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GWMR

08/31/2011

3R 429



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Mr. Glenn von Gonten
State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis DR
Santa Fe, NM 87505

August 31, 2011

Re: Martin 34 No. 2 (API No. 30-045-08934)

Dear Mr. von Gonten:

Enclosed is a report covering the initial monitor well installation and baseline groundwater monitoring results for the subject site. This report also contains a proposal for additional subsurface assessment. ConocoPhillips will work with the surface owners to obtain clearance for the exact placement of the additional monitoring wells. The additional assessment will be scheduled as soon as clearance is received.

Please feel free to contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Terry S. Lauck", written over a horizontal line.

Terry S. Lauck

Cc: Mr. Brandon Powell, NMOCD – Aztec District Office
Mr. Sam Hollar

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MONITOR WELL INSTALLATION AND BASELINE GROUNDWATER MONITORING REPORT

**MARTIN 34 NO. 2 GAS PRODUCTION WELL REMEDIATION SITE
BLOOMFIELD, NEW MEXICO
API No. 30-045-08934
NMOCD Order No. TBD**

Prepared For:



**Risk Management and Remediation
420 South Keeler Avenue
Bartlesville, OK, 74004**

AUGUST 2011

REF. NO. 075035-95

This report is printed on recycled paper.

**Prepared by:
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1.0 INTRODUCTION

This report discusses the installation of four groundwater monitor wells between the dates of July 19 and 22, 2011 at the ConocoPhillips Company (ConocoPhillips) Martin 34 No. 2 natural gas production well site (Site). The Site is located in Section 34, Township 30N, Range 11W, San Juan County, New Mexico, near the intersection of US Highway 550 and Utah Road (Figure 1). A Site detail map is included as Figure 2.

1.1 SITE BACKGROUND

The surface of the Site is privately-owned. ConocoPhillips leases the land. The historical summary for the Site is detailed below, and is also included as Table 1.

Hydrocarbon impacts were discovered during equipment upgrade and relocation activities at the Site during December 2010. During excavation activities in January 2011, Brandon Powell of the New Mexico Oil Conservation Division (NMOCD) requested that the excavation of the hydrocarbon impacted area be extended from 25 feet below ground surface (bgs) to 30 feet bgs. Final excavation dimensions measured approximately 30 feet by 75 feet by 30 feet deep. Confirmation samples collected by Envirotech, Inc., (Envirotech) from the north wall and both the north and south bottoms of the excavation contained hydrocarbon impacts above NMOCD standards.

On March 1st and 2nd, 2011, Tetra Tech, Inc. supervised the completion of three soil borings and conducted soil sampling in and around the former excavation using a truck-mounted, direct-push Geoprobe® rig. Groundwater was encountered at approximately 40 feet bgs in the borings located upgradient and downgradient of the former tank location. The saturated interval in these borings matched a damp interval in the boring located in the center of the previous excavation. Because the interval was damp, not wet in this location it was not considered water bearing as it was the first borehole drilled. The Geoprobe® rig encountered refusal at a hard, dense, dry clay layer directly below the damp interval in the boring in the center of the former excavation. Photo-ionization detector (PID) results decreased from 1,315 parts per million (ppm) in the interval above the dry clay to 20 ppm in the dry layer. For this reason, the dry clay was thought to be a confining layer. Analytical results of groundwater samples collected from the water-bearing borings exceeded the New Mexico Water Quality Control Commission (NMWQCC) standards for chloride, benzene, toluene, ethylbenzene, and xylenes (BTEX). Based on these results, it was determined that further delineation and monitoring was needed at the Site. Conestoga Rovers and Associates (CRA) supervised the installation of four groundwater monitor wells between July 19th and 22nd, 2011, and

conducted a baseline groundwater monitoring event on July 27th, 2011. Results are detailed in this report.

1.2 GROUNDWATER MONITOR WELL AND SOIL BORING INSTALLATION

Monitor Wells MW-1, MW-2, MW-3, and MW-4 were installed under the supervision of CRA by Enviro-Drill Inc. of Albuquerque, New Mexico (Enviro-Drill). All borings were drilled using a CME-75 drill rig, hollow stem augers, and split-spoon sampling techniques; 10 feet of 0.010 polyvinylchloride (PVC) slotted screen was placed in Monitor Wells MW-1 and MW-3. Fifteen feet of 0.010 slotted screen was placed in wells MW-2 and MW-4. The soil boring for MW-4 was installed on July 19, 2011 to a total depth of 58 feet bgs. Monitor Well MW-4 was set at 53 feet bgs with screened interval placed from 38 to 53 feet bgs. The bottom five feet of the boring was plugged with bentonite prior to setting the well casing. Groundwater was encountered at 41.5 feet bgs in MW-4. Monitor Well MW-2 was installed on July 20, 2011 to 41.5 feet bgs with the screened interval placed from 31.5 to 41.5 feet bgs. Groundwater was encountered at 38.0 feet bgs in MW-2. Monitor Wells MW-3 and MW-1 were installed on July 21, 2011. MW-3 was drilled to a depth of 46 feet bgs with the screened interval from 31 to 46 feet bgs, and MW-1 was drilled to a depth of 41 feet bgs with the screened interval from 31 to 41 feet bgs. Groundwater was encountered at 40 feet bgs in MW-3 and MW-1. All monitor wells were constructed using 2-inch PVC casing. Monitor Wells MW-1, MW-2, and MW-3 were installed using vaults set flush with the ground surface in three-foot by three-foot concrete pads to accommodate possible vehicle and livestock traffic in the area. Due to being placed on an incline, MW-4 was completed as an above grade stick-up completion set in a three-foot by three-foot concrete pad.

After installation, each monitor well was developed using a 1.5-inch diameter, disposable polyethylene bailer. Approximately 15 to 20 gallons of water were purged from Monitor Wells MW-2, MW-3, and MW-4 during the week of installation. Monitor Well MW-1 was purged of approximately 0.75 gallons of water for development purposes on July 21st, at which point the well bailed dry. CRA returned to the Site on July 26, 2011 and bailed MW-2, MW-3 and MW-4 dry for development purposes. The amount of fine sediment present in these wells had decreased significantly since initial development began during the week of well installation. MW-1 was allowed to fully recharge prior to baseline groundwater sampling conducted on July 27, 2011.

Purge water that was generated from monitor well development during the week of well installation was contained in properly-labeled 55 gallon drums and staged on-Site until disposal July 27, 2011. Purge water was transferred from the drums by CRA and

disposed of in the Martin 34 No. 2 produced water tank. Drums containing drill cuttings were staged onsite until disposal by Envirotech at the Industrial Ecosystems Inc. (IEI) landfarm on July 22, 2011.

The upgradient Monitor Well, MW-4, was drilled first to determine if the groundwater encountered during the previous investigation was a perched zone, and to determine the thickness of a confining layer, if present. Sediments in MW-4 consisted primarily of sand and silt with clay and some clay lenses from 5 feet bgs to 41 feet bgs. Groundwater was first encountered in a thin seam of fine to medium-grained saturated sand at 41 feet bgs, followed by approximately 17-inches of wet clay with silt. Saturated sand with silt was again encountered at 43 feet bgs, where CRA also noted a change in color, from light tan to light gray, and an increase in clay content. Clay content declined from approximately 30% to approximately 15% accompanied by a change in color to dark gray at approximately 50 feet bgs. PID readings from the field-screened soil sample also increased in this interval from between 1.0 ppm and 18.0 ppm to 1,096 ppm. Impacts continued to 55 feet bgs, where a hard, dense, dry layer was encountered. CRA continued to drill into this layer to determine its thickness. Drilling stopped at 58.5 feet bgs after no change in soil type occurred and PID readings were consistently low (55 ppm).

Monitor Well MW-1 was drilled near the center of the January 2011 excavation. Sediments encountered during boring installation of MW-1 consisted of clean fill to approximately 31 feet bgs, thereafter sediments consisting of sand and silt with clay to approximately 40 feet bgs, where a thin saturated seam was encountered. The same impacted interval that was present in MW-4 was also encountered in MW-1. Hard, dry clay was encountered from 40.5 feet bgs to 42 feet bgs. Below the clay was red, dry, laminated shale to the bottom of the boring at 43 feet bgs. PID readings were elevated in MW-1 from excavation bottom to dry shale.

Monitor Wells MW-2 and MW-3 were drilled downgradient from the excavated area. Subsurface sediments encountered at the locations for MW-2 and MW-3 consisted of sand and silt with clay. Groundwater was encountered at 38 feet bgs in MW-2 and 40 feet bgs in MW-3. The hydrocarbon-impacted interval encountered in MW-4 was present in MW-2 and to a lesser extent in MW-3.

Boring logs and well completion forms for all monitor wells are included as **Appendix A**. A generalized geologic cross section for the Site is presented as **Figure 3**.

During soil boring activities conducted July 18th through 22nd, 2011, soil samples were field screened using a PID. Soil samples were collected for laboratory analysis from the interval containing the highest PID readings and from the interval directly above groundwater of all four site monitor wells. An additional sample was collected from the boring for MW-4 to determine background levels of constituents in native soil from the Site. Soil samples were collected from MW-1 at depths of 36 to 38 feet bgs and from 42 to 43 feet bgs; MW-2 at depths of 35 to 37 feet bgs and from 39 to 41 bgs; MW-3 at a depth of 36 to 38 feet bgs; MW-4 at depths of 39 to 41 feet bgs, from 51 to 53 feet bgs, and from 54 to 56 feet bgs. All soil samples were analyzed for BTEX by EPA Method 8260B, TPH gasoline range organics (GRO) and diesel range organics (DRO) by EPA Method 8015B; and for chloride and fluoride by EPA Method E300.0. In order to determine impacts in soil from MW-1, the sample collected from 36 to 38 feet bgs was analyzed for major ions by EPA Method 300.0; for metals by EPA Method 6010B; semivolatile organic compounds (SVOCs) by EPA Method 8270C; volatile organic compounds (VOCs) by EPA Method 8260B; and TPH GRO and DRO by EPA Method 8015B in addition to those listed above. The sample that was collected from clean, native soil in MW-4 was also analyzed for metals by EPA Method 6010B; for major ions by EPA Method 300.0; and for specific conductance, alkalinity, and pH by various methods. Samples selected for laboratory analysis that contained a PID reading higher than 100 ppm during field screening activities were also analyzed for VOC's and SVOC's. Soil samples were packed in laboratory prepared containers, placed on ice, and shipped under chain of custody documentation to Pace Analytical Laboratory located in Lenexa, Kansas for analysis.

Two of the soil samples collected for laboratory analysis returned analytical results above NMOCD recommended remediation action levels for BTEX and TPH. Based on NMOCD site-specific ranking criteria, the recommended action level for total BTEX in soil at the Site is 50,000 micrograms per kilogram ($\mu\text{g}/\text{kg}$). Soil sample MW-1 (36-38) contained a concentration of 68,055 $\mu\text{g}/\text{kg}$ total BTEX. Soil sample MW-4 (51-53) contained a concentration of 95,300 $\mu\text{g}/\text{kg}$ total BTEX. The NMOCD recommended action level for TPH is 100 milligrams per kilogram (mg/kg). Four of the soil samples collected for laboratory analysis contained concentrations of TPH above the NMOCD recommended action level for this constituent. Soil sample MW-1 (36-38) contained a concentration of 791 mg/kg TPH-GRO and 235 mg/kg TPH-DRO. Soil sample MW-2 (39-41) contained a concentration of 122 mg/kg TPH-GRO and 153 mg/kg TPH-DRO. Soil Sample MW-4 (51-53) contained a concentration of 1,940 mg/kg TPH-GRO and 364 mg/kg TPH-DRO. Soil sample MW-4 (54-56) contained a concentration of 206 mg/kg TPH-GRO. TPH-DRO was not detected in soil sample MW-4 (54-56). No other constituents were found to be above NMOCD recommended remediation action levels

for soil. Soil analytical results are summarized in Table 2 and the corresponding laboratory analytical report is included as Appendix B.

2.0 MONITORING SUMMARY, SAMPLING METHODOLOGY AND RESULTS

2.1 MONITORING SUMMARY

A baseline groundwater quality monitoring event was conducted on July 27, 2011. Prior to collection of groundwater samples from Monitor Wells MW-1, MW-2, MW-3 and MW-4, depth to groundwater from top of casing (TOC) was measured in each well using a dual interface probe. A summary of groundwater elevation data is presented in Table 3.

The casings for Site monitor wells were surveyed on July 27, 2011 using an arbitrary reference-elevation of 100 feet above mean sea level (amsl). The TOC elevations determined from the Site survey were used in conjunction with groundwater level measurements to develop a potentiometric surface map (Figure 4). Using these data, groundwater flow direction at the Site is calculated to be toward the south/southeast at a gradient of 0.025 feet per foot (ft/ft).

2.2 GROUNDWATER SAMPLING METHODOLOGY

During the baseline groundwater monitoring event, Site monitor wells were purged of at least 3 casing volumes of groundwater using a 1.5-inch diameter dedicated polyethylene bailer. While bailing Monitor Wells MW-2, MW-3, and MW-4, groundwater temperature, pH, conductivity, and total dissolved solids (TDS) were measured using a YSI 556 multi-parameter sonde. Results were recorded along with general observations such as color, odor, and clarity on CRA, Well Sampling Field Information Forms (Appendix C). Groundwater parameters were not recorded at Monitor Well MW-1 during the purging process due to the low well volume. Groundwater samples were collected using the dedicated bailer and were placed in laboratory prepared bottles, packed on ice, and shipped under chain of custody documentation to Pace Analytical Laboratory in Lenexa, Kansas for analysis. Groundwater samples collected from MW-2, MW-3, and MW-4 were analyzed for major ions by EPA Method 300.0; SVOCs by EPA Method 8270C; VOCs by EPA Method 8260B; general chemistry (alkalinity, hardness, total dissolved solids, and pH by various methods); NMWQCC dissolved metals by EPA Method 6010B; and TPH GRO and DRO by EPA Method 8015B. As a result of low well volume and slow recharge, the

groundwater sample collected from MW-1 was analyzed for VOC's by EPA Method 8260B and for TPH-GRO by EPA Method 8015B. Results of the July 2011 baseline analyses are displayed in Table 4. Future groundwater sampling events will include the analysis of BTEX and any other constituents of concern that returned analytical results above NMWQCC standards during the baseline analysis.

2.3 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. Exceedences of NMWQCC groundwater quality standards in Site monitor wells are discussed below. The corresponding laboratory analytical report for the July 2011 groundwater sampling event, including quality control documentation, is included as Appendix D. A Groundwater benzene concentration map is included as Figure 5.

Benzene

The groundwater quality standard for benzene is 10 micrograms per liter ($\mu\text{g/L}$). Groundwater collected from Monitor Well MW-1 contained a concentration of benzene of 4,460 $\mu\text{g/L}$. Groundwater collected from Monitor Well MW-2 contained a concentration of 244 $\mu\text{g/L}$ benzene, while the duplicate sample, also collected from MW-2, contained a concentration of 230 $\mu\text{g/L}$ benzene.

Toluene

The groundwater quality standard for toluene is 750 $\mu\text{g/L}$. Groundwater collected from Monitor Well MW-1 contained a concentration of toluene of 13,300 $\mu\text{g/L}$. Groundwater samples collected from all other Site monitor wells contained concentrations of toluene either below the NMWQCC standard or below the laboratory detection limit.

Ethylbenzene

The groundwater quality standard for ethylbenzene is 750 $\mu\text{g/L}$. Groundwater collected from Monitor Well MW-1 was found to contain 782 $\mu\text{g/L}$ ethylbenzene. Groundwater samples collected from all other Site monitor wells contained concentrations of ethylbenzene either below the NMWQCC standard or below the laboratory detection limit.

Xylenes

The groundwater quality standard for total xylenes is 620 µg/L. Groundwater collected from Monitor Well MW-1 was found to contain xylenes at a concentration of 7,850 µg/L. Groundwater samples collected from all other Site monitor wells contained concentrations of xylenes either below the NMWQCC standard or below the laboratory detection limit.

Naphthalene

The groundwater quality standard for naphthalene is 30 µg/L. Laboratory detection limits for naphthalene were set higher than 30 µg/L when the laboratory analyzed groundwater samples from MW-1 and MW-2. However, the duplicate sample, collected from MW-2, contained a concentration of naphthalene of 53.5 µg/L.

1,1,2,2 - Tetrachloroethane

The groundwater quality standard for 1,1,2,2-Tetrachloroethane is 10 µg/L. Laboratory detection limits for 1,1,2,2-Tetrachloroethane were set higher than 10 µg/L when the laboratory analyzed the groundwater sample from MW-1. The groundwater sample from MW-2 contained 1,1,2,2-Tetrachloroethane at a concentration of 19.1 µg/L.

Methylene Chloride

The groundwater quality standard for methylene chloride is 100 µg/L. Groundwater collected from Monitor Well MW-1 contained a concentration of methylene chloride of 667 µg/L.

Dissolved Boron

The groundwater quality standard for dissolved boron is 0.75 milligrams per liter (mg/L). Groundwater collected from MW-2 and MW-3 contained a concentration of dissolved boron of 1.09 mg/L and 0.976 mg/L, respectively.

Dissolved Manganese

The groundwater quality standard for dissolved manganese is 0.2 milligrams per liter (mg/L). Groundwater collected from Monitor Wells MW-2, MW-3, and MW-4 was found to contain concentrations of dissolved manganese ranging from 1.1 mg/L to 10.5 mg/L. Detailed results are included in Table 4.

Dissolved Iron

The groundwater quality standard for dissolved iron is 1.0 mg/L. Groundwater collected from Monitoring Well, MW-2 contained a concentration of dissolved

iron of 3.46 mg/L. Groundwater samples collected from all other Site monitor wells contained concentrations of dissolved iron below the NMWQCC standard.

Total Dissolved Solids

The groundwater quality standard for TDS is 1,000 mg/L. Groundwater collected from Monitor Wells MW-2, MW-3, and MW-4 was found to contain TDS at concentrations greater than 1,000 mg/L. TDS values in groundwater samples ranged from 26,600 mg/L to 40,200 mg/L. Detailed results are included in Table 4.

Sulfate

The groundwater quality standard for sulfate is 600 mg/L. Groundwater collected from Monitor Wells MW-2, MW-3, and MW-4 was found to contain concentrations of sulfate ranging from 17,100 to 25,200 mg/L. Detailed results are included in Table 4.

Chloride

The groundwater quality standard for chloride is 250 mg/L. Groundwater collected from Monitor Wells MW-2, MW-3 and MW-4 was found to contain chloride in concentrations ranging from 330 mg/L to 437 mg/L. Detailed results are included in Table 4.

Fluoride

The groundwater quality standard for fluoride is 1.6 mg/L. Groundwater collected from Monitor Wells MW-2, MW-3, and MW-4 was found to contain fluoride in concentrations ranging from 2.7 mg/L to 4.3 mg/L. Results are tabulated in Table 4.

3.0 CONCLUSIONS AND RECOMMENDATIONS

3.1 GROUNDWATER MONITORING

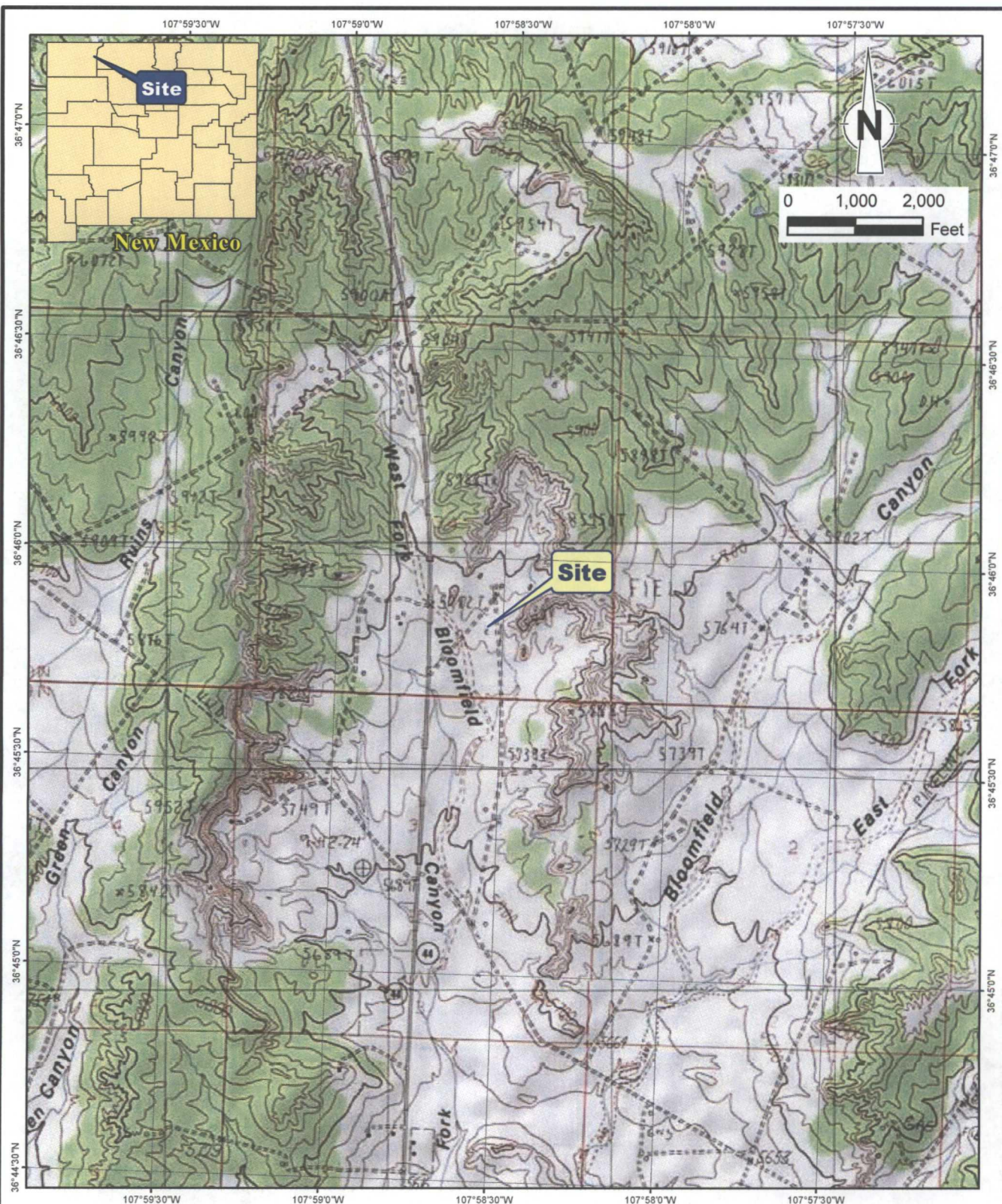
CRA has installed four groundwater monitor wells at the Site and conducted a baseline groundwater monitoring event. The groundwater monitor wells will be sampled on a quarterly monitoring schedule. The next groundwater monitoring event at the Site is scheduled for September 2011. Groundwater flow direction at the Site was calculated to be toward the south/southeast. CRA will continue to monitor groundwater flow direction at the Site and will note any changes should they occur.

Continued groundwater quality monitoring beyond BTEX analysis is recommended for the Site. Additional analytes should include naphthalene, 1,12,2 Tetrachlorethane, methylene chloride, chloride, fluoride, sulfate, dissolved manganese, dissolved boron, dissolved iron, and TDS. It should be noted, however, that MW-4, an upgradient, background monitoring well, revealed elevated concentrations of TDS and sulfate.

3.2 ADDITIONAL ASSESSMENT

CRA recommends the installation of two additional groundwater monitor wells southeast of the Site, and at least one north of the Site. If possible, these wells will be placed where impacts to groundwater are not expected to be present in order to better delineate and monitor the extent of the hydrocarbon plume. Proposed monitor well locations are displayed on Figure 6. Once these wells have been installed, CRA recommends the continuation of quarterly groundwater monitoring until concentrations of all constituents of concern are below NMWQCC standards, appear stable or reach regional background levels. In order to accelerate remediation at the site, CRA recommends evaluating potential active remediation options such as soil vapor extraction or chemical oxidation. An evaluation of these options may be presented in a work plan following NMOCD receipt and discussion of this report.

FIGURES



RE: USGS 7.5 Minute Topographic Maps.



Figure 1
SITE VICINITY MAP
MARTIN 34 NO. 2 GAS PRODUCTION WELL REMEDIATION SITE
SEC 12, T27N, R9W, SAN JUAN COUNTY, NEW MEXICO
ConocoPhillips Company



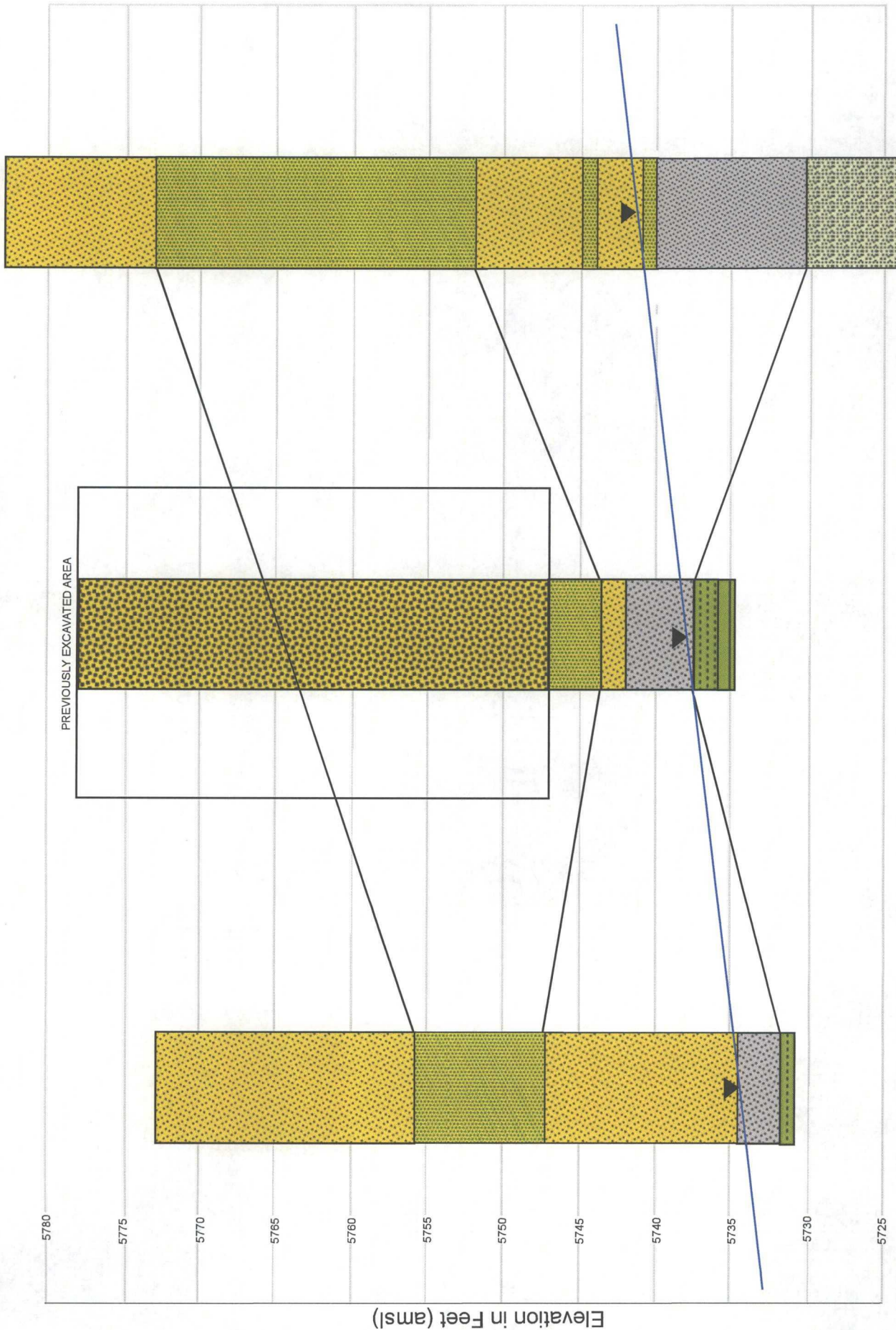
LEGEND

- ▲ Monitor Well Location
- ☀ Production Gas/Oil Well
- ☀ Plugged Production Gas/Oil Well
- ⊗ Injection Well
- Geoprobe® Boring Location

RE: 2009 NAIP Aerial Photograph

Figure 2
 SITE DETAILS MAP
 MARTIN 34 NO. 2 GAS PRODUCTION WELL REMEDIATION SITE
 SAN JUAN COUNTY, NEW MEXICO
ConocoPhillips Company





LEGEND

- Clean Fill
- Sand: loose, subrounded with silt and clay, brown
- Silt: loose, subrounded with sand and clay, brown
- Sand: loose, subrounded, 5-15% silt and clay, dark gray
- Clay: very stiff, with silt and sand, brown
- Shale: with silt and trace fine sand, light tan, reddish
- Sand: very dense, subangular, with clay and silt
- Groundwater

Figure 3
GENERALIZED GEOLOGIC CROSS SECTION
MARTIN 34 NO. 2 GAS PRODUCTION WELL REMEDIATION SITE
SAN JUAN COUNTY, NEW MEXICO
ConocoPhillips company



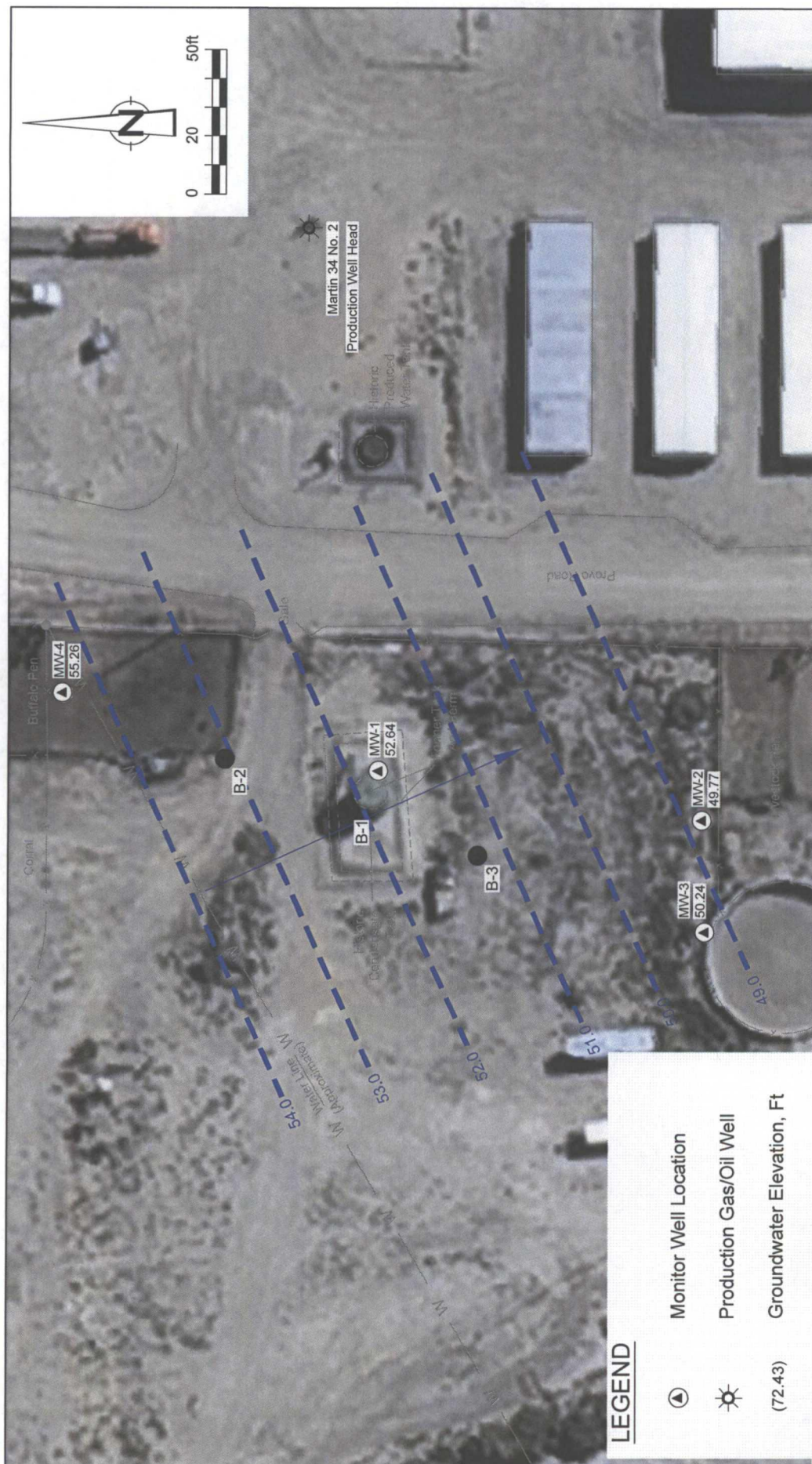


Figure 4

POTENTIOMETRIC MAP
 MARTIN 34 NO. 2 GAS PRODUCTION WELL REMEDIATION SITE
 SAN JUAN COUNTY, NEW MEXICO
 ConocoPhillips Company

Note:
 1. Groundwater elevation is relative to an arbitrary 100 ft reference point





Figure 5

BENZENE CONCENTRATION MAP
MARTIN 34 NO. 2 GAS PRODUCTION WELL REMEDIATION SITE
SAN JUAN COUNTY, NEW MEXICO
ConocoPhillips Company



TABLES

Table 1. ConocoPhillips Company, Martin 34 No. 2 - Site History Timeline

DATE	ACTIVITY
December 3, 2010	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	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 the excavation began in preparation for delineation by means of soil boring.
February 16, 2011	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 (NMWQCC) standards for benzene and chloride.
July 18 through 22, 2011	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	CRA conducted a baseline groundwater monitoring event. Laboratory analytical results were found to contain BTEX, dissolved iron, dissolved manganese, dissolved boron, chloride, fluoride, sulfate, total dissolved solids (TDS), naphthalene, TPH-GRO and TPH-DRO in exceedance of NMWQCC standards in groundwater samples collected from MW-1, MW-2, MW-3 and MW-4.

Table 2. Soil Boring Laboratory Analytical R

Constituent				
		190711-CFM-002	S-075035-190711-CFM-003	
Ions	Method	(51-53 feet)	MW-4 (54-56 feet)	NMOCD
Bromide	E300.0	mg NA	NA	NE
Chloride	E300.0	mg < 112	< 114	NE
Fluoride	E300.0	mg < 22.4	< 22.9	NE
Nitrate (as N)	E300.0	mg NA	NA	NE
Nitrite (as N)	E300.0	mg NA	NA	NE
Orthophosphate (as P)	E300.0	mg NA	NA	NE
Sulfate	E300.0	mg NA	NA	NE
Metals, Total	Method	(51-53 feet)	MW-4 (54-56 feet)	NMOCD
Aluminum	SW6010B	mg NA	NA	NE
Arsenic	SW6010B	mg NA	NA	NE
Barium	SW6010B	mg NA	NA	NE
Boron	SW6010B	mg NA	NA	NE
Cadmium	SW6010B	mg NA	NA	NE
Chromium	SW6010B	mg NA	NA	NE
Cobalt	SW6010B	mg NA	NA	NE
Copper	SW6010B	mg NA	NA	NE
Iron	SW6010B	mg NA	NA	NE
Lead	SW6010B	mg NA	NA	NE
Manganese	SW6010B	mg NA	NA	NE
Molybdenum	SW6010B	mg NA	NA	NE
Nickel	SW6010B	mg NA	NA	NE
Selenium	SW6010B	mg NA	NA	NE
Silver	SW6010B	mg NA	NA	NE
Zinc	SW6010B	mg NA	NA	NE
SVOCS (detections only)	Method	(51-53 feet)	MW-4 (54-56 feet)	NMOCD
2-Methylnaphthalene	SW8270C	mg < 368	NA	NE
VOCs (detections and BTEX only)	Method	(51-53 feet)	MW-4 (54-56 feet)	NMOCD
Acetone	8260B	µg/2810	NA	NE
1,2,4-Trimethylbenzene	8260B	µg/18300	NA	NE
1,3,5-Trimethylbenzene	8260B	µg/13300	NA	NE
p-Isopropyltoluene	8260B	µg/605	NA	NE
Isopropylbenzene	8260B	µg/1660	NA	NE
Naphthalene	8260B	µg/1120	NA	NE
n-Butylbenzene	8260B	µg/993	NA	NE
sec-Butylbenzene	8260B	µg/800	NA	NE
n-Propylbenzene	8260B	µg/2650	NA	NE
Benzene	8260B	µg < 291	< 8.3	10,000
Toluene	8260B	µg/2610	< 8.3	NE
Ethylbenzene	8260B	µg/4290	< 8.3	NE
Total Xylenes	8260B	µg/88400	< 16.6	NE
Total BTEX	—	µg/95300	< 41.5	50,000
Other	Method	(51-53 feet)	MW-4 (54-56 feet)	NMOCD
Specific Conductance	9050	µS NA	NA	NE
Alkalinity	2320B	mg NA	NA	NE
pH	9045D	µ NA	NA	NE
Petroleum Hydrocarbons	Method	(51-53 feet)	MW-4 (54-56 feet)	NMOCD
TPH Gasoline Range	8015B	mg/1940	206	100
TPH Diesel Range	8015B	mg/364	< 11.4	

Notes:

MW = monitor well

NMOCD = New Mexico Oil Conservation Division record

SVOCs = semi-volatile organic compounds

VOCs = volatile organic compounds

mg/kg - dry = milligrams per kilogram, analyzed after

mg/kg - dry = micrograms per kilogram

NE = not established

NA = Not Analyzed

Table 3. ConocoPhillips Company Martin 34 No. 2 - Groundwater Elevation Data Summary

Well ID	Total Depth (ft bgs)	Screen Interval (ft bgs)	TOC Elevation (ft)	Date Measured	Depth to Groundwater (ft below TOC)	Relative Groundwater Elevation
MW-1	41.0	31.0 - 41.0	93.09	7/27/2011	40.45	52.64
MW-2	41.5	31.5 - 41.5	87.45	7/27/2011	37.68	49.77
MW-3	46.0	31.0 - 46.0	87.19	7/27/2011	36.95	50.24
MW-4	53.0	38.0 - 53.0	99.63	7/27/2011	44.37	55.26

ft = Feet

TOC = Top of casing

bgs = below ground surface

* Elevation relative to an arbitrary reference elevation of 100 feet

Table 4. ConocoPhillips Company, Martin 34 No. 2 - Groundwater Laboratory Analytical Results Summary, July 2011 Baseline Parameters

Constituent	Sample ID (samples collected on July 27, 2011)				
	GW-07503-07271-CFM-003	GW-07503-07271-CFM-002	GW-07503-07271-CFM-001	GW-07503-07271-CFM-005	GW-07503-07271-CFM-004
Alkalinity, Total (as Calcium Carbonate)	SM2320B mg/L	1,760	NA	580	432
Hardness (as Calcium Carbonate)	SM2340C mg/L	1,820	NA	1870	3,130
Specific Conductance @ 25C	SM2510B umhos/cm	25,800	NA	26,700	33,300
Total Dissolved Solids	SM2540C mg/L	26,600	NA	29,200	40,200
pH	SM4500H pH units	7.4	NA	7.6	7.4

Notes:

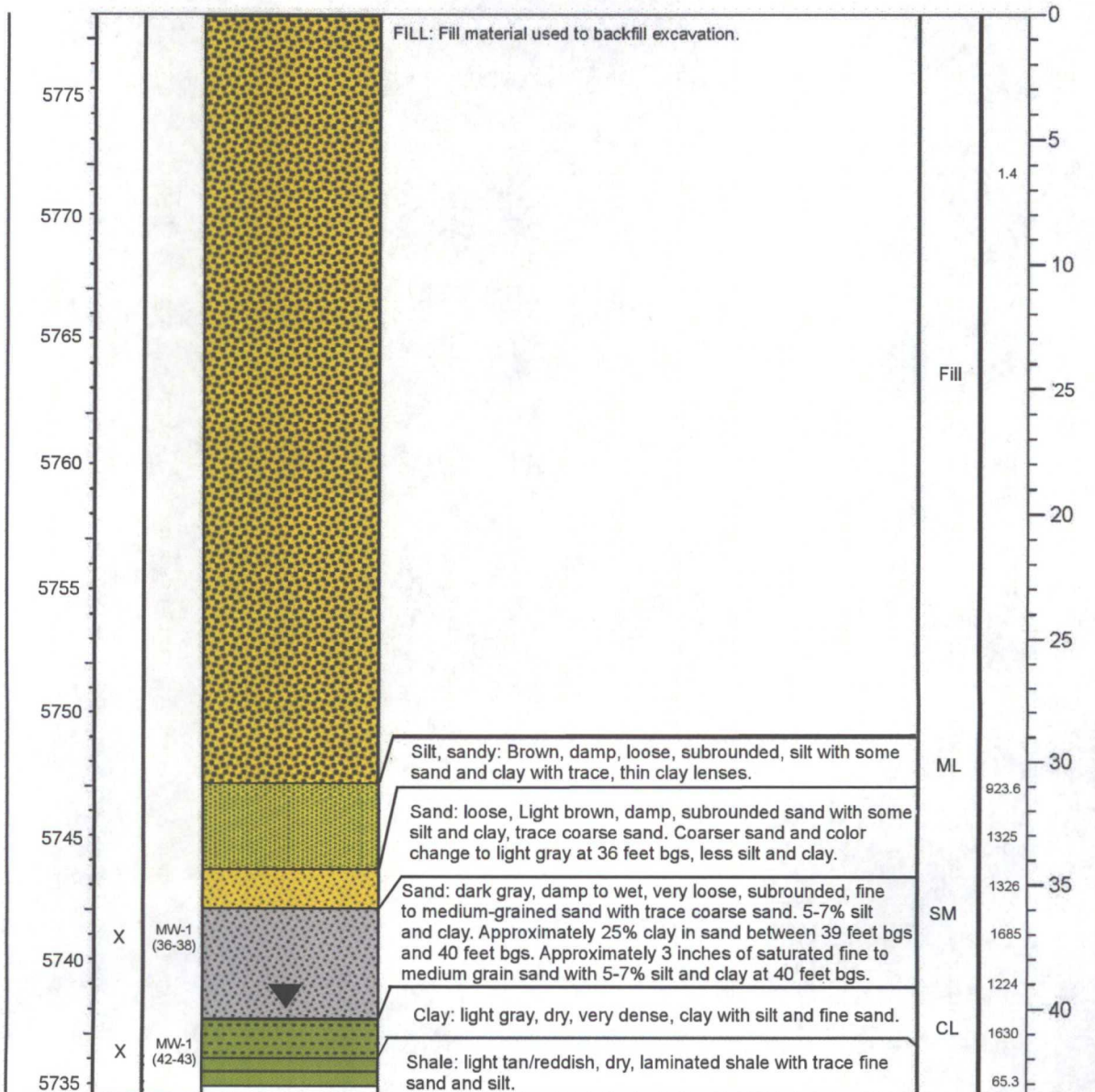
MW = monitoring well
 NMWQCC = New Mexico Water Quality Control Commission
 Constituents in BOLD are in excess of NMWQCC groundwater quality standards
 SVOCs = semi-volatile organic compounds
 VOCs = volatile organic compounds
 mg/L = milligrams per liter
 mg/L = micrograms per liter
 NE = not established
 NA = not analyzed

APPENDIX A

Boring Log

PROJECT NAME: <u>Martin 34 No. 2</u>		SOIL BORING NO. <u>MW-1</u>	
LOCATION: <u>San Juan County, NM</u>		DRILL TYPE: <u>CME-75 Hollow Stem Auger</u>	
FIELD LOGGED BY: <u>Cassie Brown and Christine Mathews</u>			
ELEVATION: GROUND SURFACE (msl): <u>~ 5778 feet</u>		BORE HOLE DIAMETER: <u>7 inches</u>	
GROUNDWATER ELEVATION (msl): <u>~5737.75 feet</u>		DRILLED BY: <u>Rodney Hammer of Enviro-Drill, Inc.</u>	
REMARKS: <u>Depth measured from ground surface</u>		DATE/TIME: HOLE STARTED: <u>July 21, 2011 - 11:45</u>	
<u>Total Depth = 43 feet</u>		DATE/TIME: COMPLETED: <u>July 21, 2011 - 15:30</u>	
<u>Drilled to 41.5 feet and sampled to 43 feet bgs</u>			

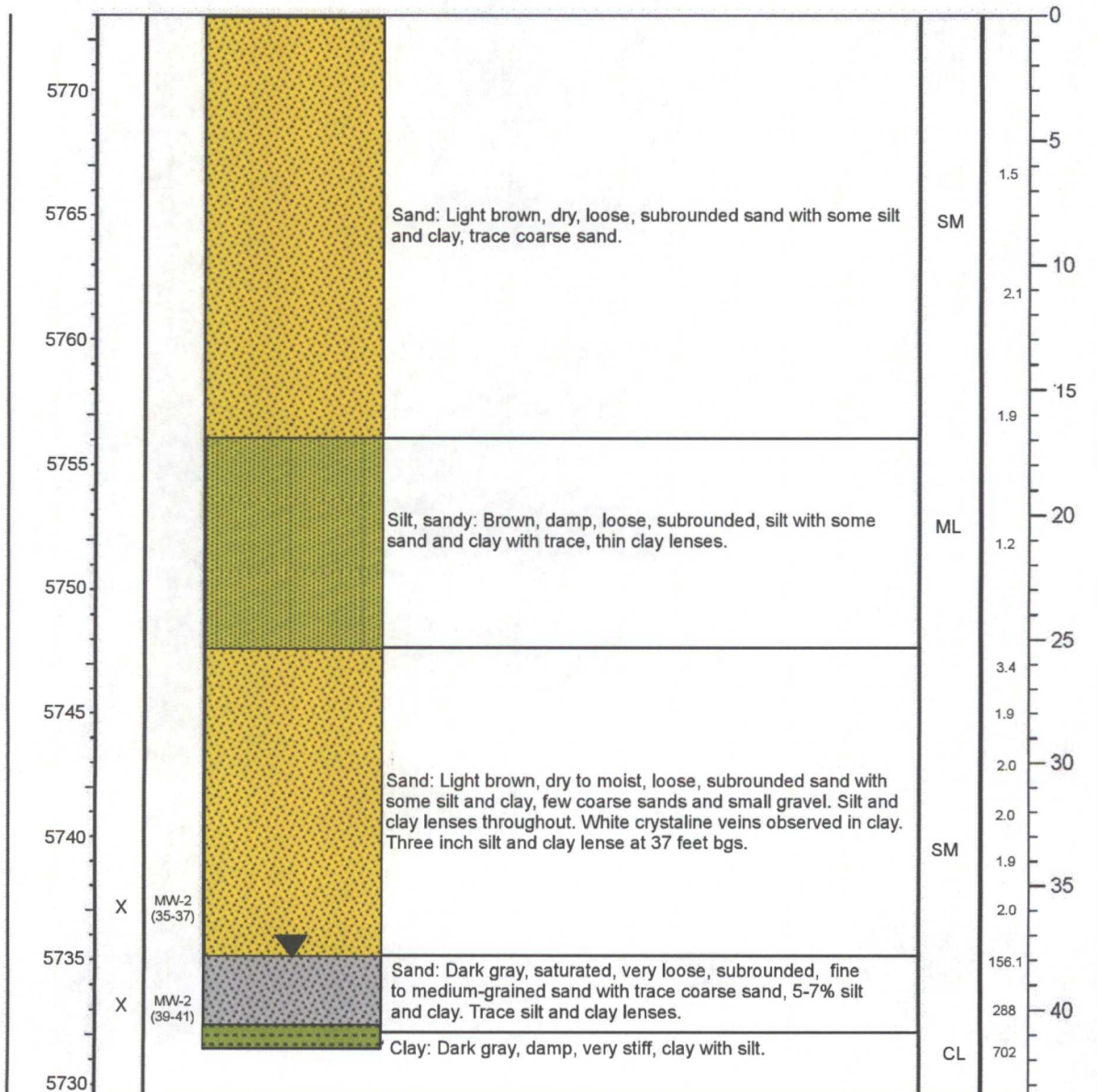
ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	PID RESULT (ppm)	DEPTH (bgs) - ft
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Boring Log

PROJECT NAME: <u>Martin 34 No. 2</u>		SOIL BORING NO. <u>MW-2</u>	
LOCATION: <u>San Juan County, NM</u>		DRILL TYPE: <u>CME-75 Hollow Stem Auger</u>	
FIELD LOGGED BY: <u>Cassie Brown and Christine Mathews</u>			
ELEVATION: GROUND SURFACE (msl): <u>~ 5773 feet</u>		BORE HOLE DIAMETER: <u>7 inches</u>	
GROUNDWATER ELEVATION (msl): <u>~ 5735 feet</u>		DRILLED BY: <u>Rodney Hammer of Enviro-Drill, Inc.</u>	
REMARKS: <u>Depth measured from ground surface</u>		DATE/TIME: HOLE STARTED: <u>July 20, 2011 - 12:30</u>	
<u>Total Depth = 41.5 feet</u>		DATE/TIME: COMPLETED: <u>July 20, 2011 - 16:18</u>	

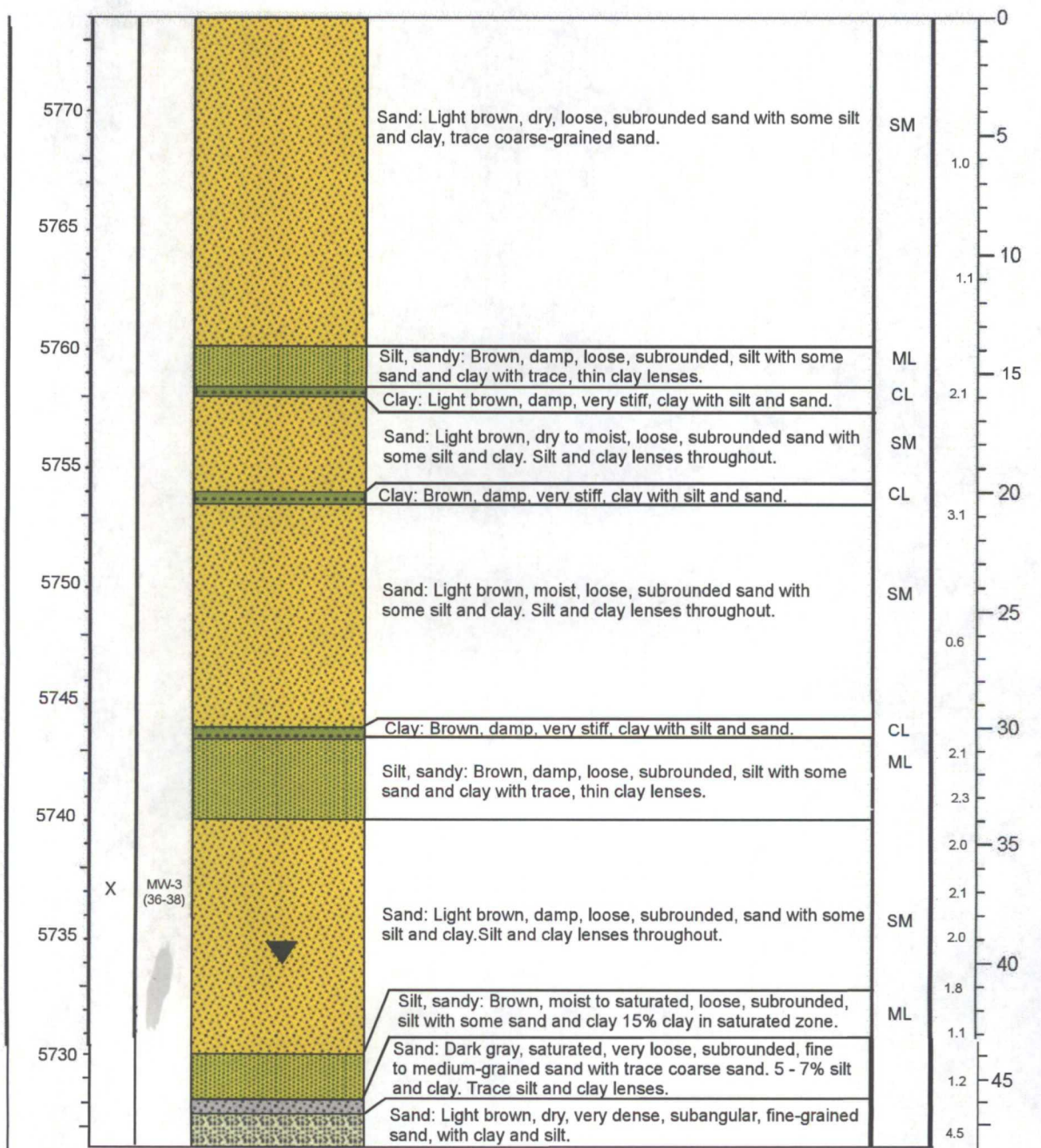
ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	PID RESULT (ppm)	DEPTH (bgs) - ft
-------------------------	---------------	-----------	-----------------------------------	-------------	------------------	---------------------



Boring Log

PROJECT NAME: <u>Martin 34 No. 2</u>		SOIL BORING NO. <u>MW-3</u>	
LOCATION: <u>San Juan County, NM</u>		DRILL TYPE: <u>CME-75 Hollow Stem Auger</u>	
FIELD LOGGED BY: <u>Cassie Brown and Christine Mathews</u>			
ELEVATION: GROUND SURFACE (msl): <u>~ 5774 feet</u>		BORE HOLE DIAMETER: <u>7 inches</u>	
GROUNDWATER ELEVATION (msl): <u>~ 5734 feet</u>		DRILLED BY: <u>Rodney Hammer of Enviro-Drill, Inc.</u>	
REMARKS: <u>Depth measured from ground surface.</u>		DATE/TIME: HOLE STARTED: <u>July 20, 2011 - 16:30</u>	
<u>Total Depth = 48 feet</u>		DATE/TIME: COMPLETED: <u>July 21, 2011 - 11:05</u>	
<u>Drilled to 46 feet bgs. Sampled to 48 feet bgs.</u>			

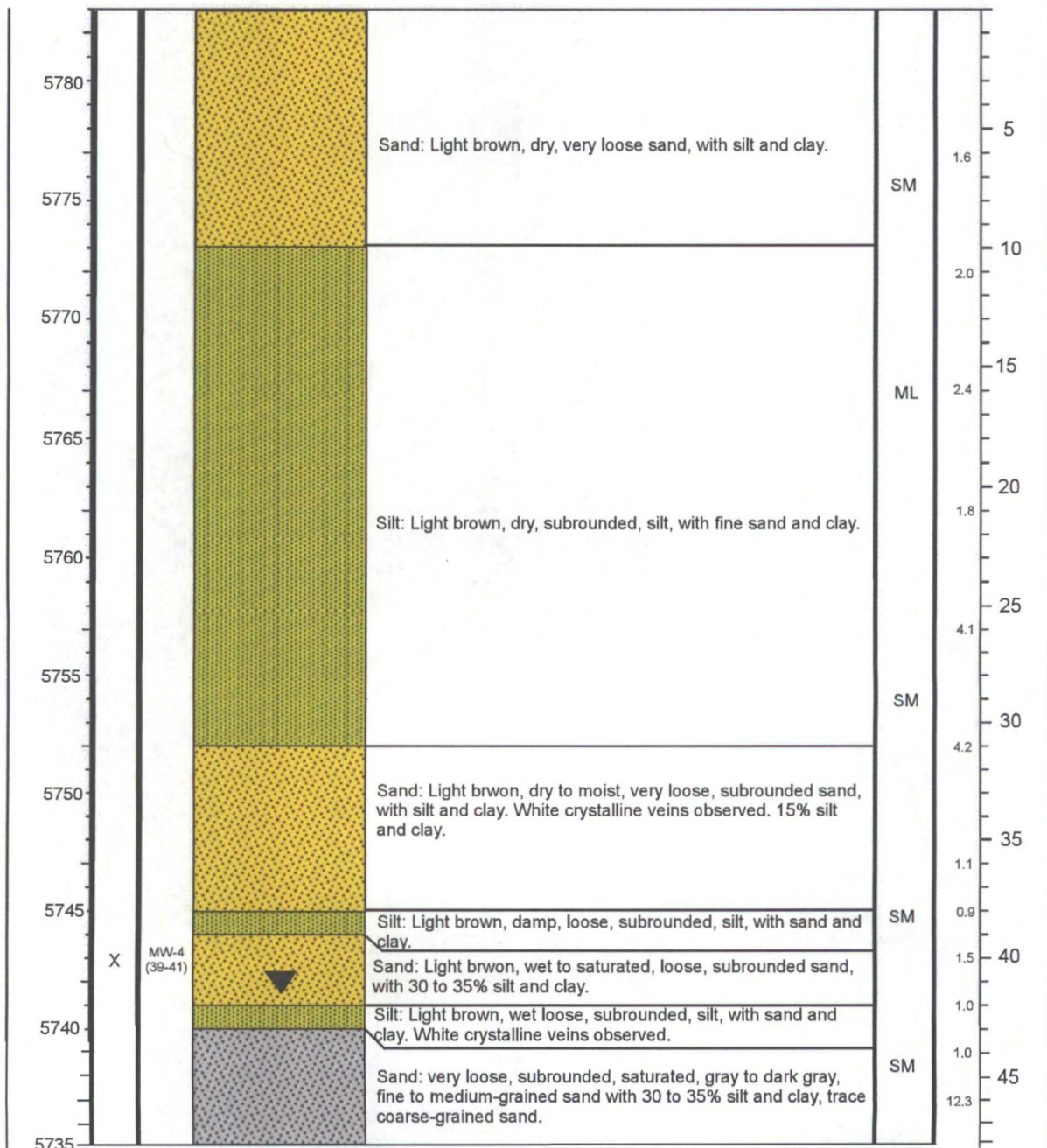
ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	PID RESULT (ppm)	DEPTH (bgs) - ft
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Boring Log

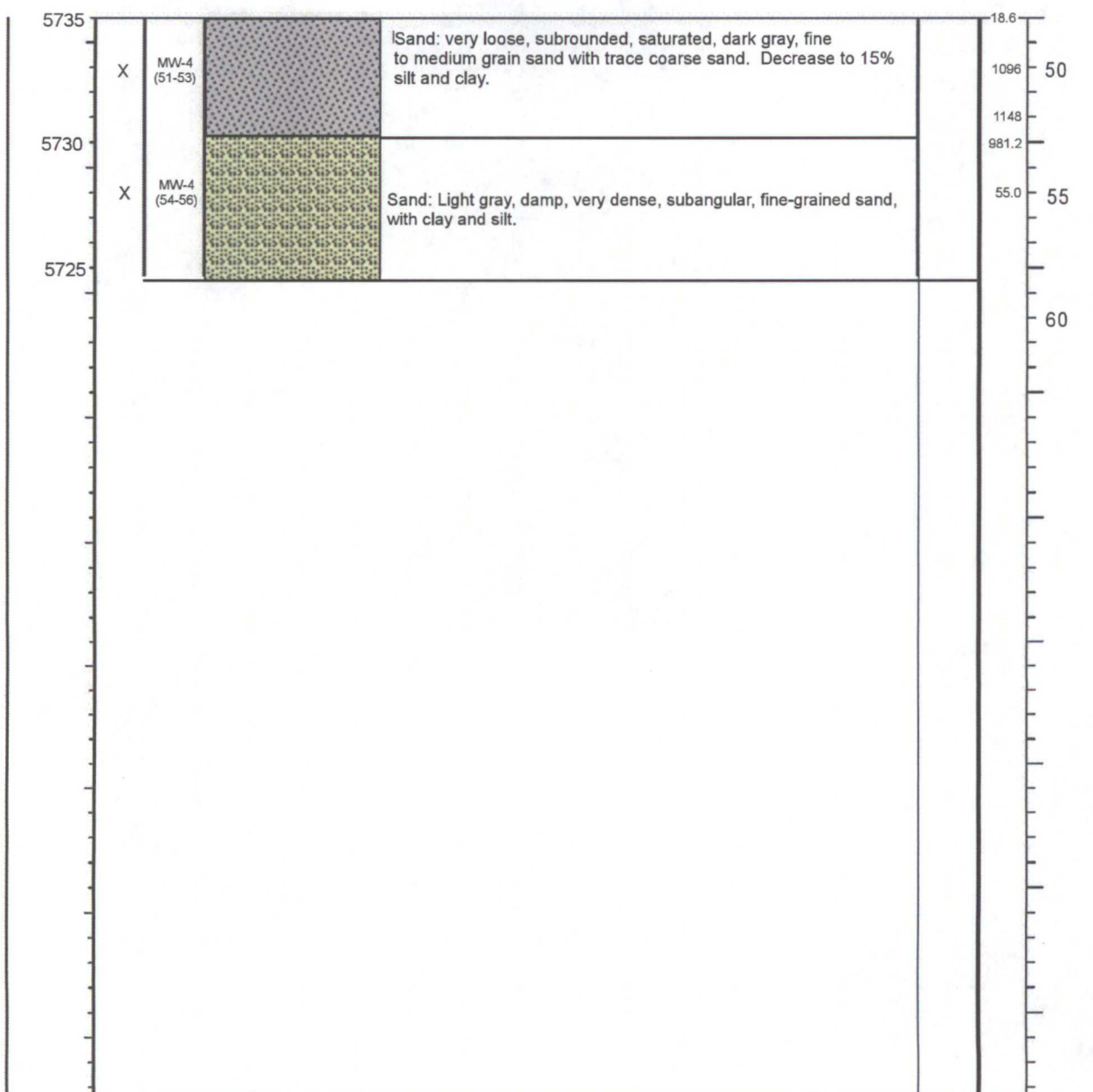
PROJECT NAME: <u>Martin 34 No. 2</u>		SOIL BORING NO. <u>MW-4</u>	
LOCATION: <u>San Juan County, NM</u>		DRILL TYPE: <u>CME-75 Hollow Stem Auger</u>	
FIELD LOGGED BY: <u>Cassie Brown and Christine Mathews</u>			
ELEVATION: GROUND SURFACE (msl): <u>~ 5783 feet</u>		BORE HOLE DIAMETER: <u>7 inches</u>	
GROUNDWATER ELEVATION (msl): <u>~ 5741.5 feet</u>		DRILLED BY: <u>Rodney Hammer of Enviro-Drill, Inc.</u>	
REMARKS: <u>Depth measured from ground surface</u>		DATE/TIME: HOLE STARTED: <u>July 19, 2011 - 13:00</u>	
<u>Total Depth = 58.5 feet</u>		DATE/TIME: COMPLETED: <u>July 19, 2011 - 17:00</u>	

ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	PID RESULT (ppm)	DEPTH (bgs) - ft
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PROJECT NAME: <u>Martin 34 No. 2</u>			SOIL BORING NO. <u>MW-4</u>		
LOCATION: <u>San Juan County, NM</u>			DRILL TYPE: <u>CME-75 Hollow Stem Auger</u>		
FIELD LOGGED BY: <u>Cassie Brown and Christine Mathews</u>					
ELEVATION: GROUND SURFACE (msl): <u>~ 5783 feet</u>			BORE HOLE DIAMETER: <u>7 inches</u>		
GROUNDWATER ELEVATION (msl): <u>~ 5741.5 feet</u>			DRILLED BY: <u>Rodney Hammer of Enviro-Drill, Inc.</u>		
REMARKS: <u>Depth measured from ground surface</u>			DATE/TIME: HOLE STARTED: <u>July 19, 2011 - 13:00</u>		
<u>Total Depth = 58.5 feet</u>			DATE/TIME: COMPLETED: <u>July 19, 2011 - 17:00</u>		

ELEVATION (msl) - ft	SAMPLE TO LAB	SAMPLE ID	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	PID RESULT (ppm)	DEPTH (bgs) - ft
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WELL CONSTRUCTION LOG

PROJECT NAME Martin 34 No. 2

WELL DESIGNATION MW-1

PROJECT NUMBER 075035

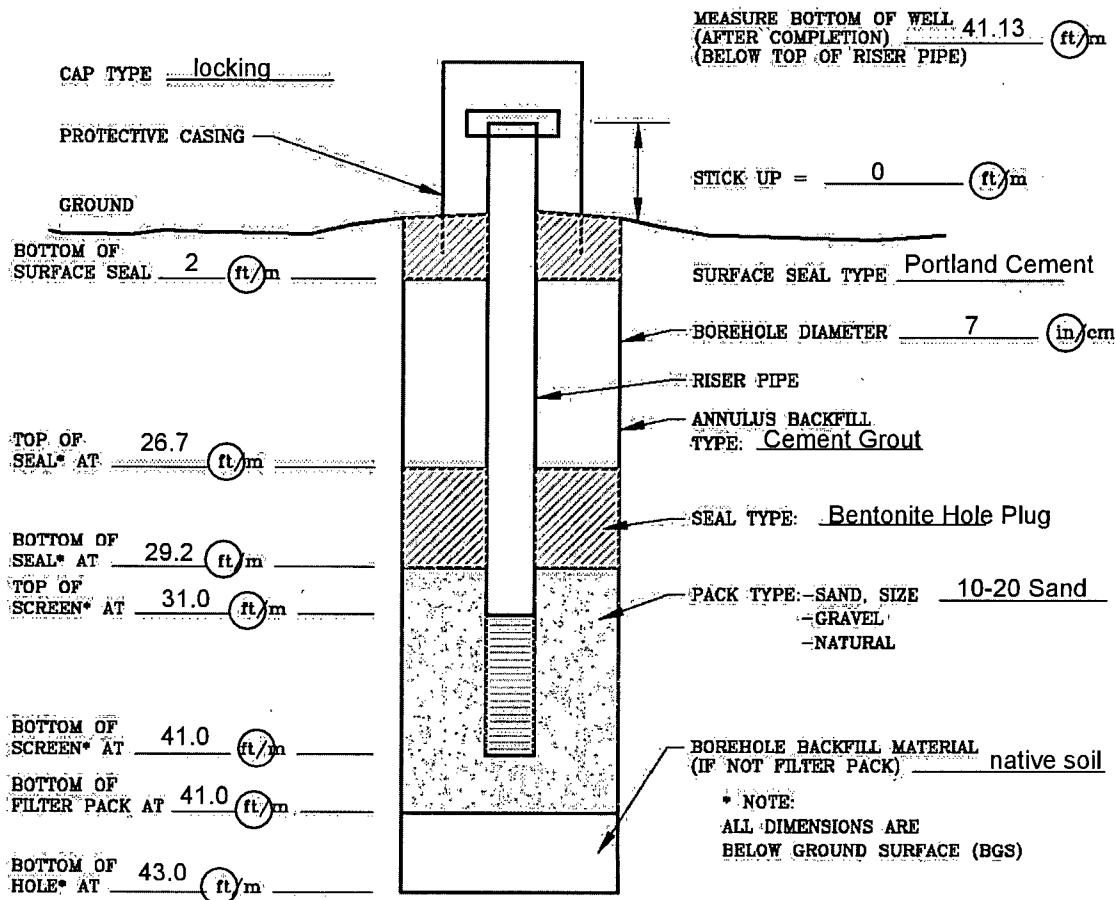
DATE COMPLETED July 21, 2011

CLIENT ConocoPhillips

DRILLING METHOD CME-75 Hollow Stem Auger

LOCATION Bloomfield, NM

CRA SUPERVISOR Kelly Blanchard



SCREEN TYPE: ☒ continuous slot ☐ wire wrapped ☐ louvre ☐ other: _____

SCREEN MATERIAL: ☐ stainless steel ☒ pvc ☐ other: _____

SCREEN LENGTH: 10 (ft/m) SCREEN DIAMETER: 2 (in/cm) SCREEN SLOT SIZE: 0.010

RISER PIPE MATERIAL: Schedule 40 PVC RISER PIPE DIAMETER: 2 (in/cm)

SURFACE CASING (Y/N) Yes MATERIAL: Steel DEPTH: 2 (ft/m)

DIAMETER: 8 (in/cm) SEALANT: Manhole

DEVELOPMENT: _____ METHOD: Bailed DURATION: _____

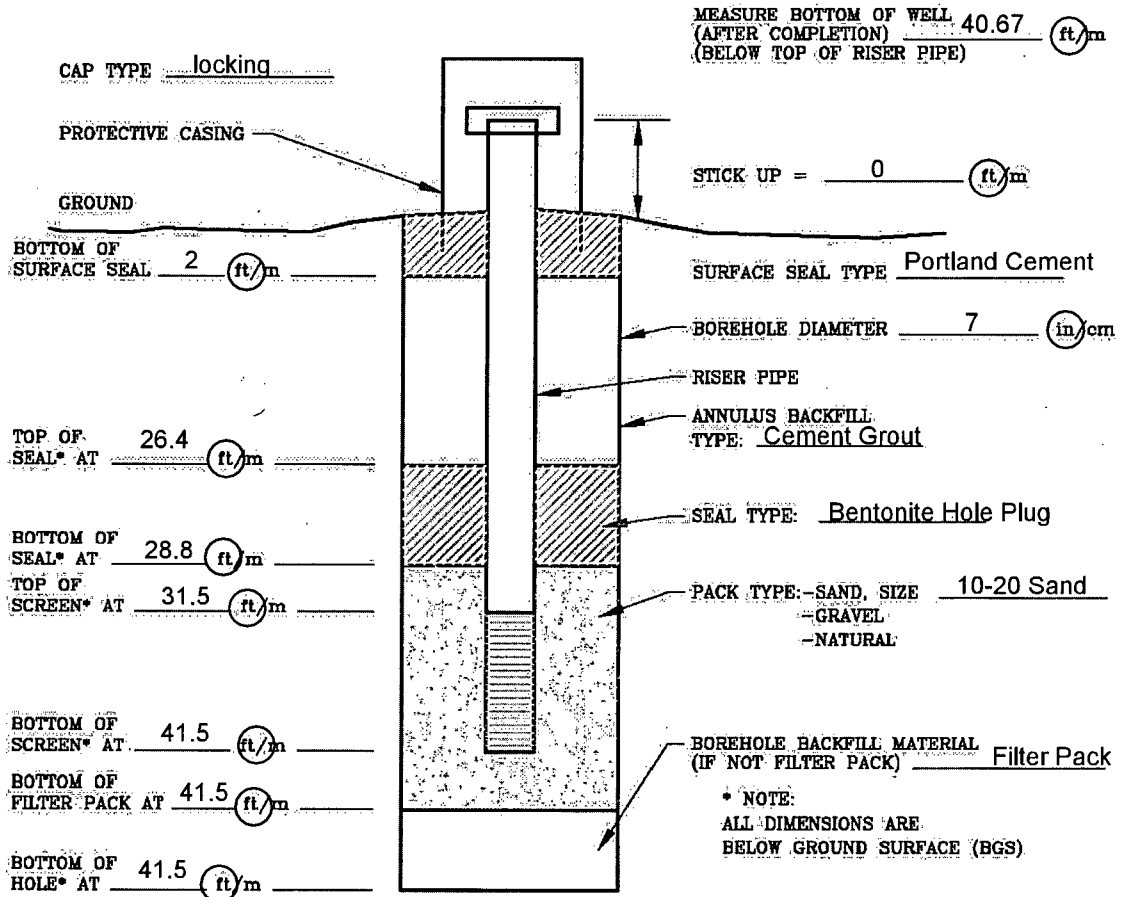
DESCRIPTION OF PURGED WATER: Silty, very little volume.



WELL CONSTRUCTION LOG

PROJECT NAME Martin 34 No. 2
 PROJECT NUMBER 075035
 CLIENT ConocoPhillips
 LOCATION Bloomfield, NM

WELL DESIGNATION MW-2
 DATE COMPLETED July 20, 2011
 DRILLING METHOD CME-75 Hollow Stem Auger
 CRA SUPERVISOR Kelly Blanchard



SCREEN TYPE: ☒ continuous slot ☐ wire wrapped ☐ louvre ☐ other: _____
 SCREEN MATERIAL: ☐ stainless steel ☒ pvc ☐ other: _____
 SCREEN LENGTH: 10 ft/m SCREEN DIAMETER: 2 in/cm SCREEN SLOT SIZE: 0.010
 RISER PIPE MATERIAL: Schedule 40 PVC RISER PIPE DIAMETER: 2 in/cm
 SURFACE CASING (Y/N) Yes MATERIAL: Steel DEPTH: 2 ft/m
 DIAMETER: 8 in/cm SEALANT: Manhole

DEVELOPMENT: METHOD: Bailed DURATION: continuously bailed dry over 2 days

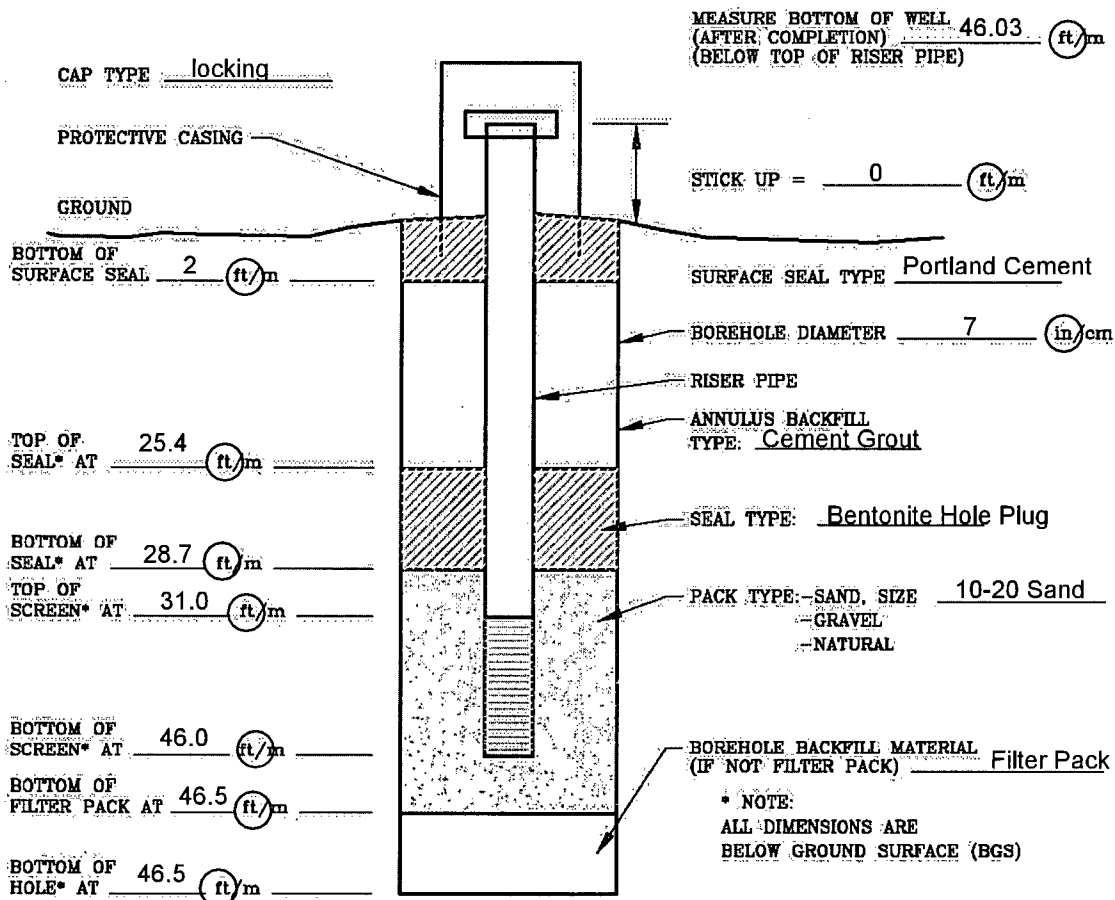
DESCRIPTION OF PURGED WATER: Silty, light gray, less silt and fine sediment after several well volumes.



WELL CONSTRUCTION LOG

PROJECT NAME Martin 34 No. 2
 PROJECT NUMBER 075035
 CLIENT ConocoPhillips
 LOCATION Bloomfield, NM

WELL DESIGNATION MW-3
 DATE COMPLETED July 21, 2011
 DRILLING METHOD CME-75 Hollow Stem Auger
 CRA SUPERVISOR Kelly Blanchard



SCREEN TYPE: ☒ continuous slot ☐ wire wrapped ☐ louvre ☐ other: _____

SCREEN MATERIAL: ☐ stainless steel ☒ pvc ☐ other: _____

SCREEN LENGTH: 15 ft/m SCREEN DIAMETER: 2 in/cm SCREEN SLOT SIZE: 0.010

RISER PIPE MATERIAL: Schedule 40 PVC RISER PIPE DIAMETER: 2 in/cm

SURFACE CASING (Y/N) Yes MATERIAL: Steel DEPTH: 2 ft/m

DIAMETER: 8 in/cm SEALANT: Manhole

DEVELOPMENT: METHOD: Bailed DURATION: continuously bailed dry over 2 days

DESCRIPTION OF PURGED WATER: Silty, tan, less silt and fine sediment after several well volumes were purged.



WELL CONSTRUCTION LOG

PROJECT NAME Martin 34 No. 2

WELL DESIGNATION MW-4

PROJECT NUMBER 075035

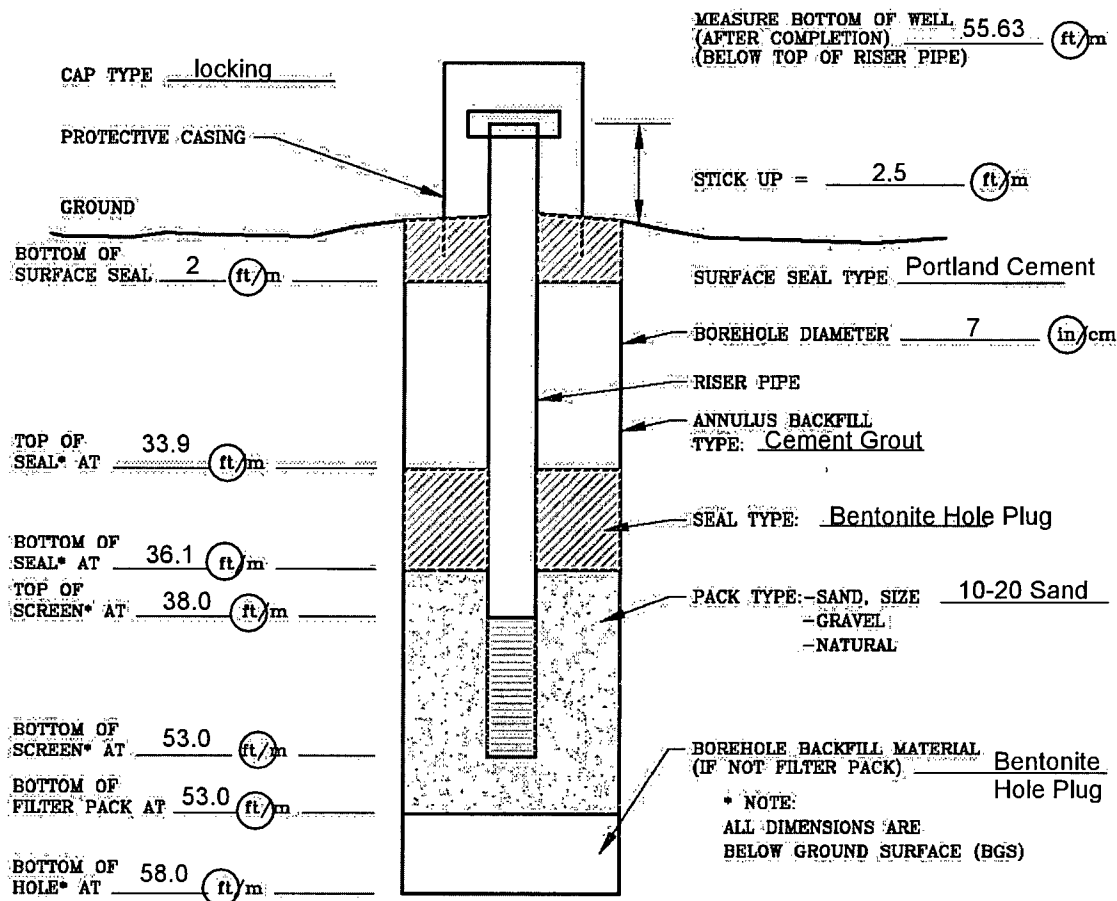
DATE COMPLETED July 20, 2011

CLIENT ConocoPhillips

DRILLING METHOD CME-75 Hollow Stem Auger

LOCATION Bloomfield, NM

CRA SUPERVISOR Kelly Blanchard



SCREEN TYPE: ☒ continuous slot ☐ wire wrapped ☐ louvre ☐ other: _____

SCREEN MATERIAL: ☐ stainless steel ☒ pvc ☐ other: _____

SCREEN LENGTH: 15 ft/m SCREEN DIAMETER: 2 in/cm SCREEN SLOT SIZE: 0.010

RISER PIPE MATERIAL: Schedule 40 PVC RISER PIPE DIAMETER: 2 in/cm

SURFACE CASING (Y/N) Yes MATERIAL: Steel DEPTH: 3 ft/m

DIAMETER: 4 in/cm SEALANT: _____

DEVELOPMENT: METHOD: Bailed DURATION: continuously bailed dry over 2 days

DESCRIPTION OF PURGED WATER: Silty, light gray, less silt and fine sediment after several well volumes were purged.



APPENDIX B

August 08, 2011

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

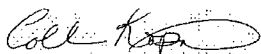
RE: Project: Martin 34 No. 2
Pace Project No.: 60103141

Dear Christine Matthews:

Enclosed are the analytical results for sample(s) received by the laboratory on July 23, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,



Colleen Koporc

colleen.koporc@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Martin 34 No. 2
Pace Project No.: 60103141

Kansas Certification IDs

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

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

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Martin 34 No. 2
Pace Project No.: 60103141

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60103141001	S-075035-190711-CFM-001	Solid	07/19/11 14:30	07/23/11 08:20
60103141002	S-075035-190711-CFM-002	Solid	07/19/11 16:00	07/23/11 08:20
60103141003	S-075035-190711-CFM-003	Solid	07/19/11 16:30	07/23/11 08:20
60103141004	S-075035-200711-CFM-004	Solid	07/20/11 14:46	07/23/11 08:20
60103141005	S-075035-200711-CFM-005	Solid	07/20/11 15:00	07/23/11 08:20
60103141006	S-075035-200711-CFM-006	Solid	07/20/11 17:27	07/23/11 08:20
60103141007	S-075035-210711-CFM-007	Solid	07/21/11 12:47	07/23/11 08:20
60103141008	S-075035-210711-CFM-008	Solid	07/21/11 13:20	07/23/11 08:20
60103141009	TB-210711-001	Solid	07/21/11 22:10	07/23/11 08:20
60103141010	TB-210711-002	Solid	07/21/11 22:10	07/23/11 08:20

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Martin 34 No. 2
Pace Project No.: 60103141

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60103141001	S-075035-190711-CFM-001	EPA 8015B	SDR	3
		EPA 8015B	PRG	2
		EPA 6010	SMW	16
		EPA 5035A/8260	JTS	7
		ASTM D2974-87	DWC	1
		SM 2320B	BDM	1
		EPA 9045	SRM1	1
		EPA 9050	SRM1	1
		EPA 300.0	JML	2
		EPA 300.0	JML	4
		EPA 9056	JML	1
60103141002	S-075035-190711-CFM-002	EPA 8015B	SDR	3
		EPA 8015B	PRG	2
		EPA 8270	JMT	71
		EPA 8260	RAB	69
		ASTM D2974-87	DWC	1
		EPA 300.0	JML	2
60103141003	S-075035-190711-CFM-003	EPA 8015B	SDR	3
		EPA 8015B	PRG	2
		EPA 5035A/8260	JTS	7
		ASTM D2974-87	DWC	1
		EPA 300.0	JML	2
60103141004	S-075035-200711-CFM-004	EPA 8015B	SDR	3
		EPA 8015B	PRG	2
		EPA 5035A/8260	JTS	7
		ASTM D2974-87	DWC	1
		EPA 300.0	JML	2
60103141005	S-075035-200711-CFM-005	EPA 8015B	SDR	3
		EPA 8015B	PRG	2
		EPA 8270	JMT	71
		EPA 8260	RAB	69
		ASTM D2974-87	DWC	1
60103141006	S-075035-200711-CFM-006	EPA 300.0	JML	2
		EPA 8015B	SDR	3
		EPA 8015B	PRG	2
		EPA 5035A/8260	JTS	7
		ASTM D2974-87	DWC	1

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Martin 34 No. 2
Pace Project No.: 60103141

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60103141007	S-075035-210711-CFM-007	EPA 300.0	JML	2
		EPA 8015B	SDR	3
		EPA 8015B	PRG	2
		EPA 6010	SMW	16
		EPA 8270	JMT	71
		EPA 8260	RAB	69
		ASTM D2974-87	DWC	1
		SM 2320B	BDM	1
		EPA 9045	SRM1	1
		EPA 9050	SRM1	1
		EPA 300.0	JML	2
		EPA 300.0	JML	4
		EPA 9056	JML	1
60103141008	S-075035-210711-CFM-008	EPA 8015B	SDR	3
		EPA 8015B	PRG	2
		EPA 5035A/8260	JTS	7
		ASTM D2974-87	DWC	1
		EPA 300.0	JML	2
60103141009	TB-210711-001	EPA 5035A/8260	JTS	7
60103141010	TB-210711-002	EPA 5035A/8260	JTS	7

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Martin 34 No. 2
Pace Project No.: 60103141

Method: EPA 8015B
Description: 8015B Diesel Range Organics
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: August 08, 2011

General Information:

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

Hold Time:

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

Sample Preparation:

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

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Surrogates:

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

Method Blank:

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

Laboratory Control Spike:

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

Matrix Spikes:

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

Duplicate Sample:

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

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Martin 34 No. 2

Pace Project No.: 60103141

Method: EPA 8015B

Description: Gasoline Range Organics

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

Date: August 08, 2011

General Information:

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

Hold Time:

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

Sample Preparation:

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

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Internal Standards:

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

Surrogates:

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

QC Batch: GCV/3776

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

- S-075035-190711-CFM-002 (Lab ID: 60103141002)
 - 4-Bromofluorobenzene (S)
- S-075035-200711-CFM-005 (Lab ID: 60103141005)
 - 4-Bromofluorobenzene (S)
- S-075035-210711-CFM-007 (Lab ID: 60103141007)
 - 4-Bromofluorobenzene (S)

Method Blank:

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

Laboratory Control Spike:

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

Matrix Spikes:

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

Duplicate Sample:

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

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Martin 34 No. 2
Pace Project No.: 60103141

Method: EPA 6010
Description: 6010 MET ICP
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: August 08, 2011

General Information:

2 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 3050 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

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

Matrix Spikes:

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

QC Batch: MPRP/14889

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60103141001

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

- MS (Lab ID: 851129)
 - Aluminum
 - Barium
 - Boron
 - Iron
 - Manganese

Duplicate Sample:

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

Additional Comments:

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PROJECT NARRATIVE

Project: Martin 34 No. 2

Pace Project No.: 60103141

Method: EPA 8270

Description: 8270 MSSV Semivolatiles

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

Date: August 08, 2011

General Information:

3 samples were analyzed for EPA 8270. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

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

Sample Preparation:

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

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

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.

Duplicate Sample:

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

Additional Comments:

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PROJECT NARRATIVE

Project: Martin 34 No. 2
Pace Project No.: 60103141

Method: EPA 5035A/8260
Description: 8260 MSV GRO and Oxygenates
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: August 08, 2011

General Information:

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

Hold Time:

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

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Internal Standards:

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

Surrogates:

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

Method Blank:

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

Laboratory Control Spike:

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

Matrix Spikes:

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

QC Batch: MSV/38752

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

QC Batch: MSV/38789

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

Duplicate Sample:

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

Additional Comments:

Analyte Comments:

QC Batch: MSV/38789

1e: The sample was received in a vessel that was not preserved within 48 hours of sample collection.

- S-075035-190711-CFM-001 (Lab ID: 60103141001)
- Toluene-d8 (S)

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PROJECT NARRATIVE

Project: Martin 34 No. 2
Pace Project No.: 60103141

Method: EPA 8260
Description: 8260 MSV 5035A VOA
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: August 08, 2011

General Information:

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

Hold Time:

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

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Internal Standards:

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

Surrogates:

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

QC Batch: MSV/38810

S0: Surrogate recovery outside laboratory control limits.

- S-075035-210711-CFM-007 (Lab ID: 60103141007)
- Toluene-d8 (S)

Method Blank:

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

QC Batch: MSV/38810

B-: Analyte detected in method blank but was not detected in the associated samples.

- BLANK (Lab ID: 852118)
- Methylene chloride

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/38810

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

Duplicate Sample:

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

Additional Comments:

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PROJECT NARRATIVE

Project: Martin 34 No. 2

Pace Project No.: 60103141

Method: EPA 8260

Description: 8260 MSV 5035A VOA

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

Date: August 08, 2011

Analyte Comments:

QC Batch: MSV/38810

B-: Analyte detected in method blank but was not detected in the associated samples.

- BLANK (Lab ID: 852118)
- Methylene chloride

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PROJECT NARRATIVE

Project: Martin 34 No. 2

Pace Project No.: 60103141

Method: SM 2320B

Description: 2320B Alkalinity

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

Date: August 08, 2011

General Information:

2 samples were analyzed for SM 2320B. 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:

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PROJECT NARRATIVE

Project: Martin 34 No. 2
Pace Project No.: 60103141

Method: EPA 9045
Description: 9045 pH Soil
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: August 08, 2011

General Information:

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

Hold Time:

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

Method Blank:

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

Laboratory Control Spike:

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

Matrix Spikes:

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

Duplicate Sample:

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

Additional Comments:

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PROJECT NARRATIVE

Project: Martin 34 No. 2

Pace Project No.: 60103141

Method: EPA 9050

Description: 9050 Specific Conductance

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

Date: August 08, 2011

General Information:

2 samples were analyzed for EPA 9050. 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:

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PROJECT NARRATIVE

Project: Martin 34 No. 2
Pace Project No.: 60103141

Method: EPA 300.0
Description: 300.0 IC Anions
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: August 08, 2011

General Information:

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

Hold Time:

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

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

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

Matrix Spikes:

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

Duplicate Sample:

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

Additional Comments:

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PROJECT NARRATIVE

Project: Martin 34 No. 2

Pace Project No.: 60103141

Method: EPA 300.0

Description: 300.0 IC Anions 28 Days

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

Date: August 08, 2011

General Information:

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

Hold Time:

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

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

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

Matrix Spikes:

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

Duplicate Sample:

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

Additional Comments:

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PROJECT NARRATIVE

Project: Martin 34 No. 2
Pace Project No.: 60103141

Method: EPA 9056
Description: 9056 IC Anions 48hr
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: August 08, 2011

General Information:

2 samples were analyzed for EPA 9056. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

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

H1: Analysis conducted outside the EPA method holding time.

- S-075035-190711-CFM-001 (Lab ID: 60103141001)
- S-075035-210711-CFM-007 (Lab ID: 60103141007)

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

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

Matrix Spikes:

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

Duplicate Sample:

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

Additional Comments:

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

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ANALYTICAL RESULTS

Project: Martin 34 No. 2

Pace Project No.: 60103141

Sample: S-075035-190711-CFM-001 Lab ID: 60103141001 Collected: 07/19/11 14:30 Received: 07/23/11 08:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics								
Analytical Method: EPA 8015B Preparation Method: EPA 3546								
TPH-DRO	ND mg/kg		11.1	1	07/29/11 00:00	08/01/11 22:43		
n-Tetracosane (S)	82 %		41-130	1	07/29/11 00:00	08/01/11 22:43	646-31-1	
p-Terphenyl (S)	90 %		39-130	1	07/29/11 00:00	08/01/11 22:43	92-94-4	
Gasoline Range Organics								
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B								
TPH-GRO	ND mg/kg		11.2	1	07/26/11 00:00	07/26/11 16:00		
4-Bromofluorobenzene (S)	92 %		68-134	1	07/26/11 00:00	07/26/11 16:00	460-00-4	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Aluminum	8460 mg/kg		7.3	1	07/28/11 10:08	07/29/11 13:58	7429-90-5	
Arsenic	1.7 mg/kg		0.98	1	07/28/11 10:08	07/29/11 13:58	7440-38-2	
Barium	114 mg/kg		0.98	1	07/28/11 10:08	07/29/11 13:58	7440-39-3	
Boron	ND mg/kg		9.8	1	07/28/11 10:08	07/29/11 13:58	7440-42-8	
Cadmium	ND mg/kg		0.49	1	07/28/11 10:08	07/29/11 13:58	7440-43-9	
Chromium	4.4 mg/kg		0.49	1	07/28/11 10:08	07/29/11 13:58	7440-47-3	
Cobalt	3.2 mg/kg		0.49	1	07/28/11 10:08	07/29/11 13:58	7440-48-4	
Copper	6.4 mg/kg		0.98	1	07/28/11 10:08	07/29/11 13:58	7440-50-8	
Iron	8950 mg/kg		9.8	2	07/28/11 10:08	08/05/11 09:49	7439-89-6	
Lead	4.9 mg/kg		0.49	1	07/28/11 10:08	07/29/11 13:58	7439-92-1	
Manganese	205 mg/kg		0.49	1	07/28/11 10:08	07/29/11 13:58	7439-96-5	
Molybdenum	ND mg/kg		2.0	1	07/28/11 10:08	07/29/11 13:58	7439-98-7	
Nickel	3.8 mg/kg		0.49	1	07/28/11 10:08	07/29/11 13:58	7440-02-0	
Selenium	ND mg/kg		1.5	1	07/28/11 10:08	07/29/11 13:58	7782-49-2	
Silver	ND mg/kg		0.68	1	07/28/11 10:08	07/29/11 13:58	7440-22-4	
Zinc	18.9 mg/kg		9.8	1	07/28/11 10:08	07/29/11 13:58	7440-66-6	
8260 MSV GRO and Oxygenates								
Analytical Method: EPA 5035A/8260								
Benzene	ND ug/kg		6.6	1		07/28/11 22:03	71-43-2	
Ethylbenzene	ND ug/kg		6.6	1		07/28/11 22:03	100-41-4	
Toluene	ND ug/kg		6.6	1		07/28/11 22:03	108-88-3	
Xylene (Total)	ND ug/kg		13.1	1		07/28/11 22:03	1330-20-7	
Toluene-d8 (S)	99 %		81-121	1		07/28/11 22:03	2037-26-5	1e
4-Bromofluorobenzene (S)	103 %		75-131	1		07/28/11 22:03	460-00-4	
1,2-Dichloroethane-d4 (S)	115 %		77-131	1		07/28/11 22:03	17060-07-0	
Percent Moisture								
Analytical Method: ASTM D2974-87								
Percent Moisture	11.7 %		0.50	1		07/26/11 00:00		
2320B Alkalinity								
Analytical Method: SM 2320B								
Alkalinity, Total as CaCO3	990 mg/kg		227	1		08/02/11 00:00		
9045 pH Soil								
Analytical Method: EPA 9045								
pH at 25 Degrees C	8.2 Std. Units		0.10	1		08/04/11 15:01		

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ANALYTICAL RESULTS

Project: Martin 34 No. 2

Pace Project No.: 60103141

Sample: S-075035-190711-CFM-001 Lab ID: 60103141001 Collected: 07/19/11 14:30 Received: 07/23/11 08:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9050 Specific Conductance								
Analytical Method: EPA 9050								
Specific Conductance	8520	umhos/cm	1.0	1		08/02/11 13:30		
300.0 IC Anions								
Analytical Method: EPA 300.0								
Nitrate as N	43.0	mg/kg	11.3	10		08/01/11 18:05	14797-55-8	
Nitrite as N	ND	mg/kg	11.3	10		08/01/11 18:05	14797-65-0	
300.0 IC Anions 28 Days								
Analytical Method: EPA 300.0								
Bromide	ND	mg/kg	113	10		08/03/11 13:00	24959-67-9	
Chloride	ND	mg/kg	113	10		08/03/11 13:00	16887-00-6	
Fluoride	ND	mg/kg	22.7	10		08/03/11 13:00	16984-48-8	
Sulfate	7880	mg/kg	566	50		08/04/11 05:16	14808-79-8	
9056 IC Anions 48hr								
Analytical Method: EPA 9056								
Orthophosphate as P	ND	mg/kg	113	10		08/03/11 13:00		H1

ANALYTICAL RESULTS

Project: Martin 34 No. 2
Pace Project No.: 60103141

Sample: S-075035-190711-CFM-002 Lab ID: 60103141002 Collected: 07/19/11 16:00 Received: 07/23/11 08:20 Matrix: Solid
Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics Analytical Method: EPA 8015B Preparation Method: EPA 3546								
TPH-DRO	364 mg/kg		10.9	1	07/29/11 00:00	08/01/11 22:54		
n-Tetracosane (S)	92 %		41-130	1	07/29/11 00:00	08/01/11 22:54	646-31-1	
p-Terphenyl (S)	91 %		39-130	1	07/29/11 00:00	08/01/11 22:54	92-94-4	
Gasoline Range Organics Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B								
TPH-GRO	1940 mg/kg		233	20	07/26/11 00:00	07/27/11 17:37		
4-Bromofluorobenzene (S)	142 %		68-134	20	07/26/11 00:00	07/27/11 17:37	460-00-4	S1
8270 MSSV Semivolatiles Analytical Method: EPA 8270 Preparation Method: EPA 3546								
Acenaphthene	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	83-32-9	
Acenaphthylene	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	208-96-8	
Anthracene	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	120-12-7	
Benzo(a)anthracene	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	56-55-3	
Benzo(a)pyrene	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	205-99-2	
Benzo(g,h,i)perylene	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	191-24-2	
Benzo(k)fluoranthene	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	207-08-9	
Benzoic acid	ND ug/kg		1860	1	07/28/11 00:00	08/01/11 18:20	65-85-0	
Benzyl alcohol	ND ug/kg		736	1	07/28/11 00:00	08/01/11 18:20	100-51-6	
4-Bromophenylphenyl ether	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	101-55-3	
Butylbenzylphthalate	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	85-68-7	
4-Chloro-3-methylphenol	ND ug/kg		736	1	07/28/11 00:00	08/01/11 18:20	59-50-7	
4-Chloroaniline	ND ug/kg		736	1	07/28/11 00:00	08/01/11 18:20	106-47-8	
bis(2-Chloroethoxy)methane	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	111-91-1	
bis(2-Chloroethyl) ether	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	111-44-4	
bis(2-Chloroisopropyl) ether	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	39638-32-9	
2-Chloronaphthalene	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	91-58-7	
2-Chlorophenol	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	95-57-8	
4-Chlorophenylphenyl ether	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	7005-72-3	
Chrysene	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	53-70-3	
Dibenzofuran	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	132-64-9	
1,2-Dichlorobenzene	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	106-46-7	
3,3'-Dichlorobenzidine	ND ug/kg		736	1	07/28/11 00:00	08/01/11 18:20	91-94-1	
2,4-Dichlorophenol	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	120-83-2	
Diethylphthalate	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	84-66-2	
2,4-Dimethylphenol	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	105-67-9	
Dimethylphthalate	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	131-11-3	
Di-n-butylphthalate	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	84-74-2	
4,6-Dinitro-2-methylphenol	ND ug/kg		1860	1	07/28/11 00:00	08/01/11 18:20	534-52-1	
2,4-Dinitrophenol	ND ug/kg		1860	1	07/28/11 00:00	08/01/11 18:20	51-28-5	
2,4-Dinitrotoluene	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	121-14-2	
2,6-Dinitrotoluene	ND ug/kg		368	1	07/28/11 00:00	08/01/11 18:20	606-20-2	

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ANALYTICAL RESULTS

Project: Martin 34 No. 2

Pace Project No.: 60103141

Sample: S-075035-190711-CFM-002 Lab ID: 60103141002 Collected: 07/19/11 16:00 Received: 07/23/11 08:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatiles Analytical Method: EPA 8270 Preparation Method: EPA 3546								
Di-n-octylphthalate	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20	117-81-7	
Fluoranthene	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20	206-44-0	
Fluorene	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20	87-68-3	
Hexachlorobenzene	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20	77-47-4	
Hexachloroethane	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20	193-39-5	
Isophorone	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20	78-59-1	
2-Methylnaphthalene	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20		
Naphthalene	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20	91-20-3	
2-Nitroaniline	ND	ug/kg	736	1	07/28/11 00:00	08/01/11 18:20	88-74-4	
3-Nitroaniline	ND	ug/kg	736	1	07/28/11 00:00	08/01/11 18:20	99-09-2	
4-Nitroaniline	ND	ug/kg	736	1	07/28/11 00:00	08/01/11 18:20	100-01-6	
Nitrobenzene	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20	98-95-3	
2-Nitrophenol	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20	88-75-5	
4-Nitrophenol	ND	ug/kg	1860	1	07/28/11 00:00	08/01/11 18:20	100-02-7	
N-Nitroso-di-n-propylamine	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20	86-30-6	
Pentachlorophenol	ND	ug/kg	1860	1	07/28/11 00:00	08/01/11 18:20	87-86-5	
Phenanthrene	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20	85-01-8	
Phenol	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20	108-95-2	
Pyrene	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	368	1	07/28/11 00:00	08/01/11 18:20	88-06-2	
Nitrobenzene-d5 (S)	74 %		41-110	1	07/28/11 00:00	08/01/11 18:20	4165-60-0	
2-Fluorobiphenyl (S)	75 %		50-106	1	07/28/11 00:00	08/01/11 18:20	321-60-8	
Terphenyl-d14 (S)	79 %		37-110	1	07/28/11 00:00	08/01/11 18:20	1718-51-0	
Phenol-d6 (S)	71 %		49-110	1	07/28/11 00:00	08/01/11 18:20	13127-88-3	
2-Fluorophenol (S)	71 %		47-110	1	07/28/11 00:00	08/01/11 18:20	367-12-4	
2,4,6-Tribromophenol (S)	81 %		48-111	1	07/28/11 00:00	08/01/11 18:20	118-79-6	
8260 MSV 5035A VOA Analytical Method: EPA 8260								
Acetone	2810	ug/kg	1160	50		07/29/11 16:41	67-64-1	
Benzene	ND	ug/kg	291	50		07/29/11 16:41	71-43-2	
Bromobenzene	ND	ug/kg	291	50		07/29/11 16:41	108-86-1	
Bromochloromethane	ND	ug/kg	291	50		07/29/11 16:41	74-97-5	
Bromodichloromethane	ND	ug/kg	291	50		07/29/11 16:41	75-27-4	
Bromoform	ND	ug/kg	291	50		07/29/11 16:41	75-25-2	
Bromomethane	ND	ug/kg	291	50		07/29/11 16:41	74-83-9	
2-Butanone (MEK)	ND	ug/kg	582	50		07/29/11 16:41	78-93-3	L3
n-Butylbenzene	993	ug/kg	291	50		07/29/11 16:41	104-51-8	

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ANALYTICAL RESULTS

Project: Martin 34 No. 2

Pace Project No.: 60103141

Sample: S-075035-190711-CFM-002 Lab ID: 60103141002 Collected: 07/19/11 16:00 Received: 07/23/11 08:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA								
Analytical Method: EPA 8260								
sec-Butylbenzene	800	ug/kg	291	50		07/29/11 16:41	135-98-8	
tert-Butylbenzene	ND	ug/kg	291	50		07/29/11 16:41	98-06-6	
Carbon disulfide	ND	ug/kg	291	50		07/29/11 16:41	75-15-0	
Carbon tetrachloride	ND	ug/kg	291	50		07/29/11 16:41	56-23-5	
Chlorobenzene	ND	ug/kg	291	50		07/29/11 16:41	108-90-7	
Chloroethane	ND	ug/kg	291	50		07/29/11 16:41	75-00-3	
Chloroform	ND	ug/kg	291	50		07/29/11 16:41	67-66-3	
Chloromethane	ND	ug/kg	291	50		07/29/11 16:41	74-87-3	
2-Chlorotoluene	ND	ug/kg	291	50		07/29/11 16:41	95-49-8	
4-Chlorotoluene	ND	ug/kg	291	50		07/29/11 16:41	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	582	50		07/29/11 16:41	96-12-8	
Dibromochloromethane	ND	ug/kg	291	50		07/29/11 16:41	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	291	50		07/29/11 16:41	106-93-4	
Dibromomethane	ND	ug/kg	291	50		07/29/11 16:41	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	291	50		07/29/11 16:41	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	291	50		07/29/11 16:41	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	291	50		07/29/11 16:41	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	291	50		07/29/11 16:41	75-71-8	
1,1-Dichloroethane	ND	ug/kg	291	50		07/29/11 16:41	75-34-3	
1,2-Dichloroethane	ND	ug/kg	291	50		07/29/11 16:41	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/kg	291	50		07/29/11 16:41	540-59-0	
1,1-Dichloroethene	ND	ug/kg	291	50		07/29/11 16:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	291	50		07/29/11 16:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	291	50		07/29/11 16:41	156-60-5	
1,2-Dichloropropane	ND	ug/kg	291	50		07/29/11 16:41	78-87-5	
1,3-Dichloropropane	ND	ug/kg	291	50		07/29/11 16:41	142-28-9	
2,2-Dichloropropane	ND	ug/kg	291	50		07/29/11 16:41	594-20-7	
1,1-Dichloropropene	ND	ug/kg	291	50		07/29/11 16:41	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	291	50		07/29/11 16:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	291	50		07/29/11 16:41	10061-02-6	
Ethylbenzene	4290	ug/kg	291	50		07/29/11 16:41	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	291	50		07/29/11 16:41	87-68-3	
2-Hexanone	ND	ug/kg	1160	50		07/29/11 16:41	591-78-6	
Isopropylbenzene (Cumene)	1660	ug/kg	291	50		07/29/11 16:41	98-82-8	
p-Isopropyltoluene	605	ug/kg	291	50		07/29/11 16:41	99-87-6	
Methylene chloride	ND	ug/kg	291	50		07/29/11 16:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	582	50		07/29/11 16:41	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	291	50		07/29/11 16:41	1634-04-4	
Naphthalene	1120	ug/kg	582	50		07/29/11 16:41	91-20-3	
n-Propylbenzene	2650	ug/kg	291	50		07/29/11 16:41	103-65-1	
Styrene	ND	ug/kg	291	50		07/29/11 16:41	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	291	50		07/29/11 16:41	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	291	50		07/29/11 16:41	79-34-5	
Tetrachloroethene	ND	ug/kg	291	50		07/29/11 16:41	127-18-4	
Toluene	2610	ug/kg	291	50		07/29/11 16:41	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	291	50		07/29/11 16:41	87-61-6	

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ANALYTICAL RESULTS

Project: Martin 34 No. 2

Pace Project No.: 60103141

Sample: S-075035-190711-CFM-002 Lab ID: 60103141002 Collected: 07/19/11 16:00 Received: 07/23/11 08:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
1,2,4-Trichlorobenzene	ND ug/kg		291	50		07/29/11 16:41	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		291	50		07/29/11 16:41	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		291	50		07/29/11 16:41	79-00-5	
Trichloroethene	ND ug/kg		291	50		07/29/11 16:41	79-01-6	
Trichlorofluoromethane	ND ug/kg		291	50		07/29/11 16:41	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		291	50		07/29/11 16:41	96-18-4	
1,2,4-Trimethylbenzene	18300 ug/kg		2910	500		08/01/11 16:50	95-63-6	
1,3,5-Trimethylbenzene	13300 ug/kg		291	50		07/29/11 16:41	108-67-8	
Vinyl chloride	ND ug/kg		291	50		07/29/11 16:41	75-01-4	
Xylene (Total)	88400 ug/kg		2910	500		08/01/11 16:50	1330-20-7	
Dibromofluoromethane (S)	88 %		68-129	50		07/29/11 16:41	1868-53-7	
Toluene-d8 (S)	89 %		81-121	50		07/29/11 16:41	2037-26-5	
4-Bromofluorobenzene (S)	127 %		75-131	50		07/29/11 16:41	460-00-4	
1,2-Dichloroethane-d4 (S)	105 %		77-131	50		07/29/11 16:41	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	10.8 %		0.50	1		07/26/11 00:00		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0						
Chloride	ND mg/kg		112	10		08/03/11 13:50	16887-00-6	
Fluoride	ND mg/kg		22.4	10		08/03/11 13:50	16984-48-8	

ANALYTICAL RESULTS

Project: Martin 34 No. 2
Pace Project No.: 60103141

Sample: S-075035-190711-CFM-003 Lab ID: 60103141003 Collected: 07/19/11 16:30 Received: 07/23/11 08:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics								
Analytical Method: EPA 8015B Preparation Method: EPA 3546								
TPH-DRO	ND	mg/kg	11.4	1	07/29/11 00:00	08/01/11 23:05		
n-Tetracosane (S)	81	%	41-130	1	07/29/11 00:00	08/01/11 23:05	646-31-1	
p-Terphenyl (S)	87	%	39-130	1	07/29/11 00:00	08/01/11 23:05	92-94-4	
Gasoline Range Organics								
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B								
TPH-GRO	206	mg/kg	38.6	1	07/26/11 00:00	07/26/11 17:32		
4-Bromofluorobenzene (S)	109	%	68-134	1	07/26/11 00:00	07/26/11 17:32	460-00-4	
8260 MSV GRO and Oxygenates								
Analytical Method: EPA 5035A/8260								
Benzene	ND	ug/kg	8.3	1		07/28/11 15:01	71-43-2	
Ethylbenzene	ND	ug/kg	8.3	1		07/28/11 15:01	100-41-4	
Toluene	ND	ug/kg	8.3	1		07/28/11 15:01	108-88-3	
Xylene (Total)	ND	ug/kg	16.6	1		07/28/11 15:01	1330-20-7	
Toluene-d8 (S)	100	%	81-121	1		07/28/11 15:01	2037-26-5	
4-Bromofluorobenzene (S)	103	%	75-131	1		07/28/11 15:01	460-00-4	
1,2-Dichloroethane-d4 (S)	115	%	77-131	1		07/28/11 15:01	17060-07-0	
Percent Moisture								
Analytical Method: ASTM D2974-87								
Percent Moisture	12.5	%	0.50	1		07/26/11 00:00		
300.0 IC Anions 28 Days								
Analytical Method: EPA 300.0								
Chloride	ND	mg/kg	114	10		08/03/11 14:06	16887-00-6	
Fluoride	ND	mg/kg	22.9	10		08/03/11 14:06	16984-48-8	



ANALYTICAL RESULTS

Project: Martin 34 No. 2

Pace Project No.: 60103141

Sample: S-075035-200711-CFM-004 Lab ID: 60103141004 Collected: 07/20/11 14:46 Received: 07/23/11 08:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics		Analytical Method: EPA 8015B Preparation Method: EPA 3546						
TPH-DRO	ND mg/kg		10.6	1	07/29/11 00:00	08/01/11 23:16		
n-Tetracosane (S)	89 %		41-130	1	07/29/11 00:00	08/01/11 23:16	646-31-1	
p-Terphenyl (S)	87 %		39-130	1	07/29/11 00:00	08/01/11 23:16	92-94-4	
Gasoline Range Organics		Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B						
TPH-GRO	21.5 mg/kg		11.8	1	07/26/11 00:00	07/26/11 17:55		
4-Bromofluorobenzene (S)	97 %		68-134	1	07/26/11 00:00	07/26/11 17:55	460-00-4	
8260 MSV GRO and Oxygenates		Analytical Method: EPA 5035A/8260						
Benzene	ND ug/kg		6.2	1		07/28/11 15:16	71-43-2	
Ethylbenzene	ND ug/kg		6.2	1		07/28/11 15:16	100-41-4	
Toluene	ND ug/kg		6.2	1		07/28/11 15:16	108-88-3	
Xylene (Total)	ND ug/kg		12.5	1		07/28/11 15:16	1330-20-7	
Toluene-d8 (S)	98 %		81-121	1		07/28/11 15:16	2037-26-5	
4-Bromofluorobenzene (S)	101 %		75-131	1		07/28/11 15:16	460-00-4	
1,2-Dichloroethane-d4 (S)	111 %		77-131	1		07/28/11 15:16	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	6.4 %		0.50	1		07/26/11 00:00		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0						
Chloride	ND mg/kg		107	10		08/03/11 14:56	16887-00-6	
Fluoride	ND mg/kg		21.4	10		08/03/11 14:56	16984-48-8	

ANALYTICAL RESULTS

Project: Martin 34 No. 2

Pace Project No.: 60103141

Sample: S-075035-200711-CFM-005 Lab ID: 60103141005 Collected: 07/20/11 15:00 Received: 07/23/11 08:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics Analytical Method: EPA 8015B Preparation Method: EPA 3546								
TPH-DRO	153 mg/kg		11.8	1	07/29/11 00:00	08/01/11 23:27		
n-Tetracosane (S)	89 %		41-130	1	07/29/11 00:00	08/01/11 23:27	646-31-1	
p-Terphenyl (S)	84 %		39-130	1	07/29/11 00:00	08/01/11 23:27	92-94-4	
Gasoline Range Organics Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B								
TPH-GRO	122 mg/kg		12.2	1	07/26/11 00:00	07/27/11 18:00		
4-Bromofluorobenzene (S)	186 %		68-134	1	07/26/11 00:00	07/27/11 18:00	460-00-4	S1
8270 MSSV Semivolatiles Analytical Method: EPA 8270 Preparation Method: EPA 3546								
Acenaphthene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	83-32-9	
Acenaphthylene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	208-96-8	
Anthracene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	120-12-7	
Benzo(a)anthracene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	56-55-3	
Benzo(a)pyrene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	205-99-2	
Benzo(g,h,i)perylene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	191-24-2	
Benzo(k)fluoranthene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	207-08-9	
Benzoic acid	ND ug/kg		1980	1	07/28/11 00:00	08/01/11 18:41	65-85-0	
Benzyl alcohol	ND ug/kg		781	1	07/28/11 00:00	08/01/11 18:41	100-51-6	
4-Bromophenylphenyl ether	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	101-55-3	
Butylbenzylphthalate	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	85-68-7	
4-Chloro-3-methylphenol	ND ug/kg		781	1	07/28/11 00:00	08/01/11 18:41	59-50-7	
4-Chloroaniline	ND ug/kg		781	1	07/28/11 00:00	08/01/11 18:41	106-47-8	
bis(2-Chloroethoxy)methane	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	111-91-1	
bis(2-Chloroethyl) ether	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	111-44-4	
bis(2-Chloroisopropyl) ether	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	39638-32-9	
2-Chloronaphthalene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	91-58-7	
2-Chlorophenol	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	95-57-8	
4-Chlorophenylphenyl ether	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	7005-72-3	
Chrysene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	53-70-3	
Dibenzofuran	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	132-64-9	
1,2-Dichlorobenzene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	106-46-7	
3,3'-Dichlorobenzidine	ND ug/kg		781	1	07/28/11 00:00	08/01/11 18:41	91-94-1	
2,4-Dichlorophenol	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	120-83-2	
Diethylphthalate	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	84-66-2	
2,4-Dimethylphenol	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	105-67-9	
Dimethylphthalate	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	131-11-3	
Di-n-butylphthalate	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	84-74-2	
4,6-Dinitro-2-methylphenol	ND ug/kg		1980	1	07/28/11 00:00	08/01/11 18:41	534-52-1	
2,4-Dinitrophenol	ND ug/kg		1980	1	07/28/11 00:00	08/01/11 18:41	51-28-5	
2,4-Dinitrotoluene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	121-14-2	
2,6-Dinitrotoluene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	606-20-2	

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ANALYTICAL RESULTS

Project: Martin 34 No. 2

Pace Project No.: 60103141

Sample: S-075035-200711-CFM-005 Lab ID: 60103141005 Collected: 07/20/11 15:00 Received: 07/23/11 08:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatiles Analytical Method: EPA 8270 Preparation Method: EPA 3546								
Di-n-octylphthalate	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	117-84-0	
bis(2-Ethylhexyl)phthalate	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	117-81-7	
Fluoranthene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	206-44-0	
Fluorene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	86-73-7	
Hexachloro-1,3-butadiene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	87-68-3	
Hexachlorobenzene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	118-74-1	
Hexachlorocyclopentadiene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	77-47-4	
Hexachloroethane	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	67-72-1	
Indeno(1,2,3-cd)pyrene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	193-39-5	
Isophorone	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	78-59-1	
2-Methylnaphthalene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	91-57-6	
2-Methylphenol(o-Cresol)	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41		
Naphthalene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	91-20-3	
2-Nitroaniline	ND ug/kg		781	1	07/28/11 00:00	08/01/11 18:41	88-74-4	
3-Nitroaniline	ND ug/kg		781	1	07/28/11 00:00	08/01/11 18:41	99-09-2	
4-Nitroaniline	ND ug/kg		781	1	07/28/11 00:00	08/01/11 18:41	100-01-6	
Nitrobenzene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	98-95-3	
2-Nitrophenol	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	88-75-5	
4-Nitrophenol	ND ug/kg		1980	1	07/28/11 00:00	08/01/11 18:41	100-02-7	
N-Nitroso-di-n-propylamine	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	621-64-7	
N-Nitrosodiphenylamine	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	86-30-6	
Pentachlorophenol	ND ug/kg		1980	1	07/28/11 00:00	08/01/11 18:41	87-86-5	
Phenanthrene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	85-01-8	
Phenol	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	108-95-2	
Pyrene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	129-00-0	
1,2,4-Trichlorobenzene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	120-82-1	
2,4,5-Trichlorophenol	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	95-95-4	
2,4,6-Trichlorophenol	ND ug/kg		391	1	07/28/11 00:00	08/01/11 18:41	88-06-2	
Nitrobenzene-d5 (S)	77 %		41-110	1	07/28/11 00:00	08/01/11 18:41	4165-60-0	
2-Fluorobiphenyl (S)	78 %		50-106	1	07/28/11 00:00	08/01/11 18:41	321-60-8	
Terphenyl-d14 (S)	80 %		37-110	1	07/28/11 00:00	08/01/11 18:41	1718-51-0	
Phenol-d6 (S)	75 %		49-110	1	07/28/11 00:00	08/01/11 18:41	13127-88-3	
2-Fluorophenol (S)	75 %		47-110	1	07/28/11 00:00	08/01/11 18:41	367-12-4	
2,4,6-Tribromophenol (S)	82 %		48-111	1	07/28/11 00:00	08/01/11 18:41	118-79-6	
8260 MSV 5035A VOA Analytical Method: EPA 8260								
Acetone	ND ug/kg		1220	50		07/29/11 16:55	67-64-1	
Benzene	ND ug/kg		306	50		07/29/11 16:55	71-43-2	
Bromobenzene	ND ug/kg		306	50		07/29/11 16:55	108-86-1	
Bromochloromethane	ND ug/kg		306	50		07/29/11 16:55	74-97-5	
Bromodichloromethane	ND ug/kg		306	50		07/29/11 16:55	75-27-4	
Bromoform	ND ug/kg		306	50		07/29/11 16:55	75-25-2	
Bromomethane	ND ug/kg		306	50		07/29/11 16:55	74-83-9	
2-Butanone (MEK)	ND ug/kg		612	50		07/29/11 16:55	78-93-3	L3
n-Butylbenzene	ND ug/kg		306	50		07/29/11 16:55	104-51-8	

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ANALYTICAL RESULTS

Project: Martin 34 No. 2

Pace Project No.: 60103141

Sample: S-075035-200711-CFM-005 Lab ID: 60103141005 Collected: 07/20/11 15:00 Received: 07/23/11 08:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA		Analytical Method: EPA 8260						
sec-Butylbenzene	ND	ug/kg	306	50		07/29/11 16:55	135-98-8	
tert-Butylbenzene	ND	ug/kg	306	50		07/29/11 16:55	98-06-6	
Carbon disulfide	ND	ug/kg	306	50		07/29/11 16:55	75-15-0	
Carbon tetrachloride	ND	ug/kg	306	50		07/29/11 16:55	56-23-5	
Chlorobenzene	ND	ug/kg	306	50		07/29/11 16:55	108-90-7	
Chloroethane	ND	ug/kg	306	50		07/29/11 16:55	75-00-3	
Chloroform	ND	ug/kg	306	50		07/29/11 16:55	67-66-3	
Chloromethane	ND	ug/kg	306	50		07/29/11 16:55	74-87-3	
2-Chlorotoluene	ND	ug/kg	306	50		07/29/11 16:55	95-49-8	
4-Chlorotoluene	ND	ug/kg	306	50		07/29/11 16:55	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	612	50		07/29/11 16:55	96-12-8	
Dibromochloromethane	ND	ug/kg	306	50		07/29/11 16:55	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	306	50		07/29/11 16:55	106-93-4	
Dibromomethane	ND	ug/kg	306	50		07/29/11 16:55	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	306	50		07/29/11 16:55	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	306	50		07/29/11 16:55	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	306	50		07/29/11 16:55	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	306	50		07/29/11 16:55	75-71-8	
1,1-Dichloroethane	ND	ug/kg	306	50		07/29/11 16:55	75-34-3	
1,2-Dichloroethane	ND	ug/kg	306	50		07/29/11 16:55	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/kg	306	50		07/29/11 16:55	540-59-0	
1,1-Dichloroethene	ND	ug/kg	306	50		07/29/11 16:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	306	50		07/29/11 16:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	306	50		07/29/11 16:55	156-60-5	
1,2-Dichloropropane	ND	ug/kg	306	50		07/29/11 16:55	78-87-5	
1,3-Dichloropropane	ND	ug/kg	306	50		07/29/11 16:55	142-28-9	
2,2-Dichloropropane	ND	ug/kg	306	50		07/29/11 16:55	594-20-7	
1,1-Dichloropropene	ND	ug/kg	306	50		07/29/11 16:55	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	306	50		07/29/11 16:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	306	50		07/29/11 16:55	10061-02-6	
Ethylbenzene	529	ug/kg	306	50		07/29/11 16:55	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	306	50		07/29/11 16:55	87-68-3	
2-Hexanone	ND	ug/kg	1220	50		07/29/11 16:55	591-78-6	
Isopropylbenzene (Cumene)	331	ug/kg	306	50		07/29/11 16:55	98-82-8	
p-Isopropyltoluene	ND	ug/kg	306	50		07/29/11 16:55	99-87-6	
Methylene chloride	ND	ug/kg	306	50		07/29/11 16:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	612	50		07/29/11 16:55	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	306	50		07/29/11 16:55	1634-04-4	
Naphthalene	ND	ug/kg	612	50		07/29/11 16:55	91-20-3	
n-Propylbenzene	440	ug/kg	306	50		07/29/11 16:55	103-65-1	
Styrene	ND	ug/kg	306	50		07/29/11 16:55	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	306	50		07/29/11 16:55	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	306	50		07/29/11 16:55	79-34-5	
Tetrachloroethene	ND	ug/kg	306	50		07/29/11 16:55	127-18-4	
Toluene	ND	ug/kg	306	50		07/29/11 16:55	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	306	50		07/29/11 16:55	87-61-6	

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ANALYTICAL RESULTS

Project: Martin 34 No. 2
Pace Project No.: 60103141

Sample: S-075035-200711-CFM-005 Lab ID: 60103141005 Collected: 07/20/11 15:00 Received: 07/23/11 08:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA								
Analytical Method: EPA 8260								
1,2,4-Trichlorobenzene	ND	ug/kg	306	50		07/29/11 16:55	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	306	50		07/29/11 16:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	306	50		07/29/11 16:55	79-00-5	
Trichloroethene	ND	ug/kg	306	50		07/29/11 16:55	79-01-6	
Trichlorofluoromethane	ND	ug/kg	306	50		07/29/11 16:55	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	306	50		07/29/11 16:55	96-18-4	
1,2,4-Trimethylbenzene	4210	ug/kg	306	50		07/29/11 16:55	95-63-6	
1,3,5-Trimethylbenzene	2810	ug/kg	306	50		07/29/11 16:55	108-67-8	
Vinyl chloride	ND	ug/kg	306	50		07/29/11 16:55	75-01-4	
Xylene (Total)	597	ug/kg	306	50		07/29/11 16:55	1330-20-7	
Dibromofluoromethane (S)	96	%	68-129	50		07/29/11 16:55	1868-53-7	
Toluene-d8 (S)	106	%	81-121	50		07/29/11 16:55	2037-26-5	
4-Bromofluorobenzene (S)	115	%	75-131	50		07/29/11 16:55	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	77-131	50		07/29/11 16:55	17060-07-0	
Percent Moisture								
Analytical Method: ASTM D2974-87								
Percent Moisture	17.7	%	0.50	1		07/26/11 00:00		
300.0 IC Anions 28 Days								
Analytical Method: EPA 300.0								
Chloride	ND	mg/kg	121	10		08/03/11 15:12	16887-00-6	
Fluoride	ND	mg/kg	24.3	10		08/03/11 15:12	16984-48-8	

ANALYTICAL RESULTS

Project: Martin 34 No. 2

Pace Project No.: 60103141

Sample: S-075035-200711-CFM-006 Lab ID: 60103141006 Collected: 07/20/11 17:27 Received: 07/23/11 08:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics								
Analytical Method: EPA 8015B Preparation Method: EPA 3546								
TPH-DRO	ND mg/kg		11.9	1	07/29/11 00:00	08/02/11 00:01		
n-Tetracosane (S)	84 %		41-130	1	07/29/11 00:00	08/02/11 00:01	646-31-1	
p-Terphenyl (S)	90 %		39-130	1	07/29/11 00:00	08/02/11 00:01	92-94-4	
Gasoline Range Organics								
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B								
TPH-GRO	ND mg/kg		13.0	1	07/26/11 00:00	07/26/11 19:27		
4-Bromofluorobenzene (S)	97 %		68-134	1	07/26/11 00:00	07/26/11 19:27	460-00-4	
8260 MSV GRO and Oxygenates								
Analytical Method: EPA 5035A/8260								
Benzene	ND ug/kg		5.9	1		07/28/11 15:32	71-43-2	
Ethylbenzene	ND ug/kg		5.9	1		07/28/11 15:32	100-41-4	
Toluene	ND ug/kg		5.9	1		07/28/11 15:32	108-88-3	
Xylene (Total)	ND ug/kg		11.8	1		07/28/11 15:32	1330-20-7	
Toluene-d8 (S)	100 %		81-121	1		07/28/11 15:32	2037-26-5	
4-Bromofluorobenzene (S)	103 %		75-131	1		07/28/11 15:32	460-00-4	
1,2-Dichloroethane-d4 (S)	122 %		77-131	1		07/28/11 15:32	17060-07-0	
Percent Moisture								
Analytical Method: ASTM D2974-87								
Percent Moisture	16.1 %		0.50	1		07/26/11 00:00		
300.0 IC Anions 28 Days								
Analytical Method: EPA 300.0								
Chloride	ND mg/kg		119	10		08/03/11 15:29	16887-00-6	
Fluoride	ND mg/kg		23.8	10		08/03/11 15:29	16984-48-8	

ANALYTICAL RESULTS

Project: Martin 34 No. 2
Pace Project No.: 60103141

Sample: S-075035-210711-CFM-007 Lab ID: 60103141007 Collected: 07/21/11 12:47 Received: 07/23/11 08:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics								
Analytical Method: EPA 8015B Preparation Method: EPA 3546								
TPH-DRO	235 mg/kg		11.9	1	07/29/11 00:00	08/02/11 00:12		
n-Tetracosane (S)	92 %		41-130	1	07/29/11 00:00	08/02/11 00:12	646-31-1	
p-Terphenyl (S)	88 %		39-130	1	07/29/11 00:00	08/02/11 00:12	92-94-4	
Gasoline Range Organics								
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B								
TPH-GRO	791 mg/kg		117	10	07/26/11 00:00	07/27/11 18:23		
4-Bromofluorobenzene (S)	136 %		68-134	10	07/26/11 00:00	07/27/11 18:23	460-00-4	S1
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Aluminum	4360 mg/kg		7.9	1	07/28/11 10:08	07/29/11 14:11	7429-90-5	
Arsenic	2.1 mg/kg		1.0	1	07/28/11 10:08	07/29/11 14:11	7440-38-2	
Barium	182 mg/kg		1.0	1	07/28/11 10:08	07/29/11 14:11	7440-39-3	
Boron	ND mg/kg		10.5	1	07/28/11 10:08	07/29/11 14:11	7440-42-8	
Cadmium	ND mg/kg		0.52	1	07/28/11 10:08	07/29/11 14:11	7440-43-9	
Chromium	2.2 mg/kg		0.52	1	07/28/11 10:08	07/29/11 14:11	7440-47-3	
Cobalt	2.0 mg/kg		0.52	1	07/28/11 10:08	07/29/11 14:11	7440-48-4	
Copper	4.0 mg/kg		1.0	1	07/28/11 10:08	07/29/11 14:11	7440-50-8	
Iron	5220 mg/kg		5.2	1	07/28/11 10:08	08/05/11 10:02	7439-89-6	
Lead	3.2 mg/kg		0.52	1	07/28/11 10:08	07/29/11 14:11	7439-92-1	
Manganese	210 mg/kg		0.52	1	07/28/11 10:08	07/29/11 14:11	7439-96-5	
Molybdenum	ND mg/kg		2.1	1	07/28/11 10:08	07/29/11 14:11	7439-98-7	
Nickel	2.2 mg/kg		0.52	1	07/28/11 10:08	07/29/11 14:11	7440-02-0	
Selenium	ND mg/kg		1.6	1	07/28/11 10:08	07/29/11 14:11	7782-49-2	
Silver	ND mg/kg		0.73	1	07/28/11 10:08	07/29/11 14:11	7440-22-4	
Zinc	11.0 mg/kg		10.5	1	07/28/11 10:08	07/29/11 14:11	7440-66-6	
8270 MSSV Semivolatiles								
Analytical Method: EPA 8270 Preparation Method: EPA 3546								
Acenaphthene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 19:02	83-32-9	
Acenaphthylene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 19:02	208-96-8	
Anthracene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 19:02	120-12-7	
Benzo(a)anthracene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 19:02	56-55-3	
Benzo(a)pyrene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 19:02	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 19:02	205-99-2	
Benzo(g,h,i)perylene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 19:02	191-24-2	
Benzo(k)fluoranthene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 19:02	207-08-9	
Benzoic acid	ND ug/kg		1980	1	07/28/11 00:00	08/01/11 19:02	65-85-0	
Benzyl alcohol	ND ug/kg		783	1	07/28/11 00:00	08/01/11 19:02	100-51-6	
4-Bromophenylphenyl ether	ND ug/kg		391	1	07/28/11 00:00	08/01/11 19:02	101-55-3	
Butylbenzylphthalate	ND ug/kg		391	1	07/28/11 00:00	08/01/11 19:02	85-68-7	
4-Chloro-3-methylphenol	ND ug/kg		783	1	07/28/11 00:00	08/01/11 19:02	59-50-7	
4-Chloroaniline	ND ug/kg		783	1	07/28/11 00:00	08/01/11 19:02	106-47-8	
bis(2-Chloroethoxy)methane	ND ug/kg		391	1	07/28/11 00:00	08/01/11 19:02	111-91-1	
bis(2-Chloroethyl) ether	ND ug/kg		391	1	07/28/11 00:00	08/01/11 19:02	111-44-4	
bis(2-Chloroisopropyl) ether	ND ug/kg		391	1	07/28/11 00:00	08/01/11 19:02	39638-32-9	
2-Chloronaphthalene	ND ug/kg		391	1	07/28/11 00:00	08/01/11 19:02	91-58-7	

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ANALYTICAL RESULTS

Project: Martin 34 No. 2

Pace Project No.: 60103141

Sample: S-075035-210711-CFM-007 Lab ID: 60103141007 Collected: 07/21/11 12:47 Received: 07/23/11 08:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatiles								
Analytical Method: EPA 8270 Preparation Method: EPA 3546								
2-Chlorophenol	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	7005-72-3	
Chrysene	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	53-70-3	
Dibenzofuran	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	783	1	07/28/11 00:00	08/01/11 19:02	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	120-83-2	
Diethylphthalate	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	105-67-9	
Dimethylphthalate	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	131-11-3	
Di-n-butylphthalate	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1980	1	07/28/11 00:00	08/01/11 19:02	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	1980	1	07/28/11 00:00	08/01/11 19:02	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	606-20-2	
Di-n-octylphthalate	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	117-81-7	
Fluoranthene	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	206-44-0	
Fluorene	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	87-68-3	
Hexachlorobenzene	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	77-47-4	
Hexachloroethane	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	193-39-5	
Isophorone	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	78-59-1	
2-Methylnaphthalene	662	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02		
Naphthalene	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	91-20-3	
2-Nitroaniline	ND	ug/kg	783	1	07/28/11 00:00	08/01/11 19:02	88-74-4	
3-Nitroaniline	ND	ug/kg	783	1	07/28/11 00:00	08/01/11 19:02	99-09-2	
4-Nitroaniline	ND	ug/kg	783	1	07/28/11 00:00	08/01/11 19:02	100-01-6	
Nitrobenzene	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	98-95-3	
2-Nitrophenol	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	88-75-5	
4-Nitrophenol	ND	ug/kg	1980	1	07/28/11 00:00	08/01/11 19:02	100-02-7	
N-Nitroso-di-n-propylamine	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	86-30-6	
Pentachlorophenol	ND	ug/kg	1980	1	07/28/11 00:00	08/01/11 19:02	87-86-5	
Phenanthrene	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	85-01-8	
Phenol	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	108-95-2	
Pyrene	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	95-95-4	

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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Martin 34 No. 2
Pace Project No.: 60103141

Sample: S-075035-210711-CFM-007 Lab ID: 60103141007 Collected: 07/21/11 12:47 Received: 07/23/11 08:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatiles Analytical Method: EPA 8270 Preparation Method: EPA 3546								
2,4,6-Trichlorophenol	ND	ug/kg	391	1	07/28/11 00:00	08/01/11 19:02	88-06-2	
Nitrobenzene-d5 (S)	72	%	41-110	1	07/28/11 00:00	08/01/11 19:02	4165-60-0	
2-Fluorobiphenyl (S)	71	%	50-106	1	07/28/11 00:00	08/01/11 19:02	321-60-8	
Terphenyl-d14 (S)	72	%	37-110	1	07/28/11 00:00	08/01/11 19:02	1718-51-0	
Phenol-d6 (S)	67	%	49-110	1	07/28/11 00:00	08/01/11 19:02	13127-88-3	
2-Fluorophenol (S)	69	%	47-110	1	07/28/11 00:00	08/01/11 19:02	367-12-4	
2,4,6-Tribromophenol (S)	75	%	48-111	1	07/28/11 00:00	08/01/11 19:02	118-79-6	
8260 MSV 5035A VOA Analytical Method: EPA 8260								
Acetone	ND	ug/kg	1170	50		07/29/11 17:10	67-64-1	
Benzene	295	ug/kg	292	50		07/29/11 17:10	71-43-2	
Bromobenzene	ND	ug/kg	292	50		07/29/11 17:10	108-86-1	
Bromochloromethane	ND	ug/kg	292	50		07/29/11 17:10	74-97-5	
Bromodichloromethane	ND	ug/kg	292	50		07/29/11 17:10	75-27-4	
Bromoform	ND	ug/kg	292	50		07/29/11 17:10	75-25-2	
Bromomethane	ND	ug/kg	292	50		07/29/11 17:10	74-83-9	
2-Butanone (MEK)	ND	ug/kg	583	50		07/29/11 17:10	78-93-3	L3
n-Butylbenzene	927	ug/kg	292	50		07/29/11 17:10	104-51-8	
sec-Butylbenzene	450	ug/kg	292	50		07/29/11 17:10	135-98-8	
tert-Butylbenzene	ND	ug/kg	292	50		07/29/11 17:10	98-06-6	
Carbon disulfide	ND	ug/kg	292	50		07/29/11 17:10	75-15-0	
Carbon tetrachloride	ND	ug/kg	292	50		07/29/11 17:10	56-23-5	
Chlorobenzene	ND	ug/kg	292	50		07/29/11 17:10	108-90-7	
Chloroethane	ND	ug/kg	292	50		07/29/11 17:10	75-00-3	
Chloroform	ND	ug/kg	292	50		07/29/11 17:10	67-66-3	
Chloromethane	ND	ug/kg	292	50		07/29/11 17:10	74-87-3	
2-Chlorotoluene	ND	ug/kg	292	50		07/29/11 17:10	95-49-8	
4-Chlorotoluene	ND	ug/kg	292	50		07/29/11 17:10	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	583	50		07/29/11 17:10	96-12-8	
Dibromochloromethane	ND	ug/kg	292	50		07/29/11 17:10	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	292	50		07/29/11 17:10	106-93-4	
Dibromomethane	ND	ug/kg	292	50		07/29/11 17:10	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	292	50		07/29/11 17:10	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	292	50		07/29/11 17:10	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	292	50		07/29/11 17:10	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	292	50		07/29/11 17:10	75-71-8	
1,1-Dichloroethane	ND	ug/kg	292	50		07/29/11 17:10	75-34-3	
1,2-Dichloroethane	ND	ug/kg	292	50		07/29/11 17:10	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/kg	292	50		07/29/11 17:10	540-59-0	
1,1-Dichloroethene	ND	ug/kg	292	50		07/29/11 17:10	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	292	50		07/29/11 17:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	292	50		07/29/11 17:10	156-60-5	
1,2-Dichloropropane	ND	ug/kg	292	50		07/29/11 17:10	78-87-5	
1,3-Dichloropropane	ND	ug/kg	292	50		07/29/11 17:10	142-28-9	
2,2-Dichloropropane	ND	ug/kg	292	50		07/29/11 17:10	594-20-7	
1,1-Dichloropropene	ND	ug/kg	292	50		07/29/11 17:10	563-58-6	

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ANALYTICAL RESULTS

Project: Martin 34 No. 2

Pace Project No.: 60103141

Sample: S-075035-210711-CFM-007 Lab ID: 60103141007 Collected: 07/21/11 12:47 Received: 07/23/11 08:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA Analytical Method: EPA 8260								
cis-1,3-Dichloropropene	ND	ug/kg	292	50		07/29/11 17:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	292	50		07/29/11 17:10	10061-02-6	
Ethylbenzene	4060	ug/kg	292	50		07/29/11 17:10	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	292	50		07/29/11 17:10	87-68-3	
2-Hexanone	ND	ug/kg	1170	50		07/29/11 17:10	591-78-6	
Isopropylbenzene (Cumene)	984	ug/kg	292	50		07/29/11 17:10	98-82-8	
p-Isopropyltoluene	626	ug/kg	292	50		07/29/11 17:10	99-87-6	
Methylene chloride	ND	ug/kg	292	50		07/29/11 17:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	583	50		07/29/11 17:10	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	292	50		07/29/11 17:10	1634-04-4	
Naphthalene	626	ug/kg	583	50		07/29/11 17:10	91-20-3	
n-Propylbenzene	1570	ug/kg	292	50		07/29/11 17:10	103-65-1	
Styrene	ND	ug/kg	292	50		07/29/11 17:10	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	292	50		07/29/11 17:10	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	292	50		07/29/11 17:10	79-34-5	
Tetrachloroethene	ND	ug/kg	292	50		07/29/11 17:10	127-18-4	
Toluene	16800	ug/kg	1460	250		08/01/11 17:04	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	292	50		07/29/11 17:10	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	292	50		07/29/11 17:10	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	292	50		07/29/11 17:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	292	50		07/29/11 17:10	79-00-5	
Trichloroethene	ND	ug/kg	292	50		07/29/11 17:10	79-01-6	
Trichlorofluoromethane	ND	ug/kg	292	50		07/29/11 17:10	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	292	50		07/29/11 17:10	96-18-4	
1,2,4-Trimethylbenzene	12000	ug/kg	292	50		07/29/11 17:10	95-63-6	
1,3,5-Trimethylbenzene	7620	ug/kg	292	50		07/29/11 17:10	108-67-8	
Vinyl chloride	ND	ug/kg	292	50		07/29/11 17:10	75-01-4	
Xylene (Total)	46900	ug/kg	1460	250		08/01/11 17:04	1330-20-7	
Dibromofluoromethane (S)	91 %		68-129	50		07/29/11 17:10	1868-53-7	
Toluene-d8 (S)	136 %		81-121	50		07/29/11 17:10	2037-26-5	S0
4-Bromofluorobenzene (S)	109 %		75-131	50		07/29/11 17:10	460-00-4	
1,2-Dichloroethane-d4 (S)	94 %		77-131	50		07/29/11 17:10	17060-07-0	

Percent Moisture Analytical Method: ASTM D2974-87

Percent Moisture	16.3 %	0.50	1	07/26/11 00:00
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2320B Alkalinity Analytical Method: SM 2320B

Alkalinity, Total as CaCO3	805 mg/kg	239	1	08/02/11 00:00
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9045 pH Soil Analytical Method: EPA 9045

pH at 25 Degrees C	8.0 Std. Units	0.10	1	08/04/11 15:01
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9050 Specific Conductance Analytical Method: EPA 9050

Specific Conductance	5610 umhos/cm	1.0	1	08/02/11 13:30
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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: Martin 34 No. 2
Pace Project No.: 60103141

Sample: S-075035-210711-CFM-007 Lab ID: 60103141007 Collected: 07/21/11 12:47 Received: 07/23/11 08:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions		Analytical Method: EPA 300.0						
Nitrate as N	ND	mg/kg	11.9	10		08/01/11 18:21	14797-55-8	
Nitrite as N	ND	mg/kg	11.9	10		08/01/11 18:21	14797-65-0	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0						
Bromide	ND	mg/kg	119	10		08/03/11 15:45	24959-67-9	
Chloride	ND	mg/kg	119	10		08/03/11 15:45	16887-00-6	
Fluoride	ND	mg/kg	23.9	10		08/03/11 15:45	16984-48-8	
Sulfate	2690	mg/kg	239	20		08/04/11 06:05	14808-79-8	
9056 IC Anions 48hr		Analytical Method: EPA 9056						
Orthophosphate as P	ND	mg/kg	119	10		08/03/11 15:45		H1

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ANALYTICAL RESULTS

Project: Martin 34 No. 2

Pace Project No.: 60103141

Sample: S-075035-210711-CFM-008 Lab ID: 60103141008 Collected: 07/21/11 13:20 Received: 07/23/11 08:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics								
Analytical Method: EPA 8015B Preparation Method: EPA 3546								
TPH-DRO	ND	mg/kg	11.7	1	07/29/11 00:00	08/02/11 00:23		
n-Tetracosane (S)	85	%	41-130	1	07/29/11 00:00	08/02/11 00:23	646-31-1	
p-Terphenyl (S)	89	%	39-130	1	07/29/11 00:00	08/02/11 00:23	92-94-4	
Gasoline Range Organics								
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B								
TPH-GRO	23.6	mg/kg	13.6	1	07/26/11 00:00	07/26/11 20:14		
4-Bromofluorobenzene (S)	104	%	68-134	1	07/26/11 00:00	07/26/11 20:14	460-00-4	
8260 MSV GRO and Oxygenates								
Analytical Method: EPA 5035A/8260								
Benzene	21.7	ug/kg	6.9	1		07/28/11 22:18	71-43-2	
Ethylbenzene	16.4	ug/kg	6.9	1		07/28/11 22:18	100-41-4	
Toluene	242	ug/kg	6.9	1		07/28/11 22:18	108-88-3	
Xylene (Total)	205	ug/kg	13.9	1		07/28/11 22:18	1330-20-7	
Toluene-d8 (S)	101	%	81-121	1		07/28/11 22:18	2037-26-5	
4-Bromofluorobenzene (S)	101	%	75-131	1		07/28/11 22:18	460-00-4	
1,2-Dichloroethane-d4 (S)	112	%	77-131	1		07/28/11 22:18	17060-07-0	
Percent Moisture								
Analytical Method: ASTM D2974-87								
Percent Moisture	15.8	%	0.50	1		07/26/11 00:00		
300.0 IC Anions 28 Days								
Analytical Method: EPA 300.0								
Chloride	ND	mg/kg	119	10		08/03/11 16:02	16887-00-6	
Fluoride	ND	mg/kg	23.7	10		08/03/11 16:02	16984-48-8	

ANALYTICAL RESULTS

Project: Martin 34 No. 2

Pace Project No.: 60103141

Sample: TB-210711-001 Lab ID: 60103141009 Collected: 07/21/11 22:10 Received: 07/23/11 08:20 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates		Analytical Method: EPA 5035A/8260						
Benzene	ND ug/kg		5.0	1		07/28/11 21:31	71-43-2	
Ethylbenzene	ND ug/kg		5.0	1		07/28/11 21:31	100-41-4	
Toluene	ND ug/kg		5.0	1		07/28/11 21:31	108-88-3	
Xylene (Total)	ND ug/kg		10.0	1		07/28/11 21:31	1330-20-7	
Toluene-d8 (S)	99 %		81-121	1		07/28/11 21:31	2037-26-5	
4-Bromofluorobenzene (S)	97 %		75-131	1		07/28/11 21:31	460-00-4	
1,2-Dichloroethane-d4 (S)	99 %		77-131	1		07/28/11 21:31	17060-07-0	

ANALYTICAL RESULTS

Project: Martin 34 No. 2

Pace Project No.: 60103141

Sample: TB-210711-002 Lab ID: 60103141010 Collected: 07/21/11 22:10 Received: 07/23/11 08:20 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates		Analytical Method: EPA 5035A/8260						
Benzene	ND	ug/kg	5.0	1		07/28/11 21:47	71-43-2	
Ethylbenzene	ND	ug/kg	5.0	1		07/28/11 21:47	100-41-4	
Toluene	ND	ug/kg	5.0	1		07/28/11 21:47	108-88-3	
Xylene (Total)	ND	ug/kg	10.0	1		07/28/11 21:47	1330-20-7	
Toluene-d8 (S)	99 %		81-121	1		07/28/11 21:47	2037-26-5	
4-Bromofluorobenzene (S)	100 %		75-131	1		07/28/11 21:47	460-00-4	
1,2-Dichloroethane-d4 (S)	98 %		77-131	1		07/28/11 21:47	17060-07-0	

QUALITY CONTROL DATA

Project: Martin 34 No. 2
Pace Project No.: 60103141

QC Batch: OEXT/29511 Analysis Method: EPA 8015B
QC Batch Method: EPA 3546 Analysis Description: EPA 8015B
Associated Lab Samples: 60103141001, 60103141002, 60103141003, 60103141004, 60103141005, 60103141006, 60103141007, 60103141008

METHOD BLANK: 851819

Matrix: Solid

Associated Lab Samples: 60103141001, 60103141002, 60103141003, 60103141004, 60103141005, 60103141006, 60103141007, 60103141008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-DRO	mg/kg	ND	9.9	08/01/11 21:59	
n-Tetracosane (S)	%	80	41-130	08/01/11 21:59	
p-Terphenyl (S)	%	82	39-130	08/01/11 21:59	

LABORATORY CONTROL SAMPLE: 851820

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO	mg/kg	82.6	70.8	86	57-120	
n-Tetracosane (S)	%			88	41-130	
p-Terphenyl (S)	%			86	39-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 851821

851822

Parameter	Units	60103141001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
TPH-DRO	mg/kg	ND	93.1	92.8	83.8	75.6	85	76	36-125	10	28
n-Tetracosane (S)	%						89	85	41-130		
p-Terphenyl (S)	%						88	88	39-130		

QUALITY CONTROL DATA

Project: Martin 34 No. 2
Pace Project No.: 60103141

QC Batch: GCV/3776 Analysis Method: EPA 8015B
QC Batch Method: EPA 5035A/5030B Analysis Description: Gasoline Range Organics
Associated Lab Samples: 60103141001, 60103141002, 60103141003, 60103141004, 60103141005, 60103141006, 60103141007, 60103141008

METHOD BLANK: 850278 Matrix: Solid
Associated Lab Samples: 60103141001, 60103141002, 60103141003, 60103141004, 60103141005, 60103141006, 60103141007, 60103141008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	mg/kg	ND	10.0	07/26/11 15:37	
4-Bromofluorobenzene (S)	%	93	68-134	07/26/11 15:37	

METHOD BLANK: 850510 Matrix: Solid
Associated Lab Samples: 60103141001, 60103141002, 60103141003, 60103141004, 60103141005, 60103141006, 60103141007, 60103141008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	mg/kg	ND	10.0	07/27/11 17:14	
4-Bromofluorobenzene (S)	%	94	68-134	07/27/11 17:14	

LABORATORY CONTROL SAMPLE: 850279

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	50	43.6	87	77-122	
4-Bromofluorobenzene (S)	%			93	68-134	

LABORATORY CONTROL SAMPLE: 850511

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	50	46.4	93	77-122	
4-Bromofluorobenzene (S)	%			94	68-134	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 850280 850281

Parameter	Units	60103141001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
TPH-GRO	mg/kg	ND	56.1	56.1	44.7	46.3	79	82	51-130	4	27
4-Bromofluorobenzene (S)	%						92	95	68-134		

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QUALITY CONTROL DATA

Project: Martin 34 No. 2
Pace Project No.: 60103141

QC Batch: MPRP/14889 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 60103141001, 60103141007

METHOD BLANK: 851127 Matrix: Solid
Associated Lab Samples: 60103141001, 60103141007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	mg/kg	ND	7.5	07/29/11 13:52	
Arsenic	mg/kg	ND	1.0	07/29/11 13:52	
Barium	mg/kg	ND	1.0	07/29/11 13:52	
Boron	mg/kg	ND	10.0	07/29/11 13:52	
Cadmium	mg/kg	ND	0.50	07/29/11 13:52	
Chromium	mg/kg	ND	0.50	07/29/11 13:52	
Cobalt	mg/kg	ND	0.50	07/29/11 13:52	
Copper	mg/kg	ND	1.0	07/29/11 13:52	
Iron	mg/kg	ND	5.0	08/05/11 09:43	
Lead	mg/kg	ND	0.50	07/29/11 13:52	
Manganese	mg/kg	ND	0.50	07/29/11 13:52	
Molybdenum	mg/kg	ND	2.0	07/29/11 13:52	
Nickel	mg/kg	ND	0.50	07/29/11 13:52	
Selenium	mg/kg	ND	1.5	07/29/11 13:52	
Silver	mg/kg	ND	0.70	07/29/11 13:52	
Zinc	mg/kg	ND	10.0	07/29/11 13:52	

LABORATORY CONTROL SAMPLE: 851128

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	mg/kg	500	500	100	80-120	
Arsenic	mg/kg	50	44.7	89	80-120	
Barium	mg/kg	50	47.6	95	80-120	
Boron	mg/kg	50	43.5	87	80-120	
Cadmium	mg/kg	50	44.9	90	80-120	
Chromium	mg/kg	50	50.1	100	80-120	
Cobalt	mg/kg	50	47.5	95	80-120	
Copper	mg/kg	50	46.0	92	80-120	
Iron	mg/kg	500	504	101	80-120	
Lead	mg/kg	50	47.4	95	80-120	
Manganese	mg/kg	50	48.6	97	80-120	
Molybdenum	mg/kg	50	49.2	98	80-120	
Nickel	mg/kg	50	48.2	96	80-120	
Selenium	mg/kg	50	44.2	88	80-120	
Silver	mg/kg	25	23.3	93	80-120	
Zinc	mg/kg	50	50.7	101	80-120	

QUALITY CONTROL DATA

Project: Martin 34 No. 2
Pace Project No.: 60103141

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 851129 851130												
Parameter	Units	60103141001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
Aluminum	mg/kg	8460	493	480	12300	12000	784	746	75-125	2	20	M0
Arsenic	mg/kg	1.7	49.3	48	41.4	40.1	81	80	75-125	3	20	
Barium	mg/kg	114	49.3	48	139	166	52	108	75-125	17	20	M0
Boron	mg/kg	ND	49.3	48	34.4	32.9	64	62	75-125	4	20	M0
Cadmium	mg/kg	ND	49.3	48	40.8	39.4	83	82	75-125	3	20	
Chromium	mg/kg	4.4	49.3	48	48.7	47.5	90	90	75-125	2	20	
Cobalt	mg/kg	3.2	49.3	48	43.1	41.8	81	80	75-125	3	20	
Copper	mg/kg	6.4	49.3	48	47.9	46.6	84	84	75-125	3	20	
Iron	mg/kg	8950	493	480	9130	9280	37	69	75-125	2	20	M0
Lead	mg/kg	4.9	49.3	48	43.8	42.7	79	79	75-125	3	20	
Manganese	mg/kg	205	49.3	48	239	268	68	131	75-125	11	20	M0
Molybdenum	mg/kg	ND	49.3	48	40.0	38.7	81	80	75-125	3	20	
Nickel	mg/kg	3.8	49.3	48	44.1	43.1	82	82	75-125	2	20	
Selenium	mg/kg	ND	49.3	48	39.5	38.1	80	79	75-125	3	20	
Silver	mg/kg	ND	24.6	24	21.8	21.3	88	88	75-125	2	20	
Zinc	mg/kg	18.9	49.3	48	61.0	61.8	85	89	75-125	1	20	

QUALITY CONTROL DATA

Project: Martin 34 No. 2
Pace Project No.: 60103141

QC Batch: OEXT/29497 Analysis Method: EPA 8270
QC Batch Method: EPA 3546 Analysis Description: 8270 Solid MSSV Microwave
Associated Lab Samples: 60103141002, 60103141005, 60103141007

METHOD BLANK: 851100 Matrix: Solid

Associated Lab Samples: 60103141002, 60103141005, 60103141007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	ND	324	08/01/11 15:32	
1,2-Dichlorobenzene	ug/kg	ND	324	08/01/11 15:32	
1,3-Dichlorobenzene	ug/kg	ND	324	08/01/11 15:32	
1,4-Dichlorobenzene	ug/kg	ND	324	08/01/11 15:32	
2,4,5-Trichlorophenol	ug/kg	ND	324	08/01/11 15:32	
2,4,6-Trichlorophenol	ug/kg	ND	324	08/01/11 15:32	
2,4-Dichlorophenol	ug/kg	ND	324	08/01/11 15:32	
2,4-Dimethylphenol	ug/kg	ND	324	08/01/11 15:32	
2,4-Dinitrophenol	ug/kg	ND	1640	08/01/11 15:32	
2,4-Dinitrotoluene	ug/kg	ND	324	08/01/11 15:32	
2,6-Dinitrotoluene	ug/kg	ND	324	08/01/11 15:32	
2-Chloronaphthalene	ug/kg	ND	324	08/01/11 15:32	
2-Chlorophenol	ug/kg	ND	324	08/01/11 15:32	
2-Methylnaphthalene	ug/kg	ND	324	08/01/11 15:32	
2-Methylphenol(o-Cresol)	ug/kg	ND	324	08/01/11 15:32	
2-Nitroaniline	ug/kg	ND	649	08/01/11 15:32	
2-Nitrophenol	ug/kg	ND	324	08/01/11 15:32	
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	324	08/01/11 15:32	
3,3'-Dichlorobenzidine	ug/kg	ND	649	08/01/11 15:32	
3-Nitroaniline	ug/kg	ND	649	08/01/11 15:32	
4,6-Dinitro-2-methylphenol	ug/kg	ND	1640	08/01/11 15:32	
4-Bromophenylphenyl ether	ug/kg	ND	324	08/01/11 15:32	
4-Chloro-3-methylphenol	ug/kg	ND	649	08/01/11 15:32	
4-Chloroaniline	ug/kg	ND	649	08/01/11 15:32	
4-Chlorophenylphenyl ether	ug/kg	ND	324	08/01/11 15:32	
4-Nitroaniline	ug/kg	ND	649	08/01/11 15:32	
4-Nitrophenol	ug/kg	ND	1640	08/01/11 15:32	
Acenaphthene	ug/kg	ND	324	08/01/11 15:32	
Acenaphthylene	ug/kg	ND	324	08/01/11 15:32	
Anthracene	ug/kg	ND	324	08/01/11 15:32	
Benzo(a)anthracene	ug/kg	ND	324	08/01/11 15:32	
Benzo(a)pyrene	ug/kg	ND	324	08/01/11 15:32	
Benzo(b)fluoranthene	ug/kg	ND	324	08/01/11 15:32	
Benzo(g,h,i)perylene	ug/kg	ND	324	08/01/11 15:32	
Benzo(k)fluoranthene	ug/kg	ND	324	08/01/11 15:32	
Benzoic acid	ug/kg	ND	1640	08/01/11 15:32	
Benzyl alcohol	ug/kg	ND	649	08/01/11 15:32	
bis(2-Chloroethoxy)methane	ug/kg	ND	324	08/01/11 15:32	
bis(2-Chloroethyl) ether	ug/kg	ND	324	08/01/11 15:32	
bis(2-Chloroisopropyl) ether	ug/kg	ND	324	08/01/11 15:32	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	324	08/01/11 15:32	
Butylbenzylphthalate	ug/kg	ND	324	08/01/11 15:32	
Chrysene	ug/kg	ND	324	08/01/11 15:32	

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QUALITY CONTROL DATA

Project: Martin 34 No. 2

Pace Project No.: 60103141

METHOD BLANK: 851100

Matrix: Solid

Associated Lab Samples: 60103141002, 60103141005, 60103141007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Di-n-butylphthalate	ug/kg	ND	324	08/01/11 15:32	
Di-n-octylphthalate	ug/kg	ND	324	08/01/11 15:32	
Dibenz(a,h)anthracene	ug/kg	ND	324	08/01/11 15:32	
Dibenzofuran	ug/kg	ND	324	08/01/11 15:32	
Diethylphthalate	ug/kg	ND	324	08/01/11 15:32	
Dimethylphthalate	ug/kg	ND	324	08/01/11 15:32	
Fluoranthene	ug/kg	ND	324	08/01/11 15:32	
Fluorene	ug/kg	ND	324	08/01/11 15:32	
Hexachloro-1,3-butadiene	ug/kg	ND	324	08/01/11 15:32	
Hexachlorobenzene	ug/kg	ND	324	08/01/11 15:32	
Hexachlorocyclopentadiene	ug/kg	ND	324	08/01/11 15:32	
Hexachloroethane	ug/kg	ND	324	08/01/11 15:32	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	324	08/01/11 15:32	
Isophorone	ug/kg	ND	324	08/01/11 15:32	
N-Nitroso-di-n-propylamine	ug/kg	ND	324	08/01/11 15:32	
N-Nitrosodiphenylamine	ug/kg	ND	324	08/01/11 15:32	
Naphthalene	ug/kg	ND	324	08/01/11 15:32	
Nitrobenzene	ug/kg	ND	324	08/01/11 15:32	
Pentachlorophenol	ug/kg	ND	1640	08/01/11 15:32	
Phenanthrene	ug/kg	ND	324	08/01/11 15:32	
Phenol	ug/kg	ND	324	08/01/11 15:32	
Pyrene	ug/kg	ND	324	08/01/11 15:32	
2,4,6-Tribromophenol (S)	%	80	48-111	08/01/11 15:32	
2-Fluorobiphenyl (S)	%	77	50-106	08/01/11 15:32	
2-Fluorophenol (S)	%	71	47-110	08/01/11 15:32	
Nitrobenzene-d5 (S)	%	73	41-110	08/01/11 15:32	
Phenol-d6 (S)	%	73	49-110	08/01/11 15:32	
Terphenyl-d14 (S)	%	76	37-110	08/01/11 15:32	

LABORATORY CONTROL SAMPLE: 851101

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1660	1210	73	50-120	
1,2-Dichlorobenzene	ug/kg	1660	1140	69	51-120	
1,3-Dichlorobenzene	ug/kg	1660	1130	68	50-120	
1,4-Dichlorobenzene	ug/kg	1660	1140	69	50-120	
2,4,5-Trichlorophenol	ug/kg	1660	1280	77	54-120	
2,4,6-Trichlorophenol	ug/kg	1660	1290	78	54-120	
2,4-Dichlorophenol	ug/kg	1660	1230	75	52-120	
2,4-Dimethylphenol	ug/kg	1660	1240	75	52-120	
2,4-Dinitrophenol	ug/kg	1660	1590J	96	13-120	
2,4-Dinitrotoluene	ug/kg	1660	1320	80	56-120	
2,6-Dinitrotoluene	ug/kg	1660	1300	79	56-120	
2-Chloronaphthalene	ug/kg	1660	1250	75	55-120	
2-Chlorophenol	ug/kg	1660	1160	70	52-120	

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QUALITY CONTROL DATA

Project: Martin 34 No. 2
Pace Project No.: 60103141

LABORATORY CONTROL SAMPLE: 851101

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Methylnaphthalene	ug/kg	1660	1200	72	51-120	
2-Methylphenol(o-Cresol)	ug/kg	1660	1130	68	52-120	
2-Nitroaniline	ug/kg	1660	1230	74	55-120	
2-Nitrophenol	ug/kg	1660	1230	75	52-120	
3&4-Methylphenol(m&p Cresol)	ug/kg	1660	1110	67	50-120	
3,3'-Dichlorobenzidine	ug/kg	1660	938	57	13-124	
3-Nitroaniline	ug/kg	1660	1200	72	23-120	
4,6-Dinitro-2-methylphenol	ug/kg	1660	1340J	81	29-120	
4-Bromophenylphenyl ether	ug/kg	1660	1230	75	57-120	
4-Chloro-3-methylphenol	ug/kg	1660	1200	73	52-120	
4-Chloroaniline	ug/kg	1660	1030	62	1-120	
4-Chlorophenylphenyl ether	ug/kg	1660	1290	78	54-120	
4-Nitroaniline	ug/kg	1660	1200	72	51-120	
4-Nitrophenol	ug/kg	1660	1340J	81	53-120	
Acenaphthene	ug/kg	1660	1260	76	54-120	
Acenaphthylene	ug/kg	1660	1270	77	54-120	
Anthracene	ug/kg	1660	1270	77	58-120	
Benzo(a)anthracene	ug/kg	1660	1260	76	58-120	
Benzo(a)pyrene	ug/kg	1660	1290	78	57-120	
Benzo(b)fluoranthene	ug/kg	1660	1290	78	56-120	
Benzo(g,h,i)perylene	ug/kg	1660	1280	77	57-120	
Benzo(k)fluoranthene	ug/kg	1660	1280	78	54-120	
Benzoic acid	ug/kg	1660	773J	47	21-120	
Benzyl alcohol	ug/kg	1660	1180	71	53-120	
bis(2-Chloroethoxy)methane	ug/kg	1660	1190	72	52-120	
bis(2-Chloroethyl) ether	ug/kg	1660	1110	67	51-120	
bis(2-Chloroisopropyl) ether	ug/kg	1660	968	58	50-120	
bis(2-Ethylhexyl)phthalate	ug/kg	1660	1330	80	59-120	
Butylbenzylphthalate	ug/kg	1660	1340	81	59-120	
Chrysene	ug/kg	1660	1240	75	57-120	
Di-n-butylphthalate	ug/kg	1660	1340	81	57-120	
Di-n-octylphthalate	ug/kg	1660	1360	82	59-120	
Dibenz(a,h)anthracene	ug/kg	1660	1340	81	58-120	
Dibenzofuran	ug/kg	1660	1270	76	55-120	
Diethylphthalate	ug/kg	1660	1270	76	56-120	
Dimethylphthalate	ug/kg	1660	1260	76	56-120	
Fluoranthene	ug/kg	1660	1270	77	55-120	
Fluorene	ug/kg	1660	1290	78	55-120	
Hexachloro-1,3-butadiene	ug/kg	1660	1200	72	50-120	
Hexachlorobenzene	ug/kg	1660	1230	74	56-120	
Hexachlorocyclopentadiene	ug/kg	3310	2070	62	10-120	
Hexachloroethane	ug/kg	1660	1160	70	49-120	
Indeno(1,2,3-cd)pyrene	ug/kg	1660	1290	78	56-120	
Isophorone	ug/kg	1660	1140	69	51-120	
N-Nitroso-di-n-propylamine	ug/kg	1660	1080	65	51-120	
N-Nitrosodiphenylamine	ug/kg	1660	1280	78	54-120	
Naphthalene	ug/kg	1660	1210	73	51-120	
Nitrobenzene	ug/kg	1660	1140	69	51-120	

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QUALITY CONTROL DATA

Project: Martin 34 No. 2

Pace Project No.: 60103141

LABORATORY CONTROL SAMPLE: 851101

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Pentachlorophenol	ug/kg	1660	1290J	78	48-120	
Phenanthrene	ug/kg	1660	1280	77	58-120	
Phenol	ug/kg	1660	1100	67	51-120	
Pyrene	ug/kg	1660	1290	78	59-120	
2,4,6-Tribromophenol (S)	%			79	48-111	
2-Fluorobiphenyl (S)	%			75	50-106	
2-Fluorophenol (S)	%			68	47-110	
Nitrobenzene-d5 (S)	%			70	41-110	
Phenol-d6 (S)	%			69	49-110	
Terphenyl-d14 (S)	%			76	37-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 851505 851506

Parameter	Units	9298904018 Result	MS	MSD	MS	MSD	MS	MSD	% Rec	Max RPD	Qual
			Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits		
1,2,4-Trichlorobenzene	ug/kg	ND	1920	1930	1370	1420	71	74	42-120	4	30
1,2-Dichlorobenzene	ug/kg	ND	1920	1930	1170	1280	61	66	39-120	9	29
1,3-Dichlorobenzene	ug/kg	ND	1920	1930	1150	1260	60	65	38-120	9	28
1,4-Dichlorobenzene	ug/kg	ND	1920	1930	1170	1270	61	65	37-120	8	29
2,4,5-Trichlorophenol	ug/kg	ND	1920	1930	1450	1520	75	79	46-120	5	27
2,4,6-Trichlorophenol	ug/kg	ND	1920	1930	1430	1500	74	77	46-120	5	31
2,4-Dichlorophenol	ug/kg	ND	1920	1930	1400	1430	73	74	43-120	2	25
2,4-Dimethylphenol	ug/kg	ND	1920	1930	1410	1470	73	76	34-120	4	27
2,4-Dinitrophenol	ug/kg	ND	1920	1930	705J	626J	37	32	10-120		35
2,4-Dinitrotoluene	ug/kg	ND	1920	1930	1390	1470	72	76	26-115	5	44
2,6-Dinitrotoluene	ug/kg	ND	1920	1930	1420	1470	74	76	32-120	4	42
2-Chloronaphthalene	ug/kg	ND	1920	1930	1400	1450	73	75	47-120	3	28
2-Chlorophenol	ug/kg	ND	1920	1930	1280	1350	66	70	40-120	6	28
2-Methylnaphthalene	ug/kg	ND	1920	1930	1340	1380	70	72	38-120	3	28
2-Methylphenol(o-Cresol)	ug/kg	ND	1920	1930	1250	1300	65	67	39-120	4	28
2-Nitroaniline	ug/kg	ND	1920	1930	1460	1540	76	80	44-120	5	32
2-Nitrophenol	ug/kg	ND	1920	1930	1310	1330	68	69	14-115	1	40
3&4-Methylphenol(m&p-Cresol)	ug/kg	ND	1920	1930	1240	1290	65	67	37-120	4	26
3,3'-Dichlorobenzidine	ug/kg	ND	1920	1930	808	666J	42	34	10-120		46
3-Nitroaniline	ug/kg	ND	1920	1930	1420	1420	74	73	8-120	1	33
4,6-Dinitro-2-methylphenol	ug/kg	ND	1920	1930	355J	342J	18	18	10-118		35
4-Bromophenylphenyl ether	ug/kg	ND	1920	1930	1410	1440	73	74	47-120	2	27
4-Chloro-3-methylphenol	ug/kg	ND	1920	1930	1380	1440	72	74	40-120	4	28
4-Chloroaniline	ug/kg	ND	1920	1930	729J	587J	38	30	6-120		32
4-Chlorophenylphenyl ether	ug/kg	ND	1920	1930	1410	1490	73	77	47-120	5	28
4-Nitroaniline	ug/kg	ND	1920	1930	1420	1420	74	73	11-120	1	31
4-Nitrophenol	ug/kg	ND	1920	1930	1490J	1570J	77	81	31-116		35
Acenaphthene	ug/kg	ND	1920	1930	1400	1460	73	75	47-120	4	28
Acenaphthylene	ug/kg	ND	1920	1930	1410	1460	73	75	45-120	3	26
Anthracene	ug/kg	ND	1920	1930	1430	1460	74	76	47-120	2	26
Benzo(a)anthracene	ug/kg	ND	1920	1930	1420	1490	74	77	44-120	5	28

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QUALITY CONTROL DATA

Project: Martin 34 No. 2

Pace Project No.: 60103141

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 851505												851506											
Parameter	Units	9298904018		MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Limits	RPD	Max	Qual								
		Result	Conc.	Spike	Spike											Result	Result	% Rec	% Rec				
Benzo(a)pyrene	ug/kg	ND	1920	1930	1390	1470	72	76	42-120	6	29												
Benzo(b)fluoranthene	ug/kg	ND	1920	1930	1470	1560	77	80	36-120	5	28												
Benzo(g,h,i)perylene	ug/kg	ND	1920	1930	1370	1430	71	74	38-120	5	30												
Benzo(k)fluoranthene	ug/kg	ND	1920	1930	1400	1480	73	77	47-120	6	32												
Benzoic acid	ug/kg	ND	1920	1930	1430J	1440J	74	74	10-120		35												
Benzyl alcohol	ug/kg	ND	1920	1930	1260	1370	65	71	42-120	8	28												
bis(2-Chloroethoxy)methane	ug/kg	ND	1920	1930	1350	1370	70	71	41-120	2	28												
bis(2-Chloroethyl) ether	ug/kg	ND	1920	1930	1230	1290	64	67	39-120	5	29												
bis(2-Chloroisopropyl) ether	ug/kg	ND	1920	1930	1060	1130	55	58	38-120	7	29												
bis(2-Ethylhexyl)phthalate	ug/kg	ND	1920	1930	1540	1610	80	83	50-120	4	38												
Butylbenzylphthalate	ug/kg	ND	1920	1930	1550	1600	81	83	47-116	3	29												
Chrysene	ug/kg	ND	1920	1930	1380	1430	72	74	39-113	3	28												
Di-n-butylphthalate	ug/kg	ND	1920	1930	1450	1480	75	76	47-120	2	27												
Di-n-octylphthalate	ug/kg	ND	1920	1930	1590	1660	83	86	53-120	5	37												
Dibenz(a,h)anthracene	ug/kg	ND	1920	1930	1440	1510	75	78	43-120	5	30												
Dibenzofuran	ug/kg	ND	1920	1930	1410	1460	73	75	47-120	4	28												
Diethylphthalate	ug/kg	ND	1920	1930	1390	1460	72	76	47-120	5	29												
Dimethylphthalate	ug/kg	ND	1920	1930	1410	1470	73	76	47-120	4	28												
Fluoranthene	ug/kg	ND	1920	1930	1400	1450	73	75	35-120	3	27												
Fluorene	ug/kg	ND	1920	1930	1420	1480	74	76	47-120	4	28												
Hexachloro-1,3-butadiene	ug/kg	ND	1920	1930	1330	1390	69	72	40-120	4	29												
Hexachlorobenzene	ug/kg	ND	1920	1930	1410	1430	73	74	47-120	1	28												
Hexachlorocyclopentadiene	ug/kg	ND	3860	3870	1210	1080	32	28	1-113	12	68												
Hexachloroethane	ug/kg	ND	1920	1930	1150	1240	60	64	23-120	7	34												
Indeno(1,2,3-cd)pyrene	ug/kg	ND	1920	1930	1390	1460	72	75	40-120	5	30												
Isophorone	ug/kg	ND	1920	1930	1270	1310	66	68	36-120	3	28												
N-Nitroso-di-n-propylamine	ug/kg	ND	1920	1930	1180	1240	61	64	35-120	5	31												
N-Nitrosodiphenylamine	ug/kg	ND	1920	1930	1390	1470	72	76	36-115	6	27												
Naphthalene	ug/kg	ND	1920	1930	1340	1390	70	72	39-120	4	31												
Nitrobenzene	ug/kg	ND	1920	1930	1260	1300	66	67	31-120	3	48												
Pentachlorophenol	ug/kg	ND	1920	1930	1560J	1580J	81	81	11-146		15												
Phenanthrene	ug/kg	ND	1920	1930	1440	1480	75	77	42-120	3	31												
Phenol	ug/kg	ND	1920	1930	1220	1260	64	65	41-120	3	28												
Pyrene	ug/kg	ND	1920	1930	1450	1500	75	78	35-125	4	27												
2,4,6-Tribromophenol (S)	%						76	81	48-111														
2-Fluorobiphenyl (S)	%						72	75	50-106														
2-Fluorophenol (S)	%						64	67	47-110														
Nitrobenzene-d5 (S)	%						66	69	41-110														
Phenol-d6 (S)	%						65	68	49-110														
Terphenyl-d14 (S)	%						75	79	37-110														

QUALITY CONTROL DATA

Project: Martin 34 No. 2

Pace Project No.: 60103141

QC Batch:	MSV/38752	Analysis Method:	EPA 5035A/8260
QC Batch Method:	EPA 5035A/8260	Analysis Description:	8260 MSV GRO and Oxygenates
Associated Lab Samples: 60103141003, 60103141004, 60103141006			

METHOD BLANK: 850953 Matrix: Solid

Associated Lab Samples: 60103141003, 60103141004, 60103141006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/kg	ND	5.0	07/28/11 14:05	
Ethylbenzene	ug/kg	ND	5.0	07/28/11 14:05	
Toluene	ug/kg	ND	5.0	07/28/11 14:05	
Xylene (Total)	ug/kg	ND	10.0	07/28/11 14:05	
1,2-Dichloroethane-d4 (S)	%	100	77-131	07/28/11 14:05	
4-Bromofluorobenzene (S)	%	99	75-131	07/28/11 14:05	
Toluene-d8 (S)	%	99	81-121	07/28/11 14:05	

LABORATORY CONTROL SAMPLE: 850954

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	100	90.8	91	84-119	
Ethylbenzene	ug/kg	100	90.8	91	80-120	
Toluene	ug/kg	100	88.6	89	83-117	
Xylene (Total)	ug/kg	300	268	89	80-120	
1,2-Dichloroethane-d4 (S)	%			100	77-131	
4-Bromofluorobenzene (S)	%			99	75-131	
Toluene-d8 (S)	%			100	81-121	

QUALITY CONTROL DATA

Project: Martin 34 No. 2

Pace Project No.: 60103141

QC Batch:	MSV/38789	Analysis Method:	EPA 5035A/8260
QC Batch Method:	EPA 5035A/8260	Analysis Description:	8260 MSV GRO and Oxygenates
Associated Lab Samples: 60103141001, 60103141008, 60103141009, 60103141010			

METHOD BLANK: 851543 Matrix: Solid
Associated Lab Samples: 60103141001, 60103141008, 60103141009, 60103141010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/kg	ND	5.0	07/28/11 21:16	
Ethylbenzene	ug/kg	ND	5.0	07/28/11 21:16	
Toluene	ug/kg	ND	5.0	07/28/11 21:16	
Xylene (Total)	ug/kg	ND	10.0	07/28/11 21:16	
1,2-Dichloroethane-d4 (S)	%	99	77-131	07/28/11 21:16	
4-Bromofluorobenzene (S)	%	99	75-131	07/28/11 21:16	
Toluene-d8 (S)	%	99	81-121	07/28/11 21:16	

LABORATORY CONTROL SAMPLE: 851544

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	100	86.4	86	84-119	
Ethylbenzene	ug/kg	100	84.0	84	80-120	
Toluene	ug/kg	100	83.5	84	83-117	
Xylene (Total)	ug/kg	300	249	83	80-120	
1,2-Dichloroethane-d4 (S)	%			99	77-131	
4-Bromofluorobenzene (S)	%			100	75-131	
Toluene-d8 (S)	%			100	81-121	

QUALITY CONTROL DATA

Project: Martin 34 No. 2

Pace Project No.: 60103141

QC Batch: MSV/38810

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV 5035A Volatile Organics

Associated Lab Samples: 60103141002, 60103141005, 60103141007

METHOD BLANK: 852118

Matrix: Solid

Associated Lab Samples: 60103141002, 60103141005, 60103141007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.0	07/29/11 16:26	
1,1,1-Trichloroethane	ug/kg	ND	5.0	07/29/11 16:26	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	07/29/11 16:26	
1,1,2-Trichloroethane	ug/kg	ND	5.0	07/29/11 16:26	
1,1-Dichloroethane	ug/kg	ND	5.0	07/29/11 16:26	
1,1-Dichloroethene	ug/kg	ND	5.0	07/29/11 16:26	
1,1-Dichloropropene	ug/kg	ND	5.0	07/29/11 16:26	
1,2,3-Trichlorobenzene	ug/kg	ND	5.0	07/29/11 16:26	
1,2,3-Trichloropropane	ug/kg	ND	5.0	07/29/11 16:26	
1,2,4-Trichlorobenzene	ug/kg	ND	5.0	07/29/11 16:26	
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	07/29/11 16:26	
1,2-Dibromo-3-chloropropane	ug/kg	ND	10.0	07/29/11 16:26	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.0	07/29/11 16:26	
1,2-Dichlorobenzene	ug/kg	ND	5.0	07/29/11 16:26	
1,2-Dichloroethane	ug/kg	ND	5.0	07/29/11 16:26	
1,2-Dichloroethene (Total)	ug/kg	ND	5.0	07/29/11 16:26	
1,2-Dichloropropane	ug/kg	ND	5.0	07/29/11 16:26	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	07/29/11 16:26	
1,3-Dichlorobenzene	ug/kg	ND	5.0	07/29/11 16:26	
1,3-Dichloropropane	ug/kg	ND	5.0	07/29/11 16:26	
1,4-Dichlorobenzene	ug/kg	ND	5.0	07/29/11 16:26	
2,2-Dichloropropane	ug/kg	ND	5.0	07/29/11 16:26	
2-Butanone (MEK)	ug/kg	ND	10.0	07/29/11 16:26	
2-Chlorotoluene	ug/kg	ND	5.0	07/29/11 16:26	
2-Hexanone	ug/kg	ND	20.0	07/29/11 16:26	
4-Chlorotoluene	ug/kg	ND	5.0	07/29/11 16:26	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	10.0	07/29/11 16:26	
Acetone	ug/kg	ND	20.0	07/29/11 16:26	
Benzene	ug/kg	ND	5.0	07/29/11 16:26	
Bromobenzene	ug/kg	ND	5.0	07/29/11 16:26	
Bromochloromethane	ug/kg	ND	5.0	07/29/11 16:26	
Bromodichloromethane	ug/kg	ND	5.0	07/29/11 16:26	
Bromoform	ug/kg	ND	5.0	07/29/11 16:26	
Bromomethane	ug/kg	ND	5.0	07/29/11 16:26	
Carbon disulfide	ug/kg	ND	5.0	07/29/11 16:26	
Carbon tetrachloride	ug/kg	ND	5.0	07/29/11 16:26	
Chlorobenzene	ug/kg	ND	5.0	07/29/11 16:26	
Chloroethane	ug/kg	ND	5.0	07/29/11 16:26	
Chloroform	ug/kg	ND	5.0	07/29/11 16:26	
Chloromethane	ug/kg	ND	5.0	07/29/11 16:26	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	07/29/11 16:26	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	07/29/11 16:26	
Dibromochloromethane	ug/kg	ND	5.0	07/29/11 16:26	

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QUALITY CONTROL DATA

Project: Martin 34 No. 2
Pace Project No.: 60103141

METHOD BLANK: 852118 Matrix: Solid

Associated Lab Samples: 60103141002, 60103141005, 60103141007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/kg	ND	5.0	07/29/11 16:26	
Dichlorodifluoromethane	ug/kg	ND	5.0	07/29/11 16:26	
Ethylbenzene	ug/kg	ND	5.0	07/29/11 16:26	
Hexachloro-1,3-butadiene	ug/kg	ND	5.0	07/29/11 16:26	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	07/29/11 16:26	
Methyl-tert-butyl ether	ug/kg	ND	5.0	07/29/11 16:26	
Methylene chloride	ug/kg	9.3	5.0	07/29/11 16:26	B-
n-Butylbenzene	ug/kg	ND	5.0	07/29/11 16:26	
n-Propylbenzene	ug/kg	ND	5.0	07/29/11 16:26	
Naphthalene	ug/kg	ND	10.0	07/29/11 16:26	
p-Isopropyltoluene	ug/kg	ND	5.0	07/29/11 16:26	
sec-Butylbenzene	ug/kg	ND	5.0	07/29/11 16:26	
Styrene	ug/kg	ND	5.0	07/29/11 16:26	
tert-Butylbenzene	ug/kg	ND	5.0	07/29/11 16:26	
Tetrachloroethene	ug/kg	ND	5.0	07/29/11 16:26	
Toluene	ug/kg	ND	5.0	07/29/11 16:26	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	07/29/11 16:26	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	07/29/11 16:26	
Trichloroethene	ug/kg	ND	5.0	07/29/11 16:26	
Trichlorofluoromethane	ug/kg	ND	5.0	07/29/11 16:26	
Vinyl chloride	ug/kg	ND	5.0	07/29/11 16:26	
Xylene (Total)	ug/kg	ND	5.0	07/29/11 16:26	
1,2-Dichloroethane-d4 (S)	%	101	77-131	07/29/11 16:26	
4-Bromofluorobenzene (S)	%	100	75-131	07/29/11 16:26	
Dibromofluoromethane (S)	%	96	68-129	07/29/11 16:26	
Toluene-d8 (S)	%	101	81-121	07/29/11 16:26	

METHOD BLANK: 853237 Matrix: Solid

Associated Lab Samples: 60103141002, 60103141007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	08/01/11 16:35	
Toluene	ug/kg	ND	5.0	08/01/11 16:35	
Xylene (Total)	ug/kg	ND	5.0	08/01/11 16:35	
1,2-Dichloroethane-d4 (S)	%	108	77-131	08/01/11 16:35	
4-Bromofluorobenzene (S)	%	99	75-131	08/01/11 16:35	
Dibromofluoromethane (S)	%	102	68-129	08/01/11 16:35	
Toluene-d8 (S)	%	105	81-121	08/01/11 16:35	

LABORATORY CONTROL SAMPLE: 852119

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	100	99.5	99	86-124	

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QUALITY CONTROL DATA

Project: Martin 34 No. 2

Pace Project No.: 60103141

LABORATORY CONTROL SAMPLE: 852119

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	100	103	103	83-119	
1,1,2,2-Tetrachloroethane	ug/kg	100	102	102	83-120	
1,1,2-Trichloroethane	ug/kg	100	93.5	93	85-120	
1,1-Dichloroethane	ug/kg	100	93.5	93	82-118	
1,1-Dichloroethene	ug/kg	100	96.2	96	78-125	
1,1-Dichloropropene	ug/kg	100	102	102	82-122	
1,2,3-Trichlorobenzene	ug/kg	100	96.1	96	81-126	
1,2,3-Trichloropropane	ug/kg	100	96.4	96	82-120	
1,2,4-Trichlorobenzene	ug/kg	100	99.6	100	74-122	
1,2,4-Trimethylbenzene	ug/kg	100	97.6	98	80-120	
1,2-Dibromo-3-chloropropane	ug/kg	100	95.2	95	73-120	
1,2-Dibromoethane (EDB)	ug/kg	100	98.0	98	85-121	
1,2-Dichlorobenzene	ug/kg	100	101	101	83-120	
1,2-Dichloroethane	ug/kg	100	101	101	80-120	
1,2-Dichloroethene (Total)	ug/kg	200	199	100	84-121	
1,2-Dichloropropane	ug/kg	100	102	102	85-118	
1,3,5-Trimethylbenzene	ug/kg	100	101	101	83-121	
1,3-Dichlorobenzene	ug/kg	100	98.0	98	81-117	
1,3-Dichloropropane	ug/kg	100	93.4	93	84-122	
1,4-Dichlorobenzene	ug/kg	100	96.6	97	80-117	
2,2-Dichloropropane	ug/kg	100	98.8	99	76-121	
2-Butanone (MEK)	ug/kg	500	479	96	66-123	
2-Chlorotoluene	ug/kg	100	103	103	83-120	
2-Hexanone	ug/kg	500	449	90	79-127	
4-Chlorotoluene	ug/kg	100	101	101	81-119	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	467	93	78-122	
Acetone	ug/kg	500	434	87	63-123	
Benzene	ug/kg	100	99.3	99	84-119	
Bromobenzene	ug/kg	100	104	104	85-119	
Bromochloromethane	ug/kg	100	89.1	89	82-123	
Bromodichloromethane	ug/kg	100	98.6	99	84-126	
Bromoform	ug/kg	100	87.1	87	73-112	
Bromomethane	ug/kg	100	113	113	66-132	
Carbon disulfide	ug/kg	100	112	112	62-150	
Carbon tetrachloride	ug/kg	100	103	103	78-126	
Chlorobenzene	ug/kg	100	101	101	83-116	
Chloroethane	ug/kg	100	84.4	84	79-132	
Chloroform	ug/kg	100	93.0	93	79-115	
Chloromethane	ug/kg	100	68.7	69	61-141	
cis-1,2-Dichloroethene	ug/kg	100	96.4	96	83-120	
cis-1,3-Dichloropropene	ug/kg	100	94.1	94	86-124	
Dibromochloromethane	ug/kg	100	103	103	78-117	
Dibromomethane	ug/kg	100	99.4	99	58-117	
Dichlorodifluoromethane	ug/kg	100	86.0	86	32-177	
Ethylbenzene	ug/kg	100	103	103	80-120	
Hexachloro-1,3-butadiene	ug/kg	100	97.3	97	77-125	
Isopropylbenzene (Cumene)	ug/kg	100	109	109	72-120	
Methyl-tert-butyl ether	ug/kg	100	96.2	96	80-125	

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QUALITY CONTROL DATA

Project: Martin 34 No. 2
Pace Project No.: 60103141

LABORATORY CONTROL SAMPLE: 852119

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methylene chloride	ug/kg	100	105	105	50-150	
n-Butylbenzene	ug/kg	100	107	107	75-132	
n-Propylbenzene	ug/kg	100	100	100	79-119	
Naphthalene	ug/kg	100	93.1	93	75-131	
p-Isopropyltoluene	ug/kg	100	102	102	79-119	
sec-Butylbenzene	ug/kg	100	102	102	82-124	
Styrene	ug/kg	100	101	101	82-120	
tert-Butylbenzene	ug/kg	100	103	103	82-121	
Tetrachloroethene	ug/kg	100	99.6	100	81-119	
Toluene	ug/kg	100	97.1	97	83-117	
trans-1,2-Dichloroethene	ug/kg	100	103	103	84-123	
trans-1,3-Dichloropropene	ug/kg	100	100	100	74-115	
Trichloroethene	ug/kg	100	98.5	99	84-117	
Trichlorofluoromethane	ug/kg	100	93.0	93	79-127	
Vinyl chloride	ug/kg	100	115	115	67-128	
Xylene (Total)	ug/kg	300	295	98	80-120	
1,2-Dichloroethane-d4 (S)	%			101	77-131	
4-Bromofluorobenzene (S)	%			103	75-131	
Dibromofluoromethane (S)	%			96	68-129	
Toluene-d8 (S)	%			101	81-121	

LABORATORY CONTROL SAMPLE: 853238

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	100	95.3	95	80-120	
Toluene	ug/kg	100	96.4	96	83-117	
Xylene (Total)	ug/kg	300	291	97	80-120	
1,2-Dichloroethane-d4 (S)	%			101	77-131	
4-Bromofluorobenzene (S)	%			105	75-131	
Dibromofluoromethane (S)	%			98	68-129	
Toluene-d8 (S)	%			101	81-121	

QUALITY CONTROL DATA

Project: Martin 34 No. 2
Pace Project No.: 60103141

QC Batch:	PMST/6355	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	60103141001, 60103141002, 60103141003, 60103141004, 60103141005, 60103141006, 60103141007, 60103141008		

METHOD BLANK:	850041	Matrix:	Solid
Associated Lab Samples:	60103141001, 60103141002, 60103141003, 60103141004, 60103141005, 60103141006, 60103141007, 60103141008		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	07/26/11 00:00	

SAMPLE DUPLICATE: 850042

Parameter	Units	60103119004 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	10.7	11.0	3	20	

QUALITY CONTROL DATA

Project: Martin 34 No. 2
Pace Project No.: 60103141

QC Batch: WET/30284 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60103141001, 60103141007

METHOD BLANK: 853484 Matrix: Solid
Associated Lab Samples: 60103141001, 60103141007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO ₃	mg/kg	ND	200	08/02/11 00:00	

LABORATORY CONTROL SAMPLE: 853485

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/kg	5000	4570	91	90-110	

SAMPLE DUPLICATE: 853486

Parameter	Units	60103141001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO ₃	mg/kg	990	1010	2	25	

QUALITY CONTROL DATA

Project: Martin 34 No. 2
Pace Project No.: 60103141

QC Batch:	WET/30308	Analysis Method:	EPA 9045
QC Batch Method:	EPA 9045	Analysis Description:	9045 pH
Associated Lab Samples: 60103141001, 60103141007			

SAMPLE DUPLICATE: 853833

Parameter	Units	60103141001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	8.2	8.2	0	3	

QUALITY CONTROL DATA

Project: Martin 34 No. 2
Pace Project No.: 60103141

QC Batch:	WET/30272	Analysis Method:	EPA 9050
QC Batch Method:	EPA 9050	Analysis Description:	9050 Specific Conductance
Associated Lab Samples: 60103141001, 60103141007			

METHOD BLANK: 853032 Matrix: Solid
Associated Lab Samples: 60103141001, 60103141007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Specific Conductance	umhos/cm	ND	1.0	08/02/11 13:30	

SAMPLE DUPLICATE: 853033

Parameter	Units	60103141001 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance	umhos/cm	8520	8730	2	20	

QUALITY CONTROL DATA

Project: Martin 34 No. 2

Pace Project No.: 60103141

QC Batch: WETA/17146

Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0

Analysis Description: 300.0 IC Anions

Associated Lab Samples: 60103141001, 60103141007

METHOD BLANK: 853304

Matrix: Solid

Associated Lab Samples: 60103141001, 60103141007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate as N	mg/kg	ND	1.0	08/01/11 16:31	
Nitrite as N	mg/kg	ND	1.0	08/01/11 16:31	

LABORATORY CONTROL SAMPLE: 853305

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/kg	25	22.7	91	90-110	
Nitrite as N	mg/kg	25	23.8	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 853306

853307

Parameter	Units	60102938001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Nitrate as N	mg/kg	ND	6270	6270	5650	5670	90	90	69-118	1	11
Nitrite as N	mg/kg	ND	6270	6270	5990	5950	96	95	70-117	1	15

QUALITY CONTROL DATA

Project: Martin 34 No. 2
Pace Project No.: 60103141

QC Batch: WETA/17172 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60103141001, 60103141002, 60103141003, 60103141004, 60103141005, 60103141006, 60103141007, 60103141008

METHOD BLANK: 854136 Matrix: Solid
Associated Lab Samples: 60103141001, 60103141002, 60103141003, 60103141004, 60103141005, 60103141006, 60103141007, 60103141008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromide	mg/kg	ND	10.0	08/03/11 12:27	
Chloride	mg/kg	ND	10.0	08/03/11 12:27	
Fluoride	mg/kg	ND	2.0	08/03/11 12:27	
Sulfate	mg/kg	ND	10.0	08/03/11 12:27	

LABORATORY CONTROL SAMPLE: 854137

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromide	mg/kg	50	48.1	96	90-110	
Chloride	mg/kg	50	48.5	97	90-110	
Fluoride	mg/kg	25	23.9	96	90-110	
Sulfate	mg/kg	50	50.3	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 854138 854139

Parameter	Units	60103141001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Bromide	mg/kg	ND	566	566	513	507	91	90	80-120	1	20
Chloride	mg/kg	ND	566	566	643	585	100	90	64-120	9	15
Fluoride	mg/kg	ND	283	283	261	268	90	93	77-117	3	20
Sulfate	mg/kg	7880	2830	2830	11100	11100	112	113	67-127	0	12

QUALITY CONTROL DATA

Project: Martin 34 No. 2

Pace Project No.: 60103141

QC Batch: WETA/17192

Analysis Method: EPA 9056

QC Batch Method: EPA 9056

Analysis Description: 9056 IC Anions

Associated Lab Samples: 60103141001, 60103141007

METHOD BLANK: 855008

Matrix: Solid

Associated Lab Samples: 60103141001, 60103141007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Orthophosphate as P	mg/kg	ND	10.0	08/03/11 12:27	

LABORATORY CONTROL SAMPLE: 855009

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Orthophosphate as P	mg/kg	50	49.5	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 855010

855011

Parameter	Units	60103141001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Orthophosphate as P	mg/kg	ND	566	566	578	583	102	103	80-120	1	15	

QUALIFIERS

Project: Martin 34 No. 2
Pace Project No.: 60103141

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

BATCH QUALIFIERS

Batch: MSV/38752

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

Batch: MSV/38789

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

Batch: MSV/38810

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

ANALYTE QUALIFIERS

1e The sample was received in a vessel that was not preserved within 48 hours of sample collection.

B- Analyte detected in method blank but was not detected in the associated samples.

H1 Analysis conducted outside the EPA method holding time.

L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

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

S0 Surrogate recovery outside laboratory control limits.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Martin 34 No. 2
Pace Project No.: 60103141

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60103141001	S-075035-190711-CFM-001	EPA 3546	OEXT/29511	EPA 8015B	GCSV/10925
60103141002	S-075035-190711-CFM-002	EPA 3546	OEXT/29511	EPA 8015B	GCSV/10925
60103141003	S-075035-190711-CFM-003	EPA 3546	OEXT/29511	EPA 8015B	GCSV/10925
60103141004	S-075035-200711-CFM-004	EPA 3546	OEXT/29511	EPA 8015B	GCSV/10925
60103141005	S-075035-200711-CFM-005	EPA 3546	OEXT/29511	EPA 8015B	GCSV/10925
60103141006	S-075035-200711-CFM-006	EPA 3546	OEXT/29511	EPA 8015B	GCSV/10925
60103141007	S-075035-210711-CFM-007	EPA 3546	OEXT/29511	EPA 8015B	GCSV/10925
60103141008	S-075035-210711-CFM-008	EPA 3546	OEXT/29511	EPA 8015B	GCSV/10925
60103141001	S-075035-190711-CFM-001	EPA 5035A/5030B	GCV/3776	EPA 8015B	GCV/3777
60103141002	S-075035-190711-CFM-002	EPA 5035A/5030B	GCV/3776	EPA 8015B	GCV/3778
60103141003	S-075035-190711-CFM-003	EPA 5035A/5030B	GCV/3776	EPA 8015B	GCV/3777
60103141004	S-075035-200711-CFM-004	EPA 5035A/5030B	GCV/3776	EPA 8015B	GCV/3777
60103141005	S-075035-200711-CFM-005	EPA 5035A/5030B	GCV/3776	EPA 8015B	GCV/3778
60103141006	S-075035-200711-CFM-006	EPA 5035A/5030B	GCV/3776	EPA 8015B	GCV/3777
60103141007	S-075035-210711-CFM-007	EPA 5035A/5030B	GCV/3776	EPA 8015B	GCV/3778
60103141008	S-075035-210711-CFM-008	EPA 5035A/5030B	GCV/3776	EPA 8015B	GCV/3777
60103141001	S-075035-190711-CFM-001	EPA 3050	MPRP/14889	EPA 6010	ICP/12950
60103141007	S-075035-210711-CFM-007	EPA 3050	MPRP/14889	EPA 6010	ICP/12950
60103141002	S-075035-190711-CFM-002	EPA 3546	OEXT/29497	EPA 8270	MSSV/9191
60103141005	S-075035-200711-CFM-005	EPA 3546	OEXT/29497	EPA 8270	MSSV/9191
60103141007	S-075035-210711-CFM-007	EPA 3546	OEXT/29497	EPA 8270	MSSV/9191
60103141001	S-075035-190711-CFM-001	EPA 5035A/8260	MSV/38789		
60103141003	S-075035-190711-CFM-003	EPA 5035A/8260	MSV/38752		
60103141004	S-075035-200711-CFM-004	EPA 5035A/8260	MSV/38752		
60103141006	S-075035-200711-CFM-006	EPA 5035A/8260	MSV/38752		
60103141008	S-075035-210711-CFM-008	EPA 5035A/8260	MSV/38789		
60103141009	TB-210711-001	EPA 5035A/8260	MSV/38789		
60103141010	TB-210711-002	EPA 5035A/8260	MSV/38789		
60103141002	S-075035-190711-CFM-002	EPA 8260	MSV/38810		
60103141005	S-075035-200711-CFM-005	EPA 8260	MSV/38810		
60103141007	S-075035-210711-CFM-007	EPA 8260	MSV/38810		
60103141001	S-075035-190711-CFM-001	ASTM D2974-87	PMST/6355		
60103141002	S-075035-190711-CFM-002	ASTM D2974-87	PMST/6355		
60103141003	S-075035-190711-CFM-003	ASTM D2974-87	PMST/6355		
60103141004	S-075035-200711-CFM-004	ASTM D2974-87	PMST/6355		
60103141005	S-075035-200711-CFM-005	ASTM D2974-87	PMST/6355		
60103141006	S-075035-200711-CFM-006	ASTM D2974-87	PMST/6355		
60103141007	S-075035-210711-CFM-007	ASTM D2974-87	PMST/6355		
60103141008	S-075035-210711-CFM-008	ASTM D2974-87	PMST/6355		
60103141001	S-075035-190711-CFM-001	SM 2320B	WET/30284		
60103141007	S-075035-210711-CFM-007	SM 2320B	WET/30284		
60103141001	S-075035-190711-CFM-001	EPA 9045	WET/30308		
60103141007	S-075035-210711-CFM-007	EPA 9045	WET/30308		

Date: 08/08/2011 04:56 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Martin 34 No. 2
Pace Project No.: 60103141

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60103141001	S-075035-190711-CFM-001	EPA 9050	WET/30272		
60103141007	S-075035-210711-CFM-007	EPA 9050	WET/30272		
60103141001	S-075035-190711-CFM-001	EPA 300.0	WETA/17146		
60103141007	S-075035-210711-CFM-007	EPA 300.0	WETA/17146		
60103141001	S-075035-190711-CFM-001	EPA 300.0	WETA/17172		
60103141002	S-075035-190711-CFM-002	EPA 300.0	WETA/17172		
60103141003	S-075035-190711-CFM-003	EPA 300.0	WETA/17172		
60103141004	S-075035-200711-CFM-004	EPA 300.0	WETA/17172		
60103141005	S-075035-200711-CFM-005	EPA 300.0	WETA/17172		
60103141006	S-075035-200711-CFM-006	EPA 300.0	WETA/17172		
60103141007	S-075035-210711-CFM-007	EPA 300.0	WETA/17172		
60103141008	S-075035-210711-CFM-008	EPA 300.0	WETA/17172		
60103141001	S-075035-190711-CFM-001	EPA 9056	WETA/17192		
60103141007	S-075035-210711-CFM-007	EPA 9056	WETA/17192		

ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Al, As, B, Ba, Cd, Cr, Co, Cu, Fe, Pb, Mn, Mo, Ni, Se, Ag, Zn		Christine Matthews	7-22-11		F. Brockett	7/23/11	0820	2-6	4	4	1
Samples ending 003 & 004 had one green capped vials each that cracked upon tightening. Caps were brittle and broke		Christine Matthews	7-22-11	0650					2-3	4	1
SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: <u>Christine Matthews</u> SIGNATURE of SAMPLER: <u>[Signature]</u> Temp in °C Received on Ice (Y/N) Custody Sealed (Y/N) Samples Intact (Y/N)											

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



Sample Condition Upon Receipt – ESI Tech Specs

Client Name: CRA Conoco Phillips

Project #: 60103141

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

Tracking #: 876803377485, 7474

Pace Shipping Label Used? Yes ☒ No ☐

Optional 8/4
Proj Due Date:
Proj Name: Martin 34

No. 2

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

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

Thermometer Used: T-191 / T-194

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

Cooler Temperature: 2.6, 2.3

Date and initials of person examining contents: 7/23/11

Temperature should be above freezing to 6°C

Chain of Custody present:	☒ Yes ☐ No ☐ N/A	1.
Chain of Custody filled out:	☒ Yes ☐ No ☐ N/A	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:	<u>in 7/23/11</u> ☒ Yes ☐ No ☐ N/A	5. <u>001-006, UV's rec'd out of hold</u>
Short Hold Time analyses (<72hr):	☒ Yes ☐ No ☐ N/A	6. <u>kits</u>
Rush Turn Around Time requested:	☐ Yes ☒ No ☐ N/A	7.
Sufficient volume:	☒ Yes ☐ No ☐ N/A	8.
Correct containers used:	☒ Yes ☐ No ☐ N/A	9.
-Pace containers used:	☒ Yes ☐ No ☐ N/A	9.
Containers intact:	☒ Yes ☐ No ☐ N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<u>7/23/11</u> ☒ Yes ☐ No ☐ N/A	11. <u>007-008 + Trips Frozen w/in 48 hrs.</u>
Filtered volume received for dissolved tests?	☐ Yes ☐ No ☐ N/A	12.
Sample labels match COC:	☒ Yes ☐ No ☐ N/A	13.
-Includes date/time/ID/analyses Matrix: <u>SL</u>		13.
All containers needing preservation have been checked.	☐ Yes ☐ No ☒ N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐ Yes ☐ No ☒ N/A	14.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	☐ Yes ☒ No	Initial when completed
Trip Blank present:	☒ Yes ☐ No ☐ N/A	Lot # of added preservative
Pace Trip Blank lot # (if purchased): <u>042511-3</u>		15.
Headspace in VOA vials (>6mm):	☐ Yes ☐ No ☒ N/A	16.
Project sampled in USDA Regulated Area:	☒ Yes ☐ No ☐ N/A	17. List State:

Client Notification/ Resolution:

Copy COC to Client? Y ☐ N ☒

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: Emailed Christine to see what town samples were collected in. OK 7/25/11.

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

Start: 11:33 Start:

End: 11:43 End:

Temp: _____ Temp:

Project Manager Review: OK

Date: 7/25/11

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

APPENDIX C



WELL SAMPLING FIELD INFORMATION FORM

SITE/PROJECT NAME:

Martin 34 No. 2

JOB#

075035

SAMPLE ID:

GW-075035-072711-CFM-003

WELL# MW-1

07/26/11

PURGE DATE
(MM DD YY)

07/27/11

SAMPLE DATE
(MM DD YY)

0.10.88

WATER VOL. IN CASING
(GALLONS)

0.10.88

ACTUAL VOLUME PURGED
(GALLONS)

PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT.....DEDICATED ☒ Y ☐ N

(CIRCLE ONE)

SAMPLING EQUIPMENT.....DEDICATED ☒ Y ☐ N

(CIRCLE ONE)

PURGING DEVICE

☒ G

A - SUBMERSIBLE PUMP

D - GAS LIFT PUMP

G - BAILER

X=

SAMPLING DEVICE

☒ G

B - PERISTALTIC PUMP

E - PURGE PUMP

H - WATERRA®

PURGING DEVICE OTHER (SPECIFY)

C - BLADDER PUMP

F - DIPPER BOTTLE

X - OTHER

X=

SAMPLING DEVICE OTHER (SPECIFY)

PURGING MATERIAL

☒ E

A - TEFLON

D - PVC

X=

SAMPLING MATERIAL

☒ E

B - STAINLESS STEEL

E - POLYETHYLENE

X=

C - POLYPROPYLENE

X - OTHER

X=

SAMPLING MATERIAL OTHER (SPECIFY)

PURGE TUBING

☒ C

A - TEFLON

D - POLYPROPYLENE

G - COMBINATION

X=

SAMPLING TUBING

☒ C

B - TYGON

E - POLYETHYLENE

TEFLON/POLYPROPYLENE

X=

C - ROPE

F - SILICONE

X - OTHER

X=

SAMPLING TUBING OTHER (SPECIFY)

FILTERING DEVICES 0.45

N/A

A - IN-LINE DISPOSABLE

B - PRESSURE

C - VACUUM

FIELD MEASUREMENTS

DEPTH TO WATER

40.45

(feet)

WELL ELEVATION

93.09

(feet)

WELL DEPTH

41.13

(feet)

GROUNDWATER ELEVATION

52.64

(feet)

SAMPLE TEMP

pH

TDS

CONDUCTIVITY

ORP

VOLUME

(°C)	(std)	(g/L)	(µS/cm)	(mV)	(gal)	
(°C)	(std)	(g/L)	(µS/cm)	(mV)	(gal)	
(°C)	(std)	(g/L)	(µS/cm)	(mV)	(gal)	
(°C)	(std)	(g/L)	(µS/cm)	(mV)	(gal)	

FIELD COMMENTS

SAMPLE APPEARANCE:

Clear

ODOR:

hydrocarbon

COLOR:

Clear

SHEEN Y/N

N

WEATHER CONDITIONS:

TEMPERATURE

85°F

WINDY Y/N

N

PRECIPITATION Y/N

N

SPECIFIC COMMENTS:

- No parameters collected due to low well volume and poor recharge

* Well was purged dry and allowed to recharge on 7-26-11 prior to sampling 7-27-11

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE CRA PROTOCOLS

DATE

7/27/11

PRINT

Christine Matthews

SIGNATURE



WELL SAMPLING FIELD INFORMATION FORM

SITE/PROJECT NAME:

Martin 34 Nb. 2

JOB#

075035

SAMPLE ID:

SW-075035-072711-001

WELL#

MW-2

072711

PURGE DATE
(MM DD YY)

072711

SAMPLE DATE
(MM DD YY)

06478

WATER VOL. IN CASING
(GALLONS)

2.75

ACTUAL VOLUME PURGED
(GALLONS)

PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT.....DEDICATED ☒ Y ☐ N

(CIRCLE ONE)

SAMPLING EQUIPMENT.....DEDICATED ☒ Y ☐ N

(CIRCLE ONE)

PURGING DEVICE

☒ G

A - SUBMERSIBLE PUMP

D - GAS LIFT PUMP

G - BAILER

X=

SAMPLING DEVICE

☒ G

B - PERISTALTIC PUMP

E - PURGE PUMP

H - WATERRA®

PURGING DEVICE OTHER (SPECIFY)

C - BLADDER PUMP

F - DIPPER BOTTLE

X - OTHER

X=

SAMPLING DEVICE OTHER (SPECIFY)

PURGING MATERIAL

☒ E

A - TEFLON

D - PVC

X=

B - STAINLESS STEEL

E - POLYETHYLENE

PURGING MATERIAL OTHER (SPECIFY)

SAMPLING MATERIAL

☒ E

C - POLYPROPYLENE

X - OTHER

X=

SAMPLING MATERIAL OTHER (SPECIFY)

PURGE TUBING

☒ C

A - TEFLON

D - POLYPROPYLENE

G - COMBINATION

X=

B - TYGON

E - POLYETHYLENE

TEFLON/POLYPROPYLENE

PURGE TUBING OTHER (SPECIFY)

SAMPLING TUBING

☒ C

C - ROPE

F - SILICONE

X - OTHER

X=

SAMPLING TUBING OTHER (SPECIFY)

FILTERING DEVICES 0.45

☒ A

A - IN-LINE DISPOSABLE

B - PRESSURE

C - VACUUM

FIELD MEASUREMENTS

DEPTH TO WATER

37.68

(feet)

WELL ELEVATION

87.45

(feet)

WELL DEPTH

40.67

(feet)

GROUNDWATER ELEVATION

49.77

(feet)

SAMPLE TEMP

pH

TDS

CONDUCTIVITY

ORP

VOLUME

17.09 (°C)

7.30 (std)

19.62 (g/L)

2556.9 (µS/cm)

(mV)

2.00 (gal)

16.81 (°C)

7.31 (std)

19.47 (g/L)

2521.4 (µS/cm)

(mV)

2.25 (gal)

16.61 (°C)

7.28 (std)

19.40 (g/L)

2506.2 (µS/cm)

(mV)

2.75 (gal)

(°C)

(std)

(g/L)

(µS/cm)

(mV)

(gal)

(°C)

(std)

(g/L)

(µS/cm)

(mV)

(gal)

FIELD COMMENTS

SAMPLE APPEARANCE:

Cloudy

ODOR: slight hydrogen

COLOR:

gray

SHEEN Y/N

N

WEATHER CONDITIONS:

TEMPERATURE

85°F

WINDY Y/N

N

PRECIPITATION Y/N

N

SPECIFIC COMMENTS:

- Sampled @ 1115

Duplicate Collected @ 11:20

SW-075035-072711-002

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE CRA PROTOCOLS

DATE

7/27/11

PRINT

Christine Matthews

SIGNATURE

[Signature]



WELL SAMPLING FIELD INFORMATION FORM

SITE/PROJECT NAME:

Martin 34 No. 2

JOB#

075035

SAMPLE ID:

GW-075035-072711-04M-005

WELL#

MW-3

072711

PURGE DATE
(MM DD YY)

072711

SAMPLE DATE
(MM DD YY)

1.38

WATER VOL. IN CASING
(GALLONS)

4.25

ACTUAL VOLUME PURGED
(GALLONS)

PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT.....DEDICATED ☒ Y ☐ N

(CIRCLE ONE)

SAMPLING EQUIPMENT.....DEDICATED ☒ Y ☐ N

(CIRCLE ONE)

PURGING DEVICE

☒ G

A - SUBMERSIBLE PUMP

D - GAS LIFT PUMP

G - BAILER

X=

SAMPLING DEVICE

☒ G

B - PERISTALTIC PUMP

E - PURGE PUMP

H - WATERA®

PURGING DEVICE OTHER (SPECIFY)

C - BLADDER PUMP

F - DIPPER BOTTLE

X - OTHER

X=

SAMPLING DEVICE OTHER (SPECIFY)

PURGING MATERIAL

☒ E

A - TEFLON

D - PVC

X=

SAMPLING MATERIAL

☒ E

B - STAINLESS STEEL

E - POLYETHYLENE

X=

C - POLYPROPYLENE

X - OTHER

X=

SAMPLING MATERIAL OTHER (SPECIFY)

PURGE TUBING

☒ C

A - TEFLON

D - POLYPROPYLENE

G - COMBINATION

X=

B - TYGON

E - POLYETHYLENE

TEFLON/POLYPROPYLENE

X=

SAMPLING TUBING

☒ C

C - ROPE

F - SILICONE

X - OTHER

X=

SAMPLING TUBING OTHER (SPECIFY)

FILTERING DEVICES 0.45

☒ A

A - IN-LINE DISPOSABLE

B - PRESSURE

C - VACUUM

FIELD MEASUREMENTS

DEPTH TO WATER

36.95

(feet)

WELL ELEVATION

87.19

(feet)

WELL DEPTH

45.63

(feet)

GROUNDWATER ELEVATION

50.24

(feet)

SAMPLE TEMP

pH

TDS

CONDUCTIVITY

ORP

VOLUME

116.93 (°C)

7.39 (std)

19.86 (g/L)

258.79 (µS/cm)

(mV)

3.50 (gal)

117.01 (°C)

7.38 (std)

19.92 (g/L)

260.19 (µS/cm)

(mV)

3.75 (gal)

117.35 (°C)

7.39 (std)

20.04 (g/L)

263.24 (µS/cm)

(mV)

4.00 (gal)

(°C)

(std)

(g/L)

(µS/cm)

(mV)

(gal)

(°C)

(std)

(g/L)

(µS/cm)

(mV)

(gal)

FIELD COMMENTS

SAMPLE APPEARANCE:

cloudy

ODOR:

none

COLOR:

brown

SHEEN Y/N

N

WEATHER CONDITIONS:

TEMPERATURE

85°

WINDY Y/N

N

PRECIPITATION Y/N OUTLOOK

N

SPECIFIC COMMENTS:

Sampled @ 1225

* Note: well bailed dry @ 2 gallons and allowed to recharge

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE CRA PROTOCOLS

DATE

7/27/11

PRINT

Christine Matthews

SIGNATURE

Christine Matthews



WELL SAMPLING FIELD INFORMATION FORM

SITE/PROJECT NAME:

Martin 34 No. 2

JOB#

075035

SAMPLE ID:

GW-075035-072711-CFM-004

WELL#

MN-4

07/27/11

PURGE DATE
(MM DD YY)

07/27/11

SAMPLE DATE
(MM DD YY)

1.8016

WATER VOL. IN CASING
(GALLONS)

5.5

ACTUAL VOLUME PURGED
(GALLONS)

PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT.....DEDICATED

Y

N

(CIRCLE ONE)

SAMPLING EQUIPMENT.....DEDICATED

Y

N

(CIRCLE ONE)

PURGING DEVICE

G

A - SUBMERSIBLE PUMP

D - GAS LIFT PUMP

G - BAITER

X=

SAMPLING DEVICE

G

B - PERISTALTIC PUMP

E - PURGE PUMP

H - WATERRA®

PURGING DEVICE OTHER (SPECIFY)

C - BLADDER PUMP

F - DIPPER BOTTLE

X - OTHER

X=

SAMPLING DEVICE OTHER (SPECIFY)

PURGING MATERIAL

E

A - TEFLON

D - PVC

X=

SAMPLING MATERIAL

E

B - STAINLESS STEEL

E - POLYETHYLENE

X=

C - POLYPROPYLENE

X - OTHER

PURGING MATERIAL OTHER (SPECIFY)

SAMPLING MATERIAL OTHER (SPECIFY)

PURGE TUBING

C

A - TEFLON

D - POLYPROPYLENE

G - COMBINATION

X=

SAMPLING TUBING

C

B - TYGON

E - POLYETHYLENE

TEFLON/POLYPROPYLENE

X=

C - ROPE

F - SILICONE

X - OTHER

PURGE TUBING OTHER (SPECIFY)

SAMPLING TUBING OTHER (SPECIFY)

FILTERING DEVICES 0.45

A

A - IN-LINE DISPOSABLE

B - PRESSURE

C - VACUUM

FIELD MEASUREMENTS

DEPTH TO WATER

44.37

(feet)

WELL ELEVATION

99.63

(feet)

WELL DEPTH

55.63

(feet)

GROUNDWATER ELEVATION

55.26

(feet)

SAMPLE TEMP

pH

TDS

CONDUCTIVITY

ORP

VOLUME

116.53 (°C)

7.817 (std)

25.616 (g/L)

331.23 (µS/cm)

(mV)

4.50 (gal)

116.74 (°C)

7.517 (std)

25.515 (g/L)

331.11 (µS/cm)

(mV)

4.75 (gal)

116.57 (°C)

7.418 (std)

25.415 (g/L)

329.66 (µS/cm)

(mV)

5.25 (gal)

(°C)

(std)

(g/L)

(µS/cm)

(mV)

(gal)

(°C)

(std)

(g/L)

(µS/cm)

(mV)

(gal)

FIELD COMMENTS

SAMPLE APPEARANCE:

cloudy

ODOR:

none

COLOR:

light brown

SHEEN Y/N

N

WEATHER CONDITIONS:

TEMPERATURE

85°

WINDY Y/N

N

PRECIPITATION Y/N

OUTLOOK

N

SPECIFIC COMMENTS:

Sampled @ 1215

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE CRA PROTOCOLS

DATE

7/27/11

PRINT

Christine Matthews

SIGNATURE

APPENDIX D

August 10, 2011

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

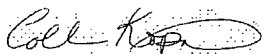
RE: Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Dear Christine Matthews:

Enclosed are the analytical results for sample(s) received by the laboratory on July 28, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,



Colleen Koporc

colleen.koporc@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219

A2LA Certification #: 2456.01

Arkansas Certification #: 05-008-0

Illinois Certification #: 001191

Iowa Certification #: 118

Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055

Nevada Certification #: KS000212008A

Oklahoma Certification #: 9205/9935

Texas Certification #: T104704407-08-TX

Utah Certification #: 9135995665

REPORT OF LABORATORY ANALYSIS

Page 2 of 64

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SAMPLE SUMMARY

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60103315001	GW-075035-072711-CFM-001	Water	07/27/11 11:15	07/28/11 08:55
60103315002	GW-075035-072711-CFM-002	Water	07/27/11 11:20	07/28/11 08:55
60103315003	GW-075035-072711-CFM-003	Water	07/27/11 11:50	07/28/11 08:55
60103315004	GW-075035-072711-CFM-004	Water	07/27/11 12:15	07/28/11 08:55
60103315005	GW-075035-072711-CFM-005	Water	07/27/11 12:25	07/28/11 08:55
60103315006	TB-072711-001	Water	07/27/11 15:15	07/28/11 08:55

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60103315001	GW-075035-072711-CFM-001	EPA 8015B	SDR	3
		EPA 5030B/8015B	PRG	3
		SM 2340B	SMW	1
		EPA 6010	SMW	18
		EPA 8270	JMT	73
		EPA 5030B/8260	PRG	70
		EPA 120.1	SRM1	1
		SM 2320B	BDM	1
		SM 2540C	LAJ	1
		SM 4500-H+B	SRM1	1
		EPA 300.0	JML	2
		EPA 300.0	JML	4
		EPA 365.1	AJM	1
60103315002	GW-075035-072711-CFM-002	EPA 5030B/8260	PRG	70
60103315003	GW-075035-072711-CFM-003	EPA 5030B/8015B	PRG	3
		EPA 5030B/8260	PRG	70
60103315004	GW-075035-072711-CFM-004	EPA 8015B	SDR	3
		EPA 5030B/8015B	PRG	3
		SM 2340B	SMW	1
		EPA 6010	SMW	18
		EPA 8270	JMT	73
		EPA 5030B/8260	PRG	70
		EPA 120.1	SRM1	1
		SM 2320B	BDM	1
		SM 2540C	LAJ	1
		SM 4500-H+B	SRM1	1
		EPA 300.0	JML	2
		EPA 300.0	JML	4
		EPA 365.1	AJM	1
60103315005	GW-075035-072711-CFM-005	EPA 8015B	SDR	3
		EPA 5030B/8015B	PRG	3
		SM 2340B	SMW	1
		EPA 6010	SMW	18
		EPA 8270	JMT	73
		EPA 5030B/8260	PRG	70
		EPA 120.1	SRM1	1
		SM 2320B	BDM	1

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60103315006	TB-072711-001	SM 2540C	LAJ	1
		SM 4500-H+B	SRM1	1
		EPA 300.0	JML	2
		EPA 300.0	JML	4
		EPA 365.1	AJM	1
		EPA 5030B/8260	PRG	70

REPORT OF LABORATORY ANALYSIS

Page 5 of 64

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PROJECT NARRATIVE

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Method: EPA 8015B
Description: 8015B Diesel Range Organics
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: August 10, 2011

General Information:

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

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 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.

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: GCSV/10932

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

Duplicate Sample:

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

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Page 6 of 64

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PROJECT NARRATIVE

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Method: EPA 5030B/8015B
Description: Gasoline Range Organics
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: August 10, 2011

General Information:

4 samples were analyzed for EPA 5030B/8015B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

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

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: GCV/3785

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

Duplicate Sample:

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

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

Method: SM 2340B

Description: 2340B Hardness, Total (Calc.)

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

Date: August 10, 2011

General Information:

3 samples were analyzed for SM 2340B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

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

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

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

Matrix Spikes:

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

Duplicate Sample:

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

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Method: EPA 6010
Description: 6010 MET ICP, Dissolved
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: August 10, 2011

General Information:

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

Hold Time:

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

Sample Preparation:

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

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

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

Matrix Spikes:

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

QC Batch: MPRP/14909

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60103315001

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

- MSD (Lab ID: 852506)
- Calcium, Dissolved

Duplicate Sample:

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

Additional Comments:

Analyte Comments:

QC Batch: MPRP/14909

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

- GW-075035-072711-CFM-001 (Lab ID: 60103315001)
 - Arsenic, Dissolved
- GW-075035-072711-CFM-004 (Lab ID: 60103315004)
 - Arsenic, Dissolved

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.

9608 Loiret Blvd.

Lenexa, KS 66219

(913)599-5665

PROJECT NARRATIVE

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

Method: EPA 6010

Description: 6010 MET ICP, Dissolved

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

Date: August 10, 2011

Analyte Comments:

QC Batch: MPRP/14909

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

- GW-075035-072711-CFM-005 (Lab ID: 60103315005)
- Arsenic, Dissolved

REPORT OF LABORATORY ANALYSIS

Page 10 of 64

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PROJECT NARRATIVE

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

Method: EPA 8270

Description: 8270 MSSV Semivolatile Organic

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

Date: August 10, 2011

General Information:

3 samples were analyzed for EPA 8270. 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 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Internal Standards:

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

Surrogates:

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

QC Batch: OEXT/29533

S4: Surrogate recovery not evaluated against control limits due to sample dilution.

- GW-075035-072711-CFM-001 (Lab ID: 60103315001)

- 2,4,6-Tribromophenol (S)

- 2-Fluorobiphenyl (S)

- 2-Fluorophenol (S)

- Nitrobenzene-d5 (S)

- Phenol-d6 (S)

- Terphenyl-d14 (S)

Method Blank:

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

Laboratory Control Spike:

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

QC Batch: OEXT/29533

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

- LCS (Lab ID: 852951)

- 4-Nitroaniline

Matrix Spikes:

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

REPORT OF LABORATORY ANALYSIS

PROJECT NARRATIVE

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Method: EPA 8270
Description: 8270 MSSV Semivolatile Organic
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: August 10, 2011

QC Batch: MSSV/9207

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

Duplicate Sample:

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

Additional Comments:

Analyte Comments:

QC Batch: OEXT/29533

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

- GW-075035-072711-CFM-001 (Lab ID: 60103315001)
- Nitrobenzene-d5 (S)

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Method: EPA 5030B/8260
Description: 8260 MSV
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: August 10, 2011

General Information:

6 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/38873

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

Duplicate Sample:

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

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Page 13 of 64

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

PROJECT NARRATIVE

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Method: EPA 120.1
Description: 120.1 Specific Conductance
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: August 10, 2011

General Information:

3 samples were analyzed for EPA 120.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

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

Method Blank:

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

Laboratory Control Spike:

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

Matrix Spikes:

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

Duplicate Sample:

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

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Method: SM 2320B
Description: 2320B Alkalinity
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: August 10, 2011

General Information:

3 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

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

Method Blank:

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

Laboratory Control Spike:

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

Matrix Spikes:

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

Duplicate Sample:

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

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Method: SM 2540C
Description: 2540C Total Dissolved Solids
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: August 10, 2011

General Information:

3 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:

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PROJECT NARRATIVE

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

Method: SM 4500-H+B

Description: 4500H+ pH, Electrometric

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

Date: August 10, 2011

General Information:

3 samples were analyzed for SM 4500-H+B. 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.

H6: Analysis initiated more than 15 minutes after sample collection.

- GW-075035-072711-CFM-001 (Lab ID: 60103315001)
- GW-075035-072711-CFM-004 (Lab ID: 60103315004)
- GW-075035-072711-CFM-005 (Lab ID: 60103315005)

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:

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PROJECT NARRATIVE

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Method: EPA 300.0
Description: 300.0 IC Anions
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: August 10, 2011

General Information:

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

Hold Time:

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

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

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

Matrix Spikes:

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

Duplicate Sample:

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

Additional Comments:

Analyte Comments:

QC Batch: WETA/17108

1e: Sample was run within hold time but had to be rerun out of hold at a dilution due to matrix interference.

- GW-075035-072711-CFM-001 (Lab ID: 60103315001)
 - Nitrate as N
- GW-075035-072711-CFM-005 (Lab ID: 60103315005)
 - Nitrate as N

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PROJECT NARRATIVE

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

Method: EPA 300.0

Description: 300.0 IC Anions 28 Days

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

Date: August 10, 2011

General Information:

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

Hold Time:

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

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

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

Matrix Spikes:

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

Duplicate Sample:

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

Additional Comments:

Analyte Comments:

QC Batch: WETA/17173

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

- GW-075035-072711-CFM-001 (Lab ID: 60103315001)

- Fluoride

- Bromide

- GW-075035-072711-CFM-004 (Lab ID: 60103315004)

- Fluoride

- Bromide

- GW-075035-072711-CFM-005 (Lab ID: 60103315005)

- Fluoride

- Bromide

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PROJECT NARRATIVE

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Method: EPA 365.1
Description: 365.1 Orthophosphate as P
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: August 10, 2011

General Information:

3 samples were analyzed for EPA 365.1. 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/17110

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60103204003

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

- MS (Lab ID: 851222)
- Orthophosphate as P

Duplicate Sample:

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

Additional Comments:

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

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ANALYTICAL RESULTS

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

Sample: **GW-075035-072711-CFM-001** Lab ID: **60103315001** Collected: 07/27/11 11:15 Received: 07/28/11 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics Analytical Method: EPA 8015B Preparation Method: EPA 3510C								
TPH-DRO	4.2 mg/L		0.50	1	08/01/11 00:00	08/04/11 20:47		
p-Terphenyl (S)	78 %		40-118	1	08/01/11 00:00	08/04/11 20:47	92-94-4	
n-Tetracosane (S)	71 %		36-120	1	08/01/11 00:00	08/04/11 20:47	646-31-1	
Gasoline Range Organics Analytical Method: EPA 5030B/8015B								
TPH-GRO	3.0 mg/L		0.50	1		08/09/11 17:28		
4-Bromofluorobenzene (S)	110 %		63-139	1		08/09/11 17:28	460-00-4	
Preservation pH	1.0			1		08/09/11 17:28		
2340B Hardness, Total (Calc.) Analytical Method: SM 2340B								
Total Hardness	1820 mg/L		2.5	5		08/04/11 11:43		
6010 MET ICP, Dissolved Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Aluminum, Dissolved	121 ug/L		75.0	1	07/29/11 17:24	08/02/11 11:40	7429-90-5	
Arsenic, Dissolved	ND ug/L		50.0	5	07/29/11 17:24	08/04/11 11:43	7440-38-2	D3
Barium, Dissolved	20.8 ug/L		10.0	1	07/29/11 17:24	08/02/11 11:40	7440-39-3	
Boron, Dissolved	1090 ug/L		500	5	07/29/11 17:24	08/04/11 11:43	7440-42-8	
Cadmium, Dissolved	ND ug/L		25.0	5	07/29/11 17:24	08/04/11 11:43	7440-43-9	
Calcium, Dissolved	354000 ug/L		100	1	07/29/11 17:24	08/02/11 11:40	7440-70-2	
Chromium, Dissolved	ND ug/L		25.0	5	07/29/11 17:24	08/04/11 11:43	7440-47-3	
Cobalt, Dissolved	ND ug/L		25.0	5	07/29/11 17:24	08/04/11 11:43	7440-48-4	
Copper, Dissolved	ND ug/L		50.0	5	07/29/11 17:24	08/04/11 11:43	7440-50-8	
Iron, Dissolved	3460 ug/L		250	5	07/29/11 17:24	08/04/11 11:43	7439-89-6	
Lead, Dissolved	ND ug/L		25.0	5	07/29/11 17:24	08/04/11 11:43	7439-92-1	
Magnesium, Dissolved	227000 ug/L		250	5	07/29/11 17:24	08/04/11 11:43	7439-95-4	
Manganese, Dissolved	2710 ug/L		25.0	5	07/29/11 17:24	08/04/11 11:43	7439-96-5	
Molybdenum, Dissolved	ND ug/L		100	5	07/29/11 17:24	08/04/11 11:43	7439-98-7	
Nickel, Dissolved	ND ug/L		25.0	5	07/29/11 17:24	08/04/11 11:43	7440-02-0	
Selenium, Dissolved	ND ug/L		75.0	5	07/29/11 17:24	08/04/11 11:43	7782-49-2	
Silver, Dissolved	ND ug/L		35.0	5	07/29/11 17:24	08/04/11 11:43	7440-22-4	
Zinc, Dissolved	ND ug/L		250	5	07/29/11 17:24	08/04/11 11:43	7440-66-6	
8270 MSSV Semivolatile Organic Analytical Method: EPA 8270 Preparation Method: EPA 3510								
Acenaphthene	ND ug/L		112	10	08/01/11 00:00	08/03/11 15:44	83-32-9	
Acenaphthylene	ND ug/L		112	10	08/01/11 00:00	08/03/11 15:44	208-96-8	
Anthracene	ND ug/L		112	10	08/01/11 00:00	08/03/11 15:44	120-12-7	
Benzo(a)anthracene	ND ug/L		112	10	08/01/11 00:00	08/03/11 15:44	56-55-3	
Benzo(a)pyrene	ND ug/L		112	10	08/01/11 00:00	08/03/11 15:44	50-32-8	
Benzo(b)fluoranthene	ND ug/L		112	10	08/01/11 00:00	08/03/11 15:44	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		112	10	08/01/11 00:00	08/03/11 15:44	191-24-2	
Benzo(k)fluoranthene	ND ug/L		112	10	08/01/11 00:00	08/03/11 15:44	207-08-9	
Benzoic acid	ND ug/L		562	10	08/01/11 00:00	08/03/11 15:44	65-85-0	
Benzyl alcohol	ND ug/L		225	10	08/01/11 00:00	08/03/11 15:44	100-51-6	
4-Bromophenylphenyl ether	ND ug/L		112	10	08/01/11 00:00	08/03/11 15:44	101-55-3	
Butylbenzylphthalate	ND ug/L		112	10	08/01/11 00:00	08/03/11 15:44	85-68-7	

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ANALYTICAL RESULTS

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

Sample: **GW-075035-072711-CFM-001** Lab ID: **60103315001** Collected: 07/27/11 11:15 Received: 07/28/11 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic Analytical Method: EPA 8270 Preparation Method: EPA 3510								
Carbazole	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	86-74-8	
4-Chloro-3-methylphenol	ND	ug/L	225	10	08/01/11 00:00	08/03/11 15:44	59-50-7	
4-Chloroaniline	ND	ug/L	225	10	08/01/11 00:00	08/03/11 15:44	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	39638-32-9	
2-Chloronaphthalene	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	91-58-7	
2-Chlorophenol	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	7005-72-3	
Chrysene	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	53-70-3	
Dibenzofuran	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	225	10	08/01/11 00:00	08/03/11 15:44	91-94-1	
2,4-Dichlorophenol	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	120-83-2	
Diethylphthalate	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	84-66-2	
2,4-Dimethylphenol	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	105-67-9	
Dimethylphthalate	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	131-11-3	
Di-n-butylphthalate	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	562	10	08/01/11 00:00	08/03/11 15:44	534-52-1	
2,4-Dinitrophenol	ND	ug/L	562	10	08/01/11 00:00	08/03/11 15:44	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	606-20-2	
Di-n-octylphthalate	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	117-81-7	
Fluoranthene	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	206-44-0	
Fluorene	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	87-68-3	
Hexachlorobenzene	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	77-47-4	
Hexachloroethane	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	193-39-5	
Isophorone	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	78-59-1	
2-Methylnaphthalene	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44		
Naphthalene	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	91-20-3	
2-Nitroaniline	ND	ug/L	562	10	08/01/11 00:00	08/03/11 15:44	88-74-4	
3-Nitroaniline	ND	ug/L	562	10	08/01/11 00:00	08/03/11 15:44	99-09-2	
4-Nitroaniline	ND	ug/L	562	10	08/01/11 00:00	08/03/11 15:44	100-01-6	L3
Nitrobenzene	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	98-95-3	
2-Nitrophenol	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	88-75-5	
4-Nitrophenol	ND	ug/L	562	10	08/01/11 00:00	08/03/11 15:44	100-02-7	
N-Nitroso-di-n-propylamine	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	621-64-7	

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ANALYTICAL RESULTS

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

Sample: GW-075035-072711-CFM-001 Lab ID: 60103315001 Collected: 07/27/11 11:15 Received: 07/28/11 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic Analytical Method: EPA 8270 Preparation Method: EPA 3510								
N-Nitrosodiphenylamine	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	86-30-6	
Pentachlorophenol	ND	ug/L	562	10	08/01/11 00:00	08/03/11 15:44	87-86-5	
Phenanthrene	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	85-01-8	
Phenol	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	108-95-2	
Pyrene	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	129-00-0	
Pyridine	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	562	10	08/01/11 00:00	08/03/11 15:44	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	112	10	08/01/11 00:00	08/03/11 15:44	88-06-2	
Nitrobenzene-d5 (S)	0 %		36-120	10	08/01/11 00:00	08/03/11 15:44	4165-60-0	D3,S4
2-Fluorobiphenyl (S)	0 %		39-120	10	08/01/11 00:00	08/03/11 15:44	321-60-8	S4
Terphenyl-d14 (S)	0 %		30-120	10	08/01/11 00:00	08/03/11 15:44	1718-51-0	S4
Phenol-d6 (S)	0 %		10-120	10	08/01/11 00:00	08/03/11 15:44	13127-88-3	S4
2-Fluorophenol (S)	0 %		12-120	10	08/01/11 00:00	08/03/11 15:44	367-12-4	S4
2,4,6-Tribromophenol (S)	0 %		45-112	10	08/01/11 00:00	08/03/11 15:44	118-79-6	S4
8260 MSV Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	100	10		08/02/11 11:58	67-64-1	
Benzene	244	ug/L	10.0	10		08/02/11 11:58	71-43-2	
Bromobenzene	ND	ug/L	10.0	10		08/02/11 11:58	108-86-1	
Bromochloromethane	ND	ug/L	10.0	10		08/02/11 11:58	74-97-5	
Bromodichloromethane	ND	ug/L	10.0	10		08/02/11 11:58	75-27-4	
Bromoform	ND	ug/L	10.0	10		08/02/11 11:58	75-25-2	
Bromomethane	ND	ug/L	10.0	10		08/02/11 11:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	10		08/02/11 11:58	78-93-3	
n-Butylbenzene	ND	ug/L	10.0	10		08/02/11 11:58	104-51-8	
sec-Butylbenzene	ND	ug/L	10.0	10		08/02/11 11:58	135-98-8	
tert-Butylbenzene	ND	ug/L	10.0	10		08/02/11 11:58	98-06-6	
Carbon disulfide	ND	ug/L	50.0	10		08/02/11 11:58	75-15-0	
Carbon tetrachloride	ND	ug/L	10.0	10		08/02/11 11:58	56-23-5	
Chlorobenzene	ND	ug/L	10.0	10		08/02/11 11:58	108-90-7	
Chloroethane	ND	ug/L	10.0	10		08/02/11 11:58	75-00-3	
Chloroform	ND	ug/L	10.0	10		08/02/11 11:58	67-66-3	
Chloromethane	ND	ug/L	10.0	10		08/02/11 11:58	74-87-3	
2-Chlorotoluene	ND	ug/L	10.0	10		08/02/11 11:58	95-49-8	
4-Chlorotoluene	ND	ug/L	10.0	10		08/02/11 11:58	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	25.0	10		08/02/11 11:58	96-12-8	
Dibromochloromethane	ND	ug/L	10.0	10		08/02/11 11:58	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	10.0	10		08/02/11 11:58	106-93-4	
Dibromomethane	ND	ug/L	10.0	10		08/02/11 11:58	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	10.0	10		08/02/11 11:58	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	10		08/02/11 11:58	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	10		08/02/11 11:58	106-46-7	
Dichlorodifluoromethane	ND	ug/L	10.0	10		08/02/11 11:58	75-71-8	
1,1-Dichloroethane	ND	ug/L	10.0	10		08/02/11 11:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	10.0	10		08/02/11 11:58	107-06-2	

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ANALYTICAL RESULTS

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Sample: **GW-075035-072711-CFM-001** Lab ID: **60103315001** Collected: 07/27/11 11:15 Received: 07/28/11 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 5030B/8260								
1,2-Dichloroethene (Total)	ND	ug/L	10.0	10		08/02/11 11:58	540-59-0	
1,1-Dichloroethene	ND	ug/L	10.0	10		08/02/11 11:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	10.0	10		08/02/11 11:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	10.0	10		08/02/11 11:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	10.0	10		08/02/11 11:58	78-87-5	
1,3-Dichloropropane	ND	ug/L	10.0	10		08/02/11 11:58	142-28-9	
2,2-Dichloropropane	ND	ug/L	10.0	10		08/02/11 11:58	594-20-7	
1,1-Dichloropropene	ND	ug/L	10.0	10		08/02/11 11:58	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	10.0	10		08/02/11 11:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	10.0	10		08/02/11 11:58	10061-02-6	
Ethylbenzene	152	ug/L	10.0	10		08/02/11 11:58	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	10		08/02/11 11:58	87-68-3	
2-Hexanone	ND	ug/L	100	10		08/02/11 11:58	591-78-6	
Isopropylbenzene (Cumene)	25.7	ug/L	10.0	10		08/02/11 11:58	98-82-8	
p-Isopropyltoluene	10.4	ug/L	10.0	10		08/02/11 11:58	99-87-6	
Methylene chloride	16.5	ug/L	10.0	10		08/02/11 11:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	10		08/02/11 11:58	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	10.0	10		08/02/11 11:58	1634-04-4	
Naphthalene	ND	ug/L	100	10		08/02/11 11:58	91-20-3	
n-Propylbenzene	19.4	ug/L	10.0	10		08/02/11 11:58	103-65-1	
Styrene	ND	ug/L	10.0	10		08/02/11 11:58	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	10.0	10		08/02/11 11:58	630-20-6	
1,1,2,2-Tetrachloroethane	19.1	ug/L	10.0	10		08/02/11 11:58	79-34-5	
Tetrachloroethene	ND	ug/L	10.0	10		08/02/11 11:58	127-18-4	
Toluene	ND	ug/L	10.0	10		08/02/11 11:58	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	10.0	10		08/02/11 11:58	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	10		08/02/11 11:58	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	10.0	10		08/02/11 11:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	10.0	10		08/02/11 11:58	79-00-5	
Trichloroethene	ND	ug/L	10.0	10		08/02/11 11:58	79-01-6	
Trichlorofluoromethane	ND	ug/L	10.0	10		08/02/11 11:58	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	25.0	10		08/02/11 11:58	96-18-4	
1,2,4-Trimethylbenzene	401	ug/L	10.0	10		08/02/11 11:58	95-63-6	
1,3,5-Trimethylbenzene	215	ug/L	10.0	10		08/02/11 11:58	108-67-8	
Vinyl chloride	ND	ug/L	10.0	10		08/02/11 11:58	75-01-4	
Xylene (Total)	81.4	ug/L	30.0	10		08/02/11 11:58	1330-20-7	
4-Bromofluorobenzene (S)	97	%	87-113	10		08/02/11 11:58	460-00-4	
Dibromofluoromethane (S)	101	%	86-112	10		08/02/11 11:58	1868-53-7	
1,2-Dichloroethane-d4 (S)	100	%	82-119	10		08/02/11 11:58	17060-07-0	
Toluene-d8 (S)	96	%	90-110	10		08/02/11 11:58	2037-26-5	
Preservation pH	1.0		0.10	10		08/02/11 11:58		

120.1 Specific Conductance Analytical Method: EPA 120.1

Specific Conductance	25800 umhos/cm	1.0	1	08/01/11 13:18
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ANALYTICAL RESULTS

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Sample: **GW-075035-072711-CFM-001** Lab ID: **60103315001** Collected: 07/27/11 11:15 Received: 07/28/11 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity Analytical Method: SM 2320B								
Alkalinity, Total as CaCO ₃	1760	mg/L	20.0	1		08/09/11 00:00		
2540C Total Dissolved Solids Analytical Method: SM 2540C								
Total Dissolved Solids	26600	mg/L	5.0	1		08/02/11 09:16		
4500H+ pH, Electrometric Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	7.4	Std. Units	0.10	1		07/28/11 17:40		H6
300.0 IC Anions Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	1.0	10		08/03/11 23:58	14797-55-8	1e
Nitrite as N	ND	mg/L	0.10	1		07/28/11 14:55	14797-65-0	
300.0 IC Anions 28 Days Analytical Method: EPA 300.0								
Bromide	ND	mg/L	10.0	10		08/03/11 23:58	24959-67-9	D3
Chloride	330	mg/L	50.0	50		08/04/11 19:58	16887-00-6	
Fluoride	2.9	mg/L	2.0	10		08/03/11 23:58	16984-48-8	D3
Sulfate	17100	mg/L	2000	2000		08/04/11 20:14	14808-79-8	
365.1 Orthophosphate as P Analytical Method: EPA 365.1								
Orthophosphate as P	0.35	mg/L	0.10	1		07/28/11 13:31		

ANALYTICAL RESULTS

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Sample: **GW-075035-072711-CFM-002** Lab ID: **60103315002** Collected: 07/27/11 11:20 Received: 07/28/11 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	50.0	5		08/02/11 12:12	67-64-1	
Benzene	230	ug/L	5.0	5		08/02/11 12:12	71-43-2	
Bromobenzene	ND	ug/L	5.0	5		08/02/11 12:12	108-86-1	
Bromochloromethane	ND	ug/L	5.0	5		08/02/11 12:12	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	5		08/02/11 12:12	75-27-4	
Bromoform	ND	ug/L	5.0	5		08/02/11 12:12	75-25-2	
Bromomethane	ND	ug/L	5.0	5		08/02/11 12:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	50.0	5		08/02/11 12:12	78-93-3	
n-Butylbenzene	7.6	ug/L	5.0	5		08/02/11 12:12	104-51-8	
sec-Butylbenzene	5.9	ug/L	5.0	5		08/02/11 12:12	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	5		08/02/11 12:12	98-06-6	
Carbon disulfide	ND	ug/L	25.0	5		08/02/11 12:12	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	5		08/02/11 12:12	56-23-5	
Chlorobenzene	ND	ug/L	5.0	5		08/02/11 12:12	108-90-7	
Chloroethane	ND	ug/L	5.0	5		08/02/11 12:12	75-00-3	
Chloroform	ND	ug/L	5.0	5		08/02/11 12:12	67-66-3	
Chloromethane	ND	ug/L	5.0	5		08/02/11 12:12	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	5		08/02/11 12:12	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	5		08/02/11 12:12	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	12.5	5		08/02/11 12:12	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	5		08/02/11 12:12	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	5		08/02/11 12:12	106-93-4	
Dibromomethane	ND	ug/L	5.0	5		08/02/11 12:12	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	5		08/02/11 12:12	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	5		08/02/11 12:12	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	5		08/02/11 12:12	106-46-7	
Dichlorodifluoromethane	ND	ug/L	5.0	5		08/02/11 12:12	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	5		08/02/11 12:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	5		08/02/11 12:12	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	5.0	5		08/02/11 12:12	540-59-0	
1,1-Dichloroethene	ND	ug/L	5.0	5		08/02/11 12:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	5		08/02/11 12:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	5		08/02/11 12:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	5		08/02/11 12:12	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	5		08/02/11 12:12	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	5		08/02/11 12:12	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	5		08/02/11 12:12	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	5		08/02/11 12:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	5		08/02/11 12:12	10061-02-6	
Ethylbenzene	143	ug/L	5.0	5		08/02/11 12:12	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	5		08/02/11 12:12	87-68-3	
2-Hexanone	ND	ug/L	50.0	5		08/02/11 12:12	591-78-6	
Isopropylbenzene (Cumene)	22.4	ug/L	5.0	5		08/02/11 12:12	98-82-8	
p-Isopropyltoluene	9.0	ug/L	5.0	5		08/02/11 12:12	99-87-6	
Methylene chloride	9.6	ug/L	5.0	5		08/02/11 12:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	50.0	5		08/02/11 12:12	108-10-1	

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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

Sample: **GW-075035-072711-CFM-002** Lab ID: **60103315002** Collected: 07/27/11 11:20 Received: 07/28/11 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV								
Analytical Method: EPA 5030B/8260								
Methyl-tert-butyl ether	ND	ug/L	5.0	5		08/02/11 12:12	1634-04-4	
Naphthalene	53.5	ug/L	50.0	5		08/02/11 12:12	91-20-3	
n-Propylbenzene	18.7	ug/L	5.0	5		08/02/11 12:12	103-65-1	
Styrene	ND	ug/L	5.0	5		08/02/11 12:12	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	5		08/02/11 12:12	630-20-6	
1,1,2,2-Tetrachloroethane	9.2	ug/L	5.0	5		08/02/11 12:12	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	5		08/02/11 12:12	127-18-4	
Toluene	ND	ug/L	5.0	5		08/02/11 12:12	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	5		08/02/11 12:12	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	5		08/02/11 12:12	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	5		08/02/11 12:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	5		08/02/11 12:12	79-00-5	
Trichloroethene	ND	ug/L	5.0	5		08/02/11 12:12	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	5		08/02/11 12:12	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	12.5	5		08/02/11 12:12	96-18-4	
1,2,4-Trimethylbenzene	368	ug/L	5.0	5		08/02/11 12:12	95-63-6	
1,3,5-Trimethylbenzene	193	ug/L	5.0	5		08/02/11 12:12	108-67-8	
Vinyl chloride	ND	ug/L	5.0	5		08/02/11 12:12	75-01-4	
Xylene (Total)	78.4	ug/L	15.0	5		08/02/11 12:12	1330-20-7	
4-Bromofluorobenzene (S)	103	%	87-113	5		08/02/11 12:12	460-00-4	
Dibromofluoromethane (S)	103	%	86-112	5		08/02/11 12:12	1868-53-7	
1,2-Dichloroethane-d4 (S)	108	%	82-119	5		08/02/11 12:12	17060-07-0	
Toluene-d8 (S)	98	%	90-110	5		08/02/11 12:12	2037-26-5	
Preservation pH	1.0		0.10	5		08/02/11 12:12		



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ANALYTICAL RESULTS

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Sample: **GW-075035-072711-CFM-003** Lab ID: **60103315003** Collected: 07/27/11 11:50 Received: 07/28/11 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Gasoline Range Organics		Analytical Method: EPA 5030B/8015B						
TPH-GRO	88.3	mg/L	10.0	20		08/09/11 17:51		
4-Bromofluorobenzene (S)	101	%	63-139	20		08/09/11 17:51	460-00-4	
Preservation pH	1.0			20		08/09/11 17:51		
8260 MSV		Analytical Method: EPA 5030B/8260						
Acetone	ND	ug/L	5000	500		08/02/11 12:26	67-64-1	
Benzene	4460	ug/L	500	500		08/02/11 12:26	71-43-2	
Bromobenzene	ND	ug/L	500	500		08/02/11 12:26	108-86-1	
Bromochloromethane	ND	ug/L	500	500		08/02/11 12:26	74-97-5	
Bromodichloromethane	ND	ug/L	500	500		08/02/11 12:26	75-27-4	
Bromoform	ND	ug/L	500	500		08/02/11 12:26	75-25-2	
Bromomethane	ND	ug/L	500	500		08/02/11 12:26	74-83-9	
2-Butanone (MEK)	ND	ug/L	5000	500		08/02/11 12:26	78-93-3	
n-Butylbenzene	ND	ug/L	500	500		08/02/11 12:26	104-51-8	
sec-Butylbenzene	ND	ug/L	500	500		08/02/11 12:26	135-98-8	
tert-Butylbenzene	ND	ug/L	500	500		08/02/11 12:26	98-06-6	
Carbon disulfide	ND	ug/L	2500	500		08/02/11 12:26	75-15-0	
Carbon tetrachloride	ND	ug/L	500	500		08/02/11 12:26	56-23-5	
Chlorobenzene	ND	ug/L	500	500		08/02/11 12:26	108-90-7	
Chloroethane	ND	ug/L	500	500		08/02/11 12:26	75-00-3	
Chloroform	ND	ug/L	500	500		08/02/11 12:26	67-66-3	
Chloromethane	ND	ug/L	500	500		08/02/11 12:26	74-87-3	
2-Chlorotoluene	ND	ug/L	500	500		08/02/11 12:26	95-49-8	
4-Chlorotoluene	ND	ug/L	500	500		08/02/11 12:26	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	1250	500		08/02/11 12:26	96-12-8	
Dibromochloromethane	ND	ug/L	500	500		08/02/11 12:26	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	500	500		08/02/11 12:26	106-93-4	
Dibromomethane	ND	ug/L	500	500		08/02/11 12:26	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	500	500		08/02/11 12:26	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	500	500		08/02/11 12:26	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	500	500		08/02/11 12:26	106-46-7	
Dichlorodifluoromethane	ND	ug/L	500	500		08/02/11 12:26	75-71-8	
1,1-Dichloroethane	ND	ug/L	500	500		08/02/11 12:26	75-34-3	
1,2-Dichloroethane	ND	ug/L	500	500		08/02/11 12:26	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	500	500		08/02/11 12:26	540-59-0	
1,1-Dichloroethene	ND	ug/L	500	500		08/02/11 12:26	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	500	500		08/02/11 12:26	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	500	500		08/02/11 12:26	156-60-5	
1,2-Dichloropropane	ND	ug/L	500	500		08/02/11 12:26	78-87-5	
1,3-Dichloropropane	ND	ug/L	500	500		08/02/11 12:26	142-28-9	
2,2-Dichloropropane	ND	ug/L	500	500		08/02/11 12:26	594-20-7	
1,1-Dichloropropene	ND	ug/L	500	500		08/02/11 12:26	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	500	500		08/02/11 12:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	500	500		08/02/11 12:26	10061-02-6	
Ethylbenzene	782	ug/L	500	500		08/02/11 12:26	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	500	500		08/02/11 12:26	87-68-3	

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ANALYTICAL RESULTS

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

Sample: **GW-075035-072711-CFM-003** Lab ID: **60103315003** Collected: 07/27/11 11:50 Received: 07/28/11 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV								
Analytical Method: EPA 5030B/8260								
2-Hexanone	ND	ug/L	5000	500		08/02/11 12:26	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	500	500		08/02/11 12:26	98-82-8	
p-Isopropyltoluene	ND	ug/L	500	500		08/02/11 12:26	99-87-6	
Methylene chloride	667	ug/L	500	500		08/02/11 12:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5000	500		08/02/11 12:26	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	500	500		08/02/11 12:26	1634-04-4	
Naphthalene	ND	ug/L	5000	500		08/02/11 12:26	91-20-3	
n-Propylbenzene	ND	ug/L	500	500		08/02/11 12:26	103-65-1	
Styrene	ND	ug/L	500	500		08/02/11 12:26	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	500	500		08/02/11 12:26	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	500	500		08/02/11 12:26	79-34-5	
Tetrachloroethene	ND	ug/L	500	500		08/02/11 12:26	127-18-4	
Toluene	13300	ug/L	500	500		08/02/11 12:26	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	500	500		08/02/11 12:26	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	500	500		08/02/11 12:26	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	500	500		08/02/11 12:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	500	500		08/02/11 12:26	79-00-5	
Trichloroethene	ND	ug/L	500	500		08/02/11 12:26	79-01-6	
Trichlorofluoromethane	ND	ug/L	500	500		08/02/11 12:26	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1250	500		08/02/11 12:26	96-18-4	
1,2,4-Trimethylbenzene	898	ug/L	500	500		08/02/11 12:26	95-63-6	
1,3,5-Trimethylbenzene	502	ug/L	500	500		08/02/11 12:26	108-67-8	
Vinyl chloride	ND	ug/L	500	500		08/02/11 12:26	75-01-4	
Xylene (Total)	7850	ug/L	1500	500		08/02/11 12:26	1330-20-7	
4-Bromofluorobenzene (S)	100	%	87-113	500		08/02/11 12:26	460-00-4	
Dibromofluoromethane (S)	105	%	86-112	500		08/02/11 12:26	1868-53-7	
1,2-Dichloroethane-d4 (S)	105	%	82-119	500		08/02/11 12:26	17060-07-0	
Toluene-d8 (S)	97	%	90-110	500		08/02/11 12:26	2037-26-5	
Preservation pH	1.0		0.10	500		08/02/11 12:26		



ANALYTICAL RESULTS

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Sample: GW-075035-072711-CFM-004 Lab ID: 60103315004 Collected: 07/27/11 12:15 Received: 07/28/11 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics		Analytical Method: EPA 8015B Preparation Method: EPA 3510C						
TPH-DRO	ND	mg/L	0.50	1	08/01/11 00:00	08/04/11 21:10		
p-Terphenyl (S)	70	%	40-118	1	08/01/11 00:00	08/04/11 21:10	92-94-4	
n-Tetracosane (S)	64	%	36-120	1	08/01/11 00:00	08/04/11 21:10	646-31-1	
Gasoline Range Organics		Analytical Method: EPA 5030B/8015B						
TPH-GRO	0.66	mg/L	0.50	1		08/09/11 18:13		
4-Bromofluorobenzene (S)	109	%	63-139	1		08/09/11 18:13	460-00-4	
Preservation pH	1.0			1		08/09/11 18:13		
2340B Hardness, Total (Calc.)		Analytical Method: SM 2340B						
Total Hardness	3130	mg/L	2.5	5		08/04/11 11:50		
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Aluminum, Dissolved	99.9	ug/L	75.0	1	07/29/11 17:24	08/02/11 11:53	7429-90-5	D3
Arsenic, Dissolved	ND	ug/L	50.0	5	07/29/11 17:24	08/04/11 11:50	7440-38-2	
Barium, Dissolved	12.1	ug/L	10.0	1	07/29/11 17:24	08/02/11 11:53	7440-39-3	
Boron, Dissolved	638	ug/L	500	5	07/29/11 17:24	08/04/11 11:50	7440-42-8	
Cadmium, Dissolved	ND	ug/L	25.0	5	07/29/11 17:24	08/04/11 11:50	7440-43-9	
Calcium, Dissolved	350000	ug/L	100	1	07/29/11 17:24	08/02/11 11:53	7440-70-2	
Chromium, Dissolved	ND	ug/L	25.0	5	07/29/11 17:24	08/04/11 11:50	7440-47-3	
Cobalt, Dissolved	ND	ug/L	25.0	5	07/29/11 17:24	08/04/11 11:50	7440-48-4	
Copper, Dissolved	ND	ug/L	50.0	5	07/29/11 17:24	08/04/11 11:50	7440-50-8	
Iron, Dissolved	677	ug/L	250	5	07/29/11 17:24	08/04/11 11:50	7439-89-6	
Lead, Dissolved	ND	ug/L	25.0	5	07/29/11 17:24	08/04/11 11:50	7439-92-1	
Magnesium, Dissolved	548000	ug/L	250	5	07/29/11 17:24	08/04/11 11:50	7439-95-4	
Manganese, Dissolved	10500	ug/L	25.0	5	07/29/11 17:24	08/04/11 11:50	7439-96-5	
Molybdenum, Dissolved	ND	ug/L	100	5	07/29/11 17:24	08/04/11 11:50	7439-98-7	
Nickel, Dissolved	ND	ug/L	25.0	5	07/29/11 17:24	08/04/11 11:50	7440-02-0	
Selenium, Dissolved	ND	ug/L	75.0	5	07/29/11 17:24	08/04/11 11:50	7782-49-2	
Silver, Dissolved	ND	ug/L	35.0	5	07/29/11 17:24	08/04/11 11:50	7440-22-4	
Zinc, Dissolved	ND	ug/L	250	5	07/29/11 17:24	08/04/11 11:50	7440-66-6	
8270 MSSV Semivolatile Organic		Analytical Method: EPA 8270 Preparation Method: EPA 3510						
Acenaphthene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	83-32-9	
Acenaphthylene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	208-96-8	
Anthracene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	120-12-7	
Benzo(a)anthracene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	56-55-3	
Benzo(a)pyrene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	207-08-9	
Benzoic acid	ND	ug/L	55.6	1	08/01/11 00:00	08/03/11 15:01	65-85-0	
Benzyl alcohol	ND	ug/L	22.2	1	08/01/11 00:00	08/03/11 15:01	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	101-55-3	
Butylbenzylphthalate	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	85-68-7	

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ANALYTICAL RESULTS

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

Sample: **GW-075035-072711-CFM-004** Lab ID: **60103315004** Collected: 07/27/11 12:15 Received: 07/28/11 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic Analytical Method: EPA 8270 Preparation Method: EPA 3510								
Carbazole	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	86-74-8	
4-Chloro-3-methylphenol	ND	ug/L	22.2	1	08/01/11 00:00	08/03/11 15:01	59-50-7	
4-Chloroaniline	ND	ug/L	22.2	1	08/01/11 00:00	08/03/11 15:01	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	39638-32-9	
2-Chloronaphthalene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	91-58-7	
2-Chlorophenol	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	7005-72-3	
Chrysene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	53-70-3	
Dibenzofuran	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	22.2	1	08/01/11 00:00	08/03/11 15:01	91-94-1	
2,4-Dichlorophenol	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	120-83-2	
Diethylphthalate	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	84-66-2	
2,4-Dimethylphenol	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	105-67-9	
Dimethylphthalate	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	131-11-3	
Di-n-butylphthalate	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	55.6	1	08/01/11 00:00	08/03/11 15:01	534-52-1	
2,4-Dinitrophenol	ND	ug/L	55.6	1	08/01/11 00:00	08/03/11 15:01	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	606-20-2	
Di-n-octylphthalate	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	117-81-7	
Fluoranthene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	206-44-0	
Fluorene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	87-68-3	
Hexachlorobenzene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	77-47-4	
Hexachloroethane	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	193-39-5	
Isophorone	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	78-59-1	
2-Methylnaphthalene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01		
Naphthalene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	91-20-3	
2-Nitroaniline	ND	ug/L	55.6	1	08/01/11 00:00	08/03/11 15:01	88-74-4	
3-Nitroaniline	ND	ug/L	55.6	1	08/01/11 00:00	08/03/11 15:01	99-09-2	
4-Nitroaniline	ND	ug/L	55.6	1	08/01/11 00:00	08/03/11 15:01	100-01-6	L3
Nitrobenzene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	98-95-3	
2-Nitrophenol	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	88-75-5	
4-Nitrophenol	ND	ug/L	55.6	1	08/01/11 00:00	08/03/11 15:01	100-02-7	
N-Nitroso-di-n-propylamine	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	621-64-7	

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ANALYTICAL RESULTS

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

Sample: GW-075035-072711-CFM-004 Lab ID: 60103315004 Collected: 07/27/11 12:15 Received: 07/28/11 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic		Analytical Method: EPA 8270 Preparation Method: EPA 3510						
N-Nitrosodiphenylamine	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	86-30-6	
Pentachlorophenol	ND	ug/L	55.6	1	08/01/11 00:00	08/03/11 15:01	87-86-5	
Phenanthrene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	85-01-8	
Phenol	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	108-95-2	
Pyrene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	129-00-0	
Pyridine	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	55.6	1	08/01/11 00:00	08/03/11 15:01	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	11.1	1	08/01/11 00:00	08/03/11 15:01	88-06-2	
Nitrobenzene-d5 (S)	73	%	36-120	1	08/01/11 00:00	08/03/11 15:01	4165-60-0	
2-Fluorobiphenyl (S)	77	%	39-120	1	08/01/11 00:00	08/03/11 15:01	321-60-8	
Terphenyl-d14 (S)	83	%	30-120	1	08/01/11 00:00	08/03/11 15:01	1718-51-0	
Phenol-d6 (S)	39	%	10-120	1	08/01/11 00:00	08/03/11 15:01	13127-88-3	
2-Fluorophenol (S)	52	%	12-120	1	08/01/11 00:00	08/03/11 15:01	367-12-4	
2,4,6-Tribromophenol (S)	90	%	45-112	1	08/01/11 00:00	08/03/11 15:01	118-79-6	
8260 MSV		Analytical Method: EPA 5030B/8260						
Acetone	12.7	ug/L	10.0	1		08/02/11 12:41	67-64-1	
Benzene	2.1	ug/L	1.0	1		08/02/11 12:41	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		08/02/11 12:41	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		08/02/11 12:41	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		08/02/11 12:41	75-27-4	
Bromoform	ND	ug/L	1.0	1		08/02/11 12:41	75-25-2	
Bromomethane	ND	ug/L	1.0	1		08/02/11 12:41	74-83-9	
2-Butanone (MEK)	18.9	ug/L	10.0	1		08/02/11 12:41	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		08/02/11 12:41	104-51-8	
sec-Butylbenzene	2.4	ug/L	1.0	1		08/02/11 12:41	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		08/02/11 12:41	98-06-6	
Carbon disulfide	ND	ug/L	5.0	1		08/02/11 12:41	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		08/02/11 12:41	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		08/02/11 12:41	108-90-7	
Chloroethane	ND	ug/L	1.0	1		08/02/11 12:41	75-00-3	
Chloroform	ND	ug/L	1.0	1		08/02/11 12:41	67-66-3	
Chloromethane	ND	ug/L	1.0	1		08/02/11 12:41	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		08/02/11 12:41	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		08/02/11 12:41	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	1		08/02/11 12:41	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		08/02/11 12:41	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		08/02/11 12:41	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		08/02/11 12:41	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		08/02/11 12:41	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		08/02/11 12:41	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		08/02/11 12:41	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		08/02/11 12:41	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		08/02/11 12:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		08/02/11 12:41	107-06-2	

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ANALYTICAL RESULTS

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Sample: **GW-075035-072711-CFM-004** Lab ID: **60103315004** Collected: 07/27/11 12:15 Received: 07/28/11 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 5030B/8260								
1,2-Dichloroethene (Total)	ND	ug/L	1.0	1		08/02/11 12:41	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		08/02/11 12:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		08/02/11 12:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		08/02/11 12:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		08/02/11 12:41	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		08/02/11 12:41	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		08/02/11 12:41	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		08/02/11 12:41	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		08/02/11 12:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		08/02/11 12:41	10061-02-6	
Ethylbenzene	5.5	ug/L	1.0	1		08/02/11 12:41	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		08/02/11 12:41	87-68-3	
2-Hexanone	ND	ug/L	10.0	1		08/02/11 12:41	591-78-6	
Isopropylbenzene (Cumene)	4.0	ug/L	1.0	1		08/02/11 12:41	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		08/02/11 12:41	99-87-6	
Methylene chloride	ND	ug/L	1.0	1		08/02/11 12:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		08/02/11 12:41	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		08/02/11 12:41	1634-04-4	
Naphthalene	ND	ug/L	10.0	1		08/02/11 12:41	91-20-3	
n-Propylbenzene	3.3	ug/L	1.0	1		08/02/11 12:41	103-65-1	
Styrene	ND	ug/L	1.0	1		08/02/11 12:41	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		08/02/11 12:41	630-20-6	
1,1,2,2-Tetrachloroethane	1.9	ug/L	1.0	1		08/02/11 12:41	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		08/02/11 12:41	127-18-4	
Toluene	5.4	ug/L	1.0	1		08/02/11 12:41	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		08/02/11 12:41	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		08/02/11 12:41	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		08/02/11 12:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		08/02/11 12:41	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		08/02/11 12:41	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		08/02/11 12:41	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	1		08/02/11 12:41	96-18-4	
1,2,4-Trimethylbenzene	12.2	ug/L	1.0	1		08/02/11 12:41	95-63-6	
1,3,5-Trimethylbenzene	12.5	ug/L	1.0	1		08/02/11 12:41	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		08/02/11 12:41	75-01-4	
Xylene (Total)	70.5	ug/L	3.0	1		08/02/11 12:41	1330-20-7	
4-Bromofluorobenzene (S)	103	%	87-113	1		08/02/11 12:41	460-00-4	
Dibromofluoromethane (S)	102	%	86-112	1		08/02/11 12:41	1868-53-7	
1,2-Dichloroethane-d4 (S)	110	%	82-119	1		08/02/11 12:41	17060-07-0	
Toluene-d8 (S)	98	%	90-110	1		08/02/11 12:41	2037-26-5	
Preservation pH	1.0		0.10	1		08/02/11 12:41		
120.1 Specific Conductance Analytical Method: EPA 120.1								
Specific Conductance	33300	umhos/cm	1.0	1		08/01/11 13:18		

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

ANALYTICAL RESULTS

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Sample: GW-075035-072711-CFM-004 Lab ID: 60103315004 Collected: 07/27/11 12:15 Received: 07/28/11 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity, Total as CaCO ₃	432	mg/L	20.0	1		08/09/11 00:00		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	40200	mg/L	5.0	1		08/02/11 09:16		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B							
pH at 25 Degrees C	7.4	Std. Units	0.10	1		07/28/11 17:40		H6
300.0 IC Anions	Analytical Method: EPA 300.0							
Nitrate as N	ND	mg/L	0.10	1		07/28/11 15:12	14797-55-8	
Nitrite as N	ND	mg/L	0.10	1		07/28/11 15:12	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	ND	mg/L	10.0	10		08/04/11 00:13	24959-67-9	D3
Chloride	435	mg/L	50.0	50		08/04/11 20:31	16887-00-6	
Fluoride	4.3	mg/L	2.0	10		08/04/11 00:13	16984-48-8	D3
Sulfate	25200	mg/L	5000	5000		08/04/11 21:20	14808-79-8	
365.1 Orthophosphate as P	Analytical Method: EPA 365.1							
Orthophosphate as P	0.36	mg/L	0.10	1		07/28/11 13:32		

ANALYTICAL RESULTS

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

Sample: GW-075035-072711-CFM-005 Lab ID: 60103315005 Collected: 07/27/11 12:25 Received: 07/28/11 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics Analytical Method: EPA 8015B Preparation Method: EPA 3510C								
TPH-DRO	ND mg/L		0.50	1	08/01/11 00:00	08/04/11 21:34		
p-Terphenyl (S)	73 %		40-118	1	08/01/11 00:00	08/04/11 21:34	92-94-4	
n-Tetracosane (S)	64 %		36-120	1	08/01/11 00:00	08/04/11 21:34	646-31-1	
Gasoline Range Organics Analytical Method: EPA 5030B/8015B								
TPH-GRO	ND mg/L		0.50	1		08/09/11 18:36		
4-Bromofluorobenzene (S)	102 %		63-139	1		08/09/11 18:36	460-00-4	
Preservation pH	1.0			1		08/09/11 18:36		
2340B Hardness, Total (Calc.) Analytical Method: SM 2340B								
Total Hardness	1870 mg/L		2.5	5		08/04/11 11:52		
6010 MET ICP, Dissolved Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Aluminum, Dissolved	740 ug/L		75.0	1	07/29/11 17:24	08/02/11 11:57	7429-90-5	
Arsenic, Dissolved	ND ug/L		50.0	5	07/29/11 17:24	08/04/11 11:52	7440-38-2	D3
Barium, Dissolved	14.3 ug/L		10.0	1	07/29/11 17:24	08/02/11 11:57	7440-39-3	
Boron, Dissolved	976 ug/L		500	5	07/29/11 17:24	08/04/11 11:52	7440-42-8	
Cadmium, Dissolved	ND ug/L		25.0	5	07/29/11 17:24	08/04/11 11:52	7440-43-9	
Calcium, Dissolved	348000 ug/L		100	1	07/29/11 17:24	08/02/11 11:57	7440-70-2	
Chromium, Dissolved	ND ug/L		25.0	5	07/29/11 17:24	08/04/11 11:52	7440-47-3	
Cobalt, Dissolved	ND ug/L		25.0	5	07/29/11 17:24	08/04/11 11:52	7440-48-4	
Copper, Dissolved	ND ug/L		50.0	5	07/29/11 17:24	08/04/11 11:52	7440-50-8	
Iron, Dissolved	495 ug/L		250	5	07/29/11 17:24	08/04/11 11:52	7439-89-6	
Lead, Dissolved	ND ug/L		25.0	5	07/29/11 17:24	08/04/11 11:52	7439-92-1	
Magnesium, Dissolved	242000 ug/L		250	5	07/29/11 17:24	08/04/11 11:52	7439-95-4	
Manganese, Dissolved	1100 ug/L		25.0	5	07/29/11 17:24	08/04/11 11:52	7439-96-5	
Molybdenum, Dissolved	ND ug/L		100	5	07/29/11 17:24	08/04/11 11:52	7439-98-7	
Nickel, Dissolved	ND ug/L		25.0	5	07/29/11 17:24	08/04/11 11:52	7440-02-0	
Selenium, Dissolved	ND ug/L		75.0	5	07/29/11 17:24	08/04/11 11:52	7782-49-2	
Silver, Dissolved	ND ug/L		35.0	5	07/29/11 17:24	08/04/11 11:52	7440-22-4	
Zinc, Dissolved	ND ug/L		250	5	07/29/11 17:24	08/04/11 11:52	7440-66-6	
8270 MSSV Semivolatile Organic Analytical Method: EPA 8270 Preparation Method: EPA 3510								
Acenaphthene	ND ug/L		12.8	1	08/01/11 00:00	08/03/11 15:23	83-32-9	
Acenaphthylene	ND ug/L		12.8	1	08/01/11 00:00	08/03/11 15:23	208-96-8	
Anthracene	ND ug/L		12.8	1	08/01/11 00:00	08/03/11 15:23	120-12-7	
Benzo(a)anthracene	ND ug/L		12.8	1	08/01/11 00:00	08/03/11 15:23	56-55-3	
Benzo(a)pyrene	ND ug/L		12.8	1	08/01/11 00:00	08/03/11 15:23	50-32-8	
Benzo(b)fluoranthene	ND ug/L		12.8	1	08/01/11 00:00	08/03/11 15:23	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		12.8	1	08/01/11 00:00	08/03/11 15:23	191-24-2	
Benzo(k)fluoranthene	ND ug/L		12.8	1	08/01/11 00:00	08/03/11 15:23	207-08-9	
Benzoic acid	ND ug/L		64.1	1	08/01/11 00:00	08/03/11 15:23	65-85-0	
Benzyl alcohol	ND ug/L		25.6	1	08/01/11 00:00	08/03/11 15:23	100-51-6	
4-Bromophenylphenyl ether	ND ug/L		12.8	1	08/01/11 00:00	08/03/11 15:23	101-55-3	
Butylbenzylphthalate	ND ug/L		12.8	1	08/01/11 00:00	08/03/11 15:23	85-68-7	

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ANALYTICAL RESULTS

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Sample: GW-075035-072711-CFM-005 Lab ID: 60103315005 Collected: 07/27/11 12:25 Received: 07/28/11 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic Analytical Method: EPA 8270 Preparation Method: EPA 3510								
Carbazole	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	86-74-8	
4-Chloro-3-methylphenol	ND	ug/L	25.6	1	08/01/11 00:00	08/03/11 15:23	59-50-7	
4-Chloroaniline	ND	ug/L	25.6	1	08/01/11 00:00	08/03/11 15:23	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	39638-32-9	
2-Chloronaphthalene	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	91-58-7	
2-Chlorophenol	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	7005-72-3	
Chrysene	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	53-70-3	
Dibenzofuran	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	25.6	1	08/01/11 00:00	08/03/11 15:23	91-94-1	
2,4-Dichlorophenol	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	120-83-2	
Diethylphthalate	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	84-66-2	
2,4-Dimethylphenol	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	105-67-9	
Dimethylphthalate	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	131-11-3	
Di-n-butylphthalate	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	64.1	1	08/01/11 00:00	08/03/11 15:23	534-52-1	
2,4-Dinitrophenol	ND	ug/L	64.1	1	08/01/11 00:00	08/03/11 15:23	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	606-20-2	
Di-n-octylphthalate	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	117-81-7	
Fluoranthene	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	206-44-0	
Fluorene	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	87-68-3	
Hexachlorobenzene	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	77-47-4	
Hexachloroethane	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	193-39-5	
Isophorone	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	78-59-1	
2-Methylnaphthalene	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23		
Naphthalene	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	91-20-3	
2-Nitroaniline	ND	ug/L	64.1	1	08/01/11 00:00	08/03/11 15:23	88-74-4	
3-Nitroaniline	ND	ug/L	64.1	1	08/01/11 00:00	08/03/11 15:23	99-09-2	
4-Nitroaniline	ND	ug/L	64.1	1	08/01/11 00:00	08/03/11 15:23	100-01-6	L3
Nitrobenzene	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	98-95-3	
2-Nitrophenol	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	88-75-5	
4-Nitrophenol	ND	ug/L	64.1	1	08/01/11 00:00	08/03/11 15:23	100-02-7	
N-Nitroso-di-n-propylamine	ND	ug/L	12.8	1	08/01/11 00:00	08/03/11 15:23	621-64-7	

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ANALYTICAL RESULTS

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

Sample: **GW-075035-072711-CFM-005** Lab ID: **60103315005** Collected: 07/27/11 12:25 Received: 07/28/11 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic Analytical Method: EPA 8270 Preparation Method: EPA 3510								
N-Nitrosodiphenylamine	ND ug/L		12.8	1	08/01/11 00:00	08/03/11 15:23	86-30-6	
Pentachlorophenol	ND ug/L		64.1	1	08/01/11 00:00	08/03/11 15:23	87-86-5	
Phenanthrene	ND ug/L		12.8	1	08/01/11 00:00	08/03/11 15:23	85-01-8	
Phenol	ND ug/L		12.8	1	08/01/11 00:00	08/03/11 15:23	108-95-2	
Pyrene	ND ug/L		12.8	1	08/01/11 00:00	08/03/11 15:23	129-00-0	
Pyridine	ND ug/L		12.8	1	08/01/11 00:00	08/03/11 15:23	110-86-1	
1,2,4-Trichlorobenzene	ND ug/L		12.8	1	08/01/11 00:00	08/03/11 15:23	120-82-1	
2,4,5-Trichlorophenol	ND ug/L		64.1	1	08/01/11 00:00	08/03/11 15:23	95-95-4	
2,4,6-Trichlorophenol	ND ug/L		12.8	1	08/01/11 00:00	08/03/11 15:23	88-06-2	
Nitrobenzene-d5 (S)	67 %		36-120	1	08/01/11 00:00	08/03/11 15:23	4165-60-0	
2-Fluorobiphenyl (S)	74 %		39-120	1	08/01/11 00:00	08/03/11 15:23	321-60-8	
Terphenyl-d14 (S)	80 %		30-120	1	08/01/11 00:00	08/03/11 15:23	1718-51-0	
Phenol-d6 (S)	39 %		10-120	1	08/01/11 00:00	08/03/11 15:23	13127-88-3	
2-Fluorophenol (S)	50 %		12-120	1	08/01/11 00:00	08/03/11 15:23	367-12-4	
2,4,6-Tribromophenol (S)	88 %		45-112	1	08/01/11 00:00	08/03/11 15:23	118-79-6	
8260 MSV Analytical Method: EPA 5030B/8260								
Acetone	ND ug/L		10.0	1		08/02/11 12:55	67-64-1	
Benzene	ND ug/L		1.0	1		08/02/11 12:55	71-43-2	
Bromobenzene	ND ug/L		1.0	1		08/02/11 12:55	108-86-1	
Bromochloromethane	ND ug/L		1.0	1		08/02/11 12:55	74-97-5	
Bromodichloromethane	ND ug/L		1.0	1		08/02/11 12:55	75-27-4	
Bromoform	ND ug/L		1.0	1		08/02/11 12:55	75-25-2	
Bromomethane	ND ug/L		1.0	1		08/02/11 12:55	74-83-9	
2-Butanone (MEK)	ND ug/L		10.0	1		08/02/11 12:55	78-93-3	
n-Butylbenzene	ND ug/L		1.0	1		08/02/11 12:55	104-51-8	
sec-Butylbenzene	ND ug/L		1.0	1		08/02/11 12:55	135-98-8	
tert-Butylbenzene	ND ug/L		1.0	1		08/02/11 12:55	98-06-6	
Carbon disulfide	ND ug/L		5.0	1		08/02/11 12:55	75-15-0	
Carbon tetrachloride	ND ug/L		1.0	1		08/02/11 12:55	56-23-5	
Chlorobenzene	ND ug/L		1.0	1		08/02/11 12:55	108-90-7	
Chloroethane	ND ug/L		1.0	1		08/02/11 12:55	75-00-3	
Chloroform	ND ug/L		1.0	1		08/02/11 12:55	67-66-3	
Chloromethane	ND ug/L		1.0	1		08/02/11 12:55	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		08/02/11 12:55	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		08/02/11 12:55	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		2.5	1		08/02/11 12:55	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		08/02/11 12:55	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		08/02/11 12:55	106-93-4	
Dibromomethane	ND ug/L		1.0	1		08/02/11 12:55	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		08/02/11 12:55	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		08/02/11 12:55	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1.0	1		08/02/11 12:55	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		08/02/11 12:55	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		08/02/11 12:55	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		08/02/11 12:55	107-06-2	

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ANALYTICAL RESULTS

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

Sample: GW-075035-072711-CFM-005 Lab ID: 60103315005 Collected: 07/27/11 12:25 Received: 07/28/11 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 5030B/8260								
1,2-Dichloroethene (Total)	ND	ug/L	1.0	1		08/02/11 12:55	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		08/02/11 12:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		08/02/11 12:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		08/02/11 12:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		08/02/11 12:55	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		08/02/11 12:55	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		08/02/11 12:55	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		08/02/11 12:55	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		08/02/11 12:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		08/02/11 12:55	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		08/02/11 12:55	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		08/02/11 12:55	87-68-3	
2-Hexanone	ND	ug/L	10.0	1		08/02/11 12:55	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		08/02/11 12:55	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		08/02/11 12:55	99-87-6	
Methylene chloride	ND	ug/L	1.0	1		08/02/11 12:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		08/02/11 12:55	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		08/02/11 12:55	1634-04-4	
Naphthalene	ND	ug/L	10.0	1		08/02/11 12:55	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		08/02/11 12:55	103-65-1	
Styrene	ND	ug/L	1.0	1		08/02/11 12:55	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		08/02/11 12:55	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		08/02/11 12:55	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		08/02/11 12:55	127-18-4	
Toluene	ND	ug/L	1.0	1		08/02/11 12:55	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		08/02/11 12:55	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		08/02/11 12:55	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		08/02/11 12:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		08/02/11 12:55	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		08/02/11 12:55	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		08/02/11 12:55	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	1		08/02/11 12:55	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		08/02/11 12:55	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		08/02/11 12:55	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		08/02/11 12:55	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		08/02/11 12:55	1330-20-7	
4-Bromofluorobenzene (S)	98 %		87-113	1		08/02/11 12:55	460-00-4	
Dibromofluoromethane (S)	106 %		86-112	1		08/02/11 12:55	1868-53-7	
1,2-Dichloroethane-d4 (S)	114 %		82-119	1		08/02/11 12:55	17060-07-0	
Toluene-d8 (S)	93 %		90-110	1		08/02/11 12:55	2037-26-5	
Preservation pH	1.0		0.10	1		08/02/11 12:55		

120.1 Specific Conductance Analytical Method: EPA 120.1

Specific Conductance	26700 umhos/cm	1.0	1	08/01/11 13:18
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ANALYTICAL RESULTS

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Sample: GW-075035-072711-CFM-005 Lab ID: 60103315005 Collected: 07/27/11 12:25 Received: 07/28/11 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity, Total as CaCO ₃	580	mg/L	20.0	1		08/09/11 00:00		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	29200	mg/L	5.0	1		08/02/11 09:16		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B							
pH at 25 Degrees C	7.6	Std. Units	0.10	1		07/28/11 17:40		H6
300.0 IC Anions	Analytical Method: EPA 300.0							
Nitrate as N	1.7	mg/L	1.0	10		08/04/11 00:28	14797-55-8	1e
Nitrite as N	ND	mg/L	0.10	1		07/28/11 15:28	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	ND	mg/L	10.0	10		08/04/11 00:28	24959-67-9	D3
Chloride	437	mg/L	50.0	50		08/04/11 21:37	16887-00-6	
Fluoride	2.7	mg/L	2.0	10		08/04/11 00:28	16984-48-8	D3
Sulfate	17600	mg/L	5000	5000		08/04/11 21:53	14808-79-8	
365.1 Orthophosphate as P	Analytical Method: EPA 365.1							
Orthophosphate as P	0.58	mg/L	0.10	1		07/28/11 13:34		

ANALYTICAL RESULTS

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

Sample: TB-072711-001		Lab ID: 60103315006		Collected: 07/27/11 15:15		Received: 07/28/11 08:55		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
8260 MSV		Analytical Method: EPA 5030B/8260							
Acetone	ND ug/L		10.0	1		08/02/11 13:09	67-64-1		
Benzene	ND ug/L		1.0	1		08/02/11 13:09	71-43-2		
Bromobenzene	ND ug/L		1.0	1		08/02/11 13:09	108-86-1		
Bromochloromethane	ND ug/L		1.0	1		08/02/11 13:09	74-97-5		
Bromodichloromethane	ND ug/L		1.0	1		08/02/11 13:09	75-27-4		
Bromoform	ND ug/L		1.0	1		08/02/11 13:09	75-25-2		
Bromomethane	ND ug/L		1.0	1		08/02/11 13:09	74-83-9		
2-Butanone (MEK)	ND ug/L		10.0	1		08/02/11 13:09	78-93-3		
n-Butylbenzene	ND ug/L		1.0	1		08/02/11 13:09	104-51-8		
sec-Butylbenzene	ND ug/L		1.0	1		08/02/11 13:09	135-98-8		
tert-Butylbenzene	ND ug/L		1.0	1		08/02/11 13:09	98-06-6		
Carbon disulfide	ND ug/L		5.0	1		08/02/11 13:09	75-15-0		
Carbon tetrachloride	ND ug/L		1.0	1		08/02/11 13:09	56-23-5		
Chlorobenzene	ND ug/L		1.0	1		08/02/11 13:09	108-90-7		
Chloroethane	ND ug/L		1.0	1		08/02/11 13:09	75-00-3		
Chloroform	ND ug/L		1.0	1		08/02/11 13:09	67-66-3		
Chloromethane	ND ug/L		1.0	1		08/02/11 13:09	74-87-3		
2-Chlorotoluene	ND ug/L		1.0	1		08/02/11 13:09	95-49-8		
4-Chlorotoluene	ND ug/L		1.0	1		08/02/11 13:09	106-43-4		
1,2-Dibromo-3-chloropropane	ND ug/L		2.5	1		08/02/11 13:09	96-12-8		
Dibromochloromethane	ND ug/L		1.0	1		08/02/11 13:09	124-48-1		
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		08/02/11 13:09	106-93-4		
Dibromomethane	ND ug/L		1.0	1		08/02/11 13:09	74-95-3		
1,2-Dichlorobenzene	ND ug/L		1.0	1		08/02/11 13:09	95-50-1		
1,3-Dichlorobenzene	ND ug/L		1.0	1		08/02/11 13:09	541-73-1		
1,4-Dichlorobenzene	ND ug/L		1.0	1		08/02/11 13:09	106-46-7		
Dichlorodifluoromethane	ND ug/L		1.0	1		08/02/11 13:09	75-71-8		
1,1-Dichloroethane	ND ug/L		1.0	1		08/02/11 13:09	75-34-3		
1,2-Dichloroethane	ND ug/L		1.0	1		08/02/11 13:09	107-06-2		
1,2-Dichloroethene (Total)	ND ug/L		1.0	1		08/02/11 13:09	540-59-0		
1,1-Dichloroethene	ND ug/L		1.0	1		08/02/11 13:09	75-35-4		
cis-1,2-Dichloroethene	ND ug/L		1.0	1		08/02/11 13:09	156-59-2		
trans-1,2-Dichloroethene	ND ug/L		1.0	1		08/02/11 13:09	156-60-5		
1,2-Dichloropropane	ND ug/L		1.0	1		08/02/11 13:09	78-87-5		
1,3-Dichloropropane	ND ug/L		1.0	1		08/02/11 13:09	142-28-9		
2,2-Dichloropropane	ND ug/L		1.0	1		08/02/11 13:09	594-20-7		
1,1-Dichloropropene	ND ug/L		1.0	1		08/02/11 13:09	563-58-6		
cis-1,3-Dichloropropene	ND ug/L		1.0	1		08/02/11 13:09	10061-01-5		
trans-1,3-Dichloropropene	ND ug/L		1.0	1		08/02/11 13:09	10061-02-6		
Ethylbenzene	ND ug/L		1.0	1		08/02/11 13:09	100-41-4		
Hexachloro-1,3-butadiene	ND ug/L		1.0	1		08/02/11 13:09	87-68-3		
2-Hexanone	ND ug/L		10.0	1		08/02/11 13:09	591-78-6		
Isopropylbenzene (Cumene)	ND ug/L		1.0	1		08/02/11 13:09	98-82-8		
p-Isopropyltoluene	ND ug/L		1.0	1		08/02/11 13:09	99-87-6		
Methylene chloride	ND ug/L		1.0	1		08/02/11 13:09	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND ug/L		10.0	1		08/02/11 13:09	108-10-1		
Methyl-tert-butyl ether	ND ug/L		1.0	1		08/02/11 13:09	1634-04-4		

Date: 08/10/2011 04:55 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

Sample: TB-072711-001		Lab ID: 60103315006	Collected: 07/27/11 15:15	Received: 07/28/11 08:55	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
Naphthalene	ND ug/L		10.0	1		08/02/11 13:09	91-20-3	
n-Propylbenzene	ND ug/L		1.0	1		08/02/11 13:09	103-65-1	
Styrene	ND ug/L		1.0	1		08/02/11 13:09	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		08/02/11 13:09	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		08/02/11 13:09	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		08/02/11 13:09	127-18-4	
Toluene	ND ug/L		1.0	1		08/02/11 13:09	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		08/02/11 13:09	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		08/02/11 13:09	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		08/02/11 13:09	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		08/02/11 13:09	79-00-5	
Trichloroethene	ND ug/L		1.0	1		08/02/11 13:09	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		08/02/11 13:09	75-69-4	
1,2,3-Trichloropropane	ND ug/L		2.5	1		08/02/11 13:09	96-18-4	
1,2,4-Trimethylbenzene	ND ug/L		1.0	1		08/02/11 13:09	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		1.0	1		08/02/11 13:09	108-67-8	
Vinyl chloride	ND ug/L		1.0	1		08/02/11 13:09	75-01-4	
Xylene (Total)	ND ug/L		3.0	1		08/02/11 13:09	1330-20-7	
4-Bromofluorobenzene (S)	95 %		87-113	1		08/02/11 13:09	460-00-4	
Dibromofluoromethane (S)	102 %		86-112	1		08/02/11 13:09	1868-53-7	
1,2-Dichloroethane-d4 (S)	102 %		82-119	1		08/02/11 13:09	17060-07-0	
Toluene-d8 (S)	98 %		90-110	1		08/02/11 13:09	2037-26-5	
Preservation pH	1.0		0.10	1		08/02/11 13:09		

QUALITY CONTROL DATA

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

QC Batch:	OEXT/29536	Analysis Method:	EPA 8015B
QC Batch Method:	EPA 3510C	Analysis Description:	EPA 8015B
Associated Lab Samples: 60103315001, 60103315004, 60103315005			

METHOD BLANK: 852963 Matrix: Water

Associated Lab Samples: 60103315001, 60103315004, 60103315005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-DRO	mg/L	ND	0.50	08/04/11 19:59	
n-Tetracosane (S)	%	61	36-120	08/04/11 19:59	
p-Terphenyl (S)	%	76	40-118	08/04/11 19:59	

LABORATORY CONTROL SAMPLE: 852964

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO	mg/L	2.5	1.6	65	48-119	
n-Tetracosane (S)	%			59	36-120	
p-Terphenyl (S)	%			70	40-118	

QUALITY CONTROL DATA

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

QC Batch: GCV/3785

Analysis Method: EPA 5030B/8015B

QC Batch Method: EPA 5030B/8015B

Analysis Description: Gasoline Range Organics

Associated Lab Samples: 60103315001, 60103315003, 60103315004, 60103315005

METHOD BLANK: 856637

Matrix: Water

Associated Lab Samples: 60103315001, 60103315003, 60103315004, 60103315005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	mg/L	ND	0.50	08/09/11 17:06	
4-Bromofluorobenzene (S)	%	103	63-139	08/09/11 17:06	

LABORATORY CONTROL SAMPLE: 856638

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/L	1	1.0	103	74-127	
4-Bromofluorobenzene (S)	%			104	63-139	

QUALITY CONTROL DATA

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

QC Batch:	MPRP/14909	Analysis Method:	EPA 6010
QC Batch Method:	EPA 3010	Analysis Description:	6010 MET Dissolved
Associated Lab Samples: 60103315001, 60103315004, 60103315005			

METHOD BLANK: 852503 Matrix: Water

Associated Lab Samples: 60103315001, 60103315004, 60103315005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum, Dissolved	ug/L	ND	75.0	08/02/11 11:34	
Arsenic, Dissolved	ug/L	ND	10.0	08/02/11 11:34	
Barium, Dissolved	ug/L	ND	10.0	08/02/11 11:34	
Boron, Dissolved	ug/L	ND	100	08/02/11 11:34	
Cadmium, Dissolved	ug/L	ND	5.0	08/02/11 11:34	
Calcium, Dissolved	ug/L	ND	100	08/02/11 11:34	
Chromium, Dissolved	ug/L	ND	5.0	08/02/11 11:34	
Cobalt, Dissolved	ug/L	ND	5.0	08/02/11 11:34	
Copper, Dissolved	ug/L	ND	10.0	08/02/11 11:34	
Iron, Dissolved	ug/L	ND	50.0	08/04/11 11:39	
Lead, Dissolved	ug/L	ND	5.0	08/02/11 11:34	
Magnesium, Dissolved	ug/L	ND	50.0	08/02/11 11:34	
Manganese, Dissolved	ug/L	ND	5.0	08/02/11 11:34	
Molybdenum, Dissolved	ug/L	ND	20.0	08/02/11 11:34	
Nickel, Dissolved	ug/L	ND	5.0	08/02/11 11:34	
Selenium, Dissolved	ug/L	ND	15.0	08/02/11 11:34	
Silver, Dissolved	ug/L	ND	7.0	08/02/11 11:34	
Zinc, Dissolved	ug/L	ND	50.0	08/02/11 11:34	

LABORATORY CONTROL SAMPLE: 852504

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	10000	10100	101	80-120	
Arsenic, Dissolved	ug/L	1000	990	99	80-120	
Barium, Dissolved	ug/L	1000	1010	101	80-120	
Boron, Dissolved	ug/L	1000	998	100	80-120	
Cadmium, Dissolved	ug/L	1000	1000	100	80-120	
Calcium, Dissolved	ug/L	10000	10200	102	80-120	
Chromium, Dissolved	ug/L	1000	1010	101	80-120	
Cobalt, Dissolved	ug/L	1000	1040	104	80-120	
Copper, Dissolved	ug/L	1000	1000	100	80-120	
Iron, Dissolved	ug/L	10000	10500	105	80-120	
Lead, Dissolved	ug/L	1000	1040	104	80-120	
Magnesium, Dissolved	ug/L	10000	10000	100	80-120	
Manganese, Dissolved	ug/L	1000	1010	101	80-120	
Molybdenum, Dissolved	ug/L	1000	1040	104	80-120	
Nickel, Dissolved	ug/L	1000	1040	104	80-120	
Selenium, Dissolved	ug/L	1000	1000	100	80-120	
Silver, Dissolved	ug/L	500	506	101	80-120	
Zinc, Dissolved	ug/L	1000	1020	102	80-120	

QUALITY CONTROL DATA

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 852505											
852506											
Parameter	Units	60103315001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Aluminum, Dissolved	ug/L	121	10000	10000	10600	10600	105	105	75-125	0 20	
Arsenic, Dissolved	ug/L	ND	1000	1000	1110	1130	106	108	75-125	2 20	
Barium, Dissolved	ug/L	20.8	1000	1000	937	915	92	89	75-125	2 20	
Boron, Dissolved	ug/L	1090	1000	1000	2150	2160	106	107	75-125	0	
Cadmium, Dissolved	ug/L	ND	1000	1000	1080	1080	108	107	75-125	0 20	
Calcium, Dissolved	ug/L	354000	10000	10000	362000	360000	84	66	75-125	0 20	M0
Chromium, Dissolved	ug/L	ND	1000	1000	991	1000	99	100	75-125	1 20	
Cobalt, Dissolved	ug/L	ND	1000	1000	975	972	97	97	75-125	0 20	
Copper, Dissolved	ug/L	ND	1000	1000	1080	1080	107	107	75-125	0 20	
Iron, Dissolved	ug/L	3460	10000	10000	13700	13600	102	102	75-125	0 20	
Lead, Dissolved	ug/L	ND	1000	1000	916	928	92	93	75-125	1 20	
Magnesium, Dissolved	ug/L	227000	10000	10000	238000	239000	112	118	75-125	0 20	
Manganese, Dissolved	ug/L	2710	1000	1000	3690	3700	99	100	75-125	0 20	
Molybdenum, Dissolved	ug/L	ND	1000	1000	1020	1020	102	101	75-125	0 20	
Nickel, Dissolved	ug/L	ND	1000	1000	960	961	96	96	75-125	0 20	
Selenium, Dissolved	ug/L	ND	1000	1000	1210	1200	121	120	75-125	0 20	
Silver, Dissolved	ug/L	ND	500	500	580	586	114	115	75-125	1 20	
Zinc, Dissolved	ug/L	ND	1000	1000	1030	1020	102	101	75-125	1 20	

QUALITY CONTROL DATA

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

QC Batch: OEXT/29533 Analysis Method: EPA 8270
QC Batch Method: EPA 3510 Analysis Description: 8270 Water MSSV
Associated Lab Samples: 60103315001, 60103315004, 60103315005

METHOD BLANK: 852950 Matrix: Water
Associated Lab Samples: 60103315001, 60103315004, 60103315005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	ND	10.0	08/03/11 13:58	
1,2-Dichlorobenzene	ug/L	ND	10.0	08/03/11 13:58	
1,3-Dichlorobenzene	ug/L	ND	10.0	08/03/11 13:58	
1,4-Dichlorobenzene	ug/L	ND	10.0	08/03/11 13:58	
2,4,5-Trichlorophenol	ug/L	ND	50.0	08/03/11 13:58	
2,4,6-Trichlorophenol	ug/L	ND	10.0	08/03/11 13:58	
2,4-Dichlorophenol	ug/L	ND	10.0	08/03/11 13:58	
2,4-Dimethylphenol	ug/L	ND	10.0	08/03/11 13:58	
2,4-Dinitrophenol	ug/L	ND	50.0	08/03/11 13:58	
2,4-Dinitrotoluene	ug/L	ND	10.0	08/03/11 13:58	
2,6-Dinitrotoluene	ug/L	ND	10.0	08/03/11 13:58	
2-Chloronaphthalene	ug/L	ND	10.0	08/03/11 13:58	
2-Chlorophenol	ug/L	ND	10.0	08/03/11 13:58	
2-Methylnaphthalene	ug/L	ND	10.0	08/03/11 13:58	
2-Methylphenol(o-Cresol)	ug/L	ND	10.0	08/03/11 13:58	
2-Nitroaniline	ug/L	ND	50.0	08/03/11 13:58	
2-Nitrophenol	ug/L	ND	10.0	08/03/11 13:58	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	10.0	08/03/11 13:58	
3,3'-Dichlorobenzidine	ug/L	ND	20.0	08/03/11 13:58	
3-Nitroaniline	ug/L	ND	50.0	08/03/11 13:58	
4,6-Dinitro-2-methylphenol	ug/L	ND	50.0	08/03/11 13:58	
4-Bromophenylphenyl ether	ug/L	ND	10.0	08/03/11 13:58	
4-Chloro-3-methylphenol	ug/L	ND	20.0	08/03/11 13:58	
4-Chloroaniline	ug/L	ND	20.0	08/03/11 13:58	
4-Chlorophenylphenyl ether	ug/L	ND	10.0	08/03/11 13:58	
4-Nitroaniline	ug/L	ND	50.0	08/03/11 13:58	
4-Nitrophenol	ug/L	ND	50.0	08/03/11 13:58	
Acenaphthene	ug/L	ND	10.0	08/03/11 13:58	
Acenaphthylene	ug/L	ND	10.0	08/03/11 13:58	
Anthracene	ug/L	ND	10.0	08/03/11 13:58	
Benzo(a)anthracene	ug/L	ND	10.0	08/03/11 13:58	
Benzo(a)pyrene	ug/L	ND	10.0	08/03/11 13:58	
Benzo(b)fluoranthene	ug/L	ND	10.0	08/03/11 13:58	
Benzo(g,h,i)perylene	ug/L	ND	10.0	08/03/11 13:58	
Benzo(k)fluoranthene	ug/L	ND	10.0	08/03/11 13:58	
Benzoic acid	ug/L	ND	50.0	08/03/11 13:58	
Benzyl alcohol	ug/L	ND	20.0	08/03/11 13:58	
bis(2-Chloroethoxy)methane	ug/L	ND	10.0	08/03/11 13:58	
bis(2-Chloroethyl) ether	ug/L	ND	10.0	08/03/11 13:58	
bis(2-Chloroisopropyl) ether	ug/L	ND	10.0	08/03/11 13:58	
bis(2-Ethylhexyl)phthalate	ug/L	ND	10.0	08/03/11 13:58	
Butylbenzylphthalate	ug/L	ND	10.0	08/03/11 13:58	
Carbazole	ug/L	ND	10.0	08/03/11 13:58	

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QUALITY CONTROL DATA

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

METHOD BLANK: 852950

Matrix: Water

Associated Lab Samples: 60103315001, 60103315004, 60103315005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chrysene	ug/L	ND	10.0	08/03/11 13:58	
Di-n-butylphthalate	ug/L	ND	10.0	08/03/11 13:58	
Di-n-octylphthalate	ug/L	ND	10.0	08/03/11 13:58	
Dibenz(a,h)anthracene	ug/L	ND	10.0	08/03/11 13:58	
Dibenzofuran	ug/L	ND	10.0	08/03/11 13:58	
Diethylphthalate	ug/L	ND	10.0	08/03/11 13:58	
Dimethylphthalate	ug/L	ND	10.0	08/03/11 13:58	
Fluoranthene	ug/L	ND	10.0	08/03/11 13:58	
Fluorene	ug/L	ND	10.0	08/03/11 13:58	
Hexachloro-1,3-butadiene	ug/L	ND	10.0	08/03/11 13:58	
Hexachlorobenzene	ug/L	ND	10.0	08/03/11 13:58	
Hexachlorocyclopentadiene	ug/L	ND	10.0	08/03/11 13:58	
Hexachloroethane	ug/L	ND	10.0	08/03/11 13:58	
Indeno(1,2,3-cd)pyrene	ug/L	ND	10.0	08/03/11 13:58	
Isophorone	ug/L	ND	10.0	08/03/11 13:58	
N-Nitroso-di-n-propylamine	ug/L	ND	10.0	08/03/11 13:58	
N-Nitrosodiphenylamine	ug/L	ND	10.0	08/03/11 13:58	
Naphthalene	ug/L	ND	10.0	08/03/11 13:58	
Nitrobenzene	ug/L	ND	10.0	08/03/11 13:58	
Pentachlorophenol	ug/L	ND	50.0	08/03/11 13:58	
Phenanthrene	ug/L	ND	10.0	08/03/11 13:58	
Phenol	ug/L	ND	10.0	08/03/11 13:58	
Pyrene	ug/L	ND	10.0	08/03/11 13:58	
Pyridine	ug/L	ND	10.0	08/03/11 13:58	
2,4,6-Tribromophenol (S)	%	85	45-112	08/03/11 13:58	
2-Fluorobiphenyl (S)	%	73	39-120	08/03/11 13:58	
2-Fluorophenol (S)	%	41	12-120	08/03/11 13:58	
Nitrobenzene-d5 (S)	%	64	36-120	08/03/11 13:58	
Phenol-d6 (S)	%	29	10-120	08/03/11 13:58	
Terphenyl-d14 (S)	%	86	30-120	08/03/11 13:58	

LABORATORY CONTROL SAMPLE: 852951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	50	32.0	64	52-120	
1,2-Dichlorobenzene	ug/L	50	30.6	61	46-120	
1,3-Dichlorobenzene	ug/L	50	29.9	60	44-120	
1,4-Dichlorobenzene	ug/L	50	30.1	60	45-120	
2,4,5-Trichlorophenol	ug/L	50	37.6	75	53-120	
2,4,6-Trichlorophenol	ug/L	50	36.5	73	53-120	
2,4-Dichlorophenol	ug/L	50	34.3	69	52-120	
2,4-Dimethylphenol	ug/L	50	33.3	67	46-120	
2,4-Dinitrophenol	ug/L	50	52.3	105	24-131	
2,4-Dinitrotoluene	ug/L	50	40.4	81	59-120	
2,6-Dinitrotoluene	ug/L	50	39.7	79	58-120	

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QUALITY CONTROL DATA

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

LABORATORY CONTROL SAMPLE: 852951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloronaphthalene	ug/L	50	35.1	70	53-120	
2-Chlorophenol	ug/L	50	31.3	63	47-120	
2-Methylnaphthalene	ug/L	50	33.3	67	52-120	
2-Methylphenol(o-Cresol)	ug/L	50	29.2	58	39-120	
2-Nitroaniline	ug/L	50	39.1J	78	53-120	
2-Nitrophenol	ug/L	50	32.2	64	53-120	
3&4-Methylphenol(m&p Cresol)	ug/L	50	27.6	55	35-120	
3,3'-Dichlorobenzidine	ug/L	50	61.4	123	40-131	
3-Nitroaniline	ug/L	50	61.4	123	24-139	
4,6-Dinitro-2-methylphenol	ug/L	50	42.3J	85	60-120	
4-Bromophenylphenyl ether	ug/L	50	39.1	78	58-120	
4-Chloro-3-methylphenol	ug/L	50	38.0	76	54-120	
4-Chloroaniline	ug/L	50	66.9	134	10-144	
4-Chlorophenylphenyl ether	ug/L	50	39.6	79	58-120	
4-Nitroaniline	ug/L	50	61.4	123	50-120	L0
4-Nitrophenol	ug/L	50	17.4J	35	10-120	
Acenaphthene	ug/L	50	37.0	74	54-120	
Acenaphthylene	ug/L	50	36.5	73	54-120	
Anthracene	ug/L	50	40.8	82	58-120	
Benzo(a)anthracene	ug/L	50	41.1	82	59-120	
Benzo(a)pyrene	ug/L	50	40.8	82	58-120	
Benzo(b)fluoranthene	ug/L	50	43.4	87	58-120	
Benzo(g,h,i)perylene	ug/L	50	40.6	81	59-120	
Benzo(k)fluoranthene	ug/L	50	39.3	79	58-120	
Benzoic acid	ug/L	50	16.5J	33	10-120	
Benzyl alcohol	ug/L	50	33.7	67	31-120	
bis(2-Chloroethoxy)methane	ug/L	50	33.9	68	52-120	
bis(2-Chloroethyl) ether	ug/L	50	32.1	64	50-120	
bis(2-Chloroisopropyl) ether	ug/L	50	32.0	64	51-120	
bis(2-Ethylhexyl)phthalate	ug/L	50	43.8	88	56-120	
Butylbenzylphthalate	ug/L	50	42.3	85	55-120	
Carbazole	ug/L	50	41.3	83	58-120	
Chrysene	ug/L	50	43.3	87	58-120	
Di-n-butylphthalate	ug/L	50	43.1	86	60-120	
Di-n-octylphthalate	ug/L	50	41.7	83	55-120	
Dibenz(a,h)anthracene	ug/L	50	41.8	84	60-120	
Dibenzofuran	ug/L	50	37.5	75	55-120	
Diethylphthalate	ug/L	50	41.2	82	58-120	
Dimethylphthalate	ug/L	50	40.2	80	56-120	
Fluoranthene	ug/L	50	41.7	83	60-120	
Fluorene	ug/L	50	39.7	79	58-120	
Hexachloro-1,3-butadiene	ug/L	50	31.1	62	48-120	
Hexachlorobenzene	ug/L	50	39.9	80	59-120	
Hexachlorocyclopentadiene	ug/L	100	49.8	50	10-120	
Hexachloroethane	ug/L	50	29.5	59	47-120	
Indeno(1,2,3-cd)pyrene	ug/L	50	41.0	82	59-120	
Isophorone	ug/L	50	34.7	69	54-120	
N-Nitroso-di-n-propylamine	ug/L	50	33.7	67	53-120	

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QUALITY CONTROL DATA

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

LABORATORY CONTROL SAMPLE: 852951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
N-Nitrosodiphenylamine	ug/L	50	39.9	80	59-120	
Naphthalene	ug/L	50	33.0	66	52-120	
Nitrobenzene	ug/L	50	32.9	66	51-120	
Pentachlorophenol	ug/L	50	38.5J	77	43-120	
Phenanthrene	ug/L	50	40.7	81	58-120	
Phenol	ug/L	50	14.6	29	15-120	
Pyrene	ug/L	50	41.6	83	57-120	
Pyridine	ug/L	50	19.0	38	1-120	
2,4,6-Tribromophenol (S)	%			80	45-112	
2-Fluorobiphenyl (S)	%			71	39-120	
2-Fluorophenol (S)	%			42	12-120	
Nitrobenzene-d5 (S)	%			65	36-120	
Phenol-d6 (S)	%			29	10-120	
Terphenyl-d14 (S)	%			83	30-120	

QUALITY CONTROL DATA

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

QC Batch: MSV/38873 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60103315001, 60103315002, 60103315003, 60103315004, 60103315005, 60103315006

METHOD BLANK: 853550 Matrix: Water
Associated Lab Samples: 60103315001, 60103315002, 60103315003, 60103315004, 60103315005, 60103315006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	08/02/11 09:48	
1,1,1-Trichloroethane	ug/L	ND	1.0	08/02/11 09:48	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	08/02/11 09:48	
1,1,2-Trichloroethane	ug/L	ND	1.0	08/02/11 09:48	
1,1-Dichloroethane	ug/L	ND	1.0	08/02/11 09:48	
1,1-Dichloroethene	ug/L	ND	1.0	08/02/11 09:48	
1,1-Dichloropropene	ug/L	ND	1.0	08/02/11 09:48	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	08/02/11 09:48	
1,2,3-Trichloropropane	ug/L	ND	2.5	08/02/11 09:48	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	08/02/11 09:48	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	08/02/11 09:48	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.5	08/02/11 09:48	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	08/02/11 09:48	
1,2-Dichlorobenzene	ug/L	ND	1.0	08/02/11 09:48	
1,2-Dichloroethane	ug/L	ND	1.0	08/02/11 09:48	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	08/02/11 09:48	
1,2-Dichloropropane	ug/L	ND	1.0	08/02/11 09:48	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	08/02/11 09:48	
1,3-Dichlorobenzene	ug/L	ND	1.0	08/02/11 09:48	
1,3-Dichloropropane	ug/L	ND	1.0	08/02/11 09:48	
1,4-Dichlorobenzene	ug/L	ND	1.0	08/02/11 09:48	
2,2-Dichloropropane	ug/L	ND	1.0	08/02/11 09:48	
2-Butanone (MEK)	ug/L	ND	10.0	08/02/11 09:48	
2-Chlorotoluene	ug/L	ND	1.0	08/02/11 09:48	
2-Hexanone	ug/L	ND	10.0	08/02/11 09:48	
4-Chlorotoluene	ug/L	ND	1.0	08/02/11 09:48	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	08/02/11 09:48	
Acetone	ug/L	ND	10.0	08/02/11 09:48	
Benzene	ug/L	ND	1.0	08/02/11 09:48	
Bromobenzene	ug/L	ND	1.0	08/02/11 09:48	
Bromochloromethane	ug/L	ND	1.0	08/02/11 09:48	
Bromodichloromethane	ug/L	ND	1.0	08/02/11 09:48	
Bromoform	ug/L	ND	1.0	08/02/11 09:48	
Bromomethane	ug/L	ND	1.0	08/02/11 09:48	
Carbon disulfide	ug/L	ND	5.0	08/02/11 09:48	
Carbon tetrachloride	ug/L	ND	1.0	08/02/11 09:48	
Chlorobenzene	ug/L	ND	1.0	08/02/11 09:48	
Chloroethane	ug/L	ND	1.0	08/02/11 09:48	
Chloroform	ug/L	ND	1.0	08/02/11 09:48	
Chloromethane	ug/L	ND	1.0	08/02/11 09:48	
cis-1,2-Dichloroethene	ug/L	ND	1.0	08/02/11 09:48	
cis-1,3-Dichloropropene	ug/L	ND	1.0	08/02/11 09:48	
Dibromochloromethane	ug/L	ND	1.0	08/02/11 09:48	

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QUALITY CONTROL DATA

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

METHOD BLANK: 853550

Matrix: Water

Associated Lab Samples: 60103315001, 60103315002, 60103315003, 60103315004, 60103315005, 60103315006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/L	ND	1.0	08/02/11 09:48	
Dichlorodifluoromethane	ug/L	ND	1.0	08/02/11 09:48	
Ethylbenzene	ug/L	ND	1.0	08/02/11 09:48	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	08/02/11 09:48	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	08/02/11 09:48	
Methyl-tert-butyl ether	ug/L	ND	1.0	08/02/11 09:48	
Methylene chloride	ug/L	ND	1.0	08/02/11 09:48	
n-Butylbenzene	ug/L	ND	1.0	08/02/11 09:48	
n-Propylbenzene	ug/L	ND	1.0	08/02/11 09:48	
Naphthalene	ug/L	ND	10.0	08/02/11 09:48	
p-Isopropyltoluene	ug/L	ND	1.0	08/02/11 09:48	
sec-Butylbenzene	ug/L	ND	1.0	08/02/11 09:48	
Styrene	ug/L	ND	1.0	08/02/11 09:48	
tert-Butylbenzene	ug/L	ND	1.0	08/02/11 09:48	
Tetrachloroethene	ug/L	ND	1.0	08/02/11 09:48	
Toluene	ug/L	ND	1.0	08/02/11 09:48	
trans-1,2-Dichloroethene	ug/L	ND	1.0	08/02/11 09:48	
trans-1,3-Dichloropropene	ug/L	ND	1.0	08/02/11 09:48	
Trichloroethene	ug/L	ND	1.0	08/02/11 09:48	
Trichlorofluoromethane	ug/L	ND	1.0	08/02/11 09:48	
Vinyl chloride	ug/L	ND	1.0	08/02/11 09:48	
Xylene (Total)	ug/L	ND	3.0	08/02/11 09:48	
1,2-Dichloroethane-d4 (S)	%	107	82-119	08/02/11 09:48	
4-Bromofluorobenzene (S)	%	100	87-113	08/02/11 09:48	
Dibromofluoromethane (S)	%	105	86-112	08/02/11 09:48	
Toluene-d8 (S)	%	97	90-110	08/02/11 09:48	

LABORATORY CONTROL SAMPLE: 853551

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.3	97	81-121	
1,1,1-Trichloroethane	ug/L	20	20.5	102	82-119	
1,1,2,2-Tetrachloroethane	ug/L	20	18.1	91	78-124	
1,1,2-Trichloroethane	ug/L	20	19.5	98	79-121	
1,1-Dichloroethane	ug/L	20	17.7	89	73-119	
1,1-Dichloroethene	ug/L	20	16.3	82	75-120	
1,1-Dichloropropene	ug/L	20	18.6	93	79-123	
1,2,3-Trichlorobenzene	ug/L	20	20.9	105	73-122	
1,2,3-Trichloropropane	ug/L	20	17.6	88	77-124	
1,2,4-Trichlorobenzene	ug/L	20	20.6	103	75-120	
1,2,4-Trimethylbenzene	ug/L	20	20.9	104	77-120	
1,2-Dibromo-3-chloropropane	ug/L	20	17.5	88	69-125	
1,2-Dibromoethane (EDB)	ug/L	20	19.8	99	85-121	
1,2-Dichlorobenzene	ug/L	20	20.7	104	82-115	
1,2-Dichloroethane	ug/L	20	18.5	93	77-125	

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QUALITY CONTROL DATA

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

LABORATORY CONTROL SAMPLE: 853551

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethene (Total)	ug/L	40	38.5	96	79-120	
1,2-Dichloropropane	ug/L	20	20.5	102	83-119	
1,3,5-Trimethylbenzene	ug/L	20	20.1	101	79-121	
1,3-Dichlorobenzene	ug/L	20	20.4	102	79-117	
1,3-Dichloropropane	ug/L	20	18.7	93	78-116	
1,4-Dichlorobenzene	ug/L	20	20.7	104	83-115	
2,2-Dichloropropane	ug/L	20	18.6	93	66-123	
2-Butanone (MEK)	ug/L	100	97.2	97	43-165	
2-Chlorotoluene	ug/L	20	19.0	95	81-117	
2-Hexanone	ug/L	100	119	119	47-159	
4-Chlorotoluene	ug/L	20	20.7	104	84-116	
4-Methyl-2-pentanone (MIBK)	ug/L	100	98.1	98	71-129	
Acetone	ug/L	100	91.1	91	18-192	
Benzene	ug/L	20	19.8	99	82-117	
Bromobenzene	ug/L	20	20.8	104	83-116	
Bromochloromethane	ug/L	20	20.1	101	79-121	
Bromodichloromethane	ug/L	20	19.8	99	79-114	
Bromoform	ug/L	20	19.2	96	78-121	
Bromomethane	ug/L	20	18.7	93	36-146	
Carbon disulfide	ug/L	20	20.0	100	75-138	
Carbon tetrachloride	ug/L	20	18.6	93	80-123	
Chlorobenzene	ug/L	20	19.9	99	83-121	
Chloroethane	ug/L	20	18.3	91	42-166	
Chloroform	ug/L	20	19.1	95	82-116	
Chloromethane	ug/L	20	15.3	76	32-127	
cis-1,2-Dichloroethene	ug/L	20	19.5	98	80-119	
cis-1,3-Dichloropropene	ug/L	20	18.6	93	76-119	
Dibromochloromethane	ug/L	20	21.1	106	81-123	
Dibromomethane	ug/L	20	19.1	95	79-123	
Dichlorodifluoromethane	ug/L	20	16.1	81	10-163	
Ethylbenzene	ug/L	20	19.5	97	79-121	
Hexachloro-1,3-butadiene	ug/L	20	19.4	97	78-125	
Isopropylbenzene (Cumene)	ug/L	20	21.0	105	80-120	
Methyl-tert-butyl ether	ug/L	20	19.3	97	78-119	
Methylene chloride	ug/L	20	18.2	91	75-118	
n-Butylbenzene	ug/L	20	21.9	110	80-126	
n-Propylbenzene	ug/L	20	20.9	104	83-116	
Naphthalene	ug/L	20	20.7	103	66-133	
p-Isopropyltoluene	ug/L	20	20.4	102	77-120	
sec-Butylbenzene	ug/L	20	21.3	107	81-120	
Styrene	ug/L	20	20.3	102	84-115	
tert-Butylbenzene	ug/L	20	20.3	102	80-117	
Tetrachloroethene	ug/L	20	18.3	92	80-124	
Toluene	ug/L	20	19.1	95	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.0	95	79-120	
trans-1,3-Dichloropropene	ug/L	20	20.4	102	76-118	
Trichloroethene	ug/L	20	18.9	95	76-122	
Trichlorofluoromethane	ug/L	20	16.3	82	72-120	

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QUALITY CONTROL DATA

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

LABORATORY CONTROL SAMPLE: 853551

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Vinyl chloride	ug/L	20	18.8	94	57-163	
Xylene (Total)	ug/L	60	56.6	94	75-120	
1,2-Dichloroethane-d4 (S)	%			100	82-119	
4-Bromofluorobenzene (S)	%			103	87-113	
Dibromofluoromethane (S)	%			102	86-112	
Toluene-d8 (S)	%			98	90-110	



Pace Analytical Services, Inc.
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(913)599-5665

QUALITY CONTROL DATA

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

QC Batch: WET/30273 Analysis Method: EPA 120.1
QC Batch Method: EPA 120.1 Analysis Description: 120.1 Specific Conductance
Associated Lab Samples: 60103315001, 60103315004, 60103315005

METHOD BLANK: 853041 Matrix: Water
Associated Lab Samples: 60103315001, 60103315004, 60103315005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Specific Conductance	umhos/cm	ND	1.0	08/01/11 13:18	

SAMPLE DUPLICATE: 853042

Parameter	Units	60103288001 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance	umhos/cm	761	721	5	20	

QUALITY CONTROL DATA

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

QC Batch: WET/30382 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60103315001, 60103315004, 60103315005

METHOD BLANK: 856612 Matrix: Water
Associated Lab Samples: 60103315001, 60103315004, 60103315005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	ND	20.0	08/09/11 00:00	

LABORATORY CONTROL SAMPLE: 856613

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	500	454	91	90-110	

SAMPLE DUPLICATE: 856614

Parameter	Units	60103315004 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	432	432	0	9	

SAMPLE DUPLICATE: 856615

Parameter	Units	60103440004 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	239	239	0	9	



QUALITY CONTROL DATA

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

QC Batch: WET/30286 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 60103315001, 60103315004, 60103315005

METHOD BLANK: 853494 Matrix: Water

Associated Lab Samples: 60103315001, 60103315004, 60103315005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	5.0	08/02/11 09:16	

SAMPLE DUPLICATE: 853495

Parameter	Units	60103315001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	26600	27700	4	17	

SAMPLE DUPLICATE: 853496

Parameter	Units	60103449007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	554	565	2	17	

QUALITY CONTROL DATA

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

QC Batch:	WET/30239	Analysis Method:	SM 4500-H+B
QC Batch Method:	SM 4500-H+B	Analysis Description:	4500H+B pH
Associated Lab Samples: 60103315001, 60103315004, 60103315005			

SAMPLE DUPLICATE: 851799

Parameter	Units	60103278002 Result	Dup. Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	8.3	8.3	0	5	H6

QUALITY CONTROL DATA

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

QC Batch: WETA/17108 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60103315001, 60103315004, 60103315005

METHOD BLANK: 851066 Matrix: Water

Associated Lab Samples: 60103315001, 60103315004, 60103315005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate as N	mg/L	ND	0.10	07/28/11 09:58	
Nitrite as N	mg/L	ND	0.10	07/28/11 09:58	

METHOD BLANK: 855032 Matrix: Water

Associated Lab Samples: 60103315001, 60103315004, 60103315005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate as N	mg/L	ND	0.10	08/03/11 09:15	
Nitrite as N	mg/L	ND	0.10	08/03/11 09:15	

LABORATORY CONTROL SAMPLE: 851067

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	2.5	2.5	98	90-110	
Nitrite as N	mg/L	2.5	2.4	98	90-110	

LABORATORY CONTROL SAMPLE: 855033

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	2.5	2.4	95	90-110	
Nitrite as N	mg/L	2.5	2.4	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 851068 851069

Parameter	Units	60103260005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Nitrate as N	mg/L	0.23	2.5	2.5	2.5	2.5	91	91	68-120	0	16
Nitrite as N	mg/L	0.42	2.5	2.5	3.1	3.1	107	108	73-114	1	12

MATRIX SPIKE SAMPLE: 851385

Parameter	Units	60103288001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L		1.3	2.5	3.8	68-120	
Nitrite as N	mg/L		ND	2.5	2.6	73-114	

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QUALITY CONTROL DATA

Project: MARTIN 34 NO. 2

Pace Project No.: 60103315

QC Batch: WETA/17173 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60103315001, 60103315004, 60103315005

METHOD BLANK: 854152 Matrix: Water

Associated Lab Samples: 60103315001, 60103315004, 60103315005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	08/04/11 13:21	
Sulfate	mg/L	ND	1.0	08/04/11 13:21	

METHOD BLANK: 856438 Matrix: Water

Associated Lab Samples: 60103315001, 60103315004, 60103315005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromide	mg/L	ND	1.0	08/03/11 12:48	
Fluoride	mg/L	ND	0.20	08/03/11 12:48	

LABORATORY CONTROL SAMPLE: 854153

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	5.0	101	90-110	
Sulfate	mg/L	5	5.2	104	90-110	

LABORATORY CONTROL SAMPLE: 856439

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	5	5.2	104	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 854154 854155

Parameter	Units	60103217001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Bromide	mg/L		250	250	252	251	98	98	75-119	0	10
Fluoride	mg/L		125	125	121	122	97	98	75-110	1	10
Sulfate	mg/L	365	250	250	595	603	92	95	61-119	1	10

MATRIX SPIKE SAMPLE: 854156

Parameter	Units	60103194002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	ND	25	25.5	100	75-119	
Fluoride	mg/L	ND	12.5	13.1	100	75-110	

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QUALITY CONTROL DATA

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

MATRIX SPIKE SAMPLE:		854156						
Parameter	Units	60103194002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers	
Sulfate	mg/L	45.4	25	71.1	103	61-119		

QUALITY CONTROL DATA

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

QC Batch: WETA/17110 Analysis Method: EPA 365.1
QC Batch Method: EPA 365.1 Analysis Description: 365.1 Orthophosphate as P
Associated Lab Samples: 60103315001, 60103315004, 60103315005

METHOD BLANK: 851219 Matrix: Water
Associated Lab Samples: 60103315001, 60103315004, 60103315005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Orthophosphate as P	mg/L	ND	0.10	07/28/11 10:23	

LABORATORY CONTROL SAMPLE: 851220

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Orthophosphate as P	mg/L	2	2.1	107	90-110	

MATRIX SPIKE SAMPLE: 851222

Parameter	Units	60103204003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Orthophosphate as P	mg/L	0.11	2	2.5	119	90-110	M0

SAMPLE DUPLICATE: 851221

Parameter	Units	60102647019 Result	Dup Result	RPD	Max RPD	Qualifiers
Orthophosphate as P	mg/L	5.1	5.2	1	30	

QUALIFIERS

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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.

BATCH QUALIFIERS

Batch: OEXT/29533

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

Batch: OEXT/29536

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

Batch: MSV/38873

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

Batch: GCV/3785

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

ANALYTE QUALIFIERS

1e Sample was run within hold time but had to be rerun out of hold at a dilution do to matrix interference.

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

H6 Analysis initiated more than 15 minutes after sample collection.

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

L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

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

S4 Surrogate recovery not evaluated against control limits due to sample dilution.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60103315001	GW-075035-072711-CFM-001	EPA 3510C	OEXT/29536	EPA 8015B	GCSV/10932
60103315004	GW-075035-072711-CFM-004	EPA 3510C	OEXT/29536	EPA 8015B	GCSV/10932
60103315005	GW-075035-072711-CFM-005	EPA 3510C	OEXT/29536	EPA 8015B	GCSV/10932
60103315001	GW-075035-072711-CFM-001	EPA 5030B/8015B	GCV/3785		
60103315003	GW-075035-072711-CFM-003	EPA 5030B/8015B	GCV/3785		
60103315004	GW-075035-072711-CFM-004	EPA 5030B/8015B	GCV/3785		
60103315005	GW-075035-072711-CFM-005	EPA 5030B/8015B	GCV/3785		
60103315001	GW-075035-072711-CFM-001	SM 2340B	ICP/13001		
60103315004	GW-075035-072711-CFM-004	SM 2340B	ICP/13001		
60103315005	GW-075035-072711-CFM-005	SM 2340B	ICP/13001		
60103315001	GW-075035-072711-CFM-001	EPA 3010	MPRP/14909	EPA 6010	ICP/12962
60103315004	GW-075035-072711-CFM-004	EPA 3010	MPRP/14909	EPA 6010	ICP/12962
60103315005	GW-075035-072711-CFM-005	EPA 3010	MPRP/14909	EPA 6010	ICP/12962
60103315001	GW-075035-072711-CFM-001	EPA 3510	OEXT/29533	EPA 8270	MSSV/9207
60103315004	GW-075035-072711-CFM-004	EPA 3510	OEXT/29533	EPA 8270	MSSV/9207
60103315005	GW-075035-072711-CFM-005	EPA 3510	OEXT/29533	EPA 8270	MSSV/9207
60103315001	GW-075035-072711-CFM-001	EPA 5030B/8260	MSV/38873		
60103315002	GW-075035-072711-CFM-002	EPA 5030B/8260	MSV/38873		
60103315003	GW-075035-072711-CFM-003	EPA 5030B/8260	MSV/38873		
60103315004	GW-075035-072711-CFM-004	EPA 5030B/8260	MSV/38873		
60103315005	GW-075035-072711-CFM-005	EPA 5030B/8260	MSV/38873		
60103315006	TB-072711-001	EPA 5030B/8260	MSV/38873		
60103315001	GW-075035-072711-CFM-001	EPA 120.1	WET/30273		
60103315004	GW-075035-072711-CFM-004	EPA 120.1	WET/30273		
60103315005	GW-075035-072711-CFM-005	EPA 120.1	WET/30273		
60103315001	GW-075035-072711-CFM-001	SM 2320B	WET/30382		
60103315004	GW-075035-072711-CFM-004	SM 2320B	WET/30382		
60103315005	GW-075035-072711-CFM-005	SM 2320B	WET/30382		
60103315001	GW-075035-072711-CFM-001	SM 2540C	WET/30286		
60103315004	GW-075035-072711-CFM-004	SM 2540C	WET/30286		
60103315005	GW-075035-072711-CFM-005	SM 2540C	WET/30286		
60103315001	GW-075035-072711-CFM-001	SM 4500-H+B	WET/30239		
60103315004	GW-075035-072711-CFM-004	SM 4500-H+B	WET/30239		
60103315005	GW-075035-072711-CFM-005	SM 4500-H+B	WET/30239		
60103315001	GW-075035-072711-CFM-001	EPA 300.0	WETA/17108		
60103315004	GW-075035-072711-CFM-004	EPA 300.0	WETA/17108		
60103315005	GW-075035-072711-CFM-005	EPA 300.0	WETA/17108		
60103315001	GW-075035-072711-CFM-001	EPA 300.0	WETA/17173		
60103315004	GW-075035-072711-CFM-004	EPA 300.0	WETA/17173		
60103315005	GW-075035-072711-CFM-005	EPA 300.0	WETA/17173		
60103315001	GW-075035-072711-CFM-001	EPA 365.1	WETA/17110		
60103315004	GW-075035-072711-CFM-004	EPA 365.1	WETA/17110		
60103315005	GW-075035-072711-CFM-005	EPA 365.1	WETA/17110		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MARTIN 34 NO. 2
Pace Project No.: 60103315

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
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CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	CRA	Report To:	Christine Matthews	Attention:	ENFOS
Address:	6121 Indian School Rd NE, Ste 200	Copy To:	Kelly Blanchard, Angela Bown	Company Name:	
Email To:	cmalhews@cravworld.com	Purchase Order No.:		Address:	
Phone:	(505)884-0572	Project Name:	Martin 34 No. 2	Pace Quote Reference:	
Requested Due Date/TAT:	standard	Project Number:	075035/95/	Pace Project Manager:	Colleen Koporc
				Pace Profile #:	53412

REGULATORY AGENCY:	
☐ NPDES	☐ GROUND WATER
☐ UST	☐ RCRA
☐ OTHER	☐ DRINKING WATER
Site Location:	STATE: NM

ITEM #	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WASTE WATER WW PRODUCT P SOIL/SOLID S OIL O WIPE W AIR AR OTHER OT TSS TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G-GRAB C-COMP)	COLLECTED		# OF CONTAINERS	PRESERVATIVES	ANALYSIS TESTS	W/V	Requested Analysis Filtered (Y/N)											
				COMPOSITE START	COMPOSITE END/GRAB																
				DATE	TIME	DATE	TIME														
1	GW-075035-072711-CFM-001	WT	G	7.27.11		11.15															
2	GW-075035-072711-CFM-002	WT	G	7.27.11		11.15															
3	GW-075035-072711-CFM-003	WT	G	7.27.11		11.15															
4	GW-075035-072711-CFM-004	WT	G	7.27.11		11.15															
5	GW-075035-072711-CFM-005	WT	G	7.27.11		11.15															
6	GW-075035-072711-CFM-006	WT	G	7.27.11		11.15															
7	GW-075035-072711-CFM-007	WT	G	7.27.11		11.15															
8	GW-075035-072711-CFM-008	WT	G	7.27.11		11.15															
9	GW-075035-072711-CFM-009	WT	G	7.27.11		11.15															
10	GW-075035-072711-CFM-010	WT	G	7.27.11		11.15															
11	GW-075035-072711-CFM-011	WT	G	7.27.11		11.15															
12	GW-075035-072711-CFM-012	WT	G	7.27.11		11.15															

ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME	
Low well volume for sample 003 only enough volume for 3 vials		Christine Matthews		7-27-11		15:45		Christine Matthews		7-27-11		08:55	
Al, As, B, Ba, Cd, Cr, Co, Cu, Fe, Pb, Mn, Mo, Ni, Se, Ag, Zn													

SAMPLER NAME AND SIGNATURE		DATE SIGNED (MM/DD/YYYY)	
Christine Matthews		7-27-11	
PRINT Name of SAMPLER			
SIGNATURE of SAMPLER			

