3R – 429

2013 AGWMR

08/22/2014



ConocoPhillips Company Risk Management & Remediation 1380-E Plaza Office Building 315 Johnstone Avenue Bartlesville, OK 74004 Phone: 918.661.6983 E-mail: David.C.Hathaway@conocophillips.com



Mr. Glenn von Gonten New Mexico Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

August 22, 2014

Re: NMOCD Case No. 3R-429, 2013 Annual Groundwater Monitoring Report

Dear Mr. von Gonten:

Enclosed is the 2013 Annual Groundwater Monitoring Report for the Martin 34 No. 2 site. This report, prepared by Conestoga-Rovers & Associates (CRA), contains the results of groundwater monitoring from March, June, September, and December 2013.

Please let me know if you have any questions.

Sincerely,

David C. Hathaway, P.E.

Enc



www.CRAworld.com



Report

2013 Annual Groundwater Monitoring Report

ConocoPhillips Martin 34 No. 2 San Juan County, New Mexico API# 30-045-08934 NMOCD# 3R-429

Prepared for: ConocoPhillips Company

Conestoga-Rovers & Associates

6121 Indian School Road, NE Suite 200 Albuquerque, New Mexico 87110



August 2014 • 075035 • Report No. 4

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Section 1.0 Introduction

ConocoPhillips Company (ConocoPhillips) retained Conestoga-Rovers & Associates (CRA) to conduct site characterization and soil and groundwater remediation at the San Juan 29-7 Unit 37 natural gas well (Site). The Site is located within Unit Letter N, Section 12, Township 29N, Range 7W, Rio Arriba County, New Mexico (Latitude: 36.73552° N; Longitude: -107.52488° W) (**Figure 1**). This report summarizes the remediation status and groundwater data that were collected in 2013 and early 2014.

Site characterization activities were conducted at the Site in 2010 and 2011 to delineate soil and groundwater impacted by a release that occurred from an above-ground condensate tank. The site characterization indicated hydrocarbon impacts from the release that exceeded New Mexico Water Quality Control Commission (NMWQCC) standards, including benzene, toluene and total xylenes in groundwater and total benzene, toluene, ethylbenzene, and xylenes (BTEX), and total petroleum hydrocarbons (TPH) in the vadose zone soil. Soil impacts were delineated in the area of the release to a maximum depth of approximately 110 feet-below ground surface (ft-bgs) or to the top of groundwater. Groundwater was impacted in the immediate area of the release and extended to approximately 60 feet down-gradient from the release. A total of 18 soil borings and eight (8) monitor wells have been utilized to characterize subsurface soil and groundwater conditions (**Figure 2**). Soil and groundwater impacts were treated in 2012 with a chemical oxidant at the Site.

1.1 Site History

The Site is located on land owned by Mr. Richard Hodgson and the surface is leased by ConocoPhillips. The well is currently operated by Burlington Resources Oil and Gas Company LP, a wholly owned subsidiary of ConocoPhillips. A Site detail map is included as **Figure 2**.

ConocoPhillips discovered a leaking inspection plate gasket on the above-ground condensate tank on August 26, 2010. Approximately 23 barrels (bbls) of condensate were released and fully contained within the berm; however, no liquids were recovered. The release was immediately reported to the New Mexico Oil Conservation Division (NMOCD) with a C-141 Release Notification and Corrective Action form, filed by ConocoPhillips on September 16, 2010.

1.2 Site Setting

The Site is located in Rio Arriba County, New Mexico, on privately owned ranch land. The elevation at the Site is approximately 6,292 feet above mean sea level (amsl). The Tertiary-aged San Jose Formation crops out as sandstone bluffs visible to the north and south of the Site and locally reaching an elevation of approximately 6,652 feet amsl.

Subsurface soils at the Site consist primarily of silts inter-bedded with fine sands and clays. Groundwater is located at approximately 110 ft-bgs and locally flows towards the south-southwest.



Regional groundwater flow is unknown, but, likely according to the United States Geological Survey Delgadita Mesa, NM topographic map, if groundwater flow mimics topography, it trends south/southeast.

An Environmental Data Resources (EDR) report on the subject property identified the Gould Pass National Wetland Inventory within a one mile radius of the Site. According to the EDR radius map included in the report, the largest section of the Wetland Inventory is located upgradient of the Site.

1.3 Summary of Previous Investigations

Following the discovery of the release of condensate from the above-ground tank at the site, approximately 5,100 cubic yards (yd³) of soil was excavated from the area below the former tank location between September 24, 2010 and January 3, 2011. The excavation measured approximately 70 ft by 120 ft by 30 ft deep (**Figure 2**). The horizontal and vertical extent of the hydrocarbon-impacted area was not determined at that time. For practical and safety reasons and due to limitations posed by surface structures, the southern extent of the excavation and the vertical extent of the excavation were halted at approximately 30 ft-bgs. At completion of the excavation approximately 3,444 yards of hydrocarbon impacted soil had been removed and transported to the Industrial Ecosystems, Incorporated landfarm located in Aztec, New Mexico. The excavation was subsequently back filled with clean soil.

To further delineate vertical impacts of the release, Tetra Tech Inc. sampled subsurface soils in the impacted area and in close proximity to the release point (soil boring B-1) between January 12 and 14, 2011 (Pre-treatment Soil Boring B-1, **Figure 2**). Impacts were noted in the soil above the NMOCD recommended field screening level for organic vapors (100 ppm) from 30 ft-bgs to the total depth of the soil boring at 129.5 ft-bgs All analytical results for soil samples collected from B-1 were below the recommended NMOCD remediation action levels with the exception of the sample collected from 30 to 32 ft-bgs that had a total BTEX concentration and total TPH concentration which exceed the NMOCD recommended action limits for total BTEX and TPH at 50 mg/kg, and 100 mg/kg, respectively .

Analytical results from the groundwater sample collected from the open borehole, B-1, indicated BTEX in groundwater above the NMWQCC standard. Between February 28 and March 4, 2011, Tetra Tech advanced two additional soil borings, B-2 and B-3, in or near the center of the previously excavated area (Pre-treatment Soil Boring B-2 and B-3, **Figure 2**) and installed four soil borings/monitor wells (MW-1 through MW-4) at the Site.

Field screening of B-2 soil samples indicated soil impacts above the NMOCD field screening action level of 100 ppm. The total BTEX concentration of 122.5 mg/kg also exceeded the NMOCD action level from 45 to 47 ft-bgs in boring B-2.

Field screening of soil samples collected from B-3 showed no signs of hydrocarbon impacts to a total depth of 57 ft-bgs No samples were collected for laboratory analysis from B-3 since no hydrocarbon impacts were observed during field screening activities and groundwater was not encountered.

Due to the elevated organic vapors encountered in B-2, Monitor Well MW-1 was installed approximately 20 ft south of B-2. The analytical results for this well from the March 2011 groundwater sampling event indicated that only benzene was detected above the NMWQCC standard at a concentration of 0.066 mg/L. Three additional monitor wells, MW-2, MW-3, and MW-4, were installed at the Site (**Figure 2**). One monitor well (MW-4) was installed up-gradient of the release and two monitor wells (MW-2 and MW-3) were installed down-gradient of the release. None of these monitor wells showed any detection of hydrocarbon constituents above the NMWQCC groundwater quality standards.

To further evaluate Site conditions and to delineate areas of remediation, 11 borings were advanced and four monitor wells were installed by CRA at the Site from September 2011 to October 2011 (**Figure 2**). Monitor wells were installed within the release area, MW-1 and MW-8, upgradient of the release area, MW-4 and MW-7, and MW-2, MW-3, MW-5 and MW-6 down gradient of the area.

Field screening of soil samples and laboratory results indicated impacts (organic vapors > 100 ppm) in the immediate area of the release to depths ranging from 40 ft-bgs to 110 ft-bgs. Soil analytical results indicated Total BTEX and TPH above the NMOCD recommended action levels in four of the borings, B-4, B-5/MW-8, and B-8, which are located within the excavation area and one boring, B-10, located approximately 10 feet south of the excavation. In addition, soil boring B-6/MW-6 located approximately 60 feet southeast of the excavation indicated the TPH concentration above the NMOCD recommended action limit.

During this portion of the Site characterization, groundwater was encountered at approximately 110 ftbgs, which is consistent with groundwater levels encountered during previous phases of the site characterization. The groundwater flow direction was determined to be towards the south-southwest. The analytical results for groundwater indicated that the benzene concentrations exceeded the NMWQCC standard at three locations (MW-1, MW-6 and MW-8). Toluene and total xylenes concentrations exceeded the standards at one location (MW-8).

For in-situ site remediation activities, CRA retained DeepEarth Technologies, Inc. (DTI) to implement the *Cool-Ox*[™] Technology, a patented in-situ process that uses a solution of calcium peroxide that generates a slow release of hydrogen peroxide and facilitates the oxidation of petroleum hydrocarbons.

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 ft² (70 ft x 85 ft) to treat approximately 8,815 yd³ of impacted soil. The solution was primarily injected into the subsurface from the bottom of the injection point to approximately 30 ft-bgs. 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.

To evaluate the effectiveness of the *Cool-Ox*[™] 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*[™] treatment by advancing five (5) soil borings in August 2012.

A more thorough discussion of the *Cool-Ox*[™] treatment site activities can be found in the April 2013 CRA *Subsurface Remediation and Annual Groundwater Monitoring Report*.

Section 2.0 Monitoring Well Installation

During the September 2012 sampling event, the casing in Monitor Well MW-8 was noted to be deformed (likely due to subsidence of fill material), 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.

A Well Plugging Plan of Operations for MW-8 was submitted by CRA to the New Mexico Office of the State Engineer (NMOSE) on July 2, 2013 and approved on July 11, 2013. On July, 16, 2013, National Exploration, Wells, and Pumps (National EWP) plugged and abandoned MW-8. Monitor Well MW-8 was plugged and abandoned with a cement-bentonite grout via tremmie pipe, filling the well from the bottom to the top. Surface completion materials were removed and disposed of as non-hazardous solid waste.

A replacement well, MW-8R was subsequently installed by National EWP adjacent to the location of MW-8. A separate boring log therefore was not generated for replacement Monitor Well MW-8R. MW-8R was installed to a total depth of 120 feet bgs. The well was constructed of 2-inch diameter, schedule 40, flush-joint, PVC casing and screen. The monitoring well consists of a 0.5-foot long, threaded PVC bottom plug and 15 feet of flush-joint, threaded, factory-slotted (0.010-inch) well screen. The annular space around the well screen was filled with 10/20 gradation silica sand to approximately two feet above the well screen, followed by approximately three feet of 3/8-inch bentonite chips. A cement/bentonite grout was placed from the top of the bentonite chips to ground surface. The



wellhead is protected with a flush-mount completion set within a 24-inch by 24-inch by 4-inch thick concrete pad.

Soil cuttings were field screened for volatile organic compounds (VOCs) using the heated headspace method. At approximately 32 ft-bgs, photoionization detector readings were greater than 100 parts per million (ppm). From this point on, cuttings generated during monitoring well installation were placed in properly labeled 55-gallon drums. A waste characterization sample was collected as required for waste disposal. Analytical results from the waste characterization soil sample are included in **Appendix A**.

Seven 55-gallon drums of hydrocarbon impacted soil cuttings were transported to the Envirotech, Inc. Soil Remediation Facility #2 on September 10, 2013. Waste disposal documentation is included as **Appendix B**.

2.1 Soil Analytical Results

A confirmation soil sample was collected at a depth of approximately 107 feet bgs from MW-8R drill cuttings. The sample was placed in laboratory-supplied containers, labeled, placed on ice, and transported under chain of custody documentation to Pace Analytical (Pace) of Lenexa, Kansas. The sample was analyzed for total petroleum hydrocarbons (TPH) diesel and gasoline range organics (DRO/GRO) by EPA method 8015B, BTEX by EPA method 8260, and pH by EPA method 9045.

The sample returned TPH-GRO analytical results of 382 mg/kg, TPH-DRO of 124 mg/kg, a toluene concentration of 0.314 mg/kg, an ethylbenzene concentration of 0.453 mg/kg, and a concentration of 9.6 mg/kg for xylenes. The sample was below laboratory detection limits for benzene. Laboratory analytical reports for the confirmation soil sampling can be found in **Appendix A**.

Section 3.0 Groundwater Monitoring Summary

Groundwater sampling events were conducted at the Site on March 26, June 11, 2013, and September 10, 2013, and on January 7, 2014. Prior to collection of groundwater samples from monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-8R, depth to groundwater in each well was measured using an oil/water interface probe (**Table 1**). Groundwater potentiometric surface maps for these monitoring events are presented as **Figures 3**, **4**, **5**, and **6**, respectively. CRA groundwater sampling field forms are included as **Appendix C**. Groundwater elevation data collected from MW-1 are somewhat anomalous likely due to this well's location near the center of the formerly excavated and backfilled area. Some subsidence in this area may have therefore affected the previously surveyed casing elevation. Generally, groundwater was encountered across the Site at approximately 108 feet bgs. The groundwater potentiometric surface elevations have been consistent with little variability by season and throughout the history of monitoring the wells at the Site.



For all of these monitoring periods, the groundwater flow at the site was towards the south-southwest and the average groundwater gradient across the Site was 0.014 feet per foot, consistent with historical results.

3.1 Groundwater Monitoring Methodology

During monitoring events, at least three well volumes were purged from Site Monitor Wells with a Monsoon[™] submersible pump prior to sampling. Purge water generated during purging of Site monitor wells was placed in the on-Site produced water tank. Groundwater samples were placed in laboratory prepared bottles, packed on ice, and shipped under chain-of-custody documentation to Pace Analytical Services, Inc. of Lenexa, KS.

Groundwater samples were analyzed for the presence of BTEX by EPA method 8260, dissolved manganese and selenium by EPA method 6010, nitrate (as nitrogen) by EPA method 353.2, sulfate by EPA method 300.0, total dissolved solids (TDS) by method SM 2540C, and heterotrophic plate count (HPC) by method SM 9215B. A summary of analytical results is presented in **Table 1**. Completed groundwater laboratory analytical results are presented in **Appendix D**.

3.2 Groundwater Monitoring Analytical Results

The NMWQCC mandates that groundwater quality in New Mexico be protected, and has issued groundwater quality standards in Title 20, Chapter 6, Part 2, Section 3103 of the New Mexico Administrative Code (20.6.2.3103 NMAC). Groundwater quality standards have been set for the protection of human health, domestic water supply, and irrigation use.

A groundwater hydrocarbon concentration map and a groundwater inorganic concentration map are included as **Figures 7** and **8**, respectively. A groundwater field parameters map displaying pH, oxidation-reduction potential (ORP) and dissolved oxygen (DO) is included as **Figure 9**. Groundwater analytical results are discussed below.

March 2013

- **BTEX:** The NMWQCC domestic water supply groundwater quality standards for benzene, toluene, ethylbenzene, and xylene are 0.01 mg/L, 0.75 mg/L, 0.75 mg/L, and 0.62 mg/L, respectively. All groundwater sampling results from the March 2013 event were below NMWQCC standards for BTEX. MW-8 was not sampled during this event due to a deformed well casing.
- **Dissolved Manganese:** The NMWQCC domestic water supply groundwater quality standard for dissolved manganese is 0.2 mg/L. Monitoring Wells MW-1, MW-3, MW-5, and MW-6 exceeded this standard with analytical results of 0.49 mg/L, 1.83 mg/L, 0.356 mg/L, and 0.282 mg/L, respectively.



- **Dissolved Selenium:** The NMWQCC domestic water supply groundwater quality standard for dissolved selenium is 0.05 mg/L. Monitoring Wells MW-1, MW-2, and MW-6 exceeded this standard with analytical results of 0.079 mg/L, 0.0728 mg/L, and 0.0602 mg/L, respectively.
- Nitrate (as Nitrogen): The NMWQCC domestic water supply groundwater quality standard for nitrate is 10 mg/L. Monitoring Wells MW-1, MW-2, and MW-6 exceeded this standard with analytical results of 37.0 mg/L, 43.3 mg/L, and 30.9 mg/L, respectively.
- Sulfate: The NMWQCC domestic water supply groundwater quality standard for sulfate is 600 mg/L. Monitoring Wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, and MW-7 exceeded this standard with analytical results of 1,000 mg/L, 1,200 mg/L, 1,080 mg/L, 1,200 mg/L, 1,700 mg/L, 945 mg/L, and 1,730 mg/L, respectively.
- **TDS:** The NMWQCC domestic water supply groundwater quality standard for TDS is 1,000 mg/L. Monitoring Wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, and MW-7 exceeded this standard with analytical results of 1,980 mg/L, 1,930 mg/L, 2,030 mg/L, 1,950 mg/L, 2,370 mg/L, 1,740 mg/L, and 3,050 mg/L, respectively.

June 2013

- **BTEX:** All groundwater sample results were below NMWQCC standards for BTEX during the June 2013 sampling event. MW-8 was not sampled during this event due to a deformed well casing.
- **Dissolved Manganese:** Monitoring Wells MW-1, MW-3, MW-5, and MW-6 exceeded the standard with analytical results of 0.52 mg/L, 1.75 mg/L, 0.609 mg/L, and 0.328 mg/L, respectively.
- **Dissolved Selenium:** Monitoring Wells MW-1, MW-2, and MW-6 exceeded the standard with analytical results of 0.056 mg/L, 0.0666 mg/L, and 0.0621 mg/L, respectively.
- Nitrate (as Nitrogen): Monitoring Wells MW-1, MW-2, MW-6, and MW-7 exceeded the standard with analytical results of 31.1 mg/L, 40.6 mg/L, 27.6 mg/L, and 18.7 mg/L, respectively.
- Sulfate: Monitoring Wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, and MW-7 exceeded the standard with analytical results of 1,050 mg/L, 1,230 mg/L, 1,110 mg/L, 1,260 mg/L, 1,630 mg/L, 946 mg/L, and 1,700 mg/L, respectively.

September 2013

- **BTEX:** Monitoring well MW-8R exceeded the NMWQCC standard for benzene with an analytical result of 0.01 mg/L.
- **Dissolved Manganese:** Monitoring Wells MW-3, MW-5, MW-6, and MW-8R exceeded the standard with analytical results of 1.70 mg/L, 0.368 mg/L, 0.299 mg/L and 0.395 mg/L, respectively.
- **Dissolved Selenium:** Monitoring Well MW-2 exceeded the standard with an analytical result of 0.0657 mg/L.



- Nitrate (as Nitrogen): Monitoring Wells MW-1, MW-2, MW-6, MW-7, and MW-8R exceeded the standard with analytical results of 18.7 mg/L, 35.6 mg/L, 22.7 mg/L, 31.4 mg/L, and 38.6 mg/L, respectively.
- Sulfate: Monitoring Wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-8R exceeded the standard with analytical results of 1,130 mg/L, 1,200 mg/L, 1,120 mg/L, 1,180 mg/L, 1,640 mg/L, 929 mg/L, 1,740 mg/L, and 1,230 mg/L, respectively.
- **TDS:** Monitoring Wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-8R exceeded the standard with analytical results of 2,090 mg/L, 2,210 mg/L, 1,910 mg/L, 2,090 mg/L, 2,540 mg/L, 1,710 mg/L, 3,080 mg/L, and 2,430 mg/L, respectively.

January 2014

- **BTEX:** Monitoring well MW-8R exceeded the NMWQCC standards for benzene and xylenes with analytical results of 0.179 mg/L, and 0.690, respectively.
- **Dissolved Manganese:** Monitoring Wells MW-3, MW-5, MW-6, MW-7, and MW-8R exceeded the standard with analytical results of 1.77 mg/L, 0.396 mg/L, 0.268 mg/L, 0.452 mg/L, and 0.255 mg/L, respectively.
- **Dissolved Selenium:** Monitoring Well MW-2 exceeded the standard with an analytical result of 0.0745 mg/L.
- Nitrate (as Nitrogen): Monitoring Wells MW-1, MW-2, MW-6, MW-7, and MW-8R exceeded the standard with analytical results of 22.5 mg/L, 33.5 mg/L, 19.5 mg/L, 28.5 mg/L, and 28.3 mg/L, respectively.
- Sulfate: Monitoring Wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-8R exceeded the standard with analytical results of 1,040 mg/L, 1,300 mg/L, 1,180 mg/L, 1,350 mg/L, 1,740 mg/L, 984 mg/L, 1,950 mg/L, and 1,360 mg/L, respectively.
- **TDS:** Monitoring Wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-8R exceeded the standard with analytical results of 1,990 mg/L, 2,390 mg/L, 1,970 mg/L, 1,960 mg/L, 2,770 mg/L, 2,060 mg/L, 3,320 mg/L, and 2,900 mg/L, respectively.

Section 4.0 Conclusions and Recommendations

The groundwater samples collected prior to subsurface treatment with *Cool-Ox*[™] showed detections of benzene, toluene and xylenes above the NMWQCC standards at Monitor Wells MW-1, MW-6 and MW-8. The *Cool-Ox*[™] treatment has evidently attenuated the BTEX concentrations previously detected in groundwater of Monitor Wells MW-1 and MW-6.



Post-treatment groundwater sample results from MW-8, however, indicated concentrations of benzene, toluene and xylenes above the NMWQCC standards. Samples collected from replacement Monitor Well MW-8R show concentrations of benzene and xylenes again above NMWQCC standards for these constituents.

CRA recommends reinjection of $Cool-Ox^{TM}$, or similar chemical oxidant, directly into Monitor Well MW-8R to further oxidize and biodegrade hydrocarbons in the vicinity of this monitor well. An injection of $Cool-Ox^{TM}$ directly into other Site monitor wells is also recommended to increase aerobic conditions and, in turn, precipitate manganese out of the groundwater. CRA will submit a separate work plan detailing proposed remediation activities for NMOCD approval.

Monitoring Well MW-4 is located upgradient of the hydrocarbon release area, therefore groundwater samples from this well can be considered to represent background conditions. Sulfate and TDS concentrations in groundwater samples collected from this well consistently exceed NMWQCC standards. Sulfate and TDS concentrations in downgradient monitoring wells are within the same order of magnitude as the background concentrations.

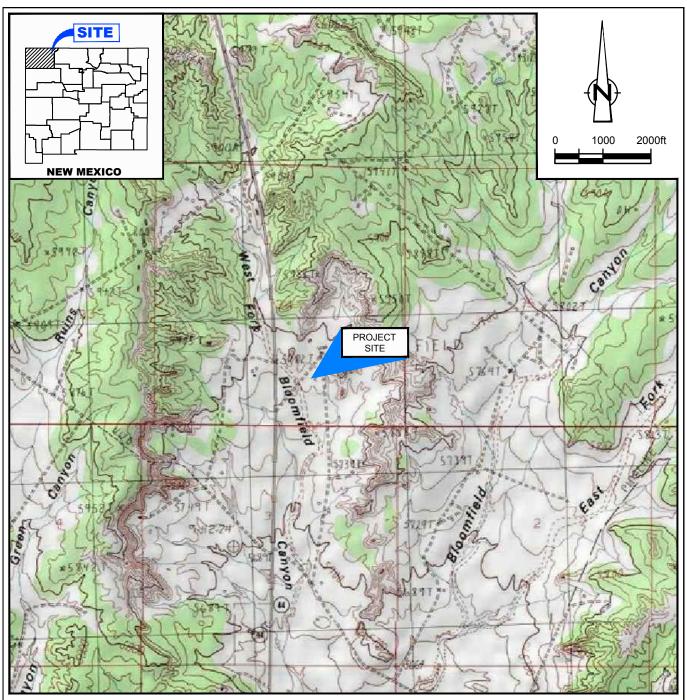
CRA will continue to monitor groundwater at the Site on a quarterly basis until BTEX and inorganic constituents are below NMWQCC standards for eight consecutive quarters or background concentrations have been reached.

Monitor Wells MW-1, MW-4 and MW-7, upgradient from MW-8R, have displayed 8 consecutive quarters of BTEX concentrations below the NMWQCC standards and therefore these constituents will not continue to be analyzed in groundwater samples from these wells. Analysis of HPC will also be discontinued in all site wells. Groundwater samples will be collected from all Site monitor wells and analyzed for BTEX (except as noted), dissolved manganese and selenium, sulfate, nitrate, and TDS.



Figures





SOURCE: USGS 7.5 MINUTE QUAD "AZTEC AND BLOOMFIELD, NEW MEXICO"

LAT/LONG: 36.7638° NORTH, 107.9762° WEST COORDINATE: NAD83 DATUM, U.S. FOOT STATE PLANE ZONE - NEW MEXICO WEST

Figure 1

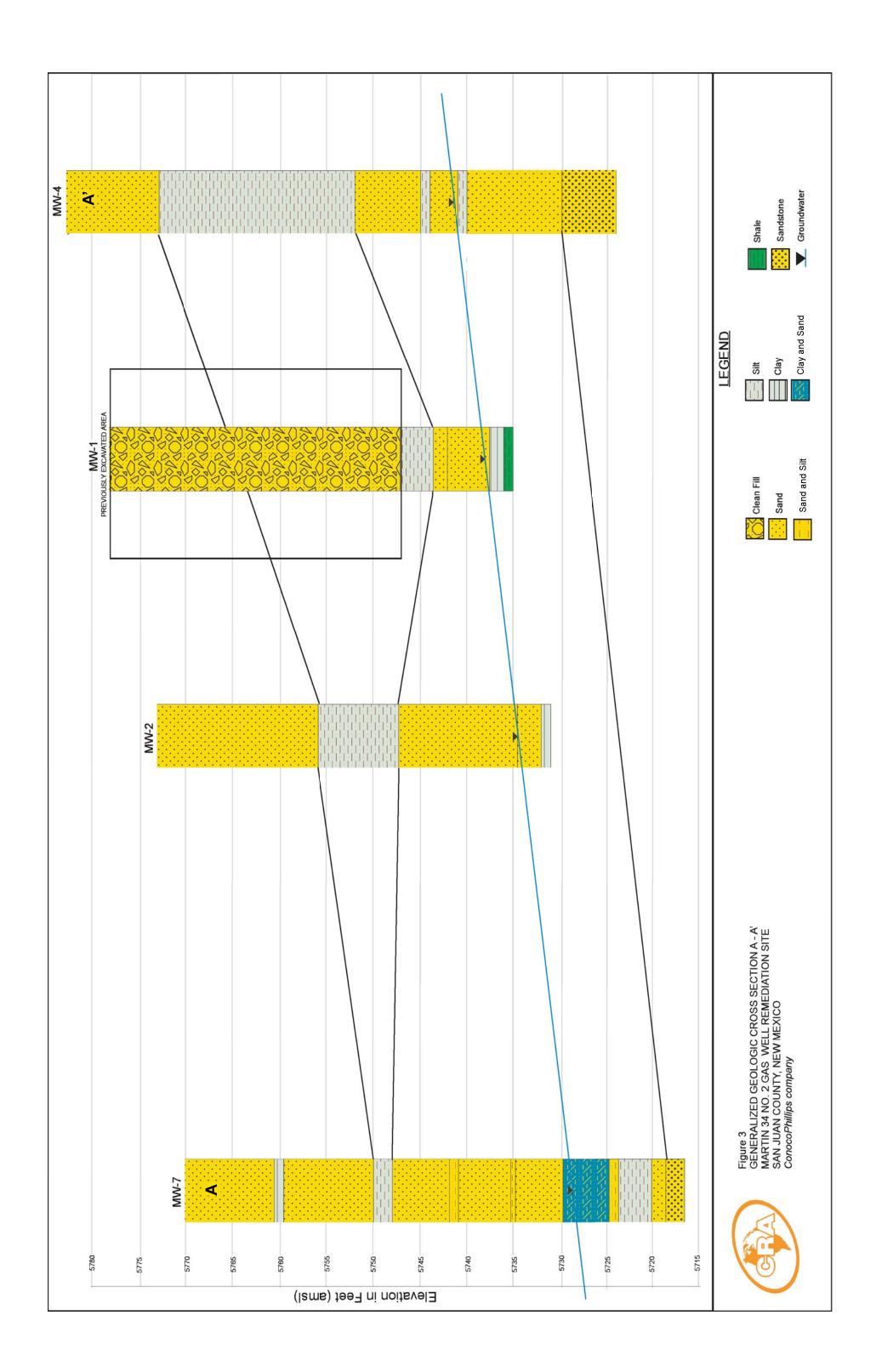
SITE VICINITY MAP MARTIN 34 No. 2 GAS WELL REMEDIATION SITE SEC 12, T27N, R9W, SAN JUAN COUNTY, NEW MEXICO *ConocoPhillips Company*



Figure 2

SITE DETAIL MAP MARTIN 34 No. 2 GAS WELL REMEDIATION SITE SAN JUAN COUNTY, NEW MEXICO *ConocoPhillips Company*





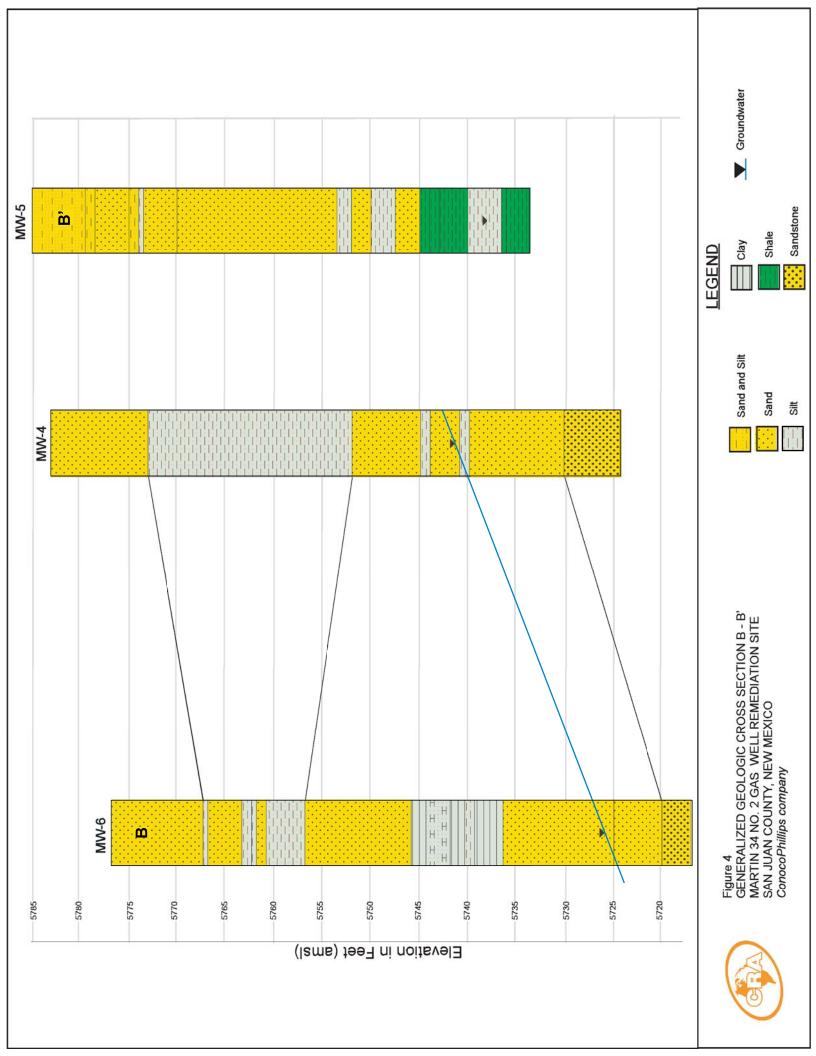




Figure 5

MARCH 2013 GROUNDWATER POTENTIOMETRIC SURFACE MAP MARTIN 34 No. 2 GAS WELL REMEDIATION SITE SAN JUAN COUNTY, NEW MEXICO ConocoPhillips Company

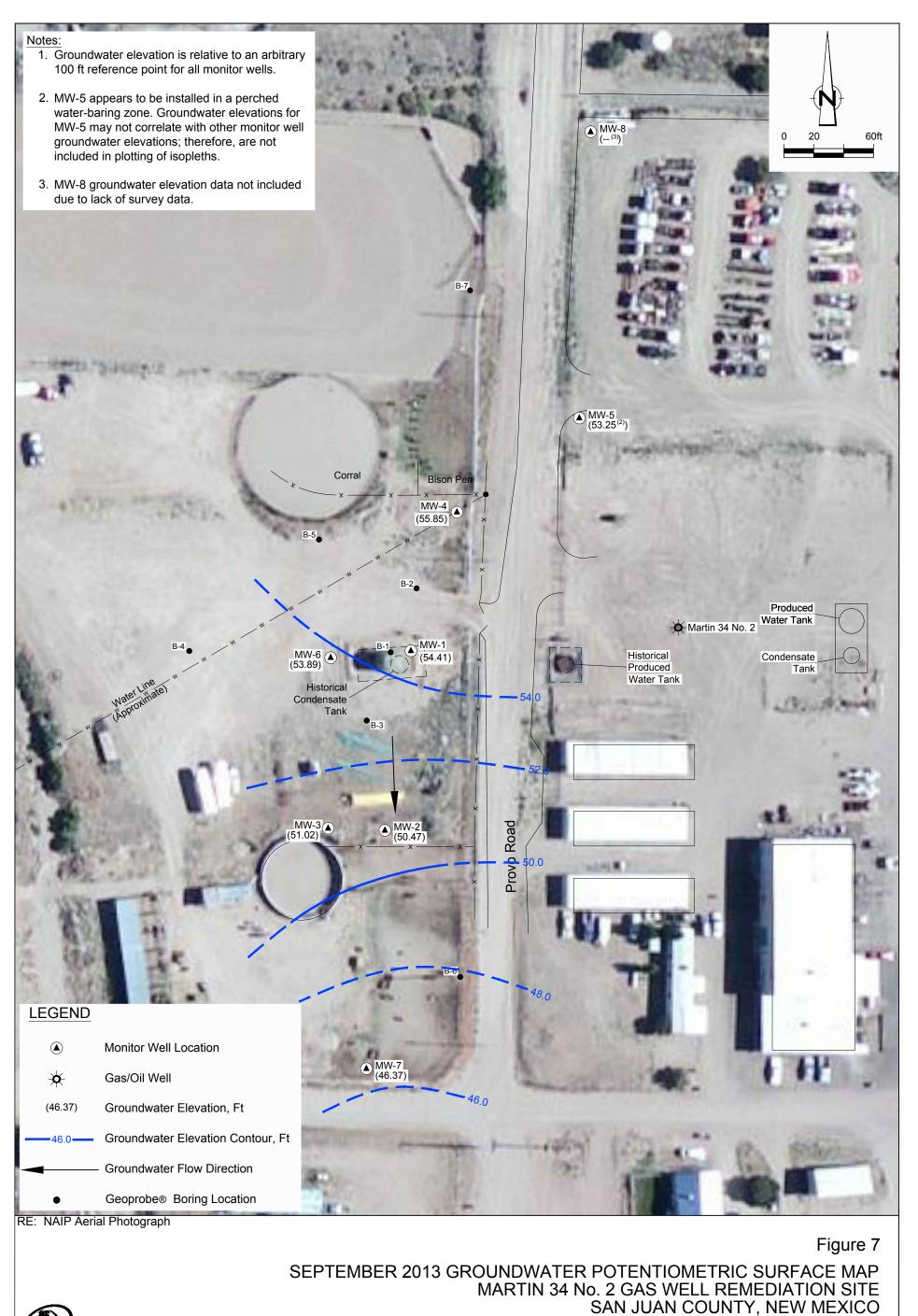




Figure 6

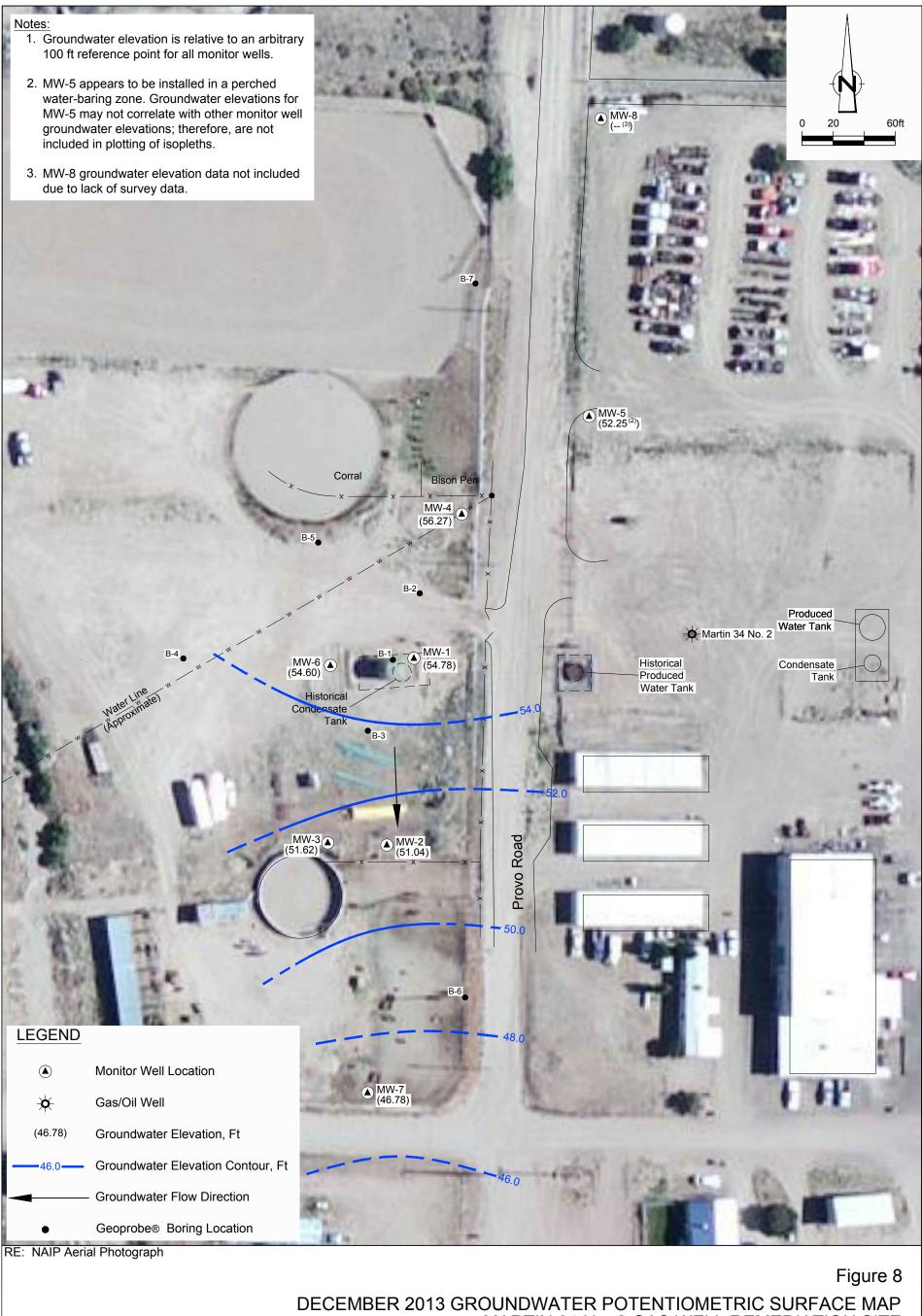
JUNE 2013 GROUNDWATER POTENTIOMETRIC SURFACE MAP MARTIN 34 No. 2 GAS WELL REMEDIATION SITE SAN JUAN COUNTY, NEW MEXICO ConocoPhillips Company





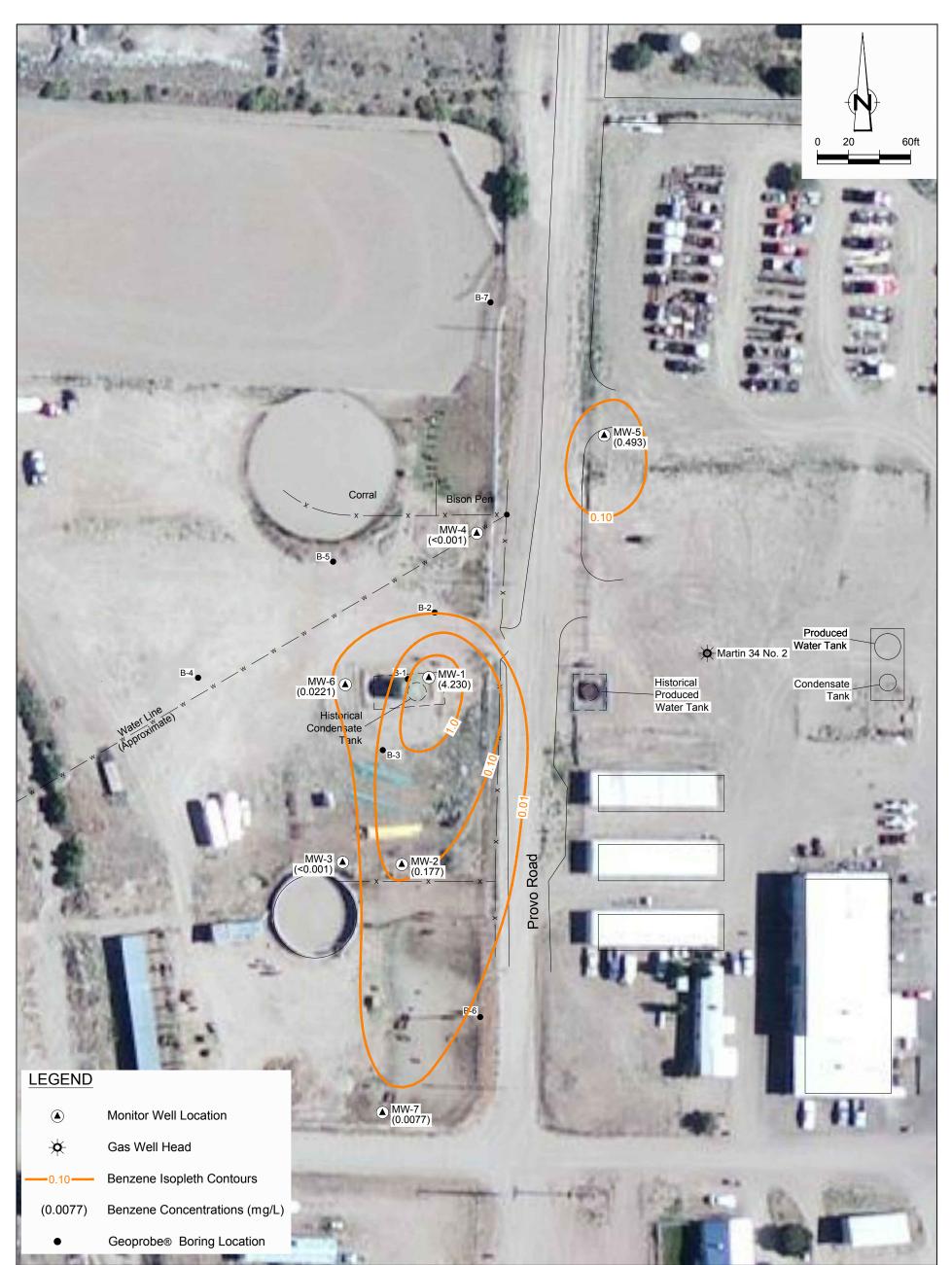
ConocoPhillips Company





MARTIN 34 No. 2 GAS WELL REMEDIATION SITE SAN JUAN COUNTY, NEW MEXICO *ConocoPhillips Company*

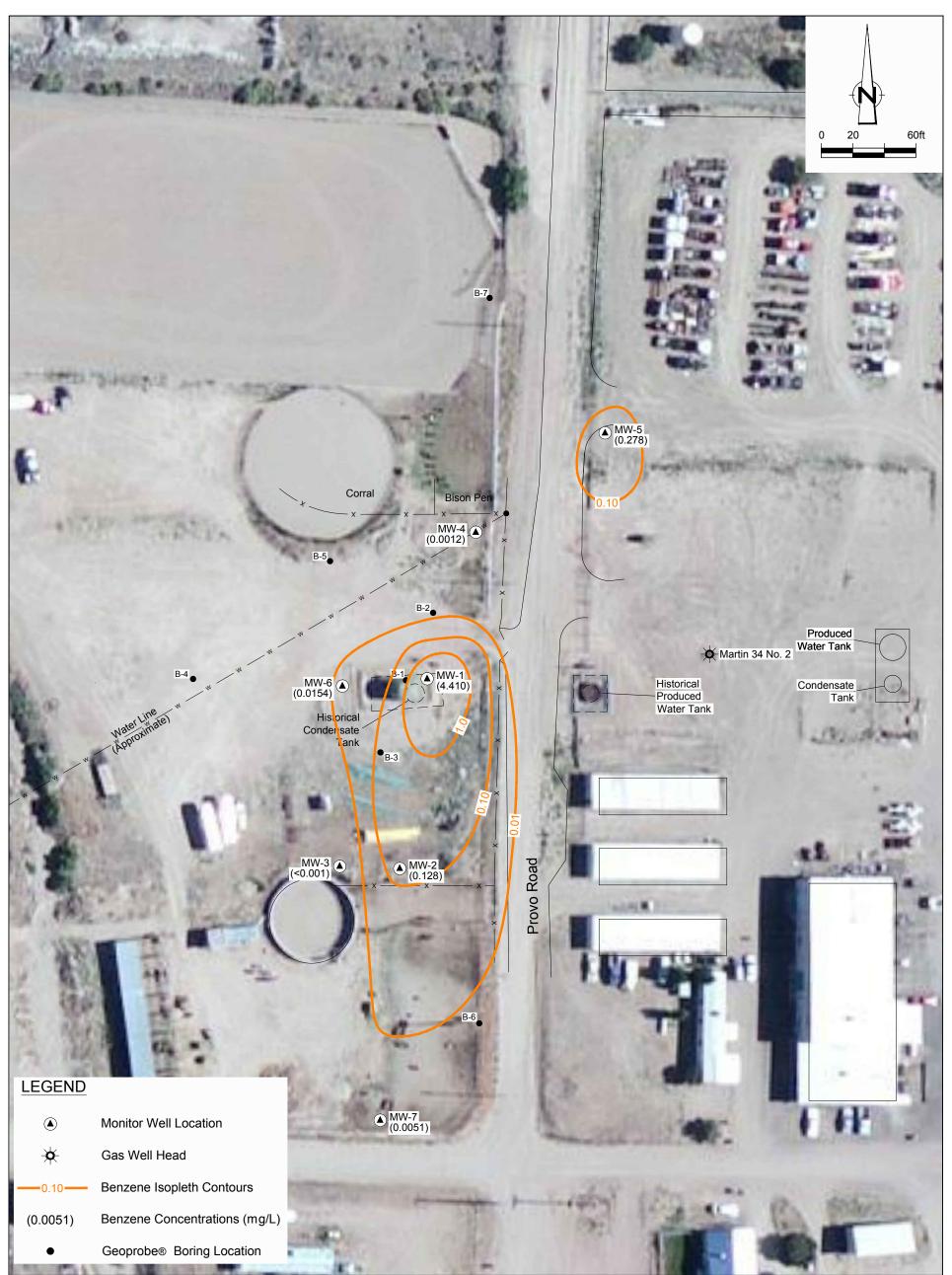






MARCH 2013 BENZENE CONCENTRATION MAP MARTIN 34 No. 2 GAS WELL REMEDIATION SITE SAN JUAN COUNTY, NEW MEXICO *ConocoPhillips Company*

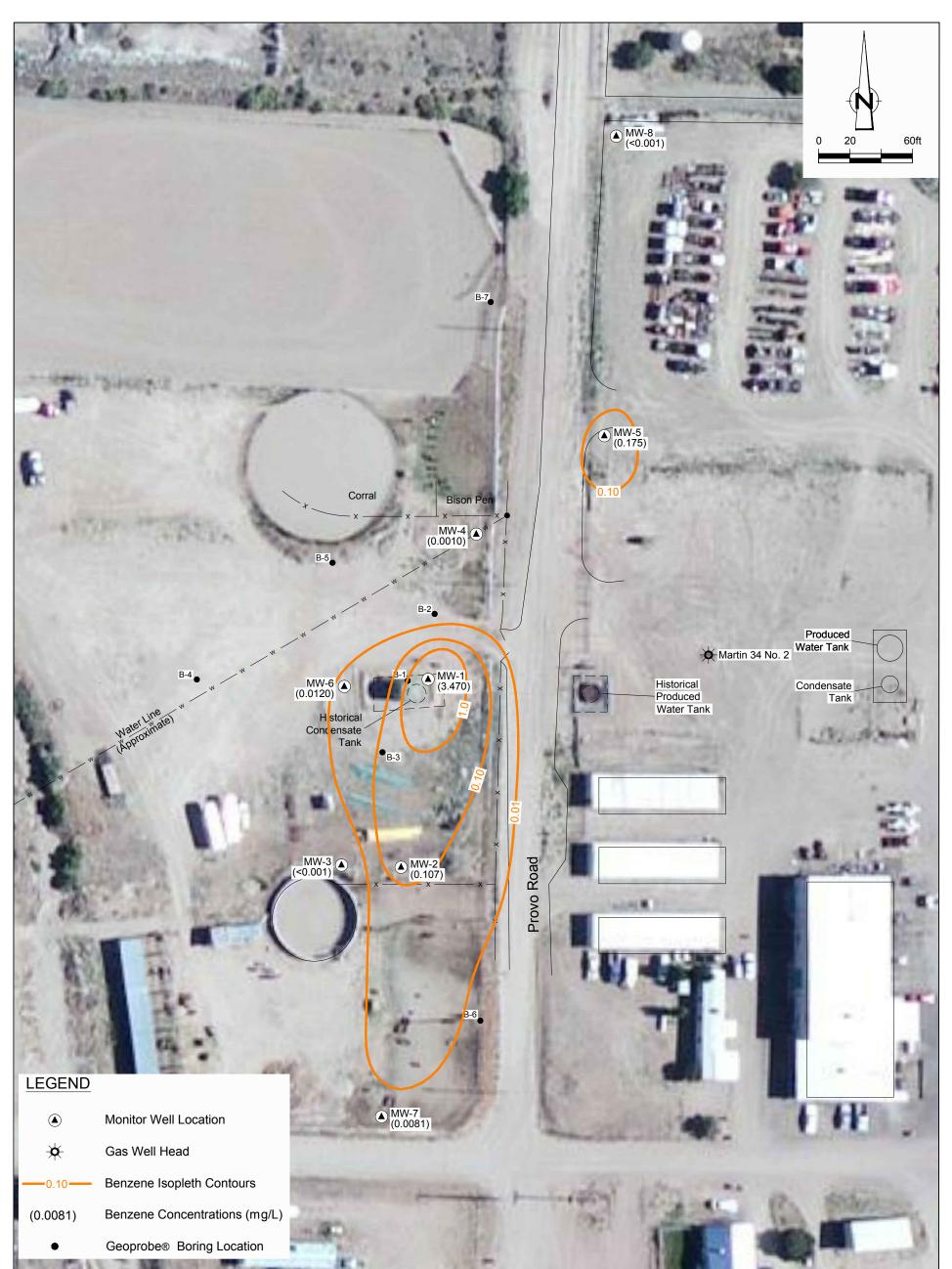






JUNE 2013 BENZENE CONCENTRATION MAP MARTIN 34 No. 2 GAS WELL REMEDIATION SITE SAN JUAN COUNTY, NEW MEXICO *ConocoPhillips Company*







SEPTEMBER 2013 BENZENE CONCENTRATION MAP MARTIN 34 No. 2 GAS WELL REMEDIATION SITE SAN JUAN COUNTY, NEW MEXICO *ConocoPhillips Company*



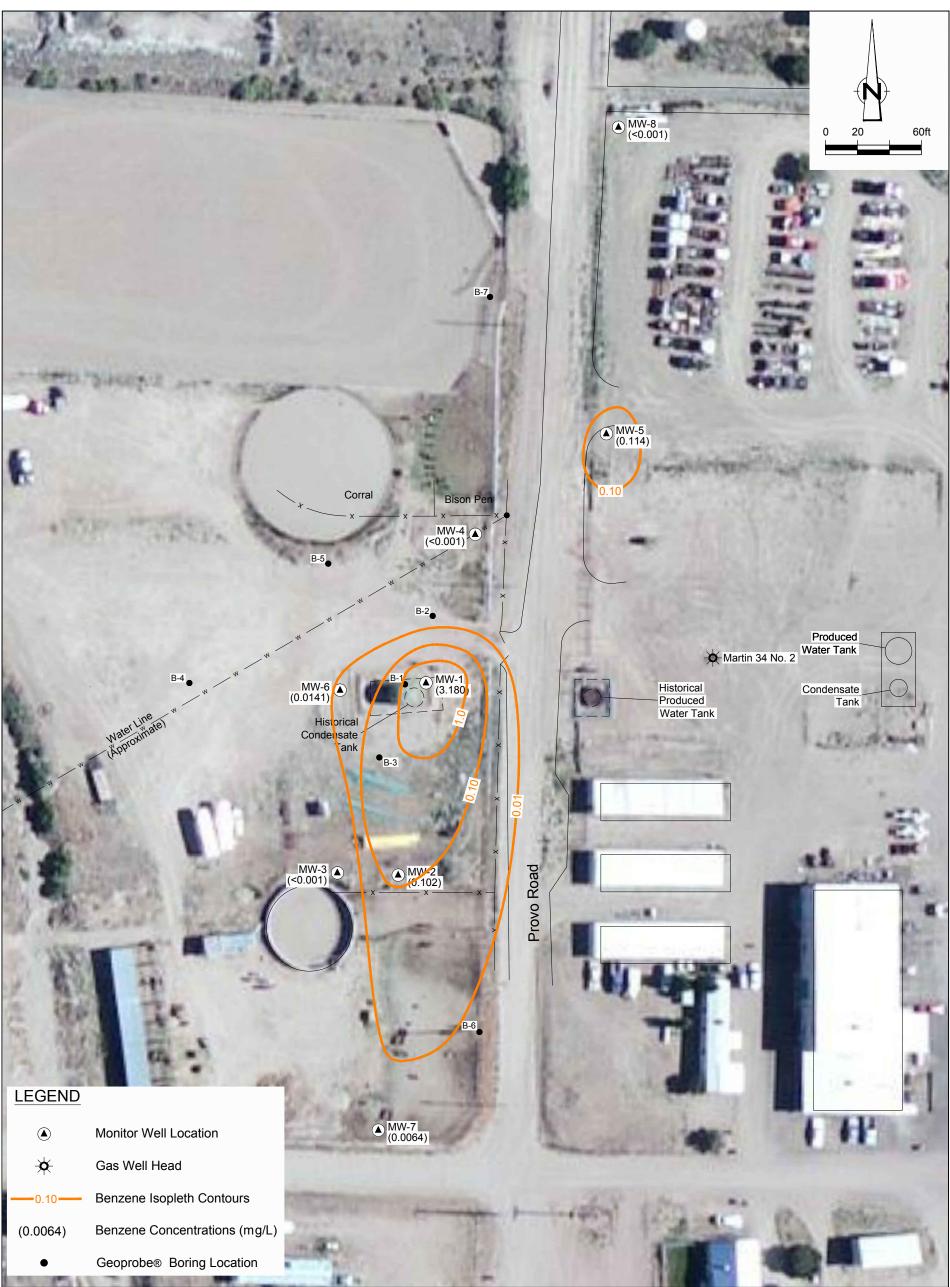


Figure 12

DECEMBER 2013 BENZENE CONCENTRATION MAP MARTIN 34 No. 2 GAS WELL REMEDIATION SITE SAN JUAN COUNTY, NEW MEXICO *ConocoPhillips Company*



Tables



SITE HISTORY TIMELINE CONOCOPHILLIPS COMPANY MARTIN 34 No. 2 SAN JUAN COUNTY, NM

Date/Time Period	Event/Action	Description/Comments
December 3, 2010	Initial Site Assessment	ConocoPhillips removed the above ground production tank. The landowner subsequently discovered hydrocarbon-stained soil in the vicinity of the former tank while regrading the area. ConocoPhillips obtained samples of the soil following notification from the landowner.
December 6, 2010	Analytical Results	Laboratory analytical results from soil samples collected on December 3, 2010 revealed hydrocarbons in excess of regulatory standards.
January 12 through 24, 2011		Excavation of soil and confirmatory sampling was conducted in the location of the former production tank. Brandon Powell of the New Mexico Oil Conservation Division (NMOCD) requested on January 20 th that the excavation be continued to a depth of 30 feet below ground surface (bgs) from a depth of 25 feet bgs. Final excavation dimensions were approximately 60 ft long by 75 feet wide by 30 feet deep. Analytical results from the final round of confirmation sampling of the excavated area indicated that the north wall and both north and south bottom areas of the excavation still contained hydrocarbons in excess of regulatory standards. The lateral extent of the excavation to the north was reached due to the proximity of a roadway. Continued lateral and vertical delineation by means other than excavation would be necessary.
January 31, 2011	Backfilling of Excavation	Backfilling of the excavation began in preparation for delineation by means of soil boring.
February 16, 2011	Meeting between ConocoPhillips and Tetra Tech, Inc.	Tetra Tech, Inc.(Tetra Tech) and ConocoPhillips made a site visit to discuss delineation plans and to meet with the property owner.
March 1 through 2, 2011		Tetra Tech supervised the installation of three soil borings using a direct-push Geoprobe [®] rig. With the exception of the soil sample collected from 38-40 feet below ground surface (bgs) in the boring that was drilled in the area of the former tank, all laboratory soil samples collected were either below laboratory detection limits or below NMOCD recommended action levels. Groundwater was encountered in two borings, located upgradient and downgradient of the former tank, at approximately 40 feet bgs. The saturated interval in these two borings matched an interval that was damp, not wet, in the boring located in the area of the former tank. Groundwater samples collected from the two water-bearing borings exceeded the New Mexico Water Quality Control Commission (NMWOCC) standards for benzene and chloride.
July 18 through 22, 2011	Monitor Well Installation	Conestoga Rovers and Associates (CRA) supervised the installation of four groundwater monitor wells at the Site. Hydrocarbon impacts to soil accompanied by a change in color from light tan/gray to dark gray were encountered at approximately 50 feet bgs in MW-4, the upgradient monitor well and at approximately 38 feet bgs in monitor well MW-2, the downgradient monitor well. Elevated photo-ionization detector (PID) readings were present in Monitor Well MW-1, located in the area of the former tank, from excavation bottom to a saturated seam at approximately 40 feet bgs. Laboratory analytical results on soil samples collected from MW-1, MW-2, and MW-4 were found to contain TPH and BTEX above NMOCD recommended action levels.
July 27, 2011	Baseline Groundwater Monitoring	CRA conducted a baseline groundwater monitoring event for Monitor Wells MW-1 through MW-4. Laboratory analytical results were found to contain BTEX, dissolved iron, dissolved managanese, dissolved boron, chloride, fluoride, sulfate, total dissolved solids (TDS), and naphthalene in exceedance of NMWQCC standards.
September 30, 2011	Quarterly Groundwater Monitoring	CRA conducted quarterly groundwater sampling.
November 9 through November 10, 2011	Deliniation of Impacts	JR Drilling, under CRA supervision, advanced four soil borings using a direct-push Geoprobe® rig to further deliniate impacts.

SITE HISTORY TIMELINE CONOCOPHILLIPS COMPANY MARTIN 34 No. 2 SAN JUAN COUNTY, NM

Date/Time Period	Event/Action	Description/Comments
November 28 through December 1, 2011	Monitor Well Installation	CRA supervised the installation of three groundwater monitor wells at the Site. Hydrocarbon impacts to soil were noted during field screening of soil from both MW-5 and MW-6 borings. Laboratory analytical results on soil samples collected from MW-6 were found to contain TPH and BTEX above NMOCD recommended action levels.
December 13, 2011	Quarterly Groundwater Monitoring	CRA conducted quarterly groundwater sampling.
March 8, 2012	Quarterly Groundwater Monitoring	CRA conducted quarterly groundwater sampling.
June 6, 2012	Quarterly Groundwater Monitoring	CRA conducted quarterly groundwater sampling.
September 25, 2012	Quarterly Groundwater Monitoring	CRA conducted quarterly groundwater sampling.
December 19, 2012	Quarterly Groundwater Monitoring	CRA conducted quarterly groundwater sampling.
March 20, 2013	Quarterly Groundwater Monitoring	CRA conducted quarterly groundwater sampling.
June 13, 2013	Quarterly Groundwater Monitoring	CRA conducted quarterly groundwater sampling.
July 18, 2013	Monitor Well Installation	CRA supervised the installation of monitor well MW-8 at the Site.
September 12, 2013	Quarterly Groundwater Monitoring	CRA conducted quarterly groundwater sampling.
December 19, 2013	Quarterly Groundwater Monitoring	CRA conducted quarterly groundwater sampling.

GROUNDWATER LABORATORY ANALYTICAL RESULTS SUMMARY CONOCOPHILLIPS COMPANY MARTIN 34 No. 2 SAN JUAN COUNTY, NM

								SAN JUAN COUN	ΓY, NM								
							Xylenes	1,1,2,2-	Methylene					Boron	Iron	Manganese	Total Dissolved
Well			Sample	Benzene	Ethylbenzene	Toluene	(total)	Tetrachloroethane	chloride	Naphthalene	Chloride	Fluoride	Sulfate	(dissolved)	(dissolved)	(dissolved)	Solids (TDS)
ID	Sample ID	Date	Type	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
	NMWQCC Groundwater Qu	ality Standard	ds	0.01	0.75	0.75	0.62	0.01	0.1	0.03	250	1.6	600	0.75	1	0.2	1000
B-4	GW-075035-110911-B4	11/9/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.001	< 0.01	12.1	2.2	5610	0.96	< 0.05	0.134	7030
B-5	GW-075035-110911-B5	11/9/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	0.0012	< 0.01	509	2.2	20500	0.977	< 0.05	5.03	26000
	GW-075035-072711-CFM-003	7/27/2011	(orig)	4.46	0.782	13.3	7.85	< 0.5	0.667	< 5							
	GW-075035-093011-CM-009	9/30/2011	(orig)	4.47	0.772	9.48	8.33	< 0.02	< 0.02	< 0.2	287	< 2.0	13300				21000
	GW-075036-121311-CB-MW-1	12/13/2011	(orig)	4.44	0.751	6.23	9.04	< 0.1	< 0.1	< 1.0	270	2.1	12300	1.12	8.94	4.17	20700
	GW-075036-121311-CB-DUP	12/13/2011	(Duplicate)	4.31	0.812	4.98	9.57										
	GW-075035-3812-CB-MW-1	3/8/2012	(orig)	5.10	0.669	2.49	9.08	< 0.1	< 0.1	< 1.0				1.10	7.34	3.48	
	GW-075035-060712-CB-MW-1	6/7/2012	(orig)	3.00	0.300	3.83	4.05	< 0.1	< 0.1	< 1.0	285	< 0.20	14100	1.00	5.98	2.09	25000
MW-1	GW-075035-092512-CM-MW-1	9/25/2012	(orig)	5.040	0.626	1.660	8.850	< 0.1	< 0.1	.0456	268	< 4.0	13100		-		24100
	GW-075035-122012-CM-MW-1	12/20/2012	(orig)	3,960	0.336	2.570	6.450	< 0.05	< 0.05	0.0012	301	< 0.20	15300	1.230	1.250	0.886	23100
	GW-075035-032013-CM-MW-1	3/20/2013	(orig)	4.230	0.411	1.050	8,380	<0.10	< 0.10	0.0438	285	< 0.20	13600	1.210	0.345	0.670	32200
	075035-061313-IK-MW1	6/13/2013	(orig)	4.410	0.418	1.640	7.220	<0.10	<0.10	0.0508	289	< 0.20	12400	1,190	0.067	0.507	22000
	GW-075035-091213-CM-MW-1	9/12/2013	(orig)	3.470	0.428	3.020	7.900	<0.10	< 0.10	0.0365	296	<0.20	12100	1.100	0.46	0.95	31300
	GW-075035-121713-CM-MW-1	12/17/2013	(orig)	3.180	0.297	5.230	6.120	<0.10	0.156	0.0258	459	<4.0	15100	1.160	0.0910	0.590	24300
	1	7/27/2011	(orig)	0.244	0.152	< 0.01	0.0814	0.0191	0.0165	< 0.112 / < 0.1	330	2.9	17100	1.09	3.46	2.71	26600
	GW-075035-072711-CFM-002	7/27/2011	(Duplicate)	0.23	0.143	< 0.005	0.0784	0.0092	0.0096	0.0535							
	GW-075035-093011-CM-007	9/30/2011	(orig)	0.197	0.155	< 0.001	0.112	< 0.001	< 0.001	0.0727	328	< 2.0	19100	1.08	3.59	2.54	26000
	GW-075035-093011-CM-010	9/30/2011	(Duplicate)	0.258	0.189	< 0.005	0.112	< 0.005	0.0144	0.0715					-		
	GW-075036-121311-CB-MW-2	12/13/2011	(orig)	0.249	0.199	0.0266	0.143	< 0.010	< 0.010	< 0.10	348	0.75	16800	1.12	4.16	2.280	26600
	GW-075035-3812-CB-MW-2	3/8/2012	(orig)	0.295	0.221	< 0.005	0.0647	< 0.005	< 0.005	0.074	398	< 0.010	23200	0.922	< 0.050	3.76	30200
	GW-075035-060712-CB-MW-2	6/6/2012	(orig)	0.207	0.219	< 0.005	0.0443	< 0.005	< 0.005	0.0238	400	< 0.2	26100	0.847	4.79	3.88	28000
MW-2	GW-075035-092512-CM-MW-2	9/25/2012	(orig)	0.127	0.161	< 0.005	0.0443	< 0.005	0.0076	0.0583	382	< 4.0	19900	1.020	0.913	2.30	31100
	GW-075035-092512-CM-DUP	9/25/2012	(Duplicate)	0.142	0.181	< 0.02	0.0356			-		- 110					
	GW-075035-121912-CM-MW-2	12/19/2012	(orig)	0.202	0.281	< 0.005	0.0811	< 0.005	< 0.005	< 0.0005	423	< 0.2	22300	1.040	1.200	1.980	33200
	GW-075035-032013-CM-MW-2	3/20/2013	(orig)	0.177	0.334	< 0.005	0.084	< 0.005	< 0.005	0.00089	408	<0.2	19100	0.981	1.180	2.210	43200
	075035-061313-JK-MW2	6/13/2013	(orig)	0.128	0.232	< 0.005	0.0508	< 0.005	< 0.005	0.0025	416	<0.2	19500	0.940	1.660	3.190	18500
	075035-061313-IK-DUP	6/13/2013	(Duplicate)	0.141	0.273	< 0.005	0.0631	< 0.005	< 0.005	0.0633							
	GW-075035-091113-CM-MW-2	9/11/2013	(orig)	0.141	0.318	< 0.005	0.0619	<0.005	<0.005	0.00097	450	< 0.2	18900	0.85	1.6	2.0	88400
	GW-075035-121713-CM-MW-2	12/17/2013	(orig)	0.107	0.247	< 0.005	0.0632	<0.005	0.0103	0.0336	453	<4.0	22400	0.791	1.450	2.430	32800
	GW-075035-072711-CFM-005	7/27/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.001	< 0.01 / < 0.0128	437	2.7	17600	0.976	0.495	1.1	29200
	GW-075035-093011-CM-006	9/30/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.001	< 0.01	399	< 2.0	19500	0.914	< 0.05	3.74	26800
	GW-075036-121311-CB-MW-3	12/13/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.001	< 0.01	375	< 0.20	17100	0.997	1.02	0.776	27500
	GW-075035-3812-CB-MW-3	3/8/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.001	< 0.01	456	< 10	21500	0.962	4.75	4.47	30500
	GW-075035-060712-CB-MW-3	6/7/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.001	< 0.01	431	< 0.20	23300	0.889	< 0.05	2.02	34100
MW-3	GW-075035-092512-CM-MW-3	9/25/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.001	< 0.01	468	< 4.0	18900	0.986	< 0.05	0.497	30000
	GW-075035-121912-CM-MW-3	12/19/2012	(orig)	< 0.001	<0.001	< 0.001	< 0.003	<0.001	< 0.001	<0.0005	458	<0.2	21400	1.030	0.152	0.547	30600
	GW-075035-032013-CM-MW-3	3/20/2012	(orig)	< 0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.0005	373	<0.2	20400	0.936	0.217	4.160	45600
	075035-061313-JK-MW3	6/13/2013	(orig)	< 0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.0005	377	<0.2	18900	0.991	<0.100	1.250	30900
	GW-075035-091113-CM-MW-3	9/11/2013	(orig)	< 0.001	<0.001	<0.001	< 0.003	<0.001	<0.001	<0.0005	403	<0.2	18700	0.87	< 0.25	3.9	80500
	GW-075035-121713-CM-MW-3	12/17/2013	(orig)	< 0.001	<0.001	< 0.001	< 0.003	<0.001	< 0.001	<0.0005	403	<4.0	20300	0.899	0.272	0.0836	31600
	GW-075035-072711-CFM-004	7/27/2013	(orig)	0.0021	0.0055	0.0054	0.0705	0.0019	< 0.001	< 0.0111 / < 0.01	435	4.3	25200	0.638	0.677	10.5	40200
	GW-075035-093011-CM-004	9/30/2011	(orig)	0.0021	0.0037	0.0014	0.0815	< 0.0019	< 0.001	< 0.01	433	2.8	27400	0.664	1.13	10.5	37200
	GW-075036-121311-CB-MW-4	12/13/2011	(orig)	0.0027	< 0.001	< 0.0014	0.0099	< 0.001	< 0.001	< 0.01	344	< 0.20	26900	0.651	1.43	8.50	40700
1	GW-075035-3812-CB-MW-4	3/8/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.001	< 0.01	377	< 10	30200	0.554	1.43	8.28	38400
	GW-075035-060712-CB-MW-4	6/7/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.001	< 0.01	378	1.4	28400	0.558	0.983	5.25	40300
MW-4	GW-075035-092512-CM-MW-4	9/25/2012	(orig)	0.0011	< 0.001	< 0.001	< 0.003	< 0.001	< 0.001	< 0.01	347	5.8	25600	0.704	1.020	5.170	38900
141 1 1 1 1 1	GW-075035-121912-CM-MW-4	9/23/2012	(orig)	0.0011	< 0.001	< 0.001	< 0.003	< 0.001	< 0.001	< 0.001	397	<0.2	23600	0.808	0.782	4.840	36400
	GW-075035-032013-CM-MW-4	3/20/2012	(orig)	<0.0011	<0.001	<0.001	<0.003	<0.001	<0.001	0.0009	397	<0.2	23600	0.748	0.836	3.580	63000
	075035-061313-JK-MW4	6/13/2013	(orig)	0.0012	<0.001	<0.001	< 0.003	<0.001	<0.001	<0.0005	378	<0.2	23000	0.748	0.506	4.080	33700
	GW-075035-091113-CM-MW-4	9/11/2013	(orig)	0.0012	<0.001	<0.001	< 0.003	<0.001	<0.001	0.0005	378	<0.2	23200	0.785	0.506	2.9	90900
	GW-075035-121713-CM-MW-4	12/17/2013	(orig)	<0.0010	<0.001	<0.001	<0.003	<0.001	<0.001	0.0027	394	5.1	20800	0.789	0.354	2.720	36300
1	GW-070000-121710-CWI-WW-4	12/17/2013	(ong)	NU.001	NU.001	NU.001	NU.003	NU.001	NU.001	0.0021	374	3.1	24300	0./07	0.334	2.720	30300

GROUNDWATER LABORATORY ANALYTICAL RESULTS SUMMARY CONOCOPHILLIPS COMPANY MARTIN 34 No. 2 SAN IIIAN COUNTY NM

								SAN JUAN COUNT	ΓY, NM								
Well ID	Sample ID	Date	Sample Type	Benzene (mg/L)	Ethylbenzene (mg/L)	Toluene (mg/L)	Xylenes (total) (mg/L)	1,1,2,2- Tetrachloroethane (mg/L)	Methylene chloride (mg/L)	Naphthalene (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Sulfate (mg/L)	Boron (dissolved) (mg/L)	Iron (dissolved) (mg/L)	Manganese (dissolved) (mg/L)	Total Dissolved Solids (TDS) (mg/L)
	NMWQCC Groundwater Qua	lity Standard	ls	0.01	0.75	0.75	0.62	0.01	0.1	0.03	250	1.6	600	0.75	1	0.2	1000
	GW-075036-121311-CB-MW-5	12/13/2011	(orig)	0.195	0.0027	< 0.001	0.0081	< 0.001	< 0.001	< 0.01							
	GW-075035-3812-CB-MW-5	3/8/2012	(orig)	1.20	0.0628	< 0.001	0.0613	< 0.001	< 0.001	< 0.01	187	< 4.0	5810		-	-	8520
	GW-075035-060712-CB-MW-5	6/7/2012	(orig)	1.03	< 0.02	< 0.02	< 0.06	< 0.02	< 0.02	< 0.2	219	0.69	8010		-	-	13900
	GW-075035-092512-CM-MW-5	9/25/2012	(orig)	1.040	.0772	< 0.02	< 0.06	< 0.02	.0289	< 0.2	202	< 4.0	6800				11600
MW-5	GW-075035-121912-CM-MW-5	12/19/2012	(orig)	0.861	0.0436	< 0.02	< 0.06	< 0.02	< 0.02	< 0.0005	230	< 0.2	7090	1.550	2.150	1.060	12000
	GW-075035-032013-CMMW-5	3/20/2013	(orig)	0.493	0.0266	< 0.005	< 0.015	< 0.005	< 0.005	< 0.0005	206	< 0.2	6960	2.870	6.060	2.230	11000
	075035-061313-JK-MW5	6/13/2013	(orig)	0.278	0.0146	< 0.005	< 0.015	< 0.005	< 0.005	< 0.0005	203	< 0.2	7110	1.460	2.200	0.806	15100
	GW-075035-091113-CM-MW-5	9/11/2013	(orig)	0.175	0.0103	< 0.005	< 0.015	< 0.005	< 0.005	0.00061	228	< 0.2	5400	1.4	0.96	0.69	15100
	GW-075035-121713-CM-MW-5	12/17/2013	(orig)	0.114	0.0069	< 0.005	< 0.015	< 0.005	< 0.005	< 0.0005	228	<4.0	7120	1.490	1.610	0.647	12000
	GW-075036-121311-CB-MW-6	12/13/2011	(orig)	0.0247	0.191	< 0.005	2.650	< 0.005	< 0.005	< 0.05	288	< 0.20	24900	0.681	4.10	2.93	37800
	GW-075035-3812-CB-MW-6	3/8/2012	(orig)	0.0432	0.190	< 0.01	3.32	< 0.01	< 0.01	< 0.10	369	< 10	31600	0.622	< 0.05	2.53	37500
	GW-075035-3812-CB-DUP	3/8/2012	(Duplicate)	< 0.050	0.199	< 0.05	3.61	< 0.05	< 0.05	< 0.5							
	GW-075035-060712-CB-MW-6	6/7/2012	(orig)	0.0255	0.181	< 0.01	3.16	< 0.01	< 0.01	0.034	326	0.84	26800	0.572	< 0.05	2.01	40600
	GW-075035-060712-CB-DUP	6/7/2012	(Duplicate)	0.0247	0.178	< 0.005	3.22	< 0.005	< 0.005	< 0.05							
	GW-075035-092512-CM-MW-6	9/25/2012	(orig)	0.0218	0.166	< 0.01	2.92	< 0.01	< 0.01	0.0237	345	< 4.0	25500	0.656	< 0.05	2.190	37800
	GW-075035-121912-CM-MW-6	12/19/2012	(orig)	0.0214	0.180	< 0.01	3.30	< 0.01	< 0.01	0.0023	392	< 0.2	27300	0.687	< 0.1	2.340	34600
MW-6	GW-075035-121912-CM-DUP	12/19/2012	(Duplicate)	0.0219	0.198	< 0.01	3.53					-					
	GW-075035-032013-CM-MW-6	3/20/2013	(orig)	0.0221	0.196	< 0.01	3.45	< 0.01	< 0.01	0.0336	380	< 0.2	23200	0.642	< 0.05	2.460	70000
	GW-075035-032013-CM-DUP	3/20/2013	(Duplicate)	0.0198	0.200	< 0.002	3.52	< 0.002	< 0.002	0.057	-				-	-	
	075035-061313-JK-MW6	6/13/2013	(orig)	0.0154	0.129	< 0.01	2.03	< 0.01	< 0.01	0.019	396	< 0.2	23000	0.666	< 0.1	2.030	36000
	GW-075035-091113-CM-MW-6	9/11/2013	(orig)	0.0120	0.125	< 0.01	1.79	< 0.01	< 0.01	0.0250	492	< 0.2	19600	0.63	< 0.25	2.0	85400
	GW-075035-091113-CM-DUP	9/11/2013	(Duplicate)	0.0114	0.133	< 0.001	1.89							-	1	1	
		12/17/2013	(orig)	0.0141	0.127	< 0.01	1.81	< 0.01	0.0222	0.0302	755	4.5	23000	0.653	0.121	1.860	34600
	GW-075035-121713-CM-DUP	12/17/2013	(Duplicate)	0.0112	0.133	< 0.01	1.780	< 0.01	0.0124						-	-	
	GW-075036-121311-CB-MW-7	12/13/2011	(orig)	0.0196	0.351	< 0.001	0.0405	< 0.001	< 0.001	0.0329	269	1.5	17800	0.772	0.076	2.28	21400
	GW-075035-3812-CB-MW-7	3/8/2012	(orig)	0.0186	0.357	< 0.005	< 0.015	< 0.005	< 0.005	< 0.05	307	< 4.0	20600	0.840	0.612	4.05	28400
	GW-075035-060712-CB-MW-7	6/7/2012	(orig)	0.0122	0.333	< 0.005	< 0.015	< 0.005	< 0.005	< 0.05	300	< 0.20	25900	0.824	0.866	3.14	35700
	GW-075035-092512-CM-MW-7	9/25/2012	(orig)	0.0109	0.426	< 0.005	< 0.015	< 0.005	< 0.005	0.0061	266	< 4.0	19500	0.895	1.250	4.080	30500
MW-7		12/19/2012	(orig)	0.001	0.0397	< 0.001	< 0.003	< 0.001	< 0.001	< 0.0005	124	0.84	10300	0.803	0.779	2.420	13800
	GW-075035-032013-CM-MW-7	3/20/2013	(orig)	0.0077	0.450	< 0.005	< 0.015	< 0.005	< 0.005	< 0.0005	283	< 0.20	21500	0.864	2.560	3.300	56000
	075035-061313-JK-MW7	6/13/2013	(orig)	0.0051	0.188	< 0.005	< 0.015	< 0.005	< 0.005	< 0.0005	258	< 0.20	20400	0.752	0.578	2.460	35900
		9/11/2013	(orig)	0.0081	0.468	< 0.005	< 0.015	< 0.005	< 0.005	< 0.0005	363	< 0.20	19300	0.80	2.6	3.2	91600
	GW-075035-121713-CM-MW-7	12/17/2013	(orig)	0.0064	0.185	< 0.001	< 0.003	< 0.001	< 0.001	0.0079	279	<4.0	20500	0.767	3.130	2.640	28900
MW-8	GW-075035-091113-CM-MW-8	9/11/2013	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.001	< 0.0005	309	< 0.20	10800	0.87	< 0.25	4.6	26700
141 4 4 -0	GW-075035-121713-CM-MW-8	12/17/2013	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.001	< 0.0005	465	<4.0	14400	0.876	< 0.05	3.440	21400

 Notes:

 NMWQCC = New Mexico Water Quality Control Commission

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

 0.001 = Below laboratory detection limit of 0.001 mg/L

 Bold = concentrations that exceed the NMWQCC groundwater quality standard

MONITOR WELL SPECIFICATIONS AND GROUNDWATER ELEVATION SUMMARY CONOCOPHILLIPS COMPANY MARTIN 34 No. 2 SAN JUAN COUNTY, NM

Well ID	Total Depth 2" PVC Casing (ft bgs)	0.010" Slot Screen Interval (ft bgs)	TOC Elevation* (ft)	Date Measured	Depth to Groundwater (ft below TOC)	Relative Groundwater Elevation
			93.09	7/27/2011	40.45	52.64
			95.09	9/30/2011	40.23	52.86
				12/13/2011	39.23	54.05
				3/7/2012	39.09	54.19
				6/6/2012	39.12	54.16
MW-1	41	31 - 41		9/24/2012	39.30	53.98
			93.28	12/19/2012	39.11	54.17
				3/19/2013	39.18	54.10
				6/13/2013	39.06	54.22
				9/12/2013	38.87	54.41
				12/17/2013	38.50	54.78
			87.45	7/27/2011	37.68	49.77
			07.10	9/30/2011	37.68	49.77
				12/13/2011	37.51	50.08
				3/7/2012	37.36	50.23
				6/6/2012	35.46**	52.13**
MW-2	41.5	31.5 - 41.5		9/24/2012	37.60	49.99
			87.59	12/19/2012	37.28	50.31
				3/20/2013	37.36	50.23
				6/13/2013	37.24	50.35
				9/11/2013	37.12	50.47
				12/17/2013	36.55	51.04
			87.19	7/27/2011	36.95	50.24
				9/30/2011	36.98	50.21
				12/13/2011	36.70	50.62
				3/7/2012	36.57	50.75
1.0147.0	10	01 16		6/6/2012	36.67	50.65
MW-3	46	31 - 46	07.00	9/24/2012	36.80	50.52
			87.32	12/19/2012	36.48	50.84
				3/20/2013	36.60 36.43	50.72 50.89
				6/13/2013	36.30	51.02
				9/11/2013	35.70	51.62
				12/17/2013	44.37	55.26
			99.63	7/27/2011 9/30/2011	44.37	55.26
				, ,	44.18	55.64
				12/13/2011 3/7/2012	44.18	55.73
				6/6/2012	44.09	55.73
MW-4	53	38 - 53		9/24/2012	44.09	55.57
14144-1	00	50-55	99.82	12/19/2012	44.16	55.66
			,,, <u>,</u> ,,,,	3/20/2012	44.32	55.50
				6/13/2013	44.14	55.68
				9/11/2013	43.97	55.85
				12/17/2013	43.55	56.27

MONITOR WELL SPECIFICATIONS AND GROUNDWATER ELEVATION SUMMARY CONOCOPHILLIPS COMPANY MARTIN 34 No. 2 SAN JUAN COUNTY, NM

Well ID	Total Depth 2" PVC Casing (ft bgs)	0.010" Slot Screen Interval (ft bgs)	TOC Elevation* (ft)	Date Measured	Depth to Groundwater (ft below TOC)	Relative Groundwater Elevation
				12/13/2011	47.61	50.66
				3/7/2012	45.61	52.66
				6/6/2012	44.60	53.67
				9/24/2012	44.60	53.67
MW-5	48.5	38.5 - 48.5	98.27	12/19/2012	45.43	52.84
				3/20/2013	43.76	54.51
				6/13/2013	44.13	54.14
				9/11/2013	45.02	53.25
				12/17/2013	44.45	53.82
				12/13/2011	41.01	53.79
				3/7/2012	40.91	53.89
				6/6/2012	41.00	53.80
				9/24/2012	41.07	53.73
MW-6	59.0	44-59	94.8	12/19/2012	40.87	53.93
				3/20/2013	41.00	53.80
				6/13/2013	40.91	53.89
				9/11/2013	40.81	53.99
				12/17/2013	40.20	54.60
				12/13/2011	40.49	46.00
				3/7/2012	40.33	46.16
				6/6/2012	40.37	46.12
				9/24/2012	40.45	46.04
MW-7	51.5	36.5-51.5	86.49	12/19/2012	40.14	46.35
				3/20/2013	40.33	46.16
				6/13/2013	40.20	46.29
				9/11/2013	40.12	46.37
				12/17/2013	39.70	46.79
MW-8	55.0	40-55		9/11/2013	42.39	
10100-8	55.0	40-55		12/17/2013	41.80	

ft = Feet TOC = Top of casing bgs = below ground surface * Elevation relative to an arbitrary reference elevation of 100 feet

** Anomalous data point

Appendix A

GROUNDWATER SAMPLING FIELD FORMS



	(•	
	WELL SAMP	LING FIELD	INFORMATIO	N FORM			
SITE/PROJECT NAME: SAMPLE ID:	Martin 3 Gw-075035-	4 No.2 032013-CN	joi <u>1- MW-</u> 1 weli	6 0	35		
3-19-13 13-20-13 CM PURGE DATE	3-20-13 SAMPLE DATE	WELL PURGING		314 FER VOL IN CASING (GALLONS)		75 ol purged lons)	
(MM DD YY) PURGING EQUIPMENTDEDICATED	(MM DD YY) (I) Y N (CIRCLE ONE)	(24 HOUR) PURGING AND SAMI	, PLING EQUIPMENT		JIPMENTDED	$\overline{\mathcal{A}}$	N NE)
	A - SUBMERSIBLE PUMP D - C B - PERISTALTIC PUMP E - P	PURGE PUMP H-1	BAILER WATERRA®		RGING DEVICE OTH	er (Specify)	
AMPLING DEVICE	C - BLADDER PUMP F - D	DIPPER BOTTLE X-C	OTHER	X=	MPLING DEVICE OTH	HER (SPECIFY)	
	A - TEFLON D - F B - STAINLESS STEEL E - P	PVC POLYETHYLENE			RGING MATERIAL O		
	C-POLYPROPYLENE X-C	DTHER		X=	MPLING MATERIAL		
			COMBINATION TEFLON/POLYPROPYLENE		RGE TUBING OTHER		
SAMPLING TUBING	C-ROPE F-SI	ILICONE X-C	OTHER .		MPLING TUBING OTH		
ILTERING DEVICES 0.45	A - IN-LINE DISPOSABLE	B - PRESSURE	far metals	anly			
	3-14	1-13 FIELD MEASU	REMENTS				
DEPTH TO WATER	39.18	(feet)	WELL ELEVATION			(feet)	
WELL DEPTH	41,14	(feet)	GROUNDWATER ELEVATION			(feet)	
TEMPERATURE	pH TDS		DC) (ORP	VOLUMI	I
(c) ·	(std)	(g/L)	(µS/cm)	(mg/L)	(mV)		(gal)
(°C)	(std)	(g/L)	(µS/cm)	(mg/ <u>L)</u>	(mV)		(gal)
(°C)	(std)	(g/L)	(µS/cm)	(mg/L)	(mV)		(gal)
(°C)	(std)	(g/L)	(μS/cm)	(mg/L)	(mV)		(gal)
(ന	(std)	(g/L)	(µS/cm)	(mg/ <u>L)</u>	(mV)		(gal)
AMPLE APPEARANCE:	1010 odor: S	WINDY Y/N	COLOR: GIULI	SHEEN Y,	-	10 10	
ресігіс сомментя: 3/4 1) ТШ 01 3-2	gallen purged 20-13 = 40,05	on 3. di	-19-13. No 10 to Jow Profession	parame Well UD	teis co une E	tlecter stou	5(<u>)</u>
211 49 - 1	2941	I	ccmarge,				
I CERTIFY THAT SAMPLING PROCEDURES	<u> </u>	ABLE CRA PROTOCOLS	Din	10- 10	~~~		
DATE 3/20/13 PRI	T (Mistivel	Matternatur	* / Attelie	Anela	$\mathcal{U}^{(j)}$		

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WELL SAMPLING FIELD INFORMATION FORM job# <u>(175735</u> vell# *MUL-2* 34 No. 2 SITE/PROJECT NAME: - Zwell# SAMPLE ID: - MU WELL PURGING INFORMATION 13-20-13 20.13 WATER VOL. IN CASING ACTUAL VOL. PURGED SAMPLE DATE PURGE DATE SAMPLE TIME MM DD YY (24 HOUR) (GALLONS) (GALLONS) (MM DD YY) PURGING AND SAMPLING EQUIPMENT PURGING EQUIPMENT DEDICATED N (CIRCLE ONE) CIRCLEON A - SUBMERSIBLE PUMP D - GAS LIFT PUMP G - BAILER PURGING DEVICE B - PERISTALTIC PUMP E - PURGE PUMP H - WATERRAD PURGING DEVICE OTHER (SPECIFY) X - OTHER C - BLADDER FUMP F - DIPPER BOTTLE SAMPLING DEVICE SAMPLING DEVICE OTHER (SPECIFY) - TEFLON D-PVC PURGING MATERIAL E - POLYETHYLENE STAINLESS STEEL PURGING MATERIAL OTHER (SPECIFY) C - POLYPROPYLENE X - OTHER SAMPLING MATERIAL SAMPLING MATERIAL OTHER (SPECIFY) G - COMBINATION TEFLON/POLYPROPYLENE PURGE TUBING D - POLYPROPYLENE A - TEFLON PURGE TUBING OTHER (SPECIFY) E - POLYETHYLENE B - TYGON X - OTHER SAMPLING TUBING F - SILICONE SAMPLING TUBING OTHER (SPECIFY) for metals only FILTERING DEVICES 0.45 A - IN-LINE DISPOSABLE B - PRESSURE FIELD MEASUREMENTS 1.36 DEPTH TO WATER WELL ELEVATION (feet) 40,64 GROUNDWATER ELEVATION WELL DEPTH (feet) SS SC TDS DO ORP VOLUME TEMPERATURE рH 15,28 (cc) 7.59 (std) 15.36 (g/L) 19277 (us/on) 6.63 15.31 (8/1) 19424 (us/cm) 5,69 ____267,9 7,56 (std) 15.82 5.20 15,30 (8/1) 274,8 5,85 119428 (us/cm) 7.54 (g/L) (uS/cm) (µS/cm) (mg/L) (g/L) (std) (gal) ഭവ AA OLA COLOR DKGWAY SAMPLE APPEARANCE: ODC SHEEN Y/N PRECIPITATION Y/N (IF Y TYPE) WEATHER CONDITIONS: SPECIFIC COMMENTS: 525X I CERTIFY THAT AMPLING PROCEDURES WERE IN ITH APPLICABLE CRA PROTOCOLS DAT

WELL SAMPLING FIELD INFORMATION FORM јов# <u>()750355</u> <u>М</u>W-Zyell# МШ -3 SITE/PROJECT NAME: SAMPLE ID: WELL PURGING INFORMATION ACTUAL VOL. PURGED (GALLONS) WATER VOL. IN CASING SAMPLE TIME SAMPLE DATE PURGE DATE MM DD YY (MM DD YY) (24 HOUR) (GALLONS) PURGING AND SAMPLING EQUIPMENT ¥) SAMPLING EQUIPMENT......DEDICATED Y PURGING EQUIPMENT......DEDICATEI N (CIRCLE ONE (CIRCLE ONE) A - SUBMERSIBLE PUMP D - GAS LIFT PUMP G - BAILER PURGING DEVICE H - WATERRAS B - PERISTALTIC PUMP E - PURGE PUMP PURGING DEVICE OTHER (SPECIFY) C - BLADDER PUMP F - DIPPER BOTTLE X - OTHER SAMPLING DEVICE SAMPLING DEVICE OTHER (SPECIFY) TEFLON D-PVC PURGING MATERIAL E - POLYETHYLENE - STAINLESS STEEL PURGING MATERIAL OTHER (SPECIFY) C - POLYPROPYLENE X - OTHER SAMPLING MATERIAL SAMPLING MATERIAL OTHER (SPECIFY) PURGE TUBING - TEFLON D - POLYPROPYLENE G - COMBINATION TEFLON/POLYPROPYLENE PURGE TUBING OTHER (SPECIFY) E - POLYETHYLENE B - TYGON X - OTHER SAMPLING TUBING ROPE F-SILICONE X≕ SAMPLING TUBING OTHER (SPECIFY) for metals only FILTERING DEVICES 0.45 A - IN-LINE DISPOSABLE B - PRESSURE FIELD MEASUREMENTS 36.601 WELL ELEVATION DEPTH TO WATER (feet) 45.621 (feet) GROUNDWATER ELEVATION (feet) WELL DEPTH -685C-TDS DO ORP VOLUME TEMPERATURE ъĦ 16.10 (g/L) 20254 (us/an) 76,69 7.49 115.47 (std) (us/cm) 3°,13 14,93 (8/1) 18847 7.53 (mV) 17.8. 15,49 15.dl 7.53 119150 166 (g/L) (g/L) (gal) (g/L) (µS/cm) (gal) (°C) FIELD COMMENTS econov/SILTY BIO COLOR: BRN/YLW SAMPLE APPEARANCE: SHEEN Y/N WEATHER CONDITIONS: TEMPERATURE WINDY Y/N SPECIFIC COMMENTS 443 330 3 I CERTIFY THAT AMPLINGPROCEDURES WERE IN ACC DANCE WITH APPLICABLE CRA PROTOCOLS DATE

WELL SAMPLING FIELD INFORMATION FORM N10.2 JOB# SITE/PROJECT NAME: SAMPLE ID: -075035 WELL# WELL PURGING INFORMATION 10-13 PURGE DATE (MM DD YY) SAMPLE DATE SAMPLE TIME WATER VOL. IN CASING (GALLONS) ACTUAL VOL. PURGED (MM DD YY) (24 HOUR) (GALLONS) PURGING AND SAMPLING EQUIPMENT SAMPLING EQUIPMENT......DEDICATED PURGING EQUIPMENT......DEDICA (CIRCLE ONE) CIRCLE ON 5 A - SUBMERSIBLE PUMP D - GAS LIFT PUMP G - BAILER PURGING DEVICE B - PERISTALTIC PUMP E - PURGE PUMP H-WATERRA® PURGING DEVICE OTHER (SPECIFY) C - BLADDER PUMP F - DIPPER BOTTLE X - OTHER SAMPLING DEVICE X= SAMPLING DEVICE OTHER (SPECIFY) A - TEFLON D-PVC PURGING MATERIAL Xe STAINLESS STEEL E - POLYETHYLENE PURGING MATERIAL OTHER (SPECIFY) POLYPROPYLENE X - OTHER SAMPLING MATERIAL X⇔ SAMPLING MATERIAL OTHER (SPECIFY) PURGE TUBING G - COMBINATION TEFLON D - POLYPROPYLENE TEFLON/POLYPROPYLENE TYGON E - POLYETHYLENE PURGE TUBING OTHER (SPECIFY) X - OTHER SAMPLING TUBING F - SILICONE C-ROPE X= SAMPLING TUBING OTHER (SPECIFY) -metals only FILTERING DEVICES 0.45 A - IN-LINE DISPOSABLE B - PRESSURE FIELD MEASUREMENTS WELL ELEVATION DEPTH TO WATER (feet) (feet) WELL DEPTH GROUNDWATER ELEVATION (feet) (feet) ORP TEMPERATURE pН TDS DO VOLUME 20 838 (gal (°C (std) °C (std) (g/L) /uS/cm) (gal) (g/L) 'std) (uS/cm) mVλ (gal) FIELD COMMENTS DNU (N 6605 COLOR: SAMPLE APPEARANCE: PRECIPITATION Y/N (IF Y TYPE) TEMPERATURE WINDY Y/N WEATHER CONDITIONS: SPECIFIC COMMENTS: 37<u>3</u> WITH APPLICABLE CRA PROTOCOLS DATE N) NATURE

WELL SAMPLING FIELD INFORMATION FORM
итергојест NAME: Martin 34 No. 2 JOB# 075035
SAMPLE ID: <u>GW-075035-032013-CIN-MU1-</u> 5 WELL# <u>MW ~5</u>
Well PURGING INFORMATION
3-20-13 1400 0,709 175 PURGE DATE SAMPLE DATE SAMPLE TIME WATER VOL IN CASING Actual vol purged
(MM DD YY) (AM DD YY) (24 HOUR) (GALLONS) (GALLONS)
JRGING EQUIPMENTDEDICATED Y N SAMPLING EQUIPMENTDEDICATED Y N
(CIRCLE ONE) (CIRCLE ONE)
B - PERISTALTIC PUMP E - PURGE PUMP H - WATERRAØ PURGING DEVICE OTHER (SPECIFY)
MPLING DEVICE C - BLADDER PUMP F - DIPPER BOTTLE X - OTHER X= SAMPLING DEVICE OTHER (SPECIFY)
JRGING MATERIAL D-PVC X=
B-STAINLESS STEEL E-POLYETHYLENE PURGING MATERIAL OTHER (SPECIFY) MPLING MATERIAL C-POLYPROPYLENE X-OTHER
SAMPLING MATERIAL OTHER (SPECIFY)
Image TUBING Image Tubing D-POLYPROPYLENE G-COMBINATION X= Image TUBING Image Tubing OTHER FEFLON/POLYPROPYLENE PURGE TUBING OTHER (SPECIFY)
MPLING TUBING C-ROPE F-SILICONE X-OTHER X=
TERING DEVICES 0.45 A-IN-LINE DISPOSABLE B- PRESSURE - For Metals ONly
FIELD MEASUREMENTS
DEPTH TO WATER 43.76 (feet) WELL ELEVATION (feet)
WELL DEPTH (feet) GROUNDWATER ELEVATION (feet)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
[°C) (std) (g/L) (mg/L) (mg/L) (g/l)
(°C) (sld) (g/L) (uS/cm) (mV) (g/L)
IFIELD COMMENTS IFIELD COMMENTS IFIELD COMMENTS COLOR: Light Brown SHEEN Y/N PRECIPITATION Y/N 0FY TYPE VINDY Y/N ND PRECIPITATION Y/N 0FY TYPE ND
THER CONDITIONS: TEMPERATURE $\frac{1}{1000}$ windy $\frac{1}{1000}$ precipitation $\frac{1}{10000}$ $\frac{1}{10000000000000000000000000000000000$
Collect I sample due to draw dawn and very
~ (161 a) WO ATA 16 (781)
$\frac{5000}{1000} + 1000 \text{ gc}^{2}$
$\frac{51000}{107} = 20126$
$\frac{5100}{1000} = \frac{1000}{1000} = \frac{1000}{1000$

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WELL SAMPLING FIELD INFORMATION FORM Sample ID: 35-032013-CM-MW-6 JOB# ##D: UNC: WELL# WELL PURGING INFORMATION Ô 20 13 PURGE DATE (MM DD YY) SAMPLE DATE (MM DD YY) SAMPLE TIME (24 HOUR) WATER VOL. IN CASING (GALLONS) ACTUAL VOL. PURGED (GALLON5) PURGING AND SAMPLING EQUIPMENT PURGING EQUIPMENT......DEDICATEI Y SAMPLING EQUIPMENT.......DEDICATER Y N N (CIRCLE ONE) (CIRCLE ONE) A-SUBMERSIBLE PUMP D - GAS LIFT PUMP G - BAILER PURGING DEVICE X∺ B - PERISTALTIC PUMP E - PURGE PUMP H - WATERRA® PURGING DEVICE OTHER (SPECIFY) C - BLADDER PUMP F - DIPPER BOTTLE X - OTHER SAMPLING DEVICE X≃ SAMPLING DEVICE OTHER (SPECIFY) A - TEFLON D-PVC PURGING MATERIAL χ= B - STAINLESS STEEL É - POLYETHYLENE PURGING MATERIAL OTHER (SPECIFY) C - POLYPROPYLENE X - OTHER SAMPLING MATERIAL X= SAMPLING MATERIAL OTHER (SPECIFY) PURGE TUBING TEFLON D - POLYPROPYLENE G - COMBINATION X= TEFLON/POLYPROPYLENE E - POLYETHYLENE PURGE TUBING OTHER (SPECIFY) TYGON SAMPLING TUBING X-OTHER F - SILICONE - ROPE X≕ SAMPLING TUBING OTHER (SPECIFY) tor metals only FILTERING DEVICES 0.45 A - IN-LINE DISPOSABLE **B - PRESSURE** FIELD MEASUREMENTS DEPTH TO WATER (feet) WELL ELEVATION (feet) WELL DEPTH GROUNDWATER ELEVATION (feet) SC TEMPERATURE pН TDS DO ORE VOLUME (g/L) °C) (µS/cm) (gal) (std) (mV) (g/L) (µS/cm) (°C) (std) nιV) (gal) FIELD COMMENTS Very slight ÍI. COLOR: AM 50 040 nЮ 110 9 WW SAMPLE APPEARANCE: ODOR: SHEEN Y/N 550 U WEATHER CONDITIONS TEMPERATURE WIND Y/N PRECIPITATION Y/N (IF Y TYPE) SPECIFIC COMMENTS: (a) CONO Jublicate 0 Con-I CERTIFY THAT S AMPLING PROCEDURES WERE IN A NCE WITH APPLICABLE CRA PROTOCOL DAT

	((
SITE/PROJECT NAME: SAMPLE ID:	Well SA Marti GW-075	ampling fi M_34_N 035-0320	eld inform 0. ?. <u>13- [17] - M</u> i	IATION FORI	м 975035 MW-7
13-20-13 PURGE DATE (MM DD YY)	3. 20,13 SAMPLEDATE (MM DD YY)	<u>13</u>	GING INFORMATION	WATER VOL IN CAR (GALLONS)	SING ACTUAL VOL PURGED (GALLONS)
PURGING EQUIPMENTDEDICA	TEERY) N (CIRCLE ONE)	PURGING AND	SAMPLING EQUIPME		ING EQUIPMENTDEDICATED N
PURGING DEVICE	A - SUBMERSIBLE PUMP B - PERISTALTIC PUMP C - BLADDER PUMP	D - GAS LIFT PUMP E - PURGE PUMP F - DIPPER BOTTLE	G - BAILER H - WATERRAD X - OTHER		X= PURGING DEVICE OTHER (SPECIFY) X=
	A - TEFLON B - STAINLESS STEEL C - POLYPROPYLENE	D-PVC E-POLYETHYLENE X-OTHER			SAMPLING DEVICE OTHER (SPECIFY) X= PURGING MATERIAL OTHER (SPECIFY)
SAMPLING MATERIAL	A-TEFLON B-TYGON	D-POLYPROPYLENE E-POLYETHYLENE	G - COMBINATION TEFLON/POLYPROPYL	ENE	X= SAMPLING MATERIAL OTHER (SPECIFY) X= PURGE TUBING OTHER (SPECIFY)
SAMPLING TUBING	C - ROFE	F - SILICONE LE B - PRESSURE	x-other -for N	vetals col	X=
DEPTH TO WATER WELL DEPTH	40,33 50,89	FIELD M	IEASUREMENTS Well EL GROUNDWATER EI	EVATION	(feet)
	7.35 (std) [2 7.33 (std) [2	<u>-15</u> (6/1.) [] 3,55[(6/1.) []	52 <u>98</u> (us/cm) 7160 (us/cm)	21.31 (mg/ <u>1</u> 13252 (mg/ <u>1</u>	ORP VOLUME 579.2 (mV) 4.25 (gal) 584.2 (mV) 4.75 (gal) 585.5 (mV) 5.25 (gal)
(°C)	(std)	(g/L)	(بالج/مار) [(بالج/مار) [(بالجرمار) [(بالمار) [(بالجرمار) [(بالمار) [(بالجرمار) [(بالمار) [(بالمار)]] () [(بالمار) [(بالمار)]] () [(بالمار)]] () [()(mV)(gal)
MPLE APPEARANCE: C EATHER CONDITIONS: TEM ECIFIC COMMENTS:	FERATURE 650		<u>color</u> <u>BRI</u>	V/YLW sł precipitati	
1.690×3=	= 5.069				
I CERTIFY THAT SAMPLING PROCEDU DATE 3/80/13		. 11		udoll	ndeo

10.942

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WELL SAMPLING FIELD INFORMATION FORM	
SITE/PROJECT NAME: MARYN 3472 JOB# 075035 SAMPLE ID: 075035-061313 JK-M-1 WELL# MW 1	-
WELL PURGING INFORMATION WELL PURGING INFORMATION GALLONS WATER VOL IN CASING (MM DD YY) WATER VOL IN CASING (MM DD YY) SAMPLE DATE (MM DD YY) PURGED ATE (MM DD YY) PURGENT PURGENT PURGENT CALLONS	
PURGING EQUIPMENTDEDICATEE(Y N SAMPLING EQUIPMENTDEDICATE() 1 (CIRCLE ONE) (CIRCLE ONE)	
PURGING DEVICE Image: A - SUBMERSIBLE PUMP D - GAS LIFT PUMP G - BAILER X* B - PERISTALTIC PUMP F - PURGE PUMP H - WATERRA® PURGING DEVICE OTHER (SPECIFY) SAMPLING DEVICE Image: G - BLADDER PUMP F - DIPPER BOTTLE X - OTHER X* SAMPLING DEVICE Image: G - BLADDER PUMP F - DIPPER BOTTLE X - OTHER X*	-
PURGING MATERIAL LA - TEFLON D - PVC X=	
PURGE TUBING Image: A - TEFLON D - POLYPROPYLENE C - COMBINATION X* B - TYGON E - POLYETHYLENE TEFLON/POLYPROPYLENE PURGE TUBING OTHER (SPECIFY) SAMPLING TUBING C - ROPE F - SILICONE X - OTHER X*	
FILTERING DEVICES 0.45 A - IN-LINE DISPOSABLE B - PRESSURE	
FIELD MEASUREMENTS	
DEPTH TO WATER 39.06 (feet) WELL ELEVATION (feet)	
TENPERATURE PH TDS SC DO ORP VOLUME	
20.21 10 10 10 10 10 10 10	1
$18.88_{(10)} \overline{1.04}_{(10)} 15.64_{(g/L)} \overline{2408.8}_{(us/m)} .32_{(mg/L)} \overline{38.9}_{(my)} 5/8$	
$\frac{18.86}{10} = 7.02 \text{ (std)} = \frac{15.71}{15.71} \text{ (s/L)} = 2420.9 \text{ (sts/m)} = .41 \text{ (stg/L)} = 328.9 \text{ (str)} = 344$	
18 \$5 (ro) 7.03 (std) [15.51 (g/L) 2449. [2,1] - 352. [(my/L) - 35	(gal) ×
1880 [19] 7.01 [(std)] 1596 [(g/L)] 3456 [(uS/cm)] 13] [(mg/L)] -359.9 [(mV)] 19	(gal)
FIELD COMMENTS SAMPLE APPEARANCE: STITE TO COOR: SLIGHT color: SLIGHT OCOR: SLIGHT color: SLIGHT SHEEN Y/N N WEATHER CONDITIONS: TEMPERATURE 70° WINDY Y/N N PRECIPITATION Y/N (JFY TYPE) A SPECIFIC COMMENTS:	
· · · · · · · · · · · · · · · · · · ·	
I CERTIFY THATSAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE CRA PROTOCOLS	

W	ELL SAMPLING FIELD INFORM	MATION FORM	
SITE/PROJECT NAME: M_1 SAMPLE ID: <u>07</u>	4871N 342 5035-061313-JK-MW2	job# <u>075035</u> well# <u>MW 2</u>	
GIBIS PURGEDATE (MM DD YY) GIM DD Y	ATE SAMPLE TIME	WATER VOL IN CASING (GALLONS) (G/	VOL PURGED
PURGING EQUIPMENTDEDICATED	LE ONE	SAMPLING EQUIPMENTDE	DICATED N (CIRCLE ONE)
PURGING DEVICE G A - SUBMERS B - FERISTAL SAMPLING DEVICE G C - BLADDER	TC PUMP E - PURGE PUMP H - WATERRAD	X= Purging device of X=	HER (SPECIFY)
	2.000	SAMPLING DEVICE O	THER (SPECIFY)
PURGING MATERIAL E A - TEFLON B - STAINLESS SAMPLING MATERIAL C - POLYPRO		X= PURGING MATERIAL X=	DTHER (SPECIFY)
	D - POLYFROPYLENE G - COMBINATION	SAMPLING MATERIAL	OTHER (SPECIFY)
	E - POLYETHYLENE TEFLON/POLYPROX F - SILICONE X - OTHER	PYLENE PURGE TUBING OTHE	
FILTERING DEVICES 0.45	NE DISPOSABLE B - PRESSURE	SAMPLING IUDING O	iner (FrCiFT)
	FIELD MEASUREMENTS		
DEPTH TO WATER 37.24 WELL DEPTH 406	(feet) WELL	ELEVATION	(feet) (feet)
TEMPERATURE PH	TD\$ SC	DO ORP	VOLUME
16.30 00 7.60 (64	20.55 (g/L) 30887 (45/m	n) 13.7 (mg/1) 280,9 (mV)	, 5 (gal)
16.37 rs 7.41 (std 16.38 rs 7.41 (std	19.76 30371	36 - 282 (1)	(gal)
16.30 mg 1.91 (shi			(gal)
(sid		1 1 1	(gal)
AMPLE APPEARANCE: ////////////////////////////////////	FIELD COMMENTS	black 578-5-44 SHEEN Y/N N PRECIPITATION Y/N (IF Y TYPE)	, 1/
DUP COLLECTE	<u>b</u>		
		<u> </u>	
I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCOR	(Me	

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	WELL SAMPLING FIELD INFORMATION FORM
SITE/PROJECT NAMI SAMPLE I	
	WELL PURGING INFORMATION
PURGE DATE (MM DD YY)	Image: Constraint of the constr
PURGING EQUIPMENT	
	(CIRCLE ONE) (CIRCLE ONE)
PURGING DEVICE SAMPLING DEVICE	Image: A - SUBMERSIBLE PUMP D - GAS LIFT PUMP G - BAILER X= B - FERISTALTIC FUMP E - PUKGE PUMP H - WATERRAS PURGING DEVICE OTHER (SPECIFY) Image: C - BLADDER PUMP F - DIPPER BOTTLE X - OTHER X=
	SAMPLING DEVICE OTHER (SPECIFY)
PURGING MATERIAL SAMPLING MATERIAL	L A - TEFLON D - PVC X=
	SAMPLING MATERIAL OTHER (SPECIFY)
PURGE TUBING	A - TEFLON D - FOLYPROPYLENE G - COMBINATION X
SAMPLING TUBING	C - ROPE F - SILICONE X - OTHER X-
FILTERING DEVICES 0.15	FIELD MEASUREMENTS
DEPTH TO WATE	R 36.43 (feet) WELL ELEVATION (feet)
WELL DEPTY	H 45.46 (feet) GROUNDWATER ELEVATION (feet)
TEMPERATURE	PH TDS SC DO ORP VOLUME
1608 19	1.65 (estd) 19.20 (estd) 21534 (us/cm) .34 (mg/L) - 193.8 (mv) 55 (estd) 19.58 (mv) 19
5.94 m	7.41 (sta) 18.97 (g/L) 21178 (us/cm) 3 (mg/L) 88.3 (mv) 545 (ga
15-96 0	7.37 (std) 18.76 (ert) 28844 (15/cm) 127 (19/1)-182.5 (111) 4.5 (24
(°C)	(std) (g/L) (uS/cm) (ng/L) (mV) (g/L)
(°C)	(std) (g/L) (mV) (mV) (g/L)
	FIELD COMMENTS
SAMPLE APPEARANCE: WEATHER CONDITIONS: SPECIFIC COMMENTS:	HIELD COMMENTS ODOR: 1000 ODOR: 1000 COLOR: 1000 TEMPERATURE 70 WINDY Y/N V Precupitation V/N (IF Y TYPE)
I CERTIFY THAT SAMPLING PRO	PRINT South Information

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SITE/PROJECT NAMI SAMPLE I	
	WELL PURGING INFORMATION
PURGE DATE (MINDD YY)	G-13.13 220 1.69 5.25 SAMPLE DATE (MM DD YY) SAMPLE TIME (24 HOUR) Water Vol. IN CASING (GALLONS) ACTUAL VOL. FURGED (GALLONS)
PURGING EQUIPMENTDEE	PURGING AND SAMPLING EQUIPMENT CATED Y N CIRCLE ONE) CIRCLE ONE) CIRCLE ONE) CIRCLE ONE)
PURGING DEVICE	A - SUBMERSIBLE PUMP D - GAS LIFT PUMP G - BAILER X= B - PERISTALTIC PUMP E - PURGE PUMP H - WATERRAD PURGING DEVICE OTHER SPECIFY)
SAMPLING DEVICE	C - BLADDER FUMP F - DIPPER BOTTLE X - OTHER X*
PURGING MATERIAL SAMPLING MATERIAL	A. TEFLON D. PVC X= B-STAINLESS STEEL E-POLYETHYLENE PURGING MATERIAL OTHER (SPECIFY) E C-POLYPROPYLENE X-OTHER
PURGE TUBING	A - TEFLON D - POLYPROPYLENE G - COMBINATION X=
SAMPLING TUBING	B - TYGON E - POLVETHYLENE PURGE TUBING OTHER SPECIFY) C - ROPE F - SILICONE X - OTHER
FILTERING DEVICES 0.45	A - IN-LINE DISPOSABLE B - PRESSURE FIELD MEASUREMENTS
DEPTH TO WATE	R 44,14 (reet) WELL ELEVATION (reet)
WELL DEPTH	H (feet) GROUNDWATER ELEVATION (feet)
TEMPERATURE	pH TDS SC DO ORP VOLUME
	$\frac{7.98}{(std)} = \frac{21.68}{(g/L)} = \frac{33356}{33356} = \frac{.22}{(mg/L)} = $
	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$
	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
(ro	(std) (g/L) (u/S/cm) (mg/L) (mV) (gal)
(r0	(std) (g/L) (uS/cm) (mg/L) (mV) (gal)
MAPLE APPEARANCE: PEATHER CONDITIONS: PECIFIC COMMENTS:	FIELD COMMENTS ODOR: <u>GLICHI</u> COLOR: <u>CLIFUAR</u> SHEEN Y/N TEMPERATURE 10 VINDY Y/N PRECIPITATION Y/N (F Y TYPE)
I CERTIFY THAT SAMPLING PRO	CEDURES WERE IN ACCORDANCE WITH APPLICABLE CRA PROTOCOLS

	WELL SA	MPLING FIELD INFO	RMATION H	FORM	
SITE/PROJECT NAME SAMPLE ID	MARTIN 075035-	- 34-2 -061313-56-MW5	JOB# _ WELL# _	075035 MW 5	
FURGE DATE (AMOD YY)	SAMPLE DATE (MMDD YY)	WELL PURGING INFORMATI	WATER VC	ACTUAL VOL PURGED LLONS) (GALLONS)	
PURGING EQUIPMENTDEDI	~	PURGING AND SAMPLING EQUI		SAMPLING EQUIPMENTDEDICATED	
PURGING DEVICE SAMPLING DEVICE	A - SUBMERSIBLE PUMP B - PERISTALTIC PUMP C - BLADDER PUMP	D - GAS LIFT PUMP G - BAILER E - PURGE PUMP H - WATERRAØ F - DIPPER BOTTLE X - OTHER		X= FURGING DEVICE OTHER (SPECIFY) X=	
PURGING MATERIAL	A - TEFLON B - STAINLESS STEEL C - POLYPROPYLENE	D-PVC E-POLYETHYLENE X-OTHER		SAMPLING DEVICE OTHER (SPECIFY) X= PURGING MATERIAL OTHER (SPECIFY) X=	
PURGE TUBING	A - TEFLON B - TYGON C - ROPE	D - POLYFROPYLENE G - COMBINATION E - POLYETHYLENE F - SILICONE X - OTHER		SAMPLING MATERIAL OTHER (SPECIFY) X= PURGE TUBING OTHER (SPECIFY) X=	
FILTERING DEVICES 0.45	A - IN-LINE DISFOSABL	LE B - PRESSURE		SAMPLING TUBING OTHER (SPECIFY)	
		FIELD MEASUREMENTS			
DEPTH TO WATER WELL DEPTH	44,13		ELL ELEVATION	(feet)	
TEMPERATURE		1D5 SC	DO	ORP VOLUME	
16.42 ro		80 (w/w 8724 (ws	/cm) . 29	(my) 4.7.0 (mv)	al)
16.43 100	730 (std) 9.	957 (g/L) 15300 (45)	/m) .29	(mg/L)-162.4 (mV) 1.5 (g	al)
16.63 (10)	7.27 (std) 9:	\$11 (e/L) 15093 (us)	/cm) .29	(mg/L)~157.8 (mv) [2](g	a1)
	(std)	(g/L) [(ს ⁵ ,	/cm)	(mg/ <u>L)</u> (mV)(gs	st)
	1 1			(mg/L)(mV)(ga	u)
(C)	(std)		/cm) [_
AMPLE APPEARANCE:	(end)	FIELD COMMENTS	BROWN		
AMPLE APPEARANCE	ODDR:	FIELD COMMENTS	BROWN	1.64	

SITE/PROJECT NAME: SAMPLE ID: MARTIN 34-2 075035-061313-5VC-MW WELL PURGING INFORM WELL PURGING INFORM I 210 SAMPLE TARE CHICLE ONE) CLICLE ONE)	MATION 2.55 WATER VOL. IN CASING (GALLONS) ACTUAL VOL. PURGED (GALLONS)
WELL PURGING INFORM WELL PURGING INFORM WELL PURGING INFORM J Z I D SAMPLE DATE (MM DD YY) PURGING EQUIPMENTDEDICATE V	MATION 2.55 IVATER VOL IN CASING (GALLONS) EQUIPMENT C
Contraction Cont	I 2.55 Z.5 WATER VOL IN CASING (GALLONS) ACTUAL VOL PURGED (GALLONS) EQUIPMENT
PURGING EQUIPMENTDEDICATE	ſ
. P.	(CIRČLE ONE)
PURGING DEVICE A - SUBMERSIBLE FUMP D - GAS LIFT FUMP G - BAILER B - PERISTALTIC FUMP E - FURGE FUMP H - WATERR	X=
B - PERISTALTIC PUMP E - PURGE PUMP H - WATERR. SAMPLING DEVICE C - BLADDER PUMP F - DIPPER BOTTLE X - OTHER	X=
PURGING MATERIAL & A-TEFLON D-PVC	SAMPLING DEVICE OTHER (SPECIFY)
B - STAINLESS STEEL E - POLYETHYLENE SAMPLING MATERIAL C - POLYEROPYLENE X - OTHER	PURGING MATERIAL OTHER (SPECIFY)
	SAMPLING MATERIAL OTHER (SPECIFY)
B - TYGON E - POLYETHYLENE	NTON X=
AAAPLING TUBING	SAMPLING TUBING OTHER (SPECIFY)
ILTERING DEVICES 0.45 A - IN-LINE DISPOSABLE B - PRESSURE	
FIELD MEASUREMEN	NT5
DEPTH TO WATER 40.91 (feet)	WELL ELEVATION (feel)
Well Depth 57,43 (feel) GROU	NDWATER ELEVATION (feel)
TEMPERATURE PH TDS SC	DO ORP VOLUME
	(us/cm) 28 (mg/L) -334.8 (mV) 6.5 (g
16.16 (rc) 7.68 (rtd) 21.26 (ert) 32718	(u5/cm) 25 (mg/L) 377.3 (mV)) (e
16.11 ro 7.70 (std) 21.79 (srd) 37797	- us/m 135 (mg/L) = 538.7 (mV) 7.5 (8
(std) (g/L)	(µ\$/cm) (my/L) (mV) (g
(°C) (std) (g/L)	(µ\$/cm)(mg/L)(mV)(g
FIELD COMMENTS	Broute N-Cutt
MAPLE APPEARANCEODOR <u>5667315</u> co eather conditions: temperature <u>10</u> windy y/n <u></u> pecific comments:	SLOR: <u>BLAUC</u> SHEEN V/N <u>IV</u> - C/11/1 PRECIPITATION Y/N (IF Y TYPE) <u>A</u>
1 CERTIFY THAT SAMPLING PROCEDURIS WERE IN ACCORDANCE WITH APPLICABLE CRA PROTOCOLS	<u> </u>

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SITE/PROJECT NAM SAMPLE	$\frac{1}{10} \frac{\sqrt{\sqrt{11}} \sqrt{1}}{\sqrt{10}}$	1001313-	JK-MW7	JOB# WELL#	075035 Nw7
			JRGING INFORMATION		
1 1.13.13	3 1 (13.13	1 1 11	50	112	4 5.5
PURGE DATE (MM DD YY)	SAMPLE DATE (MM DD YY)		AMPLETIME (24 HOUR)	WATER VOL (GALL	
	0	PURGING A	ND SAMPLING EQUIPM		
PURGING EQUIPMENTDE	EDICATED(Y) N (CIRCLE ONE)_				SAMPLING EQUIPMENTDEDICATED
PURGING DEVICE		D - GAS LIFT PUMP	G - BAILER		X¤
SAMPLING DEVICE	B - PERISTALTIC PUMP	E - PURGE FUMP F - DIPPER BOTTLE	H - WATERRA&		PURGING DEVICE OTHER (SPECIFY)
					SAMPLING DEVICE OTHER (SPECIFY)
PURGING MATERIAL	A - TEFLON	D-PVC			X=
SAMPLING MATERIAL	B - STAINLESS STEEL C - POLYPROPYLENE	E - POLYETHYLENE X - OTHER			PURGING MATERIAL OTHER (SPECIF
		<u></u>			SAMPLING MATERIAL OTHER (SPECI
PURGE TUBING	A-TEFLON B-TYGON	D - POLYFROPYLEN E - POLYETHYLENE	E G - COMBINATION TEFLON/POLYPROP	YLENE	X= PURGE TUBING OTHER (SPECIFY)
SAMPLING TUBING	C-ROPE	F-SILICONE	X - OTHER		X#
FILTERING DEVICES 0.45	A - IN-LINE DISPOSA	ABLE B - PRESSI	JRE		
		FIELI	OMEASUREMENTS		100,000 100,000 100,000 100,000 100,000 100,000 100,000 100,000 100,000 100,000 100,000 100,000 100,000 100,000
DEPTH TO WAT	ER (6.20	(feet)	WELL	ELEVATION	(feet)
WELI. DEPI	н 51.79	(feet)	GROUNDWATER		(feet)
TEMPERATURE	pH .	TDS	SC	DO	ORP VOLUN
15.68	7.38 (std)	0.52 (g/L)	246 24 (45/00)	1.24	(mg/L)-164.4 (mV) 4.5
15.70 00	7.38 (std)	3.50 (8/1)	20671 (15/00)	133	(mg/L) 160.1 (mV) 5.0
15.90 0	7.37 (std)	3.4 <u>2 </u> (g/L)	26666 (us/an)	15.1	(mg/L)~159.9 (mV) 5.J
ന	(std)	(g/L)	(µ5/an)	1	(mg/L)(mV)
	(std)	(g/L)	 (μS/cm)	1	(mg/L) (mV)
L	L		· · · · · · · · · · · · · · · · · · ·		
AMPLE APPEARANCE:	ODOR	27 Maries		libar Bique	
PECIFIC COMMENTS:	TEMPERATURE	WINDY Y/	N	PREC	
		· · · · · · · · · · · · · · · · · · ·			

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alin	du	WELL PURGIN	G INFORMATION	075035 - <u>MW-1</u>	<u>~</u>
PURGE DATE	91213 SAMPLE DATE	LO25 SAMPLE TI		VOL IN CASING ACTUAL VOL	PURGED
(MM DD YY)	(MM DD YY)	(24 HOUI		GALLONS) (GALLON	
PURGING EQUIPMENTDEDICATE	(CIRCLE ONE)			SAMPLING EQUIPMENTDEDICA	CIRCLE ONE)
PURGING DEVICE	A - SUBMERSIBLE PUMP		G - BAILER	χ	
SAMPLING DEVICE	B - PERISTALTIC PUMP C - BLADDER PUMP		1 - WATERRA® (- OTHER	PURGING DEVICE OTHER (\$	PECIFY)
				SAMPLING DEVICE OTHER	(SPECIFY)
	A - TEFLON B - STAINLESS STEEL	D - PVC E - POLYETHYLENE		X= PURGING MATERIAL OTHE	R (SPECIFY)
SAMPLING MATERIAL	C - POLYPROPYLENE	X-OTHER		X=SAMPLING MATERIAL OTH	ER (SPECIFY)
PURGE TUBING	A - TEFLON		- COMBINATION TEFLON/POLYPROPYLENE	Χ=	
SAMPLING TUBING	B - TYGON C - ROPE	E - POLYETHYLENE F - SILICONE X	- OTHER	PURGE TUBING OTHER (SPE X=	
DEPTH TO WATER	38,87		9,45 For m surements well elevation	· · · · · · · · · · · · · · · · · · ·	(cet)
DEPTH TO WATER	38,87 41.10	FIELD MEA	SUREMENTS		feet)
1	38,87 41.10 рн	FIELD MEA	SUREMENTS WELL ELEVATION		
WELL DEPTH	41.10	FIELD MEA (feet) (feet)	SUREMENTS WELL ELEVATION GROUNDWATER ELEVATION		feet)
WELL DEPTH	91.10 ^{рн}	FIELD MEA	SUREMENTS WELL ELEVATION GROUNDWATER ELEVATION SC DO		feel) VOLUME
WELL DEPTH	91.10 pH (sid) (sid) (sid)	FIELD MEA	SUREMENTS WELL ELEVATION GROUNDWATER ELEVATION SC DO	ORP(mg/L)(mV)(mg/L)(mV)(mg/L)(mV)(mV)(mg/L)(mV)(m	feet) VOLUME (gal) (gal) (gal)
WELL DEPTH	91.10 pH (std) [(std) [(std) [FIELD MEA	SUREMENTS WELL ELEVATION GROUNDWATER ELEVATION SC DO(u5/cm)(u5/cm)(u5/cm)u5/cm)	ORP (mg/L) (mV) (mg/L) (mV) (mV) (mg/L) (mV) (mV)	feet) VOLUME (gal) (gal) (gal)
WELL DEPTH	91.10 pH (sid) (sid) (sid)	FIELD MEA	SUREMENTS WELL ELEVATION GROUNDWATER ELEVATION \$C DO	ORP(mg/L)(mV)(mg/L)(mV)(mg/L)(mV)(mV)(mg/L)(mV)(m	feet) VOLUME (gal) (gal) (gal)
WELL DEPTH TEMPERATURE (°C) (°C)	91.10 pH (std) [(std) [(std) [FIELD MEA	SUREMENTS WELL ELEVATION GROUNDWATER ELEVATION SC DO(u5/cm)(u5/cm)(u5/cm)u5/cm)	ORP (mg/L) (mV) (mg/L) (mV) (mV) (mg/L) (mV) (mV)	feet) VOLUME (gal) (gal) (gal) (gal) (gal)

	WELL SAMPLING FIELD INFORMATION FORM
SITE/PROJECT NAM	E: MARTIN 34 NO.Z JOB# 075035 D: OW-07555-041113-CM-MU-2 WELL# MW-2
SAMPLE I	D: OW-0755-091113-2M1-MU=2 WELL# MW-2
Q /11/12	$\frac{\sqrt{11}}{13} + \frac{1230}{1230} + \frac{0.57}{1100} + \frac{1.25}{1000}$
PURGE DATE	SAMPLE DATE SAMPLE TIME WATER VOL IN CASING ACTUAL VOL PURGED
(MM DD YY)	(MM DD YY) (24 HOUR) (GALLONS) (GALLONS) PURGING AND SAMPLING EQUIPMENT
PURGING EQUIPMENTDE	
PURGING DEVICE	A - SUBMERSIBLE PUMP D - GAS LIFT PUMP G - BAILER X=
AMPLING DEVICE	B - PERISTALITIC PUMP E - PURGE PUMP H - WATERRA® FURGING DEVICE OTHER (SPECIFY) C - BLADDER PUMP F - DIPPER BOTTLE X - OTHER X=
	SAMPLING DEVICE OTHER (SPECIFY)
URGING MATERIAL	A - TEFLON D - PVC X= T B - STAINLESS STEEL E - POLYETHYLENE PURGING MATERIAL OTHER (SPECIFY)
AMPLING MATERIAL	K C - POLYPROPYLENE X - OTHER X=
URGE TUBING	C A-TEFLON D-FOLYPROPYLENE G-COMBINATION X=
AMPLING TUBING	B - TYGON E - POLYETHYLENE PURGE TUBING OTHER (SPECIFY) C - ROPE F - SILICONE X - OTHER
	SAMPLING TUBING OTHER (SPECIFY)
ILTERING DEVICES 0.45	A-IN-LINE DISPOSABLE B- PRESSURE 0.45 For metals only
	FIELD MEASUREMENTS
DEPTH TO WAT	ER 37.12 (feet) WELL ELEVATION (feet)
WELL DEPI	H 40.67 (feet) GROUNDWATER ELEVATION (feet)
TEMPERATURE	pH TDS SC DO ORP VOLUME
16.21 ro	$7.50 _{(std)} = 22.24 _{(g/L)} = 34216 _{(g/L)} = 1.53 _{(mg/L)} = 2/1.5 _{(mv)} = 0.75 _{(gal)}$
16,12 m	7.44 (std) 21.79 (g/L) 33504 (uS/cm) 0.85 -257.8 (mV) 1.25 (gal)
16.09	$\begin{array}{c c} 7,43 \\ \hline \ (std) \\ \hline \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
(°C)	(std) (g/L) (g/L) (mV) (gal)
(°C)	(std) (g/L) (µ5/cm) (mg/L) (mV) (gal)
MPLE APPEARANCE:	CU-DY BIO FIELD COMMENTS PLACH N TEMPERATURE 80% windy y/n N PRECIPITATION y/n (if y type) N
ECIFIC COMMENTS:	
I CERTIFY THAT SAMPLING PR	
DATE 1113	PRINT WISTMO WILL BE HATURE UL LAURE WILL WILL

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ITE/PROJECT NAME: SAMPLE ID:	611-07503	1/1N 54 NO. Z 5-09/113-(Mu	JOB# <u>C</u> WELL# <u>M</u>	w-3
9/11/13 PURGE DATE	9/11/13 TOO SAMPLE DATE	WELL PURGING INFORMA	TION 1,47 WATER VOL IN CA	SING ACTUAL VOL PÜRGED
(MM DD YY)	(MM DD YY)	(24 HOUR)	(GALLONS)	(GALLONS)
URGING EQUIPMENTDEDICATE	D(Y) N (CIRCLE ONE)	PURGING AND SAMPLING EQ		LING EQUIPMENTDEDICATED N (CIRCLE ONE)
	A - SUBMERSIBLE PUMP	D - GAS LIFT PUMP G - BAILER		X=
AMPLING DEVICE	B - PERISTALTIC PUMP C - BLADDER PUMP	E - PURGE PUMP H - WATERRAD F - DIPPER BOTTLE X - OTHER	•	PURGING DEVICE OTHER (SPECIFY)
				SAMPLING DEVICE OTHER (SPECIFY)
URGING MATERIAL	A - TEFLON B - STAINLESS STEEL	D - PVC E - POLYETHYLENE		X=
AMPLING MATERIAL	C - POLYPROPYLENE	X - OTHER		PURGING MATERIAL OTHER (SPECIFY)
	י <i>ז</i> ו			SAMPLING MATERIAL OTHER (SPECIFY)
URGE TUBING	A - TEFLON B - TYGON	D - POLYPROPYLENE G - COMBINATIC TEFLON/POL E - POLYETHYLENE		X= PURGE TUBING OTHER (SPECIFY)
	C-ROPE	F-SILICONE X-OTHER		X= SAMPLING TUBING OTHER (SPECIFY)
ILTERING DEVICES 0,45	A - IN-LINE DISPOSA	ele B- Pressure 0,4	5 far met	als only
	36 36	FIELD MEASUREMENTS	3	
DEPTH TO WATER	36.30	1	S VELL ELEVATION	(feet)
DEPTH TO WATER	36.30 45.46	(feet)	١a	(feel)
WELL DEPTH	36.30 45.46	(feet) GROUNDW	VELL ELEVATION	(feet) ORP VOLUME
WELL DEPTH	45.46	(feet) GROUNDW TDS SC (443)(8/L) 32929	VELL ELEVATION	(feel) $(Feel)$ $($
WELL DEPTH	45.46 pH .57 (std) 2 .44 (std) 2	(feet) GROUNDW TDS SC (43) (g/L) (32929) (g/L) (3199) (g/L) (3199) (g/L)	VELL ELEVATION	(feet) $(Feet)$ $($
WELL DEPTH	45.46 pH .57 (std) 2 .44 (std) 2	(feet) GROUNDW TDS SC (443)(8/L) 32929	VELL ELEVATION	(feet) $(feet)$ $(ffeet)$ $(ffeet)$ $(ffeet)$ $(ffeet)$ $(ffeet)$ $(ffee$
WELL DEPTH	45.46 pH .57 (std) 2 .44 (std) 2	$(feet) GROUNDW TDS SC f \cdot \frac{43}{(g/L)} = \frac{32929}{(g/L)} = \frac{31999}{(g/L)} = \frac{31999}{(g/L)} = \frac{31999}{(g/L)} = \frac{319921}{(g/L)} = \frac{31921}{(g/L)} = \frac{31921}{(g/L)}$	VELL ELEVATION	(feet) $(Feet)$ $($
VVELL DEPTH TEMPERATURE $15,76$ $15,76$ $15,76$ $15,76$ $15,76$ $15,76$ $15,76$ $7,76$ $15,76$ $7,76$ $15,76$ $7,76$ $7,76$ $15,76$ $7,76$ $15,76$ $7,76$ $15,76$ $7,76$	45.46 pH -57 (std) 2 44 -44 (std) 2 -44 -44 -57 (std) 2 -57 -57 -57 -57 -57 -57 -57 -57	(feet) GROUNDW TDS SC $(4,43]_{(g/L)}$ $(3,2,7,2,7,7,5]_{(g/L)}$ $(3,19,2,1)_{(g/L)}$	VELL ELEVATION ATER ELEVATION DO 15/cm) 5,81 (mg/ 15/cm) 4,82 (mg/ 15/cm) 5,13 (mg/ 15/cm) (mg/ 15/cm)	(feet) $(Feet)$ $($
VVELL DEPTH TEMPERATURE $15,76$ (°C)	45.46 pH .57 (std) 2 .44 .57 (std) 2 .44 .44 .57 (std) 2 .44 .44 .44 .57 (std) 2 .44 .44 .44 .44 .44 .44 .44 .4	$\begin{array}{c c} (\text{feet}) & \text{GROUNDW} \\ \hline \\ \text{TDS} & \text{SC} \\ \hline \\ 1.43 & (g/L) & 32929 & g \\ \hline \\$	vell elevation • /ATER ELEVATION	(feet) $(Feet)$ $($
VVELL DEPTH IS,76 [5,76] [5,76] [60] [7] [5,76] [60] [7] [60] [7] [60] [7] [60] [7] [60] [7] [60] [60] [60] [60] [60] [60]	45.46 PH .57 (std) 2 .44 .44 .57 (std) 2 .44 .57 (std) 2 .44 .57 .57 (std) 2 .44 .44 .57 .57 (std) 2 .44 .44 .44 .44 .44 .44 .44 .4	(feet) GROUNDW TDS SC 1.43 (g/L) 32929 (g/L) 2.86 (g/L) 31991 (g/L) 2.75 (g/L) 31921 (g/L) (g/L) 0 FIELD COMMENTS FIELD COMMENTS COLOR	VELL ELEVATION Image: second state s	(feet) $(Feet)$ $($
VWELL DEPTH IS,76 (°C) IS,71 (°C) IS,72 (°C) IS,73 (°C) IS,74 (°C) IS,74 (°C) IS,75 (°C) IS,76 (°C) IS,76 (°C) IS,76 (°C) IS,76 (°C) IS,76 (°C) IS,76 (°C) IS,77 (°C) (°C)<	45.46 pH .57 (std) 2 .44 .44 .57 (std) 2 .44 .44 .57 (std) 2 .44 .44 .57 (std) 2 .44 .44 .44 .57 .57 (std) 2 .44 .44 .44 .44 .44 .44 .44 .4	(feet) GROUNDW TDS SC 1.43 (g/L) 32929 (g/L) 2.86 (g/L) 31991 (g/L) 2.75 (g/L) 31921 (g/L) (g/L) 0 FIELD COMMENTS FIELD COMMENTS COLOR	VELL ELEVATION Image: second state s	(feet) $(Feet)$ $($
VVELL DEPTH TEMPERATURE 15,76 (°C) 15,76 (°C) 15,76 (°C) 15,76 (°C) 15,76 (°C) (°C) 7. (°C) (°C) (°C) (°C)	45.46 PH .57 (std) 2 .44 .44 .57 (std) 2 .44 .57 (std) 2 .44 .57 .57 (std) 2 .44 .44 .57 .57 (std) 2 .44 .44 .44 .44 .44 .44 .44 .4	(feet) GROUNDW TDS SC 1.43 (g/L) 32929 (g/L) 2.86 (g/L) 31991 (g/L) 2.75 (g/L) 31921 (g/L) (g/L) 0 FIELD COMMENTS FIELD COMMENTS COLOR	VELL ELEVATION Image: second state s	(feet) $(Feet)$ $($
VVELL DEPTH TEMPERATURE 15,76 (°C) 15,76 (°C) 15,76 (°C) 15,76 (°C) 15,76 (°C) (°C) 7. (°C) (°C) (°C) (°C)	45.46 PH .57 (std) 2 .44 .44 .57 (std) 2 .44 .57 (std) 2 .44 .57 .57 (std) 2 .44 .44 .57 .57 (std) 2 .44 .44 .44 .44 .44 .44 .44 .4	(feet) GROUNDW TDS SC 1.43 (g/L) 32929 (g/L) 2.86 (g/L) 31991 (g/L) 2.75 (g/L) 31921 (g/L) (g/L) 0 FIELD COMMENTS FIELD COMMENTS COLOR	VELL ELEVATION Image: second state s	(feet) $(Feet)$ $($
VELL DEPTH IS,76 [5,76] [5,76] [5,76] [5,76] [60] [7,76] [7,76] [60] [7,76] [7,76] [45.46 PH .57 (std) 2 .44 .44 .57 (std) 2 .44 .57 (std) 2 .44 .57 .57 (std) 2 .44 .44 .57 .57 (std) 2 .44 .44 .44 .44 .44 .44 .44 .4	(feet) GROUNDW TDS SC 1.43 (g/L) 32929 (g/L) 2.86 (g/L) 31991 (g/L) 2.75 (g/L) 31921 (g/L) (g/L) 0 FIELD COMMENTS FIELD COMMENTS COLOR	VELL ELEVATION Image: second state s	(feet) $(Feet)$ $($

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	WELL SA	MPLINĠ FI	ELD INFORMATION	FORM
SITE/PROJECT NAM	E: MAR	TIN 34	No. 2 100#	075035 MW-4
SAMPLE	$D: \qquad (JW-0757)$	735-09777	<u>3-(71-M</u> W-Ywell#	MW-4
PURGEDATE (MM DD YY)	GALIJIBI SAMPLE DATE (MM DD YY)	L IJS SAM		Col IN CASING ALLONS) ACTUAL VOL PURGED (GALLONS)
PURGING EQUIPMENTDE	DICATHO Y N (CIRCLE ONE)		D SAMPLING EQUIPMENT	SAMPLING EQUIPMENTDEDICATERY
PURGING DEVICE SAMPLING DEVICE	A - SUBMERSIBLE PUMP B - PERISTALTIC PUMP C - BLADDER PUMP	D - GAS LIFT PUMP E - PURGE PUMP F - DIPPER BOTTLE	G - BAILER H - WATERRAD X - OTHER	X= PURGING DEVICE OTHER (SPECIFY) X=
PURGING MATERIAL SAMPLING MATERIAL	A - TEFLON B - STAINLESS STEEL C - POLYPROPYLENE	D- PVC E- POLYETHYLENE X- OTHER		SAMPLING DEVICE OTHER (SPECIFY) X= FURGING MATERIAL OTHER (SPECIFY) X=
PURGE TUBING SAMPLING TUBING	A - TEFLON B - TYGON C - ROPE	D - POLYPROPYLENE E - POLYETHYLENE F - SILICONE	G - COMBINATION TEFLON/FOLYPROPYLENE X - OTHER	SAMPLING MATERIAL OTHER (SPECIFY) X
FILTERING DEVICES 0.45		LE B - PRESSUR	• 0.45 fer n	SAMPLING TUBING OTHER (SPECIFY)
		FIELD	MEASUREMENTS	•
DEPTH TO WAT	55.38	(feet)	WELL ELEVATION	(feet)
TEMPERATURE 16.24 (°C) 16.09 (°C)	рн [7.97] (std) [2 [7.74] (std) [2]	3, 53(6/1.) [3. 46](6/1.) [sc Do 3648 (us/cm) 3,5 36104 (us/cm) 3,7	
16.10 (0)		i i	36161 (µs/cm) 5.92	-108.8 (mV) 55
(°C)	(std)	(g/L)	(µS/cm) (µS/cm)	(mg/ <u>L)</u> (mV)
SAMPLE APPEARANCE: WEATHER CONDITIONS: SPECIFIC COMMENTS:	<u> </u>		COMMENTS	SHEEN Y/NND PRECIPITATION Y/N (IF Y TYPE)ND
I CERTIFY THAT SAMPLING P	COCEDURES WERE N ACCORDANCE WITH			millio

1. N. A. A. WELL SAMPLING FIELD INFORMATION FORM MARTIN JOB# 075035 GUI-075135-C91113-CM-MU-5WELL# _MW-5 SITE/PROJECT NAME: SAMPLE ID; WELL PURGING INFORMATION 10.51 SAMPLE TIME WATER VOL. IN CASING ACTUAL VOL. PURGED SAMPLE DAT . מיז סכ (MM DD YY) (24 HOUR) (GALLONS) (GALLONS) PURGING AND SAMPLING EQUIPMENT PURGING EQUIPMENT DEDICATIO SAMPLING EQUIPMENT......DEDICATED N (CIRCLE ONE) (CIRCLE ONE A - SUBMERSIBLE PUMP D - GAS LIFT PUMP G - BAILER PURGING DEVICE B - PERISTALTIC PUMP E - PURGE PUMP H-WATERRA® PURGING DEVICE OTHER (SPECIFY) C - BLADDER PUMP F - DIPPER BOTTLE X - OTHER SAMPLING DEVICE X≖ SAMPLING DEVICE OTHER (SPECIFY) A - TEFLON D - PVC PURGING MATERIAL B - STAINLESS STEEL E - POLYETHYLENE PURGING MATERIAL OTHER (SPECIFY) C - POLYPROPYLENE X - OTHER SAMPLING MATERIAL X= SAMPLING MATERIAL OTHER (SPECIFY) PURGE TUBING TEFLON D - POLYPROPYLENE G - COMBINATION TEFLON/POLYPROPYLENE B - TYGON E - POLYETHYLENE PURGE TUBING OTHER (SPECIFY) X - OTHER SAMPLING TUBING C - ROPE F-SILICONE SAMPLING TUBING OTHER (SPECIFY) 0.45 ta metals only B - PRESSURE FILTERING DEVICES 0.45 A - IN-LINE DISPOSABLE FIELD MEASUREMENTS 45.02 DEPTH TO WATER (feet) WELL ELEVATION (feet) 48.21 WELL DEPTH (feet GROUNDWATER ELEVATION (feet) TEMPERATURE TDS VOLUME рH DO 75 (stđ) (e/L) (gal) (std (g/L (gal) (°C) (std) (g/L) (uS/cm) -v (gal) (g/L)(°C) (std) (µS/cm) (mV) (gal) ť 0UV FIELD COMMENTS SAMPLE APPEARANCE: COLOR: SHEEN Y/N 5 10 WEATHER CONDITIONS: WINDY Y/N TEMPERATURE PRECIPITATION Y/N (IF Y TYPE) SPECIFIC COMMENTS NES VOLU 0 ÍX (1) A ACCORLANCE WITH APPLICABLE CRA PROTOCOLS T SAMPLING PROCEDURES WERE I CERTIF DATE UCNATURE

	WELL SAMPLING F	TELD INFORMATION F	ORM
SITE/PROJECT NAME:	MARTIN	JOR#	075035
SAMPLE ID:		<u>3-<i>CM</i>-<i>M</i>W-6 well#</u>	075035 MW-6
9/11/13	9/11/13 1 1/1	JIRGING INFORMATION	2 1 18,251
PURGB DATE (MM DD YY)			LIN CASING ACTUAL VOL PURGED (LIONS) (GALLONS)
		ND SAMPLING EQUIPMENT	
PURGING EQUIPMENTDEDICATE	(CIRCLE ONE)		SAMPLING EQUIPMENTDEDICATEI
	A - SUBMERSIBLE PUMP D - GAS LIFT PUMP	G - BAILER	X
	B - PERISTALTIC PUMP E - PURGE PUMP C - BLADDER PUMP F - DIPPER BOTTLE	H - WATERRAD X - OTHER	PURGING DEVICE OTHER (SPECIFY)
	L		SAMPLING DEVICE OTHER (SPECIFY)
PURGING MATERIAL	A - TEFLON D - PVC		X**
	B-STAINLESS STEEL E-POLYETHYLENE C-POLYPROPYLENE X-OTHER		PURGING MATERIAL OTHER (SPECIFY)
~	<u> </u>		SAMPLING MATERIAL OTHER (SPECIFY)
	A - TEFLON D - POLYPROPYLEN B - TYGON E - POLYETHYLENE	TEFLON/POLYPROPYLENE	X= PURGE TUBING OTHER (SPECIFY)
SAMPLING TUBING	C - ROPE F - SILICONE	X - OTHER	X=
FILTERING DEVICES 0.45	A - IN-LINE DISFOSABLE B - PRESS	ure 0,45 fer me	etals only
	FIEL	D MEASUREMENTS	ľ
DEPTH TO WATER	40.81 (feet)	WELL ELEVATION	(feet)
WELL DEPTH	57.83 (feet)	GROUNDWATER ELEVATION	(feet)
TEMPERATURE P	pH TDS	5C DO	ORP VOLUME
16.40 10 17.8	2 (std) 22.93 (g/L)	35240 (15/m) 4,57	(mg/L) 325.7 (mV) 7.25 (gal)
			[(mg/L) 339.2 (mV) [7.75 (gal)
			(mg/L) 345.7 (mV) [8.05 (gal)
	(std) (g/L)	(µS/cm)	
	,		
(°C)	(std)(g/L)	(µS/cm)	(mg/L) (mV) (gal)
AMPLE APPEARANCE:	TURE 75 WINDY	A COMMENTS A COLOR: CARK GTA /N O F	
Dup collected	. @ 1110		
,			
.			
I CERTIFY THAT SAMPLING PROCEDURES W	TAIN TIME.		MADERA DA
<u><u><u><u></u></u><u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u>	AMANING MOUTHE		NURVAN

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e e e e e e e e e e e e e e e e e e e	WELL SAMPLING FIELD INFORMATION FORM	1
CITE DD OTE CT MAM		
SITE/PROJECT NAMI SAMPLE I	D: GW-075035-091113-(M-7) WELL# _A	75035 W-7
PURGE LATE GIM DD YY)	SAMPLE DATE (MM DD YY) WELL PURGING INFORMATION U045 SAMPLE TIME (21 HOUR) WATER VOL IN CASE (21 HOUR) WATER VOL IN CASE	NG ACTUAL VOL PURGED (GALLONS)
PURGING EQUIPMENTDEI	PURGING AND SAMPLING EQUIPMENT DICATED N SAMPLING EQUIPMENT (CIRCLE ONE)	NG EQUIPMENTDEDICATEON
PURGING DEVICE		X
SAMPLING DEVICE	B - PERISTALTIC PUMP E - PURGE PUMP H - WATERRAÐ C - BLADDER PUMP F - DIPPER BOTTLE X - OTHER	PURGING DEVICE OTHER (SPECIFY) X**
PURGING MATERIAL	A - TEFLON D - PVC B - STAINLESS STEEL E - POLYETHYLENE	X= PURGING MATERIAL OTHER (SPECIFY)
SAMPLING MATERIAL	C - POLYPROPYLENE X - OTHER	SAMPLING MATERIAL OTHER (SPECIFY)
PURGE TUBING	A - TEFLON D - POLYPROPYLENE G - COMBINATION TEFLON/POLYPROPYLENE E - POLYPROPYLENE	X= PURGE TUBING OTHER (SPECIFY)
SAMPLING TUBING		SAMPLING TUBING OTHER (SPECIFY)
FILTERING DEVICES 0.45	A-IN-LINE DISPOSABLE B-PRESSURE 0.45 Micros 1 For	netals anly
	FIELD MEASUREMENTS	
DEPTH TO WATE	er 40,12 (feet) Well Elevation	(feet)
WELL DEPT	H 51.79 (feet) GROUNDWATER ELEVATION	(feel)
15,80 (ro) 15,74 (ro) 15,76 (ro)	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	ORP VOLUME -439 (mV) 4.75 (gal) -52,3 (gal) -68,3 (mV) 5175 (gal)
(°C)	τ (std) (g/L) (μS/cm) (mg/L)	(gal)
(°C)	(std) (g/L) (µS/cm) (mg/L)	(mV) (gal)
SAMPLE APPEARANCE: WEATHER CONDITIONS: SPECIFIC COMMENTS:		
		· · · · · · · · · · · · · · · · · · ·
I CERTIFY THAT AMPLING PR	OCEDURES WERE IN ACCORDANCE WITH APPLICABLE THA PROTOCOLS	duo-

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SITE/PROJECT NAM SAMPLE ;	E: MAR	ampling field inform <u>(T.I.N. 24 No.2</u> 35-09 14 13-CM-MU	MATION FORM JOB# <u>075035</u> WELL# <u>MW-8</u>
PURGE DATE (MM DD Y)	SAMPLE DATE (MIN DD YY)	SAMPLE TIME (24 HOUR)	N Q, O, I WATER VOL. IN CASING (GALLONS) ACTUAL VOL. PURGED (GALLONS)
PURGING EQUIPMENTDE	DICATED Y N (CIRCLE ONE)	PURGING AND SAMPLING EQUIPM	MENT SAMPLING EQUIPMENTDEDICATED Y (CIRCLE O
PURGING DEVICE	A - SUBMERSIBLE PUMP B - PERISTALTIC PUMP C - BLADDER FUMP	D - GAS LIFT PUMP G - BAILER E - PURGE PUMP H - WATERRAS F - DIPPER BOTTLE X - OTHER	X= PURGING DEVICE OTHER (SPECIFY) X=
PURGING MATERIAL SAMPLING MATERIAL	A - TEFLON B - STAINLESS STEEL C - POLYPROPYLENE	D - PVC E - POLYETHYLENE X - OTHER	SAMPLING DEVICE OTHER (SPECIFY) X= PURGING MATERIAL OTHER (SPECIFY) X=
PURGE TUBING SAMPLING TUBING	A-TEFLON B-TYGON C-ROPE	D - FOLYPROPYLENE G - COMBINATION TEFLON/FOLYPRO E - FOLYETHYLENE F - SILICONE X - OTHER	SAMPLING MATERIAL OTHER (SPECIF) PPLENE X= PURGE TUBING OTHER (SPECIFY) X**
FILTERING DEVICES 0.45	A - IN-LINE DISPOSA	BLE B- PRESSURE 0, 45	Far metals only
DEPTH TO WAT	54.96	FIELD MEASUREMENTS (feet) WEL (feet) GROUNDWATE	L ELEVATION (feet)
TEMPERATURE [5,9] [5,54] [5,48] [9]	pH [7.85](std) [1] [7,65](std) [1] [7,58](std) [1]	TDS SC 3,65 (6/12) [2/016 (65/0 4,57 (6/12) [22316 (65/0 4.56 (6/12) [22318 (65/0	DO ORP VOLUM m) 3_{c} C3 (mg/LG2 · (mV) 5.23 m) 1_{c} 89 (mg/L) 57_{c} 2 (mV) 5.75_{c} m) 1_{c} 89 (mg/L) 44_{c} 1 (mV) 6.25_{c}
(°c)	(std)	(g/L) (g/L) (us/a	
SAMPLE APPEARANCE: WEATHER CONDITIONS: SPECIFIC COMMENTS:		Field COMMENTS	PRECIPITATION Y/N (F Y TYPE)
I CERTIFY THAT SATIPLING P	PRINT DATE ACCORDANCE WITH		MANALINA

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(°C) (std) (g/L) (µ5/cm) (mg/L) (mV) (gal)	· · ·	WELL SAMPLING FIELD INFORMATION FORM
FURCENT LOCATE N SAMPLING REQUIPMENT		SAMPLE DATE SAMPLE TIME WATER VOL IN CASING ACTUAL VOL PURGED
	PURGING EQUIPMENTDEI	
SAMPLING DEVICE GOLDER KOMP P. DEPER BOTLE X-OTHER X-CITER X-C	PURGING DEVICE	
Indication of the Reference in the constraints of the rescale in t	SAMPLING DEVICE	C - BLADDER PUMP F - DIPPER BOTTLE X - OTHER X=
SAMPLING MATERIAL C - POCYPROPYLENE X - OTHER X	PURGING MATERIAL	
SAMPLING TUBING B - FYGON C - ROPE E - POLVEHYLENE F-SILCONE THELON/POLVPER/PYLENE YURGE TUBING OTHER (SPECIFY) SAMPLING TUBING C - ROPE F-SILCONE X - OTHER X - OTHER FILTERING DEVICES 0.45 A - IN-LINE DISPOSABLE P - PRESUME Moddlas Moddlas FILTERING DEVICES 0.45 A - IN-LINE DISPOSABLE P - PRESUME Moddlas Moddlas FILTERING DEVICES 0.45 A - IN-LINE DISPOSABLE P - PRESUME Moddlas Moddlas Moddlas FILTERING DEVICES 0.45 A - IN-LINE DISPOSABLE P - PRESUME Moddlas Moddl	SAMPLING MATERIAL	C-POLYPROPYLENE X-OTHER X=
SAMPLING TUBING G ROPE P - SILICONE X-OTHER X=	PURGE TUBING	TEFLON/POLYPROPYLENE
HITERING DEVICES 0.45 AIN-LINE DISPOSABLE P. PRESENCE FULL MEASUREMENTS DEPTH TO WATER 38.55 (feet) WELL ELEVATION (feet) WELL DEPTH 40.8 (feet) GROUNDWATER ELEVATION (feet) WELL DEPTH 40.78 (feet) GROUNDWATER ELEVATION (feet) TEMPERATURE pH TDS SC DO ORP VOLUME 16.36 (feet) (feet) 27.935 (fs/cm) 0.486 (mg/1) .25 16.36 (feet) (fg/L) 27.935 (fs/cm) 0.486 (mg/L) .25 16.36 (feet) (fg/L) (fs/cm) (mg/L) (mv) .25 (fg/l) 16.37 (feet) (fg/L) (fs/cm) (mg/L) (mv) .25 (fg/l) 16.70 (fs/d) (fg/L) (fs/cm) (mg/L) (mv) .25 (fg/l) 17.90 (fs/d) (fg/L) (fs/cm) (mg/L) (mv) .25 (fg/l) 16.70 (fs/d) (fg/L) (fs/cm) (mg/L) (mv) .26 .26 17.90 (fs/d) (fs/cm) (mg/L) (mv) .26 .26 .26 <t< td=""><td>SAMPLING TUBING</td><td>C - ROPE F - SILICONE X - OTHER X=</td></t<>	SAMPLING TUBING	C - ROPE F - SILICONE X - OTHER X=
DEPTH TO WATER 38.5 (feet) WELL ELEVATION (feet) WELL DEPTH 40.8 (feet) GROUNDWATER ELEVATION (feet) TEMPERATURE pH TDS SC DO ORP VOLUME 16.436/rco 6.716/std) 18.16/g(r) 271935/g(s/cm) 0.866/mg(r)_3449.8/mV 225/gat 16.436/rco 6.716/std) 18.16/g(r) 271935/g(s/cm) 0.866/mg(r)_3449.8/mV 225/gat 16.436/rco 6std) 18.16/g(r) 271935/g(s/cm) 0.866/mg(r)_3449.8/mV 225/gat 16.70 6std) 18.16/g(r) 271935/g(s/cm) 0.866/mg(r)_3449.8/mV 225/gat 16.70 6std) 18.16/g(r) 19.5/cm) (mg/L) (mV) 19.6/gat 17.90 6std) 19.16/g(r) 19.5/cm) (mg/L) (mV) 19.6/gat 18.60 19.16/g(r) 19.16/g(r) 19.6/cm) 19.6/gat 19.6/gat 19.90 19.90 19.90 19.90 19.90 19.90 19.90 19.90 19.90 19.90 19.90 19.90 19.90 19.90 19	FILTERING DEVICES 0.45	It Licharde alle
TEMPERATURE pH TDS SC DO ORP VOLUME U	DEPTH TO WATE	1 (425)
16.36/c0 6.76/std) 18.6/std) 27935/st5/cm) 0.86/st6/mg/1344.8/mv) 225 (gat)	WELL DEPTI	d 40.8 (feet) GROUNDWATER ELEVATION (feet)
(°C) (std) (g/L) (uS/cm) (mg/L) (mV) (gal) shifte appearance COUCH Shift	16,36 (°9	
(°C) (std) (g/L) (uS/cm) (mg/L) (mV) (gal) (°C) (std) (g/L) (uS/cm) (mg/L) (mV) (gal) SAMPLE APPEARANCE COUCHY Opole FIELD COMMENTS (mv) (gal) WEATHER CONDITIONS: TEMPERATURE 35 WINDY Y/N MO PRECIPITATION Y/N (IF Y TYPE) MO	(°C)	· · · · · · · · · · · · · · · · · · ·
(%) (g/L) (g/L) (mg/L) (mV) (gai) SAMPLE APPEARANCE GOUDY Oper 60 000 000 000 000 WEATHER CONDITIONS: TEMPERATURE 35 WINDY Y/N MO 970 970 000	(°C)	(std) (g/L) (g/L) (mV) (gal)
SAMPLE APPEARANCE GLOUDY ODE DIB COLOR: GNU SHEEN Y/N NO WINDY Y/N WINDY Y/N WINDY Y/N PRECIPITATION Y/N (IF Y TYPE)	(°C)	(std) (g/L) (mV) (gal)
SAMPLE APPEARANCE: <u>GLOUGU</u> oper <u>blb</u> color: <u>GLOUGU</u> sheen y/n <u>blb</u> windy y/n <u>blb</u> precipitation y/n (if y type) <u>no</u>	(°C)	(std) (g/L) (µS/cm) (my/L) (mV) (gal)
0:368 ×3 = 1:10	WEATHER CONDITIONS:	210424 oppin hit color: any sheen y/n no
	0:368 X3	= 1,10
I CERTIFY ZUNKTALING PROCEDURES WERE IN APPLICATE WITH APPLICATE CAPPORENTS CONTURE		CEDURES WERE IN PORTATE WITH APPLICATE CONTRACTOR CONTRACTOR

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 $v^{(1)} \in \{0, j_{1, \dots, n_{k}}\}$ WELL SAMPLING FIELD INFORMATION FORM IN SITE/PROJECT NAME: JOB# SAMPLE ID: 503 MUS-2 WELL# M 2 WELL PURGING INFORMATION 1 0 101 PURGE DATE SAMPLE DATE SAMPLE TIME WATER VOL. IN CASING ACTUAL VOL PURGED (MM DD YY) (MM DD YY) (24 HOUR) (GALLONS) (GALLONS) PURGING AND SAMPLING EQUIPMENT PURGING EQUIPMENT......DEDICATED SAMPLING EQUIPMENT......DEDICATED N N (CIRCLE ONE) (CIRCLE ONE) A - SUBMERSIBLE PUMP D - GAS LIFT PUMP G - BAILER PURGING DEVICE B - PERISTALTIC PLIMP E - FURGE PUMP H - WATERRA® PURGING DEVICE OTHER (SPECIFY) C - BLADDER PUMP X - OTHER F - DIPPER BOTTLE SAMPLING DEVICE X= SAMPLING DEVICE OTHER (SPECIFY) A - TEFLON D - PVC PURGING MATERIAL STAINLESS STEEL E - POLYETHYLENE PURGING MATERIAL OTHER (SPECIFY) C - POLYPROPYLENE X - OTHER SAMPLING MATERIAL X= SAMPLING MATERIAL OTHER (SPECIFY) PURGE TUBING A - TEFLON D - POLYPROPYLENE G - COMBINATION TEFLON/POLYPROPYLENE B - TYGON E - POLYETHYLENE PURGE TUBING OTHER (SPECIFY) X - OTHER SAMPLING TUBING C - ROPE F - SILICONE SAMPLING TURING OTHER (SPECIFY) 0 FILTERING DEVICES 0.45 A - IN-LINE DISPOSABLE B - PRESSURE FIELD MEASUREMENTS 36.55 WELL ELEVATION DEPTH TO WATER (feet) (feet) 40 \mathcal{U} GROUNDWATER ELEVATION WELL DEPTH (feet) (feet) TDS ORP pН VOLUME TEMPERATURE SC DO (std) 75 (g/L) (uS/cm) (oal' std) ímV (µS/cm) (gal) (std) (g/L) ng/L) FIELD COMMENTS SAMPLE APPEARANCE: COLOR: SHEEN Y/N WEATHER CONDITIONS: TEMPERATURE WINDY Y/N PRECIPITATION Y/N (IF Y TYPE) SPECIFIC COMMENTS / Motte I CERTIFY IA URES WERE IN A ND DATE PRINT

WELL SAMPLING FIELD INFORMATION FORM Ø JOB# SITE/PROJECT NAME: WELL# MW·3 SAMPLE ID: (Ql)WELL PURGING INFORMATION 5 ACTUAL VOL. PURGED WATER VOL. IN CASING SAMPLE DATE (MM DD YY) SAMPLE TIM (GALLONS) (GALLONS) (24 HOUR) (MM DD YY) PURGING AND SAMPLING EQUIPMENT PURGING EQUIPMENT......DEDICATED SAMPLING EQUIPMENT......DEDICATE (CIRCLE ONE (CIRCLE ONE) A - SUBMERSIBLE PUMP G - BAILER D - GAS LIFT PUMP PURGING DEVICE H-WATERRA® B - PERISTALTIC PUMP E - PURGE PUMF PURGING DEVICE OTHER (SPECIFY) C - BLADDER PUMP F - DIPPER BOTTLE X - OTHER SAMPLING DEVICE X= SAMPLING DEVICE OTHER (SPECIFY) A - TEFLON D - PVC PURGIŅG MATERIAL B - STAINLESS STEEL E - POLYETHYLENE PURGING MATERIAL OTHER (SPECIFY) POLYPROPYLENE X - OTHER SAMPLING MATERIAL SAMPLING MATERIAL OTHER (SPECIFY) A - TEFLON G - COMBINATION PURGE TUBING D - POLYPROPYLENE TEFLON/POLYPROPYLENE E - POLYETHYLENE PURGE TUBING OTHER (SPECIFY) B - TYGON X - OTHER SAMPLING TUBING F - SILICONE SAMPLING TUBING OTHER (SPECIFY) ð FILTERING DEVICES 0.45 A - IN-LINE DISPOSABLE B - PRESSURE . FIELD MEASUREMENTS 35. DEPTH'TO WATER (feet) WELL ELEVATION 45.05 GROUNDWATER ELEVATION WELL DEPTH (feet) (feet) 42 TEMPERATURE рН TDS SC DO ORP VOLUME 20,55 (g/L) 3/603 (us/cm) 3,87 **>** (std) 13,66 10 109.6 (gal) 20.49 (g/L) 31.5.38 (u.5/cm) 4.09 13,64 00 061 14.50 20,64 (8/1) 15 31754 ഹ്ര (gal) (µS/cm) (g/L) (gal) (uS/cm) ഭവ (std) (mV) (g/L) (mV) (gal) (µS/cm) (°C 199 A.M. 1 FIELD COMMENTS COLOR: SHEEN Y/N AMPLE APPEARANCE TEMPERATURE PRECIPITATION Y/N (IF Y TYPE) VEATHER CONDITIONS WINDY Y/N 70 SPECIFIC COMMENTS: 10 IG PROCEDURES

WELL SAMPLING FIELD INFORMATION FORM SITE/PROJECT NAME: JOB# SAMPLE ID: WELL# MUU WELL PURGING INFORMATION 165 SAMPLE DATE SAMPLE TIME WATER VOL. IN CASING ACTUAL VOL. PURGED (MM DD YY) (MM DD YY) (24 HOUR) (GALLONS) (GALLONS) PURGING AND SAMPLING EQUIPMENT PURGING EQUIPMENT......DEDICATED Y SAMPLING EQUIPMENT......DEDICATED N Ν (CIRCLE ONE) (CIRCI LE ONE) A - SUBMERSIBLE PUMP D - GAS LIFT PUMP G - BAILER PURGING DEVICE X≖ B - PERISTALTIC PUMP E - PURGE PUMP H - WATERRA® PURGING DEVICE OTHER (SPECIFY) C - BLADDER PUMP F - DIPPER BOTTLE X - OTHER SAMPLING DEVICE X= SAMPLING DEVICE OTHER (SPECIFY) A - TEFLON D-PVC PURGING MATERIAL χ= B - STAINLESS STEEL E - POLYETHYLENE PURGING MATERIAL OTHER (SPECIFY) C - POLYPROPYLENE X - OTHER SAMPLING MATERIAL X= SAMPLING MATERIAL OTHER (SPECIFY) PURGE TUBING A - TEFLON D - POLYPROPYLENE G - COMBINATION X۳ TEFLON/POLYPROPYLENE B - TYGON E - POLYETHYLENE PURGE TUBING OTHER (SPECIFY) X - OTHER SAMPLING TUBING C - ROPE F - SILICONE SAMPLING TUBING OTHER (SPECIFY) -metals only FILTERING DEVICES 0.45 A - IN-LINE DISPOSABLE B - PRESSURE FIELD MEASUREMENTS 43,55 DEPTH TO WATER (feet) WELL ELEVATION (feet) 35.1 WELL DEPTH (feet) GROUNDWATER ELEVATION (feet) TEMPERATURE pН TDS SC DO ORP VOLUME ₹79<u>3</u>[µs/cm) [dd .92 (g/L) (std) d (g/L) (g/L) mV) (°C (g/L) (µS/cm) (mg/L) (gal) (mV)(g/L) (std) (µS/cm) (gal) ng/L) (mV) FIELD COMMENTS DNW LEN I SAMPLE APPEARANCE COLOR: SHEEN Y/N no WEATHER CONDITIONS: TEMPERATURE WINDY Y/N PRECIPITATION Y/N (IF Y TYPE) SPECIFIC COMMENTS: 5.5 I CERTI OPROCEDURES WERE DATE PRINT

WELL SAMPLING FIELD INFORMATION FORM Hin 34 No. 2 JOB# SITE/PROJECT NAME: 0 SAMPLE ID: m WELL# WELLPURGING INFORMATION RGE DAT SAMPLE DATE WATER VOL. IN CASING SAMPLE TIME ACTUAL VOL. PURGED (MM DD YY) (MM DD YY) (24 HOUR) (GALLONS) (GALLONS) PURGING AND SAMPLING EQUIPMENT PURGING EQUIPMENT......DEDICATED Y Ν SAMPLING EQUIPMENT......DEDICATED (CIRCLE ONE) (CIRCLE ONE) A - SUBMERSIBLE PUMP D - GAS LIFT PUMP G - BAILER PURGING DEVICE χ= B - PERISTALTIC PUMP E - PURGE PUMP H - WATERRA® PURGING DEVICE OTHER (SPECIFY) C - BLADDER PUMP X - OTHER SAMPLING DEVICE F - DIPPER BOTTLE Х= SAMPLING DEVICE OTHER (SPECIFY) A - TEFLON D - PVC PURGING MATERIAL χ= B - STAINLESS STEEL E - POLYETHYLENE PURGING MATERIAL OTHER (SPECIFY) C - POLYPROPYLENE X - OTHER SAMPLING MATERIAL Х≕ SAMPLING MATERIAL OTHER (SPECIFY) PURGE TUBING A - TEFLON D - POLYPROPYLENE G - COMBINATION X= TEFLON/POLYPROPYLENE B - TYGON E - POLYETHYLENE PURGE TUBING OTHER (SPECIFY) X - OTHER SAMPLING TUBING F - SILICONE ROPE Х≖ SAMPLING TUBING OTHER (SPECIFY) FILTERING DEVICES 0.45 A - IN-LINE DISPOSABLE B - PRESSURE FIELD MEASUREMENTS 4.6 DEPTH TO WATER (feet) WELL ELEVATION (feet) 4 800 WELL DEPTH (feet) GROUNDWATER ELEVATION (feet) TEMPERATURE pН TDS sc DO ORP VOLUME ഹ (std) (g/L) (jiS/cm) (mg/L) (mV) (g/L) S/cm) C (std) (g/L) (µS/cm) (mg/L) (mV) (gal) (°C) (g/L) (µS/cm) mg/L) (std) (mV) (gal) FIELD COMMENTS SAMPLE APPEARANCE MU UUX COLOR: SHEEN Y/N WEATHER CONDITIONS: WINDY Y/N TEMPERATURE PRECIPITATION Y/N (IF Y TYPE) SPECIFIC COMMENTS: -3 4.7 10 I CERTIFY DATE

WELL SAMPLING FIELD INFORMATION FORM 34 2 SITE/PROJECT NAME: JOB# SAMPLE ID: B-M-MUSS WELL# WELL PURGING INFORMATION 1020 Я. SAMPLE TIME WATER VOL. IN CASING ACTUAL VOL. PURGEE MPLEE (MM DD YY) (MM DD YY) (24 HOUR) (GALLONS) (GALLONS) PURGING AND SAMPLING EQUIPMENT PURGING EQUIPMENT......DEDICATED SAMPLING EQUIPMENT......DEDICATEL Ν (CIRCLE ONE) (CIRCLE ONE) A - SUBMERSIBLE PUMP D - GAS LIFT PUMP G - BAILER PURGING DEVICE X= B - PERISTALTIC PUMP H - WATERRA® E - PURGE PUMP PURGING DEVICE OTHER (SPECIFY) C - BLADDER PUMP F - DIPPER BOTTLE X - OTHER SAMPLING DEVICE Х= SAMPLING DEVICE OTHER (SPECIFY) A - TEFLON D-PVC PURGING MATERIAL X= B - STAINLESS STEEL E - POLYETHYLENE PURGING MATERIAL OTHER (SPECIFY) C - POLYPROPYLENE X - OTHER SAMPLING MATERIAL Х= SAMPLING MATERIAL OTHER (SPECIFY) PURGE TUBING - TEFLON D - POLYPROPYLENE G - COMBINATION TEFLON/POLYPROPYLENE E - POLYETHYLENE PURGE TUBING OTHER (SPECIFY) X - OTHER SAMPLING TUBING F - SILICONE X≖ SAMPLING TUBING OTHER (SPECIFY) metals ant FILTERING DEVICES 0.45 A - IN-LINE DISPOSABLE B - PRESSURE FIELD MEASUREMENTS DEPTH TO WATER (feet) WELL ELEVATION (feet) WELL DEPTH (feet) GROUNDWATER ELEVATION (feet) TEMPERATURE TDS pН SC ORP DO VOLUME 1.95 94 365.3 7.75 | 15,53 kg 22,77 (g/L) 35083 (us/cm) (std) 2293 (g/L) 3274 (uS/cm) 15.52 3.0,2 (mV) 8,25 83 (std) 15,58 8,75 123,0 0S 13537 (std) (g/L) uS/cm) (std) (g/L) (µS/cm) (gal) (mg/L (mV) (g/L) (std) (µS/cm) (°C) (mg/L)(gal) FIELD COMMENTS Bio COLOR Dree celos SAMPLE APPEARANCE ODOR: SHEEN Y/N 350 Ň TEMPERATURE C WEATHER CONDITIONS: WINDY Y/N PRECIPITATION Y/N (IF Y TYPE) SPECIFIC COMMENTS: 256 REGCEDURES WERE IN A PART AND A WITH APPI AND E LEAP PROTOCOLS I CERTIFY THAT DATE PRIN

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WELL SAMPLING FIELD INFORMATION FORM No.2 24 JOB# SITE/PROJECT NAME: WELL# SAMPLE ID: 12 RB-CM-MU-1 WELL PURGING INFORMATION 31/2 ACTUAL VOL. PURGED SAMPLE DAT SAMPLE TIME WATER VOL. IN CASING PURGE DATE (GALLONS) (GALLONS) (MM DD YY) (MM DD YY) (24 HOUR) PURGING AND SAMPLING EQUIPMENT PURGING EQUIPMENT......DEDICATED SAMPLING EQUIPMENT......DEDICATED Ν (CIRCLE ONE) (CIRCLE ONE) A - SUBMERSIBLE PUMP D - GAS LIFT PUMP G - BAILER PURGING DEVICE X≔ B - PERISTALTIC PUMP E - PURGE PUMP H - WATERRA® PURGING DEVICE OTHER (SPECIFY) C - BLADDER PUMP F - DIPPER BOTTLE X - OTHER SAMPLING DEVICE X= SAMPLING DEVICE OTHER (SPECIFY) A - TEFLON D-PVC PURGING MATERIAL χ= B - STAINLESS STEEL E - POLYETHYLENE PURGING MATERIAL OTHER (SPECIFY) C - POLYPROPYLENE X - OTHER SAMPLING MATERIAL X =SAMPLING MATERIAL OTHER (SPECIFY) PURGE TUBING A - TEFLON D - POLYPROPYLENE G - COMBINATION TEFLON/POLYPROPYLENE PURGE TUBING OTHER (SPECIFY) B - TYGON E - POLYETHYLENE X - OTHER SAMPLING TUBING C - ROPE F - SILICONE X= SAMPLING TUBING OTHER (SPECIFY) 1 Meta FILTERING DEVICES 0.45 A - IN-LINE DISPOSABLE B - PRESSURE FIELD MEASUREMENTS (feet) (feet) WELL ELEVATION DEPTH TO WATER (feet) GROUNDWATER ELEVATION (feet) WELL DEPTH ORP VOLUME TDS SC DO pН TEMPERATURE (g/L) (µS/cm) (mg/L) (gal) (std) (°C (gal) (g/L) (µS/cm) mg/L) (mV) °C FIELD COMMENTS A. YOUI COLOR: SHEEN Y/N SAMPLE APPEARANCE: PRECIPITATION Y/N (IF Y TYPE) WEATHER CONDITIONS: WINDY Y/N SPECIFIC COMMENTS: eto UNATUI PESCEDURES WERE N HOORDAN E WITH APPL AMPL DATE PRINT

WELL SAMPLING FIELD INFORMATION FORM tin 24 Min 2 SITE/PROJECT NAME: JOB# SAMPLE ID: CM-MW-8 WELL# WELL PURGING INFORMATION PURGEDATE SAMPLE DAT SAMPLE TIME WATER VOL. IN CASING ACTUAL VOL. PURGED (MM DD YY) (MM DD YY) (GALLONS) (GALLONS) (24 HOUR) PURGING AND SAMPLING EQUIPMENT PURGING EQUIPMENT......DEDICATED SAMPLING EQUIPMENT,......DEDICATEP Ý (CIRCLE ONE) (CIRCLE ONE) A - SUBMERSIBLE PUMP D - GAS LIFT PUMP G - BAILER PURGING DEVICE Х≕ B - PERISTALTIC PUMP E - PURGE PUMP H - WATERRA® PURGING DEVICE OTHER (SPECIFY) C - BLADDER PUMP F - DIPPER BOTTLE X - OTHER SAMPLING DEVICE X= SAMPLING DEVICE OTHER (SPECIFY) A - TEFLON D - PVC PURGING MATERIAL χ= B - STAINLESS STEEL E - POLYETHYLENE PURGING MATERIAL OTHER (SPECIFY) C - POLYPROPYLENE X - OTHER SAMPLING MATERIAL χ.... SAMPLING MATERIAL OTHER (SPECIFY) PURGE TUBING A - TEFLON D - POLYPROPYLENE G - COMBINATION TEFLON/POLYPROPYLENE PURGE TUBING OTHER (SPECIFY) TYGON E - POLYETHYLENE X - OTHER SAMPLING TUBING C - ROPE F - SILICONE X= SAMPLING TUBING OTHER (SPECIFY) FILTERING DEVICES 0.45 A - IN-LINE DISPOSABLE B - PRESSURE FIELD MEASUREMENTS 41,8 DEPTH TO WATER (feet) WELL ELEVATION (feet) WELL DEPTH (feet) GROUNDWATER ELEVATION (feet) TEMPERATURE TDS ORP рH VOLUME DO Dor mV) (mV) 1612 (gal) mV) (g/L) (µS/cm) (mg/L) (gal) ίmV ng/L) ഹ (g/L) (µS/cm) (gal) std) (mV) FIELD COMMENTS Omur COLOR: SAMPLE APPEARANCE: ØN V SHEEN Y/N WEATHER CONDITIONS: TEMPERATURE WINDY Y/N DO PRECIPITATION Y/N (IF Y TYPE) V YO SPECIFIC COMMENTS: 3=6,192 $\Delta b l$ ROCEDURES WERE IN A CORDANJE WITH APPOINTE OF PROTOCOLS I CERTIF DATE PRINT ATURE

Appendix B

GROUNDWATER LABORATORY ANALYTICAL REPORTS





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

April 12, 2013

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

RE: Project: 075035 Martin 34 No 2 Pace Project No.: 60141069

Dear Christine Matthews:

Enclosed are the analytical results for sample(s) received by the laboratory on March 23, 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 Flanazan

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





CERTIFICATIONS

Project: 075035 Martin 34 No 2

Pace Project No.: 60141069

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 Illinois Certification #: 003097



SAMPLE SUMMARY

 Project:
 075035 Martin 34 No 2

 Pace Project No.:
 60141069

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60141069001	GW-075035-032013-CM-MW-1	Water	03/20/13 10:05	03/23/13 08:45
60141069002	GW-075035-032013-CM-MW-2	Water	03/20/13 11:00	03/23/13 08:45
60141069003	GW-075035-032013-CM-MW-3	Water	03/20/13 12:00	03/23/13 08:45
60141069004	GW-075035-032013-CM-MW-4	Water	03/20/13 12:35	03/23/13 08:45
60141069005	GW-075035-032013-CM-MW-5	Water	03/20/13 14:00	03/23/13 08:45
60141069006	GW-075035-032013-CM-MW-6	Water	03/20/13 11:10	03/23/13 08:45
60141069007	GW-075035-032013-CM-MW-7	Water	03/20/13 13:10	03/23/13 08:45
60141069008	GW-075035-032013-CM-DUP	Water	03/20/13 11:15	03/23/13 08:45
60141069009	TB-075035-032013-CM-001	Water	03/20/13 00:00	03/23/13 08:45



SAMPLE ANALYTE COUNT

 Project:
 075035 Martin 34 No 2

 Pace Project No.:
 60141069

Lab ID	Sample ID	Method	Analysts	Analytes Reported	
60141069001		EPA 6010	JGP	3	
		EPA 8270C by SIM	CEM	3	
		EPA 5030B/8260	PRG	12	
		SM 2540C	JML	1	
		EPA 300.0	OL	3	
60141069002	GW-075035-032013-CM-MW-2	EPA 6010	JGP	3	
		EPA 8270C by SIM	CEM	3	
		EPA 5030B/8260	PRG	12	
		SM 2540C	JML	1	
		EPA 300.0	OL	3	
60141069003	GW-075035-032013-CM-MW-3	EPA 6010	JGP	3	
		EPA 8270C by SIM	CEM	3	
		EPA 5030B/8260	PRG	12	
		SM 2540C	JML	1	
		EPA 300.0	OL	3	
0141069004	GW-075035-032013-CM-MW-4	EPA 6010	JGP	3	
		EPA 8270C by SIM	CEM	3	
		EPA 5030B/8260	PRG	12	
		SM 2540C	JML	1	
		EPA 300.0	OL	3	
60141069005	GW-075035-032013-CM-MW-5	EPA 6010	JGP	3	
		EPA 8270C by SIM	CEM	3	
		EPA 5030B/8260	PRG	12	
		SM 2540C	JML	1	
		EPA 300.0	OL	3	
60141069006	GW-075035-032013-CM-MW-6	EPA 6010	JGP	3	
		EPA 8270C by SIM	CEM	3	
		EPA 5030B/8260	PRG	12	
		SM 2540C	JML	1	
		EPA 300.0	OL	3	
0141069007	GW-075035-032013-CM-MW-7	EPA 6010	JGP	3	
		EPA 8270C by SIM	CEM	3	
		EPA 5030B/8260	PRG	12	
		SM 2540C	JML	1	
		EPA 300.0	OL	3	
60141069008	GW-075035-032013-CM-DUP	EPA 5030B/8260	PRG	12	
60141069009	TB-075035-032013-CM-001	EPA 5030B/8260	PRG	12	



PROJECT NARRATIVE

Project: 075035 Martin 34 No 2

Pace Project No.: 60141069

Method: EPA 6010

Description:6010 MET ICP, DissolvedClient:COP Conestoga-Rovers & Associates, Inc. NMDate:April 12, 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:



PROJECT NARRATIVE

Project: 075035 Martin 34 No 2

Pace Project No.: 60141069

Method: EPA 8270C by SIM

Description:8270 MSSV PAH by SIMClient:COP Conestoga-Rovers & Associates, Inc. NMDate:April 12, 2013

General Information:

7 samples were analyzed for EPA 8270C by SIM. 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 3510C 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: MSSV/11958

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

Additional Comments:



Project: 075035 Martin 34 No 2

Pace Project No.: 60141069

Method: EPA 5030B/8260

Description:8260 MSVClient:COP Conestoga-Rovers & Associates, Inc. NMDate:April 12, 2013

General Information:

9 samples were analyzed for EPA 5030B/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/52648

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

QC Batch: MSV/52673

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

Additional Comments:



Project: 075035 Martin 34 No 2

Pace Project No.: 60141069

Method: SM 2540C

Description:2540C Total Dissolved SolidsClient:COP Conestoga-Rovers & Associates, Inc. NMDate:April 12, 2013

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:



Project: 075035 Martin 34 No 2

Pace Project No.: 60141069

Method: EPA 300.0

Description:300.0 IC Anions 28 DaysClient:COP Conestoga-Rovers & Associates, Inc. NMDate:April 12, 2013

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:

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



Project: 075035 Martin 34 No 2

Pace Project No.: 60141069

Sample: GW-075035-032013-CM- MW-1	Lab ID: 6014106900 ⁻	1 Collected	d: 03/20/1	3 10:05	Received: 03/	/23/13 08:45 Ma	atrix: Water	
		Report						
Parameters	Results Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA	6010 Prepa	ration Meth	od: EP/	A 3010			
Boron, Dissolved	1210 ug/L	500	250	5	03/27/13 14:00	04/04/13 17:49	7440-42-8	
Iron, Dissolved	345 ug/L	250	58.0	5	03/27/13 14:00	04/04/13 17:49	7439-89-6	
Manganese, Dissolved	670 ug/L	25.0	2.4	5	03/27/13 14:00	04/04/13 17:49	7439-96-5	
8270 MSSV PAH by SIM	Analytical Method: EPA	8270C by SI	M Prepara	tion Me	thod: EPA 3510C			
Naphthalene <i>Surrogates</i>	43.8 ug/L	2.5		5	03/27/13 00:00	04/11/13 16:10	91-20-3	
2-Fluorobiphenyl (S)	60 %	40-120		5	03/27/13 00:00	04/11/13 16:10	321-60-8	
Terphenyl-d14 (S)	104 %	43-122		5	03/27/13 00:00	04/11/13 16:10	1718-51-0	
8260 MSV	Analytical Method: EPA	5030B/8260						
Benzene	4230 ug/L	100	9.8	100		03/28/13 18:51	71-43-2	
Ethylbenzene	411 ug/L	100	23.0	100		03/28/13 18:51	100-41-4	
Methylene chloride	ND ug/L	100	24.0	100		03/28/13 18:51	75-09-2	
Naphthalene	ND ug/L	1000	11.0	100		03/28/13 18:51	91-20-3	
1,1,2,2-Tetrachloroethane	ND ug/L	100	8.6	100		03/28/13 18:51	79-34-5	
Toluene	1050 ug/L	100	15.0	100		03/28/13 18:51	108-88-3	
Xylene (Total)	8380 ug/L	300	41.0	100		03/28/13 18:51	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	100 %	80-120		100		03/28/13 18:51		
Dibromofluoromethane (S)	89 %	80-120		100		03/28/13 18:51		
1,2-Dichloroethane-d4 (S)	95 %	80-120		100		03/28/13 18:51		
Toluene-d8 (S)	101 %	80-120		100		03/28/13 18:51	2037-26-5	
Preservation pH	1.0	0.10	0.10	100		03/28/13 18:51		
2540C Total Dissolved Solids	Analytical Method: SM 2	2540C						
Total Dissolved Solids	32200 mg/L	5.0	5.0	1		03/26/13 11:59		
300.0 IC Anions 28 Days	Analytical Method: EPA	300.0						
Chloride	285 mg/L	50.0	25.0	50		04/02/13 12:46	16887-00-6	
Fluoride	ND mg/L	0.20	0.069	1		04/01/13 17:21	16984-48-8	
Sulfate	13600 mg/L	1000	59.0	1000		04/02/13 13:04	14808-79-8	



Project: 075035 Martin 34 No 2

G010 MET ICP, Dissolved Analytical Method: EPA 6010 Preparation Method: EPA 3010 Boron, Dissolved 981 ug/L 500 250 5 03/27/13 14:00 04/04/13 18:06 7440-42-8 Manganese, Dissolved 180 ug/L 250 5. 03/27/13 14:00 04/04/13 18:06 7439-89-6 Manganese, Dissolved 2210 ug/L 25.0 2.4 5 03/27/13 14:00 04/04/13 18:06 7439-96-5 8270 MSSV PAH by SIM Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C Naphthalene 0.89 ug/L 0.50 1 03/27/13 00:00 04/10/13 17:21 91-20-3 Surrogates 71 % 40-120 1 03/27/13 00:00 04/10/13 17:21 321-60-8 Terphenyl-d14 (S) 87 % 43-122 1 03/27/13 00:00 04/10/13 17:21 321-60-8 Benzene 177 ug/L 5.0 0.49 5 03/28/13 19:06 71-43-2 Benzene 177 ug/L 5.0 0.43 5 03/28/13 19:06 70-42-2 Naphthalene 90.0 ug/L 5.0 <	Sample: GW-075035-032013-CM- MW-2	Lab ID: 60141069002	2 Collected	: 03/20/1	3 11:00	Received: 03/	/23/13 08:45 Ma	atrix: Water	
Boron, Dissolved Analytical Method: EPA 6010 Preparation Method: EPA 3010 Boron, Dissolved 981 ug/L 500 250 5 03/27/13 14:00 04/04/13 18:06 7440-42-8 Manganese, Dissolved 2210 ug/L 250 5 03/27/13 14:00 04/04/13 18:06 7439-89-6 Manganese, Dissolved 2210 ug/L 25.0 2.4 5 03/27/13 14:00 04/04/13 18:06 7439-89-6 Storrogates Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C 04/04/13 17:21 91-20-3 Naphthalene 0.89 ug/L 0.50 1 03/27/13 00:00 04/10/13 17:21 321-60-8 Storrogates 71 % 40-120 1 03/27/13 00:00 04/10/13 17:21 321-60-8 Erphenyl-d14 (S) 87 % 43-122 1 03/28/13 19:06 71-43-2 Benzene 177 ug/L 5.0 1.2 5 03/28/13 19:06 71-43-2 Sthylbenzene 334 ug/L 5.0 1.2 5 03/28/13 19:06 70-42-5 Naphthalene 90.0			Report						
Baron, Dissolved Iron, Dissolved Bit ug/L Sol	Parameters	Results Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Iron, Dissolved 1180 ug/L 250 58.0 5 03/27/13 14:00 04/04/13 18:06 7439-89-6 Manganese, Dissolved 2210 ug/L 25.0 2.4 5 03/27/13 14:00 04/04/13 18:06 7439-89-6 Bath Analytical Method: EPA 8270C by SIM Preparation Verto: EPA 3510C Surrogates 0.89 ug/L 0.50 1 03/27/13 00:00 04/10/13 17:21 91-20-3 Surrogates 71<% 40-120 1 03/27/13 00:00 04/10/13 17:21 91-20-3 Strongates 71<% 40-120 1 03/27/13 00:00 04/10/13 17:21 91-20-3 Strongates 71 40-120 1 03/27/13 00:00 04/10/13 17:21 91-20-3 Strongates 71 40-120 1 03/27/13 00:00 04/10/13 17:21 91-20-3 Benzene 177 ug/L 5.0 0.49 5 03/28/13 19:06 70-43-2 Benzene 177 ug/L 5.0 0.43 5	6010 MET ICP, Dissolved	Analytical Method: EPA	6010 Prepar	ation Meth	nod: EPA	A 3010			
Marganese, Dissolved 2210 ug/L 25.0 2.4 5 03/27/13 14:00 04/04/13 18:06 7439-96-5 8270 MSSV PAH by SIM Analytical Method: EPA 8270C by SIM Preparation Method: EPA 8270C by SIM Preparation Naphthalene 0.89 ug/L 0.50 1 03/27/13 00:00 04/10/13 17:21 91-20-3 Surrogates 71 4 0-120 1 03/27/13 00:00 04/10/13 17:21 91-20-3 2-Fluorobiphenyl (S) 71 4 0-120 1 03/27/13 00:00 04/10/13 17:21 91-20-3 8260 MSV Analytical Method: EPA 5030B/8260 03/28/13 19:06 71-43-2 03/28/13 19:06 71-43-2 Benzene 177 ug/L 5.0 0.49 5 03/28/13 19:06 71-43-2 Benzene 177 ug/L 5.0 0.49 5 03/28/13 19:06 71-43-2 Benzene 177 ug/L 5.0 0.42 5 03/28/13 19:06 71-43-2 Benzene 107 ug/L 5.0	Boron, Dissolved	981 ug/L	500	250	5	03/27/13 14:00	04/04/13 18:06	7440-42-8	
Barto MSSV PAH by SIM Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C Naphthalene 0.89 ug/L 0.50 1 03/27/13 00:00 04/10/13 17:21 91-20-3 Surrogates 2-Fluorobiphenyl (S) 71 % 40-120 1 03/27/13 00:00 04/10/13 17:21 321-60-8 Terphenyl-d14 (S) 87 % 43-122 1 03/27/13 00:00 04/10/13 17:21 171-85-10 Bezone 177 ug/L 5.0 0.49 5 03/28/13 19:06 71-43-2 Ethylbenzene 334 ug/L 5.0 1.2 5 03/28/13 19:06 75-09-2 Naphthalene 90.0 ug/L 50.0 0.55 5 03/28/13 19:06 75-09-2 Naphthalene 90.0 ug/L 50.0 0.55 5 03/28/13 19:06 75-09-2 Naphthalene ND ug/L 5.0 0.43 5 03/28/13 19:06 75-09-2 Napthtalene ND ug/L 5.0 0.43 5 03/28/13 19:06 76-9-2 Napthtalene ND ug/L <td>Iron, Dissolved</td> <td>1180 ug/L</td> <td>250</td> <td>58.0</td> <td>5</td> <td>03/27/13 14:00</td> <td>04/04/13 18:06</td> <td>7439-89-6</td> <td></td>	Iron, Dissolved	1180 ug/L	250	58.0	5	03/27/13 14:00	04/04/13 18:06	7439-89-6	
Naphthalene 0.89 ug/L 0.50 1 03/27/13 00:00 04/10/13 17:21 91-20-3 Surrogates 71 % 40-120 1 03/27/13 00:00 04/10/13 17:21 91-20-3 Surrogates 71 % 40-120 1 03/27/13 00:00 04/10/13 17:21 321-60-8 Serrogates 71 % 43-122 1 03/27/13 00:00 04/10/13 17:21 321-60-8 Serrogates Analytical Method: EPA 5030B/8260 0 03/27/13 00:00 04/10/13 17:21 171-85-10 Benzene 177 ug/L 5.0 0.42 5 03/28/13 19:06 71-43-2 Benzene 177 ug/L 5.0 0.12 5 03/28/13 19:06 70-41-4 Methylene chloride ND ug/L 5.0 0.55 5 03/28/13 19:06 70-93-2 Naphthalene 90.0 ug/L 5.0 0.75 5 03/28/13 19:06 108-88-3 Toluene ND ug/L 5.0 0.75 5 03	Manganese, Dissolved	2210 ug/L	25.0	2.4	5	03/27/13 14:00	04/04/13 18:06	7439-96-5	
Surrogates 2-Fluorobiphenyl (S) 71 % 40-120 1 03/27/13 00:00 04/10/13 17:21 321-60-8 Terphenyl-d14 (S) 87 % 43-122 1 03/27/13 00:00 04/10/13 17:21 1718-51-0 8260 MSV Analytical Method: EPA 5030B/8260 0 03/27/13 00:00 04/10/13 17:21 1718-51-0 Benzene 177 ug/L 5.0 0.49 5 03/28/13 19:06 71-43-2 Ethylbenzene 334 ug/L 5.0 1.2 5 03/28/13 19:06 75-09-2 Naphthalene 90.0 ug/L 50.0 0.55 5 03/28/13 19:06 79-20-3 Naphthalene 90.0 ug/L 50.0 0.55 5 03/28/13 19:06 79-20-3 Naphthalene 90.0 ug/L 50.0 0.75 5 03/28/13 19:06 79-20-3 Naphthalene 90.0 ug/L 50.0 0.75 5 03/28/13 19:06 79-34-5 Toluene ND ug/L 5.0 0.75 5 03/28/13 19:06 78-37 Surrogates 1	8270 MSSV PAH by SIM	Analytical Method: EPA	8270C by SI	/ Prepara	ation Me	thod: EPA 3510C			
2-Fluorobiphenyl (S) 71 % 40-120 1 03/27/13 00:00 04/10/13 17:21 321-60-8 Terphenyl-d14 (S) 87 % 43-122 1 03/27/13 00:00 04/10/13 17:21 1718-51-0 8260 MSV Analytical Method: EPA 5030B/8260 5 03/28/13 19:06 71-43-2 Ethylbenzene 334 ug/L 5.0 1.2 5 03/28/13 19:06 70-43-2 Ethylbenzene 334 ug/L 5.0 1.2 5 03/28/13 19:06 70-43-2 Naphthalene 90.0 ug/L 5.0 1.2 5 03/28/13 19:06 70-9-2 Naphthalene ND ug/L 5.0 0.43 5 03/28/13 19:06 70-43-2 Toluene ND ug/L 5.0 0.43 5 03/28/13 19:06 70-43-2 Surrogates - - 5 03/28/13 19:06 70-43-2 Hormofluorobenzene (S) 103 % 80-120 5 03/28/13 19:06 70-40-2 Dibromofluorobenzene (S) 103 % 80-120 5 03/28/13 19:06	Naphthalene Surrogates	0.89 ug/L	0.50		1	03/27/13 00:00	04/10/13 17:21	91-20-3	
Based MSV Analytical Method: EPA 5030B/8260 Benzene 177 ug/L 5.0 0.49 5 03/28/13 19:06 71-43-2 Ethylbenzene 334 ug/L 5.0 1.2 5 03/28/13 19:06 70-41-4 Methylene chloride ND ug/L 5.0 1.2 5 03/28/13 19:06 75-09-2 Naphthalene 90.0 ug/L 50.0 0.55 5 03/28/13 19:06 79-34-5 Toluene ND ug/L 5.0 0.75 5 03/28/13 19:06 108-88-3 Xylene (Total) 84.0 ug/L 15.0 0.75 5 03/28/13 19:06 1830-20-7 Surrogates - - - - 03/28/13 19:06 1830-20-7 4-Bromofluorobenzene (S) 103 % 80-120 5 03/28/13 19:06 1868-53-7 1,2-Dichloroethane-d4 (S) 97 % 80-120 5 03/28/13 19:06 106-07-0 Toluene-d8 (S) 102 % 80-120 5 03/28/13 19:06 2037-26-5 Preservation pH	2-Fluorobiphenyl (S)	71 %	40-120		1	03/27/13 00:00	04/10/13 17:21	321-60-8	
Benzene 177 ug/L 5.0 0.49 5 03/28/13 19:06 71-43-2 Ethylbenzene 334 ug/L 5.0 1.2 5 03/28/13 19:06 100-41-4 Methylene chloride ND ug/L 5.0 1.2 5 03/28/13 19:06 75-09-2 Naphthalene 90.0 ug/L 5.0 0.43 5 03/28/13 19:06 75-09-2 Naphthalene ND ug/L 5.0 0.43 5 03/28/13 19:06 75-09-2 ND ug/L 5.0 0.43 5 03/28/13 19:06 78-34-5 Toluene ND ug/L 5.0 0.75 5 03/28/13 19:06 130-20-7 Surrogates	Terphenyl-d14 (S)	87 %	43-122		1	03/27/13 00:00	04/10/13 17:21	1718-51-0	
Ethylbenzene 334 ug/L 5.0 1.2 5 03/28/13 19:06 100-41-4 Methylene chloride ND ug/L 5.0 1.2 5 03/28/13 19:06 75-09-2 Naphthalene 90.0 ug/L 50.0 0.55 5 03/28/13 19:06 91-20-3 1,1,2,2-Tetrachloroethane ND ug/L 5.0 0.43 5 03/28/13 19:06 79-34-5 Toluene ND ug/L 5.0 0.75 5 03/28/13 19:06 108-88-3 Sylene (Total) 84.0 ug/L 15.0 0.75 5 03/28/13 19:06 460-00-4 Surrogates - - - - - - - 4-Bromofiluorobenzene (S) 103 % 80-120 5 03/28/13 19:06 460-00-4 Dibromofluoromethane-d4 (S) 97 % 80-120 5 03/28/13 19:06 17060-07-0 Toluene-d8 (S) 102 % 80-120 5 03/28/13 19:06 2037-26-5 Preservation pH 1.0 0.10 0.10 0.10	8260 MSV	Analytical Method: EPA	5030B/8260						
Methylene chloride ND ug/L 5.0 1.2 5 03/28/13 19:06 75-09-2 Naphthalene 90.0 ug/L 50.0 0.55 5 03/28/13 19:06 91-20-3 1,1,2,2-Tetrachloroethane ND ug/L 5.0 0.43 5 03/28/13 19:06 79-34-5 Toluene ND ug/L 5.0 0.75 5 03/28/13 19:06 108-88-3 Xylene (Total) 84.0 ug/L 15.0 2.0 5 03/28/13 19:06 130-20-7 Surrogates - - - - - - - 4-Bromofluorobenzene (S) 103 % 80-120 5 03/28/13 19:06 460-00-4 Dibromofluoromethane (S) 93 % 80-120 5 03/28/13 19:06 17060-07-0 Toluene-d8 (S) 102 % 80-120 5 03/28/13 19:06 2037-26-5 2540C Total Dissolved Solids Analytical Method: SM 2540C - 30/28/13 19:06 2037-26-5 300.0 IC Anions 28 Days	Benzene	177 ug/L	5.0	0.49	5		03/28/13 19:06	71-43-2	
Naphthalene 90.0 ug/L 50.0 0.55 5 03/28/13 19:06 91-20-3 1,1,2,2-Tetrachloroethane ND ug/L 5.0 0.43 5 03/28/13 19:06 79-34-5 Toluene ND ug/L 5.0 0.75 5 03/28/13 19:06 108-88-3 Xylene (Total) 84.0 ug/L 15.0 2.0 5 03/28/13 19:06 1330-20-7 Surrogates	Ethylbenzene	334 ug/L	5.0	1.2	5		03/28/13 19:06	100-41-4	
1,1,2,2-Tetrachloroethane ND ug/L 5.0 0.43 5 03/28/13 19:06 79-34-5 Toluene ND ug/L 5.0 0.75 5 03/28/13 19:06 108-88-3 Xylene (Total) 84.0 ug/L 15.0 2.0 5 03/28/13 19:06 103-20-7 Surrogates	Methylene chloride	ND ug/L	5.0	1.2	5		03/28/13 19:06	75-09-2	
ND ug/L 5.0 0.75 5 03/28/13 19:06 108-88-3 Xylene (Total) 84.0 ug/L 15.0 2.0 5 03/28/13 19:06 1330-20-7 Surrogates - <t< td=""><td>Naphthalene</td><td>90.0 ug/L</td><td>50.0</td><td>0.55</td><td>5</td><td></td><td>03/28/13 19:06</td><td>91-20-3</td><td></td></t<>	Naphthalene	90.0 ug/L	50.0	0.55	5		03/28/13 19:06	91-20-3	
Xylene (Total) 84.0 ug/L 15.0 2.0 5 03/28/13 19:06 1330-20-7 Surrogates 4-Bromofluorobenzene (S) 103 % 80-120 5 03/28/13 19:06 460-00-4 Dibromofluoromethane (S) 93 % 80-120 5 03/28/13 19:06 1868-53-7 1,2-Dichloroethane-d4 (S) 97 % 80-120 5 03/28/13 19:06 17060-07-0 Toluene-d8 (S) 102 % 80-120 5 03/28/13 19:06 2037-26-5 Preservation pH 1.0 0.10 0.10 5 03/28/13 19:06 2037-26-5 2540C Total Dissolved Solids Analytical Method: SM 2540C State State State State 300.0 IC Anions 28 Days Analytical Method: EPA 300.0 50.0 25.0 50.0 04/02/13 13:22 16887-00-6 Fluoride 408 mg/L 50.0 25.0 50 04/02/13 13:22 16887-00-6 ND mg/L 0.20 0.069 1 04/01/13 17:39 16984-48-8	1,1,2,2-Tetrachloroethane	ND ug/L	5.0	0.43	5		03/28/13 19:06	79-34-5	
Surrogates 103 % 80-120 5 03/28/13 19:06 460-00-4 Dibromofluoromethane (S) 93 % 80-120 5 03/28/13 19:06 1868-53-7 1,2-Dichloroethane-d4 (S) 97 % 80-120 5 03/28/13 19:06 17060-07-0 Toluene-d8 (S) 102 % 80-120 5 03/28/13 19:06 2037-26-5 Preservation pH 1.0 0.10 0.10 5 03/28/13 19:06 2037-26-5 2540C Total Dissolved Solids Analytical Method: SM 2540C 30.0 0 0.10 0.10 5 03/26/13 11:59 300.0 IC Anions 28 Days Analytical Method: EPA 300.0 103/26/13 11:59 16887-00-6 ND mg/L 5.0 25.0 50 04/02/13 13:22 16887-00-6 Fluoride 408 mg/L 50.0 25.0 50 04/02/13 13:22 16887-00-6	Toluene	ND ug/L	5.0	0.75	5		03/28/13 19:06	108-88-3	
4-Bronofluorobenzene (S) 103 % 80-120 5 03/28/13 19:06 460-00-4 Dibromofluoromethane (S) 93 % 80-120 5 03/28/13 19:06 1868-53-7 1,2-Dichloroethane-d4 (S) 97 % 80-120 5 03/28/13 19:06 17060-07-0 Toluene-d8 (S) 102 % 80-120 5 03/28/13 19:06 2037-26-5 Preservation pH 1.0 0.10 0.10 5 03/28/13 19:06 2037-26-5 2540C Total Dissolved Solids Analytical Method: SM 2540C 300.0 IC Anions 28 Days Analytical Method: EPA 300.0 03/26/13 11:59 Chloride 408 mg/L 50.0 25.0 50 04/02/13 13:22 16887-00-6 Fluoride ND mg/L 0.20 0.069 1 04/01/13 17:39 16984-48-8	Xylene (Total)	84.0 ug/L	15.0	2.0	5		03/28/13 19:06	1330-20-7	
Dibromofluoromethane (S) 93 % 80-120 5 03/28/13 19:06 1868-53-7 1,2-Dichloroethane-d4 (S) 97 % 80-120 5 03/28/13 19:06 17060-07-0 Toluene-d8 (S) 102 % 80-120 5 03/28/13 19:06 2037-26-5 Preservation pH 1.0 0.10 0.10 5 03/28/13 19:06 2037-26-5 2540C Total Dissolved Solids Analytical Method: SM 2540C Total Dissolved Solids Analytical Method: SM 2540C 03/26/13 11:59 300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Chloride 408 mg/L 50.0 25.0 50 04/02/13 13:22 16887-00-6 Fluoride ND mg/L 0.20 0.069 1 04/01/13 17:39 16984-48-8	Surrogates								
1,2-Dichloroethane-d4 (S) 97 % 80-120 5 03/28/13 19:06 17060-07-0 Toluene-d8 (S) 102 % 80-120 5 03/28/13 19:06 2037-26-5 Preservation pH 1.0 0.10 0.10 5 03/28/13 19:06 2037-26-5 2540C Total Dissolved Solids Analytical Method: SM 2540C 5.0 1 03/26/13 11:59 Total Dissolved Solids 43200 mg/L 5.0 5.0 1 03/26/13 11:59 300.0 IC Anions 28 Days Analytical Method: EPA 300.0 50.0 25.0 50 04/02/13 13:22 16887-00-6 Chloride 408 mg/L 50.0 25.0 50 04/02/13 13:22 16887-00-6 Fluoride ND mg/L 0.20 0.069 1 04/01/13 17:39 16984-48-8	4-Bromofluorobenzene (S)		80-120		5		03/28/13 19:06	460-00-4	
Toluene-d8 (S) 102 % 80-120 5 03/28/13 19:06 2037-26-5 Preservation pH 1.0 0.10 0.10 5 03/28/13 19:06 2037-26-5 2540C Total Dissolved Solids Analytical Method: SM 2540C X<	Dibromofluoromethane (S)		80-120		5		03/28/13 19:06	1868-53-7	
Preservation pH 1.0 0.10 0.10 5 03/28/13 19:06 2540C Total Dissolved Solids Analytical Method: SM 2540C V V Total Dissolved Solids 43200 mg/L 5.0 5.0 1 03/26/13 11:59 300.0 IC Anions 28 Days Analytical Method: EPA 300.0 V V V Chloride 408 mg/L 50.0 25.0 50 04/02/13 13:22 16887-00-6 Fluoride ND mg/L 0.20 0.069 1 04/01/13 17:39 16984-48-8	1,2-Dichloroethane-d4 (S)	97 %	80-120		5		03/28/13 19:06	17060-07-0	
2540C Total Dissolved Solids Analytical Method: SM 2540C Total Dissolved Solids 43200 mg/L 5.0 5.0 1 03/26/13 11:59 300.0 IC Anions 28 Days Analytical Method: EPA 300.0 EPA 300.0 50.0 25.0 50 04/02/13 13:22 16887-00-6 Chloride 408 mg/L 50.0 25.0 50 04/02/13 13:22 16887-00-6 Fluoride ND mg/L 0.20 0.069 1 04/01/13 17:39 16984-48-8	Toluene-d8 (S)	102 %	80-120		5		03/28/13 19:06	2037-26-5	
Total Dissolved Solids 43200 mg/L 5.0 5.0 1 03/26/13 11:59 300.0 IC Anions 28 Days Analytical Method: EPA 300.0 V V V Chloride 408 mg/L 50.0 25.0 50 04/02/13 13:22 16887-00-6 Fluoride ND mg/L 0.20 0.069 1 04/01/13 17:39 16984-48-8	Preservation pH	1.0	0.10	0.10	5		03/28/13 19:06		
300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Chloride 408 mg/L 50.0 25.0 50 04/02/13 13:22 16887-00-6 Fluoride ND mg/L 0.20 0.069 1 04/01/13 17:39 16984-48-8	2540C Total Dissolved Solids	Analytical Method: SM 2	2540C						
Chloride 408 mg/L 50.0 25.0 50 04/02/13 13:22 16887-00-6 Fluoride ND mg/L 0.20 0.069 1 04/01/13 17:39 16984-48-8	Total Dissolved Solids	43200 mg/L	5.0	5.0	1		03/26/13 11:59		
Fluoride ND mg/L 0.20 0.069 1 04/01/13 17:39 16984-48-8	300.0 IC Anions 28 Days	Analytical Method: EPA	300.0						
5	Chloride	408 mg/L	50.0	25.0	50		04/02/13 13:22	16887-00-6	
Sulfate 19100 mg/L 1000 59.0 1000 04/02/13 13:40 14808-79-8	Fluoride	ND mg/L	0.20	0.069	1		04/01/13 17:39	16984-48-8	
	Sulfate	19100 mg/L	1000	59.0	1000		04/02/13 13:40	14808-79-8	



Project: 075035 Martin 34 No 2

Sample: GW-075035-032013-CM- MW-3	Lab ID: 6014106900	3 Collected	d: 03/20/1	3 12:00	Received: 03/	/23/13 08:45 Ma	atrix: Water	
		Report						
Parameters	Results Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA	6010 Prepar	ration Meth	nod: EPA	3010			
Boron, Dissolved	936 ug/L	500	250	5	03/27/13 14:00	04/04/13 18:08	7440-42-8	
Iron, Dissolved	217 ug/L	100	23.2	2	03/27/13 14:00	04/05/13 10:54	7439-89-6	
Manganese, Dissolved	4160 ug/L	25.0	2.4	5	03/27/13 14:00	04/04/13 18:08	7439-96-5	
8270 MSSV PAH by SIM	Analytical Method: EPA	8270C by SII	M Prepara	ation Me	thod: EPA 3510C			
Naphthalene Surrogates	ND ug/L	0.50		1	03/27/13 00:00	04/10/13 17:39	91-20-3	
2-Fluorobiphenyl (S)	73 %	40-120		1	03/27/13 00:00	04/10/13 17:39	321-60-8	
Terphenyl-d14 (S)	100 %	43-122		1	03/27/13 00:00	04/10/13 17:39	1718-51-0	
8260 MSV	Analytical Method: EPA	5030B/8260						
Benzene	ND ug/L	1.0	0.098	1		03/28/13 19:20	71-43-2	
Ethylbenzene	ND ug/L	1.0	0.23	1		03/28/13 19:20	100-41-4	
Methylene chloride	ND ug/L	1.0	0.24	1		03/28/13 19:20	75-09-2	
Naphthalene	ND ug/L	10.0	0.11	1		03/28/13 19:20	91-20-3	
1,1,2,2-Tetrachloroethane	ND ug/L	1.0	0.086	1		03/28/13 19:20	79-34-5	
Toluene	ND ug/L	1.0	0.15	1		03/28/13 19:20	108-88-3	
Xylene (Total)	ND ug/L	3.0	0.41	1		03/28/13 19:20	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	102 %	80-120		1		03/28/13 19:20		
Dibromofluoromethane (S)	92 %	80-120		1		03/28/13 19:20	1868-53-7	
1,2-Dichloroethane-d4 (S)	102 %	80-120		1		03/28/13 19:20	17060-07-0	
Toluene-d8 (S)	99 %	80-120		1		03/28/13 19:20	2037-26-5	
Preservation pH	1.0	0.10	0.10	1		03/28/13 19:20		
2540C Total Dissolved Solids	Analytical Method: SM	2540C						
Total Dissolved Solids	45600 mg/L	5.0	5.0	1		03/26/13 12:00		
300.0 IC Anions 28 Days	Analytical Method: EPA	300.0						
Chloride	373 mg/L	50.0	25.0	50		04/02/13 13:57	16887-00-6	
Fluoride	ND mg/L	0.20	0.069	1		04/01/13 17:56	16984-48-8	
Sulfate	20400 mg/L	2000	360	2000		04/03/13 11:17	14808-79-8	



Project: 075035 Martin 34 No 2

Sample: GW-075035-032013-CM- MW-4	Lab ID: 6014	1069004 Collected	d: 03/20/1	3 12:35	Received: 03/	/23/13 08:45 Ma	atrix: Water	
		Report						
Parameters	Results Un	iits Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Metho	od: EPA 6010 Prepa	ration Meth	nod: EPA	A 3010			
Boron, Dissolved	748 ug/L	500	250	5	03/27/13 14:00	04/04/13 18:10	7440-42-8	
Iron, Dissolved	836 ug/L	250	58.0	5	03/27/13 14:00	04/04/13 18:10	7439-89-6	
Manganese, Dissolved	3580 ug/L	25.0	2.4	5	03/27/13 14:00	04/04/13 18:10	7439-96-5	
8270 MSSV PAH by SIM	Analytical Metho	od: EPA 8270C by SI	M Prepara	ation Me	thod: EPA 3510C			
Naphthalene <i>Surrogates</i>	0.90 ug/L	0.50		1	03/27/13 00:00	04/10/13 17:57	91-20-3	
2-Fluorobiphenyl (S)	66 %	40-120		1	03/27/13 00:00	04/10/13 17:57	321-60-8	
Terphenyl-d14 (S)	86 %	43-122		1	03/27/13 00:00	04/10/13 17:57	1718-51-0	
8260 MSV	Analytical Metho	od: EPA 5030B/8260						
Benzene	ND ug/L	1.0	0.098	1		03/28/13 19:35	71-43-2	
Ethylbenzene	ND ug/L	1.0	0.23	1		03/28/13 19:35	100-41-4	
Methylene chloride	ND ug/L	1.0	0.24	1		03/28/13 19:35	75-09-2	
Naphthalene	ND ug/L	10.0	0.11	1		03/28/13 19:35	91-20-3	
1,1,2,2-Tetrachloroethane	ND ug/L	1.0	0.086	1		03/28/13 19:35	79-34-5	
Toluene	ND ug/L	1.0	0.15	1		03/28/13 19:35	108-88-3	
Xylene (Total)	ND ug/L	3.0	0.41	1		03/28/13 19:35	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	105 %	80-120		1		03/28/13 19:35		
Dibromofluoromethane (S)	95 %	80-120		1		03/28/13 19:35		
1,2-Dichloroethane-d4 (S)	105 %	80-120		1		03/28/13 19:35		
Toluene-d8 (S)	99 %	80-120		1		03/28/13 19:35	2037-26-5	
Preservation pH	1.0	0.10	0.10	1		03/28/13 19:35		
2540C Total Dissolved Solids	Analytical Metho	od: SM 2540C						
Total Dissolved Solids	63000 mg/L	5.0	5.0	1		03/27/13 14:46		
300.0 IC Anions 28 Days	Analytical Metho	od: EPA 300.0						
Chloride	377 mg/L	50.0	25.0	50		04/02/13 15:26	16887-00-6	
Fluoride	ND mg/L	0.20	0.069	1		04/01/13 18:49	16984-48-8	
Sulfate	23600 mg/L	2000	360	2000		04/03/13 11:33	14808-79-8	



Project: 075035 Martin 34 No 2

MW-5		05 Collected	1: 03/20/1	5 14:00	Received: 03/	23/13 08:45 Ma	atrix: Water	
		Report						
Parameters	Results Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EF	A 6010 Prepar	ation Meth	od: EPA	3010			
Boron, Dissolved	2870 ug/L	1000	500	10	03/27/13 14:00	04/04/13 18:12	7440-42-8	
Iron, Dissolved	6060 ug/L	500	116	10	03/27/13 14:00	04/04/13 18:12	7439-89-6	
Manganese, Dissolved	2230 ug/L	50.0	4.9	10	03/27/13 14:00	04/04/13 18:12	7439-96-5	
8270 MSSV PAH by SIM	Analytical Method: EF	A 8270C by SI	M Prepara	tion Me	thod: EPA 3510C			
Naphthalene Surrogates	ND ug/L	0.50		1	03/27/13 00:00	04/10/13 18:15	91-20-3	
2-Fluorobiphenyl (S)	66 %	40-120		1	03/27/13 00:00	04/10/13 18:15	321-60-8	
Terphenyl-d14 (S)	101 %	43-122		1		04/10/13 18:15		
8260 MSV	Analytical Method: EF	PA 5030B/8260						
Benzene	493 ug/L	5.0	0.49	5		03/29/13 15:53	71-43-2	
Ethylbenzene	26.6 ug/L	5.0	1.2	5		03/29/13 15:53	100-41-4	
Methylene chloride	ND ug/L	5.0	1.2	5		03/29/13 15:53	75-09-2	
Naphthalene	ND ug/L	50.0	0.55	5		03/29/13 15:53	91-20-3	
1,1,2,2-Tetrachloroethane	ND ug/L	5.0	0.43	5		03/29/13 15:53	79-34-5	
Toluene	ND ug/L	5.0	0.75	5		03/29/13 15:53	108-88-3	
Xylene (Total)	ND ug/L	15.0	2.0	5		03/29/13 15:53	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	103 %	80-120		5		03/29/13 15:53		
Dibromofluoromethane (S)	101 %	80-120		5		03/29/13 15:53		
1,2-Dichloroethane-d4 (S)	107 %	80-120		5		03/29/13 15:53		
Toluene-d8 (S)	99 %	80-120		5		03/29/13 15:53	2037-26-5	
Preservation pH	1.0	0.10	0.10	5		03/29/13 15:53		
2540C Total Dissolved Solids	Analytical Method: SN	1 2540C						
Total Dissolved Solids	11000 mg/L	5.0	5.0	1		03/27/13 14:47		
300.0 IC Anions 28 Days	Analytical Method: EF	PA 300.0						
Chloride	206 mg/L	20.0	10.0	20		04/02/13 15:43	16887-00-6	
Fluoride	ND mg/L	0.20	0.069	1		04/01/13 19:07	16984-48-8	
Sulfate	6960 mg/L	500	29.5	500		04/02/13 16:01	14808-79-8	



Project: 075035 Martin 34 No 2

Sample: GW-075035-032013-CM- MW-6	Lab ID: 60141	069006 Collected	d: 03/20/1	3 11:10	Received: 03/	/23/13 08:45 M	atrix: Water	
		Report						
Parameters	Results Un		MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Metho	d: EPA 6010 Prepar	ration Meth	nod: EP/	A 3010			
Boron, Dissolved	642 ug/L	500	250	5	03/27/13 14:00	04/04/13 18:14	7440-42-8	
Iron, Dissolved	ND ug/L	50.0	11.6	1	03/27/13 14:00	04/05/13 10:56	7439-89-6	
Manganese, Dissolved	2460 ug/L	25.0	2.4	5	03/27/13 14:00	04/04/13 18:14	7439-96-5	
8270 MSSV PAH by SIM	Analytical Metho	d: EPA 8270C by SI	M Prepara	ation Me	thod: EPA 3510C			
Naphthalene Surrogates	33.6 ug/L	0.50		1	03/27/13 00:00	04/10/13 18:33	91-20-3	
2-Fluorobiphenyl (S)	66 %	40-120		1	03/27/13 00:00	04/10/13 18:33	321-60-8	
Terphenyl-d14 (S)	103 %	43-122		1	03/27/13 00:00	04/10/13 18:33	1718-51-0	
8260 MSV	Analytical Metho	d: EPA 5030B/8260						
Benzene	22.1 ug/L	10.0	0.98	10		03/28/13 20:04	71-43-2	
Ethylbenzene	196 ug/L	10.0	2.3	10		03/28/13 20:04	100-41-4	
Methylene chloride	ND ug/L	10.0	2.4	10		03/28/13 20:04	75-09-2	
Naphthalene	ND ug/L	100	1.1	10		03/28/13 20:04	91-20-3	
1,1,2,2-Tetrachloroethane	ND ug/L	10.0	0.86	10		03/28/13 20:04	79-34-5	
Toluene	ND ug/L	10.0	1.5	10		03/28/13 20:04	108-88-3	
Xylene (Total)	3450 ug/L	30.0	4.1	10		03/28/13 20:04	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	102 %	80-120		10		03/28/13 20:04		
Dibromofluoromethane (S)	85 %	80-120		10		03/28/13 20:04		
1,2-Dichloroethane-d4 (S)	95 %	80-120		10		03/28/13 20:04		
Toluene-d8 (S)	103 %	80-120		10		03/28/13 20:04	2037-26-5	
Preservation pH	1.0	0.10	0.10	10		03/28/13 20:04		
2540C Total Dissolved Solids	Analytical Metho	d: SM 2540C						
Total Dissolved Solids	70000 mg/L	5.0	5.0	1		03/27/13 14:47		
300.0 IC Anions 28 Days	Analytical Metho	d: EPA 300.0						
Chloride	380 mg/L	50.0	25.0	50		04/02/13 16:19	16887-00-6	
Fluoride	ND mg/L	0.20	0.069	1		04/01/13 19:25	16984-48-8	
Sulfate	23200 mg/L	2000	360	2000		04/03/13 11:48	14808-79-8	



Project: 075035 Martin 34 No 2

Sample: GW-075035-032013-CM- MW-7	Lab ID: 60141069007	7 Collected	I: 03/20/1	3 13:10	Received: 03/	/23/13 08:45 Ma	atrix: Water	
		Report						
Parameters	Results Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA	6010 Prepar	ation Meth	nod: EPA	3010			
Boron, Dissolved	864 ug/L	500	250	5	03/27/13 14:00	04/04/13 18:16	7440-42-8	
Iron, Dissolved	2560 ug/L	250	58.0	5	03/27/13 14:00	04/04/13 18:16	7439-89-6	
Manganese, Dissolved	3300 ug/L	25.0	2.4	5	03/27/13 14:00	04/04/13 18:16	7439-96-5	
8270 MSSV PAH by SIM	Analytical Method: EPA	8270C by SI	M Prepara	ation Me	thod: EPA 3510C			
Naphthalene <i>Surrogates</i>	ND ug/L	0.50		1	03/27/13 00:00	04/10/13 18:51	91-20-3	
2-Fluorobiphenyl (S)	76 %	40-120		1	03/27/13 00:00	04/10/13 18:51	321-60-8	
Terphenyl-d14 (S)	99 %	43-122		1	03/27/13 00:00	04/10/13 18:51	1718-51-0	
8260 MSV	Analytical Method: EPA	5030B/8260						
Benzene	7.7 ug/L	5.0	0.49	5		03/28/13 20:18	71-43-2	
Ethylbenzene	450 ug/L	5.0	1.2	5		03/28/13 20:18	100-41-4	
Methylene chloride	ND ug/L	5.0	1.2	5		03/28/13 20:18	75-09-2	
Naphthalene	ND ug/L	50.0	0.55	5		03/28/13 20:18	91-20-3	
1,1,2,2-Tetrachloroethane	ND ug/L	5.0	0.43	5		03/28/13 20:18	79-34-5	
Toluene	ND ug/L	5.0	0.75	5		03/28/13 20:18	108-88-3	
Xylene (Total)	ND ug/L	15.0	2.0	5		03/28/13 20:18	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	97 %	80-120		5		03/28/13 20:18		
Dibromofluoromethane (S)	88 %	80-120		5		03/28/13 20:18		
1,2-Dichloroethane-d4 (S)	96 %	80-120		5		03/28/13 20:18	17060-07-0	
Toluene-d8 (S)	99 %	80-120		5		03/28/13 20:18	2037-26-5	
Preservation pH	1.0	0.10	0.10	5		03/28/13 20:18		
2540C Total Dissolved Solids	Analytical Method: SM 2	2540C						
Total Dissolved Solids	56000 mg/L	5.0	5.0	1		03/27/13 14:47		
300.0 IC Anions 28 Days	Analytical Method: EPA	300.0						
Chloride	283 mg/L	50.0	25.0	50		04/02/13 16:54	16887-00-6	
Fluoride	ND mg/L	0.20	0.069	1		04/01/13 19:42	16984-48-8	
Sulfate	21500 mg/L	2000	360	2000		04/03/13 12:04	14808-79-8	



Project: 075035 Martin 34 No 2

Pace Project No.: 60141069

Sample: GW-075035-032013-CM- DUP	Lab ID:	60141069008	Collected	l: 03/20/13	8 11:15	Received: 03	8/23/13 08:45 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical	Method: EPA 5	030B/8260						
Benzene	19.8 u	g/L	2.0	0.20	2		03/28/13 22:42	71-43-2	
Ethylbenzene	200 u	g/L	2.0	0.46	2		03/28/13 22:42	100-41-4	
Methylene chloride	ND u	g/L	2.0	0.48	2		03/28/13 22:42	75-09-2	
Naphthalene	57.0 u	g/L	20.0	0.22	2		03/28/13 22:42	91-20-3	
1,1,2,2-Tetrachloroethane	ND u	g/L	2.0	0.17	2		03/28/13 22:42	79-34-5	
Toluene	ND u	g/L	2.0	0.30	2		03/28/13 22:42	108-88-3	
Xylene (Total)	3520 u	g/L	30.0	4.1	10		03/29/13 16:07	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100 %	6	80-120		2		03/28/13 22:42	460-00-4	
Dibromofluoromethane (S)	88 %	6	80-120		2		03/28/13 22:42	1868-53-7	
1,2-Dichloroethane-d4 (S)	107 %	6	80-120		2		03/28/13 22:42	17060-07-0	
Toluene-d8 (S)	107 %	6	80-120		2		03/28/13 22:42	2037-26-5	
Preservation pH	1.0		0.10	0.10	2		03/28/13 22:42		



Project: 075035 Martin 34 No 2

Pace Project No.: 60141069

Sample: TB-075035-032013-CM-001	Lab ID:	60141069009	Collected	d: 03/20/13	3 00:00	Received: 03	B/23/13 08:45 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical	Method: EPA 5	030B/8260						
Benzene	ND u	ıg/L	1.0	0.098	1		03/28/13 22:57	71-43-2	
Ethylbenzene	ND u	ıg/L	1.0	0.23	1		03/28/13 22:57	100-41-4	
Methylene chloride	ND u	ıg/L	1.0	0.24	1		03/28/13 22:57	75-09-2	
Naphthalene	ND u	ıg/L	10.0	0.11	1		03/28/13 22:57	91-20-3	
1,1,2,2-Tetrachloroethane	ND u	ıg/L	1.0	0.086	1		03/28/13 22:57	79-34-5	
Toluene	ND u	ıg/L	1.0	0.15	1		03/28/13 22:57	108-88-3	
Xylene (Total)	ND u	ıg/L	3.0	0.41	1		03/29/13 16:21	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100 %	6	80-120		1		03/28/13 22:57	460-00-4	
Dibromofluoromethane (S)	91 %	6	80-120		1		03/28/13 22:57	1868-53-7	
1,2-Dichloroethane-d4 (S)	98 %	6	80-120		1		03/28/13 22:57	17060-07-0	
Toluene-d8 (S)	101 %	6	80-120		1		03/28/13 22:57	2037-26-5	
Preservation pH	1.0		0.10	0.10	1		03/28/13 22:57		



Project:	075035 Martin 34	1 No 2											
Pace Project No .:	60141069												
QC Batch:	MPRP/22048			Analysi	s Method:	El	PA 6010						
QC Batch Method:	EPA 3010			Analysi	s Descript	ion: 60	010 MET Dis	solved					
Associated Lab Sam	nples: 6014106	9001, 6014	1069002	, 601410690	03, 60141	069004, 60	0141069005	5, 6014106	9006, 6014	1069007			
METHOD BLANK:	1160117			М	atrix: Wat	er							
Associated Lab Sam	nples: 6014106	9001, 6014	1069002	, 601410690 Blank		069004, 60 eporting	0141069005	5, 6014106	9006, 6014	1069007			
Param	neter	Un	its	Result		Limit	Analyz	ed	Qualifiers				
Boron, Dissolved Iron, Dissolved		ug/L ug/L			ND ND	100 50.0							
Manganese, Dissolv	red	ug/L			ND	5.0							
LABORATORY CON	TROL SAMPLE:	1160118											
LABORATORY CON	ITROL SAMPLE:	1160118		Spike	LCS		LCS	% Rec	;				
LABORATORY CON		1160118 Un		Spike Conc.	LCS Resu		LCS % Rec	% Rec Limits		ualifiers			
				•				Limits		ualifiers			
Param		Un		Conc.	Resu	lt	% Rec	Limits 80	Q	ualifiers	-		
Param Boron, Dissolved	neter	Un ug/L		Conc. 1000	Resu	lt 945	% Rec 94	Limits 80 80	-120 Q	ualifiers	-		
Param Boron, Dissolved Iron, Dissolved	red	ug/L ug/L ug/L ug/L		Conc. 1000 10000 10000	Resu	lt 945 9260	% Rec 94 93	Limits 80 80	-120 -120 -120	ualifiers			
Param Boron, Dissolved Iron, Dissolved Manganese, Dissolv	red	ug/L ug/L ug/L ug/L	iits	Conc. 1000 10000 10000	Resu	lt 945 9260 1010	% Rec 94 93	Limits 80 80	-120 -120 -120	ualifiers			
Param Boron, Dissolved Iron, Dissolved Manganese, Dissolv	red	Un ug/L ug/L ug/L PLICATE:	iits	Conc. 1000 10000 10000 9	Resu	lt 945 9260 1010	% Rec 94 93	Limits 80 80	-120 -120 -120	walifiers		Мах	
Param Boron, Dissolved Iron, Dissolved Manganese, Dissolv	red ATRIX SPIKE DU	Un ug/L ug/L ug/L PLICATE: 60141	nits 116011	Conc. 1000 10000 1000 9 MS	Resu	lt 945 9260 1010 1160120	% Rec 94 93 101	Limits 80 80 80	Q -120 -120 -120		RPD	Max RPD	Qual
Param Boron, Dissolved Iron, Dissolved Manganese, Dissolv MATRIX SPIKE & M	red ATRIX SPIKE DU	Un ug/L ug/L ug/L PLICATE: 60141 Units	iits 116011 069001	Conc. 1000 10000 1000 9 MS Spike	Resu MSD Spike	lt 945 9260 1010 1160120 MS	% Rec 94 93 101 MSD	Limits 80 80 80 MS	Q -120 -120 -120 MSD	% Rec Limits	RPD 4		Qual

REPORT OF LABORATORY ANALYSIS

Manganese, Dissolved

ug/L

670

1000

1000

1600

1660

93

99

75-125

4 20



Project: 075035 Martin 34 No 2

Pace Project No.: 60141069

QC Batch:	MSV	/52648	Analysis Method:	EPA 5030B/8260
QC Batch Method:	EPA	5030B/8260	Analysis Description:	8260 MSV Water 10 mL Purge
Associated Lab Sam	ples:	60141069001, 60141069002, 6	0141069003, 60141069004	4, 60141069006, 60141069007

 METHOD BLANK:
 1160784
 Matrix:
 Water

 Associated Lab Samples:
 60141069001, 60141069002, 60141069003, 60141069004, 60141069006, 60141069007

_		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/28/13 15:43	
Benzene	ug/L	ND	1.0	03/28/13 15:43	
Ethylbenzene	ug/L	ND	1.0	03/28/13 15:43	
Methylene chloride	ug/L	ND	1.0	03/28/13 15:43	
Naphthalene	ug/L	ND	10.0	03/28/13 15:43	
Toluene	ug/L	ND	1.0	03/28/13 15:43	
Xylene (Total)	ug/L	ND	3.0	03/28/13 15:43	
1,2-Dichloroethane-d4 (S)	%	99	80-120	03/28/13 15:43	
4-Bromofluorobenzene (S)	%	103	80-120	03/28/13 15:43	
Dibromofluoromethane (S)	%	80	80-120	03/28/13 15:43	
Toluene-d8 (S)	%	100	80-120	03/28/13 15:43	

LABORATORY CONTROL SAMPLE: 1160785

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	20	20.2	101	73-120	
Benzene	ug/L	20	19.8	99	73-122	
Ethylbenzene	ug/L	20	19.9	100	76-123	
Methylene chloride	ug/L	20	22.1	111	71-123	
Naphthalene	ug/L	20	21.5	108	64-127	
Toluene	ug/L	20	20.3	101	76-122	
Xylene (Total)	ug/L	60	61.6	103	76-122	
1,2-Dichloroethane-d4 (S)	%			90	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Dibromofluoromethane (S)	%			85	80-120	
Toluene-d8 (S)	%			101	80-120	

REPORT OF LABORATORY ANALYSIS

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Project: 075035 Martin 34 No 2

Pace Project No.: 60141069

QC Batch: MSV/52651 QC Batch Method:

EPA 5030B/8260 60141069008, 60141069009 Analysis Description:

Analysis Method:

EPA 5030B/8260 8260 MSV Water 10 mL Purge

Associated Lab Samples:

METHOD BLANK: 1160820

Matrix: Water

Associated Lab Samples: 60141069008, 60141069009

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/28/13 21:30	
Benzene	ug/L	ND	1.0	03/28/13 21:30	
Ethylbenzene	ug/L	ND	1.0	03/28/13 21:30	
Methylene chloride	ug/L	ND	1.0	03/28/13 21:30	
Naphthalene	ug/L	ND	10.0	03/28/13 21:30	
Toluene	ug/L	ND	1.0	03/28/13 21:30	
1,2-Dichloroethane-d4 (S)	%	96	80-120	03/28/13 21:30	
4-Bromofluorobenzene (S)	%	96	80-120	03/28/13 21:30	
Dibromofluoromethane (S)	%	84	80-120	03/28/13 21:30	
Toluene-d8 (S)	%	102	80-120	03/28/13 21:30	

LABORATORY CONTROL SAMPLE: 1160821

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	20	21.8	109	73-120	
Benzene	ug/L	20	21.5	108	73-122	
Ethylbenzene	ug/L	20	22.0	110	76-123	
Methylene chloride	ug/L	20	22.9	115	71-123	
Naphthalene	ug/L	20	24.7	124	64-127	
Toluene	ug/L	20	22.0	110	76-122	
1,2-Dichloroethane-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			96	80-120	
Dibromofluoromethane (S)	%			84	80-120	
Toluene-d8 (S)	%			101	80-120	

MATRIX SPIKE & MATRIX SP	IKE DUPLICAT	E: 11608	22		1160823							
		140771012	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
1,1,2,2-Tetrachloroethane	ug/L	<0.086	20	20	18.5	19.2	93	96	63-126	4	20	
Benzene	ug/L	0.18J	20	20	20.8	21.0	103	104	48-150	1	31	
Ethylbenzene	ug/L	<0.23	20	20	20.2	20.5	101	102	50-147	1	31	
Methylene chloride	ug/L	0.30J	20	20	21.9	22.4	108	111	67-128	2	20	
Naphthalene	ug/L	<0.11	20	20	20.7	22.1	104	110	40-140	6	33	
Toluene	ug/L	<0.15	20	20	20.3	20.5	101	103	51-147	1	32	
1,2-Dichloroethane-d4 (S)	%						95	96	80-120			
4-Bromofluorobenzene (S)	%						98	98	80-120			
Dibromofluoromethane (S)	%						87	86	80-120			
Toluene-d8 (S)	%						102	101	80-120			
Preservation pH		1.0			1.0	1.0				0		

REPORT OF LABORATORY ANALYSIS

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Project: 075035 Martin 34 No 2

Pace Project No.: 60141069

QC Batch:	MSV/52673
QC Batch Method:	EPA 5030B/8260

Analysis Method: Analysis Description:

Matrix: Water

EPA 5030B/8260 8260 MSV Water 10 mL Purge

60141069005, 60141069008, 60141069009 Associated Lab Samples:

METHOD BLANK:	116171	3	
Associated Lab Sam	noles:	60141069005	601410

Associated Lab Samples: 601	41069005, 60141069008				
Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/29/13 13:13	
Benzene	ug/L	ND	1.0	03/29/13 13:13	
Ethylbenzene	ug/L	ND	1.0	03/29/13 13:13	
Methylene chloride	ug/L	ND	1.0	03/29/13 13:13	
Naphthalene	ug/L	ND	10.0	03/29/13 13:13	
Toluene	ug/L	ND	1.0	03/29/13 13:13	
Xylene (Total)	ug/L	ND	3.0	03/29/13 13:13	
1,2-Dichloroethane-d4 (S)	%	104	80-120	03/29/13 13:13	
4-Bromofluorobenzene (S)	%	103	80-120	03/29/13 13:13	
Dibromofluoromethane (S)	%	101	80-120	03/29/13 13:13	
Toluene-d8 (S)	%	101	80-120	03/29/13 13:13	

LABORATORY CONTROL SAMPLE: 1161714

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L			97	73-120	
Benzene	ug/L	20	19.9	99	73-122	
Ethylbenzene	ug/L	20	19.9	100	76-123	
Methylene chloride	ug/L	20	19.2	96	71-123	
Naphthalene	ug/L	20	18.7	93	64-127	
Toluene	ug/L	20	20.4	102	76-122	
Xylene (Total)	ug/L	60	60.7	101	76-122	
1,2-Dichloroethane-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			103	80-120	
Dibromofluoromethane (S)	%			99	80-120	
Toluene-d8 (S)	%			100	80-120	



Project: 075035 Martin 34 No 2 Pace Project No.: 60141069 QC Batch: OEXT/37713 Analysis Method: EPA 8270C by SIM QC Batch Method: EPA 3510C Analysis Description: 8270 Water PAH by SIM MSSV 60141069001, 60141069002, 60141069003, 60141069004, 60141069005, 60141069006, 60141069007 Associated Lab Samples: METHOD BLANK: 1159830 Matrix: Water Associated Lab Samples: 60141069001, 60141069002, 60141069003, 60141069004, 60141069005, 60141069006, 60141069007 Blank Reporting Limit Parameter Units Result Analyzed Qualifiers Naphthalene ug/L ND 0.50 04/10/13 14:39 2-Fluorobiphenyl (S) % 83 40-120 04/10/13 14:39 Terphenyl-d14 (S) % 43-122 04/10/13 14:39 111 LABORATORY CONTROL SAMPLE: 1159831 Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Naphthalene ug/L 10 9.1 91 41-120 2-Fluorobiphenyl (S) % 82 40-120 Terphenyl-d14 (S) % 97 43-122



Project:	075035 Martin 3	34 No 2					
Pace Project No.:	60141069						
QC Batch:	WET/40401		Analysis Meth	iod: SM	M 2540C		
QC Batch Method:	SM 2540C		Analysis Desc	cription: 25	40C Total Dissolve	ed Solids	
Associated Lab Sar	nples: 601410	69001, 601410690	02, 60141069003				
METHOD BLANK:	1159598		Matrix:	Water			
Associated Lab Sar	nples: 601410	69001, 601410690	02, 60141069003				
			Blank	Reporting			
Parar	neter	Units	Result	Limit	Analyzed	Qualifiers	
Total Dissolved Soli	ds	mg/L	ND	5.0	03/26/13 11:53		_
SAMPLE DUPLICA	TE: 1159599						
			60140890005	Dup		Max	
Parar	neter	Units	60140890005 Result	Dup Result	RPD	Max RPD	Qualifiers
		Units mg/L		•			Qualifiers
			Result	Result		RPD	Qualifiers
Parar Total Dissolved Soli SAMPLE DUPLICA	ds		Result	Result		RPD	Qualifiers
Total Dissolved Soli	ds		Result	Result		RPD	Qualifiers
Total Dissolved Soli	ds TE: 1159600		Result 1080	Result 1080		RPD 17	Qualifiers



Project:	075035 Martin 3	4 No 2					
Pace Project No.:	60141069						
QC Batch:	WET/40427		Analysis Meth	nod: SM	M 2540C		
QC Batch Method:	SM 2540C		Analysis Desc	cription: 25	40C Total Dissolve	ed Solids	
Associated Lab Sar	mples: 6014106	9004, 601410690	05, 60141069006, 60	0141069007			
METHOD BLANK:	1160247		Matrix:	Water			
Associated Lab Sar	mples: 6014106	9004, 601410690	05, 60141069006, 60	0141069007			
			Blank	Reporting			
Para	meter	Units	Result	Limit	Analyzed	Qualifiers	
Total Dissolved Sol	ids	mg/L	ND	5.0	03/27/13 14:46		_
SAMPLE DUPLICA	TE: 1160248						
			60141069004	Dup		Max	
Parar	meter	Units	Result	Result	RPD	RPD	Qualifiers
Total Dissolved Sol	ids	mg/L	63000	65000	3	17	
	TE (1000.10						
SAMPLE DUPLICA	TE: 1160249						
SAMPLE DUPLICA	NE: 1160249		60141075001	Dup		Max	
SAMPLE DUPLICA Parai		Units	60141075001 Result	Dup Result	RPD	Max RPD	Qualifiers



Project:	075	035 Martin 34	No 2							
Pace Project	t No.: 601	41069								
QC Batch:	W	ETA/24072		Analysis I	Method:	EP	A 300.0			
QC Batch Me	ethod: E	PA 300.0		-	Description:	300	0.0 IC Anions	6		
Associated L	_ab Sample:	s: 6014106	9001, 6014106900	02, 6014106900	3, 6014106900	4, 60 ⁻	141069005,	60141069006,	6014106900	7
METHOD BL	LANK: 116	2735		Mat	rix: Water					
Associated L	_ab Samples	6014106	9001, 6014106900	02, 6014106900	3, 6014106900	4, 60 [,]	141069005,	60141069006,	6014106900	7
				Blank	Reporting	g				
	Paramete	•	Units	Result	Limit		Analyzed	d Quali	fiers	
Fluoride			mg/L	Ν	ND C).20	04/01/13 12	2:02		
METHOD BL	LANK: 116	3179		Mat	rix: Water					
Associated L	_ab Samples	6014106	9001, 6014106900	02, 6014106900	3, 6014106900	4, 60 [,]	141069005,	60141069006,	6014106900	7
	_			Blank	Reporting	g				
	Paramete		Units	Result	Limit		Analyzed		fiers	
Chloride			mg/L		ND	1.0	04/02/13 09	-		
Cultoto			mg/L	I I	۱D	1.0	04/02/13 09	9.32		
Sulfate										
Sulfate		3684		Mat	riv: Water					
METHOD BL			0000 004 440000		rix: Water					
METHOD BL			9003, 6014106900	04, 6014106900	6, 6014106900					
METHOD BL		6014106	9003, 6014106900 Units				Analyzed	d Quali	fiers	
METHOD BL Associated L	_ab Samples	6014106		04, 60141069000 Blank Result	6, 6014106900 Reporting	g 	Analyzed 04/03/13 10		fiers	
METHOD BL Associated L	_ab Samples	6014106	Units	04, 60141069000 Blank Result	6, 6014106900 Reporting Limit	g 			fiers	
METHOD BL Associated L Sulfate	ab Samples	6014106	Units	04, 60141069000 Blank Result	6, 6014106900 Reporting Limit	g 			fiers	
METHOD BL Associated L Sulfate	ab Samples	5: 6014106	Units mg/L	04, 60141069000 Blank Result	6, 6014106900 Reporting Limit	g 			fiers	
METHOD BL Associated L Sulfate	ab Samples	DL SAMPLE:	Units mg/L	04, 60141069000 Blank 	6, 6014106900 Reporting Limit	g 1.0	04/03/13 10):16	fiers Qualifiers	
METHOD BL Associated L Sulfate _ABORATOF	ab Samples	DL SAMPLE:	Units mg/L 1162736	04, 60141069000 Blank Result N	6, 6014106900 Reporting Limit	g 1.0	04/03/13 10):16 % Rec		
METHOD BL Associated L Sulfate LABORATOP	ab Samples	DL SAMPLE:	Units mg/L 1162736 Units	04, 60141069000 Blank Result N Spike Conc.	6, 6014106900 Reporting Limit	g 1.0	04/03/13 10	% Rec Limits		
METHOD BL Associated L Sulfate LABORATOP	ab Samples	:: 6014106 DL SAMPLE:	Units mg/L 1162736 Units mg/L	04, 60141069000 Blank Result N Spike Conc.	6, 6014106900 Reporting Limit	g 1.0 %	04/03/13 10	% Rec Limits		
METHOD BL Associated L Sulfate LABORATOP	ab Samples	DL SAMPLE:	Units mg/L 1162736 Units mg/L	04, 60141069000 Blank Result N Spike Conc. 2.5	6, 6014106900 Reporting Limit ND LCS Result 2.5	g 1.0 1 %	04/03/13 10	0:16 % Rec Limits 90-110		
METHOD BL Associated L Sulfate _ABORATOF =luoride _ABORATOF _ABORATOF	ab Samples	DL SAMPLE:	Units mg/L 1162736 Units mg/L 1163180 Units mg/L	04, 6014106900 Blank Result N Spike Conc. 2.5 Spike	6, 6014106900 Reporting Limit ND LCS Result 2.5 LCS Result 4.8	g 1.0 1 %	LCS 6 Rec 102 LCS 6 Rec 96	0:16 % Rec Limits 90-110 % Rec Limits 90-110	Qualifiers	
METHOD BL Associated L Sulfate _ABORATOF =luoride _ABORATOF _ABORATOF	ab Samples	DL SAMPLE:	Units mg/L 1162736 Units mg/L 1163180 Units	04, 60141069000 Blank Result N Spike Conc. 2.5 Spike Conc.	6, 6014106900 Reporting Limit ND LCS Result 2.5	g 1.0 1 %	04/03/13 10 LCS 6 Rec 102 LCS 6 Rec	0:16 % Rec Limits 90-110 % Rec Limits	Qualifiers	
METHOD BL Associated L Sulfate LABORATOF Fluoride LABORATOF Chloride Sulfate	ab Samples	DL SAMPLE:	Units mg/L 1162736 Units mg/L 1163180 Units mg/L	04, 6014106900 Blank Result N Spike Conc. 2.5 Spike Conc. 5	6, 6014106900 Reporting Limit ND LCS Result 2.5 LCS Result 4.8	g 1.0 1 %	LCS 6 Rec 102 LCS 6 Rec 96	0:16 % Rec Limits 90-110 % Rec Limits 90-110	Qualifiers	
METHOD BL Associated L Sulfate _ABORATOF =luoride _ABORATOF Chloride Sulfate	ab Samples	E 6014106	Units mg/L 1162736 Units mg/L 1163180 Units mg/L mg/L	04, 60141069000 Blank Result N Spike Conc. 2.5 Spike Conc. 5 5 5 5	6, 6014106900 Reporting Limit ND LCS Result 2.5 LCS Result 4.8	g 	04/03/13 10 LCS 6 Rec 102 LCS 6 Rec 96 92 LCS	0:16 % Rec Limits 90-110 % Rec Limits 90-110 90-110 % Rec	Qualifiers Qualifiers	
METHOD BL Associated L Sulfate LABORATOF Fluoride LABORATOF Chloride Sulfate	ab Samples	E 6014106	Units mg/L 1162736 Units mg/L 1163180 Units mg/L mg/L	04, 6014106900 Blank Result Spike Conc. 2.5 Spike Conc. 5 5	6, 6014106900 Reporting Limit ND LCS Result 2.5 LCS Result 4.8 4.6	g 	04/03/13 10 LCS 6 Rec 102 LCS 6 Rec 96 92	0:16 % Rec Limits 90-110 % Rec Limits 90-110 90-110	Qualifiers	



Project: 075035 Martin 34 No 2

Pace Project No.: 60141069

MATRIX SPIKE & MATRIX SP	VIKE DUPLICAT	E: 11627	37		1162738							
Parameter	60 [.] Units	141070003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride			100	100		223	92	93	64-118			
Fluoride	mg/L	0.22	2.5	2.5	2.7	223	92 98	101	75-110	-		
Sulfate	mg/L	ND	5	5	5.3	5.5	98	100	61-119	3	10	
MATRIX SPIKE SAMPLE:	1162	739										
Parameter		Units	601410 Res		Spike Conc.	MS Result	M % F	-	% Rec Limits		Qualif	iers
Chloride	mg/L			ND	2500	21	60	73	64-	118		
Fluoride	mg/L			ND	1250	10	00	80	75-	110		
Sulfate	mg/L			3070	2500	50	30	79	61-	119		



QUALIFIERS

Project: 075035 Martin 34 No 2

Pace Project No.: 60141069

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: OEXT/37713

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume. Batch: MSV/52648

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume. Batch: MSV/52673

Batch: IVISV/52673

[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:	075035 Martin 34 No 2
Pace Project No.:	60141069

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60141069001	GW-075035-032013-CM-MW-1	EPA 3010	MPRP/22048	EPA 6010	ICP/17600
60141069002	GW-075035-032013-CM-MW-2	EPA 3010	MPRP/22048		ICP/17600
60141069003	GW-075035-032013-CM-MW-3	EPA 3010	MPRP/22048	EPA 6010	ICP/17600
60141069004	GW-075035-032013-CM-MW-4	EPA 3010	MPRP/22048	EPA 6010	ICP/17600
60141069005	GW-075035-032013-CM-MW-5	EPA 3010	MPRP/22048	EPA 6010	ICP/17600
60141069006	GW-075035-032013-CM-MW-6	EPA 3010	MPRP/22048	EPA 6010	ICP/17600
60141069007	GW-075035-032013-CM-MW-7	EPA 3010	MPRP/22048	EPA 6010	ICP/17600
60141069001	GW-075035-032013-CM-MW-1	EPA 3510C	OEXT/37713	EPA 8270C by SIM	MSSV/11958
60141069002	GW-075035-032013-CM-MW-2	EPA 3510C	OEXT/37713	EPA 8270C by SIM	MSSV/11958
60141069003	GW-075035-032013-CM-MW-3	EPA 3510C	OEXT/37713	EPA 8270C by SIM	MSSV/11958
60141069004	GW-075035-032013-CM-MW-4	EPA 3510C	OEXT/37713	EPA 8270C by SIM	MSSV/11958
60141069005	GW-075035-032013-CM-MW-5	EPA 3510C	OEXT/37713	EPA 8270C by SIM	MSSV/11958
60141069006	GW-075035-032013-CM-MW-6	EPA 3510C	OEXT/37713	EPA 8270C by SIM	MSSV/11958
60141069007	GW-075035-032013-CM-MW-7	EPA 3510C	OEXT/37713	EPA 8270C by SIM	MSSV/11958
60141069001	GW-075035-032013-CM-MW-1	EPA 5030B/8260	MSV/52648		
60141069002	GW-075035-032013-CM-MW-2	EPA 5030B/8260	MSV/52648		
60141069003	GW-075035-032013-CM-MW-3	EPA 5030B/8260	MSV/52648		
60141069004	GW-075035-032013-CM-MW-4	EPA 5030B/8260	MSV/52648		
60141069005	GW-075035-032013-CM-MW-5	EPA 5030B/8260	MSV/52673		
60141069006	GW-075035-032013-CM-MW-6	EPA 5030B/8260	MSV/52648		
60141069007	GW-075035-032013-CM-MW-7	EPA 5030B/8260	MSV/52648		
60141069008	GW-075035-032013-CM-DUP	EPA 5030B/8260	MSV/52651		
60141069008	GW-075035-032013-CM-DUP	EPA 5030B/8260	MSV/52673		
60141069009	TB-075035-032013-CM-001	EPA 5030B/8260	MSV/52651		
60141069009	TB-075035-032013-CM-001	EPA 5030B/8260	MSV/52673		
60141069001	GW-075035-032013-CM-MW-1	SM 2540C	WET/40401		
60141069002	GW-075035-032013-CM-MW-2	SM 2540C	WET/40401		
60141069003	GW-075035-032013-CM-MW-3	SM 2540C	WET/40401		
60141069004	GW-075035-032013-CM-MW-4	SM 2540C	WET/40427		
60141069005	GW-075035-032013-CM-MW-5	SM 2540C	WET/40427		
60141069006	GW-075035-032013-CM-MW-6	SM 2540C	WET/40427		
60141069007	GW-075035-032013-CM-MW-7	SM 2540C	WET/40427		
60141069001	GW-075035-032013-CM-MW-1	EPA 300.0	WETA/24072		
60141069002	GW-075035-032013-CM-MW-2	EPA 300.0	WETA/24072		
60141069003	GW-075035-032013-CM-MW-3	EPA 300.0	WETA/24072		
60141069004	GW-075035-032013-CM-MW-4	EPA 300.0	WETA/24072		
60141069005	GW-075035-032013-CM-MW-5	EPA 300.0	WETA/24072		
60141069006	GW-075035-032013-CM-MW-6	EPA 300.0	WETA/24072		
60141069007	GW-075035-032013-CM-MW-7	EPA 300.0	WETA/24072		



Sample Condition Upon Receipt ESI Tech Spec Client

WO#:60141069

Client Name: COP- CRA NM			Optional
	Commercial 🗔 🛛 Pa	ice 🗆 Other 🗆	Proj Due Date:
	Pace Shipping Label L		Proj Name:
Custody Seal on Cooler/Box Present: Yes No			
Packing Material: Bubble Wrap Bubble Ba	/	,	ther 🗆
			ceived on ice, cooling process has begun.
Cooler Temperature: 3.8			nd initials of person examining nts: _3 23 13
Temperature should be above freezing to 6°C		conte	nts: <u>5 23 15 8</u>
Chain of Custody present:	Elves DNO DN/A	1	
Chain of Custody filled out:		2.	
Chain of Custody relinquished:	EYes DNO DN/A	3.	
Sampler name & signature on COC:		4.	
Samples arrived within holding time:	EYes DNO DN/A	5.	
Short Hold Time analyses (<72hr):	Yes 200 DN/A	6.	
Rush Turn Around Time requested:		7.	
Sufficient volume:	Dres No N/A	8.	
Correct containers used:	Difes INO IN/A		
Pace containers used:		9.	
Containers intact:	Dres DNO DN/A	10.	
Unpreserved 5035A soils frozen w/in 48hrs?		11.	
Filtered volume received for dissolved tests?		12.	
Sample labels match COC:		-	
Includes date/time/ID/analyses Matrix:	ч	13.	
All containers needing preservation have been checked.	Yes No N/A		
All containers needing preservation are found to be in	- □y∕es □no □n/A	14.	
compliance with EPA recommendation. Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water),	1	Initial when	Lot # of added
Phenolics Trip Blank present:	PYes DNo	completed	preservative
	Yes No N/A		
Pace Trip Blank lot # (if purchased): <u>0304(3~3</u> Headspace in VOA vials (>6mm):		15	
	□Yes □No □N/A		
		16	
Project sampled in USDA Regulated Area:	Yes No DNA	~	
Client Notification/ Resolution: Copy C	COC to Client? Y /	Field Data Requi	
Person Contacted:	Date/Time:		Temp Log: Record start and finish times when unpacking cooler, if >20 min,
Comments/ Resolution:			recheck sample temps.
3 		1	Start: OG18 Start: End: OG25 End:
Project Manager Review:		Date: 315 13	Temp: Temp:
Project Manager Review:AAF		Date	romp.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT, All relevant fields must be completed accurately.

-										-	-	
Section A Required C	Section A Required Client Information	Section B Required Project Information		Section C Invoice Information:	ion:				Page:	e:	of	2
Company	V COP CRA NM	Report To: Christine Mathews		Attention	ENFOS							
Address	6121 Indian School Rd NE, Ste 200	Copy To: Kelly Blanchard, Angela Bown	own	Company Name			REG	REGULATORY AGENCY	ENCY			
	Albequerque, NM 87110			Address:			L	NPDES T 0	GROUND WATER	L	DRINKING WATER	TER
Email To:	cmathews@craworld.com	Purchase Order No.: 4517205766		Pace Quote Reference:			L	UST L' R	RCRA	L	OTHER	
Phone:	(505)884-0672 Fax (505)884-4932	Project Name: Martin 34 No. 2			Alice Flanagan		Site	Site Location	N N N			
Request	Requested Due Date/TAT: standard	Project Number: 075035		ie #	5341, 7		Г	STATE:	MN			
						Reques	ted Analy	Requested Analysis Filtered (Y/N)	(N)			
	Section D Valid Matrix Codes Required Client Information MATRIX COL	(dW)	COLLECTED		Preservatives	<u>†</u> N /A	-					
	DRINKING WATER VATER WASTE WATER PRODUCT SOLUSOLID OII		OLLECTION COMPOSITE END/GRAB	s			əu				111100	
	е НЕR SUE	CODE ^{(a}	TEMP AT C	атымен. Ватер		ts9T 2i2≀ *, M ,9 ^T b9	apithale *				14100	
# WƏTI		XIATAM SAMALE - DATE DATE TIME	DATE TIME AMPLE	H ⁵ SO ⁴	Methan Methan NaoH HCI HNO ₃	***0928	300.0 **		hiseQ		Pace Project No./ Lab I.D	Lab I.D.
-	K-11-175735-032013-0714	┢	20	XL.	XX III	XXX	XX	3049	1 # 1	16934 1897 20	897 ²⁰ 24644	10 mHu (10)
~	AU)-075235-032013-011-111	10-2 MT G	3,20,13,1100	J X L		XXX	XX				-	(1),
6	A.D175235-032013-0m-mu	10-3 MT G	3:26.13 1200	XC.	XX	XXX	XX					Cor.
4	1241-075035-032013-0m-MI	nu-4 mig	3,20,13 1235	J X	XX		X			_		- AN
ŝ	GU-075035-032013-CM-MW	1-5 M G	3.2013 1400	XZ	XX		X			_		C)
9	032013	10-6 101 G	3-20.13 1110	X Z	XX							an
7	032013-UM-N	11/1 /	3:20:13 1510	× / /						>	7	1.
8		DUP WIG	3/26/3 1115	.Ce		~~			G	_		Kro (101)
σ €	1-111-51720-581010-01		T	0	X			>				2
₽ ₽												
12												
	ADDIT:ONAL COMMENTS	RELINGUISHED BY / AFFILIATION	ION DATE	TIME	ACCEPT	ACCEPTED BY / AFFILIATION	N	DATE TI	TIME	SAMP	SAMPLE CONDITIONS	
BTE	"BTEX, Methylene Chloride, 1,1,2,2-Tetrachiordethane	V UNADOUNDUDO	17-RA 3:22:13	1200	FBrocket	¥	~ `	5/23 OI	0245 3.8	2	7	7
**Chlori	**Chioride_Sulfate, Fluoride	Ceveral 1								-		_
		1							_			
	Par	SAMPL	SAMPLER NAME AND SIGNATURE	E 1	1001	0			0.1			
,001	ge 31 j			CHA Y	Streille	THUN DATE Signed	ned 2	21.00	ni qməT	есеілея ICe (Y)	S voler () Cooler ()	səlqma N\Y)
01 0	of 3		SIGNATURE OF SAMPLERS	MANN	AULIVICIUL	(WMDD/W)	5	01177		ł		s

F-ALL-Q-020rev.08, 12-Oct-2007

invoices not paid within 30 days.

Aus

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

31



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

March 18, 2014

Jeff Walker COP Conestoga-Rovers & Associa 6121 Indian School Rd. NE Ste 200 Albuquerque, NM 87110

RE: Project: 075035 MARTIN 34 NO 2 Pace Project No.: 60147069

Dear Jeff Walker:

Enclosed are the analytical results for sample(s) received by the laboratory on June 17, 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.

REVISED

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

Sincerely,

alice Flanagan

Alice Flanagan alice.flanagan@pacelabs.com Project Manager

Enclosures



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



CERTIFICATIONS

Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219 WY STR Certification #: 2456.01 Arkansas Certification #: 13-012-0 Illinois Certification #: 003097 Iowa Certification #: 118 Kansas/NELAP Certification #: E-10116 Louisiana Certification #: 03055 Nevada Certification #: KS000212008A Oklahoma Certification #: 9205/9935 Texas Certification #: T104704407-13-4 Utah Certification #: KS000212013-3 Illinois Certification #: 003097



SAMPLE SUMMARY

Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60147069001	075035-061313-JK-MW1	Water	06/13/13 12:30	06/17/13 08:15
60147069002	075035-061313-JK-MW2	Water	06/13/13 12:15	06/17/13 08:15
60147069003	075035-061313-JK-MW3	Water	06/13/13 12:05	06/17/13 08:15
60147069004	075035-061313-JK-MW4	Water	06/13/13 12:20	06/17/13 08:15
60147069005	075035-061313-JK-MW5	Water	06/13/13 11:45	06/17/13 08:15
60147069006	075035-061313-JK-MW6	Water	06/13/13 12:10	06/17/13 08:15
60147069007	075035-061313-JK-MW7	Water	06/13/13 11:50	06/17/13 08:15
60147069008	075035-061313-JK-DUP	Water	06/13/13 08:00	06/17/13 08:15
60147069009	TRIP BLANK 1	Water	06/13/13 08:00	06/17/13 08:15
60147069010	TRIP BLANK 2	Water	06/13/13 08:00	06/17/13 08:15



SAMPLE ANALYTE COUNT

Project: 075035 MARTIN 34 NO 2

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60147069001	 075035-061313-JK-MW1	EPA 6010	TJT	3
		EPA 8270C by SIM	NAW	3
		EPA 5030B/8260	PRG	12
		SM 2540C	JML	1
		EPA 300.0	OL	3
0147069002	075035-061313-JK-MW2	EPA 6010	TJT	3
		EPA 8270C by SIM	NAW	3
		EPA 5030B/8260	PRG	12
		SM 2540C	JML	1
		EPA 300.0	OL	3
60147069003	075035-061313-JK-MW3	EPA 6010	TJT	3
		EPA 8270C by SIM	NAW	3
		EPA 5030B/8260	PRG	12
		SM 2540C	JML	1
		EPA 300.0	OL	3
0147069004	075035-061313-JK-MW4	EPA 6010	TJT	3
		EPA 8270C by SIM	NAW	3
		EPA 5030B/8260	PRG	12
		SM 2540C	JML	1
		EPA 300.0	OL	3
60147069005	075035-061313-JK-MW5	EPA 6010	TJT	3
		EPA 8270C by SIM	NAW	3
		EPA 5030B/8260	PRG	12
		SM 2540C	JML	1
		EPA 300.0	OL	3
60147069006	075035-061313-JK-MW6	EPA 6010	TJT	3
		EPA 8270C by SIM	NAW	3
		EPA 5030B/8260	PRG	12
		SM 2540C	JML	1
		EPA 300.0	OL	3
60147069007	075035-061313-JK-MW7	EPA 6010	TJT	3
		EPA 8270C by SIM	NAW	3
		EPA 5030B/8260	PRG	12
		SM 2540C	JML	1
				0

60147069008 075035-061313-JK-DUP 60147069009 **TRIP BLANK 1**

REPORT OF LABORATORY ANALYSIS

EPA 300.0

EPA 5030B/8260

EPA 5030B/8260

OL

PRG

PRG

3

12

12



SAMPLE ANALYTE COUNT

 Project:
 075035
 MARTIN 34 NO 2

 Pace Project No.:
 60147069

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60147069010	TRIP BLANK 2	EPA 5030B/8260	PRG	12



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

Method:EPA 6010Description:6010 MET ICP, DissolvedClient:COP Conestoga-Rovers & Associates, Inc. NMDate:March 18, 2014

General Information:

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

- TP: The samples were received outside of required temperature range. Analysis was completed upon client approval.
 - 075035-061313-JK-MW2 (Lab ID: 60147069002)
 - 075035-061313-JK-MW3 (Lab ID: 60147069003)
 - 075035-061313-JK-MW4 (Lab ID: 60147069004)
 - 075035-061313-JK-MW5 (Lab ID: 60147069005)
 - 075035-061313-JK-MW6 (Lab ID: 60147069006)
 - 075035-061313-JK-MW7 (Lab ID: 60147069007)

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, where applicable, 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:

Analyte Comments:

QC Batch: MPRP/23127

- D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
 - 075035-061313-JK-MW3 (Lab ID: 60147069003)
 - Iron, Dissolved
 - 075035-061313-JK-MW6 (Lab ID: 60147069006)
 - Iron, Dissolved



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

Method: EPA 6010

Description:6010 MET ICP, Dissolved (LF)Client:COP Conestoga-Rovers & Associates, Inc. NMDate:March 18, 2014

General Information:

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

TP: The samples were received outside of required temperature range. Analysis was completed upon client approval.

• 075035-061313-JK-MW1 (Lab ID: 60147069001)

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, where applicable, 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: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

Method: EPA 8270C by SIM

Description:8270 MSSV PAH by SIMClient:COP Conestoga-Rovers & Associates, Inc. NMDate:March 18, 2014

General Information:

7 samples were analyzed for EPA 8270C by SIM. All samples were received in acceptable condition with any exceptions noted below.

- TP: The samples were received outside of required temperature range. Analysis was completed upon client approval.
 - 075035-061313-JK-MW1 (Lab ID: 60147069001)
 - 075035-061313-JK-MW2 (Lab ID: 60147069002)
 - 075035-061313-JK-MW3 (Lab ID: 60147069003)
 - 075035-061313-JK-MW4 (Lab ID: 60147069004)
 - 075035-061313-JK-MW5 (Lab ID: 60147069005)
 - 075035-061313-JK-MW6 (Lab ID: 60147069006)
 - 075035-061313-JK-MW7 (Lab ID: 60147069007)

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 3510C 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, where applicable, with any exceptions noted below.

Laboratory Control Spike:

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

QC Batch: OEXT/38927

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

- LCS (Lab ID: 1207722)
 - Naphthalene

Matrix Spikes:

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



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

Method:EPA 8270C by SIMDescription:8270 MSSV PAH by SIMClient:COP Conestoga-Rovers & Associates, Inc. NMDate:March 18, 2014

QC Batch: MSSV/12336

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

Additional Comments:



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

Method: EPA 5030B/8260

Description:8260 MSVClient:COP Conestoga-Rovers & Associates, Inc. NMDate:March 18, 2014

General Information:

10 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

- TP: The samples were received outside of required temperature range. Analysis was completed upon client approval.
 - 075035-061313-JK-DUP (Lab ID: 60147069008)
 - 075035-061313-JK-MW1 (Lab ID: 60147069001)
 - 075035-061313-JK-MW2 (Lab ID: 60147069002)
 - 075035-061313-JK-MW3 (Lab ID: 60147069003)
 - 075035-061313-JK-MW4 (Lab ID: 60147069004)
 - 075035-061313-JK-MW5 (Lab ID: 60147069005)
 - 075035-061313-JK-MW6 (Lab ID: 60147069006)
 - 075035-061313-JK-MW7 (Lab ID: 60147069007)
 - TRIP BLANK 1 (Lab ID: 60147069009)
 - TRIP BLANK 2 (Lab ID: 60147069010)

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, where applicable, 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/54497

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

QC Batch: MSV/54523

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



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

Method: EPA 5030B/8260

Description:8260 MSVClient:COP Conestoga-Rovers & Associates, Inc. NMDate:March 18, 2014

Additional Comments:



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

Method: SM 2540C

Description:2540C Total Dissolved SolidsClient:COP Conestoga-Rovers & Associates, Inc. NMDate:March 18, 2014

General Information:

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

- TP: The samples were received outside of required temperature range. Analysis was completed upon client approval.
 - 075035-061313-JK-MW1 (Lab ID: 60147069001)
 - 075035-061313-JK-MW2 (Lab ID: 60147069002)
 - 075035-061313-JK-MW3 (Lab ID: 60147069003)
 - 075035-061313-JK-MW4 (Lab ID: 60147069004)
 - 075035-061313-JK-MW5 (Lab ID: 60147069005)
 - 075035-061313-JK-MW6 (Lab ID: 60147069006)
 - 075035-061313-JK-MW7 (Lab ID: 60147069007)

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, where applicable, 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:



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

Method: EPA 300.0

Description:300.0 IC Anions 28 DaysClient:COP Conestoga-Rovers & Associates, Inc. NMDate:March 18, 2014

General Information:

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

TP: The samples were received outside of required temperature range. Analysis was completed upon client approval.

- 075035-061313-JK-MW1 (Lab ID: 60147069001)
- 075035-061313-JK-MW2 (Lab ID: 60147069002)
- 075035-061313-JK-MW3 (Lab ID: 60147069003)
- 075035-061313-JK-MW4 (Lab ID: 60147069004)
- 075035-061313-JK-MW5 (Lab ID: 60147069005)
- 075035-061313-JK-MW6 (Lab ID: 60147069006)
- 075035-061313-JK-MW7 (Lab ID: 60147069007)

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, where applicable, 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/25209

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60146886001,60147069005

- M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
 - MS (Lab ID: 1209733)
 - Fluoride
 - MSD (Lab ID: 1209732)
 - Chloride
 - Fluoride
- R1: RPD value was outside control limits.
 - MSD (Lab ID: 1209732)
 - Fluoride

Additional Comments:



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

Method: Description: Client: Date:	EPA 300.0 300.0 IC Anions 28 Days COP Conestoga-Rovers & Associates, Inc. NM March 18, 2014
Analyte Com	ments:
QC Batch: W	ETA/25209
1e: R	esult has been revised.
• 0	75035-061313-JK-MW1 (Lab ID: 60147069001) • Sulfate
• 0	75035-061313-JK-MW2 (Lab ID: 60147069002) • Sulfate
• 0	75035-061313-JK-MW3 (Lab ID: 60147069003) • Sulfate
• 0	75035-061313-JK-MW4 (Lab ID: 60147069004) • Sulfate
• 0	75035-061313-JK-MW6 (Lab ID: 60147069006) • Sulfate
• 0	75035-061313-JK-MW7 (Lab ID: 60147069007) • Sulfate

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



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

Sample: 07	25035-061313-JK-MW1	Lab ID: 60147069001	Collected: 06/13/	13 12:30	Received: 06	/17/13 08:15 N	Aatrix: Water	
Comments:	 The samples were rece 	eived outside of required ter	mperature range. Analy	/sis was	completed upon	client approval.		
	Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET IC	CP, Dissolved (LF)	Analytical Method: EPA	6010 Preparation Met	hod: EP/	A 3010			
Boron, Disso	blved	1190 ug/L	200	2	06/18/13 14:00	06/21/13 09:46	7440-42-8	
Iron, Dissolv	ed	67.0 ug/L	50.0	1	06/18/13 14:00	06/20/13 12:47	7439-89-6	
Manganese,	Dissolved	507 ug/L	10.0	2	06/18/13 14:00	06/21/13 09:46	7439-96-5	
8270 MSSV	PAH by SIM	Analytical Method: EPA	8270C by SIM Prepar	ation Me	ethod: EPA 35100	>		
Naphthalene Surrogates	9	50.8 ug/L	5.0	10	06/20/13 00:00	06/26/13 14:55	91-20-3	L1
2-Fluorobiph	envl (S)	59 %	40-120	1	06/20/13 00:00	06/26/13 01:37	321-60-8	
Terphenyl-d1		71 %	43-122	1		06/26/13 01:37		
8260 MSV		Analytical Method: EPA	5030B/8260					
Benzene		4410 ug/L	100	100		06/24/13 18:03	71-43-2	
Ethylbenzen	e	418 ug/L	100	100		06/24/13 18:03	100-41-4	
Methylene c	hloride	ND ug/L	100	100		06/24/13 18:03	75-09-2	
Naphthalene)	ND ug/L	1000	100		06/24/13 18:03	91-20-3	
1,1,2,2-Tetra	chloroethane	ND ug/L	100	100		06/24/13 18:03	79-34-5	
Toluene		1640 ug/L	100	100		06/24/13 18:03	108-88-3	
Xylene (Tota	l)	7220 ug/L	300	100		06/24/13 18:03	1330-20-7	
Surrogates								
	robenzene (S)	106 %	80-120	100		06/24/13 18:03	460-00-4	
	romethane (S)	93 %	80-120	100		06/24/13 18:03		
	ethane-d4 (S)	101 %	80-120	100		06/24/13 18:03	17060-07-0	
Toluene-d8 (, ,	101 %	80-120	100		06/24/13 18:03		
Preservation	рН	1.0	0.10	100		06/24/13 18:03		
2540C Total	Dissolved Solids	Analytical Method: SM 2	2540C					
Total Dissolv	ved Solids	22000 mg/L	5.0	1		06/20/13 17:56		
300.0 IC Ani	ions 28 Days	Analytical Method: EPA	300.0					
Chloride		289 mg/L	50.0	50		06/25/13 13:35	16887-00-6	
Fluoride		ND mg/L	0.20	1		06/24/13 13:17	16984-48-8	
Sulfate		12400 mg/L	1000	1000		06/26/13 10:21	14808-79-8	1e



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

Sample: 07	/5035-061313-JK-MW2	Lab ID: 60147069002	Collected: 06/13/	13 12:15	Received: 06	/17/13 08:15 N	Aatrix: Water	
Comments:	 The samples were rece 	ived outside of required ter	nperature range. Analy	/sis was	completed upon	client approval.		
	Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET IC	CP, Dissolved	Analytical Method: EPA	6010 Preparation Met	hod: EP/	A 3010			
Boron, Disso	blved	940 ug/L	500	5	06/18/13 14:00	06/21/13 10:25	7440-42-8	
Iron, Dissolv	red	1660 ug/L	250	5	06/18/13 14:00	06/21/13 10:25	7439-89-6	
Manganese,	Dissolved	3190 ug/L	25.0	5	06/18/13 14:00	06/21/13 10:25	7439-96-5	
8270 MSSV	PAH by SIM	Analytical Method: EPA	8270C by SIM Prepar	ation Me	thod: EPA 35100	;		
Naphthalene Surrogates		2.5 ug/L	0.50	1	06/20/13 00:00	06/26/13 01:58	91-20-3	L1
2-Fluorobiph		71 %	40-120	1	06/20/13 00:00	06/26/13 01:58	321-60-8	
Terphenyl-d'	• • •	85 %	43-122	1		06/26/13 01:58		
8260 MSV		Analytical Method: EPA	5030B/8260					
Benzene		128 ug/L	5.0	5		06/24/13 18:17	71-43-2	
Ethylbenzen	e	232 ug/L	5.0	5		06/24/13 18:17	100-41-4	
Methylene c	hloride	ND ug/L	5.0	5		06/24/13 18:17	75-09-2	
Naphthalene	9	58.4 ug/L	50.0	5		06/24/13 18:17	91-20-3	
1,1,2,2-Tetra	chloroethane	ND ug/L	5.0	5		06/24/13 18:17	79-34-5	
Toluene		ND ug/L	5.0	5		06/24/13 18:17	108-88-3	
Xylene (Tota	d)	50.8 ug/L	15.0	5		06/24/13 18:17	1330-20-7	
Surrogates								
	robenzene (S)	102 %	80-120	5		06/24/13 18:17	460-00-4	
Dibromofluo	romethane (S)	102 %	80-120	5		06/24/13 18:17	1868-53-7	
1,2-Dichloro	ethane-d4 (S)	107 %	80-120	5		06/24/13 18:17	17060-07-0	
Toluene-d8 ((S)	99 %	80-120	5		06/24/13 18:17	2037-26-5	
Preservation	рН	1.0	0.10	5		06/24/13 18:17		
2540C Total	Dissolved Solids	Analytical Method: SM 2	540C					
Total Dissolv	ved Solids	18500 mg/L	5.0	1		06/20/13 17:56		
300.0 IC Ani	ions 28 Days	Analytical Method: EPA	300.0					
Chloride		416 mg/L	50.0	50		06/25/13 14:10	16887-00-6	
Fluoride		ND mg/L	0.20	1		06/24/13 13:35	16984-48-8	
Sulfate		19500 mg/L	2000	2000		06/26/13 10:38	14808-79-8	1e



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

Sample: 07	/5035-061313-JK-MW3	Lab ID: 60147069003	Collected: 06/13/	13 12:05	Received: 06	6/17/13 08:15 N	latrix: Water	
Comments:	 The samples were rece 	ived outside of required ter	mperature range. Analy	/sis was	completed upon	client approval.		
	Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET IC	CP, Dissolved	Analytical Method: EPA	6010 Preparation Met	hod: EP/	A 3010			
Boron, Disso	blved	991 ug/L	500	5	06/18/13 14:00	06/21/13 10:52	7440-42-8	
Iron, Dissolv	red	ND ug/L	100	2	06/18/13 14:00	06/21/13 10:27	7439-89-6	D3
Manganese,	Dissolved	1250 ug/L	25.0	5	06/18/13 14:00	06/21/13 10:52	7439-96-5	
8270 MSSV	PAH by SIM	Analytical Method: EPA	8270C by SIM Prepar	ation Me	thod: EPA 35100	2		
Naphthalene Surrogates		ND ug/L	0.50	1	06/20/13 00:00	06/26/13 02:18	91-20-3	L1
2-Fluorobiph		79 %	40-120	1	06/20/13 00:00	06/26/13 02:18	321-60-8	
Terphenyl-d'	• • •	74 %	43-122	1		06/26/13 02:18		
8260 MSV		Analytical Method: EPA	5030B/8260					
Benzene		ND ug/L	1.0	1		06/24/13 18:32	71-43-2	
Ethylbenzen	е	ND ug/L	1.0	1		06/24/13 18:32	100-41-4	
Methylene c	hloride	ND ug/L	1.0	1		06/24/13 18:32	75-09-2	
Naphthalene	9	ND ug/L	10.0	1		06/24/13 18:32	91-20-3	
1,1,2,2-Tetra	chloroethane	ND ug/L	1.0	1		06/24/13 18:32	79-34-5	
Toluene		ND ug/L	1.0	1		06/24/13 18:32	108-88-3	
Xylene (Tota	l)	ND ug/L	3.0	1		06/24/13 18:32	1330-20-7	
Surrogates								
	robenzene (S)	102 %	80-120	1		06/24/13 18:32	460-00-4	
Dibromofluo	romethane (S)	105 %	80-120	1		06/24/13 18:32	1868-53-7	
1,2-Dichloro	ethane-d4 (S)	118 %	80-120	1		06/24/13 18:32	17060-07-0	
Toluene-d8 ((S)	98 %	80-120	1		06/24/13 18:32	2037-26-5	
Preservation	n pH	1.0	0.10	1		06/24/13 18:32		
2540C Total	Dissolved Solids	Analytical Method: SM 2	2540C					
Total Dissolv	ved Solids	30900 mg/L	5.0	1		06/20/13 17:56		
300.0 IC Ani	ions 28 Days	Analytical Method: EPA	300.0					
Chloride		377 mg/L	50.0	50		06/25/13 14:46	16887-00-6	
Fluoride		ND mg/L	0.20	1		06/24/13 13:53	16984-48-8	
Sulfate		18900 mg/L	2000	2000		06/26/13 11:31	14808-79-8	1e



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

Sample: 07	′5035-061313-JK-MW4	Lab ID: 60147069004	Collected: 06/13/	13 12:20	Received: 06	/17/13 08:15 N	Aatrix: Water	
Comments:	 The samples were rece 	ived outside of required ter	mperature range. Analy	/sis was	completed upon	client approval.		
	Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET IC	CP, Dissolved	Analytical Method: EPA	6010 Preparation Met	hod: EP/	A 3010			
Boron, Disso	blved	785 ug/L	500	5	06/18/13 14:00	06/21/13 10:47	7440-42-8	
Iron, Dissolv	ed	506 ug/L	100	2	06/18/13 14:00	06/21/13 10:29	7439-89-6	
Manganese,	Dissolved	4080 ug/L	25.0	5	06/18/13 14:00	06/21/13 10:47	7439-96-5	
8270 MSSV	PAH by SIM	Analytical Method: EPA	8270C by SIM Prepar	ation Me	thod: EPA 35100	>		
Naphthalene Surrogates	9	ND ug/L	0.50	1	06/20/13 00:00	06/26/13 02:38	91-20-3	L1
2-Fluorobiph	enyl (S)	73 %	40-120	1	06/20/13 00:00	06/26/13 02:38	321-60-8	
Terphenyl-d'	• • •	68 %	43-122	1		06/26/13 02:38		
8260 MSV		Analytical Method: EPA	5030B/8260					
Benzene		1.2 ug/L	1.0	1		06/24/13 18:47	71-43-2	
Ethylbenzen	e	ND ug/L	1.0	1		06/24/13 18:47	100-41-4	
Methylene c	hloride	ND ug/L	1.0	1		06/24/13 18:47	75-09-2	
Naphthalene	9	ND ug/L	10.0	1		06/24/13 18:47	91-20-3	
1,1,2,2-Tetra	chloroethane	ND ug/L	1.0	1		06/24/13 18:47	79-34-5	
Toluene		ND ug/L	1.0	1		06/24/13 18:47	108-88-3	
Xylene (Tota	l)	ND ug/L	3.0	1		06/24/13 18:47	1330-20-7	
Surrogates								
	robenzene (S)	101 %	80-120	1		06/24/13 18:47		
	romethane (S)	108 %	80-120	1		06/24/13 18:47		
	ethane-d4 (S)	117 %	80-120	1		06/24/13 18:47		
Toluene-d8 (, ,	97 %	80-120	1		06/24/13 18:47		
Preservation	рН	1.0	0.10	1		06/24/13 18:47		
2540C Total	Dissolved Solids	Analytical Method: SM 2	2540C					
Total Dissolv	ved Solids	33700 mg/L	5.0	1		06/20/13 17:56		
300.0 IC Ani	ions 28 Days	Analytical Method: EPA	300.0					
Chloride		378 mg/L	50.0	50		06/25/13 15:22	16887-00-6	
Fluoride		ND mg/L	0.20	1		06/24/13 14:10	16984-48-8	
Sulfate		23200 mg/L	2000	2000		06/26/13 11:49	14808-79-8	1e



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

Sample: 07	25035-061313-JK-MW5	Lab ID: 60147069005	Collected: 06/13/	13 11:45	Received: 06	/17/13 08:15	Aatrix: Water	
Comments:	 The samples were rece 	ived outside of required ter	nperature range. Analy	vsis was	completed upon	client approval.		
	Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET IC	CP, Dissolved	Analytical Method: EPA	6010 Preparation Met	hod: EP/	A 3010			
Boron, Disso	blved	1460 ug/L	1000	10	06/18/13 14:00	06/21/13 10:32	7440-42-8	
Iron, Dissolv	ed	2200 ug/L	500	10	06/18/13 14:00	06/21/13 10:32	7439-89-6	
Manganese,	Dissolved	806 ug/L	50.0	10	06/18/13 14:00	06/21/13 10:32	7439-96-5	
8270 MSSV	PAH by SIM	Analytical Method: EPA	8270C by SIM Prepar	ation Me	thod: EPA 3510C	;		
Naphthalene Surrogates	9	ND ug/L	0.50	1	06/20/13 00:00	06/26/13 02:58	91-20-3	L1
2-Fluorobiph	envl (S)	72 %	40-120	1	06/20/13 00:00	06/26/13 02:58	321-60-8	
Terphenyl-d1	• • •	81 %	43-122	1		06/26/13 02:58		
8260 MSV		Analytical Method: EPA	5030B/8260					
Benzene		278 ug/L	5.0	5		06/24/13 19:02	71-43-2	
Ethylbenzen	e	14.6 ug/L	5.0	5		06/24/13 19:02	100-41-4	
Methylene cl	hloride	ND ug/L	5.0	5		06/24/13 19:02	75-09-2	
Naphthalene)	ND ug/L	50.0	5		06/24/13 19:02	91-20-3	
1,1,2,2-Tetra	chloroethane	ND ug/L	5.0	5		06/24/13 19:02	79-34-5	
Toluene		ND ug/L	5.0	5		06/24/13 19:02	108-88-3	
Xylene (Tota	l)	ND ug/L	15.0	5		06/24/13 19:02	1330-20-7	
Surrogates								
4-Bromofluo	robenzene (S)	102 %	80-120	5		06/24/13 19:02	460-00-4	
Dibromofluo	romethane (S)	106 %	80-120	5		06/24/13 19:02	1868-53-7	
1,2-Dichloro	ethane-d4 (S)	107 %	80-120	5		06/24/13 19:02	17060-07-0	
Toluene-d8 ((S)	98 %	80-120	5		06/24/13 19:02	2037-26-5	
Preservation	рН	1.0	0.10	5		06/24/13 19:02		
2540C Total	Dissolved Solids	Analytical Method: SM 2	540C					
Total Dissolv	ved Solids	15100 mg/L	5.0	1		06/20/13 17:56		
300.0 IC Ani	ions 28 Days	Analytical Method: EPA	300.0					
Chloride		203 mg/L	20.0	20		06/26/13 09:45	16887-00-6	
Fluoride		ND mg/L	0.20	1		06/24/13 15:03	16984-48-8	M1
Sulfate		7110 mg/L	1000	1000		06/25/13 15:57	14808-79-8	



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

Sample: 07	25035-061313-JK-MW6	Lab ID: 60147069006	Collected: 06/13/	13 12:10	Received: 06	/17/13 08:15	/latrix: Water	
Comments:	 The samples were rece 	eived outside of required ter	mperature range. Analy	/sis was	completed upon	client approval.		
	Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET IC	CP, Dissolved	Analytical Method: EPA	6010 Preparation Met	hod: EP/	A 3010			
Boron, Disso	blved	666 ug/L	500	5	06/18/13 14:00	06/21/13 10:49	7440-42-8	
Iron, Dissolv	ed	ND ug/L	100	2	06/18/13 14:00	06/21/13 10:34	7439-89-6	D3
Manganese,	Dissolved	2030 ug/L	25.0	5	06/18/13 14:00	06/21/13 10:49	7439-96-5	
8270 MSSV	PAH by SIM	Analytical Method: EPA	8270C by SIM Prepar	ation Me	thod: EPA 35100	;		
Naphthalene Surrogates	9	19.0 ug/L	0.50	1	06/20/13 00:00	06/26/13 15:15	91-20-3	L1
2-Fluorobiph	envl (S)	56 %	40-120	1	06/20/13 00:00	06/26/13 15:15	321-60-8	
Terphenyl-d1	• • •	64 %	43-122	1		06/26/13 15:15		
8260 MSV		Analytical Method: EPA	5030B/8260					
Benzene		15.4 ug/L	10.0	10		06/24/13 19:16	71-43-2	
Ethylbenzen	е	129 ug/L	10.0	10		06/24/13 19:16	100-41-4	
Methylene cl	hloride	ND ug/L	10.0	10		06/24/13 19:16	75-09-2	
Naphthalene)	ND ug/L	100	10		06/24/13 19:16	91-20-3	
1,1,2,2-Tetra	chloroethane	ND ug/L	10.0	10		06/24/13 19:16	79-34-5	
Toluene		ND ug/L	10.0	10		06/24/13 19:16	108-88-3	
Xylene (Tota	l)	2030 ug/L	30.0	10		06/24/13 19:16	1330-20-7	
Surrogates		-						
4-Bromofluo	robenzene (S)	103 %	80-120	10		06/24/13 19:16	460-00-4	
Dibromofluor	romethane (S)	106 %	80-120	10		06/24/13 19:16	1868-53-7	
1,2-Dichloroe	ethane-d4 (S)	106 %	80-120	10		06/24/13 19:16	17060-07-0	
Toluene-d8 ((S)	101 %	80-120	10		06/24/13 19:16	2037-26-5	
Preservation	рН	1.0	0.10	10		06/24/13 19:16		
2540C Total	Dissolved Solids	Analytical Method: SM 2	2540C					
Total Dissolv	ved Solids	36000 mg/L	5.0	1		06/20/13 17:56		
300.0 IC Ani	ions 28 Days	Analytical Method: EPA	300.0					
Chloride		396 mg/L	50.0	50		06/25/13 17:43	16887-00-6	
Fluoride		ND mg/L	0.20	1		06/24/13 15:39	16984-48-8	
Sulfate		23000 mg/L	2000	2000		06/26/13 12:07	14808-79-8	1e

REPORT OF LABORATORY ANALYSIS

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Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

Sample: 07	5035-061313-JK-MW7	Lab ID: 60147069007	Collected: 06/13/	13 11:50	Received: 06	6/17/13 08:15 N	Aatrix: Water	
Comments:	 The samples were rece 	ived outside of required ter	mperature range. Analy	/sis was	completed upon	client approval.		
	Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET IC	CP, Dissolved	Analytical Method: EPA	6010 Preparation Met	hod: EP/	A 3010			
Boron, Disso	blved	752 ug/L	500	5	06/18/13 14:00	06/21/13 10:41	7440-42-8	
Iron, Dissolv	ed	578 ug/L	250	5	06/18/13 14:00	06/21/13 10:41	7439-89-6	
Manganese,	Dissolved	2460 ug/L	25.0	5	06/18/13 14:00	06/21/13 10:41	7439-96-5	
8270 MSSV	PAH by SIM	Analytical Method: EPA	8270C by SIM Prepar	ation Me	thod: EPA 35100	>		
Naphthalene Surrogates	•	ND ug/L	0.50	1	06/20/13 00:00	06/26/13 03:39	91-20-3	L1
2-Fluorobiph	envl (S)	73 %	40-120	1	06/20/13 00:00	06/26/13 03:39	321-60-8	
Terphenyl-d1	• • •	77 %	43-122	1		06/26/13 03:39		
8260 MSV		Analytical Method: EPA	5030B/8260					
Benzene		5.1 ug/L	5.0	5		06/24/13 19:31	71-43-2	
Ethylbenzen	e	188 ug/L	5.0	5		06/24/13 19:31	100-41-4	
Methylene cl	hloride	ND ug/L	5.0	5		06/24/13 19:31	75-09-2	
Naphthalene)	ND ug/L	50.0	5		06/24/13 19:31	91-20-3	
1,1,2,2-Tetra	chloroethane	ND ug/L	5.0	5		06/24/13 19:31	79-34-5	
Toluene		ND ug/L	5.0	5		06/24/13 19:31	108-88-3	
Xylene (Tota	I)	ND ug/L	15.0	5		06/24/13 19:31	1330-20-7	
Surrogates								
	robenzene (S)	106 %	80-120	5		06/24/13 19:31		
	romethane (S)	101 %	80-120	5		06/24/13 19:31		
-	ethane-d4 (S)	102 %	80-120	5		06/24/13 19:31		
Toluene-d8 (,	100 %	80-120	5		06/24/13 19:31	2037-26-5	
Preservation	рН	1.0	0.10	5		06/24/13 19:31		
2540C Total	Dissolved Solids	Analytical Method: SM 2	2540C					
Total Dissolv	red Solids	35900 mg/L	5.0	1		06/20/13 17:57		
300.0 IC Ani	ons 28 Days	Analytical Method: EPA	300.0					
Chloride		258 mg/L	50.0	50		06/25/13 18:19	16887-00-6	
Fluoride		ND mg/L	0.20	1		06/24/13 15:57	16984-48-8	
Sulfate		20400 mg/L	2000	2000		06/26/13 12:24	14808-79-8	1e



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

 Sample:
 075035-061313-JK-DUP
 Lab ID:
 60147069008
 Collected:
 06/13/13
 08:00
 Received:
 06/17/13
 08:15
 Matrix:
 Water

 Comments:
 • The samples were received outside of required temperature range. Analysis was completed upon client approval.
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Parameters	Results	Units Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Metho	d: EPA 5030B/8260					
Benzene	141 ug/L	5.0	5		06/25/13 20:23	71-43-2	
Ethylbenzene	273 ug/L	. 5.0	5		06/25/13 20:23	100-41-4	
Methylene chloride	ND ug/L	5.0	5		06/25/13 20:23	75-09-2	
Naphthalene	63.3 ug/L	. 50.0	5		06/25/13 20:23	91-20-3	
1,1,2,2-Tetrachloroethane	ND ug/L	. 5.0	5		06/25/13 20:23	79-34-5	
Toluene	ND ug/L	5.0	5		06/25/13 20:23	108-88-3	
Xylene (Total)	63.1 ug/L	. 15.0	5		06/25/13 20:23	1330-20-7	
Surrogates							
4-Bromofluorobenzene (S)	100 %	80-120	5		06/25/13 20:23	460-00-4	
Dibromofluoromethane (S)	102 %	80-120	5		06/25/13 20:23	1868-53-7	
1,2-Dichloroethane-d4 (S)	107 %	80-120	5		06/25/13 20:23	17060-07-0	
Toluene-d8 (S)	102 %	80-120	5		06/25/13 20:23	2037-26-5	
Preservation pH	1.0	0.10	5		06/25/13 20:23		



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

Sample: TRIP BLANK 1	Lab ID: 60147	7069009	Collected: 06/13/2	3 08:00	Received: 0	6/17/13 08:15 I	Matrix: Water	
Comments: • The samples were	received outside of requ	uired temp	perature range. Analy	sis was	completed upor	n client approval.		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Metho	od: EPA 50	030B/8260					
Benzene	ND ug/L	-	1.0	1		06/24/13 16:20	71-43-2	
Ethylbenzene	ND ug/L	-	1.0	1		06/24/13 16:20	100-41-4	
Methylene chloride	ND ug/L	-	1.0	1		06/24/13 16:20	75-09-2	
Naphthalene	ND ug/L	-	10.0	1		06/24/13 16:20	91-20-3	
1,1,2,2-Tetrachloroethane	ND ug/L	-	1.0	1		06/24/13 16:20	79-34-5	
Toluene	ND ug/L	-	1.0	1		06/24/13 16:20	108-88-3	
Xylene (Total)	ND ug/L	-	3.0	1		06/24/13 16:20	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	104 %		80-120	1		06/24/13 16:20	460-00-4	
Dibromofluoromethane (S)	98 %		80-120	1		06/24/13 16:20	1868-53-7	
1,2-Dichloroethane-d4 (S)	100 %		80-120	1		06/24/13 16:20	17060-07-0	
Toluene-d8 (S)	100 %		80-120	1		06/24/13 16:20	2037-26-5	
Preservation pH	1.0		0.10	1		06/24/13 16:20		



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

Sample: TRIP BLANK 2	Lab ID: 6014	7069010	Collected: 06/13/1	3 08:00	Received: 06	6/17/13 08:15 N	Aatrix: Water	
Comments: • The samples were	received outside of rec	uired temp	perature range. Analy	sis was	completed upon	client approval.		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Meth	od: EPA 50)30B/8260					
Benzene	ND ug/	L	1.0	1		06/24/13 16:35	71-43-2	
Ethylbenzene	ND ug/	L	1.0	1		06/24/13 16:35	100-41-4	
Methylene chloride	ND ug/	L	1.0	1		06/24/13 16:35	75-09-2	
Naphthalene	ND ug/	L	10.0	1		06/24/13 16:35	91-20-3	
1,1,2,2-Tetrachloroethane	ND ug/	L	1.0	1		06/24/13 16:35	79-34-5	
Toluene	ND ug/	L	1.0	1		06/24/13 16:35	108-88-3	
Xylene (Total)	ND ug/	L	3.0	1		06/24/13 16:35	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	107 %		80-120	1		06/24/13 16:35	460-00-4	
Dibromofluoromethane (S)	103 %		80-120	1		06/24/13 16:35	1868-53-7	
1,2-Dichloroethane-d4 (S)	102 %		80-120	1		06/24/13 16:35	17060-07-0	
Toluene-d8 (S)	99 %		80-120	1		06/24/13 16:35	2037-26-5	
Preservation pH	1.0		0.10	1		06/24/13 16:35		



Project: 075035 MARTIN 34 NO 2

EPA 3010

Pace Project No.: 60147069

QC Batch: MPRP/23127

QC Batch Method:

Analysis Method:

Analysis Description:

EPA 6010

6010 MET Dissolved

Associated Lab Samples: 60147069002, 60147069003, 60147069004, 60147069005, 60147069006, 60147069007

METHOD BLANK: 12067	'81	Matrix:	Matrix: Water						
Associated Lab Samples:	60147069002, 60147069003	, 60147069004, 6	0147069005, 60	147069006, 60147	069007				
		Blank	Reporting						
Parameter	Units	Result	Limit	Analyzed	Qualifiers				
Boron, Dissolved	ug/L	ND	100	06/20/13 12:56					
Iron, Dissolved	ug/L	ND	50.0	06/20/13 12:56					
Manganese, Dissolved	ug/L	ND	5.0	06/20/13 12:56					

LABORATORY CONTROL SAMPLE: 1206782

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron, Dissolved	ug/L	1000	1020	102	80-120	
Iron, Dissolved	ug/L	10000	9680	97	80-120	
Manganese, Dissolved	ug/L	1000	1040	104	80-120	

MATRIX SPIKE & MATRIX SP	PIKE DUPLICATE	E: 12067	83		1206784							
			MS	MSD								
	601	46960001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Boron, Dissolved	ug/L	ND	1000	1000	1050	1060	96	97	75-125	1	20	
Iron, Dissolved	ug/L	1460	10000	10000	11400	11300	99	99	75-125	0	20	
Manganese, Dissolved	ug/L	1840	1000	1000	2630	2640	78	80	75-125	1	20	



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

QC Batch: MPRP/23	5126	Analysis M	/lethod:	EPA 6010		
QC Batch Method: EPA 3010)	Analysis [Description:	6010 MET Dis	solved	
Associated Lab Samples: 60	147069001					
METHOD BLANK: 1206776		Mat	rix: Water			
Associated Lab Samples: 60	147069001					
		Blank	Reporting			
Parameter	Units	Result	Limit	Analyz	ed Quali	fiers
Boron, Dissolved	ug/L	N	D 1	00 06/20/13	12:42	
Iron, Dissolved	ug/L	N	D 5	0.0 06/20/13 [·]	12:42	
Manganese, Dissolved	ug/L	N	D	5.0 06/20/13 [·]	12:42	
LABORATORY CONTROL SAM	IPLE: 1206777					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
	ug/L	1000	1030	103	80-120	
Boron, Dissolved		10000	9650	96	80-120	
Iron, Dissolved	ug/L	10000	0000			

MATRIX SPIKE & MATRIX S	PIKE DUPLICAT	E: 12067	-	MCD	1206779							
	601	147069001	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Boron, Dissolved	ug/L	1190	1000	1000	2250	2250	106	106	75-125	0	20	
Iron, Dissolved	ug/L	67.0	10000	10000	9250	9870	92	98	75-125	6	20	
Manganese, Dissolved	ug/L	507	1000	1000	1500	1490	99	98	75-125	1	20	



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

QC Batch: MSV/54497 QC Batch Method: EPA 5030B/8260 Associated Lab Samples:

Analysis Method:

Analysis Description: 8260 MSV Water 10 mL Purge 60147069001, 60147069002, 60147069003, 60147069004, 60147069005, 60147069006, 60147069007,

EPA 5030B/8260

60147069009, 60147069010

METHOD BLANK: 1209891

Matrix: Water

Associated Lab Samples: 60147069009, 60147069010 Dionk Deporting

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	06/24/13 15:07	
Benzene	ug/L	ND	1.0	06/24/13 15:07	
Ethylbenzene	ug/L	ND	1.0	06/24/13 15:07	
Methylene chloride	ug/L	ND	1.0	06/24/13 15:07	
Naphthalene	ug/L	ND	10.0	06/24/13 15:07	
Toluene	ug/L	ND	1.0	06/24/13 15:07	
Xylene (Total)	ug/L	ND	3.0	06/24/13 15:07	
1,2-Dichloroethane-d4 (S)	%	103	80-120	06/24/13 15:07	
4-Bromofluorobenzene (S)	%	101	80-120	06/24/13 15:07	
Dibromofluoromethane (S)	%	104	80-120	06/24/13 15:07	
Toluene-d8 (S)	%	98	80-120	06/24/13 15:07	

LABORATORY CONTROL SAMPLE: 1209892

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	20	19.5	98	73-120	
Benzene	ug/L	20	19.9	99	73-122	
Ethylbenzene	ug/L	20	19.8	99	76-123	
Methylene chloride	ug/L	20	21.6	108	71-123	
Naphthalene	ug/L	20	19.3	97	64-127	
Toluene	ug/L	20	19.1	96	76-122	
Xylene (Total)	ug/L	60	58.5	98	76-122	
1,2-Dichloroethane-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Dibromofluoromethane (S)	%			105	80-120	
Toluene-d8 (S)	%			102	80-120	



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

QC Batch:	MSV/54523		Analysis Meth	od: EF	PA 5030B/8260	
QC Batch Method:	EPA 5030B/8260		Analysis Desc	ription: 82	60 MSV Water 10	mL Purge
Associated Lab Sam	ples: 60147069008	3				
METHOD BLANK:	1210238		Matrix:	Water		
Associated Lab Sam	ples: 60147069008	3				
			Blank	Reporting		
Param	neter	Units	Result	Limit	Analyzed	Qualifiers
1,1,2,2-Tetrachloroet	thane ug	/L	 ND	1.0	06/25/13 19:25	
Benzene	ug	/L	ND	1.0	06/25/13 19:25	
Ethylbenzene	ug	/L	ND	1.0	06/25/13 19:25	
Methylene chloride	ug	/L	ND	1.0	06/25/13 19:25	
Naphthalene	ug	/L	ND	10.0	06/25/13 19:25	
Toluene	ug	/L	ND	1.0	06/25/13 19:25	
Xylene (Total)	ug	/L	ND	3.0	06/25/13 19:25	
1,2-Dichloroethane-o	d4 (S) %		99	80-120	06/25/13 19:25	
4-Bromofluorobenze	ene (S) %		100	80-120	06/25/13 19:25	
Dibromofluorometha	ine (S) %		102	80-120	06/25/13 19:25	
Toluene-d8 (S)	%		97	80-120	06/25/13 19:25	

LABORATORY CONTROL SAMPLE: 1210239

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	20	21.1	106	73-120	
Benzene	ug/L	20	19.3	97	73-122	
Ethylbenzene	ug/L	20	20.3	102	76-123	
Methylene chloride	ug/L	20	20.3	101	71-123	
Naphthalene	ug/L	20	19.5	97	64-127	
Toluene	ug/L	20	19.1	95	76-122	
Xylene (Total)	ug/L	60	61.2	102	76-122	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			96	80-120	
Dibromofluoromethane (S)	%			101	80-120	
Toluene-d8 (S)	%			102	80-120	



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

QC Batch: OEXT/38927		Analysis N	lethod:	EPA 8270C by	SIM		
QC Batch Method: EPA 3510C		Analysis E	Description:	8270 Water PA	H by SIM MS	SV	
Associated Lab Samples: 601470	69001, 60147069002	2, 60147069003	8, 60147069004	, 60147069005,	6014706900	6, 60147069007	
METHOD BLANK: 1207721		Matr	ix: Water				
Associated Lab Samples: 601470	69001, 60147069002	2, 60147069003	, 60147069004	, 60147069005,	6014706900	6, 60147069007	
		Blank	Reporting				
Parameter	Units	Result	Limit	Analyze	d Qua	alifiers	
Naphthalene	ug/L	N	D 0.	50 06/25/13 18	3:41		
2-Fluorobiphenyl (S)	%	8	40-1	20 06/25/13 18	3:41		
Terphenyl-d14 (S)	%	8	31 43-1	22 06/25/13 18	3:41		
LABORATORY CONTROL SAMPLE	: 1207722						
		Spike	LCS	LCS	% Rec		
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers	
Naphthalene	ug/L	10	17.4	174	41-120	0 L0	
2-Fluorobiphenyl (S)	%			85	40-120	D	
Terphenyl-d14 (S)	%			83	43-122	2	



Project: 075035 MAR	RTIN 34 NO 2							
Pace Project No.: 60147069								
QC Batch: WET/41961		Analysis Me	ethod:	SM 2540C				
QC Batch Method: SM 2540C		Analysis De	escription:	2540C Tota	al Dissolv	ed Solids		
Associated Lab Samples: 6014	7069001, 601470690	02, 60147069003,	60147069004	, 601470690	005, 6014	17069006,	6014	7069007
METHOD BLANK: 1208400		Matrix	k: Water					
Associated Lab Samples: 6014	7069001, 601470690	02, 60147069003,	60147069004	, 601470690	005, 6014	17069006,	6014	7069007
		Blank	Reporting					
Parameter	Units	Result	Limit	Ana	yzed	Quali	fiers	_
Total Dissolved Solids	mg/L	ND) !	5.0 06/20/1	3 17:53			
LABORATORY CONTROL SAMPI	LE: 1208401							
5		Spike	LCS	LCS		Rec	~	
Parameter	Units	Conc.	Result	% Rec		imits	Qu	alifiers
Total Dissolved Solids	mg/L	1000	1040	10)4	80-120		
SAMPLE DUPLICATE: 1208402	2		_					
Parameter	Units	60147022001 Result	Dup Result	RP		Max RPD		Qualifiers
						RPD		Quaimers
Total Dissolved Solids	mg/L	104	• 1	11	7		17	
SAMPLE DUPLICATE: 1208403								
		60147022010	Dup			Max		
_	Units	Result	Result	RP	D	RPD		Qualifiers
Parameter								



Project: 075035 MARTI	N 34 NO 2							
Pace Project No.: 60147069		A	Asthead		A 200 0			
QC Batch: WETA/25209		Analysis N			A 300.0			
QC Batch Method: EPA 300.0	00004 004 47000000	-	Description:		0.0 IC Anions		004 47000007	
Associated Lab Samples: 601470	69001, 60147069002,	, 60147069003	3, 6014706900	J4, 60 [°]	147069005,	60147069006,	60147069007	
METHOD BLANK: 1209729		Matr	rix: Water					
Associated Lab Samples: 601470	69001, 60147069002,				147069005,	60147069006,	60147069007	
Parameter	Units	Blank Result	Reportir Limit	ıg	Analyzed	d Quali	fiore	
Fluoride	mg/L	IN	D	0.20	06/24/13 09	210		
METHOD BLANK: 1210399		Matr	rix: Water					
Associated Lab Samples: 601470	69001, 60147069002,	60147069003	3, 601470690	04, 60 ⁻	147069005,	60147069006,	60147069007	
		Blank	Reportir	g				
Parameter	Units	Result	Limit		Analyzeo	d Quali	fiers	
Chloride	mg/L		D	1.0	06/25/13 09	-		
Sulfate	mg/L	Ν	D	1.0	06/25/13 09	9:10		
METHOD BLANK: 1210982		Matr	rix: Water					
	69001_60147069002		ix: Water	04, 60	147069005	60147069006.	60147069007	
	69001, 60147069002,		3, 601470690		147069005,	60147069006,	60147069007	
METHOD BLANK: 1210982 Associated Lab Samples: 601470 Parameter	69001, 60147069002, Units	60147069003			147069005, Analyzed			
Associated Lab Samples: 601470		60147069003 Blank Result	3, 6014706900 Reportir			d Quali		
Associated Lab Samples: 601470 Parameter Chloride	Units	60147069003 Blank Result N	3, 6014706900 Reportir Limit	ig	Analyzed	d Quali 0:10		
Associated Lab Samples: 601470 Parameter Chloride Sulfate	Units mg/L ng/L	60147069003 Blank Result N	8, 6014706900 Reportir Limit	ng 	Analyzec 06/26/13 09	d Quali 0:10		
Associated Lab Samples: 601470 Parameter Chloride Sulfate	Units mg/L ng/L	60147069003 Blank Result N	8, 6014706900 Reportir Limit	ng 1.0 1.0	Analyzec 06/26/13 09	d Quali 0:10		
Associated Lab Samples: 601470 Parameter Chloride Sulfate	Units mg/L ng/L	60147069003 Blank Result N N	3, 6014706900 Reportir Limit D D	ng 1.0 1.0	Analyzed 06/26/13 09 06/26/13 09	d Quali 0:10 0:10		
Associated Lab Samples: 601470 Parameter Chloride Sulfate LABORATORY CONTROL SAMPLE Parameter	Units mg/L mg/L : 1209730	60147069003 Blank Result N N Spike	3, 6014706900 Reportir Limit D D LCS	ng 1.0 1.0	Analyzec 06/26/13 09 06/26/13 09 LCS	9 Quali 9:10 9:10 % Rec	fiers	_
Associated Lab Samples: 601470 Parameter Chloride Sulfate LABORATORY CONTROL SAMPLE Parameter Fluoride	Units mg/L mg/L : 1209730 Units mg/L	60147069003 Blank Result N N Spike Conc.	3, 6014706900 Reportir Limit D D LCS Result	ng 1.0 1.0	Analyzec 06/26/13 09 06/26/13 09 LCS 6 Rec	d Quali 9:10 9:10 % Rec Limits	fiers	-
Associated Lab Samples: 601470 Parameter Chloride Sulfate LABORATORY CONTROL SAMPLE Parameter Fluoride	Units mg/L mg/L : 1209730 Units mg/L	60147069003 Blank Result N N Spike Conc. 2.5	B, 6014706900 Reportir Limit D D LCS Result 2.4	ng 1.0 1.0	Analyzed 06/26/13 09 06/26/13 09 LCS 6 Rec 97	2 Quali 0:10 0:10 % Rec Limits 90-110	fiers	_
Associated Lab Samples: 601470 Parameter Chloride Sulfate LABORATORY CONTROL SAMPLE Parameter Fluoride	Units mg/L mg/L : 1209730 Units mg/L	60147069003 Blank Result N N Spike Conc.	3, 6014706900 Reportir Limit D D LCS Result	ng 1.0 1.0 %	Analyzec 06/26/13 09 06/26/13 09 LCS 6 Rec	d Quali 9:10 9:10 % Rec Limits	fiers	_
Associated Lab Samples: 601470 Parameter Chloride Sulfate LABORATORY CONTROL SAMPLE Parameter Fluoride LABORATORY CONTROL SAMPLE Parameter Parameter	Units mg/L mg/L 1209730 Units mg/L 1210400 Units	60147069003 Blank Result N N Spike Conc. 2.5 Spike Conc.	B, 6014706900 Reportir Limit D D LCS Result 2.4	ng 1.0 1.0 %	Analyzed 06/26/13 09 06/26/13 09 LCS 6 Rec 97	d Quali 9:10 9:10 % Rec Limits 90-110 % Rec Limits	fiers Qualifiers	_
Associated Lab Samples: 601470 Parameter Chloride Sulfate LABORATORY CONTROL SAMPLE Parameter Fluoride LABORATORY CONTROL SAMPLE Parameter Chloride	Units mg/L mg/L 1209730 Units mg/L : 1210400	60147069003 Blank Result N N Spike Conc. 2.5	3, 6014706900 Reportir Limit D D LCS Result 2.4 LCS	ng 1.0 1.0 %	Analyzed 06/26/13 09 06/26/13 09 LCS 6 Rec 97	9 Quali 2:10 2:10 % Rec Limits 90-110 % Rec	fiers Qualifiers	_
Associated Lab Samples: 601470 Parameter Chloride Sulfate LABORATORY CONTROL SAMPLE Parameter Fluoride LABORATORY CONTROL SAMPLE Parameter Chloride	Units mg/L mg/L 1209730 Units mg/L : 1210400 Units mg/L	60147069003 Blank Result N N Spike Conc. 2.5 Spike Conc. 5	B, 6014706900 Reportir Limit D D LCS Result 2.4 LCS Result 5.0	ng 1.0 1.0 %	Analyzed 06/26/13 09 06/26/13 09 LCS 6 Rec 97 LCS 6 Rec 99	d Quali 9:10 9:10 % Rec Limits 90-110 % Rec Limits 90-110	fiers Qualifiers	_
Associated Lab Samples: 601470 Parameter Chloride Sulfate LABORATORY CONTROL SAMPLE Parameter Fluoride LABORATORY CONTROL SAMPLE Parameter Chloride Sulfate	Units mg/L mg/L 1209730 Units mg/L 1210400 Units mg/L mg/L	60147069003 Blank Result N N Spike Conc. 2.5 Spike Conc. 5 5 5	B, 6014706900 Reportir Limit D D LCS Result 2.4 LCS Result 5.0 5.2	9 1.0 1.0 %	Analyzed 06/26/13 09 06/26/13 09 LCS 6 Rec 97 LCS 6 Rec 99 104	2 Quali 2:10 2:10 % Rec Limits 90-110 90-110 90-110	fiers Qualifiers	_
Associated Lab Samples: 601470 Parameter Chloride Sulfate LABORATORY CONTROL SAMPLE Parameter Fluoride LABORATORY CONTROL SAMPLE Parameter Chloride Sulfate LABORATORY CONTROL SAMPLE	Units mg/L mg/L 1209730 Units mg/L 1210400 Units mg/L mg/L 1210983	60147069003 Blank Result N N Spike Conc. 2.5 Spike Conc. 5 5 5	A, 6014706900 Reportir Limit D D LCS Result 2.4 LCS Result 5.0 5.2 LCS	اع 1.0 1.0 %	Analyzed 06/26/13 09 06/26/13 09 LCS 6 Rec 97 LCS 6 Rec 99 104 LCS	2 Quali 2:10 2:10 % Rec Limits 90-110 90-110 90-110 % Rec	fiers Qualifiers Qualifiers	-
Associated Lab Samples: 601470 Parameter Chloride Sulfate LABORATORY CONTROL SAMPLE Parameter Fluoride LABORATORY CONTROL SAMPLE Parameter Chloride Sulfate LABORATORY CONTROL SAMPLE Parameter Parameter	Units mg/L mg/L 1209730 Units mg/L 1210400 Units mg/L 1210983 Units Units	60147069003 Blank Result N N Spike Conc. 2.5 Spike Conc. 5 5 5	B, 6014706900 Reportir Limit D D LCS Result 2.4 LCS Result 5.0 5.2 LCS Result	اع 1.0 1.0 %	Analyzed 06/26/13 09 06/26/13 09 LCS 6 Rec 97 LCS 6 Rec 99 104	d Quali 2:10 2:10 % Rec Limits 90-110 % Rec Limits 90-110 90-110 % Rec Limits	fiers Qualifiers	_
Associated Lab Samples: 601470 Parameter Chloride Sulfate LABORATORY CONTROL SAMPLE Parameter Fluoride LABORATORY CONTROL SAMPLE Parameter Chloride Sulfate LABORATORY CONTROL SAMPLE	Units mg/L mg/L 1209730 Units mg/L 1210400 Units mg/L mg/L 1210983	60147069003 Blank Result N N Spike Conc. 2.5 Spike Conc. 5 5 5	A, 6014706900 Reportir Limit D D LCS Result 2.4 LCS Result 5.0 5.2 LCS	اع 1.0 1.0 %	Analyzed 06/26/13 09 06/26/13 09 LCS 6 Rec 97 LCS 6 Rec 99 104 LCS	2 Quali 2:10 2:10 % Rec Limits 90-110 90-110 90-110 % Rec	fiers Qualifiers Qualifiers	_



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

MATRIX SPIKE & MATRIX SF	VIKE DUPLICAT	E: 12097	31		1209732							
	<u></u>	1 40000004	MS	MSD Smiller	MC	MOD	MC	MCD	% Doo			
Parameter	Units	146886001 Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	157	50	50	195	187	77	59	64-118	5	12	M1
Fluoride	mg/L	ND	25	25	22.2	16.3	89	65	75-110	30	10	M1,R1
Sulfate	mg/L	122	50	50	165	153	87	64	61-119	7	10	
MATRIX SPIKE SAMPLE:	1209	733										
			601470	69005	Spike	MS	Μ	IS	% Rec			
Parameter		Units	Res	ult	Conc.	Result	% F	Rec	Limits		Quali	fiers
Chloride	mg/L			203	100	2	90	87	64-	118		
Fluoride	mg/L			ND	2.5	1	1.8	74	75-	110 M	1	
Sulfate	mg/L			7110	5000	124	00	105	61-	119		



QUALIFIERS

Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60147069

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: OEXT/38927

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume. Batch: MSV/54497

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

Batch: MSV/54523

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

ANALYTE QUALIFIERS

- 1e Result has been revised.
- D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
- 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.
- R1 RPD value was outside control limits.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

 Project:
 075035
 MARTIN 34 NO 2

 Pace Project No.:
 60147069

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60147069002	075035-061313-JK-MW2	EPA 3010	MPRP/23127	EPA 6010	ICP/18251
60147069003	075035-061313-JK-MW3	EPA 3010	MPRP/23127	EPA 6010	ICP/18251
60147069004	075035-061313-JK-MW4	EPA 3010	MPRP/23127	EPA 6010	ICP/18251
60147069005	075035-061313-JK-MW5	EPA 3010	MPRP/23127	EPA 6010	ICP/18251
60147069006	075035-061313-JK-MW6	EPA 3010	MPRP/23127	EPA 6010	ICP/18251
60147069007	075035-061313-JK-MW7	EPA 3010	MPRP/23127	EPA 6010	ICP/18251
60147069001	075035-061313-JK-MW1	EPA 3010	MPRP/23126	EPA 6010	ICP/18252
60147069001	075035-061313-JK-MW1	EPA 3510C	OEXT/38927	EPA 8270C by SIM	MSSV/12336
60147069002	075035-061313-JK-MW2	EPA 3510C	OEXT/38927	EPA 8270C by SIM	MSSV/12336
60147069003	075035-061313-JK-MW3	EPA 3510C	OEXT/38927	EPA 8270C by SIM	MSSV/12336
60147069004	075035-061313-JK-MW4	EPA 3510C	OEXT/38927	EPA 8270C by SIM	MSSV/12336
60147069005	075035-061313-JK-MW5	EPA 3510C	OEXT/38927	EPA 8270C by SIM	MSSV/12336
60147069006	075035-061313-JK-MW6	EPA 3510C	OEXT/38927	EPA 8270C by SIM	MSSV/12336
60147069007	075035-061313-JK-MW7	EPA 3510C	OEXT/38927	EPA 8270C by SIM	MSSV/12336
60147069001	075035-061313-JK-MW1	EPA 5030B/8260	MSV/54497		
60147069002	075035-061313-JK-MW2	EPA 5030B/8260	MSV/54497		
60147069003	075035-061313-JK-MW3	EPA 5030B/8260	MSV/54497		
60147069004	075035-061313-JK-MW4	EPA 5030B/8260	MSV/54497		
60147069005	075035-061313-JK-MW5	EPA 5030B/8260	MSV/54497		
60147069006	075035-061313-JK-MW6	EPA 5030B/8260	MSV/54497		
60147069007	075035-061313-JK-MW7	EPA 5030B/8260	MSV/54497		
60147069008	075035-061313-JK-DUP	EPA 5030B/8260	MSV/54523		
60147069009	TRIP BLANK 1	EPA 5030B/8260	MSV/54497		
60147069010	TRIP BLANK 2	EPA 5030B/8260	MSV/54497		
60147069001	075035-061313-JK-MW1	SM 2540C	WET/41961		
60147069002	075035-061313-JK-MW2	SM 2540C	WET/41961		
60147069003	075035-061313-JK-MW3	SM 2540C	WET/41961		
60147069004	075035-061313-JK-MW4	SM 2540C	WET/41961		
60147069005	075035-061313-JK-MW5	SM 2540C	WET/41961		
60147069006	075035-061313-JK-MW6	SM 2540C	WET/41961		
60147069007	075035-061313-JK-MW7	SM 2540C	WET/41961		
60147069001	075035-061313-JK-MW1	EPA 300.0	WETA/25209		
60147069002	075035-061313-JK-MW2	EPA 300.0	WETA/25209		
60147069003	075035-061313-JK-MW3	EPA 300.0	WETA/25209		
60147069004	075035-061313-JK-MW4	EPA 300.0	WETA/25209		
60147069005	075035-061313-JK-MW5	EPA 300.0	WETA/25209		
60147069006	075035-061313-JK-MW6	EPA 300.0	WETA/25209		
60147069007	075035-061313-JK-MW7	EPA 300.0	WETA/25209		



Sample Condition Upon Receipt ESI Tech Spec Client

WO#:60147069

60147069

Client Name: <u>COPCRA</u>			Optional
Courier: Fed Ex VPS UPS Client	Commercial	🗆 Pa	ce 🗆 Other 🗆 🛛 Proj Due Date:
Tracking #: forth42 801244426618	Pace Shipping	Label U	sed? Yes 🗆 No 🖾 🛛 Proj Name:
Custody Seal on Cooler/Box Present: Yes	D 🗆 Seals inf	act: Y	
Packing Material: Bubble Wrap Bubble B	ags 🗹	Foaml	f' None \Box Other $\not \Delta z f' \mathcal{L}$
Thermometer Used: (T-11)2 / T-194 T	ype of Ice: 🕠	-	e None Samples received on ice, cooling process has begun.
Cooler Temperature: 9.8/11.2		(circle	Date and initials of person examining
Temperature should be above freezing to 6°C			contents:
Chain of Custody present:	Yes No	□n/A	1
Chain of Custody filled out:	Yes No	□n/a	2. Ite method in cooler during
Chain of Custody relinquished:		□n/A	3. Shipping.
Sampler name & signature on COC:	Yes No	□n/A	4.
Samples arrived within holding time:	Yes No	□n/A	5.
Short Hold Time analyses (<72hr):	TYes No		6. Did not received BP3F for mw-1.
Rush Turn Around Time requested:		□ N /A	7
Sufficient volume:	Yes No	□n/A	8. ,
Correct containers used:	Yes DNO	□n/A	MW-1,24 and Dup came With TBI
Pace containers used:		□n/A	9.
Containers intact:		□n/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	□Yes □No		11.
Filtered volume received for dissolved tests?	□Yes □No		12
Sample labels match COC:	Tyres INO	□N /A	
Includes date/time/ID/analyses Matrix:	WT		13.
All containers needing preservation have been checked,	Pres DNO	□n/A	Added 2.5 mi of Hrus to mw-5
All containers needing preservation are found to be in compliance with EPA recommendation.		□n/A	BP3F 14. PH 3-01-
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	Ayes DNO		Initial when pL Lot # of added /2570
Trip Blank present:		□n/A	procentatio
Pace Trip Blank lot # (if purchased):_0506/3-3			15.
Headspace in VOA vials (>6mm):	XÍYes □No	□n/A	3cts mw-1
			16,
Project sampled in USDA Regulated Area:	□Yes □No		17. List State:
Client Notification/ Resolution: Copy C	COC to Client?	Y M	Field Data Required? Y / N
Person Contacted:	Date/Time:	. (Temp Log: Record start and finish times
Comments/ Resolution: Droppool + forth	Note. Use	dui	When unpacking cooler, if >20 min, recheck sample temps
Metals apalysis on Sample	MWI	OPK	Clicht 6/19/13 AF Start: 1045 Start:
		por	End: //ºc End:
Project Manager Review:			Date: 011713 Temp. Temp.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Operation Operation <t< th=""><th>ny: COP CRA NM S: 6121 Indian School Rd NE, Ste 200 Copy To: Kelly Blanchard, Ang Albequerque, NM 87110 Copy To: Kelly Blanchard, Ang Albequerque, NM 87110 Copy To: Kelly Blanchard, Ang 6: cmathews@craworld.com (505)884-0672 Fax (505)884-4932 Project Name: Martin 34 No. 2 (505)884-0672 Fax (505)884-4932 Project Name: Projec</th><th>Bown</th><th>Attention: Company Na Address:</th><th>ENFOS</th><th></th><th></th><th></th><th></th><th></th><th>ł.</th></t<>	ny: COP CRA NM S: 6121 Indian School Rd NE, Ste 200 Copy To: Kelly Blanchard, Ang Albequerque, NM 87110 Copy To: Kelly Blanchard, Ang Albequerque, NM 87110 Copy To: Kelly Blanchard, Ang 6: cmathews@craworld.com (505)884-0672 Fax (505)884-4932 Project Name: Martin 34 No. 2 (505)884-0672 Fax (505)884-4932 Project Name: Projec	Bown	Attention: Company Na Address:	ENFOS						ł.
Image: Second Barles Stand Barles	s: 6121 Indian School Rd NE, Ste 200 Copy To: Kelly Blanchard, Ang Albequerque, NM 87110 o: <u>cmathews@craworld.com</u> (505)884-0672 Fax (505)884-4932 Project Name: Martin 34 No. 2 (505)884-0672 Fax (505)884-4932 Project Number: 075035 (505)884-0672 Fax (505)884-4932 Project Number: 075035 sted Due Date/TAT: standard Matrix Codes Required Client Information MATRIX <u>CODE</u> Required Client Information MATRIX <u>CODE</u> (A-2, 0-9/ -:) Sample IDS MUST BE UNIQUE TISSUE TS COPE	30wn LECTED	Company Na Address:	ame:		DCCULATOR	10110 V			
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F-ALL-Q-020rev 08, 12-Oct-2007

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



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

September 27, 2013

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

RE: Project: 075035 Martin 34 No. 2 Pace Project No.: 60153050

Dear Christine Matthews:

Enclosed are the analytical results for sample(s) received by the laboratory on September 13, 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 Flanazan

Alice Flanagan

alice.flanagan@pacelabs.com Project Manager

Enclosures

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





CERTIFICATIONS

Project: 075035 Martin 34 No. 2

Pace Project No.: 60153050

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219 WY STR Certification #: 2456.01 Arkansas Certification #: 13-012-0 Illinois Certification #: 003097 Iowa Certification #: 118 Kansas/NELAP Certification #: E-10116 Louisiana Certification #: 03055 Nevada Certification #: KS000212008A Oklahoma Certification #: 9205/9935 Texas Certification #: T104704407-13-4 Utah Certification #: KS000212013-3 Illinois Certification #: 003097



SAMPLE SUMMARY

 Project:
 075035 Martin 34 No. 2

 Pace Project No.:
 60153050

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60153050001	GW-075035-091213-CM-MW-1	Water	09/12/13 08:25	09/13/13 08:30
60153050002	GW-075035-091213-CM-MW-2	Water	09/12/13 12:30	09/13/13 08:30
60153050003	GW-075035-091213-CM-MW-3	Water	09/12/13 12:00	09/13/13 08:30
60153050004	GW-075035-091213-CM-MW-4	Water	09/12/13 11:55	09/13/13 08:30
60153050005	GW-075035-091213-CM-MW-5	Water	09/12/13 14:35	09/13/13 08:30
60153050006	GW-075035-091213-CM-MW-6	Water	09/12/13 11:05	09/13/13 08:30
60153050007	GW-075035-091213-CM-MW-7	Water	09/12/13 10:45	09/13/13 08:30
60153050008	GW-075035-091213-CM-MW-8	Water	09/12/13 15:00	09/13/13 08:30
60153050009	GW-075035-091213-CM-DUP	Water	09/12/13 11:10	09/13/13 08:30
60153050010	TB-075035-091213-CM-001	Water	09/12/13 12:30	09/13/13 08:30



SAMPLE ANALYTE COUNT

 Project:
 075035 Martin 34 No. 2

 Pace Project No.:
 60153050

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60153050001		EPA 6010	JGP, NDJ	3
		EPA 8270C by SIM	NAW	3
		EPA 5030B/8260	PRG	10
		SM 2540C	RAH	1
		EPA 300.0	OL	3
60153050002	GW-075035-091213-CM-MW-2	EPA 6010	JGP, NDJ	3
		EPA 8270C by SIM	NAW	3
		EPA 5030B/8260	PRG	10
		SM 2540C	RAH	1
		EPA 300.0	OL	3
60153050003	GW-075035-091213-CM-MW-3	EPA 6010	JGP, NDJ	3
		EPA 8270C by SIM	NAW	3
		EPA 5030B/8260	PRG	10
		SM 2540C	RAH	1
		EPA 300.0	OL	3
60153050004	GW-075035-091213-CM-MW-4	EPA 6010	JGP, NDJ	3
		EPA 8270C by SIM	NAW	3
		EPA 5030B/8260	PRG	10
		SM 2540C	RAH	1
		EPA 300.0	OL	3
60153050005	GW-075035-091213-CM-MW-5	EPA 6010	JGP, NDJ	3
		EPA 8270C by SIM	NAW	3
		EPA 5030B/8260	PRG	10
		SM 2540C	RAH	1
		EPA 300.0	OL	3
60153050006	GW-075035-091213-CM-MW-6	EPA 6010	JGP, NDJ	3
		EPA 8270C by SIM	NAW	3
		EPA 5030B/8260	PRG	10
		SM 2540C	RAH	1
		EPA 300.0	OL	3
60153050007	GW-075035-091213-CM-MW-7	EPA 6010	JGP, NDJ	3
		EPA 8270C by SIM	NAW	3
		EPA 5030B/8260	PRG	10
		SM 2540C	RAH	1
		EPA 300.0	OL	3
60153050008	GW-075035-091213-CM-MW-8	EPA 6010	JGP, NDJ	3
		EPA 8270C by SIM	NAW	3
				-



SAMPLE ANALYTE COUNT

 Project:
 075035 Martin 34 No. 2

 Pace Project No.:
 60153050

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 5030B/8260	PRG	10
		SM 2540C	RAH	1
		EPA 300.0	OL	3
60153050009	GW-075035-091213-CM-DUP	EPA 5030B/8260	PRG	8
60153050010	TB-075035-091213-CM-001	EPA 5030B/8260	PRG	8



Project: 075035 Martin 34 No. 2

Pace Project No.: 60153050

Method: EPA 6010

Description:6010 MET ICP, DissolvedClient:COP Conestoga-Rovers & Associates, Inc. NMDate:September 27, 2013

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.

Additional Comments:

Analyte Comments:

QC Batch: MPRP/24320

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- GW-075035-091213-CM-MW-3 (Lab ID: 60153050003)
- Iron, Dissolved
- GW-075035-091213-CM-MW-6 (Lab ID: 60153050006)
 - Iron, Dissolved
- GW-075035-091213-CM-MW-8 (Lab ID: 60153050008)
 - Iron, Dissolved



Project: 075035 Martin 34 No. 2

Pace Project No.: 60153050

Method: EPA 8270C by SIM

Description:8270 MSSV PAH by SIMClient:COP Conestoga-Rovers & Associates, Inc. NMDate:September 27, 2013

General Information:

8 samples were analyzed for EPA 8270C by SIM. 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 3510C 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: MSSV/12856

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

Additional Comments:

Analyte Comments:

QC Batch: OEXT/40543

1e: The internal standard response was outside the laboratory acceptance limits (no target analytes associated with this internal standard).

- GW-075035-091213-CM-MW-6 (Lab ID: 60153050006)
 - Naphthalene
- GW-075035-091213-CM-MW-7 (Lab ID: 60153050007)
 - Naphthalene



Project: 075035 Martin 34 No. 2

Pace Project No.: 60153050

Method: EPA 5030B/8260

Description:8260 MSVClient:COP Conestoga-Rovers & Associates, Inc. NMDate:September 27, 2013

General Information:

10 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-075035-091213-CM-MW-1 (Lab ID: 60153050001)

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/56316

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

Additional Comments:



Project: 075035 Martin 34 No. 2

Pace Project No.: 60153050

Method: SM 2540C

Description:2540C Total Dissolved SolidsClient:COP Conestoga-Rovers & Associates, Inc. NMDate:September 27, 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:



Project: 075035 Martin 34 No. 2

Pace Project No.: 60153050

Method: EPA 300.0

Description:300.0 IC Anions 28 DaysClient:COP Conestoga-Rovers & Associates, Inc. NMDate:September 27, 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.

QC Batch: WETA/26321

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60153050001

M3: Matrix spike recovery was outside laboratory control limits due to matrix interferences.

- MS (Lab ID: 1259733)
 - Fluoride
- MSD (Lab ID: 1259734)
 - Fluoride

Additional Comments:

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



Project: 075035 Martin 34 No. 2

Pace Project No.: 60153050

Sample: GW-075035-091213-CM- MW-1	Lab ID:	60153050001	Collected	d: 09/12/1	3 08:25	Received: 09/	13/13 08:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytica	I Method: EPA 6	010 Prepa	ration Meth	od: EPA	3010			
Boron, Dissolved	1.1 r	mg/L	0.50	0.25	5	09/18/13 11:30	09/19/13 12:44	7440-42-8	
Iron, Dissolved	0.46 r	ng/L	0.25	0.058	5	09/18/13 11:30	09/20/13 10:42	7439-89-6	
Manganese, Dissolved	0.95 r	ng/L	0.025	0.0024	5	09/18/13 11:30	09/19/13 12:44	7439-96-5	
8270 MSSV PAH by SIM	Analytica	I Method: EPA 8	270C by SI	M Prepara	tion Me	thod: EPA 3510C			
Naphthalene <i>Surrogates</i>	36.5 (ug/L	2.5	0.16	5	09/19/13 00:00	09/24/13 16:53	91-20-3	
2-Fluorobiphenyl (S)	52 9	%	36-120		1	09/19/13 00:00	09/20/13 19:20	321-60-8	
Terphenyl-d14 (S)	59 9	%	29-134		1	09/19/13 00:00	09/20/13 19:20	1718-51-0	
8260 MSV	Analytica	I Method: EPA 5	030B/8260						
Benzene	3470 ι	ug/L	100	6.0	100		09/17/13 04:28	71-43-2	
Ethylbenzene	428 ι	ug/L	100	18.0	100		09/17/13 04:28	100-41-4	
Methylene chloride	ND ι	ug/L	100	15.0	100		09/17/13 04:28	75-09-2	
1,1,2,2-Tetrachloroethane	ND u	ug/L	100	15.0	100		09/17/13 04:28	79-34-5	
Toluene	3020 ເ	ug/L	100	17.0	100		09/17/13 04:28	108-88-3	
Xylene (Total)	7900 u	ug/L	300	42.0	100		09/17/13 04:28	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101 9		80-120		100		09/17/13 04:28		
1,2-Dichloroethane-d4 (S)	109 9		80-120		100		09/17/13 04:28		
Toluene-d8 (S)	106 9	%	80-120		100		09/17/13 04:28	2037-26-5	
Preservation pH	6.0		0.10	0.10	100		09/17/13 04:28		рН
2540C Total Dissolved Solids	Analytica	I Method: SM 25	540C						
Total Dissolved Solids	31300 r	ng/L	5.0	5.0	1		09/18/13 15:48		
300.0 IC Anions 28 Days	Analytica	I Method: EPA 3	0.00						
Chloride	296 r	ng/L	50.0	25.0	50		09/26/13 11:18	16887-00-6	
Fluoride	ND r	ng/L	0.20	0.047	1		09/25/13 09:30	16984-48-8	M3
Sulfate	12100 r	ng/L	1000	160	1000		09/26/13 14:21	14808-79-8	



Project: 075035 Martin 34 No. 2

Pace Project No.: 60153050

Sample: GW-075035-091213-CM- MW-2	Lab ID:	60153050002	Collected	d: 09/12/1	3 12:30	Received: 09/	(13/13 08:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytica	l Method: EPA 6	010 Prepa	ration Meth	nod: EPA	3010			
Boron, Dissolved	0.85 r	mg/L	0.50	0.25	5	09/18/13 11:30	09/19/13 12:47	7440-42-8	
Iron, Dissolved	1.6 r	ng/L	0.25	0.058	5	09/18/13 11:30	09/20/13 10:45	7439-89-6	
Manganese, Dissolved	2.0 r	ng/L	0.025	0.0024	5	09/18/13 11:30	09/19/13 12:47	7439-96-5	
8270 MSSV PAH by SIM	Analytica	I Method: EPA 8	270C by SI	M Prepara	ation Me	thod: EPA 3510C			
Naphthalene Surrogates	0.97 (ug/L	0.50	0.031	1	09/19/13 00:00	09/20/13 19:39	91-20-3	
2-Fluorobiphenyl (S)	75 9	%	36-120		1	09/19/13 00:00	09/20/13 19:39	321-60-8	
Terphenyl-d14 (S)	80 9	%	29-134		1	09/19/13 00:00	09/20/13 19:39	1718-51-0	
8260 MSV	Analytica	l Method: EPA 5	030B/8260						
Benzene	107 נ	ug/L	5.0	0.30	5		09/17/13 04:41	71-43-2	
Ethylbenzene	318 ι	ug/L	5.0	0.90	5		09/17/13 04:41	100-41-4	
Methylene chloride	ND u	ug/L	5.0	0.75	5		09/17/13 04:41	75-09-2	
1,1,2,2-Tetrachloroethane	ND u	ug/L	5.0	0.75	5		09/17/13 04:41	79-34-5	
Toluene	ND u	ug/L	5.0	0.85	5		09/17/13 04:41	108-88-3	
Xylene (Total)	61.9 ι	ug/L	15.0	2.1	5		09/17/13 04:41	1330-20-7	
Surrogates	105				-				
4-Bromofluorobenzene (S)	105 9		80-120		5		09/17/13 04:41		
1,2-Dichloroethane-d4 (S)	103 9	-	80-120		5		09/17/13 04:41		
Toluene-d8 (S)	104 9	/o	80-120	0.40	5		09/17/13 04:41	2037-26-5	
Preservation pH	1.0		0.10	0.10	5		09/17/13 04:41		
2540C Total Dissolved Solids	Analytica	I Method: SM 25	40C						
Total Dissolved Solids	88400 r	ng/L	5.0	5.0	1		09/18/13 15:48		
300.0 IC Anions 28 Days	Analytica	I Method: EPA 3	00.0						
Chloride	450 r	ng/L	50.0	25.0	50		09/26/13 12:05	16887-00-6	
Fluoride	ND r	ng/L	0.20	0.047	1		09/25/13 11:02	16984-48-8	
Sulfate	18900 r	ng/L	1000	160	1000		09/26/13 15:10	14808-79-8	



Project: 075035 Martin 34 No. 2

Pace Project No.: 60153050

Sample: GW-075035-091213-CM- MW-3	Lab ID:	60153050003	Collected	d: 09/12/1	3 12:00	Received: 09/	13/13 08:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytica	l Method: EPA 6	010 Prepa	ration Meth	od: EPA	3010			
Boron, Dissolved	0.87 r	ng/L	0.50	0.25	5	09/18/13 11:30	09/19/13 12:49	7440-42-8	
Iron, Dissolved	ND r	ng/L	0.25	0.058	5	09/18/13 11:30	09/20/13 10:49	7439-89-6	D3
Manganese, Dissolved	3.9 r	ng/L	0.025	0.0024	5	09/18/13 11:30	09/19/13 12:49	7439-96-5	
8270 MSSV PAH by SIM	Analytica	I Method: EPA 8	270C by SI	M Prepara	tion Met	thod: EPA 3510C			
Naphthalene <i>Surrogates</i>	ND u	ug/L	0.50	0.031	1	09/19/13 00:00	09/20/13 19:57	91-20-3	
2-Fluorobiphenyl (S)	75 9	%	36-120		1	09/19/13 00:00	09/20/13 19:57	321-60-8	
Terphenyl-d14 (S)	68 9	%	29-134		1	09/19/13 00:00	09/20/13 19:57	1718-51-0	
8260 MSV	Analytica	I Method: EPA 5	030B/8260						
Benzene	ND u	ug/L	1.0	0.060	1		09/17/13 04:55	71-43-2	
Ethylbenzene	ND u	ug/L	1.0	0.18	1		09/17/13 04:55	100-41-4	
Methylene chloride	ND u	ug/L	1.0	0.15	1		09/17/13 04:55	75-09-2	
1,1,2,2-Tetrachloroethane	ND ι	ug/L	1.0	0.15	1		09/17/13 04:55	79-34-5	
Toluene	ND u	ug/L	1.0	0.17	1		09/17/13 04:55	108-88-3	
Xylene (Total)	ND u	ug/L	3.0	0.42	1		09/17/13 04:55	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103 9		80-120		1		09/17/13 04:55		
1,2-Dichloroethane-d4 (S)	109 9		80-120		1		09/17/13 04:55		
Toluene-d8 (S)	101 9	%	80-120		1		09/17/13 04:55	2037-26-5	
Preservation pH	1.0		0.10	0.10	1		09/17/13 04:55		
2540C Total Dissolved Solids	Analytica	I Method: SM 25	40C						
Total Dissolved Solids	80500 r	ng/L	5.0	5.0	1		09/18/13 15:48		
300.0 IC Anions 28 Days	Analytica	I Method: EPA 3	00.0						
Chloride	403 r	ng/L	50.0	25.0	50		09/26/13 12:20	16887-00-6	
Fluoride	ND r	ng/L	0.20	0.047	1		09/25/13 11:17	16984-48-8	
Sulfate	18700 r	ng/L	1000	160	1000		09/26/13 15:26	14808-79-8	



Project: 075035 Martin 34 No. 2

Pace Project No.: 60153050

Sample: GW-075035-091213-CM- MW-4	Lab ID:	60153050004	Collected	d: 09/12/1	3 11:55	Received: 09/	(13/13 08:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytica	l Method: EPA 6	010 Prepa	ration Meth	od: EPA	3010			
Boron, Dissolved	0.73 r	mg/L	0.50	0.25	5	09/18/13 11:30	09/19/13 12:51	7440-42-8	
Iron, Dissolved	0.51 r	mg/L	0.25	0.058	5	09/18/13 11:30	09/20/13 10:52	7439-89-6	
Manganese, Dissolved	2.9 r	mg/L	0.025	0.0024	5	09/18/13 11:30	09/19/13 12:51	7439-96-5	
8270 MSSV PAH by SIM	Analytica	I Method: EPA 8	270C by SI	M Prepara	tion Me	thod: EPA 3510C			
Naphthalene <i>Surrogates</i>	2.7 U	ug/L	0.50	0.031	1	09/19/13 00:00	09/20/13 20:15	91-20-3	
2-Fluorobiphenyl (S)	78 9	%	36-120		1	09/19/13 00:00	09/20/13 20:15	321-60-8	
Terphenyl-d14 (S)	79 9	%	29-134		1	09/19/13 00:00	09/20/13 20:15	1718-51-0	
8260 MSV	Analytica	I Method: EPA 5	030B/8260						
Benzene	1.0 ι	ug/L	1.0	0.060	1		09/17/13 05:08	71-43-2	
Ethylbenzene	ND ι	ug/L	1.0	0.18	1		09/17/13 05:08	100-41-4	
Methylene chloride	ND ι	ug/L	1.0	0.15	1		09/17/13 05:08	75-09-2	
1,1,2,2-Tetrachloroethane	ND u	ug/L	1.0	0.15	1		09/17/13 05:08	79-34-5	
Toluene	ND u	ug/L	1.0	0.17	1		09/17/13 05:08	108-88-3	
Xylene (Total)	ND u	ug/L	3.0	0.42	1		09/17/13 05:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103 9		80-120		1		09/17/13 05:08		
1,2-Dichloroethane-d4 (S)	108 9		80-120		1		09/17/13 05:08		
Toluene-d8 (S)	93 9	%	80-120		1		09/17/13 05:08	2037-26-5	
Preservation pH	1.0		0.10	0.10	1		09/17/13 05:08		
2540C Total Dissolved Solids	Analytica	I Method: SM 25	40C						
Total Dissolved Solids	90900 r	mg/L	5.0	5.0	1		09/18/13 15:48		
300.0 IC Anions 28 Days	Analytica	I Method: EPA 3	00.0						
Chloride	389 r	mg/L	50.0	25.0	50		09/26/13 12:35	16887-00-6	
Fluoride	ND r	mg/L	0.20	0.047	1		09/25/13 11:32	16984-48-8	
Sulfate	20800 r	mg/L	2000	320	2000		09/27/13 09:31	14808-79-8	



Project: 075035 Martin 34 No. 2

Pace Project No.: 60153050

Sample: GW-075035-091213-CM- MW-5	Lab ID:	60153050005	Collecte	d: 09/12/1	3 14:35	Received: 09/	13/13 08:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical	I Method: EPA 6	010 Prepa	ration Meth	od: EPA	3010			
Boron, Dissolved	1.4 r	ng/L	0.10	0.050	1	09/18/13 11:30	09/19/13 12:30	7440-42-8	
Iron, Dissolved	0.96 r	ng/L	0.25	0.058	5	09/18/13 11:30	09/20/13 11:02	7439-89-6	
Manganese, Dissolved	0.69 r	ng/L	0.0050	0.00049	1	09/18/13 11:30	09/19/13 12:30	7439-96-5	
8270 MSSV PAH by SIM	Analytical	I Method: EPA 8	270C by S	IM Prepara	tion Me	thod: EPA 3510C			
Naphthalene <i>Surrogates</i>	0.61 u	ug/L	0.50	0.031	1	09/19/13 00:00	09/20/13 20:34	91-20-3	
2-Fluorobiphenyl (S)	74 %	%	36-120		1	09/19/13 00:00	09/20/13 20:34	321-60-8	
Terphenyl-d14 (S)	68 %	%	29-134		1	09/19/13 00:00	09/20/13 20:34	1718-51-0	
8260 MSV	Analytical	I Method: EPA 5	030B/8260	I					
Benzene	175 ι	ug/L	5.0	0.30	5		09/17/13 05:22	71-43-2	
Ethylbenzene	10.3 ι	ug/L	5.0	0.90	5		09/17/13 05:22	100-41-4	
Methylene chloride	ND ι	ug/L	5.0	0.75	5		09/17/13 05:22	75-09-2	
1,1,2,2-Tetrachloroethane	ND ι	ug/L	5.0	0.75	5		09/17/13 05:22	79-34-5	
Toluene	ND ι	ug/L	5.0	0.85	5		09/17/13 05:22	108-88-3	
Xylene (Total)	ND ι	ug/L	15.0	2.1	5		09/17/13 05:22	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104 9		80-120		5		09/17/13 05:22	460-00-4	
1,2-Dichloroethane-d4 (S)	101 9	%	80-120		5		09/17/13 05:22	17060-07-0	
Toluene-d8 (S)	104 9	%	80-120		5		09/17/13 05:22	2037-26-5	
Preservation pH	1.0		0.10	0.10	5		09/17/13 05:22		
2540C Total Dissolved Solids	Analytical	I Method: SM 25	40C						
Total Dissolved Solids	15100 r	ng/L	5.0	5.0	1		09/18/13 15:48		
300.0 IC Anions 28 Days	Analytical	I Method: EPA 3	00.0						
Chloride	228 r		50.0	25.0	50		09/26/13 12:50	16887-00-6	
Fluoride	ND r	ng/L	0.20	0.047	1		09/25/13 11:47	16984-48-8	
Sulfate	5400 r	ng/L	1000	160	1000		09/26/13 16:55	14808-79-8	



Project: 075035 Martin 34 No. 2

Pace Project No.: 60153050

Sample: GW-075035-091213-CM- MW-6	Lab ID:	60153050006	Collected	d: 09/12/1	3 11:05	Received: 09/	(13/13 08:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytica	l Method: EPA 6	010 Prepa	ration Meth	od: EPA	3010			
Boron, Dissolved	0.63 r	mg/L	0.50	0.25	5	09/18/13 11:30	09/19/13 12:54	7440-42-8	
Iron, Dissolved	ND r	mg/L	0.25	0.058	5	09/18/13 11:30	09/20/13 11:05	7439-89-6	D3
Manganese, Dissolved	2.0 r	mg/L	0.025	0.0024	5	09/18/13 11:30	09/19/13 12:54	7439-96-5	
8270 MSSV PAH by SIM	Analytica	I Method: EPA 8	270C by SI	M Prepara	tion Me	thod: EPA 3510C			
Naphthalene Surrogates	25.0 (ug/L	2.5	0.16	5	09/19/13 00:00	09/24/13 17:11	91-20-3	1e
2-Fluorobiphenyl (S)	70 9	%	36-120		1	09/19/13 00:00	09/20/13 20:53	321-60-8	
Terphenyl-d14 (S)	82 9	%	29-134		1	09/19/13 00:00	09/20/13 20:53	1718-51-0	
8260 MSV	Analytica	I Method: EPA 5	030B/8260						
Benzene	12.0 ເ	ug/L	10.0	0.60	10		09/17/13 05:36	71-43-2	
Ethylbenzene	125 u	ug/L	10.0	1.8	10		09/17/13 05:36	100-41-4	
Methylene chloride	ND u	ug/L	10.0	1.5	10		09/17/13 05:36	75-09-2	
1,1,2,2-Tetrachloroethane	ND u	ug/L	10.0	1.5	10		09/17/13 05:36	79-34-5	
Toluene	ND u	ug/L	10.0	1.7	10		09/17/13 05:36	108-88-3	
Xylene (Total)	1790 ເ	ug/L	30.0	4.2	10		09/17/13 05:36	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101 9		80-120		10		09/17/13 05:36		
1,2-Dichloroethane-d4 (S)	101 9		80-120		10		09/17/13 05:36		
Toluene-d8 (S)	104 9	%	80-120		10		09/17/13 05:36	2037-26-5	
Preservation pH	1.0		0.10	0.10	10		09/17/13 05:36		
2540C Total Dissolved Solids	Analytica	I Method: SM 25	40C						
Total Dissolved Solids	85400 r	mg/L	5.0	5.0	1		09/18/13 15:49		
300.0 IC Anions 28 Days	Analytica	I Method: EPA 3	00.0						
Chloride	492 r	mg/L	50.0	25.0	50		09/26/13 13:05	16887-00-6	
Fluoride	ND r	mg/L	0.20	0.047	1		09/25/13 12:03	16984-48-8	
Sulfate	19600 r	mg/L	2000	320	2000		09/27/13 09:46	14808-79-8	



Project: 075035 Martin 34 No. 2

Pace Project No.: 60153050

Sample: GW-075035-091213-CM- MW-7	Lab ID:	60153050007	Collecte	d: 09/12/1	3 10:45	Received: 09/	13/13 08:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical	Method: EPA 6	010 Prepa	ration Meth	od: EPA	3010			
Boron, Dissolved	0.80 n	ng/L	0.50	0.25	5	09/18/13 11:30	09/19/13 12:56	7440-42-8	
Iron, Dissolved	2.6 n	ng/L	0.25	0.058	5	09/18/13 11:30	09/20/13 11:08	7439-89-6	
Manganese, Dissolved	3.2 n	ng/L	0.025	0.0024	5	09/18/13 11:30	09/19/13 12:56	7439-96-5	
8270 MSSV PAH by SIM	Analytical	Method: EPA 8	270C by SI	M Prepara	tion Me	thod: EPA 3510C			
Naphthalene Surrogates	ND u	ıg/L	0.50	0.031	1	09/19/13 00:00	09/20/13 21:11	91-20-3	1e
2-Fluorobiphenyl (S)	64 %	6	36-120		1	09/19/13 00:00	09/20/13 21:11	321-60-8	
Terphenyl-d14 (S)	55 %	6	29-134		1	09/19/13 00:00	09/20/13 21:11	1718-51-0	
8260 MSV	Analytical	Method: EPA 5	030B/8260						
Benzene	8.1 u	ıg/L	5.0	0.30	5		09/17/13 05:50	71-43-2	
Ethylbenzene	468 u	ıg/L	5.0	0.90	5		09/17/13 05:50	100-41-4	
Methylene chloride	ND u	ıg/L	5.0	0.75	5		09/17/13 05:50	75-09-2	
1,1,2,2-Tetrachloroethane	ND u	ıg/L	5.0	0.75	5		09/17/13 05:50	79-34-5	
Toluene	ND u	ıg/L	5.0	0.85	5		09/17/13 05:50	108-88-3	
Xylene (Total) <i>Surrogates</i>	ND u	ıg/L	15.0	2.1	5		09/17/13 05:50	1330-20-7	
4-Bromofluorobenzene (S)	101 %	6	80-120		5		09/17/13 05:50	460-00-4	
1,2-Dichloroethane-d4 (S)	103 %	6	80-120		5		09/17/13 05:50	17060-07-0	
Toluene-d8 (S)	99 %	6	80-120		5		09/17/13 05:50	2037-26-5	
Preservation pH	1.0		0.10	0.10	5		09/17/13 05:50		
2540C Total Dissolved Solids	Analytical	Method: SM 25	40C						
Total Dissolved Solids	91600 n	ng/L	5.0	5.0	1		09/18/13 15:49		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	00.0						
Chloride	363 n	ng/L	50.0	25.0	50		09/26/13 13:21	16887-00-6	
Fluoride	ND n	ng/L	0.20	0.047	1		09/25/13 12:18	16984-48-8	
Sulfate	19300 n	ng/L	2000	320	2000		09/27/13 10:01	14808-79-8	



Project: 075035 Martin 34 No. 2

Pace Project No.: 60153050

Sample: GW-075035-091213-CM- MW-8	Lab ID:	60153050008	Collected	d: 09/12/1	3 15:00	Received: 09/	13/13 08:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytica	l Method: EPA 6	010 Prepar	ation Meth	od: EPA	3010			
Boron, Dissolved	0.87 r	ng/L	0.50	0.25	5	09/18/13 11:30	09/19/13 12:58	7440-42-8	
Iron, Dissolved	ND r	ng/L	0.25	0.058	5	09/18/13 11:30	09/20/13 11:12	7439-89-6	D3
Manganese, Dissolved	4.6 r	ng/L	0.025	0.0024	5	09/18/13 11:30	09/19/13 12:58	7439-96-5	
8270 MSSV PAH by SIM	Analytica	I Method: EPA 8	270C by SII	M Prepara	tion Met	thod: EPA 3510C			
Naphthalene Surrogates	ND (ug/L	0.50	0.031	1	09/19/13 00:00	09/20/13 21:29	91-20-3	
2-Fluorobiphenyl (S)	74 9	%	36-120		1	09/19/13 00:00	09/20/13 21:29	321-60-8	
Terphenyl-d14 (S)	71 9	%	29-134		1	09/19/13 00:00	09/20/13 21:29	1718-51-0	
8260 MSV	Analytica	I Method: EPA 5	030B/8260						
Benzene	ND u	ug/L	1.0	0.060	1		09/17/13 06:03	71-43-2	
Ethylbenzene	ND u	ug/L	1.0	0.18	1		09/17/13 06:03	100-41-4	
Methylene chloride	ND u	ug/L	1.0	0.15	1		09/17/13 06:03	75-09-2	
1,1,2,2-Tetrachloroethane	ND u	ug/L	1.0	0.15	1		09/17/13 06:03	79-34-5	
Toluene	ND u	ug/L	1.0	0.17	1		09/17/13 06:03	108-88-3	
Xylene (Total)	ND u	ug/L	3.0	0.42	1		09/17/13 06:03	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100 9		80-120		1		09/17/13 06:03		
1,2-Dichloroethane-d4 (S)	105 9	-	80-120		1		09/17/13 06:03		
Toluene-d8 (S)	102 9	%	80-120		1		09/17/13 06:03	2037-26-5	
Preservation pH	1.0		0.10	0.10	1		09/17/13 06:03		
2540C Total Dissolved Solids	Analytica	I Method: SM 25	40C						
Total Dissolved Solids	26700 r	ng/L	5.0	5.0	1		09/18/13 15:49		
300.0 IC Anions 28 Days	Analytica	I Method: EPA 3	00.0						
Chloride	309 r	ng/L	50.0	25.0	50		09/26/13 14:06	16887-00-6	
Fluoride	ND r	ng/L	0.20	0.047	1		09/25/13 12:33	16984-48-8	
Sulfate	10800 r	ng/L	1000	160	1000		09/26/13 18:11	14808-79-8	



Project: 075035 Martin 34 No. 2

Pace Project No.: 60153050

Sample: GW-075035-091213-CM- DUP	Lab ID:	60153050009	Collecte	d: 09/12/13	8 11:10	Received: 09	9/13/13 08:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical	l Method: EPA 5	030B/8260						
Benzene	11.4 u	ug/L	10.0	0.60	10		09/17/13 06:17	71-43-2	
Ethylbenzene	133 ι	ug/L	10.0	1.8	10		09/17/13 06:17	100-41-4	
Toluene	ND u	ug/L	10.0	1.7	10		09/17/13 06:17	108-88-3	
Xylene (Total)	1890 ເ	ug/L	30.0	4.2	10		09/17/13 06:17	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102 %	%	80-120		10		09/17/13 06:17	460-00-4	
1,2-Dichloroethane-d4 (S)	105 %	%	80-120		10		09/17/13 06:17	17060-07-0	
Toluene-d8 (S)	105 %	%	80-120		10		09/17/13 06:17	2037-26-5	
Preservation pH	1.0		0.10	0.10	10		09/17/13 06:17		



Project: 075035 Martin 34 No. 2

Pace Project No.: 60153050

Sample: TB-075035-091213-CM-001	Lab ID:	60153050010	Collected	: 09/12/13	8 12:30	Received: 09	/13/13 08:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical	Method: EPA 5	030B/8260						
Benzene	ND ι	ıg/L	1.0	0.060	1		09/17/13 02:52	71-43-2	
Ethylbenzene	NDι	ıg/L	1.0	0.18	1		09/17/13 02:52	100-41-4	
Toluene	NDι	ıg/L	1.0	0.17	1		09/17/13 02:52	108-88-3	
Xylene (Total)	NDι	ıg/L	3.0	0.42	1		09/17/13 02:52	1330-20-7	
Surrogates		-							
4-Bromofluorobenzene (S)	103 %	%	80-120		1		09/17/13 02:52	460-00-4	
1,2-Dichloroethane-d4 (S)	102 %	%	80-120		1		09/17/13 02:52	17060-07-0	
Toluene-d8 (S)	92 %	%	80-120		1		09/17/13 02:52	2037-26-5	
Preservation pH	1.0		0.10	0.10	1		09/17/13 02:52		



- ,	075035 601530	5 Martin 34 No. 2 050											
QC Batch:	MPR	P/24320		Analys	is Method:	EI	PA 6010						
QC Batch Method:	EPA 3	3010		Analys	is Descripti	on: 60	010 MET Di	ssolved					
Associated Lab Samp	oles:	60153050001, 60 60153050008	0153050002	, 60153050	003, 60153	050004, 6	0153050005	5, 60153050	0006, 6015	53050007,			
METHOD BLANK: 1	125529	99		N	Aatrix: Wat	er							
Associated Lab Samp	oles:	60153050001, 60 60153050008	0153050002	, 60153050	003, 60153	050004, 6	0153050005	5, 60153050	0006, 6015	53050007,			
Parame	eter		Units	Blank Resul [:]		eporting Limit	Analyz	ed	Qualifiers				
Boron, Dissolved		mg/L		·		0.10	09/19/13	 11·46					
Iron, Dissolved		mg/L			ND	0.050		-					
Manganese, Dissolve	d	mg/L			ND	0.0050	09/19/13	11:46					
LABORATORY CONT	FROL S	SAMPLE: 12553	300										
				Spike	LCS		LCS	% Rec					
Parame	eter		Units	Conc.	Resul	t	% Rec	Limits	Q	ualifiers			
Boron, Dissolved		mg/L		1		0.94	94	80.	120		-		
Iron, Dissolved		mg/L		10		10.4	104	80-	120				
Manganese, Dissolve	d	mg/L		1		1.0	102	80-	120				
MATRIX SPIKE & MA		SPIKE DUPLICAT	E: 12553	01		1255302							
				MS	MSD								
		601	52803001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	r	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Boron, Dissolved		mg/L	ND	1	1	1.0	1.0	97	97	75-125	0	20	
Iron, Dissolved		mg/L	ND	10	10	10.2	10.2	102	102	75-125	0	20	
Manganese, Dissolve	d	mg/L	164	1	1	1.2	1.2	99	99	75-125	0	20	

ug/L



Project: 075035 Martin 34 No. 2 Pace Project No.: 60153050 QC Batch: MSV/56316 Analysis Method: EPA 5030B/8260 QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge 60153050001, 60153050002, 60153050003, 60153050004, 60153050005, 60153050006, 60153050007, Associated Lab Samples: 60153050008, 60153050009, 60153050010 METHOD BLANK: 1254091 Matrix: Water 60153050001, 60153050002, 60153050003, 60153050004, 60153050005, 60153050006, 60153050007, Associated Lab Samples: 60153050008, 60153050009, 60153050010 Blank Reporting Units Limit Qualifiers Parameter Result Analyzed 1,1,2,2-Tetrachloroethane ug/L ND 1.0 09/17/13 02:38 ND 09/17/13 02:38 Benzene ug/L 1.0 Ethylbenzene ND 1.0 09/17/13 02:38 ug/L Methylene chloride ND 1.0 09/17/13 02:38 ug/L Toluene ug/L ND 1.0 09/17/13 02:38 ND Xylene (Total) ug/L 3.0 09/17/13 02:38 1,2-Dichloroethane-d4 (S) % 98 80-120 09/17/13 02:38 4-Bromofluorobenzene (S) % 101 80-120 09/17/13 02:38 Toluene-d8 (S) % 105 80-120 09/17/13 02:38 LABORATORY CONTROL SAMPLE: 1254092

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Q 1,1,2,2-Tetrachloroethane ug/L 20 20.5 103 73-120 Benzene ug/L 20 19.3 97 73-122 Ethylbenzene ug/L 20 20.9 104 76-123 Methylene chloride ug/L 20 20.9 104 76-123 Toluene ug/L 20 20.9 104 76-122 Xylene (Total) ug/L 60 62.0 103 76-122 1,2-Dichloroethane-d4 (S) % 97 80-120		
1,1,2,2-Tetrachloroethaneug/L2020.510373-120Benzeneug/L2019.39773-122Ethylbenzeneug/L2020.910476-123Methylene chlorideug/L2017.48771-123Tolueneug/L2020.910476-122Xylene (Total)ug/L6062.010376-122	Parameter	Qualifiers
Benzeneug/L2019.39773-122Ethylbenzeneug/L2020.910476-123Methylene chlorideug/L2017.48771-123Tolueneug/L2020.910476-122Xylene (Total)ug/L6062.010376-122	Falameter	Qualifiers
Ethylbenzeneug/L2020.910476-123Methylene chlorideug/L2017.48771-123Tolueneug/L2020.910476-122Xylene (Total)ug/L6062.010376-122	,2,2-Tetrachloroethane	
Methylene chloride ug/L 20 17.4 87 71-123 Toluene ug/L 20 20.9 104 76-122 Xylene (Total) ug/L 60 62.0 103 76-122	nzene	
Toluene ug/L 20 20.9 104 76-122 Xylene (Total) ug/L 60 62.0 103 76-122	iylbenzene	
Xylene (Total) ug/L 60 62.0 103 76-122	thylene chloride	
)	uene	
1,2-Dichloroethane-d4 (S) % 97 80-120	ene (Total)	
	-Dichloroethane-d4 (S)	
4-Bromofluorobenzene (S) % 107 80-120	3romofluorobenzene (S)	
Toluene-d8 (S) % 105 80-120	uene-d8 (S)	



Project: Pace Project No.:	075035 601530	Martin 34 50	No. 2							
QC Batch:	OEXT	/40543		Analy	sis Method:	El	PA 8270C by	SIM		
QC Batch Method:	EPA 3	510C		Analy	sis Descriptio	on: 82	270 Water PA	H by SIM MSS	V	
Associated Lab San	nples:	60153050 60153050		50002, 60153050	0003, 601530)50004, 60	0153050005,	60153050006,	60153050007,	
METHOD BLANK:	125590	6			Matrix: Wate	r				
Associated Lab San	mples:	60153050 60153050		50002, 60153050	0003, 601530)50004, 60	0153050005,	60153050006,	60153050007,	
				Blan	k Re	porting				
Paran	neter		Units	Resu	ult L	imit	Analyze	d Quali	fiers	
Naphthalene			ug/L		ND	0.50	09/20/13 1	7:10		
2-Fluorobiphenyl (S	5)		%		85	36-120	09/20/13 1	7:10		
Terphenyl-d14 (S)			%		83	29-134	09/20/13 1	7:10		
LABORATORY CON	NTROLS	SAMPLE:	1255907							
				Spike	LCS		LCS	% Rec		
Paran	neter		Units	Conc.	Result		% Rec	Limits	Qualifiers	
Naphthalene			ug/L	1(0	8.1	81	44-120		
							82	36-120		
2-Fluorobiphenyl (S	5)		%				02	00 120		



07503	5 Martin 34 I	No. 2						
60153	050							
WET	/43476		Analysis Me	ethod:	SM 2540C			
SM 2	540C		Analysis De	scription: 2	2540C Total Di	ssolved Solids		
mples:			2, 60153050003,	60153050004,	60153050005,	60153050006,	60153050007,	
12555	01		Matrix	: Water				
mples:			2, 60153050003,	60153050004,	60153050005,	60153050006,	60153050007,	
			Blank	Reporting				
neter		Units	Result	Limit	Analyze	d Quali	fiers	
ids		mg/L	ND	5.	09/18/13 1	5:47		
NTROL	SAMPLE:	1255502						
			Spike	LCS	LCS	% Rec		
neter		Units	Conc.				Qualifiara	
		Units	Conc.	Result	% Rec	Limits	Quaimers	
ids		mg/L	1000	952	95 %	Limits 80-120		
ids	255503						Quaimers	
ids							Quaimers	
ids			1000	952		80-120	Qualifiers	
ids .TE: 12	255503	mg/L	60152910002	952 Dup Result	95 RPD	80-120 Max		
ids TE: 12 meter	255503	mg/L Units	1000 60152910002 Result	952 Dup Result	95 RPD	80-120 Max RPD	Qualifiers	
ids TE: 12 meter ids	255503	mg/L Units	1000 60152910002 Result	952 Dup Result	95 RPD	80-120 Max RPD	Qualifiers	
ids TE: 12 meter ids	255503	mg/L Units	1000 60152910002 Result	952 Dup Result	95 RPD	80-120 Max RPD	Qualifiers	
ids TE: 12 meter ids	255503	mg/L Units	60152910002 Result 375	952 Dup Result 39	95 RPD	80-120 Max RPD 4	Qualifiers	
r	601530 WET, SM 2 mples: 125550 mples: ids	60153050 WET/43476 SM 2540C mples: 601530500 601530500 1255501 mples: 601530500 601530500 meter ids	WET/43476 SM 2540C mples: 60153050001, 6015305000 60153050008 1255501 mples: 60153050001, 6015305000 60153050008 meter Units ids mg/L NTROL SAMPLE: 1255502	60153050 WET/43476 Analysis Me SM 2540C Analysis De mples: 60153050001, 60153050002, 60153050003, 60153050008 1255501 Matrix mples: 60153050001, 60153050002, 60153050003, 60153050003, 60153050003, 60153050008 meter Units ids mg/L ND NTROL SAMPLE: 1255502	60153050 WET/43476 Analysis Method: S SM 2540C Analysis Description: 2 mples: 60153050001, 60153050002, 60153050003, 60153050004, 6 60153050004, 6 1255501 Matrix: Water mples: 60153050001, 60153050002, 60153050003, 60153050004, 6 60153050008 Blank meter Units Matrix Limit ids mg/L ND NTROL SAMPLE: 1255502 Spike LCS	60153050 WET/43476 Analysis Method: SM 2540C SM 2540C Analysis Description: 2540C Total Dis mples: 60153050001, 60153050002, 60153050003, 60153050004, 60153050005, 60153050008 60153050004, 60153050005, 60153050004, 60153050005, 60153050008, 60153050003, 60153050004, 60153050005, 60153050008 meter Units Blank Reporting meter Units Result Limit Analyzee ids mg/L ND 5.0 09/18/13 15 NTROL SAMPLE: 1255502 Spike LCS LCS	60153050 WET/43476 Analysis Method: SM 2540C SM 2540C Analysis Description: 2540C Total Dissolved Solids mples: 60153050001, 60153050002, 60153050003, 60153050004, 60153050005, 60153050006, 60153050008 1255501 Matrix: Water mples: 60153050001, 60153050002, 60153050003, 60153050004, 60153050005, 60153050006, 60153050008 meter Units Blank Reporting meter Units MZ ND 5.0 09/18/13 15:47	60153050 WET/43476 Analysis Method: SM 2540C SM 2540C Analysis Description: 2540C Total Dissolved Solids mples: 60153050001, 60153050002, 60153050003, 60153050004, 60153050005, 60153050006, 60153050007, 60153050008 1255501 Matrix: Water mples: 60153050001, 60153050002, 60153050003, 60153050004, 60153050005, 60153050006, 60153050007, 60153050008 meter Units Blank Reporting meter Units Result Limit Analyzed Qualifiers ids mg/L ND 5.0 09/18/13 15:47 NTROL SAMPLE: 1255502 Spike LCS LCS % Rec



Pace Project No.: 60153050							
QC Batch: WETA/26321		Analysis	Method:	EPA	A 300.0		
QC Batch Method: EPA 300.0		-	Description:		0.0 IC Anions	6	
Associated Lab Samples: 601530 601530	50001, 6015305000 50008	2, 6015305000	3, 6015305000	4, 601	153050005,	60153050006,	60153050007,
METHOD BLANK: 1259731		Ma	trix: Water				
Associated Lab Samples: 601530 601530	50001, 6015305000 50008	2, 6015305000	3, 6015305000	4, 601	153050005,	60153050006,	60153050007,
-		Blank	Reportin	g			
Parameter	Units	Result	Limit		Analyze		iers
Fluoride	mg/L	1	ND (0.20	09/25/13 09	9:00	
METHOD BLANK: 1261363		Ma	trix: Water				
Associated Lab Samples: 601530 601530	50001, 6015305000 50008	2, 6015305000	3, 6015305000	4, 601	153050005,	60153050006,	60153050007,
_		Blank	Reportin	g			
Parameter	Units	Result	Limit		Analyze		iers
Chloride	mg/L		ND		09/26/13 10		
Sulfate	mg/L	ſ	ND	1.0	09/26/13 10):17	
METHOD BLANK: 1261462		Ma	trix: Water				
	50004, 6015305000 Units	6, 6015305000 Blank	7 Reportin	g	Analyze	d Qualit	ïers
Associated Lab Samples: 601530	Units	6, 6015305000 Blank Result	7 Reportin Limit		Analyze		ïers
Associated Lab Samples: 601530		6, 6015305000 Blank Result	7 Reportin		Analyzeo 09/27/13 09		ïiers
Associated Lab Samples: 601530 Parameter Sulfate	Units mg/L	6, 6015305000 Blank Result	7 Reportin Limit				ïers
Associated Lab Samples: 601530 Parameter Sulfate LABORATORY CONTROL SAMPLE	Units mg/L : 1259732	6, 6015305000 Blank Result r	7 Reportin Limit	1.0 L	09/27/13 09	9:00 % Rec	
Associated Lab Samples: 601530 Parameter Sulfate	Units mg/L	6, 6015305000 Blank 	7 Reportin Limit	1.0 L	09/27/13 09	9:00	iers
Associated Lab Samples: 601530 Parameter Sulfate LABORATORY CONTROL SAMPLE Parameter	Units mg/L : 1259732	6, 6015305000 Blank Result r	7 Reportin Limit	1.0 L	09/27/13 09	9:00 % Rec	
Associated Lab Samples: 601530 Parameter Sulfate LABORATORY CONTROL SAMPLE Parameter Fluoride	Units mg/L 1259732 Units mg/L	6, 6015305000 Blank Result N Spike Conc.	7 Reportin Limit	1.0 L	09/27/13 09	9:00 % Rec Limits	
Associated Lab Samples: 601530 Parameter Sulfate LABORATORY CONTROL SAMPLE Parameter Fluoride	Units mg/L 1259732 Units mg/L 1261364	6, 6015305000 Blank Result M Spike 2.5 Spike	7 Reportin Limit ND LCS Result 2.4	L	09/27/13 09	9:00 % Rec Limits 90-110 % Rec	Qualifiers
Associated Lab Samples: 601530 Parameter Sulfate LABORATORY CONTROL SAMPLE: Parameter Fluoride LABORATORY CONTROL SAMPLE: Parameter Parameter	Units mg/L 1259732 Units mg/L 1261364 Units Units	6, 6015305000 Blank Result Spike Conc. 2.5 Spike Conc.	7 Reportin Limit ND LCS Result 2.4	L	09/27/13 09	% Rec Limits 90-110 % Rec Limits	
Associated Lab Samples: 601530 Parameter Sulfate LABORATORY CONTROL SAMPLE: Parameter Fluoride LABORATORY CONTROL SAMPLE: Parameter Chloride	Units mg/L 1259732 Units mg/L 1261364 Units mg/L	6, 6015305000 Blank Result Spike Conc. 2.5 Spike Conc. 5	7 Reportin Limit ND LCS Result 2.4 LCS Result 4.8	L	09/27/13 09 LCS 6 Rec 97 LCS 6 Rec 96	9:00 % Rec Limits 90-110 % Rec Limits 90-110	Qualifiers
Associated Lab Samples: 601530 Parameter Sulfate LABORATORY CONTROL SAMPLE: Parameter Fluoride LABORATORY CONTROL SAMPLE: Parameter Chloride	Units mg/L 1259732 Units mg/L 1261364 Units Units	6, 6015305000 Blank Result Spike Conc. 2.5 Spike Conc.	7 Reportin Limit ND LCS Result 2.4	L	09/27/13 09	% Rec Limits 90-110 % Rec Limits	Qualifiers
Associated Lab Samples: 601530 Parameter Sulfate LABORATORY CONTROL SAMPLE: Parameter Fluoride LABORATORY CONTROL SAMPLE: Parameter Chloride Sulfate	Units mg/L 1259732 Units mg/L 1261364 Units mg/L mg/L	6, 6015305000 Blank Result Spike Conc. 2.5 Spike Conc. 5	7 Reportin Limit ND LCS Result 2.4 LCS Result 4.8	L	09/27/13 09 LCS 6 Rec 97 LCS 6 Rec 96	9:00 % Rec Limits 90-110 % Rec Limits 90-110	Qualifiers
Associated Lab Samples: 6015303 Parameter Sulfate LABORATORY CONTROL SAMPLES Parameter Fluoride LABORATORY CONTROL SAMPLES Parameter Chloride Sulfate	Units mg/L 1259732 Units mg/L 1261364 Units mg/L mg/L 1261463	6, 6015305000 Blank Result Spike Conc. 2.5 Spike Conc. 5 5 5	7 Reportin Limit ND LCS Result 4.8 4.9 LCS LCS	L 1.0 L %	09/27/13 09 LCS 6 Rec 97 	9:00 % Rec Limits 90-110 % Rec Limits 90-110 90-110 % Rec	Qualifiers
Associated Lab Samples: 601530 Parameter Sulfate LABORATORY CONTROL SAMPLE: Parameter Fluoride LABORATORY CONTROL SAMPLE: Parameter Chloride Sulfate	Units mg/L 1259732 Units mg/L 1261364 Units mg/L mg/L	6, 6015305000 Blank Result Spike Conc. 2.5 Spike Conc. 5 5	7 Reportin Limit ND LCS Result 2.4 LCS Result 4.8 4.9	L 1.0 L %	09/27/13 09 LCS 6 Rec 97 	9:00 % Rec Limits 90-110 % Rec Limits 90-110 90-110	Qualifiers



 Project:
 075035 Martin 34 No. 2

 Pace Project No.:
 60153050

MATRIX SPIKE & MATRIX S	PIKE DUPLICAT	E: 12597	33		1259734							
	601	153050001	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	296	250	250	584	504	115	83	80-120	15	15	
Fluoride	mg/L	ND	2.5	2.5	ND	ND	0	0	80-120		15	M3
Sulfate	mg/L	12100	5000	5000	17500	18000	109	119	80-120	3	15	



QUALIFIERS

Project: 075035 Martin 34 No. 2

Pace Project No.: 60153050

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/56316

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

Batch: OEXT/40543

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

ANALYTE QUALIFIERS

- 1e The internal standard response was outside the laboratory acceptance limits (no target analytes associated with this internal standard).
- D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
- M3 Matrix spike recovery was outside laboratory control limits due to matrix interferences.
- pH Post-analysis pH measurement indicates insufficient VOA sample preservation.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

 Project:
 075035 Martin 34 No. 2

 Pace Project No.:
 60153050

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60153050001	GW-075035-091213-CM-MW-1	EPA 3010	MPRP/24320	EPA 6010	ICP/18973
60153050002	GW-075035-091213-CM-MW-2	EPA 3010	MPRP/24320	EPA 6010	ICP/18973
60153050003	GW-075035-091213-CM-MW-3	EPA 3010	MPRP/24320	EPA 6010	ICP/18973
60153050004	GW-075035-091213-CM-MW-4	EPA 3010	MPRP/24320	EPA 6010	ICP/18973
60153050005	GW-075035-091213-CM-MW-5	EPA 3010	MPRP/24320	EPA 6010	ICP/18973
60153050006	GW-075035-091213-CM-MW-6	EPA 3010	MPRP/24320	EPA 6010	ICP/18973
60153050007	GW-075035-091213-CM-MW-7	EPA 3010	MPRP/24320	EPA 6010	ICP/18973
60153050008	GW-075035-091213-CM-MW-8	EPA 3010	MPRP/24320	EPA 6010	ICP/18973
60153050001	GW-075035-091213-CM-MW-1	EPA 3510C	OEXT/40543	EPA 8270C by SIM	MSSV/12856
60153050002	GW-075035-091213-CM-MW-2	EPA 3510C	OEXT/40543	EPA 8270C by SIM	MSSV/12856
60153050003	GW-075035-091213-CM-MW-3	EPA 3510C	OEXT/40543	EPA 8270C by SIM	MSSV/12856
60153050004	GW-075035-091213-CM-MW-4	EPA 3510C	OEXT/40543	EPA 8270C by SIM	MSSV/12856
60153050005	GW-075035-091213-CM-MW-5	EPA 3510C		EPA 8270C by SIM	MSSV/12856
60153050006	GW-075035-091213-CM-MW-6	EPA 3510C	OEXT/40543	EPA 8270C by SIM	MSSV/12856
60153050007	GW-075035-091213-CM-MW-7	EPA 3510C	OEXT/40543	EPA 8270C by SIM	MSSV/12856
60153050008	GW-075035-091213-CM-MW-8	EPA 3510C		EPA 8270C by SIM	MSSV/12856
60153050001	GW-075035-091213-CM-MW-1	EPA 5030B/8260	MSV/56316		
60153050002	GW-075035-091213-CM-MW-2	EPA 5030B/8260	MSV/56316		
60153050003	GW-075035-091213-CM-MW-3	EPA 5030B/8260	MSV/56316		
60153050004	GW-075035-091213-CM-MW-4	EPA 5030B/8260	MSV/56316		
60153050005	GW-075035-091213-CM-MW-5	EPA 5030B/8260	MSV/56316		
60153050006	GW-075035-091213-CM-MW-6	EPA 5030B/8260	MSV/56316		
60153050007	GW-075035-091213-CM-MW-7	EPA 5030B/8260	MSV/56316		
60153050008	GW-075035-091213-CM-MW-8	EPA 5030B/8260	MSV/56316		
60153050009	GW-075035-091213-CM-DUP	EPA 5030B/8260	MSV/56316		
60153050010	TB-075035-091213-CM-001	EPA 5030B/8260	MSV/56316		
60153050001	GW-075035-091213-CM-MW-1	SM 2540C	WET/43476		
60153050002	GW-075035-091213-CM-MW-2	SM 2540C	WET/43476		
60153050003	GW-075035-091213-CM-MW-3	SM 2540C	WET/43476		
60153050004	GW-075035-091213-CM-MW-4	SM 2540C	WET/43476		
60153050005	GW-075035-091213-CM-MW-5	SM 2540C	WET/43476		
60153050006	GW-075035-091213-CM-MW-6	SM 2540C	WET/43476		
60153050007	GW-075035-091213-CM-MW-7	SM 2540C	WET/43476		
60153050008	GW-075035-091213-CM-MW-8	SM 2540C	WET/43476		
60153050001	GW-075035-091213-CM-MW-1	EPA 300.0	WETA/26321		
60153050002	GW-075035-091213-CM-MW-2	EPA 300.0	WETA/26321		
60153050003	GW-075035-091213-CM-MW-3	EPA 300.0	WETA/26321		
60153050004	GW-075035-091213-CM-MW-4	EPA 300.0	WETA/26321		
60153050005	GW-075035-091213-CM-MW-5	EPA 300.0	WETA/26321		
60153050006	GW-075035-091213-CM-MW-6	EPA 300.0	WETA/26321		
60153050007	GW-075035-091213-CM-MW-7	EPA 300.0	WETA/26321		
60153050008	GW-075035-091213-CM-MW-8	EPA 300.0	WETA/26321		



Sample Condition Upon Receipt ESI Tech Spec Client

WO#:60153050

Client Name: Col CRA NM			Optional
Courier: Fed Ex 🛛 UPS 🗆 USPS 🗆 Client 🗆	Commercial D Pa	ace 🗆 Other 🗆	Proj Due Date:
	Pace Shipping Label U	Jsed? Yes 😡 No 🛛	Proj Name:
Custody Seal on Cooler/Box Present: Yes 🕅 No	Seals intact:	∕es,⁄⊉ No 🗆	
Packing Material: Bubble Wrap		None	Other 🗆
Thermometer Used: 7-112/ T-194 T	ype of Ice: Web BI	ue None 🗆 Samples	received on ice, cooling process has begun.
Cooler Temperature:	(circl	e one) Da	te and initials of person examining ntents: UNA 9/13/13 197
Temperature should be above freezing to 6°C			ntents: 010 11:411 1020
Chain of Custody present:		1.	
Chain of Custody filled out:	Tyes No NA	2.	
Chain of Custody relinquished:	Yes No N/A	3.	
Sampler name & signature on COC:	Yes No N/A	4.	
Samples arrived within holding time:	Pres No N/A	5.	
Short Hold Time analyses (<72hr):		6.	
Rush Turn Around Time requested:		7.	
Sufficient volume:		8.	
Correct containers used:			
Pace containers used:	/ Ģryes □No □N/A	9.	
Containers intact:		10.	
Unpreserved 5035A soils frozen w/in 48hrs?		11.	
Filtered volume received for dissolved tests?	ØYes □No □N/A	12.	
Sample labels match COC:			
Includes date/time/ID/analyses Matrix:	water	13	
All containers needing preservation have been checked.	DYYes □No □N/A	10.	
All containers needing preservation are found to be in	, 		
compliance with EPA recommendation.	PYes □No □N/A	14.	Lot # of added
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	Z[Yes □No	Initial when completed	preservative
Trip Blank present:	Ares INO IN/A		
Pace Trip Blank lot # (if purchased):		15.	
Headspace in VOA vials (>6mm):	□Yes <mark>X</mark> No □N/A		
		16.	
Project sampled in USDA Regulated Area:		17. List State:	
Client Notification/ Resolution: Copy	COC to Client? Y	N Field Data Re	equired? Y / N
Person Contacted:	Date/Time:	2	Temp Log : Record start and finish times when unpacking cooler. if >20 min,
Comments/ Resolution			recheck sample temps
			Start: 1015 Start:
AAT		alpha	End: <u>63</u> 9 End:
Project Manager Review:		Date 11317	Temp: Temp:

F-KS-C-004-Rev.2, 0Pagee29bef23012

Pace Analytical " 0

CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT, All relevant fields must be completed accurately.

	5		WATER I' DRINKING WATER	L OTHER					(N) (00/ 6 70 20	ninoldD Isub	ଞ୍ଚ ଜୁ ନୁ Pace Project No./ Lab I.D.	3(0694) 2(AEG44) ((BC24) 1(BC39)							~	3(12(44))	7	SAMPLE CONDITIONS		0-1 X X X		on (V) (V)	ni qmaT beviaceš (YY) eci (YY) eci (Y) eci (Y) (V) (V) (V) (V) (V) (V) (V) (V) (V) (V	д D D
£2.		REGULATORY AGENCY	GROUND WATER	I RCRA			tered (Y/N)	21 11	7110	2 (1)	-я	100	200	8	8	80	R	400	De	Loa X	200 X	TIME		13 830 0			5	113
Г	-	REGULATO	I NPDES	L UST	Site Location	STATE:	Requested Analysis Filtered (Y/N)		əu	əlsdidqsN		XX	X	X	X	X	X	XX	×	•		DATE	91.1				C D ba	2112 30
n								↑ N / A		siysis Tes **** Vi ved Fe, i V	8560	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX			ACCEPTED BY / AFFILIATION	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	(A)		H	A DATE Sign	UN (MMIDDAY):
on:	ENFOS				Alice Flanagan	5514,2		Preservatives		anol 2 ⁰ 3 H	Offher Metha NaOF HCI HCO				×	X	×	×	X	×	<	ACCEPTEI	C. M	Jury Vin	•		STINE H	UN RELIVE
forme	Attention: E	Company Name:	Address:	Pace Qúote Reference:	· · ·			ď	S		anqnU O2 _s H	XXL	TX A	N N L	7XX	JX V	7X	X	18	oca	n	TIME	64 64	1200		K	ANA ANA	· UNNUR
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	Ø	ela Bown		3455	. 2			COLLECTED	COMPOSITE COME START END		TIME	912	dh.	dinit	qlulf	9.00	-	9/1×1	9111B	100	Jallb	AFFILIATION	10	w/ck4		SAMPLER NAME A	PRINT Name	SIGNATURE
Required Project Information:	Report To: Christine Mathews	Jeff Walker, Angela Bown		der No.: 4517653455	e: Martin 34 No. 2	Project Number. 075035			CO=C Codes f		_	<u> </u>	0	0	9	6	9	S	Ō	5		RELINQUISHED BY / AFEILLATION	- IFANIN XX	hall lan				
Required PI	Report To:	Copy To:		Purchase Order No :	32 Project Name:	Project Num		Valid Matrix Codes MATRIX CODE	ER	AR TOT		1-mur-u	12-mm-n	n- mw3	M-MM-4	n-mw-5	n-mw-6	R-mm-n	n-Mul-B	57	100 0			man				
	WN	6121 Indian School Rd NE, Ste 200	Albequerque, NM 87110	c:nathews@craworld.com	Fax: (505)884-4932	standard				SAMPLE ID WIFE (A-Z, 0-9 /) OTHER (A-Z, 0-9 /) OTHER Sample IDS MUST BE UNIQUE TISSUE		35-091213-17	35-MIII3-M	35- Miliz-2n	35 MID-N	35-091113-CD	25-091113-0r	5-09113 M	5-091113- DN	- 01113-0	85-091213-01	ADDITIONAL COMMENTS	*BTEX Methylene Chloride 1122-Tetrachloroethane		ne field			
Required Client Information:	ny: COP CRA NM		Albequerq:		(505)884-0672	Requested Due Date/TAT:		Section D Required Client Information		SAMPLE ID (A-Z, 0-9 / -) Sample IDS MUST BE UN		411 M50:	Ku-onso	RIA-OTSO:	-679	RU)-07503	RU1-07582	Fiu)-OTSTO	KW-OR3	Sul-orso	113-013035	OFFICIA	-Y Mathvlane Chloride	"Chloride, Suifate, Fluoride	etris we	1 Hered	ge 30	of
Required C	Company	Address		Email To:	Phone:	Reque				#	tEM #	-	~	~	4	ŝ	9	2	∞	σ	1	12	TD****	Chia	A		.gc 00	51



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

January 07, 2014

Jeff Walker COP Conestoga-Rovers & Associa 6121 Indian School Rd. NE Ste 200 Albuquerque, NM 87110

RE: Project: 075035 MARTIN 34 NO 2 Pace Project No.: 60160036

Dear Jeff Walker:

Enclosed are the analytical results for sample(s) received by the laboratory on December 19, 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 Flanazan

Alice Flanagan

alice.flanagan@pacelabs.com Project Manager

Enclosures

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





CERTIFICATIONS

Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60160036

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219 WY STR Certification #: 2456.01 Arkansas Certification #: 13-012-0 Illinois Certification #: 003097 Iowa Certification #: 118 Kansas/NELAP Certification #: E-10116 Louisiana Certification #: 03055 Nevada Certification #: KS000212008A Oklahoma Certification #: 9205/9935 Texas Certification #: T104704407-13-4 Utah Certification #: KS000212013-3 Illinois Certification #: 003097



SAMPLE SUMMARY

 Project:
 075035 MARTIN 34 NO 2

 Pace Project No.:
 60160036

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60160036001	GW-075035-121713-CM-MW-1	Water	12/17/13 10:40	12/19/13 09:25
60160036002	GW-075035-121713-CM-MW-2	Water	12/17/13 11:20	12/19/13 09:25
60160036003	GW-075035-121713-CM-MW-3	Water	12/17/13 12:50	12/19/13 09:25
60160036004	GW-075035-121713-CM-MW-4	Water	12/17/13 11:55	12/19/13 09:25
60160036005	GW-075035-121713-CM-MW-5	Water	12/17/13 14:05	12/19/13 09:25
60160036006	GW-075035-121713-CM-MW-6	Water	12/17/13 10:20	12/19/13 09:25
60160036007	GW-075035-121713-CM-MW-7	Water	12/17/13 13:10	12/19/13 09:25
60160036008	GW-075035-121713-CM-MW-8	Water	12/17/13 14:35	12/19/13 09:25
60160036009	GW-075035-121713-CM-DUP	Water	12/17/13 10:25	12/19/13 09:25



SAMPLE ANALYTE COUNT

Project: 075035 MARTIN 34 NO 2

Pace Project No.:	60160036
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Lab ID	Sample ID	Method	Analysts	Analytes Reported
60160036001	GW-075035-121713-CM-MW-1	EPA 6010	SMW, TDS	3
		EPA 8270C by SIM	NAW	3
		EPA 5030B/8260	PRG	10
		SM 2540C	RAH	1
		EPA 300.0	OL	3
160036002	GW-075035-121713-CM-MW-2	EPA 6010	SMW, TDS	3
		EPA 8270C by SIM	NAW	3
		EPA 5030B/8260	PRG	10
		SM 2540C	RAH	1
		EPA 300.0	OL	3
160036003	GW-075035-121713-CM-MW-3	EPA 6010	SMW, TDS	3
		EPA 8270C by SIM	NAW	3
		EPA 5030B/8260	PRG	10
		SM 2540C	RAH	1
		EPA 300.0	OL	3
160036004	GW-075035-121713-CM-MW-4	EPA 6010	SMW, TDS	3
		EPA 8270C by SIM	NAW	3
		EPA 5030B/8260	PRG	10
		SM 2540C	RAH	1
		EPA 300.0	OL	3
60036005	GW-075035-121713-CM-MW-5	EPA 6010	SMW, TDS	3
		EPA 8270C by SIM	NAW	3
		EPA 5030B/8260	PRG	10
		SM 2540C	RAH	1
		EPA 300.0	OL	3
160036006	GW-075035-121713-CM-MW-6	EPA 6010	SMW, TDS	3
		EPA 8270C by SIM	NAW	3
		EPA 5030B/8260	PRG	10
		SM 2540C	RAH	1
		EPA 300.0	OL	3
160036007	GW-075035-121713-CM-MW-7	EPA 6010	SMW, TDS	3
		EPA 8270C by SIM	NAW	3
		EPA 5030B/8260	PRG, SDR	10
		SM 2540C	RAH	1
		EPA 300.0	OL	3
0160036008	GW-075035-121713-CM-MW-8	EPA 6010	SMW, TDS	3
		EPA 8270C by SIM	NAW	3



SAMPLE ANALYTE COUNT

 Project:
 075035 MARTIN 34 NO 2

 Pace Project No.:
 60160036

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 5030B/8260	PRG	10
		SM 2540C	RAH	1
		EPA 300.0	OL	3
60160036009	GW-075035-121713-CM-DUP	EPA 5030B/8260	PRG	10



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60160036

Method: EPA 6010

Description:6010 MET ICP, DissolvedClient:COP Conestoga-Rovers & Associates, Inc. NMDate:January 07, 2014

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, where applicable, 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: 075035 MARTIN 34 NO 2

Pace Project No.: 60160036

Method: EPA 8270C by SIM

Description:8270 MSSV PAH by SIMClient:COP Conestoga-Rovers & Associates, Inc. NMDate:January 07, 2014

General Information:

8 samples were analyzed for EPA 8270C by SIM. 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 3510C 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, where applicable, 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: MSSV/13367

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

Additional Comments:



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60160036

Method: EPA 5030B/8260

Description:8260 MSVClient:COP Conestoga-Rovers & Associates, Inc. NMDate:January 07, 2014

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-075035-121713-CM-MW-1 (Lab ID: 60160036001)

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, where applicable, 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/58563

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

QC Batch: MSV/58601

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

Additional Comments:



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60160036

Method: SM 2540C

Description:2540C Total Dissolved SolidsClient:COP Conestoga-Rovers & Associates, Inc. NMDate:January 07, 2014

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, where applicable, 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:



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60160036

Method: EPA 300.0

Description:300.0 IC Anions 28 DaysClient:COP Conestoga-Rovers & Associates, Inc. NMDate:January 07, 2014

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, where applicable, 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:

Analyte Comments:

QC Batch: WETA/27681

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- GW-075035-121713-CM-MW-1 (Lab ID: 60160036001) • Fluoride
- GW-075035-121713-CM-MW-2 (Lab ID: 60160036002) • Fluoride
- GW-075035-121713-CM-MW-3 (Lab ID: 60160036003) • Fluoride
- GW-075035-121713-CM-MW-4 (Lab ID: 60160036004) • Fluoride
- GW-075035-121713-CM-MW-5 (Lab ID: 60160036005) • Fluoride
- GW-075035-121713-CM-MW-6 (Lab ID: 60160036006) • Fluoride
- GW-075035-121713-CM-MW-7 (Lab ID: 60160036007) • Fluoride
- GW-075035-121713-CM-MW-8 (Lab ID: 60160036008) • Fluoride

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



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60160036

Sample: GW-075035-121713-CM- MW-1	Lab ID: 6016003600	1 Collected: 12/17/	13 10:40	Received: 12	2/19/13 09:25	Matrix: Water	
Parameters	ResultsUnits	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA	6010 Preparation Met	hod: EP	A 3010			
Boron, Dissolved	1160 ug/L	100	1	12/24/13 09:00	12/26/13 11:30	7440-42-8	
Iron, Dissolved	91.0 ug/L	50.0	1	12/24/13 09:00	12/30/13 14:42	7439-89-6	
Manganese, Dissolved	590 ug/L	5.0	1	12/24/13 09:00	12/26/13 11:30	7439-96-5	
8270 MSSV PAH by SIM	Analytical Method: EPA	8270C by SIM Prepar	ation Me	thod: EPA 35100	2		
Naphthalene <i>Surrogates</i>	25.8 ug/L	5.0	10	12/20/13 00:00	12/24/13 12:53	91-20-3	
2-Fluorobiphenyl (S)	38 %	36-120	10	12/20/13 00:00	12/24/13 12:53	321-60-8	
Terphenyl-d14 (S)	58 %	29-134	10	12/20/13 00:00	12/24/13 12:53	1718-51-0	
8260 MSV	Analytical Method: EPA	5030B/8260					
Benzene	3180 ug/L	100	100		12/25/13 03:15	71-43-2	
Ethylbenzene	297 ug/L	100	100		12/25/13 03:15	100-41-4	
Methylene chloride	156 ug/L	100	100		12/25/13 03:15	75-09-2	
1,1,2,2-Tetrachloroethane	ND ug/L	100	100		12/25/13 03:15	79-34-5	
Toluene	5230 ug/L	100	100		12/25/13 03:15	108-88-3	
Xylene (Total)	6120 ug/L	300	100		12/25/13 03:15	1330-20-7	
Surrogates							
4-Bromofluorobenzene (S)	101 %	80-120	100		12/25/13 03:15		
1,2-Dichloroethane-d4 (S)	101 %	80-120	100		12/25/13 03:15		
Toluene-d8 (S)	99 %	80-120	100		12/25/13 03:15		
Preservation pH	6.0	0.10	100		12/25/13 03:15		рН
2540C Total Dissolved Solids	Analytical Method: SM	2540C					
Total Dissolved Solids	24300 mg/L	5.0	1		12/23/13 11:29		
300.0 IC Anions 28 Days	Analytical Method: EPA	300.0					
Chloride	459 mg/L	50.0	50		12/29/13 20:29	16887-00-6	
Fluoride	ND mg/L	4.0	20		12/29/13 22:53	16984-48-8	D3
Sulfate	15100 mg/L	2000	2000		12/29/13 18:05	14808-79-8	



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60160036

Sample: GW-075035-121713-CM- MW-2	Lab ID: 6016003600	2 Collected: 12/17/	13 11:20	Received: 12	2/19/13 09:25	Matrix: Water	
Parameters	ResultsUnit	s Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA	6010 Preparation Met	hod: EP/	A 3010			
Boron, Dissolved	791 ug/L	100	1	12/24/13 09:00	12/26/13 11:33	7440-42-8	
Iron, Dissolved	1450 ug/L	500	10	12/24/13 09:00	12/30/13 14:44	7439-89-6	
Manganese, Dissolved	2430 ug/L	5.0	1	12/24/13 09:00	12/26/13 11:33	7439-96-5	
8270 MSSV PAH by SIM	Analytical Method: EPA	8270C by SIM Prepar	ation Me	thod: EPA 35100	2		
Naphthalene <i>Surrogates</i>	33.6 ug/L	2.5	5	12/20/13 00:00	01/06/14 20:00	91-20-3	
2-Fluorobiphenyl (S)	80 %	36-120	1	12/20/13 00:00	12/24/13 13:11	321-60-8	
Terphenyl-d14 (S)	98 %	29-134	1	12/20/13 00:00	12/24/13 13:11	1718-51-0	
8260 MSV	Analytical Method: EPA	5030B/8260					
Benzene	102 ug/L	5.0	5		12/25/13 03:29	71-43-2	
Ethylbenzene	247 ug/L	5.0	5		12/25/13 03:29	100-41-4	
Methylene chloride	10.3 ug/L	5.0	5		12/25/13 03:29	75-09-2	
1,1,2,2-Tetrachloroethane	ND ug/L	5.0	5		12/25/13 03:29	79-34-5	
Toluene	ND ug/L	5.0	5		12/25/13 03:29	108-88-3	
Xylene (Total)	63.2 ug/L	15.0	5		12/25/13 03:29	1330-20-7	
Surrogates							
4-Bromofluorobenzene (S)	99 %	80-120	5		12/25/13 03:29		
1,2-Dichloroethane-d4 (S)	99 %	80-120	5		12/25/13 03:29		
Toluene-d8 (S)	96 %	80-120	5		12/25/13 03:29	2037-26-5	
Preservation pH	1.0	0.10	5		12/25/13 03:29		
2540C Total Dissolved Solids	Analytical Method: SM	2540C					
Total Dissolved Solids	32800 mg/L	5.0	1		12/23/13 11:30		
300.0 IC Anions 28 Days	Analytical Method: EPA	300.0					
Chloride	453 mg/L	50.0	50		12/29/13 20:44	16887-00-6	
Fluoride	ND mg/L	4.0	20		12/29/13 23:08	16984-48-8	D3
Sulfate	22400 mg/L	2000	2000		12/29/13 18:20	14808-79-8	



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60160036

Sample: GW-075035-121713-CM- MW-3	Lab ID: 6016003600	3 Collected: 12/17/	13 12:50	Received: 12	2/19/13 09:25 N	Matrix: Water	
Parameters	ResultsUnits	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA	6010 Preparation Met	hod: EP/	A 3010			
Boron, Dissolved	899 ug/L	100	1	12/24/13 09:00	12/26/13 11:37	7440-42-8	
Iron, Dissolved	272 ug/L	150	3	12/24/13 09:00	12/30/13 14:46	7439-89-6	
Manganese, Dissolved	83.6 ug/L	5.0	1	12/24/13 09:00	12/26/13 11:37	7439-96-5	
8270 MSSV PAH by SIM	Analytical Method: EPA	8270C by SIM Prepar	ation Me	thod: EPA 35100	;		
Naphthalene <i>Surrogates</i>	ND ug/L	0.50	1	12/20/13 00:00	12/24/13 13:30	91-20-3	
2-Fluorobiphenyl (S)	97 %	36-120	1	12/20/13 00:00	12/24/13 13:30	321-60-8	
Terphenyl-d14 (S)	104 %	29-134	1	12/20/13 00:00	12/24/13 13:30	1718-51-0	
8260 MSV	Analytical Method: EPA	5030B/8260					
Benzene	ND ug/L	1.0	1		12/25/13 03:44	71-43-2	
Ethylbenzene	ND ug/L	1.0	1		12/25/13 03:44	100-41-4	
Methylene chloride	ND ug/L	1.0	1		12/25/13 03:44	75-09-2	
1,1,2,2-Tetrachloroethane	ND ug/L	1.0	1		12/25/13 03:44	79-34-5	
Toluene	ND ug/L	1.0	1		12/25/13 03:44	108-88-3	
Xylene (Total)	ND ug/L	3.0	1		12/25/13 03:44	1330-20-7	
Surrogates							
4-Bromofluorobenzene (S)	105 %	80-120	1		12/25/13 03:44		
1,2-Dichloroethane-d4 (S)	112 %	80-120	1		12/25/13 03:44		
Toluene-d8 (S)	99 %	80-120	1		12/25/13 03:44		
Preservation pH	1.0	0.10	1		12/25/13 03:44		
2540C Total Dissolved Solids	Analytical Method: SM	2540C					
Total Dissolved Solids	31600 mg/L	5.0	1		12/23/13 11:31		
300.0 IC Anions 28 Days	Analytical Method: EPA	300.0					
Chloride	476 mg/L	50.0	50		12/29/13 20:58	16887-00-6	
Fluoride	ND mg/L	4.0	20		12/29/13 23:22	16984-48-8	D3
Sulfate	20300 mg/L	2000	2000		12/29/13 18:34	14808-79-8	



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60160036

Sample: GW-075035-121713-CM- MW-4	Lab ID: 601600360	04 Collected: 12/17/	13 11:55	Received: 12	2/19/13 09:25 N	Aatrix: Water	
Parameters	ResultsUni	ts Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EP	A 6010 Preparation Met	hod: EP	A 3010			
Boron, Dissolved	789 ug/L	100	1	12/24/13 09:00	12/26/13 11:40	7440-42-8	
Iron, Dissolved	354 ug/L	250	5	12/24/13 09:00	12/30/13 14:49	7439-89-6	
Manganese, Dissolved	2720 ug/L	5.0	1	12/24/13 09:00	12/26/13 11:40	7439-96-5	
8270 MSSV PAH by SIM	Analytical Method: EP	A 8270C by SIM Prepar	ation Me	thod: EPA 35100	;		
Naphthalene <i>Surrogates</i>	2.1 ug/L	0.50	1	12/20/13 00:00	12/24/13 13:48	91-20-3	
2-Fluorobiphenyl (S)	86 %	36-120	1	12/20/13 00:00	12/24/13 13:48	321-60-8	
Terphenyl-d14 (S)	94 %	29-134	1	12/20/13 00:00	12/24/13 13:48	1718-51-0	
8260 MSV	Analytical Method: EP	A 5030B/8260					
Benzene	ND ug/L	1.0	1		12/25/13 03:58	71-43-2	
Ethylbenzene	ND ug/L	1.0	1		12/25/13 03:58	100-41-4	
Methylene chloride	ND ug/L	1.0	1		12/25/13 03:58	75-09-2	
1,1,2,2-Tetrachloroethane	ND ug/L	1.0	1		12/25/13 03:58	79-34-5	
Toluene	ND ug/L	1.0	1		12/25/13 03:58	108-88-3	
Xylene (Total)	ND ug/L	3.0	1		12/25/13 03:58	1330-20-7	
Surrogates							
4-Bromofluorobenzene (S)	105 %	80-120	1		12/25/13 03:58	460-00-4	
1,2-Dichloroethane-d4 (S)	115 %	80-120	1		12/25/13 03:58	17060-07-0	
Toluene-d8 (S)	100 %	80-120	1		12/25/13 03:58	2037-26-5	
Preservation pH	1.0	0.10	1		12/25/13 03:58		
2540C Total Dissolved Solids	Analytical Method: SM	2540C					
Total Dissolved Solids	36300 mg/L	5.0	1		12/23/13 11:31		
300.0 IC Anions 28 Days	Analytical Method: EP	A 300.0					
Chloride	394 mg/L	50.0	50		12/29/13 21:12	16887-00-6	
Fluoride	5.1 mg/L	4.0	20		12/29/13 23:37	16984-48-8	D3
Sulfate	24300 mg/L	2000	2000		12/29/13 18:48	14808-79-8	



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60160036

Sample: GW-075035-121713-CM- MW-5	Lab ID: 6016003600	5 Collected: 12/17/	13 14:05	Received: 12	2/19/13 09:25 I	Matrix: Water	
Parameters	ResultsUnit	s Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA	6010 Preparation Met	hod: EP	A 3010			
Boron, Dissolved	1490 ug/L	100	1	12/24/13 09:00	12/26/13 11:44	7440-42-8	
Iron, Dissolved	1610 ug/L	500	10	12/24/13 09:00	12/30/13 14:58	7439-89-6	
Manganese, Dissolved	647 ug/L	5.0	1	12/24/13 09:00	12/26/13 11:44	7439-96-5	
8270 MSSV PAH by SIM	Analytical Method: EPA	8270C by SIM Prepar	ation Me	ethod: EPA 35100	2		
Naphthalene <i>Surrogates</i>	ND ug/L	0.50	1	12/20/13 00:00	12/24/13 14:07	91-20-3	
2-Fluorobiphenyl (S)	85 %	36-120	1	12/20/13 00:00	12/24/13 14:07	321-60-8	
Terphenyl-d14 (S)	98 %	29-134	1	12/20/13 00:00	12/24/13 14:07	7 1718-51-0	
8260 MSV	Analytical Method: EPA	5030B/8260					
Benzene	114 ug/L	1.0	1		12/25/13 04:12	2 71-43-2	
Ethylbenzene	6.9 ug/L	1.0	1		12/25/13 04:12	2 100-41-4	
Methylene chloride	ND ug/L	1.0	1		12/25/13 04:12	2 75-09-2	
1,1,2,2-Tetrachloroethane	ND ug/L	1.0	1		12/25/13 04:12	2 79-34-5	
Toluene	ND ug/L	1.0	1		12/25/13 04:12	2 108-88-3	
Xylene (Total)	ND ug/L	3.0	1		12/25/13 04:12	1330-20-7	
Surrogates							
4-Bromofluorobenzene (S)	99 %	80-120	1		12/25/13 04:12		
1,2-Dichloroethane-d4 (S)	104 %	80-120	1		12/25/13 04:12		
Toluene-d8 (S)	100 %	80-120	1		12/25/13 04:12		
Preservation pH	1.0	0.10	1		12/25/13 04:12	2	
2540C Total Dissolved Solids	Analytical Method: SM	2540C					
Total Dissolved Solids	12000 mg/L	5.0	1		12/23/13 11:32	!	
300.0 IC Anions 28 Days	Analytical Method: EPA	300.0					
Chloride	228 mg/L	20.0	20		12/29/13 21:27	16887-00-6	
Fluoride	ND mg/L	4.0	20		12/29/13 21:27	16984-48-8	D3
Sulfate	7120 mg/L	2000	2000		12/29/13 19:03	14808-79-8	



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60160036

Sample: GW-075035-121713-CM- MW-6	Lab ID: 6016003600	6 Collected: 12/17/	13 10:20	Received: 12	2/19/13 09:25 I	Matrix: Water	
Parameters	ResultsUnit	s Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA	6010 Preparation Met	hod: EP	A 3010			
Boron, Dissolved	653 ug/L	100	1	12/24/13 09:00	12/26/13 11:47	7440-42-8	
Iron, Dissolved	121 ug/L	100	2	12/24/13 09:00	12/30/13 15:00	7439-89-6	
Manganese, Dissolved	1860 ug/L	5.0	1	12/24/13 09:00	12/26/13 11:47	7439-96-5	
8270 MSSV PAH by SIM	Analytical Method: EPA	8270C by SIM Prepar	ation Me	ethod: EPA 35100	2		
Naphthalene <i>Surrogates</i>	30.2 ug/L	2.5	5	12/20/13 00:00	01/06/14 20:20	91-20-3	
2-Fluorobiphenyl (S)	83 %	36-120	1	12/20/13 00:00	12/24/13 14:25	321-60-8	
Terphenyl-d14 (S)	107 %	29-134	1	12/20/13 00:00	12/24/13 14:25	1718-51-0	
8260 MSV	Analytical Method: EPA	5030B/8260					
Benzene	14.1 ug/L	10.0	10		12/25/13 04:26	71-43-2	
Ethylbenzene	127 ug/L	10.0	10		12/25/13 04:26	5 100-41-4	
Methylene chloride	22.2 ug/L	10.0	10		12/25/13 04:26	75-09-2	
1,1,2,2-Tetrachloroethane	ND ug/L	10.0	10		12/25/13 04:26	79-34-5	
Toluene	ND ug/L	10.0	10		12/25/13 04:26	108-88-3	
Xylene (Total)	1810 ug/L	30.0	10		12/25/13 04:26	1330-20-7	
Surrogates							
4-Bromofluorobenzene (S)	98 %	80-120	10		12/25/13 04:26	6 460-00-4	
1,2-Dichloroethane-d4 (S)	102 %	80-120	10		12/25/13 04:26	17060-07-0	
Toluene-d8 (S)	102 %	80-120	10		12/25/13 04:26	2037-26-5	
Preservation pH	1.0	0.10	10		12/25/13 04:26	i	
2540C Total Dissolved Solids	Analytical Method: SM	2540C					
Total Dissolved Solids	34600 mg/L	5.0	1		12/23/13 11:33	i	
300.0 IC Anions 28 Days	Analytical Method: EPA	300.0					
Chloride	755 mg/L	50.0	50		12/29/13 21:41	16887-00-6	
Fluoride	4.5 mg/L	4.0	20		12/29/13 23:51	16984-48-8	D3
Sulfate	23000 mg/L	2000	2000		12/29/13 19:17	14808-79-8	



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60160036

Sample: GW-075035-121713-CM- MW-7	Lab ID: 6016003600	7 Collected: 12/17/	13 13:10	Received: 12	2/19/13 09:25 I	Matrix: Water	
Parameters	ResultsUnit	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA	6010 Preparation Met	hod: EP/	A 3010			
Boron, Dissolved	767 ug/L	100	1	12/24/13 09:00	12/26/13 11:51	7440-42-8	
Iron, Dissolved	3130 ug/L	1000	20	12/24/13 09:00	12/30/13 15:03	3 7439-89-6	
Manganese, Dissolved	2640 ug/L	5.0	1	12/24/13 09:00	12/26/13 11:51	7439-96-5	
8270 MSSV PAH by SIM	Analytical Method: EPA	8270C by SIM Prepar	ation Me	thod: EPA 35100	2		
Naphthalene <i>Surrogates</i>	7.9 ug/L	0.50	1	12/20/13 00:00	12/24/13 14:43	3 91-20-3	
2-Fluorobiphenyl (S)	90 %	36-120	1	12/20/13 00:00	12/24/13 14:43	321-60-8	
Terphenyl-d14 (S)	97 %	29-134	1	12/20/13 00:00	12/24/13 14:43	3 1718-51-0	
8260 MSV	Analytical Method: EPA	5030B/8260					
Benzene	6.4 ug/L	1.0	1		12/25/13 04:40) 71-43-2	
Ethylbenzene	185 ug/L	5.0	5		12/26/13 18:14	100-41-4	
Methylene chloride	ND ug/L	1.0	1		12/25/13 04:40) 75-09-2	
1,1,2,2-Tetrachloroethane	ND ug/L	1.0	1		12/25/13 04:40) 79-34-5	
Toluene	ND ug/L	1.0	1		12/25/13 04:40) 108-88-3	
Xylene (Total)	ND ug/L	3.0	1		12/25/13 04:40	1330-20-7	
Surrogates							
4-Bromofluorobenzene (S)	103 %	80-120	1		12/25/13 04:40		
1,2-Dichloroethane-d4 (S)	111 %	80-120	1		12/25/13 04:40		
Toluene-d8 (S)	98 %	80-120	1		12/25/13 04:40		
Preservation pH	1.0	0.10	1		12/25/13 04:40)	
2540C Total Dissolved Solids	Analytical Method: SM	2540C					
Total Dissolved Solids	28900 mg/L	5.0	1		12/23/13 11:34	Ļ	
300.0 IC Anions 28 Days	Analytical Method: EPA	300.0					
Chloride	279 mg/L	20.0	20		12/29/13 21:56	6 16887-00-6	
Fluoride	ND mg/L	4.0	20		12/29/13 21:56	6 16984-48-8	D3
Sulfate	20500 mg/L	2000	2000		12/29/13 19:32	2 14808-79-8	



ANALYTICAL RESULTS

Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60160036

Sample: GW-075035-121713-CM- MW-8	Lab ID: 60160036	008 Collected: 12/17/	13 14:35	Received: 12	2/19/13 09:25 N	Aatrix: Water	
Parameters	ResultsU	nits Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: E	PA 6010 Preparation Met	hod: EP/	A 3010			
Boron, Dissolved	876 ug/L	100	1	12/24/13 09:00	12/26/13 11:54	7440-42-8	
Iron, Dissolved	ND ug/L	50.0	1	12/24/13 09:00	12/30/13 14:56	7439-89-6	
Manganese, Dissolved	3440 ug/L	5.0	1	12/24/13 09:00	12/26/13 11:54	7439-96-5	
8270 MSSV PAH by SIM	Analytical Method: E	PA 8270C by SIM Prepar	ation Me	thod: EPA 35100	2		
Naphthalene <i>Surrogates</i>	ND ug/L	0.50	1	12/20/13 00:00	12/24/13 15:02	91-20-3	
2-Fluorobiphenyl (S)	88 %	36-120	1	12/20/13 00:00	12/24/13 15:02	321-60-8	
Terphenyl-d14 (S)	98 %	29-134	1	12/20/13 00:00	12/24/13 15:02	1718-51-0	
8260 MSV	Analytical Method: E	PA 5030B/8260					
Benzene	ND ug/L	1.0	1		12/26/13 15:01	71-43-2	
Ethylbenzene	ND ug/L	1.0	1		12/26/13 15:01	100-41-4	
Methylene chloride	ND ug/L	1.0	1		12/26/13 15:01	75-09-2	
1,1,2,2-Tetrachloroethane	ND ug/L	1.0	1		12/26/13 15:01	79-34-5	
Toluene	ND ug/L	1.0	1		12/26/13 15:01	108-88-3	
Xylene (Total)	ND ug/L	3.0	1		12/26/13 15:01	1330-20-7	
Surrogates							
4-Bromofluorobenzene (S)	99 %	80-120	1		12/26/13 15:01		
1,2-Dichloroethane-d4 (S)	107 %	80-120	1		12/26/13 15:01		
Toluene-d8 (S)	98 %	80-120	1		12/26/13 15:01	2037-26-5	
Preservation pH	1.0	0.10	1		12/26/13 15:01		
2540C Total Dissolved Solids	Analytical Method: S	M 2540C					
Total Dissolved Solids	21400 mg/L	5.0	1		12/23/13 11:34		
300.0 IC Anions 28 Days	Analytical Method: E	PA 300.0					
Chloride	465 mg/L	50.0	50		12/29/13 22:10	16887-00-6	
Fluoride	ND mg/L	4.0	20		12/30/13 00:05	16984-48-8	D3
Sulfate	14400 mg/L	2000	2000		12/29/13 19:46	14808-79-8	



ANALYTICAL RESULTS

Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60160036

Sample: GW-075035-121713-CM- DUP	Lab ID: 6016003600	9 Collected: 12/17/1	3 10:25	Received: 12	2/19/13 09:25	Matrix: Water	
Parameters	Results Unit	s Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA	5030B/8260					
Benzene	11.2 ug/L	10.0	10		12/26/13 15:16	5 71-43-2	
Ethylbenzene	133 ug/L	10.0	10		12/26/13 15:16	6 100-41-4	
Methylene chloride	12.4 ug/L	10.0	10		12/26/13 15:16	5 75-09-2	
1,1,2,2-Tetrachloroethane	ND ug/L	10.0	10		12/26/13 15:16	6 79-34-5	
Toluene	ND ug/L	10.0	10		12/26/13 15:16	6 108-88-3	
Xylene (Total)	1780 ug/L	30.0	10		12/26/13 15:16	3 1330-20-7	
Surrogates	_						
4-Bromofluorobenzene (S)	100 %	80-120	10		12/26/13 15:16	6 460-00-4	
1,2-Dichloroethane-d4 (S)	98 %	80-120	10		12/26/13 15:16	3 17060-07-0	
Toluene-d8 (S)	98 %	80-120	10		12/26/13 15:16	2037-26-5	
Preservation pH	1.0	0.10	10		12/26/13 15:16	5	



- ,	075035 6016003	MARTIN (36	34 NO 2	2											
QC Batch:	MPRP	/25711			Analys	is Method:	E	PA 6010							
QC Batch Method:	EPA 30	010			Analys	is Descript	tion: 60	010 MET Dis	solved						
Associated Lab Sam		60160036 60160036		0160036002	, 60160036	003, 6016	0036004, 6	0160036005	, 6016003	6006, 6	60160	0036007,			
METHOD BLANK:	1311138	3			N	latrix: Wa	ter								
Associated Lab Sam		60160036 60160036		0160036002	, 60160036	003, 6016	0036004, 6	0160036005	, 6016003	6006, 6	60160	0036007,			
					Blank	R	eporting								
Param	neter			Units	Result	t	Limit	Analyz	ed	Qualifi	ers				
Boron, Dissolved			ug/L			ND	100	12/26/13	10:51			_			
Iron, Dissolved			ug/L			ND	50.0	12/30/13	14:28						
IIOII, DISSOIVED			0					10/00/10	10 54						
Manganese, Dissolv	ved		ug/L			ND	5.0	12/26/13 ⁻	10:51						
,		AMPLE:	•	39		ND	5.0	12/26/13 2	10:51						
Manganese, Dissolv		AMPLE:	ug/L	39	Spike	ND		12/26/13 2	10:51 % Red						
Manganese, Dissolv	NTROL S	AMPLE:	ug/L 13111	39 Units	Spike Conc.		3				Qu	alifiers			
Manganese, Dissolv	NTROL S	AMPLE:	ug/L 13111		•	LCS	3	LCS	% Rec Limits		Qu	alifiers			
Manganese, Dissolv LABORATORY CON Param	NTROL S	AMPLE:	ug/L 13111		Conc.	LCS	5 t	LCS % Rec	% Red Limits 80	; 	Qu	alifiers			
Manganese, Dissolv LABORATORY CON Param Boron, Dissolved	NTROL S	AMPLE:	ug/L 13111 ug/L		Conc. 1000	LCS	977	LCS % Rec 98	% Rec Limits 80)-120	Qu	alifiers			
Manganese, Dissolv LABORATORY CON Param Boron, Dissolved Iron, Dissolved	NTROL S neter red		ug/L 13111 ug/L ug/L ug/L	Units	Conc. 1000 10000 1000	LCS	977 9940	LCS % Rec 98 99	% Rec Limits 80)-120)-120	Qu	alifiers			
Manganese, Dissolv LABORATORY CON Param Boron, Dissolved Iron, Dissolved Manganese, Dissolv	NTROL S neter red		ug/L 13111 ug/L ug/L ug/L	Units	Conc. 1000 10000 1000	LCS	977 9940 964	LCS % Rec 98 99	% Rec Limits 80)-120)-120	Qu	alifiers			
Manganese, Dissolv LABORATORY CON Param Boron, Dissolved Iron, Dissolved Manganese, Dissolv	NTROL S neter red		ug/L 13111 ug/L ug/L ug/L PLICAT	Units	Conc. 1000 10000 1000	LCS Resu	977 9940 964	LCS % Rec 98 99	% Rec Limits 80)-120)-120		% Rec		Мах	
Manganese, Dissolv LABORATORY CON Param Boron, Dissolved Iron, Dissolved Manganese, Dissolv	NTROL S neter /ed IATRIX S	PIKE DUF	ug/L 13111 ug/L ug/L ug/L PLICAT	Units E: 131114	Conc. 1000 10000 1000 1000 MS	LCS Resu MSD	977 9940 964 1311141	LCS % Rec 98 99 96	% Rec Limits 80 80 80)-120)-120)-120)-120)	% Rec	RPD	Max RPD	Qual
Manganese, Dissolv LABORATORY CON Param Boron, Dissolved Iron, Dissolved Manganese, Dissolv MATRIX SPIKE & M	NTROL S neter /ed IATRIX S	PIKE DUF	ug/L 131111 ug/L ug/L ug/L PLICAT 601 Jnits	Units E: 131114	Conc. 1000 10000 1000 1000 MS Spike	LCS Resu MSD Spike	977 9940 964 1311141 MS	LCS % Rec 98 99 96 MSD	% Red Limits 80 80 80 80)-120)-120)-120)-120 MSE)	% Rec	RPD 1	RPD	Qual
Manganese, Dissolv LABORATORY CON Param Boron, Dissolved Iron, Dissolved Manganese, Dissolv MATRIX SPIKE & M Paramet	NTROL S neter /ed IATRIX S		ug/L 131111 ug/L ug/L ug/L PLICAT 601 Jnits	Units E: 131114 I59759001 Result	Conc. 1000 10000 1000 1000 MS Spike Conc.	LCS Resu MSD Spike Conc.	977 9940 964 1311141 MS Result	LCS % Rec 98 99 96 96 MSD Result	% Rec Limits 80 80 80 80 80 80 80 80 80 80 80 80 80)-120)-120)-120)-120 MSE) ec	% Rec Limits		RPD 20	Qual



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60160036

QC Batch:	MSV	/58563	Analysis Method:	EPA 5030B/8260
QC Batch Method:	EPA	5030B/8260	Analysis Description:	8260 MSV Water 10 mL Purge
Associated Lab Sam	ples:	60160036001, 60160036002, 6	0160036003, 60160036004	, 60160036005, 60160036006, 60160036007

 METHOD BLANK:
 1311169
 Matrix:
 Water

 Associated Lab Samples:
 60160036001, 60160036002, 60160036003, 60160036004, 60160036005, 60160036006, 60160036007

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/25/13 03:01	
Benzene	ug/L	ND	1.0	12/25/13 03:01	
Ethylbenzene	ug/L	ND	1.0	12/25/13 03:01	
Methylene chloride	ug/L	ND	1.0	12/25/13 03:01	
Toluene	ug/L	ND	1.0	12/25/13 03:01	
Xylene (Total)	ug/L	ND	3.0	12/25/13 03:01	
1,2-Dichloroethane-d4 (S)	%	103	80-120	12/25/13 03:01	
4-Bromofluorobenzene (S)	%	100	80-120	12/25/13 03:01	
Toluene-d8 (S)	%	100	80-120	12/25/13 03:01	

LABORATORY CONTROL SAMPLE: 1311170

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	20	18.4	92	73-120	
Benzene	ug/L	20	18.8	94	73-122	
Ethylbenzene	ug/L	20	18.6	93	76-123	
Methylene chloride	ug/L	20	18.8	94	71-123	
Toluene	ug/L	20	18.8	94	76-122	
Xylene (Total)	ug/L	60	55.7	93	76-122	
1,2-Dichloroethane-d4 (S)	%			103	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Toluene-d8 (S)	%			104	80-120	



Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60160036

QC Batch: MSV/58598		Analysis	Method:	EPA	A 5030B/826	50	
QC Batch Method: EPA 5030B/82	260	Analysis	Description:	826	0 MSV Wat	er 10 mL Purge	e
Associated Lab Samples: 601600	36007						
METHOD BLANK: 1311776		Ma	trix: Water				
Associated Lab Samples: 601600	36007						
Parameter	Units	Blank Result	Reportir Limit	ng	Analyze	d Quali	fiers
Ethylbenzene	ug/L		ND	1.0	12/26/13 1	1:57	
1,2-Dichloroethane-d4 (S)	%	1	02 80	-120	12/26/13 12	1:57	
4-Bromofluorobenzene (S)	%	1	01 80	-120	12/26/13 17	1:57	
Toluene-d8 (S)	%	1	04 80	-120	12/26/13 1 [/]	1:57	
LABORATORY CONTROL SAMPLE	: 1311777						
		Spike	LCS	L	CS	% Rec	
Parameter	Units	Conc.	Result	%	Rec	Limits	Qualifiers
Ethylbenzene	ug/L	20	20.4		102	76-123	
1,2-Dichloroethane-d4 (S)	%				109	80-120	
4-Bromofluorobenzene (S)	%				98	80-120	
Toluene-d8 (S)	%				97	80-120	



EPA 5030B/8260

8260 MSV Water 10 mL Purge

Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60160036

QC Batch:	MSV/58601
QC Batch Method:	EPA 5030B/8260

Associated Lab Samples: 60160036008, 60160036009

METHOD BLANK: 1311787

Matrix: Water

Analysis Method:

Analysis Description:

Associated Lab Samples:	60160036008, 60160036009	

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/26/13 14:33	
Benzene	ug/L	ND	1.0	12/26/13 14:33	
Ethylbenzene	ug/L	ND	1.0	12/26/13 14:33	
Methylene chloride	ug/L	ND	1.0	12/26/13 14:33	
Toluene	ug/L	ND	1.0	12/26/13 14:33	
Xylene (Total)	ug/L	ND	3.0	12/26/13 14:33	
1,2-Dichloroethane-d4 (S)	%	94	80-120	12/26/13 14:33	
4-Bromofluorobenzene (S)	%	98	80-120	12/26/13 14:33	
Toluene-d8 (S)	%	101	80-120	12/26/13 14:33	

LABORATORY CONTROL SAMPLE: 1311788

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L		21.2	106	73-120	
Benzene	ug/L	20	20.1	100	73-122	
Ethylbenzene	ug/L	20	20.2	101	76-123	
Methylene chloride	ug/L	20	19.5	98	71-123	
Toluene	ug/L	20	20.5	102	76-122	
Xylene (Total)	ug/L	60	61.6	103	76-122	
1,2-Dichloroethane-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			103	80-120	



- ,	075035 MART 60160036	N 34 NO 2							
QC Batch:	OEXT/42047		Analysis N	Method:	EF	PA 8270C by	SIM		
QC Batch Method:	C Batch Method: EPA 3510C			Description	n: 82	70 Water PA	H by SIM MSS	V	
Associated Lab Sam		036001, 6016003600 036008	2, 60160036003	3, 6016003	36004, 60	0160036005,	60160036006,	60160036007,	
METHOD BLANK:	1309487		Mat	rix: Water					
Associated Lab Sam	•	036001, 6016003600 036008	2, 60160036003	3, 6016003	36004, 60	0160036005,	60160036006,	60160036007,	
			Blank	Rep	orting				
Param	eter	Units	Result	Li	mit	Analyze	d Qualif	fiers	
Naphthalene		ug/L	N	ID	0.50	12/24/13 12	2:16		
2-Fluorobiphenyl (S)		%	8	35	36-120	12/24/13 12	2:16		
Terphenyl-d14 (S)		%	ę	94	29-134	12/24/13 12	2:16		
LABORATORY CON		E: 1309488							
			Spike	LCS		LCS	% Rec		
Param	eter	Units	Conc.	Result	c	% Rec	Limits	Qualifiers	
Naphthalene		ug/L	10		9.8	98	44-120		
2-Fluorobiphenyl (S)		%				98	36-120		
Terphenyl-d14 (S)		%				103	29-134		



Project:	075035	MARTIN 34 NO 2						
Pace Project No .:	6016003	36						
QC Batch:	WET/4	5293	Analysis Me	ethod:	SM 2540C			
QC Batch Method:	SM 25	40C	Analysis De	scription:	2540C Total Di	ssolved Solids		
Associated Lab San		60160036001, 60160036002, 60160036008	60160036003,	60160036004,	60160036005,	60160036006,	60160036007,	
METHOD BLANK:	1310518	3	Matrix	: Water				
Associated Lab San	•	60160036001, 60160036002, 60160036008	60160036003,	60160036004,	60160036005,	60160036006,	60160036007,	
			Blank	Reporting				
Paran	neter	Units	Result	Limit	Analyze	d Quali	fiers	
Total Dissolved Soli	ds	mg/L	ND	5	.0 12/23/13 1	1:28		
LABORATORY COM	NTROL S	AMPLE: 1310519						
			Spike	LCS	LCS	% Rec		
Paran	neter	Units	Conc.	Result	% Rec	Limits	Qualifiers	
Total Dissolved Soli	ds	mg/L	1000	1000	100	80-120		
SAMPLE DUPLICA	TE: 131	0520						
			60160036001	Dup		Max		
Paran	neter	Units	Result	Result	RPD	RPD	Qualifiers	
Total Dissolved Soli	ds	mg/L	24300	2440	00	0	17	



Project: Pace Project No.:	075035 601600	MARTIN 34 36	NO 2										
QC Batch:		/27681		Analy	sis Method	· FI	PA 300.0						
QC Batch Method:	EPA 3				sis Descrip		0.0 IC Anio	ns					
Associated Lab San			01, 60160036002 08		•				6006, 6016	60036007,			
METHOD BLANK:	131235	6			Matrix: Wa	ter							
Associated Lab San	nples:	6016003600 6016003600	01, 60160036002 08	2, 60160036	6003, 6016	0036004, 6	0160036005	5, 6016003	6006, 6016	60036007,			
Paran	neter		Units	Blan Resu		eporting Limit	Analyz	ed	Qualifiers				
Chloride		n	ng/L		ND	1.0	12/29/13	09:27					
Fluoride			ng/L		ND	0.20							
Sulfate		n	ng/L		ND	1.0	12/29/13	09:27					
LABORATORY COM	NTROL S	SAMPLE:	1312357										
Paran	neter		Units	Spike Conc.	LCS Resi		LCS % Rec	% Rec Limits		ualifiers			
Chloride		n	ng/L		5	5.0	99	90)-110				
Fluoride		n	ng/L	2.5	5	2.5	100	90)-110				
Sulfate		n	ng/L	Ę	5	5.2	104	90)-110				
MATRIX SPIKE & M	IATRIX S		ICATE: 13123	358		1312359							
				MS	MSD								
Paramet	ter	Un	60159830001 its Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qua
Chloride		mg/L	437	250	250	690	658	101	88	80-120	5	15	
Fluoride		mg/L	ND	25	25	27.3	27.8	109	111	80-120	2	15	
Sulfate		mg/L	64.1	50	50	113	114	97	99	80-120	1	15	
MATRIX SPIKE SAI	MPLE:		1312653										
Paran	neter		Units	601601 Res		Spike Conc.	MS Result		IS Rec	% Rec Limits		Qualif	fiers
		n	ng/L		163	50	2	16	106	80-1	20		
Chloride					4.8	25	30).6	103	80-1	20		
Chloride Fluoride		n	ng/L		4.0	25	50		100	00	20		



QUALIFIERS

Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60160036

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: OEXT/42047

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume. Batch: MSV/58563

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

Batch: MSV/58601

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

ANALYTE QUALIFIERS

- D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
- pH Post-analysis pH measurement indicates insufficient VOA sample preservation.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 075035 MARTIN 34 NO 2

Pace Project No.: 60160036

Analytical QC Batch Method QC Batch Lab ID Sample ID **Analytical Method** Batch 60160036001 GW-075035-121713-CM-MW-1 EPA 3010 MPRP/25711 EPA 6010 ICP/19729 60160036002 GW-075035-121713-CM-MW-2 EPA 3010 MPRP/25711 EPA 6010 ICP/19729 60160036003 GW-075035-121713-CM-MW-3 EPA 3010 EPA 6010 MPRP/25711 ICP/19729 60160036004 GW-075035-121713-CM-MW-4 EPA 3010 MPRP/25711 EPA 6010 ICP/19729 60160036005 GW-075035-121713-CM-MW-5 EPA 3010 MPRP/25711 EPA 6010 ICP/19729 60160036006 GW-075035-121713-CM-MW-6 EPA 3010 MPRP/25711 EPA 6010 ICP/19729 60160036007 GW-075035-121713-CM-MW-7 EPA 3010 MPRP/25711 EPA 6010 ICP/19729 60160036008 GW-075035-121713-CM-MW-8 EPA 3010 MPRP/25711 EPA 6010 ICP/19729 60160036001 GW-075035-121713-CM-MW-1 EPA 3510C OEXT/42047 EPA 8270C by SIM MSSV/13367 60160036002 GW-075035-121713-CM-MW-2 EPA 3510C OEXT/42047 EPA 8270C by SIM MSSV/13367 60160036003 GW-075035-121713-CM-MW-3 EPA 3510C OEXT/42047 EPA 8270C by SIM MSSV/13367 60160036004 GW-075035-121713-CM-MW-4 EPA 3510C OEXT/42047 EPA 8270C by SIM MSSV/13367 60160036005 OEXT/42047 EPA 8270C by SIM GW-075035-121713-CM-MW-5 **FPA 3510C** MSSV/13367 60160036006 GW-075035-121713-CM-MW-6 OEXT/42047 EPA 8270C by SIM EPA 3510C MSSV/13367 60160036007 GW-075035-121713-CM-MW-7 OEXT/42047 EPA 8270C by SIM EPA 3510C MSSV/13367 EPA 8270C by SIM 60160036008 GW-075035-121713-CM-MW-8 EPA 3510C OEXT/42047 MSSV/13367 60160036001 GW-075035-121713-CM-MW-1 EPA 5030B/8260 MSV/58563 60160036002 GW-075035-121713-CM-MW-2 EPA 5030B/8260 MSV/58563 60160036003 GW-075035-121713-CM-MW-3 EPA 5030B/8260 MSV/58563 60160036004 GW-075035-121713-CM-MW-4 EPA 5030B/8260 MSV/58563 60160036005 GW-075035-121713-CM-MW-5 EPA 5030B/8260 MSV/58563 60160036006 GW-075035-121713-CM-MW-6 EPA 5030B/8260 MSV/58563 60160036007 GW-075035-121713-CM-MW-7 MSV/58563 EPA 5030B/8260 60160036007 GW-075035-121713-CM-MW-7 EPA 5030B/8260 MSV/58598 GW-075035-121713-CM-MW-8 60160036008 EPA 5030B/8260 MSV/58601 GW-075035-121713-CM-DUP 60160036009 EPA 5030B/8260 MSV/58601 60160036001 GW-075035-121713-CM-MW-1 SM 2540C WET/45293 60160036002 GW-075035-121713-CM-MW-2 SM 2540C WET/45293 60160036003 GW-075035-121713-CM-MW-3 SM 2540C WET/45293 60160036004 SM 2540C GW-075035-121713-CM-MW-4 WET/45293 60160036005 GW-075035-121713-CM-MW-5 SM 2540C WET/45293 60160036006 GW-075035-121713-CM-MW-6 SM 2540C WET/45293 60160036007 GW-075035-121713-CM-MW-7 SM 2540C WET/45293 60160036008 GW-075035-121713-CM-MW-8 SM 2540C WET/45293 60160036001 GW-075035-121713-CM-MW-1 EPA 300.0 WETA/27681 60160036002 GW-075035-121713-CM-MW-2 EPA 300.0 WETA/27681 60160036003 GW-075035-121713-CM-MW-3 EPA 300.0 WETA/27681 60160036004 GW-075035-121713-CM-MW-4 EPA 300.0 WETA/27681 60160036005 GW-075035-121713-CM-MW-5 EPA 300.0 WETA/27681 60160036006 GW-075035-121713-CM-MW-6 EPA 300.0 WETA/27681 60160036007 GW-075035-121713-CM-MW-7 EPA 300.0 WETA/27681 60160036008 GW-075035-121713-CM-MW-8 EPA 300.0 WETA/27681



Sample Condition Upon Receipt ESI Tech Spec Client

WO#:60160036

Client Name: Col CPA NM	Optional
	Pace D Other Proj Due Date:
Tracking #: 5669 1279 1/93; 5669 1279 1208 Pace Shipping Labe	
Custody Seal on Cooler/Box Present: Yes P No D Seals intact:	
Packing Material: Bubble Wrap 🖉 Bubble Bags 🖉 Foan	n 😼 None 🗆 Other 🗆
	Blue None Samples received on ice, cooling process has begun.
Cooler Temperature: <u>3.6, 1.6</u> (cir	cle one) Date and initials of person examining contents: Do (2/////5
Temperature should be above freezing to 6°C	148
Chain of Custody present: Variable V	N 1
Chain of Custody filled out: Pres No N/A	2.
Chain of Custody relinquished: TYes No N/A	3.
Sampler name & signature on COC: 72 Yes No N/A	4.
Samples arrived within holding time:	5.
Short Hold Time analyses (<72hr):	6.
Rush Turn Around Time requested:	7,
Sufficient volume: Zves DNo DN/A	8.
Correct containers used:	N
Pace containers used: ⊉Yes □No □N//	9.
Containers intact: ZYes DNo DN/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	11.
Filtered volume received for dissolved tests?	12.
Sample labels match COC: Yes No N//	A
Includes date/time/ID/analyses Matrix:	13,
All containers needing preservation have been checked.	A
All containers needing preservation are found to be in □Yes □No ØN// compliance with EPA recommendation.	14.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Pres INo	Initial when Lot # of added preservative
Trip Blank present:	A
Pace Trip Blank lot # (if purchased):	15.
Headspace in VOA vials (>6mm): □Yes ⊠No □N//	16.
Project sampled in USDA Regulated Area:	
Client Notification/ Resolution: Copy COC to Client? Y	N Field Data Required? Y / N
Person Contacted: Date/Time:	Temp Log: Record start and finish times when unpacking cooler, if >20 min,
Comments/ Resolution:	recheck sample temps
	Start: 1135 Start:
1 A A P	
Project Manager Review:	Date: HWIT Temp: Temp:

Section A Required Client Information:	Section B Required Project Information:		Section C Invoice Information:			Page:	of
Company: COP CRA NM	Report To: Christine Mathews		Attention: ENFOS			ſ	-
Address: 6121 Indian School Rd NE, Ste 200	Copy To: Jeff Walker, Angela Bown		Company Name:	REGU	REGULATORY AGENCY	NCY	
Albequerque, NM 87110			Address:	T 4		GROUND WATER	R DRINKING WATER
Email To: cmathews@craworld.com	Purchase Order No.: 4517653455		Pace Quote Reference:	LL NST	Ţ	RCRA	T OTHER
Phone: (505)884-0672 Fax: (505)884-4932	Project Name: Martin 34 No. 2	270	Pace Project Alice Flanagan Manager:	Site L	Site Location		
Requested Due Date/TAT: standard	Project Number: 075035		Pace Profile #: 5514,2		STATE:	M	
				Requested Analysis Filtered (Y/N)	s Filtered (Y/	() (N	
Required Client Information MATRIX COL	odes copy to left) OMP)	COLLECTED	Preservatives	Y/N			
DRINKING WATER WATER PRODUCT SOIL/SOLID OIL	OL SI SI CRAB C=CC START START	COMPOSITE END/GRAD	S	n, B		: (Y/N)	
SAMPLE ID AR (A-Z, 0-9 / -) OTHER Sample IDs MUST BE UNIQUE TISSUE	CODE (erved	ed Fe, M		I Chlorine	60160036
ITEM #	MATRIX (SAMPLE T DATE		# OF COI Unprese H ₂ SO ₄ HNO ₃ HCI NaOH Na ₂ S ₂ O ₃ Methano Other	J Analys 8260**** Dissolve TDS 300.0 ** 8270 Na		Residual	Pace Project No./ Lab I.D.
1 611-07505-121713-CM- MIN	1-1 WTK	1241213 1040	24 13	メメムム		_	3/0494) (1994) 20034) 24
2 RUI-07503-121713-1111-1111	N-2 14 A	Jinia 11/20	61 200	XXXXX			_
3 GW-0505-121713-111-11	mw-3 Wrizi	12/11/3 1250	8213	XXXXX			
1 - 101-0703- 12113- 201- 11	mul-4 107131	1131 1156 1	8113	XXXXX			
5 6W-075035-12718-1M-M	mus wig	r4/1/13/14:05	1 1 1 1 8 1 1 1 8	XXXXX			
· GW-075035-12173-CM-my	-6 WTC	0201010	8413	NN NN N			
7 612-07235-1217B-/m-M	mw-1 which	12/17/13/13/10	84 13	XXXXXX			
* 101-015035-121713-(nn-1	10111 B WU	12/n/13/1435	1 14 5	XXXXX			V
0 JW-01505-121115-011-	DUPINIC	5201 0121kg	2	X			3(1)69(4)
10				77			
12							
ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	of pate	TIME ACCEPTED	ACCEPTED BY / AFFILIATION D	DATE TIME	m	SAMPLE CONDITIONS
****BTEX, Methylene Chloride, 1,1,2,2-Tetrachloroethane	, any man in a contraction	(21A 12/18/13)	730 \ \mu	Prese 14	2995 2119/121	1.8	XXXX
**Chloride, Sulfate; Fluoride	1 - v	1 1 1	the last			14	Y Y Y
	SAMPLE	SAMPLER NAME AND SIGNATURE	1 11 22	14	-	5	ıleci 1)
		PRINT Name of SAMPLER:	NAMSTINO MU	Hews 1	-	np in °(eived o e (Y/N) dy Sea ler (Y/N
		SIGNATURE of SAMPLER:	1770, 101 INATTO	DATE Signed	21/2	Ten	Ice Custo Coo

Pace Analytical

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

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