALITY CONTROL DATA

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

QC Batch: WETA/23143 Analysis Method: EPA 353.2  
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.  
Associated Lab Samples: 60136522004, 60136522005, 60136522007, 60136522008

METHOD BLANK: 1123629 Matrix: Water  
Associated Lab Samples: 60136522004, 60136522005, 60136522007, 60136522008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	01/09/13 14:33	

LABORATORY CONTROL SAMPLE: 1123630

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.6	99	90-110	

MATRIX SPIKE SAMPLE: 1123631

Parameter	Units	60136522004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	25.6	16	42.7	107	90-110	

MATRIX SPIKE SAMPLE: 1123633

Parameter	Units	60136520006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	ND	1.6	1.8	110	90-110	

SAMPLE DUPLICATE: 1123632

Parameter	Units	60136515001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	3.6	3.6	1	15	

## QUALITY CONTROL DATA

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60136522

QC Batch: WETA/23153

Analysis Method: EPA 353.2

QC Batch Method: EPA 353.2

Analysis Description: 353.2 Nitrate + Nitrite, Unpres.

Associated Lab Samples: 60136522006

METHOD BLANK: 1124033

Matrix: Water

Associated Lab Samples: 60136522006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	01/10/13 11:20	

LABORATORY CONTROL SAMPLE: 1124034

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.7	103	90-110	

MATRIX SPIKE SAMPLE: 1124036

Parameter	Units	60136581006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	29.4	16	43.5	88	90-110	M6

MATRIX SPIKE SAMPLE: 1124207

Parameter	Units	60136619001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	0.29	1.6	1.9	103	90-110	

SAMPLE DUPLICATE: 1124035

Parameter	Units	60136587001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.78	0.78	1	15	

## QUALIFIERS

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### BATCH QUALIFIERS

Batch: MSV/51224

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/51235

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/51307

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

### ANALYTE QUALIFIERS

L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M6	Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.
u3	Analysis initiated more than 6 hours but less than 24 hours after sample collection.

## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 075034 SAN JUAN 29-7 UNIT 37 Q

Pace Project No.: 60136522

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60136522002	GW-075034-010813-CM-MW-2	EPA 3010	MPRP/21154	EPA 6010	ICP/17087
60136522003	GW-075034-010813-CM-MW-3	EPA 3010	MPRP/21154	EPA 6010	ICP/17087
60136522004	GW-075034-010813-CM-MW-6	EPA 3010	MPRP/21154	EPA 6010	ICP/17087
60136522005	GW-075034-010813-CM-MW-4	EPA 3010	MPRP/21154	EPA 6010	ICP/17087
60136522006	GW-075034-010813-CM-MW-1	EPA 3010	MPRP/21154	EPA 6010	ICP/17087
60136522007	GW-075034-010813-CM-MW-5	EPA 3010	MPRP/21154	EPA 6010	ICP/17087
60136522008	GW-075034-010813-CM-MW-7	EPA 3010	MPRP/21154	EPA 6010	ICP/17087
60136522011	GW-075034-010813-CM-MW-1	SM 9215B	MBIO/10717	SM 9215B	MBIO/10718
60136522012	GW-075034-010813-CM-DUP	SM 9215B	MBIO/10717	SM 9215B	MBIO/10718
60136522013	GW-075034-010813-CM-MW-5	SM 9215B	MBIO/10717	SM 9215B	MBIO/10718
60136522014	GW-075034-010813-CM-MW-8	SM 9215B	MBIO/10717	SM 9215B	MBIO/10718
60136522015	GW-075034-010813-CM-MW-7	SM 9215B	MBIO/10717	SM 9215B	MBIO/10718
60136522016	GW-075034-010813-CM-MW-6	SM 9215B	MBIO/10717	SM 9215B	MBIO/10718
60136522017	GW-075034-010813-CM-MW-2	SM 9215B	MBIO/10717	SM 9215B	MBIO/10718
60136522018	GW-075034-010813-CM-MW-3	SM 9215B	MBIO/10717	SM 9215B	MBIO/10718
60136522019	GW-075034-010813-CM-MW-4	SM 9215B	MBIO/10717	SM 9215B	MBIO/10718
60136522001	GW-075034-010813-CM-MW-8	EPA 8260	MSV/51224		
60136522001	GW-075034-010813-CM-MW-8	EPA 8260	MSV/51307		
60136522002	GW-075034-010813-CM-MW-2	EPA 8260	MSV/51224		
60136522003	GW-075034-010813-CM-MW-3	EPA 8260	MSV/51224		
60136522004	GW-075034-010813-CM-MW-6	EPA 8260	MSV/51224		
60136522005	GW-075034-010813-CM-MW-4	EPA 8260	MSV/51224		
60136522006	GW-075034-010813-CM-MW-1	EPA 8260	MSV/51224		
60136522007	GW-075034-010813-CM-MW-5	EPA 8260	MSV/51224		
60136522008	GW-075034-010813-CM-MW-7	EPA 8260	MSV/51224		
60136522009	GW-075030-010813-CM-DUP	EPA 8260	MSV/51235		
60136522010	TB-075034-01083-CM-001	EPA 8260	MSV/51235		
60136522001	GW-075034-010813-CM-MW-8	SM 2540C	WET/39272		
60136522002	GW-075034-010813-CM-MW-2	SM 2540C	WET/39272		
60136522003	GW-075034-010813-CM-MW-3	SM 2540C	WET/39272		
60136522004	GW-075034-010813-CM-MW-6	SM 2540C	WET/39272		
60136522005	GW-075034-010813-CM-MW-4	SM 2540C	WET/39272		
60136522006	GW-075034-010813-CM-MW-1	SM 2540C	WET/39272		
60136522007	GW-075034-010813-CM-MW-5	SM 2540C	WET/39272		
60136522008	GW-075034-010813-CM-MW-7	SM 2540C	WET/39272		
60136522001	GW-075034-010813-CM-MW-8	EPA 300.0	WETA/23193		
60136522002	GW-075034-010813-CM-MW-2	EPA 300.0	WETA/23193		
60136522003	GW-075034-010813-CM-MW-3	EPA 300.0	WETA/23193		
60136522004	GW-075034-010813-CM-MW-6	EPA 300.0	WETA/23193		
60136522005	GW-075034-010813-CM-MW-4	EPA 300.0	WETA/23193		
60136522006	GW-075034-010813-CM-MW-1	EPA 300.0	WETA/23193		
60136522007	GW-075034-010813-CM-MW-5	EPA 300.0	WETA/23193		
60136522008	GW-075034-010813-CM-MW-7	EPA 300.0	WETA/23193		
60136522001	GW-075034-010813-CM-MW-8	EPA 353.2	WETA/23142		
60136522002	GW-075034-010813-CM-MW-2	EPA 353.2	WETA/23142		

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 075034 SAN JUAN 29-7 UNIT 37 Q  
Pace Project No.: 60136522

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60136522003	GW-075034-010813-CM-MW-3	EPA 353.2	WETA/23142		
60136522004	GW-075034-010813-CM-MW-6	EPA 353.2	WETA/23143		
60136522005	GW-075034-010813-CM-MW-4	EPA 353.2	WETA/23143		
60136522006	GW-075034-010813-CM-MW-1	EPA 353.2	WETA/23153		
60136522007	GW-075034-010813-CM-MW-5	EPA 353.2	WETA/23143		
60136522008	GW-075034-010813-CM-MW-7	EPA 353.2	WETA/23143		



Sample Condition Upon Receipt  
ESI Tech Spec Client

WO#: 60136522



Client Name: COP-CRA NM

Courier: Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Tracking #: 8022 4195 9132 Pace Shipping Label Used? Yes ☐ No ☒

Custody Seal on Cooler/Box Present: Yes ☒ No ☐ Seals intact: Yes ☒ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☒ Foam ☒ None ☐ Other 12PIC

Thermometer Used: T-191 / T-194

Type of Ice: Vet Blue None ☐ Samples received on ice, cooling process has begun.  
(circle one)

Cooler Temperature: 3-3

Date and initials of person examining contents: 21-9-13

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6. <u>NO3</u>
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Includes date/time/ID/analyses Matrix: <u>WT</u>		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
Exceptions: <u>VOA</u> coliform, TOC, O&G, WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed
Trip Blank present: <u>21-9-13</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Lot # of added preservative
Pace Trip Blank lot # (if purchased): <u>109 102912-3</u>		
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
		16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State:

Client Notification/ Resolution:

Copy COC to Client? Y / N

Field Data Required? Y / N

Person Contacted: \_\_\_\_\_

Date/Time: \_\_\_\_\_

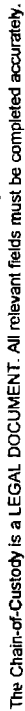
Comments/ Resolution: \_\_\_\_\_

Project Manager Review: [Signature]

Date: 11/9/13

Temp Log: Record start and finish times when unpacking cooler, if >20 min, recheck sample temps.

Start: <u>0920</u>	Start:
End: <u>0935</u>	End:
Temp:	Temp:



**The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.**



# Sample Condition Upon Receipt

2 of 2

Client Name: CRA

Project # Co0136522

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #: \_\_\_\_\_ Pace Shipping Label Used? ☐ Yes ☐ No

Custody Seal on Cooler/Box Present: ☒ Yes ☐ No Seals intact: ☒ Yes ☐ No

Optional
Proj. Due Date: <u>1/23</u>
Proj. Name: _____

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Foam ☒ None ☐ Other

Thermometer Used: T-111

Type of Ice: Wet Blue None

☐ Samples on ice, cooling process has begun

Cooler Temperature: 2-2

Temperature should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: MB 1/9/13 1020

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
-Includes date/time/ID/analyses Matrix: <u>WT</u>		
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed _____ Lot # of added preservative _____
Trip Blank present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Pace Trip Blank lot # (if purchased):		
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State: _____

Client Notification/ Resolution:

Copy COC to Client?

Y / N

Field Data Required?

Y / N

Person Contacted: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Project Manager Review: MAX

Date: 1/10/13

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Package 46 of 47

F-KS-C-003-Rev.05, 19February2010





CONESTOGA-ROVERS  
& ASSOCIATES

# CHAIN OF CUSTODY RECORD

Address: 671 Indian School Rd #200 Albuquerque, NM 87110

Phone: 505-884-0672 Fax:

COC NO.: 32520  
PAGE 1 OF 1

(See Reverse Side for Instructions)

6015522

Project No/Phase/Task Code: 075034		Laboratory Name: Pace Analytical		Lab Location: Hartman, KS		SSOW ID:	
Project Name: San Juan 29-7 Unit 37		Lab Contact: Alice Flanagan		Lab Quote No:		Cooler No:	
Project Location: Rio Arriba County, NM		CONTAINER QUANTITY & PRESERVATION		ANALYSIS REQUESTED (See Back of COC for Definitions)		Carrier: FedEx	
Chemistry Contact: Angie Brown		SAMPLE TYPE		PRESERVATION		Airbill No:	
Sampler(s): U. Matthews, J. Ploss, J. Kitchner		Matrix Code (see back of COC)		Grab (g) or Comp (c)		Date Shipped: 1-8-13	
SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)		DATE (mm/dd/yyyy)		TIME (hh:mm)		COMMENTS/ SPECIAL INSTRUCTIONS:	
1 GW-075034-010813-CM-MW-1		01-08-13		1320		011	
2 GW-075034-010813-CM-DUP		01-08-13		1330		012	
3 GW-075034-010813-CM-MW-5		01-08-13		1345		013	
4 GW-075034-010813-CM-MW-8		01-08-13		1355		014	
5 GW-075034-010813-CM-MW-7		01-08-13		1400		015	
6 GW-075034-010813-CM-MW-6		01-08-13		1415		016	
7 GW-075034-010813-CM-MW-2		01-08-13		1425		017	
8 GW-075034-010813-CM-MW-3		01-08-13		1430		018	
9 GW-075034-010813-CM-MW-4		01-08-13		1440		015	
10							
11							
12							
13							
14							
15							
TAT Required in business days (use separate COCs for different TATs):		DATE		TIME		DATE	
1 Day <input type="checkbox"/> 2 Days <input type="checkbox"/> 3 Days <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week <input type="checkbox"/> Other: Standard		01-08-13		1530		1/9/13	
RELINQUISHED BY: [Signature]		COMPANY: CRA		RECEIVED BY: [Signature]		COMPANY: Pace	
Package 47 of 48						1020 212	