

May 8, 2012

**Via Electronic Mail**

Mr. Sam Cannon Jr.  
Vice President Operations  
Associated Asphalt Partners, LLC  
2677 Roanoke Avenue Southwest  
Roanoke, Virginia 24015

**Re: Phase II Environmental Site Assessment  
SEACO, Inc.  
2700 William H. Tuller Drive  
Columbia, South Carolina**

Dear Sam:

At the request of Associated Asphalt Partners, LLC, (Associated Asphalt) ENVIRON International Corporation (ENVIRON) conducted a Phase II environmental site assessment (ESA) at the SEACO, Inc. (SEACO) facility located at 2700 William H. Tuller Drive in Columbia, South Carolina. The primary objective of the targeted Phase II ESA was to further investigate known and potential soil and groundwater concerns identified during the Phase I ESA<sup>1</sup> that was prepared by ENVIRON for the SEACO facility in January 2012. Based on the results of the March 2012 investigation activities, supplemental site investigation activities were conducted in April 2012.

**BACKGROUND**

ENVIRON performed a Phase I ESA of the site in January 2012. The Phase I ESA report identified several findings relating to known and potential site conditions, including the following:

- **Know Petroleum Contamination.** Petroleum constituents at levels above state regulatory criteria were discovered in groundwater monitoring wells along the southern boundary of the site. The source of contamination is believed to be a former fuel oil underground storage tank (UST) associated with a boiler formerly located in the mill building. The fuel oil UST was emptied and taken out of service on December 30, 1992 and free product recovery was conducted at two recovery wells installed on the adjacent property to the south (a railroad line). According to data contained in subsequent groundwater monitoring reports, concentrations of benzene and naphthalene have demonstrated a slight, steady decrease over time, and light non-aqueous phase liquid

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<sup>1</sup> *Phase I Environmental Site Assessment and Limited Environmental Compliance Review*, prepared by ENVIRON International Corporation, dated January 2012

had not been detected in any wells since 2009. Based on regulatory correspondence, it appears that naphthalene is the primary constituent of concern and that the South Carolina Department of Health & Environmental Control (SCDHEC) has approved a monitoring only approach to address the release.

- **Historical Release Associated with 130-gallon UST at Emulsion Plant.** A 130-gallon waste oil UST was excavated and removed from the southern portion of the truck shop near the southern corner of the site in June 1993. Petroleum contamination was observed during the excavation and reported to SCDHEC. According to a Full Closure Assessment Report submitted to SCDHEC, soil samples collected from the bottom of the excavation contained total petroleum hydrocarbons (TPH) diesel-range organics (DRO) at a maximum concentration of 500 mg/kg, which is considered a release of regulated substances by SCDHEC. No known soil excavation was performed, according to facility personnel, and no known subsequent subsurface investigations related to the waste oil UST release have been conducted. Despite the fact that no further investigation was conducted, it appears that a No Further Action (NFA) determination was granted on September 25, 1998 following submittal of an initial groundwater assessment (IGWA) report relating to a former gasoline UST. The IGWA confirmed the absence of impacts near the former gasoline UST but did not include any investigation of the waste oil tank. Therefore, it appears that SCDHEC may have inadvertently provided the NFA determination for the former waste oil UST instead of the former gasoline UST. Given the previous detection of contamination within the waste oil UST excavation pit and the lack of any apparent follow-up investigation, residual petroleum impacts associated with the 130-gallon waste oil UST may still be present in the soil or groundwater.
- **Potential Impacts from Other Current & Historical Site Operations.** Various raw materials are staged in aboveground storage tanks (ASTs) within bare ground containment structures on-site, notably No. 2 fuel oil. Furthermore, the site has been used for various industrial purposes from prior to 1939. Former known industrial operations included activities conducted for use by Durlane Gas Co. and Carolina Block Co., as well as metal working, woodworking, operation of a kiln, use of an oil warehouse, auto repair, and distribution of heating oil. Facility personnel additionally indicate that the site may have been used for the production and/or storage of fertilizers products since as early as 1900. The former industrial operations may have included the use of petroleum products, heavy metals, paints, solvents, pesticides, and other chemicals. A recent or historical release of any of the above materials may have resulted in soil or groundwater impacts.

## SITE DESCRIPTION

SEACO owns and operates an asphaltic emulsions manufacturing facility located on a 3-acre parcel in Columbia, South Carolina. The site was first developed prior to 1939 for industrial use, and SEACO began operating at the emulsion plant in 1949 for asphaltic emulsion manufacturing. Facility personnel indicated that the site may have been used for fertilizer production and/or storage in the early-1900s. The site is currently developed with a mill building, maintenance shop, truck shop, storage/dispatch building, and an office building with an attached truck wash bay and shed. Numerous ASTs, primarily used for emulsion storage, are

situated along the southern portion of the site. The westernmost portion of the emulsion plant facility consists of a grass field that is fenced off from the remainder of the facility.

### **MARCH 2012 PHASE II SCOPE OF WORK**

The Phase II ESA was conducted in accordance with the scope of work agreed upon with Associated Asphalt (dated March 6, 2012), with the following exception: during Phase II ESA field activities, facility personnel reported that the site may have been used historically for fertilizer production and/or storage; as such, two additional soil samples were collected for laboratory analysis of organochlorine pesticides.

Prior to conducting invasive activities, ENVIRON requested a public utility markout from the South Carolina one-call service, and subcontracted with a private utility locator to screen boring locations for subsurface utilities. Additionally, ENVIRON prepared a site-specific health and safety plan.

Five soil borings (GP-6 to GP-10) were installed to a depth of 15 feet below ground surface (bgs) using direct push methods. At each soil boring location, continuous soil cores were collected, screened on-site for the presence of organic vapors using a photo-ionization detector (PID), and described in general accordance with the Unified Soil Classification System (USCS). The soil cores were also visually inspected for obvious signs of potential impact (i.e., visual staining and/or odor). One soil sample was collected from each boring for laboratory analysis of Resource Conservation and Recovery Act (RCRA) metals by United States Environmental Protection Agency (USEPA) method 6010 and polycyclic aromatic hydrocarbons (PAHs) by USEPA method 8270 SIM. Given the lack of any obvious indications of impacts, including odors, staining, or elevated organic vapor readings, no soil samples were collected for analysis of volatile organic compounds (VOCs). An additional two soil samples were collected from intervals of potential non-petroleum discoloration within borings GP-6 and GP-9 for laboratory analysis of organochlorine pesticides by USEPA method 8081.

Each soil boring was converted to a temporary groundwater well using five feet of one-inch diameter schedule 40, 0.010-slot PVC well screen and sufficient schedule 40 PVC riser to bring the well point to the surface. Temporary groundwater wells were purged using a peristaltic pump prior to sampling. Following purging, groundwater samples were collected from each well for laboratory analysis of PAHs by USEPA method 8270, VOCs by USEPA method 8260, and RCRA metals by USEPA method 6010; samples for analysis of metals were filtered in the field using a 0.45-micron filter.

Additional groundwater samples were collected from three pre-existing permanent monitoring wells (MW-1, MW-5, and PW-5), located along the downgradient site boundary, for analysis of VOCs; water samples were collected using low-flow sampling methods. These wells were installed at the site in 1992 following the discovery of a petroleum release along the southern site boundary (discussed above). Groundwater samples from these wells were collected for laboratory analysis of VOCs by USEPA method 8260. Due to the presence of approximately 0.01 feet of free product, no groundwater was collected for laboratory analysis from a fourth monitoring well (MW-2).

For all boring and sampling activities, excess soil, purge water, and used disposable personal protective equipment (PPE) were containerized in new United States Department of

Transportation (USDOT)-approved 55-gallon drums, labeled, and staged in a secure location at the site for appropriate future disposal. Sampling equipment was decontaminated between each boring and well using a non-phosphate detergent and distilled water rinse.

## APRIL 2012 PHASE II SCOPE OF WORK

A Supplemental Phase II investigation was conducted in accordance with an email scope of work dated April 11, 2012. The supplemental investigation activities included the collection and laboratory analysis of five surface soil samples for analysis of arsenic and the collection and laboratory analysis of groundwater samples from four on-site wells (IGWA-1, MW-3, MW-4, and PW-6) for the presence of dissolved arsenic.

Groundwater samples were collected using low-flow sampling procedures and were filtered in the field. Purge water generated during the investigation activities was containerized in a 55-gallon drum, labeled, and staged on-site for appropriate future disposal.

## REGULATORY BACKGROUND

A known release of petroleum at the site is undergoing corrective action under the SCDHEC Petroleum Storage Tank Program. The SCDHEC has approved a monitoring only approach for the known petroleum impacts and annual monitoring of groundwater for the presence of naphthalene is required. Remedial endpoints of 1) no measureable free product, and 2) naphthalene less than 25 µg/L have been established for the petroleum release; monitoring will likely be required until the remedial endpoints have been met.

The SCDHEC has established numeric risk-based screening levels for soil impacted by petroleum under the risk-based corrective action program (RBCA). These criteria, or risk-based screening levels (RBSLs), were developed to be conservatively protective of human health and the environment based on various exposure scenarios and pathways including protection of human health based on inhalation, dermal contact, or ingestion of potential contaminants. The SCDHEC has not developed specific soil standards for non-petroleum constituents, including metals. In the absence of such state-level criteria, the USEPA Regional Screening Levels (RSLs) for non-residential soils have been applied as applicable and relevant screening levels for the purposes of evaluating soil data. As with the SCDHEC RBSLs, the USEPA RSLs were developed to be conservatively protective of human health for a variety of exposure pathways, including direct ingestion, dermal contact, and inhalation. For the purposes of this assessment, results were compared to the most conservative (lowest) RSL for each constituent. The SCDHEC has also adopted the USEPA Maximum Contaminant Levels (MCLs) as Water Quality Standards for use as groundwater screening levels. The SCDHEC Water Quality Standards were developed to be conservatively protective of human health based on consumption of groundwater as a drinking water resource.

For purposes of this assessment, detected concentrations of constituents in soil and groundwater were generally compared to the SCDHEC Water Quality Standards (groundwater), the SCDHEC RBSLs, and the USEPA RSLs. SCDHEC adopted the RBSL of 25 µg /L for naphthalene as a site specific cleanup level for petroleum impacts to groundwater related to the former fuel oil UST. It is notable that an exceedance of a screening level does not necessarily indicate that remediation is required, but rather that further assessment or evaluation is warranted.

## PHASE II RESULTS AND DISCUSSION

### Field Observations

Soils at the site are generally characterized as light tan and orange, poorly graded medium sand with little to no silt and clay and trace fine gravel. Maroon colored soils were encountered at a depth of 0.0 to 1.8 and 12.2 to 15.0 feet bgs at GP-6, at a depth of 2.6 to 2.9 feet bgs at GP-7, and at a depth of 10.9 to 11.0 feet bgs at GP-8, and at a depth of 1.2 to 2.0 and 12.0 to 15.0 feet bgs at GP-9; it is unclear if the maroon coloring is natural, or whether it may be indicative of impact. No obvious staining or odors were observed in soil cores from the five boring locations. Facility personnel reported that brick structures (possibly walls or foundations) have been encountered at approximate depths of 3 to 5 feet bgs during past excavations on-site, thus it is likely that the upper soils at the site consist of fill material. ENVIRON did not observe such structures or other clear signs of fill material during the investigation. Shallow groundwater was encountered between approximately 11 feet and 12 feet below ground service (bgs).

### Soil Analytical Results

ENVIRON collected a total of five surface soil and seven subsurface soil samples for laboratory analysis. Five subsurface soil samples were analyzed for the presence of RCRA metals and PAHs. Two additional subsurface soil samples, collected from maroon colored horizons in borings GP-6 and GP-9, were analyzed for the presence of pesticides. The five surface soil samples were analyzed for the presence of arsenic only. Based on an absence of elevated organic vapor readings or other indications of impact by organic compounds, no soil samples were collected for analysis of VOCs. Analytical results for detected constituents in soil are summarized in Table 1 and on Figure 2; complete laboratory data reporting sheets are included as Attachment A to this report.

Seven metals (including arsenic, barium, cadmium, chromium, lead, silver, and mercury) were detected in site soils; no PAHs or pesticides were detected. Concentrations of detected constituents were compared to the most conservative USEPA RSLs for soil at non-residential sites. Measured concentrations of barium, cadmium, chromium, lead, silver, and mercury are below the USEPA RSLs for non-residential sites. Arsenic, however, was measured in surface soil at concentrations ranging from 0.81 to 436 milligrams per kilogram (mg/kg) and in three of five subsurface soil samples at concentrations (up to 118 mg/kg) exceeding the USEPA RSL for arsenic of 1.6 mg/kg.

### Groundwater Analytical Results

During March 2012, ENVIRON collected five groundwater samples from temporary wells GP-6 to GP-10, and an additional three groundwater samples from permanent monitoring and recovery wells in the railroad right-of-way directly south of the site. Each of the eight groundwater samples was submitted for laboratory analysis of PAHs and VOCs; groundwater samples from the temporary wells were additionally analyzed for the presence of RCRA metals. ENVIRON subsequently collected field filtered groundwater samples from four of the on-site wells (IGWA-1, MW-3, MW-4, and PW-6) for analysis of dissolved arsenic. Analytical results for detected constituents in groundwater are summarized in Table 2 and on Figure 2; complete laboratory data reporting sheets are included as Attachment A to this report.

Five metals (including arsenic, barium, cadmium, chromium, and selenium) and six VOCs (including acetone, ethylbenzene, naphthalene, tetrachloroethene [PCE], trichloroethene [TCE], and m&p-xylene [xylenes]) were detected in site groundwater. Concentrations of detected constituents in groundwater were compared to the SCDHEC Water Quality Standards – MCLs and the SCDHEC RBSL for naphthalene, which was adopted by SCDHEC as a site specific cleanup level for the known petroleum contamination associated with the former fuel oil UST.

Measured concentrations of barium, chromium, selenium, acetone, ethylbenzene, TCE, and xylenes are below the MCLs. Arsenic was measured in five of nine groundwater samples analyzed for metals at concentrations (up to 495 micrograms per liter [ $\mu\text{g/L}$ ]) exceeding the SCDHEC – MCL for arsenic of 10  $\mu\text{g/L}$ . Cadmium was detected in one groundwater sample (GP-9), located in the central portion of the site, at a concentration (10.1  $\mu\text{g/L}$ ) slightly exceeding the MCL of 5  $\mu\text{g/L}$ .

Two of the six detected VOCs were identified at concentrations exceeding applicable criteria. Tetrachloroethene (PCE) was measured in groundwater collected near the maintenance building (GP-7) at a concentration of 7.9  $\mu\text{g/L}$ , which exceeds the MCL of 5  $\mu\text{g/L}$ ; it is notable that PCE was also detected at a second location (GP-8), also located near the maintenance building, at concentration below the MCL (4.8  $\mu\text{g/L}$ ). Trichloroethylene (TCE), a common degradation byproduct of PCE, was also detected at GP-7 and GP-8 at concentrations below the MCL of 5  $\mu\text{g/L}$  for TCE.

Naphthalene was measured in one of the three sampled permanent monitoring wells along the southern site boundary (MW-1) at a concentration of 26.1  $\mu\text{g/L}$ , as compared to the site cleanup level of 25  $\mu\text{g/L}$ . In addition, approximately 0.01 feet of free product was identified at MW-2. No other constituents were detected at concentrations exceeding applicable criteria.

## SUMMARY OF CONCLUSIONS

Conclusions with respect to the concerns identified during the Phase I ESA are presented below:

**Known Petroleum Contamination.** Based on the results of the Phase II investigation, groundwater impacts associated with the known petroleum release remain. Approximately 0.01 feet of free product was identified in MW-2 located near the southeastern corner of the site along the railroad right-of-way. Naphthalene was measured in one groundwater sample at a concentration slightly exceeding the site cleanup level for naphthalene established by SCDHEC. Based on the results of the Phase II investigation, minor petroleum impacts remain at the site and are consistent with levels of impact presented in the most recent annual groundwater monitoring report for the site. The SCDHEC has approved a monitoring only approach for the known petroleum release, and ENVIRON anticipates that continued groundwater monitoring will be required until no measureable free product is present and naphthalene concentrations fall below the cleanup level.

**Historical Release Associated with Former 130-gallon UST.** A single soil boring (GP-10) was installed in the vicinity of the former 130-gallon UST, located in the southern portion of the truck shop. No indications of impacts to soil or groundwater, such as odors or staining, were observed, and analytical results did not reveal any exceedances for tested constituents. However, the former UST was located below the truck shop building (where a thick concrete

floor prohibited drilling); it is possible that localized impacts were not detected and that such impacts could have contributed to the known petroleum contamination along the southern site boundary. Even so, known petroleum impacts are being addressed under supervision of SCDHEC, which has approved a monitoring-only strategy. Based on a review of historical monitoring reports, and the results of this study, concentrations of constituents of concern (notably naphthalene) have been decreasing over time, and it is unlikely that further subsurface exploratory activities would be required in the area of the former 130-gallon UST.

#### Potential Impacts from Other Current & Historical Site Operations.

- Arsenic was detected in surface soil, subsurface soil and groundwater at levels exceeding applicable screening levels. Measured concentrations of arsenic in soil at GP-6, GP-9, and SS-3 are two orders of magnitude greater than the screening level. In addition, dissolved arsenic was detected in groundwater samples at concentrations more than 10 times greater than the MCL. Further, the horizontal and vertical extent of arsenic in site soil and groundwater is not known. The source of the arsenic in site soil and groundwater has not been identified, but it is possible that the arsenic is related to historical fertilizer manufacturing or storage activities. No current use of materials containing elevated concentrations of arsenic was identified at the site. Although no drinking water wells were identified within one mile downgradient from the site based on a review of a data base search, ENVIRON did identify one irrigation well and one industrial use well within ½ to ¾ mile downgradient from the site.
- PCE was detected in groundwater at a concentration slightly exceeding the MCL at one location (GP-7) adjacent to the maintenance shop; PCE was also detected at a nearby, downgradient location (GP-8) at a concentration slightly below the MCL. The detections of PCE in site groundwater indicate a historical release in the vicinity of the maintenance shop. Although greater concentrations of PCE may exist under the maintenance shop, PCE was not detected in groundwater samples collected from monitoring wells at the downgradient site boundary, which are located approximately 120 feet south of GP-8. Therefore, it appears that any potential groundwater plume of PCE is limited in horizontal extent.

#### **RELIANCE AND LIMITATIONS**

This report has been prepared for the exclusive use of Associated Asphalt Partners, LLC, and may not be relied upon by any other person or entity without ENVIRON's prior express written permission.

This report has been prepared in conformance with generally accepted standards of practice in the fields of environmental sciences and engineering at the time the services were rendered. ENVIRON makes no other warranty or representation, either expressed or implied, with respect to its services.

The report findings are based in part on information/data provided by our client and/or other third parties and conditions identified as a result of ENVIRON's investigations as of the date of the report. ENVIRON has not attempted to verify information/data provided to it by our client or other third parties, except as explicitly noted in our report, and makes no express representations to the accuracy of such information/data by the inclusion of it in our report.

The level of detail carried out during ENVIRON's investigation is appropriate to meet the study objectives as defined in this report; however, there is no warranty or guarantee, expressed or implied, that this investigation has uncovered all potential latent environmental liabilities associated with the Site.

**CLOSING**

ENVIRON appreciates this opportunity to be of service to Associated Asphalt. Please contact me at 703-516-2407 ([slibeau@environcorp.com](mailto:slibeau@environcorp.com)) if you would like to further discuss the results of the Phase II Investigation.

Sincerely,



Sarah E. Libeau, P.G.  
Senior Manager

## **Tables**

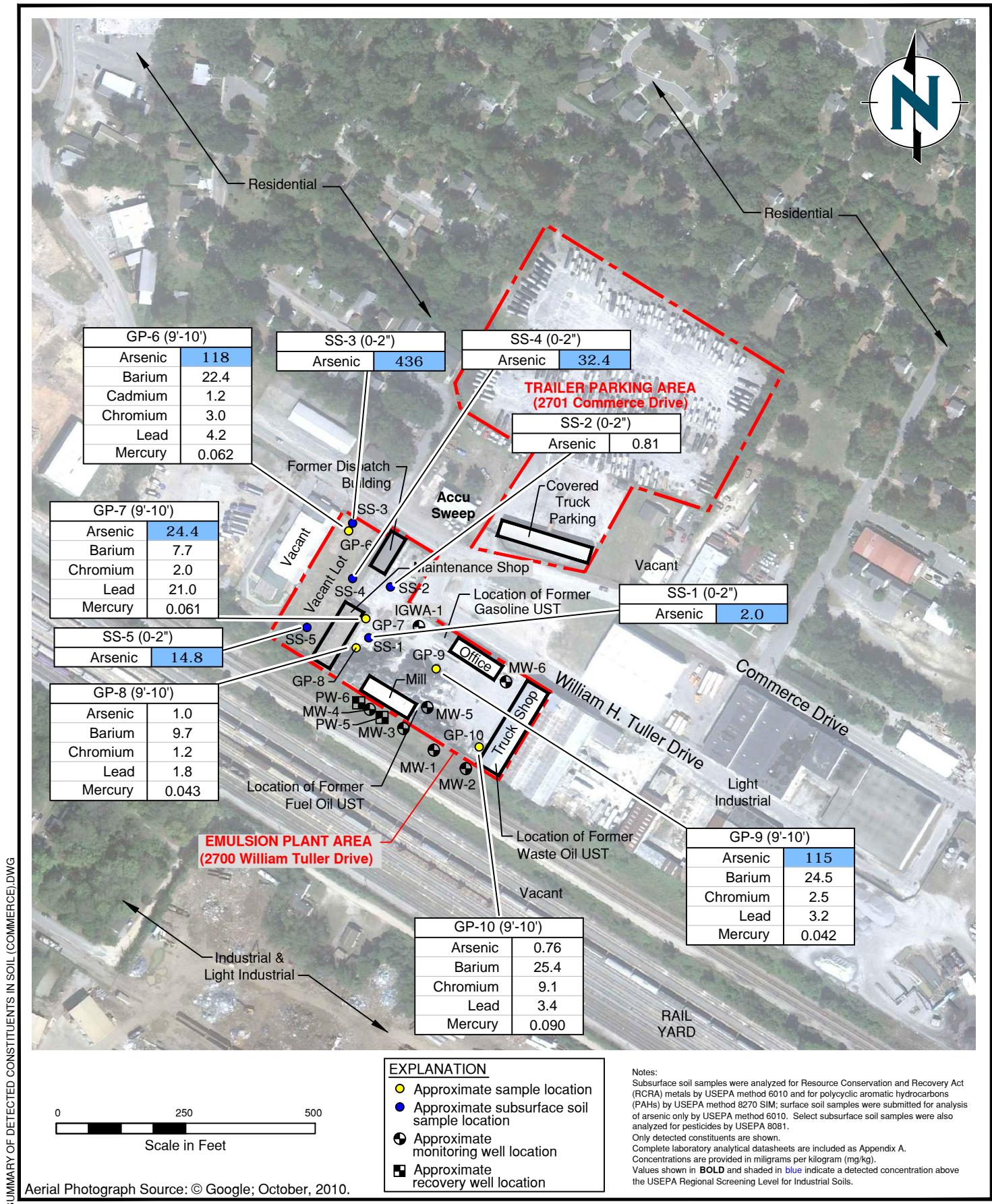
TABLE 1: SUMMARY OF DETECTED CONSTITUENTS IN SOIL<sup>1</sup>  
SEACO, INC., 2700 COMMERCE DRIVE, COLUMBIA, SOUTH CAROLINA

TABLE 1: SUMMARY OF DETECTED CONSTITUENTS IN SOIL <sup>1</sup> SEACO, INC., 2700 COMMERCE DRIVE, COLUMBIA, SOUTH CAROLINA											
Constituent	USEPA Regional Screening Levels <sup>2</sup>	GP-6 (9'-10')	GP-7 (9'-10')	GP-8 (9'-10')	GP-9 (9'-10')	GP-10 (9'-10')	SS-1 (0-2")	SS-2 (0-2")	SS-3 (0-2")	SS-4 (0-2")	SS-5 (0-2")
<b>Metals (mg/kg)</b>											
Arsenic	1.6	118	24.4	1.0	115	0.76	2.0	0.81	436	32.4	14.8
Barium	190,000	22.4	7.7	9.7	24.5	25.4	NA	NA	NA	NA	NA
Cadmium	800	1.2	<0.075	<0.090	<0.097	<0.090	NA	NA	NA	NA	NA
Chromium (total)	1,600,000 <sup>3</sup>	3.0	2.0	1.2	2.5	9.1	NA	NA	NA	NA	NA
Lead	800	4.2	21.0	1.8	3.2	3.4	NA	NA	NA	NA	NA
Silver	5,100	<0.48	<0.38	<0.45	<0.48	<0.45	NA	NA	NA	NA	NA
Mercury	43	0.062	0.061	0.043	0.042	0.090	NA	NA	NA	NA	NA

**TABLE 2: SUMMARY OF DETECTED CONSTITUENTS IN GROUNDWATER  
SEACO, INC., 2700 COMMERCE DRIVE, COLUMBIA, SOUTH CAROLINA**

TABLE 2: SUMMARY OF DETECTED CONSTITUENTS IN GROUNDWATER <sup>1</sup> SEACO, INC., 2700 COMMERCE DRIVE, COLUMBIA, SOUTH CAROLINA													
Constituent	SCDHEC Water Quality Standards	IGWA-1	MW-1	MW-3	MW-4	MW-5	PW-5	GP-6	PW-6	GP-7	GP-8	GP-9	GP-10
<b>Metals (µg/L)</b>													
Arsenic	10	<5.0	NA	<b>50.5</b>	<5.0	NA	NA	<b>495</b>	<b>65.4</b>	<b>298</b>	<b>39.6</b>	5.8	9.6
Barium	2,000	NA	NA	NA	NA	NA	<5.0	NA	22.1	20.1	51.1	23.6	
Cadmium	5	NA	NA	NA	NA	NA	2.6	NA	3.7	1.1	<b>10.1</b>	1.3	
Chromium	100	NA	NA	NA	NA	NA	<5.0	NA	<5.0	6.6	<5.0	<5.0	
Selenium	50	NA	NA	NA	NA	NA	<10.0	NA	<10.0	<10.0	<10.0	<10.0	
<b>Volatile Organic Compounds (VOCs) (µg/L)</b>													
Acetone	14,000 <sup>2</sup>	NA	28.9	NA	NA	<25.0	<25.0	<25.0	NA	<25.0	<25.0	<25.0	<25.0
Ethylbenzene	700	NA	47.0	NA	NA	<1.0	4.2	<1.0	NA	<1.0	<1.0	<1.0	<1.0
Naphthalene	25 <sup>2</sup>	NA	<b>26.1</b>	NA	NA	<1.0	6.8	<1.0	NA	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	5	NA	<1.0	NA	NA	<1.0	<1.0	<1.0	NA	<b>7.9</b>	4.8	<1.0	<1.0
Trichloroethene	5	NA	<1.0	NA	NA	<1.0	<1.0	<1.0	NA	1.4	1.4	<1.0	<1.0
m&p-Xylene	10000 <sup>3</sup>	NA	2.2	NA	NA	<2.0	<2.0	<2.0	NA	<2.0	<2.0	<2.0	<2.0

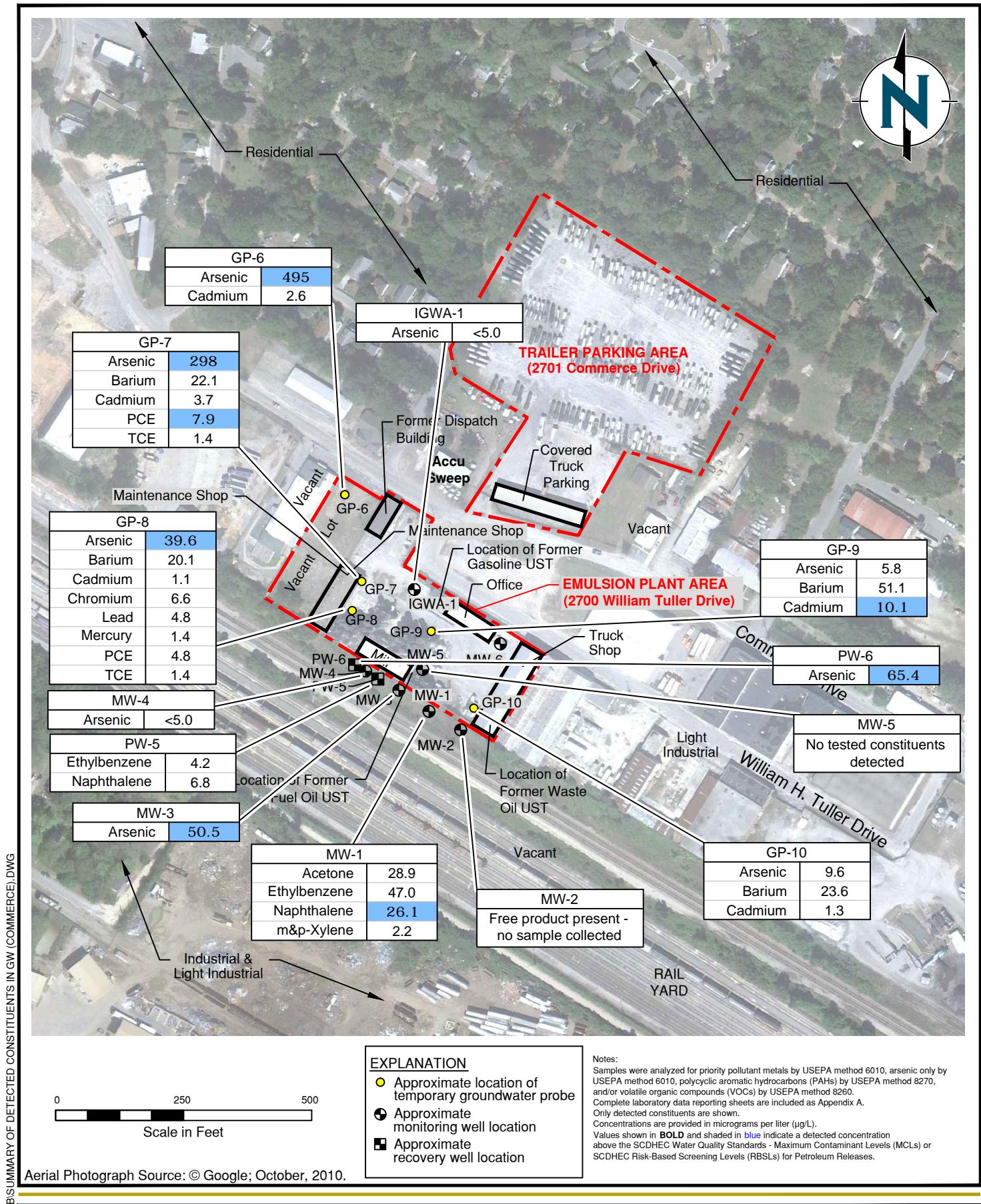
## **Figures**



**ENVIRON**

**Summary of Detected Constituents in Soil**  
SEACO, Inc.  
2700 William H. Tuller Drive & 2701 Commerce Drive  
Columbia, South Carolina

**Figure 1**



**ENVIRON**

DRAFTED BY: \GMILES

DATE: 4/25/2012

**Summary of  
Detected Constituents in Groundwater**  
SEACO, Inc.  
2700 William H. Tuller Drive & 2701 Commerce Drive  
Columbia, South Carolina

**Figure  
2**

01-29288B

**Attachment A**  
**Laboratory Data Reporting Sheets**

**Pace Analytical Services, Inc.**  
205 East Meadow Road - Suite A  
Eden, NC 27288  
(336)623-8921

**Pace Analytical Services, Inc.**  
2225 Riverside Dr.  
Asheville, NC 28804  
(828)254-7176

**Pace Analytical Services, Inc.**  
9800 Kincey Ave. Suite 100  
Huntersville, NC 28078  
(704)875-9092

March 30, 2012

Ari Hartmann  
Environ Corporation  
4350 North Fairfax Dr  
Suite 300  
Arlington, VA 22203

RE: Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Dear Ari Hartmann:

Enclosed are the analytical results for sample(s) received by the laboratory on March 16, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Analyses were performed at the Pace Analytical Services location indicated on the sample analyte page for analysis unless otherwise footnoted.

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

Sincerely,



Kevin Godwin

kevin.godwin@pacelabs.com  
Project Manager

Enclosures



#### REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, Inc..

## CERTIFICATIONS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

### Charlotte Certification IDs

9800 Kincey Ave. Ste 100, Huntersville, NC 28078  
North Carolina Drinking Water Certification #: 37706  
North Carolina Field Services Certification #: 5342  
North Carolina Wastewater Certification #: 12  
South Carolina Certification #: 99006001  
South Carolina Drinking Water Cert. #: 99006003  
Virginia Drinking Water Certification #: 00213

Connecticut Certification #: PH-0104  
Florida/NELAP Certification #: E87627  
Kentucky UST Certification #: 84  
Louisiana DHH Drinking Water # LA 100031  
West Virginia Certification #: 357  
Virginia/VELAP Certification #: 460144

### Asheville Certification IDs

2225 Riverside Dr., Asheville, NC 28804  
Florida/NELAP Certification #: E87648  
Massachusetts Certification #: M-NC030  
North Carolina Drinking Water Certification #: 37712  
North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001  
Virginia Certification #: 00072  
West Virginia Certification #: 356  
Virginia/VELAP Certification #: 460147

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92114401001	GP-1 031312 9-10'	Solid	03/13/12 10:25	03/16/12 09:30
92114401002	GP-2 031312 9-10'	Solid	03/13/12 10:56	03/16/12 09:30
92114401003	GP-3 031312 9-10'	Solid	03/13/12 11:43	03/16/12 09:30
92114401004	GP-4 031312 9-10'	Solid	03/13/12 12:19	03/16/12 09:30
92114401005	GP-5 031312 9-10'	Solid	03/13/12 13:57	03/16/12 09:30
92114401006	GP-6 031312 9-10'	Solid	03/13/12 15:22	03/16/12 09:30
92114401007	GP-7 031412 9-10'	Solid	03/14/12 09:36	03/16/12 09:30
92114401008	GP-8 031412 9-10'	Solid	03/14/12 10:17	03/16/12 09:30
92114401009	GP-9 031412 9-10'	Solid	03/14/12 11:07	03/16/12 09:30
92114401010	GP-10 031412 9-10'	Solid	03/14/12 11:58	03/16/12 09:30
92114401011	GP-9 031412 1.5-2.0' (EXCESS)	Solid	03/14/12 11:07	03/16/12 09:30
92114401013	GP-1 031412 1.5-2.0'(EXCESS)	Solid	03/14/12 14:21	03/16/12 09:30
92114401015	GP-6 031512 0.5-1.0' (EXCESS)	Solid	03/15/12 12:20	03/16/12 09:30
92114401016	GP-1 031312 GW	Water	03/15/12 12:57	03/16/12 09:30
92114401017	GP-5 031312 GW	Water	03/13/12 16:15	03/16/12 09:30
92114401018	GP-4 031312 GW	Water	03/13/12 17:07	03/16/12 09:30
92114401019	GP-3 031312 GW	Water	03/13/12 17:57	03/16/12 09:30
92114401020	GP-2 031312 GW	Water	03/13/12 18:40	03/16/12 09:30
92114401021	PW-5 031212	Water	03/12/12 18:03	03/16/12 09:30
92114401022	GP-10 031412 GW	Water	03/14/12 15:13	03/16/12 09:30
92114401023	GP-9 031412 GW	Water	03/14/12 16:00	03/16/12 09:30
92114401024	GP-7 031412 GW	Water	03/14/12 16:39	03/16/12 09:30
92114401025	GP-8 031412 GW	Water	03/14/12 17:29	03/16/12 09:30
92114401026	GP-6 031412 GW	Water	03/14/12 18:08	03/16/12 09:30
92114401027	MW-5 031512	Water	03/15/12 10:43	03/16/12 09:30
92114401028	MW-1 031512	Water	03/15/12 11:41	03/16/12 09:30

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## SAMPLE ANALYTE COUNT

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92114401001	GP-1 031312 9-10'	EPA 6010	SHB	7	PASI-A
		EPA 7471	DMB	1	PASI-A
		EPA 8270 by SIM	PPM	21	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92114401002	GP-2 031312 9-10'	EPA 6010	SHB	7	PASI-A
		EPA 7471	DMB	1	PASI-A
		EPA 8270 by SIM	PPM	21	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92114401003	GP-3 031312 9-10'	EPA 6010	SHB	7	PASI-A
		EPA 7471	DMB	1	PASI-A
		EPA 8270 by SIM	PPM	21	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92114401004	GP-4 031312 9-10'	EPA 6010	JMW	7	PASI-A
		EPA 7471	DMB	1	PASI-A
		EPA 8270 by SIM	PPM	21	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92114401005	GP-5 031312 9-10'	EPA 6010	JMW	7	PASI-A
		EPA 7471	DMB	1	PASI-A
		EPA 8270 by SIM	PPM	21	PASI-C
		ASTM D2974-87	JEA	1	PASI-C
92114401006	GP-6 031312 9-10'	EPA 6010	JMW	7	PASI-A
		EPA 7471	DMB	1	PASI-A
		EPA 8270 by SIM	PPM	21	PASI-C
		ASTM D2974-87	JEA	1	PASI-C
92114401007	GP-7 031412 9-10'	EPA 6010	JMW	7	PASI-A
		EPA 7471	DMB	1	PASI-A
		EPA 8270 by SIM	PPM	21	PASI-C
		ASTM D2974-87	JEA	1	PASI-C
92114401008	GP-8 031412 9-10'	EPA 6010	JMW	7	PASI-A
		EPA 7471	DMB	1	PASI-A
		EPA 8270 by SIM	PPM	21	PASI-C
		ASTM D2974-87	JEA	1	PASI-C
92114401009	GP-9 031412 9-10'	EPA 6010	JMW	7	PASI-A
		EPA 7471	DMB	1	PASI-A
		EPA 8270 by SIM	PPM	21	PASI-C
		ASTM D2974-87	JEA	1	PASI-C
92114401010	GP-10 031412 9-10'	EPA 6010	JMW	7	PASI-A
		EPA 7471	DMB	1	PASI-A
		EPA 8270 by SIM	PPM	21	PASI-C
		ASTM D2974-87	JEA	1	PASI-C

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## SAMPLE ANALYTE COUNT

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92114401011	GP-9 031412 1.5-2.0' (EXCESS)	EPA 7471	DMB	1	PASI-A
		EPA 8270 by SIM	PPM	21	PASI-C
		ASTM D2974-87	JEA	1	PASI-C
		EPA 8081	RES	23	PASI-C
92114401013	GP-1 031412 1.5-2.0'(EXCESS)	ASTM D2974-87	JEA	1	PASI-C
		EPA 8081	RES	23	PASI-C
92114401015	GP-6 031512 0.5-1.0' (EXCESS)	ASTM D2974-87	JEA	1	PASI-C
		EPA 8081	RES	23	PASI-C
92114401016	GP-1 031312 GW	ASTM D2974-87	JEA	1	PASI-C
		EPA 6010	JMW	7	PASI-A
		EPA 7470	DMB	1	PASI-A
		EPA 8270	PPM	21	PASI-C
92114401017	GP-5 031312 GW	EPA 8260	MCK	63	PASI-C
		EPA 6010	JMW	7	PASI-A
		EPA 7470	DMB	1	PASI-A
		EPA 8270	PPM	21	PASI-C
92114401018	GP-4 031312 GW	EPA 8260	MCK	63	PASI-C
		EPA 6010	JMW	7	PASI-A
		EPA 7470	DMB	1	PASI-A
		EPA 8270	PPM	21	PASI-C
92114401019	GP-3 031312 GW	EPA 8260	MCK	63	PASI-C
		EPA 6010	JMW	7	PASI-A
		EPA 7470	DMB	1	PASI-A
		EPA 8270	PPM	21	PASI-C
92114401020	GP-2 031312 GW	EPA 8260	MCK	63	PASI-C
		EPA 6010	JMW	7	PASI-A
		EPA 7470	DMB	1	PASI-A
		EPA 8270	PPM	21	PASI-C
92114401021	PW-5 031212	EPA 8260	MCK	63	PASI-C
		EPA 6010	JMW	7	PASI-A
		EPA 7470	DMB	1	PASI-A
		EPA 8270	PPM	21	PASI-C
92114401022	GP-10 031412 GW	EPA 8260	MCK	63	PASI-C
		EPA 6010	JMW	7	PASI-A
		EPA 7470	DMB	1	PASI-A
		EPA 8270	PPM	21	PASI-C
92114401023	GP-9 031412 GW	EPA 8260	MCK	63	PASI-C
		EPA 6010	JMW	7	PASI-A
		EPA 7470	DMB	1	PASI-A
		EPA 8270	PPM	21	PASI-C

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## SAMPLE ANALYTE COUNT

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92114401024	GP-7 031412 GW	EPA 8260	MCK	63	PASI-C
		EPA 6010	JMW	7	PASI-A
		EPA 7470	DMB	1	PASI-A
		EPA 8270	PPM	21	PASI-C
		EPA 8260	MCK	63	PASI-C
92114401025	GP-8 031412 GW	EPA 6010	JMW	7	PASI-A
		EPA 7470	DMB	1	PASI-A
		EPA 8270	PPM	21	PASI-C
		EPA 8260	MCK	63	PASI-C
92114401026	GP-6 031412 GW	EPA 6010	JMW	7	PASI-A
		EPA 7470	DMB	1	PASI-A
		EPA 8270	PPM	21	PASI-C
		EPA 8260	MCK	63	PASI-C
92114401027	MW-5 031512	EPA 8260	MCK	63	PASI-C
92114401028	MW-1 031512	EPA 8260	MCK	63	PASI-C

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-1 031312 9-10' Lab ID: 92114401001 Collected: 03/13/12 10:25 Received: 03/16/12 09:30 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3050						
Arsenic	ND mg/kg		0.42	1	03/19/12 16:00	03/23/12 13:30	7440-38-2	
Barium	11.5 mg/kg		0.42	1	03/19/12 16:00	03/22/12 21:46	7440-39-3	
Cadmium	ND mg/kg		0.083	1	03/19/12 16:00	03/22/12 21:46	7440-43-9	
Chromium	5.8 mg/kg		0.42	1	03/19/12 16:00	03/22/12 21:46	7440-47-3	
Lead	0.92 mg/kg		0.42	1	03/19/12 16:00	03/22/12 21:46	7439-92-1	
Selenium	ND mg/kg		0.83	1	03/19/12 16:00	03/22/12 21:46	7782-49-2	
Silver	ND mg/kg		0.42	1	03/19/12 16:00	03/22/12 21:46	7440-22-4	
<b>7471 Mercury</b>		Analytical Method: EPA 7471 Preparation Method: EPA 7471						
Mercury	0.017 mg/kg		0.0041	1	03/22/12 16:00	03/23/12 12:50	7439-97-6	
<b>8270 MSSV MW PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Acenaphthene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 16:49	83-32-9	
Acenaphthylene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 16:49	208-96-8	
Anthracene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 16:49	120-12-7	
Benzo(a)anthracene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 16:49	56-55-3	
Benzo(a)pyrene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 16:49	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 16:49	205-99-2	
Benzo(g,h,i)perylene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 16:49	191-24-2	
Benzo(k)fluoranthene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 16:49	207-08-9	
Chrysene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 16:49	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 16:49	53-70-3	
Fluoranthene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 16:49	206-44-0	
Fluorene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 16:49	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 16:49	193-39-5	
1-Methylnaphthalene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 16:49	90-12-0	
2-Methylnaphthalene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 16:49	91-57-6	
Naphthalene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 16:49	91-20-3	
Phenanthrene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 16:49	85-01-8	
Pyrene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 16:49	129-00-0	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	71 %		10-128	1	03/19/12 14:59	03/22/12 16:49	4165-60-0	
2-Fluorobiphenyl (S)	64 %		10-110	1	03/19/12 14:59	03/22/12 16:49	321-60-8	
Terphenyl-d14 (S)	80 %		39-119	1	03/19/12 14:59	03/22/12 16:49	1718-51-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	4.5 %		0.10	1			03/21/12 09:04	

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-2 031312 9-10' Lab ID: 92114401002 Collected: 03/13/12 10:56 Received: 03/16/12 09:30 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3050						
Arsenic	0.53 mg/kg		0.47	1	03/19/12 16:00	03/23/12 13:34	7440-38-2	
Barium	10.5 mg/kg		0.47	1	03/19/12 16:00	03/22/12 21:49	7440-39-3	
Cadmium	ND mg/kg		0.094	1	03/19/12 16:00	03/22/12 21:49	7440-43-9	
Chromium	3.1 mg/kg		0.47	1	03/19/12 16:00	03/22/12 21:49	7440-47-3	
Lead	0.89 mg/kg		0.47	1	03/19/12 16:00	03/22/12 21:49	7439-92-1	
Selenium	ND mg/kg		0.94	1	03/19/12 16:00	03/22/12 21:49	7782-49-2	
Silver	ND mg/kg		0.47	1	03/19/12 16:00	03/22/12 21:49	7440-22-4	
<b>7471 Mercury</b>		Analytical Method: EPA 7471 Preparation Method: EPA 7471						
Mercury	0.0068 mg/kg		0.0037	1	03/28/12 16:20	03/29/12 14:09	7439-97-6	
<b>8270 MSSV MW PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Acenaphthene	ND ug/kg		10.9	1	03/19/12 14:59	03/22/12 17:09	83-32-9	
Acenaphthylene	ND ug/kg		10.9	1	03/19/12 14:59	03/22/12 17:09	208-96-8	
Anthracene	ND ug/kg		10.9	1	03/19/12 14:59	03/22/12 17:09	120-12-7	
Benzo(a)anthracene	ND ug/kg		10.9	1	03/19/12 14:59	03/22/12 17:09	56-55-3	
Benzo(a)pyrene	ND ug/kg		10.9	1	03/19/12 14:59	03/22/12 17:09	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		10.9	1	03/19/12 14:59	03/22/12 17:09	205-99-2	
Benzo(g,h,i)perylene	ND ug/kg		10.9	1	03/19/12 14:59	03/22/12 17:09	191-24-2	
Benzo(k)fluoranthene	ND ug/kg		10.9	1	03/19/12 14:59	03/22/12 17:09	207-08-9	
Chrysene	ND ug/kg		10.9	1	03/19/12 14:59	03/22/12 17:09	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg		10.9	1	03/19/12 14:59	03/22/12 17:09	53-70-3	
Fluoranthene	ND ug/kg		10.9	1	03/19/12 14:59	03/22/12 17:09	206-44-0	
Fluorene	ND ug/kg		10.9	1	03/19/12 14:59	03/22/12 17:09	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/kg		10.9	1	03/19/12 14:59	03/22/12 17:09	193-39-5	
1-Methylnaphthalene	ND ug/kg		10.9	1	03/19/12 14:59	03/22/12 17:09	90-12-0	
2-Methylnaphthalene	ND ug/kg		10.9	1	03/19/12 14:59	03/22/12 17:09	91-57-6	
Naphthalene	ND ug/kg		10.9	1	03/19/12 14:59	03/22/12 17:09	91-20-3	
Phenanthrene	ND ug/kg		10.9	1	03/19/12 14:59	03/22/12 17:09	85-01-8	
Pyrene	ND ug/kg		10.9	1	03/19/12 14:59	03/22/12 17:09	129-00-0	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	84 %		10-128	1	03/19/12 14:59	03/22/12 17:09	4165-60-0	
2-Fluorobiphenyl (S)	73 %		10-110	1	03/19/12 14:59	03/22/12 17:09	321-60-8	
Terphenyl-d14 (S)	84 %		39-119	1	03/19/12 14:59	03/22/12 17:09	1718-51-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	8.5 %		0.10	1			03/21/12 08:54	

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-3 031312 9-10' Lab ID: 92114401003 Collected: 03/13/12 11:43 Received: 03/16/12 09:30 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3050						
Arsenic	ND mg/kg		0.51	1	03/19/12 16:00	03/23/12 13:37	7440-38-2	
Barium	<b>12.8</b> mg/kg		0.51	1	03/19/12 16:00	03/22/12 21:52	7440-39-3	
Cadmium	ND mg/kg		0.10	1	03/19/12 16:00	03/22/12 21:52	7440-43-9	
Chromium	<b>6.0</b> mg/kg		0.51	1	03/19/12 16:00	03/22/12 21:52	7440-47-3	
Lead	<b>1.2</b> mg/kg		0.51	1	03/19/12 16:00	03/22/12 21:52	7439-92-1	
Selenium	ND mg/kg		1.0	1	03/19/12 16:00	03/22/12 21:52	7782-49-2	
Silver	ND mg/kg		0.51	1	03/19/12 16:00	03/22/12 21:52	7440-22-4	
<b>7471 Mercury</b>		Analytical Method: EPA 7471 Preparation Method: EPA 7471						
Mercury	<b>0.029</b> mg/kg		0.0052	1	03/28/12 16:20	03/29/12 14:14	7439-97-6	
<b>8270 MSSV MW PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Acenaphthene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 17:30	83-32-9	
Acenaphthylene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 17:30	208-96-8	
Anthracene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 17:30	120-12-7	
Benzo(a)anthracene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 17:30	56-55-3	
Benzo(a)pyrene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 17:30	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 17:30	205-99-2	
Benzo(g,h,i)perylene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 17:30	191-24-2	
Benzo(k)fluoranthene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 17:30	207-08-9	
Chrysene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 17:30	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 17:30	53-70-3	
Fluoranthene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 17:30	206-44-0	
Fluorene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 17:30	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 17:30	193-39-5	
1-Methylnaphthalene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 17:30	90-12-0	
2-Methylnaphthalene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 17:30	91-57-6	
Naphthalene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 17:30	91-20-3	
Phenanthrene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 17:30	85-01-8	
Pyrene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 17:30	129-00-0	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	81 %		10-128	1	03/19/12 14:59	03/22/12 17:30	4165-60-0	
2-Fluorobiphenyl (S)	72 %		10-110	1	03/19/12 14:59	03/22/12 17:30	321-60-8	
Terphenyl-d14 (S)	88 %		39-119	1	03/19/12 14:59	03/22/12 17:30	1718-51-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	<b>6.4</b> %		0.10	1			03/21/12 08:54	

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-4 031312 9-10' Lab ID: 92114401004 Collected: 03/13/12 12:19 Received: 03/16/12 09:30 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3050						
Arsenic	0.55 mg/kg		0.49	1	03/23/12 14:45	03/25/12 19:06	7440-38-2	
Barium	12.9 mg/kg		0.49	1	03/23/12 14:45	03/25/12 19:06	7440-39-3	
Cadmium	ND mg/kg		0.097	1	03/23/12 14:45	03/25/12 19:06	7440-43-9	
Chromium	5.2 mg/kg		0.49	1	03/23/12 14:45	03/25/12 19:06	7440-47-3	
Lead	1.0 mg/kg		0.49	1	03/23/12 14:45	03/25/12 19:06	7439-92-1	
Selenium	ND mg/kg		0.97	1	03/23/12 14:45	03/25/12 19:06	7782-49-2	
Silver	0.49 mg/kg		0.49	1	03/23/12 14:45	03/25/12 19:06	7440-22-4	
<b>7471 Mercury</b>		Analytical Method: EPA 7471 Preparation Method: EPA 7471						
Mercury	0.029 mg/kg		0.0046	1	03/28/12 16:20	03/29/12 14:19	7439-97-6	
<b>8270 MSSV MW PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Acenaphthene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 12:47	83-32-9	
Acenaphthylene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 12:47	208-96-8	
Anthracene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 12:47	120-12-7	
Benzo(a)anthracene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 12:47	56-55-3	
Benzo(a)pyrene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 12:47	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 12:47	205-99-2	
Benzo(g,h,i)perylene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 12:47	191-24-2	
Benzo(k)fluoranthene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 12:47	207-08-9	
Chrysene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 12:47	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 12:47	53-70-3	
Fluoranthene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 12:47	206-44-0	
Fluorene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 12:47	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 12:47	193-39-5	
1-Methylnaphthalene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 12:47	90-12-0	
2-Methylnaphthalene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 12:47	91-57-6	
Naphthalene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 12:47	91-20-3	
Phenanthrene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 12:47	85-01-8	
Pyrene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 12:47	129-00-0	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	81 %		10-128	1	03/19/12 14:59	03/22/12 12:47	4165-60-0	
2-Fluorobiphenyl (S)	71 %		10-110	1	03/19/12 14:59	03/22/12 12:47	321-60-8	
Terphenyl-d14 (S)	91 %		39-119	1	03/19/12 14:59	03/22/12 12:47	1718-51-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	6.7 %		0.10	1			03/21/12 08:54	

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-5 031312 9-10' Lab ID: 92114401005 Collected: 03/13/12 13:57 Received: 03/16/12 09:30 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3050						
Arsenic	ND mg/kg		0.53	1	03/23/12 14:45	03/25/12 19:10	7440-38-2	
Barium	15.5 mg/kg		0.53	1	03/23/12 14:45	03/25/12 19:10	7440-39-3	
Cadmium	ND mg/kg		0.11	1	03/23/12 14:45	03/25/12 19:10	7440-43-9	
Chromium	4.2 mg/kg		0.53	1	03/23/12 14:45	03/25/12 19:10	7440-47-3	
Lead	1.4 mg/kg		0.53	1	03/23/12 14:45	03/25/12 19:10	7439-92-1	
Selenium	ND mg/kg		1.1	1	03/23/12 14:45	03/25/12 19:10	7782-49-2	
Silver	ND mg/kg		0.53	1	03/23/12 14:45	03/25/12 19:10	7440-22-4	
<b>7471 Mercury</b>		Analytical Method: EPA 7471 Preparation Method: EPA 7471						
Mercury	0.0095 mg/kg		0.0049	1	03/28/12 16:20	03/29/12 14:30	7439-97-6	
<b>8270 MSSV MW PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Acenaphthene	ND ug/kg		10.6	1	03/19/12 14:59	03/22/12 17:50	83-32-9	
Acenaphthylene	ND ug/kg		10.6	1	03/19/12 14:59	03/22/12 17:50	208-96-8	
Anthracene	ND ug/kg		10.6	1	03/19/12 14:59	03/22/12 17:50	120-12-7	
Benzo(a)anthracene	ND ug/kg		10.6	1	03/19/12 14:59	03/22/12 17:50	56-55-3	
Benzo(a)pyrene	ND ug/kg		10.6	1	03/19/12 14:59	03/22/12 17:50	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		10.6	1	03/19/12 14:59	03/22/12 17:50	205-99-2	
Benzo(g,h,i)perylene	ND ug/kg		10.6	1	03/19/12 14:59	03/22/12 17:50	191-24-2	
Benzo(k)fluoranthene	ND ug/kg		10.6	1	03/19/12 14:59	03/22/12 17:50	207-08-9	
Chrysene	ND ug/kg		10.6	1	03/19/12 14:59	03/22/12 17:50	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg		10.6	1	03/19/12 14:59	03/22/12 17:50	53-70-3	
Fluoranthene	ND ug/kg		10.6	1	03/19/12 14:59	03/22/12 17:50	206-44-0	
Fluorene	ND ug/kg		10.6	1	03/19/12 14:59	03/22/12 17:50	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/kg		10.6	1	03/19/12 14:59	03/22/12 17:50	193-39-5	
1-Methylnaphthalene	ND ug/kg		10.6	1	03/19/12 14:59	03/22/12 17:50	90-12-0	
2-Methylnaphthalene	ND ug/kg		10.6	1	03/19/12 14:59	03/22/12 17:50	91-57-6	
Naphthalene	ND ug/kg		10.6	1	03/19/12 14:59	03/22/12 17:50	91-20-3	
Phenanthrene	ND ug/kg		10.6	1	03/19/12 14:59	03/22/12 17:50	85-01-8	
Pyrene	ND ug/kg		10.6	1	03/19/12 14:59	03/22/12 17:50	129-00-0	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	71 %		10-128	1	03/19/12 14:59	03/22/12 17:50	4165-60-0	
2-Fluorobiphenyl (S)	62 %		10-110	1	03/19/12 14:59	03/22/12 17:50	321-60-8	
Terphenyl-d14 (S)	74 %		39-119	1	03/19/12 14:59	03/22/12 17:50	1718-51-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	6.7 %		0.10	1			03/21/12 09:05	



Pace Analytical Services, Inc.  
205 East Meadow Road - Suite A  
Eden, NC 27288  
(336)623-8921

Pace Analytical Services, Inc.  
2225 Riverside Dr.  
Asheville, NC 28804  
(828)254-7176

Pace Analytical Services, Inc.  
9800 Kincey Ave. Suite 100  
Huntersville, NC 28078  
(704)875-9092

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-6 031312 9-10' Lab ID: 92114401006 Collected: 03/13/12 15:22 Received: 03/16/12 09:30 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	118 mg/kg		0.48	1	03/23/12 14:45	03/25/12 19:13	7440-38-2	
Barium	22.4 mg/kg		0.48	1	03/23/12 14:45	03/25/12 19:13	7440-39-3	
Cadmium	1.2 mg/kg		0.097	1	03/23/12 14:45	03/25/12 19:13	7440-43-9	
Chromium	3.0 mg/kg		0.48	1	03/23/12 14:45	03/25/12 19:13	7440-47-3	
Lead	4.2 mg/kg		0.48	1	03/23/12 14:45	03/25/12 19:13	7439-92-1	
Selenium	ND mg/kg		0.97	1	03/23/12 14:45	03/25/12 19:13	7782-49-2	
Silver	ND mg/kg		0.48	1	03/23/12 14:45	03/25/12 19:13	7440-22-4	
<b>7471 Mercury</b>	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	0.062 mg/kg		0.0052	1	03/28/12 16:20	03/29/12 14:33	7439-97-6	
<b>8270 MSSV MW PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546							
Acenaphthene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 18:10	83-32-9	
Acenaphthylene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 18:10	208-96-8	
Anthracene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 18:10	120-12-7	
Benzo(a)anthracene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 18:10	56-55-3	
Benzo(a)pyrene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 18:10	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 18:10	205-99-2	
Benzo(g,h,i)perylene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 18:10	191-24-2	
Benzo(k)fluoranthene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 18:10	207-08-9	
Chrysene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 18:10	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 18:10	53-70-3	
Fluoranthene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 18:10	206-44-0	
Fluorene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 18:10	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 18:10	193-39-5	
1-Methylnaphthalene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 18:10	90-12-0	
2-Methylnaphthalene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 18:10	91-57-6	
Naphthalene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 18:10	91-20-3	
Phenanthrene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 18:10	85-01-8	
Pyrene	ND ug/kg		10.5	1	03/19/12 14:59	03/22/12 18:10	129-00-0	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	85 %		10-128	1	03/19/12 14:59	03/22/12 18:10	4165-60-0	
2-Fluorobiphenyl (S)	72 %		10-110	1	03/19/12 14:59	03/22/12 18:10	321-60-8	
Terphenyl-d14 (S)	83 %		39-119	1	03/19/12 14:59	03/22/12 18:10	1718-51-0	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87							
Percent Moisture	6.1 %		0.10	1			03/21/12 09:08	

Date: 03/30/2012 03:06 PM

## REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.  
205 East Meadow Road - Suite A  
Eden, NC 27288  
(336)623-8921

Pace Analytical Services, Inc.  
2225 Riverside Dr.  
Asheville, NC 28804  
(828)254-7176

Pace Analytical Services, Inc.  
9800 Kincey Ave. Suite 100  
Huntersville, NC 28078  
(704)875-9092

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-7 031412 9-10' Lab ID: 92114401007 Collected: 03/14/12 09:36 Received: 03/16/12 09:30 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3050						
Arsenic	24.4 mg/kg		0.38	1	03/23/12 14:45	03/25/12 19:17	7440-38-2	
Barium	7.7 mg/kg		0.38	1	03/23/12 14:45	03/25/12 19:17	7440-39-3	
Cadmium	ND mg/kg		0.075	1	03/23/12 14:45	03/25/12 19:17	7440-43-9	
Chromium	2.0 mg/kg		0.38	1	03/23/12 14:45	03/25/12 19:17	7440-47-3	
Lead	21.0 mg/kg		0.38	1	03/23/12 14:45	03/25/12 19:17	7439-92-1	
Selenium	ND mg/kg		0.75	1	03/23/12 14:45	03/25/12 19:17	7782-49-2	
Silver	ND mg/kg		0.38	1	03/23/12 14:45	03/25/12 19:17	7440-22-4	
<b>7471 Mercury</b>		Analytical Method: EPA 7471 Preparation Method: EPA 7471						
Mercury	0.061 mg/kg		0.0050	1	03/28/12 16:20	03/29/12 14:35	7439-97-6	
<b>8270 MSSV MW PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Acenaphthene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 18:30	83-32-9	
Acenaphthylene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 18:30	208-96-8	
Anthracene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 18:30	120-12-7	
Benzo(a)anthracene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 18:30	56-55-3	
Benzo(a)pyrene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 18:30	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 18:30	205-99-2	
Benzo(g,h,i)perylene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 18:30	191-24-2	
Benzo(k)fluoranthene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 18:30	207-08-9	
Chrysene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 18:30	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 18:30	53-70-3	
Fluoranthene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 18:30	206-44-0	
Fluorene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 18:30	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 18:30	193-39-5	
1-Methylnaphthalene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 18:30	90-12-0	
2-Methylnaphthalene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 18:30	91-57-6	
Naphthalene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 18:30	91-20-3	
Phenanthrene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 18:30	85-01-8	
Pyrene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 18:30	129-00-0	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	84 %		10-128	1	03/19/12 14:59	03/22/12 18:30	4165-60-0	
2-Fluorobiphenyl (S)	73 %		10-110	1	03/19/12 14:59	03/22/12 18:30	321-60-8	
Terphenyl-d14 (S)	85 %		39-119	1	03/19/12 14:59	03/22/12 18:30	1718-51-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	6.6 %		0.10	1			03/21/12 09:08	

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205 East Meadow Road - Suite A  
Eden, NC 27288  
(336)623-8921

Pace Analytical Services, Inc.  
2225 Riverside Dr.  
Asheville, NC 28804  
(828)254-7176

Pace Analytical Services, Inc.  
9800 Kincey Ave. Suite 100  
Huntersville, NC 28078  
(704)875-9092

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-8 031412 9-10' Lab ID: 92114401008 Collected: 03/14/12 10:17 Received: 03/16/12 09:30 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3050						
Arsenic	1.0 mg/kg		0.45	1	03/23/12 14:45	03/25/12 19:21	7440-38-2	
Barium	9.7 mg/kg		0.45	1	03/23/12 14:45	03/25/12 19:21	7440-39-3	
Cadmium	ND mg/kg		0.090	1	03/23/12 14:45	03/25/12 19:21	7440-43-9	
Chromium	1.2 mg/kg		0.45	1	03/23/12 14:45	03/25/12 19:21	7440-47-3	
Lead	1.8 mg/kg		0.45	1	03/23/12 14:45	03/25/12 19:21	7439-92-1	
Selenium	ND mg/kg		0.90	1	03/23/12 14:45	03/25/12 19:21	7782-49-2	
Silver	ND mg/kg		0.45	1	03/23/12 14:45	03/25/12 19:21	7440-22-4	
<b>7471 Mercury</b>		Analytical Method: EPA 7471 Preparation Method: EPA 7471						
Mercury	0.043 mg/kg		0.0041	1	03/28/12 16:20	03/29/12 14:38	7439-97-6	
<b>8270 MSSV MW PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Acenaphthene	ND ug/kg		10.8	1	03/19/12 14:59	03/22/12 18:50	83-32-9	
Acenaphthylene	ND ug/kg		10.8	1	03/19/12 14:59	03/22/12 18:50	208-96-8	
Anthracene	ND ug/kg		10.8	1	03/19/12 14:59	03/22/12 18:50	120-12-7	
Benzo(a)anthracene	ND ug/kg		10.8	1	03/19/12 14:59	03/22/12 18:50	56-55-3	
Benzo(a)pyrene	ND ug/kg		10.8	1	03/19/12 14:59	03/22/12 18:50	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		10.8	1	03/19/12 14:59	03/22/12 18:50	205-99-2	
Benzo(g,h,i)perylene	ND ug/kg		10.8	1	03/19/12 14:59	03/22/12 18:50	191-24-2	
Benzo(k)fluoranthene	ND ug/kg		10.8	1	03/19/12 14:59	03/22/12 18:50	207-08-9	
Chrysene	ND ug/kg		10.8	1	03/19/12 14:59	03/22/12 18:50	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg		10.8	1	03/19/12 14:59	03/22/12 18:50	53-70-3	
Fluoranthene	ND ug/kg		10.8	1	03/19/12 14:59	03/22/12 18:50	206-44-0	
Fluorene	ND ug/kg		10.8	1	03/19/12 14:59	03/22/12 18:50	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/kg		10.8	1	03/19/12 14:59	03/22/12 18:50	193-39-5	
1-Methylnaphthalene	ND ug/kg		10.8	1	03/19/12 14:59	03/22/12 18:50	90-12-0	
2-Methylnaphthalene	ND ug/kg		10.8	1	03/19/12 14:59	03/22/12 18:50	91-57-6	
Naphthalene	ND ug/kg		10.8	1	03/19/12 14:59	03/22/12 18:50	91-20-3	
Phenanthrene	ND ug/kg		10.8	1	03/19/12 14:59	03/22/12 18:50	85-01-8	
Pyrene	ND ug/kg		10.8	1	03/19/12 14:59	03/22/12 18:50	129-00-0	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	85 %		10-128	1	03/19/12 14:59	03/22/12 18:50	4165-60-0	
2-Fluorobiphenyl (S)	74 %		10-110	1	03/19/12 14:59	03/22/12 18:50	321-60-8	
Terphenyl-d14 (S)	85 %		39-119	1	03/19/12 14:59	03/22/12 18:50	1718-51-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	7.6 %		0.10	1			03/21/12 09:08	

Date: 03/30/2012 03:06 PM

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-9 031412 9-10' Lab ID: 92114401009 Collected: 03/14/12 11:07 Received: 03/16/12 09:30 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3050						
Arsenic	115 mg/kg		0.48	1	03/23/12 14:45	03/25/12 19:25	7440-38-2	
Barium	24.5 mg/kg		0.48	1	03/23/12 14:45	03/25/12 19:25	7440-39-3	
Cadmium	ND mg/kg		0.097	1	03/23/12 14:45	03/25/12 19:25	7440-43-9	
Chromium	2.5 mg/kg		0.48	1	03/23/12 14:45	03/25/12 19:25	7440-47-3	
Lead	3.2 mg/kg		0.48	1	03/23/12 14:45	03/25/12 19:25	7439-92-1	
Selenium	ND mg/kg		0.97	1	03/23/12 14:45	03/25/12 19:25	7782-49-2	
Silver	ND mg/kg		0.48	1	03/23/12 14:45	03/25/12 19:25	7440-22-4	
<b>7471 Mercury</b>		Analytical Method: EPA 7471 Preparation Method: EPA 7471						
Mercury	0.042 mg/kg		0.0041	1	03/28/12 16:20	03/29/12 14:41	7439-97-6	
<b>8270 MSSV MW PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Acenaphthene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 19:11	83-32-9	
Acenaphthylene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 19:11	208-96-8	
Anthracene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 19:11	120-12-7	
Benzo(a)anthracene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 19:11	56-55-3	
Benzo(a)pyrene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 19:11	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 19:11	205-99-2	
Benzo(g,h,i)perylene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 19:11	191-24-2	
Benzo(k)fluoranthene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 19:11	207-08-9	
Chrysene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 19:11	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 19:11	53-70-3	
Fluoranthene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 19:11	206-44-0	
Fluorene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 19:11	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 19:11	193-39-5	
1-Methylnaphthalene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 19:11	90-12-0	
2-Methylnaphthalene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 19:11	91-57-6	
Naphthalene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 19:11	91-20-3	
Phenanthrene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 19:11	85-01-8	
Pyrene	ND ug/kg		10.7	1	03/19/12 14:59	03/22/12 19:11	129-00-0	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	78 %		10-128	1	03/19/12 14:59	03/22/12 19:11	4165-60-0	
2-Fluorobiphenyl (S)	69 %		10-110	1	03/19/12 14:59	03/22/12 19:11	321-60-8	
Terphenyl-d14 (S)	81 %		39-119	1	03/19/12 14:59	03/22/12 19:11	1718-51-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	7.5 %		0.10	1			03/21/12 09:08	

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-10 031412 9-10' Lab ID: 92114401010 Collected: 03/14/12 11:58 Received: 03/16/12 09:30 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010 Preparation Method: EPA 3050						
Arsenic	0.76 mg/kg		0.45	1	03/23/12 14:45	03/25/12 19:28	7440-38-2	
Barium	25.4 mg/kg		0.45	1	03/23/12 14:45	03/25/12 19:28	7440-39-3	
Cadmium	ND mg/kg		0.090	1	03/23/12 14:45	03/25/12 19:28	7440-43-9	
Chromium	9.1 mg/kg		0.45	1	03/23/12 14:45	03/25/12 19:28	7440-47-3	
Lead	3.4 mg/kg		0.45	1	03/23/12 14:45	03/25/12 19:28	7439-92-1	
Selenium	ND mg/kg		0.90	1	03/23/12 14:45	03/25/12 19:28	7782-49-2	
Silver	ND mg/kg		0.45	1	03/23/12 14:45	03/25/12 19:28	7440-22-4	
<b>7471 Mercury</b>		Analytical Method: EPA 7471 Preparation Method: EPA 7471						
Mercury	0.090 mg/kg		0.0048	1	03/28/12 16:20	03/29/12 14:43	7439-97-6	
<b>8270 MSSV MW PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Acenaphthene	ND ug/kg		11.9	1	03/19/12 14:59	03/22/12 19:31	83-32-9	
Acenaphthylene	ND ug/kg		11.9	1	03/19/12 14:59	03/22/12 19:31	208-96-8	
Anthracene	ND ug/kg		11.9	1	03/19/12 14:59	03/22/12 19:31	120-12-7	
Benzo(a)anthracene	ND ug/kg		11.9	1	03/19/12 14:59	03/22/12 19:31	56-55-3	
Benzo(a)pyrene	ND ug/kg		11.9	1	03/19/12 14:59	03/22/12 19:31	50-32-8	
Benzo(b)fluoranthene	ND ug/kg		11.9	1	03/19/12 14:59	03/22/12 19:31	205-99-2	
Benzo(g,h,i)perylene	ND ug/kg		11.9	1	03/19/12 14:59	03/22/12 19:31	191-24-2	
Benzo(k)fluoranthene	ND ug/kg		11.9	1	03/19/12 14:59	03/22/12 19:31	207-08-9	
Chrysene	ND ug/kg		11.9	1	03/19/12 14:59	03/22/12 19:31	218-01-9	
Dibenz(a,h)anthracene	ND ug/kg		11.9	1	03/19/12 14:59	03/22/12 19:31	53-70-3	
Fluoranthene	ND ug/kg		11.9	1	03/19/12 14:59	03/22/12 19:31	206-44-0	
Fluorene	ND ug/kg		11.9	1	03/19/12 14:59	03/22/12 19:31	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/kg		11.9	1	03/19/12 14:59	03/22/12 19:31	193-39-5	
1-Methylnaphthalene	ND ug/kg		11.9	1	03/19/12 14:59	03/22/12 19:31	90-12-0	
2-Methylnaphthalene	ND ug/kg		11.9	1	03/19/12 14:59	03/22/12 19:31	91-57-6	
Naphthalene	ND ug/kg		11.9	1	03/19/12 14:59	03/22/12 19:31	91-20-3	
Phenanthrene	ND ug/kg		11.9	1	03/19/12 14:59	03/22/12 19:31	85-01-8	
Pyrene	ND ug/kg		11.9	1	03/19/12 14:59	03/22/12 19:31	129-00-0	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	75 %		10-128	1	03/19/12 14:59	03/22/12 19:31	4165-60-0	
2-Fluorobiphenyl (S)	62 %		10-110	1	03/19/12 14:59	03/22/12 19:31	321-60-8	
Terphenyl-d14 (S)	44 %		39-119	1	03/19/12 14:59	03/22/12 19:31	1718-51-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	16.3 %		0.10	1			03/21/12 09:09	



Pace Analytical Services, Inc.  
205 East Meadow Road - Suite A  
Eden, NC 27288  
(336)623-8921

Pace Analytical Services, Inc.  
2225 Riverside Dr.  
Asheville, NC 28804  
(828)254-7176

Pace Analytical Services, Inc.  
9800 Kincey Ave. Suite 100  
Huntersville, NC 28078  
(704)875-9092

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-9 031412 1.5-2.0' Lab ID: 92114401011 Collected: 03/14/12 11:07 Received: 03/16/12 09:30 Matrix: Solid  
(EXCESS)

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8081 GCS Pesticides</b>		Analytical Method: EPA 8081 Preparation Method: EPA 3546						
Aldrin	ND ug/kg		42.6	20	03/21/12 15:00	03/22/12 19:03	309-00-2	
alpha-BHC	ND ug/kg		42.6	20	03/21/12 15:00	03/22/12 19:03	319-84-6	
beta-BHC	ND ug/kg		42.6	20	03/21/12 15:00	03/22/12 19:03	319-85-7	
delta-BHC	ND ug/kg		42.6	20	03/21/12 15:00	03/22/12 19:03	319-86-8	
gamma-BHC (Lindane)	ND ug/kg		42.6	20	03/21/12 15:00	03/22/12 19:03	58-89-9	
Chlordane (Technical)	ND ug/kg		149	20	03/21/12 15:00	03/22/12 19:03	57-74-9	
4,4'-DDD	ND ug/kg		42.6	20	03/21/12 15:00	03/22/12 19:03	72-54-8	
4,4'-DDE	ND ug/kg		42.6	20	03/21/12 15:00	03/22/12 19:03	72-55-9	
4,4'-DDT	ND ug/kg		42.6	20	03/21/12 15:00	03/22/12 19:03	50-29-3	
Dieldrin	ND ug/kg		42.6	20	03/21/12 15:00	03/22/12 19:03	60-57-1	
Endosulfan I	ND ug/kg		42.6	20	03/21/12 15:00	03/22/12 19:03	959-98-8	
Endosulfan II	ND ug/kg		42.6	20	03/21/12 15:00	03/22/12 19:03	33213-65-9	
Endosulfan sulfate	ND ug/kg		42.6	20	03/21/12 15:00	03/22/12 19:03	1031-07-8	
Endrin	ND ug/kg		42.6	20	03/21/12 15:00	03/22/12 19:03	72-20-8	
Endrin aldehyde	ND ug/kg		42.6	20	03/21/12 15:00	03/22/12 19:03	7421-93-4	
Endrin ketone	ND ug/kg		42.6	20	03/21/12 15:00	03/22/12 19:03	53494-70-5	
Heptachlor	ND ug/kg		42.6	20	03/21/12 15:00	03/22/12 19:03	76-44-8	
Heptachlor epoxide	ND ug/kg		42.6	20	03/21/12 15:00	03/22/12 19:03	1024-57-3	
Methoxychlor	ND ug/kg		107	20	03/21/12 15:00	03/22/12 19:03	72-43-5	
Mirex	ND ug/kg		107	20	03/21/12 15:00	03/22/12 19:03	2385-85-5	
Toxaphene	ND ug/kg		149	20	03/21/12 15:00	03/22/12 19:03	8001-35-2	
<b>Surrogates</b>								
Tetrachloro-m-xylene (S)	0 %		50-150	20	03/21/12 15:00	03/22/12 19:03	877-09-8	D3,S4
Decachlorobiphenyl (S)	0 %		50-150	20	03/21/12 15:00	03/22/12 19:03	2051-24-3	S4
<b>Percent Moisture</b>								
Analytical Method: ASTM D2974-87								
Percent Moisture	6.2 %		0.10	1		03/21/12 09:09		

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-1 031412 1.5-  
2.0'(EXCESS) Lab ID: 92114401013 Collected: 03/14/12 14:21 Received: 03/16/12 09:30 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8081 GCS Pesticides</b>		Analytical Method: EPA 8081 Preparation Method: EPA 3546						
Aldrin	ND ug/kg		2.1	1	03/21/12 15:00	03/22/12 19:20	309-00-2	
alpha-BHC	ND ug/kg		2.1	1	03/21/12 15:00	03/22/12 19:20	319-84-6	
beta-BHC	ND ug/kg		2.1	1	03/21/12 15:00	03/22/12 19:20	319-85-7	
delta-BHC	ND ug/kg		2.1	1	03/21/12 15:00	03/22/12 19:20	319-86-8	
gamma-BHC (Lindane)	ND ug/kg		2.1	1	03/21/12 15:00	03/22/12 19:20	58-89-9	
Chlordane (Technical)	ND ug/kg		7.2	1	03/21/12 15:00	03/22/12 19:20	57-74-9	
4,4'-DDD	ND ug/kg		2.1	1	03/21/12 15:00	03/22/12 19:20	72-54-8	
4,4'-DDE	ND ug/kg		2.1	1	03/21/12 15:00	03/22/12 19:20	72-55-9	
4,4'-DDT	ND ug/kg		2.1	1	03/21/12 15:00	03/22/12 19:20	50-29-3	
Dieldrin	ND ug/kg		2.1	1	03/21/12 15:00	03/22/12 19:20	60-57-1	
Endosulfan I	ND ug/kg		2.1	1	03/21/12 15:00	03/22/12 19:20	959-98-8	
Endosulfan II	ND ug/kg		2.1	1	03/21/12 15:00	03/22/12 19:20	33213-65-9	
Endosulfan sulfate	ND ug/kg		2.1	1	03/21/12 15:00	03/22/12 19:20	1031-07-8	
Endrin	ND ug/kg		2.1	1	03/21/12 15:00	03/22/12 19:20	72-20-8	
Endrin aldehyde	ND ug/kg		2.1	1	03/21/12 15:00	03/22/12 19:20	7421-93-4	
Endrin ketone	ND ug/kg		2.1	1	03/21/12 15:00	03/22/12 19:20	53494-70-5	
Heptachlor	ND ug/kg		2.1	1	03/21/12 15:00	03/22/12 19:20	76-44-8	
Heptachlor epoxide	ND ug/kg		2.1	1	03/21/12 15:00	03/22/12 19:20	1024-57-3	
Methoxychlor	ND ug/kg		5.1	1	03/21/12 15:00	03/22/12 19:20	72-43-5	
Mirex	ND ug/kg		5.1	1	03/21/12 15:00	03/22/12 19:20	2385-85-5	
Toxaphene	ND ug/kg		7.2	1	03/21/12 15:00	03/22/12 19:20	8001-35-2	
<b>Surrogates</b>								
Tetrachloro-m-xylene (S)	56 %		50-150	1	03/21/12 15:00	03/22/12 19:20	877-09-8	
Decachlorobiphenyl (S)	81 %		50-150	1	03/21/12 15:00	03/22/12 19:20	2051-24-3	
<b>Percent Moisture</b>								
Analytical Method: ASTM D2974-87								
Percent Moisture	<b>2.9 %</b>		0.10	1		03/21/12 09:09		



Pace Analytical Services, Inc.  
205 East Meadow Road - Suite A  
Eden, NC 27288  
(336)623-8921

Pace Analytical Services, Inc.  
2225 Riverside Dr.  
Asheville, NC 28804  
(828)254-7176

Pace Analytical Services, Inc.  
9800 Kincey Ave. Suite 100  
Huntersville, NC 28078  
(704)875-9092

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-6 031512 0.5-1.0' Lab ID: 92114401015 Collected: 03/15/12 12:20 Received: 03/16/12 09:30 Matrix: Solid  
(EXCESS)

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8081 GCS Pesticides</b>		Analytical Method: EPA 8081 Preparation Method: EPA 3546						
Aldrin	ND ug/kg		3630	1600	03/21/12 15:00	03/28/12 14:50	309-00-2	
alpha-BHC	ND ug/kg		3630	1600	03/21/12 15:00	03/28/12 14:50	319-84-6	
beta-BHC	ND ug/kg		3630	1600	03/21/12 15:00	03/28/12 14:50	319-85-7	
delta-BHC	ND ug/kg		3630	1600	03/21/12 15:00	03/28/12 14:50	319-86-8	
gamma-BHC (Lindane)	ND ug/kg		3630	1600	03/21/12 15:00	03/28/12 14:50	58-89-9	
Chlordane (Technical)	ND ug/kg		12700	1600	03/21/12 15:00	03/28/12 14:50	57-74-9	
4,4'-DDD	ND ug/kg		3630	1600	03/21/12 15:00	03/28/12 14:50	72-54-8	
4,4'-DDE	ND ug/kg		3630	1600	03/21/12 15:00	03/28/12 14:50	72-55-9	
4,4'-DDT	ND ug/kg		3630	1600	03/21/12 15:00	03/28/12 14:50	50-29-3	
Dieldrin	ND ug/kg		3630	1600	03/21/12 15:00	03/28/12 14:50	60-57-1	
Endosulfan I	ND ug/kg		3630	1600	03/21/12 15:00	03/28/12 14:50	959-98-8	
Endosulfan II	ND ug/kg		3630	1600	03/21/12 15:00	03/28/12 14:50	33213-65-9	
Endosulfan sulfate	ND ug/kg		3630	1600	03/21/12 15:00	03/28/12 14:50	1031-07-8	
Endrin	ND ug/kg		3630	1600	03/21/12 15:00	03/28/12 14:50	72-20-8	
Endrin aldehyde	ND ug/kg		3630	1600	03/21/12 15:00	03/28/12 14:50	7421-93-4	
Endrin ketone	ND ug/kg		3630	1600	03/21/12 15:00	03/28/12 14:50	53494-70-5	
Heptachlor	ND ug/kg		3630	1600	03/21/12 15:00	03/28/12 14:50	76-44-8	
Heptachlor epoxide	ND ug/kg		3630	1600	03/21/12 15:00	03/28/12 14:50	1024-57-3	
Methoxychlor	ND ug/kg		9070	1600	03/21/12 15:00	03/28/12 14:50	72-43-5	
Mirex	ND ug/kg		9070	1600	03/21/12 15:00	03/28/12 14:50	2385-85-5	
Toxaphene	ND ug/kg		12700	1600	03/21/12 15:00	03/28/12 14:50	8001-35-2	
<b>Surrogates</b>								
Tetrachloro-m-xylene (S)	0 %		50-150	1600	03/21/12 15:00	03/28/12 14:50	877-09-8	D3,S4
Decachlorobiphenyl (S)	0 %		50-150	1600	03/21/12 15:00	03/28/12 14:50	2051-24-3	S4
<b>Percent Moisture</b>								
Analytical Method: ASTM D2974-87								
Percent Moisture	11.8 %			0.10	1		03/21/12 09:10	

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-1 031312 GW	Lab ID: 92114401016	Collected: 03/15/12 12:57	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND ug/L		5.0	1	03/22/12 15:50	03/25/12 20:45	7440-38-2	
Barium	16.3 ug/L		5.0	1	03/22/12 15:50	03/25/12 20:45	7440-39-3	
Cadmium	ND ug/L		1.0	1	03/22/12 15:50	03/25/12 20:45	7440-43-9	
Chromium	ND ug/L		5.0	1	03/22/12 15:50	03/25/12 20:45	7440-47-3	
Lead	ND ug/L		5.0	1	03/22/12 15:50	03/25/12 20:45	7439-92-1	
Selenium	ND ug/L		10.0	1	03/22/12 15:50	03/25/12 20:45	7782-49-2	
Silver	ND ug/L		5.0	1	03/22/12 15:50	03/25/12 20:45	7440-22-4	
<b>7470 Mercury</b>	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND ug/L		0.20	1	03/27/12 09:50	03/27/12 14:35	7439-97-6	
<b>8270 MSSV PAH by SIM 3510</b>	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
Acenaphthene	ND ug/L		2.0	1	03/20/12 19:00	03/23/12 21:10	83-32-9	
Acenaphthylene	ND ug/L		1.5	1	03/20/12 19:00	03/23/12 21:10	208-96-8	
Anthracene	ND ug/L		0.050	1	03/20/12 19:00	03/23/12 21:10	120-12-7	
Benzo(a)anthracene	ND ug/L		0.10	1	03/20/12 19:00	03/23/12 21:10	56-55-3	
Benzo(a)pyrene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 21:10	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.30	1	03/20/12 19:00	03/23/12 21:10	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 21:10	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 21:10	207-08-9	
Chrysene	ND ug/L		0.10	1	03/20/12 19:00	03/23/12 21:10	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 21:10	53-70-3	
Fluoranthene	ND ug/L		0.30	1	03/20/12 19:00	03/23/12 21:10	206-44-0	
Fluorene	ND ug/L		0.31	1	03/20/12 19:00	03/23/12 21:10	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 21:10	193-39-5	
1-Methylnaphthalene	ND ug/L		2.0	1	03/20/12 19:00	03/23/12 21:10	90-12-0	
2-Methylnaphthalene	ND ug/L		2.0	1	03/20/12 19:00	03/23/12 21:10	91-57-6	
Naphthalene	ND ug/L		1.5	1	03/20/12 19:00	03/23/12 21:10	91-20-3	
Phenanthrene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 21:10	85-01-8	
Pyrene	ND ug/L		0.10	1	03/20/12 19:00	03/23/12 21:10	129-00-0	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	47 %		70-130	1	03/20/12 19:00	03/23/12 21:10	4165-60-0	S0
2-Fluorobiphenyl (S)	40 %		70-130	1	03/20/12 19:00	03/23/12 21:10	321-60-8	S0
Terphenyl-d14 (S)	66 %		70-130	1	03/20/12 19:00	03/23/12 21:10	1718-51-0	S0
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Acetone	ND ug/L		25.0	1			03/26/12 09:52	67-64-1
Benzene	ND ug/L		1.0	1			03/26/12 09:52	71-43-2
Bromobenzene	ND ug/L		1.0	1			03/26/12 09:52	108-86-1
Bromochloromethane	ND ug/L		1.0	1			03/26/12 09:52	74-97-5
Bromodichloromethane	ND ug/L		1.0	1			03/26/12 09:52	75-27-4
Bromoform	ND ug/L		1.0	1			03/26/12 09:52	75-25-2
Bromomethane	ND ug/L		5.0	1			03/26/12 09:52	74-83-9
2-Butanone (MEK)	ND ug/L		5.0	1			03/26/12 09:52	78-93-3
Carbon tetrachloride	ND ug/L		1.0	1			03/26/12 09:52	56-23-5
Chlorobenzene	ND ug/L		1.0	1			03/26/12 09:52	108-90-7

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## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-1 031312 GW	Lab ID: 92114401016	Collected: 03/15/12 12:57	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Chloroethane	ND ug/L		1.0	1		03/26/12 09:52	75-00-3	
Chloroform	ND ug/L		1.0	1		03/26/12 09:52	67-66-3	
Chloromethane	ND ug/L		1.0	1		03/26/12 09:52	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		03/26/12 09:52	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		03/26/12 09:52	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		3.0	1		03/26/12 09:52	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		03/26/12 09:52	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		03/26/12 09:52	106-93-4	
Dibromomethane	ND ug/L		1.0	1		03/26/12 09:52	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 09:52	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 09:52	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 09:52	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		03/26/12 09:52	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		03/26/12 09:52	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		03/26/12 09:52	107-06-2	
1,1-Dichloroethene	ND ug/L		1.0	1		03/26/12 09:52	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 09:52	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 09:52	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 09:52	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		03/26/12 09:52	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 09:52	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		03/26/12 09:52	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 09:52	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 09:52	10061-02-6	
Diisopropyl ether	ND ug/L		1.0	1		03/26/12 09:52	108-20-3	
Ethylbenzene	ND ug/L		1.0	1		03/26/12 09:52	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		1.0	1		03/26/12 09:52	87-68-3	
2-Hexanone	ND ug/L		5.0	1		03/26/12 09:52	591-78-6	
p-Isopropyltoluene	ND ug/L		1.0	1		03/26/12 09:52	99-87-6	
Methylene Chloride	ND ug/L		2.0	1		03/26/12 09:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	1		03/26/12 09:52	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		03/26/12 09:52	1634-04-4	
Naphthalene	ND ug/L		1.0	1		03/26/12 09:52	91-20-3	
Styrene	ND ug/L		1.0	1		03/26/12 09:52	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 09:52	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 09:52	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		03/26/12 09:52	127-18-4	
Toluene	ND ug/L		1.0	1		03/26/12 09:52	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		03/26/12 09:52	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		03/26/12 09:52	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		03/26/12 09:52	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		03/26/12 09:52	79-00-5	
Trichloroethene	ND ug/L		1.0	1		03/26/12 09:52	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		03/26/12 09:52	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	1		03/26/12 09:52	96-18-4	
Vinyl acetate	ND ug/L		2.0	1		03/26/12 09:52	108-05-4	
Vinyl chloride	ND ug/L		1.0	1		03/26/12 09:52	75-01-4	

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**Pace Analytical Services, Inc.**  
205 East Meadow Road - Suite A  
Eden, NC 27288  
(336)623-8921

**Pace Analytical Services, Inc.**  
2225 Riverside Dr.  
Asheville, NC 28804  
(828)254-7176

**Pace Analytical Services, Inc.**  
9800 Kincey Ave. Suite 100  
Huntersville, NC 28078  
(704)875-9092

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-1 031312 GW	Lab ID: 92114401016	Collected: 03/15/12 12:57	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
m&p-Xylene	ND	ug/L	2.0	1			179601-23-1	
o-Xylene	ND	ug/L	1.0	1			95-47-6	
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	103 %		70-130	1			460-00-4	
Dibromofluoromethane (S)	107 %		70-130	1			1868-53-7	
1,2-Dichloroethane-d4 (S)	102 %		70-130	1			17060-07-0	
Toluene-d8 (S)	102 %		70-130	1			2037-26-5	

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-5 031312 GW	Lab ID: 92114401017	Collected: 03/13/12 16:15	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND ug/L		5.0	1	03/22/12 15:50	03/25/12 20:48	7440-38-2	
Barium	<b>16.4</b> ug/L		5.0	1	03/22/12 15:50	03/25/12 20:48	7440-39-3	
Cadmium	ND ug/L		1.0	1	03/22/12 15:50	03/25/12 20:48	7440-43-9	
Chromium	ND ug/L		5.0	1	03/22/12 15:50	03/25/12 20:48	7440-47-3	
Lead	ND ug/L		5.0	1	03/22/12 15:50	03/25/12 20:48	7439-92-1	
Selenium	<b>37.1</b> ug/L		10.0	1	03/22/12 15:50	03/25/12 20:48	7782-49-2	
Silver	ND ug/L		5.0	1	03/22/12 15:50	03/25/12 20:48	7440-22-4	
<b>7470 Mercury</b>	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND ug/L		0.20	1	03/27/12 09:50	03/27/12 14:38	7439-97-6	
<b>8270 MSSV PAH by SIM 3510</b>	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
Acenaphthene	ND ug/L		2.0	1	03/20/12 19:00	03/23/12 18:08	83-32-9	
Acenaphthylene	ND ug/L		1.5	1	03/20/12 19:00	03/23/12 18:08	208-96-8	
Anthracene	ND ug/L		0.050	1	03/20/12 19:00	03/23/12 18:08	120-12-7	
Benzo(a)anthracene	ND ug/L		0.10	1	03/20/12 19:00	03/23/12 18:08	56-55-3	
Benzo(a)pyrene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 18:08	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.30	1	03/20/12 19:00	03/23/12 18:08	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 18:08	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 18:08	207-08-9	
Chrysene	ND ug/L		0.10	1	03/20/12 19:00	03/23/12 18:08	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 18:08	53-70-3	
Fluoranthene	ND ug/L		0.30	1	03/20/12 19:00	03/23/12 18:08	206-44-0	
Fluorene	ND ug/L		0.31	1	03/20/12 19:00	03/23/12 18:08	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 18:08	193-39-5	
1-Methylnaphthalene	ND ug/L		2.0	1	03/20/12 19:00	03/23/12 18:08	90-12-0	
2-Methylnaphthalene	ND ug/L		2.0	1	03/20/12 19:00	03/23/12 18:08	91-57-6	
Naphthalene	ND ug/L		1.5	1	03/20/12 19:00	03/23/12 18:08	91-20-3	
Phenanthrene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 18:08	85-01-8	
Pyrene	ND ug/L		0.10	1	03/20/12 19:00	03/23/12 18:08	129-00-0	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	51 %		70-130	1	03/20/12 19:00	03/23/12 18:08	4165-60-0	S0
2-Fluorobiphenyl (S)	40 %		70-130	1	03/20/12 19:00	03/23/12 18:08	321-60-8	S0
Terphenyl-d14 (S)	77 %		70-130	1	03/20/12 19:00	03/23/12 18:08	1718-51-0	
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Acetone	ND ug/L		25.0	1			03/26/12 10:09	67-64-1
Benzene	ND ug/L		1.0	1			03/26/12 10:09	71-43-2
Bromobenzene	ND ug/L		1.0	1			03/26/12 10:09	108-86-1
Bromochloromethane	ND ug/L		1.0	1			03/26/12 10:09	74-97-5
Bromodichloromethane	ND ug/L		1.0	1			03/26/12 10:09	75-27-4
Bromoform	ND ug/L		1.0	1			03/26/12 10:09	75-25-2
Bromomethane	ND ug/L		5.0	1			03/26/12 10:09	74-83-9
2-Butanone (MEK)	ND ug/L		5.0	1			03/26/12 10:09	78-93-3
Carbon tetrachloride	ND ug/L		1.0	1			03/26/12 10:09	56-23-5
Chlorobenzene	ND ug/L		1.0	1			03/26/12 10:09	108-90-7

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## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-5 031312 GW	Lab ID: 92114401017	Collected: 03/13/12 16:15	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Chloroethane	ND ug/L		1.0	1		03/26/12 10:09	75-00-3	
Chloroform	ND ug/L		1.0	1		03/26/12 10:09	67-66-3	
Chloromethane	ND ug/L		1.0	1		03/26/12 10:09	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		03/26/12 10:09	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		03/26/12 10:09	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		3.0	1		03/26/12 10:09	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		03/26/12 10:09	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		03/26/12 10:09	106-93-4	
Dibromomethane	ND ug/L		1.0	1		03/26/12 10:09	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 10:09	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 10:09	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 10:09	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		03/26/12 10:09	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		03/26/12 10:09	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		03/26/12 10:09	107-06-2	
1,1-Dichloroethene	ND ug/L		1.0	1		03/26/12 10:09	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 10:09	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 10:09	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 10:09	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		03/26/12 10:09	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 10:09	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		03/26/12 10:09	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 10:09	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 10:09	10061-02-6	
Diisopropyl ether	ND ug/L		1.0	1		03/26/12 10:09	108-20-3	
Ethylbenzene	ND ug/L		1.0	1		03/26/12 10:09	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		1.0	1		03/26/12 10:09	87-68-3	
2-Hexanone	ND ug/L		5.0	1		03/26/12 10:09	591-78-6	
p-Isopropyltoluene	ND ug/L		1.0	1		03/26/12 10:09	99-87-6	
Methylene Chloride	ND ug/L		2.0	1		03/26/12 10:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	1		03/26/12 10:09	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		03/26/12 10:09	1634-04-4	
Naphthalene	ND ug/L		1.0	1		03/26/12 10:09	91-20-3	
Styrene	ND ug/L		1.0	1		03/26/12 10:09	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 10:09	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 10:09	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		03/26/12 10:09	127-18-4	
Toluene	ND ug/L		1.0	1		03/26/12 10:09	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		03/26/12 10:09	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		03/26/12 10:09	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		03/26/12 10:09	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		03/26/12 10:09	79-00-5	
Trichloroethene	ND ug/L		1.0	1		03/26/12 10:09	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		03/26/12 10:09	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	1		03/26/12 10:09	96-18-4	
Vinyl acetate	ND ug/L		2.0	1		03/26/12 10:09	108-05-4	
Vinyl chloride	ND ug/L		1.0	1		03/26/12 10:09	75-01-4	

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**Pace Analytical Services, Inc.**  
205 East Meadow Road - Suite A  
Eden, NC 27288  
(336)623-8921

**Pace Analytical Services, Inc.**  
2225 Riverside Dr.  
Asheville, NC 28804  
(828)254-7176

**Pace Analytical Services, Inc.**  
9800 Kincey Ave. Suite 100  
Huntersville, NC 28078  
(704)875-9092

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-5 031312 GW	Lab ID: 92114401017	Collected: 03/13/12 16:15	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
m&p-Xylene	ND	ug/L	2.0	1		03/26/12 10:09	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/26/12 10:09	95-47-6	
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	104 %		70-130	1		03/26/12 10:09	460-00-4	
Dibromofluoromethane (S)	105 %		70-130	1		03/26/12 10:09	1868-53-7	
1,2-Dichloroethane-d4 (S)	101 %		70-130	1		03/26/12 10:09	17060-07-0	
Toluene-d8 (S)	101 %		70-130	1		03/26/12 10:09	2037-26-5	

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-4 031312 GW	Lab ID: 92114401018	Collected: 03/13/12 17:07	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND ug/L		5.0	1	03/22/12 15:50	03/25/12 20:52	7440-38-2	
Barium	54.3 ug/L		5.0	1	03/22/12 15:50	03/25/12 20:52	7440-39-3	
Cadmium	ND ug/L		1.0	1	03/22/12 15:50	03/25/12 20:52	7440-43-9	
Chromium	ND ug/L		5.0	1	03/22/12 15:50	03/25/12 20:52	7440-47-3	
Lead	ND ug/L		5.0	1	03/22/12 15:50	03/25/12 20:52	7439-92-1	
Selenium	18.8 ug/L		10.0	1	03/22/12 15:50	03/25/12 20:52	7782-49-2	
Silver	ND ug/L		5.0	1	03/22/12 15:50	03/25/12 20:52	7440-22-4	
<b>7470 Mercury</b>	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND ug/L		0.20	1	03/27/12 09:50	03/28/12 17:30	7439-97-6	
<b>8270 MSSV PAH by SIM 3510</b>	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
Acenaphthene	ND ug/L		2.0	1	03/20/12 19:00	03/23/12 18:28	83-32-9	
Acenaphthylene	ND ug/L		1.5	1	03/20/12 19:00	03/23/12 18:28	208-96-8	
Anthracene	ND ug/L		0.050	1	03/20/12 19:00	03/23/12 18:28	120-12-7	
Benzo(a)anthracene	ND ug/L		0.10	1	03/20/12 19:00	03/23/12 18:28	56-55-3	
Benzo(a)pyrene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 18:28	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.30	1	03/20/12 19:00	03/23/12 18:28	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 18:28	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 18:28	207-08-9	
Chrysene	ND ug/L		0.10	1	03/20/12 19:00	03/23/12 18:28	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 18:28	53-70-3	
Fluoranthene	ND ug/L		0.30	1	03/20/12 19:00	03/23/12 18:28	206-44-0	
Fluorene	ND ug/L		0.31	1	03/20/12 19:00	03/23/12 18:28	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 18:28	193-39-5	
1-Methylnaphthalene	ND ug/L		2.0	1	03/20/12 19:00	03/23/12 18:28	90-12-0	
2-Methylnaphthalene	ND ug/L		2.0	1	03/20/12 19:00	03/23/12 18:28	91-57-6	
Naphthalene	ND ug/L		1.5	1	03/20/12 19:00	03/23/12 18:28	91-20-3	
Phenanthrene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 18:28	85-01-8	
Pyrene	ND ug/L		0.10	1	03/20/12 19:00	03/23/12 18:28	129-00-0	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	48 %		70-130	1	03/20/12 19:00	03/23/12 18:28	4165-60-0	S0
2-Fluorobiphenyl (S)	40 %		70-130	1	03/20/12 19:00	03/23/12 18:28	321-60-8	S0
Terphenyl-d14 (S)	72 %		70-130	1	03/20/12 19:00	03/23/12 18:28	1718-51-0	
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Acetone	ND ug/L		25.0	1			03/26/12 10:24	67-64-1
Benzene	ND ug/L		1.0	1			03/26/12 10:24	71-43-2
Bromobenzene	ND ug/L		1.0	1			03/26/12 10:24	108-86-1
Bromochloromethane	ND ug/L		1.0	1			03/26/12 10:24	74-97-5
Bromodichloromethane	ND ug/L		1.0	1			03/26/12 10:24	75-27-4
Bromoform	ND ug/L		1.0	1			03/26/12 10:24	75-25-2
Bromomethane	ND ug/L		5.0	1			03/26/12 10:24	74-83-9
2-Butanone (MEK)	ND ug/L		5.0	1			03/26/12 10:24	78-93-3
Carbon tetrachloride	ND ug/L		1.0	1			03/26/12 10:24	56-23-5
Chlorobenzene	ND ug/L		1.0	1			03/26/12 10:24	108-90-7

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## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-4 031312 GW	Lab ID: 92114401018	Collected: 03/13/12 17:07	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Chloroethane	ND ug/L		1.0	1		03/26/12 10:24	75-00-3	
Chloroform	ND ug/L		1.0	1		03/26/12 10:24	67-66-3	
Chloromethane	ND ug/L		1.0	1		03/26/12 10:24	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		03/26/12 10:24	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		03/26/12 10:24	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		3.0	1		03/26/12 10:24	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		03/26/12 10:24	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		03/26/12 10:24	106-93-4	
Dibromomethane	ND ug/L		1.0	1		03/26/12 10:24	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 10:24	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 10:24	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 10:24	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		03/26/12 10:24	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		03/26/12 10:24	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		03/26/12 10:24	107-06-2	
1,1-Dichloroethene	ND ug/L		1.0	1		03/26/12 10:24	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 10:24	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 10:24	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 10:24	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		03/26/12 10:24	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 10:24	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		03/26/12 10:24	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 10:24	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 10:24	10061-02-6	
Diisopropyl ether	ND ug/L		1.0	1		03/26/12 10:24	108-20-3	
Ethylbenzene	ND ug/L		1.0	1		03/26/12 10:24	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		1.0	1		03/26/12 10:24	87-68-3	
2-Hexanone	ND ug/L		5.0	1		03/26/12 10:24	591-78-6	
p-Isopropyltoluene	ND ug/L		1.0	1		03/26/12 10:24	99-87-6	
Methylene Chloride	ND ug/L		2.0	1		03/26/12 10:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	1		03/26/12 10:24	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		03/26/12 10:24	1634-04-4	
Naphthalene	ND ug/L		1.0	1		03/26/12 10:24	91-20-3	
Styrene	ND ug/L		1.0	1		03/26/12 10:24	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 10:24	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 10:24	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		03/26/12 10:24	127-18-4	
Toluene	ND ug/L		1.0	1		03/26/12 10:24	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		03/26/12 10:24	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		03/26/12 10:24	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		03/26/12 10:24	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		03/26/12 10:24	79-00-5	
Trichloroethene	ND ug/L		1.0	1		03/26/12 10:24	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		03/26/12 10:24	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	1		03/26/12 10:24	96-18-4	
Vinyl acetate	ND ug/L		2.0	1		03/26/12 10:24	108-05-4	
Vinyl chloride	ND ug/L		1.0	1		03/26/12 10:24	75-01-4	

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**Pace Analytical Services, Inc.**  
205 East Meadow Road - Suite A  
Eden, NC 27288  
(336)623-8921

**Pace Analytical Services, Inc.**  
2225 Riverside Dr.  
Asheville, NC 28804  
(828)254-7176

**Pace Analytical Services, Inc.**  
9800 Kincey Ave. Suite 100  
Huntersville, NC 28078  
(704)875-9092

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-4 031312 GW	Lab ID: 92114401018	Collected: 03/13/12 17:07	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
m&p-Xylene	ND	ug/L	2.0	1			179601-23-1	
o-Xylene	ND	ug/L	1.0	1			95-47-6	
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	108 %		70-130	1			460-00-4	
Dibromofluoromethane (S)	108 %		70-130	1			1868-53-7	
1,2-Dichloroethane-d4 (S)	104 %		70-130	1			17060-07-0	
Toluene-d8 (S)	102 %		70-130	1			2037-26-5	

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-3 031312 GW	Lab ID: 92114401019	Collected: 03/13/12 17:57	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND ug/L		5.0	1	03/22/12 15:50	03/25/12 20:55	7440-38-2	
Barium	16.2 ug/L		5.0	1	03/22/12 15:50	03/25/12 20:55	7440-39-3	
Cadmium	ND ug/L		1.0	1	03/22/12 15:50	03/25/12 20:55	7440-43-9	
Chromium	ND ug/L		5.0	1	03/22/12 15:50	03/25/12 20:55	7440-47-3	
Lead	ND ug/L		5.0	1	03/22/12 15:50	03/25/12 20:55	7439-92-1	
Selenium	ND ug/L		10.0	1	03/22/12 15:50	03/25/12 20:55	7782-49-2	
Silver	ND ug/L		5.0	1	03/22/12 15:50	03/25/12 20:55	7440-22-4	
<b>7470 Mercury</b>	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND ug/L		0.20	1	03/27/12 09:50	03/28/12 17:32	7439-97-6	
<b>8270 MSSV PAH by SIM 3510</b>	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
Acenaphthene	ND ug/L		2.0	1	03/20/12 19:00	03/23/12 18:48	83-32-9	
Acenaphthylene	ND ug/L		1.5	1	03/20/12 19:00	03/23/12 18:48	208-96-8	
Anthracene	ND ug/L		0.050	1	03/20/12 19:00	03/23/12 18:48	120-12-7	
Benzo(a)anthracene	ND ug/L		0.10	1	03/20/12 19:00	03/23/12 18:48	56-55-3	
Benzo(a)pyrene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 18:48	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.30	1	03/20/12 19:00	03/23/12 18:48	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 18:48	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 18:48	207-08-9	
Chrysene	ND ug/L		0.10	1	03/20/12 19:00	03/23/12 18:48	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 18:48	53-70-3	
Fluoranthene	ND ug/L		0.30	1	03/20/12 19:00	03/23/12 18:48	206-44-0	
Fluorene	ND ug/L		0.31	1	03/20/12 19:00	03/23/12 18:48	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 18:48	193-39-5	
1-Methylnaphthalene	ND ug/L		2.0	1	03/20/12 19:00	03/23/12 18:48	90-12-0	
2-Methylnaphthalene	ND ug/L		2.0	1	03/20/12 19:00	03/23/12 18:48	91-57-6	
Naphthalene	ND ug/L		1.5	1	03/20/12 19:00	03/23/12 18:48	91-20-3	
Phenanthrene	ND ug/L		0.20	1	03/20/12 19:00	03/23/12 18:48	85-01-8	
Pyrene	ND ug/L		0.10	1	03/20/12 19:00	03/23/12 18:48	129-00-0	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	43 %		70-130	1	03/20/12 19:00	03/23/12 18:48	4165-60-0	S0
2-Fluorobiphenyl (S)	31 %		70-130	1	03/20/12 19:00	03/23/12 18:48	321-60-8	S0
Terphenyl-d14 (S)	63 %		70-130	1	03/20/12 19:00	03/23/12 18:48	1718-51-0	S0
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Acetone	ND ug/L		25.0	1			03/26/12 10:40	67-64-1
Benzene	ND ug/L		1.0	1			03/26/12 10:40	71-43-2
Bromobenzene	ND ug/L		1.0	1			03/26/12 10:40	108-86-1
Bromochloromethane	ND ug/L		1.0	1			03/26/12 10:40	74-97-5
Bromodichloromethane	ND ug/L		1.0	1			03/26/12 10:40	75-27-4
Bromoform	ND ug/L		1.0	1			03/26/12 10:40	75-25-2
Bromomethane	ND ug/L		5.0	1			03/26/12 10:40	74-83-9
2-Butanone (MEK)	ND ug/L		5.0	1			03/26/12 10:40	78-93-3
Carbon tetrachloride	ND ug/L		1.0	1			03/26/12 10:40	56-23-5
Chlorobenzene	ND ug/L		1.0	1			03/26/12 10:40	108-90-7

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-3 031312 GW	Lab ID: 92114401019	Collected: 03/13/12 17:57	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Chloroethane	ND ug/L		1.0	1		03/26/12 10:40	75-00-3	
Chloroform	ND ug/L		1.0	1		03/26/12 10:40	67-66-3	
Chloromethane	ND ug/L		1.0	1		03/26/12 10:40	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		03/26/12 10:40	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		03/26/12 10:40	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		3.0	1		03/26/12 10:40	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		03/26/12 10:40	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		03/26/12 10:40	106-93-4	
Dibromomethane	ND ug/L		1.0	1		03/26/12 10:40	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 10:40	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 10:40	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 10:40	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		03/26/12 10:40	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		03/26/12 10:40	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		03/26/12 10:40	107-06-2	
1,1-Dichloroethene	ND ug/L		1.0	1		03/26/12 10:40	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 10:40	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 10:40	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 10:40	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		03/26/12 10:40	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 10:40	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		03/26/12 10:40	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 10:40	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 10:40	10061-02-6	
Diisopropyl ether	ND ug/L		1.0	1		03/26/12 10:40	108-20-3	
Ethylbenzene	ND ug/L		1.0	1		03/26/12 10:40	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		1.0	1		03/26/12 10:40	87-68-3	
2-Hexanone	ND ug/L		5.0	1		03/26/12 10:40	591-78-6	
p-Isopropyltoluene	ND ug/L		1.0	1		03/26/12 10:40	99-87-6	
Methylene Chloride	ND ug/L		2.0	1		03/26/12 10:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	1		03/26/12 10:40	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		03/26/12 10:40	1634-04-4	
Naphthalene	ND ug/L		1.0	1		03/26/12 10:40	91-20-3	
Styrene	ND ug/L		1.0	1		03/26/12 10:40	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 10:40	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 10:40	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		03/26/12 10:40	127-18-4	
Toluene	ND ug/L		1.0	1		03/26/12 10:40	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		03/26/12 10:40	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		03/26/12 10:40	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		03/26/12 10:40	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		03/26/12 10:40	79-00-5	
Trichloroethene	ND ug/L		1.0	1		03/26/12 10:40	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		03/26/12 10:40	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	1		03/26/12 10:40	96-18-4	
Vinyl acetate	ND ug/L		2.0	1		03/26/12 10:40	108-05-4	
Vinyl chloride	ND ug/L		1.0	1		03/26/12 10:40	75-01-4	

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## REPORT OF LABORATORY ANALYSIS

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**Pace Analytical Services, Inc.**  
205 East Meadow Road - Suite A  
Eden, NC 27288  
(336)623-8921

**Pace Analytical Services, Inc.**  
2225 Riverside Dr.  
Asheville, NC 28804  
(828)254-7176

**Pace Analytical Services, Inc.**  
9800 Kincey Ave. Suite 100  
Huntersville, NC 28078  
(704)875-9092

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-3 031312 GW	Lab ID: 92114401019	Collected: 03/13/12 17:57	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
m&p-Xylene	ND	ug/L	2.0	1			179601-23-1	
o-Xylene	ND	ug/L	1.0	1			95-47-6	
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	103 %		70-130	1			460-00-4	
Dibromofluoromethane (S)	106 %		70-130	1			1868-53-7	
1,2-Dichloroethane-d4 (S)	105 %		70-130	1			17060-07-0	
Toluene-d8 (S)	99 %		70-130	1			2037-26-5	

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-2 031312 GW	Lab ID: 92114401020	Collected: 03/13/12 18:40	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND ug/L		5.0	1	03/22/12 15:50	03/25/12 20:58	7440-38-2	
Barium	<b>10.8</b> ug/L		5.0	1	03/22/12 15:50	03/25/12 20:58	7440-39-3	
Cadmium	ND ug/L		1.0	1	03/22/12 15:50	03/25/12 20:58	7440-43-9	
Chromium	ND ug/L		5.0	1	03/22/12 15:50	03/25/12 20:58	7440-47-3	
Lead	ND ug/L		5.0	1	03/22/12 15:50	03/25/12 20:58	7439-92-1	
Selenium	ND ug/L		10.0	1	03/22/12 15:50	03/25/12 20:58	7782-49-2	
Silver	ND ug/L		5.0	1	03/22/12 15:50	03/25/12 20:58	7440-22-4	
<b>7470 Mercury</b>	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND ug/L		0.20	1	03/27/12 09:50	03/28/12 17:35	7439-97-6	
<b>8270 MSSV PAH by SIM 3510</b>	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
Acenaphthene	ND ug/L		2.2	1	03/20/12 19:00	03/23/12 19:08	83-32-9	
Acenaphthylene	ND ug/L		1.7	1	03/20/12 19:00	03/23/12 19:08	208-96-8	
Anthracene	ND ug/L		0.056	1	03/20/12 19:00	03/23/12 19:08	120-12-7	
Benzo(a)anthracene	ND ug/L		0.11	1	03/20/12 19:00	03/23/12 19:08	56-55-3	
Benzo(a)pyrene	ND ug/L		0.22	1	03/20/12 19:00	03/23/12 19:08	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.33	1	03/20/12 19:00	03/23/12 19:08	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.22	1	03/20/12 19:00	03/23/12 19:08	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.22	1	03/20/12 19:00	03/23/12 19:08	207-08-9	
Chrysene	ND ug/L		0.11	1	03/20/12 19:00	03/23/12 19:08	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.22	1	03/20/12 19:00	03/23/12 19:08	53-70-3	
Fluoranthene	ND ug/L		0.33	1	03/20/12 19:00	03/23/12 19:08	206-44-0	
Fluorene	ND ug/L		0.34	1	03/20/12 19:00	03/23/12 19:08	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.22	1	03/20/12 19:00	03/23/12 19:08	193-39-5	
1-Methylnaphthalene	ND ug/L		2.2	1	03/20/12 19:00	03/23/12 19:08	90-12-0	
2-Methylnaphthalene	ND ug/L		2.2	1	03/20/12 19:00	03/23/12 19:08	91-57-6	
Naphthalene	ND ug/L		1.7	1	03/20/12 19:00	03/23/12 19:08	91-20-3	
Phenanthrene	ND ug/L		0.22	1	03/20/12 19:00	03/23/12 19:08	85-01-8	
Pyrene	ND ug/L		0.11	1	03/20/12 19:00	03/23/12 19:08	129-00-0	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	93 %		70-130	1	03/20/12 19:00	03/23/12 19:08	4165-60-0	
2-Fluorobiphenyl (S)	76 %		70-130	1	03/20/12 19:00	03/23/12 19:08	321-60-8	
Terphenyl-d14 (S)	95 %		70-130	1	03/20/12 19:00	03/23/12 19:08	1718-51-0	
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Acetone	ND ug/L		25.0	1		03/26/12 11:28	67-64-1	
Benzene	ND ug/L		1.0	1		03/26/12 11:28	71-43-2	
Bromobenzene	ND ug/L		1.0	1		03/26/12 11:28	108-86-1	
Bromochloromethane	ND ug/L		1.0	1		03/26/12 11:28	74-97-5	
Bromodichloromethane	ND ug/L		1.0	1		03/26/12 11:28	75-27-4	
Bromoform	ND ug/L		1.0	1		03/26/12 11:28	75-25-2	
Bromomethane	ND ug/L		5.0	1		03/26/12 11:28	74-83-9	
2-Butanone (MEK)	ND ug/L		5.0	1		03/26/12 11:28	78-93-3	
Carbon tetrachloride	ND ug/L		1.0	1		03/26/12 11:28	56-23-5	
Chlorobenzene	ND ug/L		1.0	1		03/26/12 11:28	108-90-7	

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-2 031312 GW	Lab ID: 92114401020	Collected: 03/13/12 18:40	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Chloroethane	ND ug/L		1.0	1		03/26/12 11:28	75-00-3	
Chloroform	ND ug/L		1.0	1		03/26/12 11:28	67-66-3	
Chloromethane	ND ug/L		1.0	1		03/26/12 11:28	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		03/26/12 11:28	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		03/26/12 11:28	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		3.0	1		03/26/12 11:28	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		03/26/12 11:28	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		03/26/12 11:28	106-93-4	
Dibromomethane	ND ug/L		1.0	1		03/26/12 11:28	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 11:28	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 11:28	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 11:28	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		03/26/12 11:28	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		03/26/12 11:28	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		03/26/12 11:28	107-06-2	
1,1-Dichloroethene	ND ug/L		1.0	1		03/26/12 11:28	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 11:28	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 11:28	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 11:28	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		03/26/12 11:28	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 11:28	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		03/26/12 11:28	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 11:28	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 11:28	10061-02-6	
Diisopropyl ether	ND ug/L		1.0	1		03/26/12 11:28	108-20-3	
Ethylbenzene	ND ug/L		1.0	1		03/26/12 11:28	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		1.0	1		03/26/12 11:28	87-68-3	
2-Hexanone	ND ug/L		5.0	1		03/26/12 11:28	591-78-6	
p-Isopropyltoluene	ND ug/L		1.0	1		03/26/12 11:28	99-87-6	
Methylene Chloride	ND ug/L		2.0	1		03/26/12 11:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	1		03/26/12 11:28	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		03/26/12 11:28	1634-04-4	
Naphthalene	ND ug/L		1.0	1		03/26/12 11:28	91-20-3	
Styrene	ND ug/L		1.0	1		03/26/12 11:28	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 11:28	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 11:28	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		03/26/12 11:28	127-18-4	
Toluene	ND ug/L		1.0	1		03/26/12 11:28	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		03/26/12 11:28	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		03/26/12 11:28	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		03/26/12 11:28	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		03/26/12 11:28	79-00-5	
Trichloroethene	ND ug/L		1.0	1		03/26/12 11:28	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		03/26/12 11:28	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	1		03/26/12 11:28	96-18-4	
Vinyl acetate	ND ug/L		2.0	1		03/26/12 11:28	108-05-4	
Vinyl chloride	ND ug/L		1.0	1		03/26/12 11:28	75-01-4	

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## REPORT OF LABORATORY ANALYSIS

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**Pace Analytical Services, Inc.**  
205 East Meadow Road - Suite A  
Eden, NC 27288  
(336)623-8921

**Pace Analytical Services, Inc.**  
2225 Riverside Dr.  
Asheville, NC 28804  
(828)254-7176

**Pace Analytical Services, Inc.**  
9800 Kincey Ave. Suite 100  
Huntersville, NC 28078  
(704)875-9092

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-2 031312 GW	Lab ID: 92114401020	Collected: 03/13/12 18:40	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
m&p-Xylene	ND	ug/L	2.0	1		03/26/12 11:28	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/26/12 11:28	95-47-6	
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	106 %		70-130	1		03/26/12 11:28	460-00-4	
Dibromofluoromethane (S)	104 %		70-130	1		03/26/12 11:28	1868-53-7	
1,2-Dichloroethane-d4 (S)	101 %		70-130	1		03/26/12 11:28	17060-07-0	
Toluene-d8 (S)	103 %		70-130	1		03/26/12 11:28	2037-26-5	

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: PW-5 031212	Lab ID: 92114401021	Collected: 03/12/12 18:03	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Acetone	ND ug/L		25.0	1		03/26/12 11:43	67-64-1	
Benzene	ND ug/L		1.0	1		03/26/12 11:43	71-43-2	
Bromobenzene	ND ug/L		1.0	1		03/26/12 11:43	108-86-1	
Bromochloromethane	ND ug/L		1.0	1		03/26/12 11:43	74-97-5	
Bromodichloromethane	ND ug/L		1.0	1		03/26/12 11:43	75-27-4	
Bromoform	ND ug/L		1.0	1		03/26/12 11:43	75-25-2	
Bromomethane	ND ug/L		5.0	1		03/26/12 11:43	74-83-9	
2-Butanone (MEK)	ND ug/L		5.0	1		03/26/12 11:43	78-93-3	
Carbon tetrachloride	ND ug/L		1.0	1		03/26/12 11:43	56-23-5	
Chlorobenzene	ND ug/L		1.0	1		03/26/12 11:43	108-90-7	
Chloroethane	ND ug/L		1.0	1		03/26/12 11:43	75-00-3	
Chloroform	ND ug/L		1.0	1		03/26/12 11:43	67-66-3	
Chloromethane	ND ug/L		1.0	1		03/26/12 11:43	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		03/26/12 11:43	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		03/26/12 11:43	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		3.0	1		03/26/12 11:43	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		03/26/12 11:43	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		03/26/12 11:43	106-93-4	
Dibromomethane	ND ug/L		1.0	1		03/26/12 11:43	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 11:43	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 11:43	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 11:43	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		03/26/12 11:43	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		03/26/12 11:43	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		03/26/12 11:43	107-06-2	
1,1-Dichloroethene	ND ug/L		1.0	1		03/26/12 11:43	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 11:43	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 11:43	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 11:43	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		03/26/12 11:43	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 11:43	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		03/26/12 11:43	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 11:43	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 11:43	10061-02-6	
Diisopropyl ether	ND ug/L		1.0	1		03/26/12 11:43	108-20-3	
Ethylbenzene	<b>4.2</b> ug/L		1.0	1		03/26/12 11:43	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		1.0	1		03/26/12 11:43	87-68-3	
2-Hexanone	ND ug/L		5.0	1		03/26/12 11:43	591-78-6	
p-Isopropyltoluene	ND ug/L		1.0	1		03/26/12 11:43	99-87-6	
Methylene Chloride	ND ug/L		2.0	1		03/26/12 11:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	1		03/26/12 11:43	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		03/26/12 11:43	1634-04-4	
Naphthalene	<b>6.8</b> ug/L		1.0	1		03/26/12 11:43	91-20-3	
Styrene	ND ug/L		1.0	1		03/26/12 11:43	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 11:43	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 11:43	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		03/26/12 11:43	127-18-4	

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## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: PW-5 031212	Lab ID: 92114401021	Collected: 03/12/12 18:03	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Toluene	ND	ug/L	1.0	1		03/26/12 11:43	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		03/26/12 11:43	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		03/26/12 11:43	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/26/12 11:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/26/12 11:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		03/26/12 11:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/26/12 11:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/26/12 11:43	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		03/26/12 11:43	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		03/26/12 11:43	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		03/26/12 11:43	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/26/12 11:43	95-47-6	
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	107 %		70-130	1		03/26/12 11:43	460-00-4	
Dibromofluoromethane (S)	106 %		70-130	1		03/26/12 11:43	1868-53-7	
1,2-Dichloroethane-d4 (S)	102 %		70-130	1		03/26/12 11:43	17060-07-0	
Toluene-d8 (S)	101 %		70-130	1		03/26/12 11:43	2037-26-5	

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-10 031412 GW	Lab ID: 92114401022	Collected: 03/14/12 15:13	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	9.6	ug/L	5.0	1	03/22/12 15:50	03/25/12 21:01	7440-38-2	
Barium	23.6	ug/L	5.0	1	03/22/12 15:50	03/25/12 21:01	7440-39-3	
Cadmium	1.3	ug/L	1.0	1	03/22/12 15:50	03/25/12 21:01	7440-43-9	
Chromium	ND	ug/L	5.0	1	03/22/12 15:50	03/25/12 21:01	7440-47-3	
Lead	ND	ug/L	5.0	1	03/22/12 15:50	03/25/12 21:01	7439-92-1	
Selenium	ND	ug/L	10.0	1	03/22/12 15:50	03/25/12 21:01	7782-49-2	
Silver	ND	ug/L	5.0	1	03/22/12 15:50	03/25/12 21:01	7440-22-4	
<b>7470 Mercury</b>	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	03/27/12 09:50	03/28/12 17:38	7439-97-6	
<b>8270 MSSV PAH by SIM 3510</b>	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	2.2	1	03/20/12 19:00	03/23/12 19:28	83-32-9	
Acenaphthylene	ND	ug/L	1.7	1	03/20/12 19:00	03/23/12 19:28	208-96-8	
Anthracene	ND	ug/L	0.056	1	03/20/12 19:00	03/23/12 19:28	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.11	1	03/20/12 19:00	03/23/12 19:28	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 19:28	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.33	1	03/20/12 19:00	03/23/12 19:28	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 19:28	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 19:28	207-08-9	
Chrysene	ND	ug/L	0.11	1	03/20/12 19:00	03/23/12 19:28	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 19:28	53-70-3	
Fluoranthene	ND	ug/L	0.33	1	03/20/12 19:00	03/23/12 19:28	206-44-0	
Fluorene	ND	ug/L	0.34	1	03/20/12 19:00	03/23/12 19:28	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 19:28	193-39-5	
1-Methylnaphthalene	ND	ug/L	2.2	1	03/20/12 19:00	03/23/12 19:28	90-12-0	
2-Methylnaphthalene	ND	ug/L	2.2	1	03/20/12 19:00	03/23/12 19:28	91-57-6	
Naphthalene	ND	ug/L	1.7	1	03/20/12 19:00	03/23/12 19:28	91-20-3	
Phenanthrene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 19:28	85-01-8	
Pyrene	ND	ug/L	0.11	1	03/20/12 19:00	03/23/12 19:28	129-00-0	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	44 %		70-130	1	03/20/12 19:00	03/23/12 19:28	4165-60-0	S0
2-Fluorobiphenyl (S)	35 %		70-130	1	03/20/12 19:00	03/23/12 19:28	321-60-8	S0
Terphenyl-d14 (S)	68 %		70-130	1	03/20/12 19:00	03/23/12 19:28	1718-51-0	S0
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1			03/26/12 11:59	67-64-1
Benzene	ND	ug/L	1.0	1			03/26/12 11:59	71-43-2
Bromobenzene	ND	ug/L	1.0	1			03/26/12 11:59	108-86-1
Bromochloromethane	ND	ug/L	1.0	1			03/26/12 11:59	74-97-5
Bromodichloromethane	ND	ug/L	1.0	1			03/26/12 11:59	75-27-4
Bromoform	ND	ug/L	1.0	1			03/26/12 11:59	75-25-2
Bromomethane	ND	ug/L	5.0	1			03/26/12 11:59	74-83-9
2-Butanone (MEK)	ND	ug/L	5.0	1			03/26/12 11:59	78-93-3
Carbon tetrachloride	ND	ug/L	1.0	1			03/26/12 11:59	56-23-5
Chlorobenzene	ND	ug/L	1.0	1			03/26/12 11:59	108-90-7

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## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-10 031412 GW	Lab ID: 92114401022	Collected: 03/14/12 15:13	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Chloroethane	ND ug/L		1.0	1		03/26/12 11:59	75-00-3	
Chloroform	ND ug/L		1.0	1		03/26/12 11:59	67-66-3	
Chloromethane	ND ug/L		1.0	1		03/26/12 11:59	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		03/26/12 11:59	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		03/26/12 11:59	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		3.0	1		03/26/12 11:59	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		03/26/12 11:59	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		03/26/12 11:59	106-93-4	
Dibromomethane	ND ug/L		1.0	1		03/26/12 11:59	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 11:59	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 11:59	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 11:59	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		03/26/12 11:59	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		03/26/12 11:59	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		03/26/12 11:59	107-06-2	
1,1-Dichloroethene	ND ug/L		1.0	1		03/26/12 11:59	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 11:59	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 11:59	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 11:59	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		03/26/12 11:59	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 11:59	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		03/26/12 11:59	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 11:59	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 11:59	10061-02-6	
Diisopropyl ether	ND ug/L		1.0	1		03/26/12 11:59	108-20-3	
Ethylbenzene	ND ug/L		1.0	1		03/26/12 11:59	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		1.0	1		03/26/12 11:59	87-68-3	
2-Hexanone	ND ug/L		5.0	1		03/26/12 11:59	591-78-6	
p-Isopropyltoluene	ND ug/L		1.0	1		03/26/12 11:59	99-87-6	
Methylene Chloride	ND ug/L		2.0	1		03/26/12 11:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	1		03/26/12 11:59	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		03/26/12 11:59	1634-04-4	
Naphthalene	ND ug/L		1.0	1		03/26/12 11:59	91-20-3	
Styrene	ND ug/L		1.0	1		03/26/12 11:59	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 11:59	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 11:59	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		03/26/12 11:59	127-18-4	
Toluene	ND ug/L		1.0	1		03/26/12 11:59	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		03/26/12 11:59	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		03/26/12 11:59	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		03/26/12 11:59	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		03/26/12 11:59	79-00-5	
Trichloroethene	ND ug/L		1.0	1		03/26/12 11:59	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		03/26/12 11:59	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	1		03/26/12 11:59	96-18-4	
Vinyl acetate	ND ug/L		2.0	1		03/26/12 11:59	108-05-4	
Vinyl chloride	ND ug/L		1.0	1		03/26/12 11:59	75-01-4	

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**Pace Analytical Services, Inc.**  
205 East Meadow Road - Suite A  
Eden, NC 27288  
(336)623-8921

**Pace Analytical Services, Inc.**  
2225 Riverside Dr.  
Asheville, NC 28804  
(828)254-7176

**Pace Analytical Services, Inc.**  
9800 Kincey Ave. Suite 100  
Huntersville, NC 28078  
(704)875-9092

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-10 031412 GW	Lab ID: 92114401022	Collected: 03/14/12 15:13	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
m&p-Xylene	ND	ug/L	2.0	1		03/26/12 11:59	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/26/12 11:59	95-47-6	
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	107 %		70-130	1		03/26/12 11:59	460-00-4	
Dibromofluoromethane (S)	105 %		70-130	1		03/26/12 11:59	1868-53-7	
1,2-Dichloroethane-d4 (S)	102 %		70-130	1		03/26/12 11:59	17060-07-0	
Toluene-d8 (S)	100 %		70-130	1		03/26/12 11:59	2037-26-5	

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-9 031412 GW	Lab ID: 92114401023	Collected: 03/14/12 16:00	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	5.8	ug/L	5.0	1	03/22/12 15:50	03/25/12 21:04	7440-38-2	
Barium	51.1	ug/L	5.0	1	03/22/12 15:50	03/25/12 21:04	7440-39-3	
Cadmium	10.1	ug/L	1.0	1	03/22/12 15:50	03/25/12 21:04	7440-43-9	
Chromium	ND	ug/L	5.0	1	03/22/12 15:50	03/25/12 21:04	7440-47-3	
Lead	ND	ug/L	5.0	1	03/22/12 15:50	03/25/12 21:04	7439-92-1	
Selenium	ND	ug/L	10.0	1	03/22/12 15:50	03/25/12 21:04	7782-49-2	
Silver	ND	ug/L	5.0	1	03/22/12 15:50	03/25/12 21:04	7440-22-4	
<b>7470 Mercury</b>	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	03/27/12 09:50	03/28/12 17:40	7439-97-6	
<b>8270 MSSV PAH by SIM 3510</b>	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	2.2	1	03/20/12 19:00	03/23/12 19:48	83-32-9	
Acenaphthylene	ND	ug/L	1.7	1	03/20/12 19:00	03/23/12 19:48	208-96-8	
Anthracene	ND	ug/L	0.056	1	03/20/12 19:00	03/23/12 19:48	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.11	1	03/20/12 19:00	03/23/12 19:48	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 19:48	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.33	1	03/20/12 19:00	03/23/12 19:48	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 19:48	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 19:48	207-08-9	
Chrysene	ND	ug/L	0.11	1	03/20/12 19:00	03/23/12 19:48	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 19:48	53-70-3	
Fluoranthene	ND	ug/L	0.33	1	03/20/12 19:00	03/23/12 19:48	206-44-0	
Fluorene	ND	ug/L	0.34	1	03/20/12 19:00	03/23/12 19:48	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 19:48	193-39-5	
1-Methylnaphthalene	ND	ug/L	2.2	1	03/20/12 19:00	03/23/12 19:48	90-12-0	
2-Methylnaphthalene	ND	ug/L	2.2	1	03/20/12 19:00	03/23/12 19:48	91-57-6	
Naphthalene	ND	ug/L	1.7	1	03/20/12 19:00	03/23/12 19:48	91-20-3	
Phenanthrene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 19:48	85-01-8	
Pyrene	ND	ug/L	0.11	1	03/20/12 19:00	03/23/12 19:48	129-00-0	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	55 %		70-130	1	03/20/12 19:00	03/23/12 19:48	4165-60-0	S0
2-Fluorobiphenyl (S)	43 %		70-130	1	03/20/12 19:00	03/23/12 19:48	321-60-8	S0
Terphenyl-d14 (S)	84 %		70-130	1	03/20/12 19:00	03/23/12 19:48	1718-51-0	
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1			03/26/12 12:15	67-64-1
Benzene	ND	ug/L	1.0	1			03/26/12 12:15	71-43-2
Bromobenzene	ND	ug/L	1.0	1			03/26/12 12:15	108-86-1
Bromochloromethane	ND	ug/L	1.0	1			03/26/12 12:15	74-97-5
Bromodichloromethane	ND	ug/L	1.0	1			03/26/12 12:15	75-27-4
Bromoform	ND	ug/L	1.0	1			03/26/12 12:15	75-25-2
Bromomethane	ND	ug/L	5.0	1			03/26/12 12:15	74-83-9
2-Butanone (MEK)	ND	ug/L	5.0	1			03/26/12 12:15	78-93-3
Carbon tetrachloride	ND	ug/L	1.0	1			03/26/12 12:15	56-23-5
Chlorobenzene	ND	ug/L	1.0	1			03/26/12 12:15	108-90-7

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## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-9 031412 GW	Lab ID: 92114401023	Collected: 03/14/12 16:00	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Chloroethane	ND ug/L		1.0	1		03/26/12 12:15	75-00-3	
Chloroform	ND ug/L		1.0	1		03/26/12 12:15	67-66-3	
Chloromethane	ND ug/L		1.0	1		03/26/12 12:15	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		03/26/12 12:15	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		03/26/12 12:15	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		3.0	1		03/26/12 12:15	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		03/26/12 12:15	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		03/26/12 12:15	106-93-4	
Dibromomethane	ND ug/L		1.0	1		03/26/12 12:15	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 12:15	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 12:15	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 12:15	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		03/26/12 12:15	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		03/26/12 12:15	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		03/26/12 12:15	107-06-2	
1,1-Dichloroethene	ND ug/L		1.0	1		03/26/12 12:15	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 12:15	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 12:15	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 12:15	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		03/26/12 12:15	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 12:15	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		03/26/12 12:15	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 12:15	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 12:15	10061-02-6	
Diisopropyl ether	ND ug/L		1.0	1		03/26/12 12:15	108-20-3	
Ethylbenzene	ND ug/L		1.0	1		03/26/12 12:15	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		1.0	1		03/26/12 12:15	87-68-3	
2-Hexanone	ND ug/L		5.0	1		03/26/12 12:15	591-78-6	
p-Isopropyltoluene	ND ug/L		1.0	1		03/26/12 12:15	99-87-6	
Methylene Chloride	ND ug/L		2.0	1		03/26/12 12:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	1		03/26/12 12:15	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		03/26/12 12:15	1634-04-4	
Naphthalene	ND ug/L		1.0	1		03/26/12 12:15	91-20-3	
Styrene	ND ug/L		1.0	1		03/26/12 12:15	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 12:15	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 12:15	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		03/26/12 12:15	127-18-4	
Toluene	ND ug/L		1.0	1		03/26/12 12:15	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		03/26/12 12:15	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		03/26/12 12:15	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		03/26/12 12:15	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		03/26/12 12:15	79-00-5	
Trichloroethene	ND ug/L		1.0	1		03/26/12 12:15	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		03/26/12 12:15	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	1		03/26/12 12:15	96-18-4	
Vinyl acetate	ND ug/L		2.0	1		03/26/12 12:15	108-05-4	
Vinyl chloride	ND ug/L		1.0	1		03/26/12 12:15	75-01-4	

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**Pace Analytical Services, Inc.**  
205 East Meadow Road - Suite A  
Eden, NC 27288  
(336)623-8921

**Pace Analytical Services, Inc.**  
2225 Riverside Dr.  
Asheville, NC 28804  
(828)254-7176

**Pace Analytical Services, Inc.**  
9800 Kincey Ave. Suite 100  
Huntersville, NC 28078  
(704)875-9092

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-9 031412 GW	Lab ID: 92114401023	Collected: 03/14/12 16:00	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
m&p-Xylene	ND	ug/L	2.0	1		03/26/12 12:15	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/26/12 12:15	95-47-6	
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	104 %		70-130	1		03/26/12 12:15	460-00-4	
Dibromofluoromethane (S)	106 %		70-130	1		03/26/12 12:15	1868-53-7	
1,2-Dichloroethane-d4 (S)	102 %		70-130	1		03/26/12 12:15	17060-07-0	
Toluene-d8 (S)	99 %		70-130	1		03/26/12 12:15	2037-26-5	

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-7 031412 GW	Lab ID: 92114401024	Collected: 03/14/12 16:39	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	298	ug/L	5.0	1	03/22/12 15:50	03/25/12 21:08	7440-38-2	
Barium	22.1	ug/L	5.0	1	03/22/12 15:50	03/25/12 21:08	7440-39-3	
Cadmium	3.7	ug/L	1.0	1	03/22/12 15:50	03/25/12 21:08	7440-43-9	
Chromium	ND	ug/L	5.0	1	03/22/12 15:50	03/25/12 21:08	7440-47-3	
Lead	ND	ug/L	5.0	1	03/22/12 15:50	03/25/12 21:08	7439-92-1	
Selenium	ND	ug/L	10.0	1	03/22/12 15:50	03/25/12 21:08	7782-49-2	
Silver	ND	ug/L	5.0	1	03/22/12 15:50	03/25/12 21:08	7440-22-4	
<b>7470 Mercury</b>	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	03/27/12 09:50	03/28/12 17:43	7439-97-6	
<b>8270 MSSV PAH by SIM 3510</b>	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	2.2	1	03/20/12 19:00	03/23/12 20:09	83-32-9	
Acenaphthylene	ND	ug/L	1.7	1	03/20/12 19:00	03/23/12 20:09	208-96-8	
Anthracene	ND	ug/L	0.056	1	03/20/12 19:00	03/23/12 20:09	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.11	1	03/20/12 19:00	03/23/12 20:09	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 20:09	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.33	1	03/20/12 19:00	03/23/12 20:09	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 20:09	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 20:09	207-08-9	
Chrysene	ND	ug/L	0.11	1	03/20/12 19:00	03/23/12 20:09	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 20:09	53-70-3	
Fluoranthene	ND	ug/L	0.33	1	03/20/12 19:00	03/23/12 20:09	206-44-0	
Fluorene	ND	ug/L	0.34	1	03/20/12 19:00	03/23/12 20:09	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 20:09	193-39-5	
1-Methylnaphthalene	ND	ug/L	2.2	1	03/20/12 19:00	03/23/12 20:09	90-12-0	
2-Methylnaphthalene	ND	ug/L	2.2	1	03/20/12 19:00	03/23/12 20:09	91-57-6	
Naphthalene	ND	ug/L	1.7	1	03/20/12 19:00	03/23/12 20:09	91-20-3	
Phenanthrene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 20:09	85-01-8	
Pyrene	ND	ug/L	0.11	1	03/20/12 19:00	03/23/12 20:09	129-00-0	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	50 %		70-130	1	03/20/12 19:00	03/23/12 20:09	4165-60-0	S0
2-Fluorobiphenyl (S)	38 %		70-130	1	03/20/12 19:00	03/23/12 20:09	321-60-8	S0
Terphenyl-d14 (S)	71 %		70-130	1	03/20/12 19:00	03/23/12 20:09	1718-51-0	S0
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1			67-64-1	
Benzene	ND	ug/L	1.0	1			71-43-2	
Bromobenzene	ND	ug/L	1.0	1			108-86-1	
Bromochloromethane	ND	ug/L	1.0	1			74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1			75-27-4	
Bromoform	ND	ug/L	1.0	1			75-25-2	
Bromomethane	ND	ug/L	5.0	1			74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1			78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1			56-23-5	
Chlorobenzene	ND	ug/L	1.0	1			108-90-7	

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## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-7 031412 GW	Lab ID: 92114401024	Collected: 03/14/12 16:39	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Chloroethane	ND ug/L		1.0	1		03/26/12 12:30	75-00-3	
Chloroform	ND ug/L		1.0	1		03/26/12 12:30	67-66-3	
Chloromethane	ND ug/L		1.0	1		03/26/12 12:30	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		03/26/12 12:30	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		03/26/12 12:30	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		3.0	1		03/26/12 12:30	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		03/26/12 12:30	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		03/26/12 12:30	106-93-4	
Dibromomethane	ND ug/L		1.0	1		03/26/12 12:30	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 12:30	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 12:30	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 12:30	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		03/26/12 12:30	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		03/26/12 12:30	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		03/26/12 12:30	107-06-2	
1,1-Dichloroethene	ND ug/L		1.0	1		03/26/12 12:30	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 12:30	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 12:30	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 12:30	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		03/26/12 12:30	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 12:30	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		03/26/12 12:30	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 12:30	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 12:30	10061-02-6	
Diisopropyl ether	ND ug/L		1.0	1		03/26/12 12:30	108-20-3	
Ethylbenzene	ND ug/L		1.0	1		03/26/12 12:30	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		1.0	1		03/26/12 12:30	87-68-3	
2-Hexanone	ND ug/L		5.0	1		03/26/12 12:30	591-78-6	
p-Isopropyltoluene	ND ug/L		1.0	1		03/26/12 12:30	99-87-6	
Methylene Chloride	ND ug/L		2.0	1		03/26/12 12:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	1		03/26/12 12:30	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		03/26/12 12:30	1634-04-4	
Naphthalene	ND ug/L		1.0	1		03/26/12 12:30	91-20-3	
Styrene	ND ug/L		1.0	1		03/26/12 12:30	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 12:30	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 12:30	79-34-5	
Tetrachloroethene	7.9 ug/L		1.0	1		03/26/12 12:30	127-18-4	
Toluene	ND ug/L		1.0	1		03/26/12 12:30	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		03/26/12 12:30	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		03/26/12 12:30	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		03/26/12 12:30	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		03/26/12 12:30	79-00-5	
Trichloroethene	1.4 ug/L		1.0	1		03/26/12 12:30	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		03/26/12 12:30	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	1		03/26/12 12:30	96-18-4	
Vinyl acetate	ND ug/L		2.0	1		03/26/12 12:30	108-05-4	
Vinyl chloride	ND ug/L		1.0	1		03/26/12 12:30	75-01-4	

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## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-7 031412 GW	Lab ID: 92114401024	Collected: 03/14/12 16:39	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
m&p-Xylene	ND	ug/L	2.0	1			03/26/12 12:30	179601-23-1
o-Xylene	ND	ug/L	1.0	1			03/26/12 12:30	95-47-6
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	104 %		70-130	1			03/26/12 12:30	460-00-4
Dibromofluoromethane (S)	109 %		70-130	1			03/26/12 12:30	1868-53-7
1,2-Dichloroethane-d4 (S)	102 %		70-130	1			03/26/12 12:30	17060-07-0
Toluene-d8 (S)	99 %		70-130	1			03/26/12 12:30	2037-26-5

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-8 031412 GW	Lab ID: 92114401025	Collected: 03/14/12 17:29	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	39.6	ug/L	5.0	1	03/22/12 15:50	03/25/12 21:21	7440-38-2	
Barium	20.1	ug/L	5.0	1	03/22/12 15:50	03/25/12 21:21	7440-39-3	
Cadmium	1.1	ug/L	1.0	1	03/22/12 15:50	03/25/12 21:21	7440-43-9	
Chromium	6.6	ug/L	5.0	1	03/22/12 15:50	03/25/12 21:21	7440-47-3	
Lead	ND ug/L		5.0	1	03/22/12 15:50	03/25/12 21:21	7439-92-1	
Selenium	ND ug/L		10.0	1	03/22/12 15:50	03/25/12 21:21	7782-49-2	
Silver	ND ug/L		5.0	1	03/22/12 15:50	03/25/12 21:21	7440-22-4	
<b>7470 Mercury</b>	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND ug/L		0.20	1	03/27/12 09:50	03/28/12 17:46	7439-97-6	
<b>8270 MSSV PAH by SIM 3510</b>	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
Acenaphthene	ND ug/L		2.2	1	03/20/12 19:00	03/23/12 20:29	83-32-9	
Acenaphthylene	ND ug/L		1.7	1	03/20/12 19:00	03/23/12 20:29	208-96-8	
Anthracene	ND ug/L		0.056	1	03/20/12 19:00	03/23/12 20:29	120-12-7	
Benzo(a)anthracene	ND ug/L		0.11	1	03/20/12 19:00	03/23/12 20:29	56-55-3	
Benzo(a)pyrene	ND ug/L		0.22	1	03/20/12 19:00	03/23/12 20:29	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.33	1	03/20/12 19:00	03/23/12 20:29	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.22	1	03/20/12 19:00	03/23/12 20:29	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.22	1	03/20/12 19:00	03/23/12 20:29	207-08-9	
Chrysene	ND ug/L		0.11	1	03/20/12 19:00	03/23/12 20:29	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.22	1	03/20/12 19:00	03/23/12 20:29	53-70-3	
Fluoranthene	ND ug/L		0.33	1	03/20/12 19:00	03/23/12 20:29	206-44-0	
Fluorene	ND ug/L		0.34	1	03/20/12 19:00	03/23/12 20:29	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.22	1	03/20/12 19:00	03/23/12 20:29	193-39-5	
1-Methylnaphthalene	ND ug/L		2.2	1	03/20/12 19:00	03/23/12 20:29	90-12-0	
2-Methylnaphthalene	ND ug/L		2.2	1	03/20/12 19:00	03/23/12 20:29	91-57-6	
Naphthalene	ND ug/L		1.7	1	03/20/12 19:00	03/23/12 20:29	91-20-3	
Phenanthrene	ND ug/L		0.22	1	03/20/12 19:00	03/23/12 20:29	85-01-8	
Pyrene	ND ug/L		0.11	1	03/20/12 19:00	03/23/12 20:29	129-00-0	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	71 %		70-130	1	03/20/12 19:00	03/23/12 20:29	4165-60-0	
2-Fluorobiphenyl (S)	59 %		70-130	1	03/20/12 19:00	03/23/12 20:29	321-60-8	S0
Terphenyl-d14 (S)	100 %		70-130	1	03/20/12 19:00	03/23/12 20:29	1718-51-0	
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Acetone	ND ug/L		25.0	1		03/26/12 12:46	67-64-1	
Benzene	ND ug/L		1.0	1		03/26/12 12:46	71-43-2	
Bromobenzene	ND ug/L		1.0	1		03/26/12 12:46	108-86-1	
Bromochloromethane	ND ug/L		1.0	1		03/26/12 12:46	74-97-5	
Bromodichloromethane	ND ug/L		1.0	1		03/26/12 12:46	75-27-4	
Bromoform	ND ug/L		1.0	1		03/26/12 12:46	75-25-2	
Bromomethane	ND ug/L		5.0	1		03/26/12 12:46	74-83-9	
2-Butanone (MEK)	ND ug/L		5.0	1		03/26/12 12:46	78-93-3	
Carbon tetrachloride	ND ug/L		1.0	1		03/26/12 12:46	56-23-5	
Chlorobenzene	ND ug/L		1.0	1		03/26/12 12:46	108-90-7	

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## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-8 031412 GW	Lab ID: 92114401025	Collected: 03/14/12 17:29	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Chloroethane	ND ug/L		1.0	1		03/26/12 12:46	75-00-3	
Chloroform	ND ug/L		1.0	1		03/26/12 12:46	67-66-3	
Chloromethane	ND ug/L		1.0	1		03/26/12 12:46	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		03/26/12 12:46	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		03/26/12 12:46	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		3.0	1		03/26/12 12:46	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		03/26/12 12:46	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		03/26/12 12:46	106-93-4	
Dibromomethane	ND ug/L		1.0	1		03/26/12 12:46	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 12:46	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 12:46	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 12:46	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		03/26/12 12:46	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		03/26/12 12:46	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		03/26/12 12:46	107-06-2	
1,1-Dichloroethene	ND ug/L		1.0	1		03/26/12 12:46	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 12:46	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 12:46	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 12:46	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		03/26/12 12:46	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 12:46	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		03/26/12 12:46	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 12:46	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 12:46	10061-02-6	
Diisopropyl ether	ND ug/L		1.0	1		03/26/12 12:46	108-20-3	
Ethylbenzene	ND ug/L		1.0	1		03/26/12 12:46	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		1.0	1		03/26/12 12:46	87-68-3	
2-Hexanone	ND ug/L		5.0	1		03/26/12 12:46	591-78-6	
p-Isopropyltoluene	ND ug/L		1.0	1		03/26/12 12:46	99-87-6	
Methylene Chloride	ND ug/L		2.0	1		03/26/12 12:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	1		03/26/12 12:46	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		03/26/12 12:46	1634-04-4	
Naphthalene	ND ug/L		1.0	1		03/26/12 12:46	91-20-3	
Styrene	ND ug/L		1.0	1		03/26/12 12:46	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 12:46	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 12:46	79-34-5	
Tetrachloroethene	4.8 ug/L		1.0	1		03/26/12 12:46	127-18-4	
Toluene	ND ug/L		1.0	1		03/26/12 12:46	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		03/26/12 12:46	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		03/26/12 12:46	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		03/26/12 12:46	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		03/26/12 12:46	79-00-5	
Trichloroethene	1.4 ug/L		1.0	1		03/26/12 12:46	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		03/26/12 12:46	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	1		03/26/12 12:46	96-18-4	
Vinyl acetate	ND ug/L		2.0	1		03/26/12 12:46	108-05-4	
Vinyl chloride	ND ug/L		1.0	1		03/26/12 12:46	75-01-4	

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## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-8 031412 GW	Lab ID: 92114401025	Collected: 03/14/12 17:29	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
m&p-Xylene	ND	ug/L	2.0	1		03/26/12 12:46	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/26/12 12:46	95-47-6	
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	106 %		70-130	1		03/26/12 12:46	460-00-4	
Dibromofluoromethane (S)	105 %		70-130	1		03/26/12 12:46	1868-53-7	
1,2-Dichloroethane-d4 (S)	99 %		70-130	1		03/26/12 12:46	17060-07-0	
Toluene-d8 (S)	101 %		70-130	1		03/26/12 12:46	2037-26-5	

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-6 031412 GW	Lab ID: 92114401026	Collected: 03/14/12 18:08	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	495	ug/L	5.0	1	03/22/12 15:50	03/25/12 21:25	7440-38-2	
Barium	ND	ug/L	5.0	1	03/22/12 15:50	03/25/12 21:25	7440-39-3	
Cadmium	2.6	ug/L	1.0	1	03/22/12 15:50	03/25/12 21:25	7440-43-9	
Chromium	ND	ug/L	5.0	1	03/22/12 15:50	03/25/12 21:25	7440-47-3	
Lead	ND	ug/L	5.0	1	03/22/12 15:50	03/25/12 21:25	7439-92-1	
Selenium	ND	ug/L	10.0	1	03/22/12 15:50	03/25/12 21:25	7782-49-2	
Silver	ND	ug/L	5.0	1	03/22/12 15:50	03/25/12 21:25	7440-22-4	
<b>7470 Mercury</b>	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	03/27/12 09:50	03/28/12 17:48	7439-97-6	
<b>8270 MSSV PAH by SIM 3510</b>	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	2.2	1	03/20/12 19:00	03/23/12 20:49	83-32-9	
Acenaphthylene	ND	ug/L	1.7	1	03/20/12 19:00	03/23/12 20:49	208-96-8	
Anthracene	ND	ug/L	0.056	1	03/20/12 19:00	03/23/12 20:49	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.11	1	03/20/12 19:00	03/23/12 20:49	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 20:49	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.33	1	03/20/12 19:00	03/23/12 20:49	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 20:49	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 20:49	207-08-9	
Chrysene	ND	ug/L	0.11	1	03/20/12 19:00	03/23/12 20:49	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 20:49	53-70-3	
Fluoranthene	ND	ug/L	0.33	1	03/20/12 19:00	03/23/12 20:49	206-44-0	
Fluorene	ND	ug/L	0.34	1	03/20/12 19:00	03/23/12 20:49	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 20:49	193-39-5	
1-Methylnaphthalene	ND	ug/L	2.2	1	03/20/12 19:00	03/23/12 20:49	90-12-0	
2-Methylnaphthalene	ND	ug/L	2.2	1	03/20/12 19:00	03/23/12 20:49	91-57-6	
Naphthalene	ND	ug/L	1.7	1	03/20/12 19:00	03/23/12 20:49	91-20-3	
Phenanthrene	ND	ug/L	0.22	1	03/20/12 19:00	03/23/12 20:49	85-01-8	
Pyrene	ND	ug/L	0.11	1	03/20/12 19:00	03/23/12 20:49	129-00-0	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	39 %		70-130	1	03/20/12 19:00	03/23/12 20:49	4165-60-0	S0
2-Fluorobiphenyl (S)	33 %		70-130	1	03/20/12 19:00	03/23/12 20:49	321-60-8	S0
Terphenyl-d14 (S)	59 %		70-130	1	03/20/12 19:00	03/23/12 20:49	1718-51-0	S0
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1			67-64-1	
Benzene	ND	ug/L	1.0	1			71-43-2	
Bromobenzene	ND	ug/L	1.0	1			108-86-1	
Bromochloromethane	ND	ug/L	1.0	1			74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1			75-27-4	
Bromoform	ND	ug/L	1.0	1			75-25-2	
Bromomethane	ND	ug/L	5.0	1			74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1			78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1			56-23-5	
Chlorobenzene	ND	ug/L	1.0	1			108-90-7	

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## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-6 031412 GW	Lab ID: 92114401026	Collected: 03/14/12 18:08	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Chloroethane	ND ug/L		1.0	1		03/26/12 13:02	75-00-3	
Chloroform	ND ug/L		1.0	1		03/26/12 13:02	67-66-3	
Chloromethane	ND ug/L		1.0	1		03/26/12 13:02	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		03/26/12 13:02	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		03/26/12 13:02	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		3.0	1		03/26/12 13:02	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		03/26/12 13:02	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		03/26/12 13:02	106-93-4	
Dibromomethane	ND ug/L		1.0	1		03/26/12 13:02	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 13:02	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 13:02	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 13:02	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		03/26/12 13:02	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		03/26/12 13:02	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		03/26/12 13:02	107-06-2	
1,1-Dichloroethene	ND ug/L		1.0	1		03/26/12 13:02	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 13:02	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 13:02	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 13:02	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		03/26/12 13:02	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 13:02	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		03/26/12 13:02	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 13:02	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 13:02	10061-02-6	
Diisopropyl ether	ND ug/L		1.0	1		03/26/12 13:02	108-20-3	
Ethylbenzene	ND ug/L		1.0	1		03/26/12 13:02	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		1.0	1		03/26/12 13:02	87-68-3	
2-Hexanone	ND ug/L		5.0	1		03/26/12 13:02	591-78-6	
p-Isopropyltoluene	ND ug/L		1.0	1		03/26/12 13:02	99-87-6	
Methylene Chloride	ND ug/L		2.0	1		03/26/12 13:02	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	1		03/26/12 13:02	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		03/26/12 13:02	1634-04-4	
Naphthalene	ND ug/L		1.0	1		03/26/12 13:02	91-20-3	
Styrene	ND ug/L		1.0	1		03/26/12 13:02	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 13:02	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 13:02	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		03/26/12 13:02	127-18-4	
Toluene	ND ug/L		1.0	1		03/26/12 13:02	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		03/26/12 13:02	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		03/26/12 13:02	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		03/26/12 13:02	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		03/26/12 13:02	79-00-5	
Trichloroethene	ND ug/L		1.0	1		03/26/12 13:02	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		03/26/12 13:02	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	1		03/26/12 13:02	96-18-4	
Vinyl acetate	ND ug/L		2.0	1		03/26/12 13:02	108-05-4	
Vinyl chloride	ND ug/L		1.0	1		03/26/12 13:02	75-01-4	

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**Pace Analytical Services, Inc.**  
205 East Meadow Road - Suite A  
Eden, NC 27288  
(336)623-8921

**Pace Analytical Services, Inc.**  
2225 Riverside Dr.  
Asheville, NC 28804  
(828)254-7176

**Pace Analytical Services, Inc.**  
9800 Kincey Ave. Suite 100  
Huntersville, NC 28078  
(704)875-9092

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: GP-6 031412 GW	Lab ID: 92114401026	Collected: 03/14/12 18:08	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
m&p-Xylene	ND	ug/L	2.0	1			179601-23-1	
o-Xylene	ND	ug/L	1.0	1			95-47-6	
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	105 %		70-130	1			460-00-4	
Dibromofluoromethane (S)	107 %		70-130	1			1868-53-7	
1,2-Dichloroethane-d4 (S)	105 %		70-130	1			17060-07-0	
Toluene-d8 (S)	101 %		70-130	1			2037-26-5	

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: MW-5 031512	Lab ID: 92114401027	Collected: 03/15/12 10:43	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Acetone	ND ug/L		25.0	1		03/26/12 13:18	67-64-1	
Benzene	ND ug/L		1.0	1		03/26/12 13:18	71-43-2	
Bromobenzene	ND ug/L		1.0	1		03/26/12 13:18	108-86-1	
Bromoform	ND ug/L		1.0	1		03/26/12 13:18	74-97-5	
Bromochloromethane	ND ug/L		1.0	1		03/26/12 13:18	75-27-4	
Bromodichloromethane	ND ug/L		1.0	1		03/26/12 13:18	75-25-2	
Bromomethane	ND ug/L		5.0	1		03/26/12 13:18	74-83-9	
2-Butanone (MEK)	ND ug/L		5.0	1		03/26/12 13:18	78-93-3	
Carbon tetrachloride	ND ug/L		1.0	1		03/26/12 13:18	56-23-5	
Chlorobenzene	ND ug/L		1.0	1		03/26/12 13:18	108-90-7	
Chloroethane	ND ug/L		1.0	1		03/26/12 13:18	75-00-3	
Chloroform	ND ug/L		1.0	1		03/26/12 13:18	67-66-3	
Chloromethane	ND ug/L		1.0	1		03/26/12 13:18	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		03/26/12 13:18	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		03/26/12 13:18	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		3.0	1		03/26/12 13:18	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		03/26/12 13:18	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		03/26/12 13:18	106-93-4	
Dibromomethane	ND ug/L		1.0	1		03/26/12 13:18	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 13:18	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 13:18	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1.0	1		03/26/12 13:18	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		03/26/12 13:18	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		03/26/12 13:18	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		03/26/12 13:18	107-06-2	
1,1-Dichloroethene	ND ug/L		1.0	1		03/26/12 13:18	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 13:18	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		03/26/12 13:18	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 13:18	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		03/26/12 13:18	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		03/26/12 13:18	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		03/26/12 13:18	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 13:18	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		03/26/12 13:18	10061-02-6	
Diisopropyl ether	ND ug/L		1.0	1		03/26/12 13:18	108-20-3	
Ethylbenzene	ND ug/L		1.0	1		03/26/12 13:18	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		1.0	1		03/26/12 13:18	87-68-3	
2-Hexanone	ND ug/L		5.0	1		03/26/12 13:18	591-78-6	
p-Isopropyltoluene	ND ug/L		1.0	1		03/26/12 13:18	99-87-6	
Methylene Chloride	ND ug/L		2.0	1		03/26/12 13:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	1		03/26/12 13:18	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		03/26/12 13:18	1634-04-4	
Naphthalene	ND ug/L		1.0	1		03/26/12 13:18	91-20-3	
Styrene	ND ug/L		1.0	1		03/26/12 13:18	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 13:18	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		03/26/12 13:18	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		03/26/12 13:18	127-18-4	

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## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: MW-5 031512	Lab ID: 92114401027	Collected: 03/15/12 10:43	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Toluene	ND	ug/L	1.0	1		03/26/12 13:18	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		03/26/12 13:18	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		03/26/12 13:18	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/26/12 13:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/26/12 13:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		03/26/12 13:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/26/12 13:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/26/12 13:18	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		03/26/12 13:18	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		03/26/12 13:18	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		03/26/12 13:18	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/26/12 13:18	95-47-6	
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	104 %		70-130	1		03/26/12 13:18	460-00-4	
Dibromofluoromethane (S)	106 %		70-130	1		03/26/12 13:18	1868-53-7	
1,2-Dichloroethane-d4 (S)	103 %		70-130	1		03/26/12 13:18	17060-07-0	
Toluene-d8 (S)	101 %		70-130	1		03/26/12 13:18	2037-26-5	

## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: MW-1 031512	Lab ID: 92114401028	Collected: 03/15/12 11:41	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>		Analytical Method: EPA 8260						
Acetone	<b>28.9</b> ug/L		25.0	1		03/27/12 17:33	67-64-1	
Benzene	ND ug/L		1.0	1		03/27/12 17:33	71-43-2	
Bromobenzene	ND ug/L		1.0	1		03/27/12 17:33	108-86-1	
Bromochloromethane	ND ug/L		1.0	1		03/27/12 17:33	74-97-5	
Bromodichloromethane	ND ug/L		1.0	1		03/27/12 17:33	75-27-4	
Bromoform	ND ug/L		1.0	1		03/27/12 17:33	75-25-2	
Bromomethane	ND ug/L		5.0	1		03/27/12 17:33	74-83-9	
2-Butanone (MEK)	ND ug/L		5.0	1		03/27/12 17:33	78-93-3	
Carbon tetrachloride	ND ug/L		1.0	1		03/27/12 17:33	56-23-5	
Chlorobenzene	ND ug/L		1.0	1		03/27/12 17:33	108-90-7	
Chloroethane	ND ug/L		1.0	1		03/27/12 17:33	75-00-3	
Chloroform	ND ug/L		1.0	1		03/27/12 17:33	67-66-3	
Chloromethane	ND ug/L		1.0	1		03/27/12 17:33	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		03/27/12 17:33	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		03/27/12 17:33	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		3.0	1		03/27/12 17:33	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		03/27/12 17:33	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		03/27/12 17:33	106-93-4	
Dibromomethane	ND ug/L		1.0	1		03/27/12 17:33	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		03/27/12 17:33	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		03/27/12 17:33	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1.0	1		03/27/12 17:33	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		03/27/12 17:33	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		03/27/12 17:33	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		03/27/12 17:33	107-06-2	
1,1-Dichloroethene	ND ug/L		1.0	1		03/27/12 17:33	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		03/27/12 17:33	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		03/27/12 17:33	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	1		03/27/12 17:33	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		03/27/12 17:33	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		03/27/12 17:33	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		03/27/12 17:33	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		1.0	1		03/27/12 17:33	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	1		03/27/12 17:33	10061-02-6	
Diisopropyl ether	ND ug/L		1.0	1		03/27/12 17:33	108-20-3	
Ethylbenzene	<b>47.0</b> ug/L		1.0	1		03/27/12 17:33	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		1.0	1		03/27/12 17:33	87-68-3	
2-Hexanone	ND ug/L		5.0	1		03/27/12 17:33	591-78-6	
p-Isopropyltoluene	ND ug/L		1.0	1		03/27/12 17:33	99-87-6	
Methylene Chloride	ND ug/L		2.0	1		03/27/12 17:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		5.0	1		03/27/12 17:33	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		03/27/12 17:33	1634-04-4	
Naphthalene	<b>26.1</b> ug/L		1.0	1		03/27/12 17:33	91-20-3	
Styrene	ND ug/L		1.0	1		03/27/12 17:33	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		03/27/12 17:33	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		03/27/12 17:33	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		03/27/12 17:33	127-18-4	

Date: 03/30/2012 03:06 PM

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Sample: MW-1 031512	Lab ID: 92114401028	Collected: 03/15/12 11:41	Received: 03/16/12 09:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Low Level SC</b>	Analytical Method: EPA 8260							
Toluene	ND	ug/L	1.0	1		03/27/12 17:33	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		03/27/12 17:33	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		03/27/12 17:33	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/27/12 17:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/27/12 17:33	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		03/27/12 17:33	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/27/12 17:33	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/27/12 17:33	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		03/27/12 17:33	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		03/27/12 17:33	75-01-4	
m&p-Xylene	<b>2.2</b>	ug/L	2.0	1		03/27/12 17:33	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/27/12 17:33	95-47-6	
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	104 %		70-130	1		03/27/12 17:33	460-00-4	
Dibromofluoromethane (S)	103 %		70-130	1		03/27/12 17:33	1868-53-7	
1,2-Dichloroethane-d4 (S)	97 %		70-130	1		03/27/12 17:33	17060-07-0	
Toluene-d8 (S)	100 %		70-130	1		03/27/12 17:33	2037-26-5	

## QUALITY CONTROL DATA

Project: SEACO COLUMBIA

Pace Project No.: 92114401

QC Batch:	MERP/4134	Analysis Method:	EPA 7470
QC Batch Method:	EPA 7470	Analysis Description:	7470 Mercury
Associated Lab Samples: 92114401016, 92114401017, 92114401018, 92114401019, 92114401020, 92114401022, 92114401023, 92114401024, 92114401025, 92114401026			

METHOD BLANK: 740935		Matrix: Water		
Parameter	Units	Blank Result	Reporting Limit	Analyzed
Mercury	ug/L	ND	0.20	03/27/12 13:42

LABORATORY CONTROL SAMPLE: 740936		Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Parameter	Units					
Mercury	ug/L	2.5	2.4	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 740937			740938									
Parameter	Units	9211400006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	2.5	2.5	2.4	2.3	95	93	75-125	2	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 740939			740940									
Parameter	Units	9211400010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	2.5	2.5	2.2	2.3	90	92	75-125	2	25	

## QUALITY CONTROL DATA

Project: SEACO COLUMBIA

Pace Project No.: 92114401

QC Batch:	MERP/4126	Analysis Method:	EPA 7471
QC Batch Method:	EPA 7471	Analysis Description:	7471 Mercury
Associated Lab Samples:	92114401001		

METHOD BLANK: 739821                                  Matrix: Solid

Associated Lab Samples: 92114401001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.0050	03/23/12 11:07	

LABORATORY CONTROL SAMPLE: 739822

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.067	0.060	90	80-120	

MATRIX SPIKE SAMPLE: 739823

Parameter	Units	92113991001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.022	.056	0.066	78	75-125	

MATRIX SPIKE SAMPLE: 739825

Parameter	Units	92114465003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.017	.078	0.086	87	75-125	

SAMPLE DUPLICATE: 739824

Parameter	Units	92113991002 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/kg	0.0093	0.023	85	20	D6

SAMPLE DUPLICATE: 739858

Parameter	Units	92114583001 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/kg	ND	.00026J		20	

## QUALITY CONTROL DATA

Project: SEACO COLUMBIA

Pace Project No.: 92114401

QC Batch:	MERP/4139	Analysis Method:	EPA 7471
QC Batch Method:	EPA 7471	Analysis Description:	7471 Mercury
Associated Lab Samples:	92114401002, 92114401003, 92114401004, 92114401005, 92114401006, 92114401007, 92114401008, 92114401009, 92114401010		

METHOD BLANK: 741454 Matrix: Solid

Associated Lab Samples: 92114401002, 92114401003, 92114401004, 92114401005, 92114401006, 92114401007, 92114401008,  
92114401009, 92114401010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.0050	03/29/12 14:04	

LABORATORY CONTROL SAMPLE: 741455

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.067	0.070	105	80-120	

MATRIX SPIKE SAMPLE: 741456

Parameter	Units	92114401002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.0068	.056	0.067	107	75-125	

MATRIX SPIKE SAMPLE: 741458

Parameter	Units	92114989001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.0074	.069	0.066	85	75-125	

SAMPLE DUPLICATE: 741457

Parameter	Units	92114401003 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/kg	0.029	0.030	4	20	

SAMPLE DUPLICATE: 741459

Parameter	Units	92115012001 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/kg	0.0067 ug/g	0.0056	17	20	

## QUALITY CONTROL DATA

Project: SEACO COLUMBIA

Pace Project No.: 92114401

QC Batch: MPRP/10143 Analysis Method: EPA 6010

QC Batch Method: EPA 3050 Analysis Description: 6010 MET

Associated Lab Samples: 92114401001, 92114401002, 92114401003

METHOD BLANK: 737575 Matrix: Solid

Associated Lab Samples: 92114401001, 92114401002, 92114401003

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
Arsenic	mg/kg	ND	0.50	03/22/12 20:42	
Barium	mg/kg	ND	0.50	03/22/12 20:42	
Cadmium	mg/kg	ND	0.10	03/22/12 20:42	
Chromium	mg/kg	ND	0.50	03/22/12 20:42	
Lead	mg/kg	ND	0.50	03/22/12 20:42	
Selenium	mg/kg	ND	1.0	03/22/12 20:42	
Silver	mg/kg	ND	0.50	03/22/12 20:42	

LABORATORY CONTROL SAMPLE: 737576

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Arsenic	mg/kg	50	51.3	103	80-120	
Barium	mg/kg	50	51.9	104	80-120	
Cadmium	mg/kg	50	51.5	103	80-120	
Chromium	mg/kg	50	50.6	101	80-120	
Lead	mg/kg	50	51.9	104	80-120	
Selenium	mg/kg	50	51.6	103	80-120	
Silver	mg/kg	25	25.9	104	80-120	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 737577 737578

Parameter	Units	MS		MSD		MS	MSD	% Rec	% Rec	Max		
		92114351012	Spike	Spike	Conc.	Result	Result	% Rec	% Rec	RPD	RPD	Qual
Arsenic	mg/kg	8.3	52.2	69	61.6	82.5	102	108	75-125	29	20	D6
Barium	mg/kg	43.0	52.2	69	101	123	111	116	75-125	20	20	
Cadmium	mg/kg	2.4	52.2	69	51.7	67.2	94	94	75-125	26	20	D6
Chromium	mg/kg	22.7	52.2	69	84.9	103	119	117	75-125	19	20	
Lead	mg/kg	23.5	52.2	69	71.6	88.9	92	95	75-125	22	20	D6
Selenium	mg/kg	1.3J	52.2	69	42.4	57.4	79	81	75-125	30	20	D6
Silver	mg/kg	0.18J	26.2	34.5	28.5	36.7	108	106	75-125	25	20	D6

## QUALITY CONTROL DATA

Project: SEACO COLUMBIA

Pace Project No.: 92114401

QC Batch: MPRP/10190 Analysis Method: EPA 6010

QC Batch Method: EPA 3050 Analysis Description: 6010 MET

Associated Lab Samples: 92114401004, 92114401005, 92114401006, 92114401007, 92114401008, 92114401009, 92114401010

METHOD BLANK: 739796 Matrix: Solid

Associated Lab Samples: 92114401004, 92114401005, 92114401006, 92114401007, 92114401008, 92114401009, 92114401010

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Arsenic	mg/kg	ND	0.50	03/25/12 18:01	
Barium	mg/kg	ND	0.50	03/25/12 18:01	
Cadmium	mg/kg	ND	0.10	03/25/12 18:01	
Chromium	mg/kg	ND	0.50	03/25/12 18:01	
Lead	mg/kg	ND	0.50	03/25/12 18:01	
Selenium	mg/kg	ND	1.0	03/25/12 18:01	
Silver	mg/kg	ND	0.50	03/25/12 18:01	

LABORATORY CONTROL SAMPLE: 739797

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Arsenic	mg/kg	50	51.3	103	80-120	
Barium	mg/kg	50	51.0	102	80-120	
Cadmium	mg/kg	50	51.1	102	80-120	
Chromium	mg/kg	50	50.7	101	80-120	
Lead	mg/kg	50	51.0	102	80-120	
Selenium	mg/kg	50	50.9	102	80-120	
Silver	mg/kg	25	26.6	106	80-120	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 739798 739799

Parameter	Units	MS		MSD		MS	MSD	% Rec	% Rec	Limits	RPD	RPD	Max
		92114522001	Spike	Spike	Conc.								
Arsenic	mg/kg	0.58J	65.6	56.8	63.7	52.6	96	92	75-125	19	20		
Barium	mg/kg	132	65.6	56.8	207	184	116	92	75-125	12	20		
Cadmium	mg/kg	6.8	65.6	56.8	65.8	56.5	90	88	75-125	15	20		
Chromium	mg/kg	18.8	65.6	56.8	79.6	70.3	93	91	75-125	12	20		
Lead	mg/kg	19.7	65.6	56.8	75.2	64.2	85	78	75-125	16	20		
Selenium	mg/kg	2.8	65.6	56.8	61.2	47.7	89	79	75-125	25	20	D6	
Silver	mg/kg	0.73	32.8	28.4	36.8	31.6	110	109	75-125	15	20		

## QUALITY CONTROL DATA

Project: SEACO COLUMBIA

Pace Project No.: 92114401

QC Batch:	MPRP/10188	Analysis Method:	EPA 6010
QC Batch Method:	EPA 3010	Analysis Description:	6010 MET
Associated Lab Samples:	92114401016, 92114401017, 92114401018, 92114401019, 92114401020, 92114401022, 92114401023, 92114401024, 92114401025, 92114401026		

METHOD BLANK: 739758                          Matrix: Water

Associated Lab Samples: 92114401016, 92114401017, 92114401018, 92114401019, 92114401020, 92114401022, 92114401023,  
92114401024, 92114401025, 92114401026

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
Arsenic	ug/L	ND	5.0	03/25/12 19:56	
Barium	ug/L	ND	5.0	03/25/12 19:56	
Cadmium	ug/L	ND	1.0	03/25/12 19:56	
Chromium	ug/L	ND	5.0	03/25/12 19:56	
Lead	ug/L	ND	5.0	03/25/12 19:56	
Selenium	ug/L	ND	10.0	03/25/12 19:56	
Silver	ug/L	ND	5.0	03/25/12 19:56	

LABORATORY CONTROL SAMPLE: 739759

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Arsenic	ug/L	500	505	101	80-120	
Barium	ug/L	500	508	102	80-120	
Cadmium	ug/L	500	506	101	80-120	
Chromium	ug/L	500	504	101	80-120	
Lead	ug/L	500	510	102	80-120	
Selenium	ug/L	500	504	101	80-120	
Silver	ug/L	250	266	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 739760                          739761

Parameter	Units	92114166001	MS	MSD	MS	% Rec	MSD	% Rec	% Rec	Limits	RPD	Max	RPD	Qual
		Result	Spike	Spike										
Arsenic	ug/L	ND	500	500	542	537	108	107	75-125	1	20			
Barium	ug/L	8.9	500	500	500	500	98	98	75-125	0	20			
Cadmium	ug/L	ND	500	500	491	491	98	98	75-125	0	20			
Chromium	ug/L	16.7	500	500	510	509	99	98	75-125	0	20			
Lead	ug/L	ND	500	500	472	475	94	95	75-125	1	20			
Selenium	ug/L	ND	500	500	500	505	99	100	75-125	1	20			
Silver	ug/L	ND	250	250	268	268	106	106	75-125	0	20			

## QUALITY CONTROL DATA

Project: SEACO COLUMBIA

Pace Project No.: 92114401

QC Batch:	MSV/18611	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV Low Level SC
Associated Lab Samples:	92114401016, 92114401017, 92114401018, 92114401019, 92114401020, 92114401021, 92114401022, 92114401023, 92114401024, 92114401025, 92114401026, 92114401027		

METHOD BLANK:

740998

Matrix: Water

Associated Lab Samples: 92114401016, 92114401017, 92114401018, 92114401019, 92114401020, 92114401021, 92114401022,  
92114401023, 92114401024, 92114401025, 92114401026, 92114401027

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	03/26/12 09:21	
1,1,1-Trichloroethane	ug/L	ND	1.0	03/26/12 09:21	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/26/12 09:21	
1,1,2-Trichloroethane	ug/L	ND	1.0	03/26/12 09:21	
1,1-Dichloroethane	ug/L	ND	1.0	03/26/12 09:21	
1,1-Dichloroethene	ug/L	ND	1.0	03/26/12 09:21	
1,1-Dichloropropene	ug/L	ND	1.0	03/26/12 09:21	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	03/26/12 09:21	
1,2,3-Trichloropropane	ug/L	ND	1.0	03/26/12 09:21	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	03/26/12 09:21	
1,2-Dibromo-3-chloropropane	ug/L	ND	3.0	03/26/12 09:21	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	03/26/12 09:21	
1,2-Dichlorobenzene	ug/L	ND	1.0	03/26/12 09:21	
1,2-Dichloroethane	ug/L	ND	1.0	03/26/12 09:21	
1,2-Dichloropropane	ug/L	ND	1.0	03/26/12 09:21	
1,3-Dichlorobenzene	ug/L	ND	1.0	03/26/12 09:21	
1,3-Dichloropropane	ug/L	ND	1.0	03/26/12 09:21	
1,4-Dichlorobenzene	ug/L	ND	1.0	03/26/12 09:21	
2,2-Dichloropropane	ug/L	ND	1.0	03/26/12 09:21	
2-Butanone (MEK)	ug/L	ND	5.0	03/26/12 09:21	
2-Chlorotoluene	ug/L	ND	1.0	03/26/12 09:21	
2-Hexanone	ug/L	ND	5.0	03/26/12 09:21	
4-Chlorotoluene	ug/L	ND	1.0	03/26/12 09:21	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	03/26/12 09:21	
Acetone	ug/L	ND	25.0	03/26/12 09:21	
Benzene	ug/L	ND	1.0	03/26/12 09:21	
Bromobenzene	ug/L	ND	1.0	03/26/12 09:21	
Bromochloromethane	ug/L	ND	1.0	03/26/12 09:21	
Bromodichloromethane	ug/L	ND	1.0	03/26/12 09:21	
Bromoform	ug/L	ND	1.0	03/26/12 09:21	
Bromomethane	ug/L	ND	5.0	03/26/12 09:21	
Carbon tetrachloride	ug/L	ND	1.0	03/26/12 09:21	
Chlorobenzene	ug/L	ND	1.0	03/26/12 09:21	
Chloroethane	ug/L	ND	1.0	03/26/12 09:21	
Chloroform	ug/L	ND	1.0	03/26/12 09:21	
Chloromethane	ug/L	ND	1.0	03/26/12 09:21	
cis-1,2-Dichloroethene	ug/L	ND	1.0	03/26/12 09:21	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/26/12 09:21	
Dibromochloromethane	ug/L	ND	1.0	03/26/12 09:21	
Dibromomethane	ug/L	ND	1.0	03/26/12 09:21	
Dichlorodifluoromethane	ug/L	ND	1.0	03/26/12 09:21	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

METHOD BLANK: 740998                          Matrix: Water

Associated Lab Samples: 92114401016, 92114401017, 92114401018, 92114401019, 92114401020, 92114401021, 92114401022, 92114401023, 92114401024, 92114401025, 92114401026, 92114401027

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diisopropyl ether	ug/L	ND	1.0	03/26/12 09:21	
Ethylbenzene	ug/L	ND	1.0	03/26/12 09:21	
Hexachloro-1,3-butadiene	ug/L	2.0	1.0	03/26/12 09:21	B
m&p-Xylene	ug/L	ND	2.0	03/26/12 09:21	
Methyl-tert-butyl ether	ug/L	ND	1.0	03/26/12 09:21	
Methylene Chloride	ug/L	ND	2.0	03/26/12 09:21	
Naphthalene	ug/L	ND	1.0	03/26/12 09:21	
o-Xylene	ug/L	ND	1.0	03/26/12 09:21	
p-Isopropyltoluene	ug/L	ND	1.0	03/26/12 09:21	
Styrene	ug/L	ND	1.0	03/26/12 09:21	
Tetrachloroethene	ug/L	ND	1.0	03/26/12 09:21	
Toluene	ug/L	ND	1.0	03/26/12 09:21	
trans-1,2-Dichloroethene	ug/L	ND	1.0	03/26/12 09:21	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/26/12 09:21	
Trichloroethene	ug/L	ND	1.0	03/26/12 09:21	
Trichlorofluoromethane	ug/L	ND	1.0	03/26/12 09:21	
Vinyl acetate	ug/L	ND	2.0	03/26/12 09:21	
Vinyl chloride	ug/L	ND	1.0	03/26/12 09:21	
1,2-Dichloroethane-d4 (S)	%	99	70-130	03/26/12 09:21	
4-Bromofluorobenzene (S)	%	106	70-130	03/26/12 09:21	
Dibromofluoromethane (S)	%	106	70-130	03/26/12 09:21	
Toluene-d8 (S)	%	100	70-130	03/26/12 09:21	

LABORATORY CONTROL SAMPLE: 740999

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	51.3	103	70-130	
1,1,1-Trichloroethane	ug/L	50	50.9	102	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	43.1	86	70-130	
1,1,2-Trichloroethane	ug/L	50	56.5	113	70-130	
1,1-Dichloroethane	ug/L	50	45.3	91	70-130	
1,1-Dichloroethene	ug/L	50	53.5	107	70-130	
1,1-Dichloropropene	ug/L	50	45.2	90	70-130	
1,2,3-Trichlorobenzene	ug/L	50	46.2	92	70-130	
1,2,3-Trichloropropane	ug/L	50	48.4	97	70-130	
1,2,4-Trichlorobenzene	ug/L	50	45.9	92	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	41.4	83	70-130	
1,2-Dibromoethane (EDB)	ug/L	50	49.5	99	70-130	
1,2-Dichlorobenzene	ug/L	50	50.2	100	70-130	
1,2-Dichloroethane	ug/L	50	48.6	97	70-130	
1,2-Dichloropropane	ug/L	50	47.5	95	70-130	
1,3-Dichlorobenzene	ug/L	50	48.7	97	70-130	
1,3-Dichloropropane	ug/L	50	46.2	92	70-130	
1,4-Dichlorobenzene	ug/L	50	49.4	99	70-130	

## QUALITY CONTROL DATA

Project: SEACO COLUMBIA

Pace Project No.: 92114401

LABORATORY CONTROL SAMPLE: 740999

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,2-Dichloropropane	ug/L	50	35.9	72	70-130	
2-Butanone (MEK)	ug/L	100	103	103	70-130	
2-Chlorotoluene	ug/L	50	45.3	91	70-130	
2-Hexanone	ug/L	100	99.3	99	70-130	
4-Chlorotoluene	ug/L	50	47.1	94	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	105	105	70-130	
Acetone	ug/L	100	104	104	70-130	
Benzene	ug/L	50	49.6	99	70-130	
Bromobenzene	ug/L	50	47.4	95	70-130	
Bromochloromethane	ug/L	50	61.1	122	70-130	
Bromodichloromethane	ug/L	50	50.9	102	70-130	
Bromoform	ug/L	50	50.5	101	70-130	
Bromomethane	ug/L	50	41.6	83	70-130	
Carbon tetrachloride	ug/L	50	59.3	119	70-130	
Chlorobenzene	ug/L	50	48.9	98	70-130	
Chloroethane	ug/L	50	49.8	100	70-130	
Chloroform	ug/L	50	46.7	93	70-130	
Chloromethane	ug/L	50	52.7	105	70-130	
cis-1,2-Dichloroethene	ug/L	50	51.9	104	70-130	
cis-1,3-Dichloropropene	ug/L	50	47.3	95	70-130	
Dibromochloromethane	ug/L	50	53.1	106	70-130	
Dibromomethane	ug/L	50	55.6	111	70-130	
Dichlorodifluoromethane	ug/L	50	52.1	104	70-130	
Diisopropyl ether	ug/L	50	50.6	101	70-130	
Ethylbenzene	ug/L	50	49.5	99	70-130	
Hexachloro-1,3-butadiene	ug/L	50	40.6	81	70-130	
m&p-Xylene	ug/L	100	95.3	95	70-130	
Methyl-tert-butyl ether	ug/L	50	50.3	101	70-130	
Methylene Chloride	ug/L	50	53.5	107	70-130	
Naphthalene	ug/L	50	48.8	98	70-130	
o-Xylene	ug/L	50	47.5	95	70-130	
p-Isopropyltoluene	ug/L	50	49.0	98	70-130	
Styrene	ug/L	50	50.6	101	70-130	
Tetrachloroethene	ug/L	50	46.7	93	70-130	
Toluene	ug/L	50	50.6	101	70-130	
trans-1,2-Dichloroethene	ug/L	50	48.6	97	70-130	
trans-1,3-Dichloropropene	ug/L	50	47.3	95	70-130	
Trichloroethene	ug/L	50	53.9	108	70-130	
Trichlorofluoromethane	ug/L	50	67.8	136	70-130 LO	
Vinyl acetate	ug/L	100	102	102	70-130	
Vinyl chloride	ug/L	50	52.8	106	70-130	
1,2-Dichloroethane-d4 (S)	%			98	70-130	
4-Bromofluorobenzene (S)	%			95	70-130	
Dibromofluoromethane (S)	%			104	70-130	
Toluene-d8 (S)	%			99	70-130	

## QUALITY CONTROL DATA

Project: SEACO COLUMBIA

Pace Project No.: 92114401

Parameter	Units	92114401016		MS Spike		MSD Spike		MS Result		MSD Result		MS % Rec		MSD % Rec		% Rec Limits		Max RPD		Max Qual	
		Result	Conc.	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	% Rec	Result	Conc.	% Rec	Limits	RPD	RPD			
1,1,1,2-Tetrachloroethane	ug/L	ND	50	50	54.7	57.9	109	116	70-130	6	30										
1,1,1-Trichloroethane	ug/L	ND	50	50	55.0	54.8	110	110	70-130	0	30										
1,1,2-Tetrachloroethane	ug/L	ND	50	50	45.0	47.1	90	94	70-130	4	30										
1,1,2-Trichloroethane	ug/L	ND	50	50	55.9	59.1	112	118	70-130	5	30										
1,1-Dichloroethane	ug/L	ND	50	50	47.5	48.1	95	96	70-130	1	30										
1,1-Dichloroethene	ug/L	ND	50	50	58.7	58.5	117	117	70-130	0	30										
1,1-Dichloropropene	ug/L	ND	50	50	48.8	49.3	98	99	70-130	1	30										
1,2,3-Trichlorobenzene	ug/L	ND	50	50	49.2	55.5	98	111	70-130	12	30										
1,2,3-Trichloropropane	ug/L	ND	50	50	50.1	53.5	100	107	70-130	6	30										
1,2,4-Trichlorobenzene	ug/L	ND	50	50	47.6	54.7	95	109	70-130	14	30										
1,2-Dibromo-3-chloropropane	ug/L	ND	50	50	41.5	45.0	83	90	70-130	8	30										
1,2-Dibromoethane (EDB)	ug/L	ND	50	50	50.8	54.3	102	109	70-130	7	30										
1,2-Dichlorobenzene	ug/L	ND	50	50	53.8	56.2	108	112	70-130	4	30										
1,2-Dichloroethane	ug/L	ND	50	50	48.8	49.6	98	99	70-130	2	30										
1,2-Dichloropropene	ug/L	ND	50	50	50.0	51.3	100	103	70-130	3	30										
1,3-Dichlorobenzene	ug/L	ND	50	50	53.1	55.3	106	111	70-130	4	30										
1,3-Dichloropropane	ug/L	ND	50	50	47.4	49.9	95	100	70-130	5	30										
1,4-Dichlorobenzene	ug/L	ND	50	50	54.7	57.4	109	115	70-130	5	30										
2,2-Dichloropropane	ug/L	ND	50	50	48.7	49.9	97	100	70-130	3	30										
2-Butanone (MEK)	ug/L	ND	100	100	104	101	104	101	70-130	3	30										
2-Chlorotoluene	ug/L	ND	50	50	50.8	52.8	102	106	70-130	4	30										
2-Hexanone	ug/L	ND	100	100	104	106	104	106	70-130	2	30										
4-Chlorotoluene	ug/L	ND	50	50	50.5	53.0	101	106	70-130	5	30										
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	109	113	109	113	70-130	4	30										
Acetone	ug/L	ND	100	100	96.8	95.2	94	92	70-130	2	30										
Benzene	ug/L	ND	50	50	52.7	53.8	105	108	70-130	2	30										
Bromobenzene	ug/L	ND	50	50	51.0	52.9	102	106	70-130	4	30										
Bromochloromethane	ug/L	ND	50	50	66.0	64.9	132	130	70-130	2	30 M0										
Bromodichloromethane	ug/L	ND	50	50	52.0	54.5	104	109	70-130	5	30										
Bromoform	ug/L	ND	50	50	50.5	53.3	101	107	70-130	5	30										
Bromomethane	ug/L	ND	50	50	44.2	51.5	88	103	70-130	15	30										
Carbon tetrachloride	ug/L	ND	50	50	63.5	66.5	127	133	70-130	5	30 M0										
Chlorobenzene	ug/L	ND	50	50	52.8	56.0	106	112	70-130	6	30										
Chloroethane	ug/L	ND	50	50	54.1	54.7	108	109	70-130	1	30										
Chloroform	ug/L	ND	50	50	51.0	50.1	102	100	70-130	2	30										
Chloromethane	ug/L	ND	50	50	53.6	56.9	107	114	70-130	6	30										
cis-1,2-Dichloroethene	ug/L	ND	50	50	51.6	53.4	103	107	70-130	4	30										
cis-1,3-Dichloropropene	ug/L	ND	50	50	50.1	52.1	100	104	70-130	4	30										
Dibromochloromethane	ug/L	ND	50	50	54.0	57.2	108	114	70-130	6	30										
Dibromomethane	ug/L	ND	50	50	56.3	59.2	113	118	70-130	5	30										
Dichlorodifluoromethane	ug/L	ND	50	50	54.6	54.8	109	110	70-130	0	30										
Diisopropyl ether	ug/L	ND	50	50	53.8	55.1	108	110	70-130	2	30										
Ethylbenzene	ug/L	ND	50	50	52.2	54.6	104	109	70-130	5	30										
Hexachloro-1,3-butadiene	ug/L	ND	50	50	42.6	49.8	84	98	70-130	16	30										
m&p-Xylene	ug/L	ND	100	100	99.8	107	100	107	70-130	7	30										
Methyl-tert-butyl ether	ug/L	ND	50	50	52.2	52.4	104	105	70-130	0	30										
Methylene Chloride	ug/L	ND	50	50	58.5	55.8	117	112	70-130	5	30										

## QUALITY CONTROL DATA

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Parameter	Units	92114401016		MS Spike		MSD Spike		MS Result		MSD Result		% Rec	Max	
		Result	Conc.	Conc.	MSD	MS	Result	% Rec	MSD	MS	Result	Limits	RPD	RPD
Naphthalene	ug/L	ND	50	50	52.5	56.3	105	113	70-130	7	30			
o-Xylene	ug/L	ND	50	50	49.7	51.9	99	104	70-130	4	30			
p-Isopropyltoluene	ug/L	ND	50	50	53.6	56.9	107	114	70-130	6	30			
Styrene	ug/L	ND	50	50	52.6	55.0	105	110	70-130	4	30			
Tetrachloroethene	ug/L	ND	50	50	52.7	55.6	105	111	70-130	5	30			
Toluene	ug/L	ND	50	50	54.6	57.5	109	115	70-130	5	30			
trans-1,2-Dichloroethene	ug/L	ND	50	50	50.2	51.9	100	104	70-130	3	30			
trans-1,3-Dichloropropene	ug/L	ND	50	50	50.1	53.4	100	107	70-130	6	30			
Trichloroethene	ug/L	ND	50	50	57.2	59.3	114	119	70-130	4	30			
Trichlorofluoromethane	ug/L	ND	50	50	67.0	71.0	134	142	70-130	6	30	M0		
Vinyl acetate	ug/L	ND	100	100	108	110	108	110	70-130	2	30			
Vinyl chloride	ug/L	ND	50	50	57.5	57.9	115	116	70-130	1	30			
1,2-Dichloroethane-d4 (S)	%						93	90	70-130					
4-Bromofluorobenzene (S)	%						95	96	70-130					
Dibromofluoromethane (S)	%						103	99	70-130					
Toluene-d8 (S)	%						98	99	70-130					

## QUALITY CONTROL DATA

Project: SEACO COLUMBIA

Pace Project No.: 92114401

QC Batch:	MSV/18630	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV Low Level SC
Associated Lab Samples:	92114401028		

METHOD BLANK: 741401    Matrix: Water

Associated Lab Samples: 92114401028

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	03/27/12 17:17	
1,1,1-Trichloroethane	ug/L	ND	1.0	03/27/12 17:17	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/27/12 17:17	
1,1,2-Trichloroethane	ug/L	ND	1.0	03/27/12 17:17	
1,1-Dichloroethane	ug/L	ND	1.0	03/27/12 17:17	
1,1-Dichloroethene	ug/L	ND	1.0	03/27/12 17:17	
1,1-Dichloropropene	ug/L	ND	1.0	03/27/12 17:17	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	03/27/12 17:17	
1,2,3-Trichloropropane	ug/L	ND	1.0	03/27/12 17:17	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	03/27/12 17:17	
1,2-Dibromo-3-chloropropane	ug/L	ND	3.0	03/27/12 17:17	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	03/27/12 17:17	
1,2-Dichlorobenzene	ug/L	ND	1.0	03/27/12 17:17	
1,2-Dichloroethane	ug/L	ND	1.0	03/27/12 17:17	
1,2-Dichloropropane	ug/L	ND	1.0	03/27/12 17:17	
1,3-Dichlorobenzene	ug/L	ND	1.0	03/27/12 17:17	
1,3-Dichloropropane	ug/L	ND	1.0	03/27/12 17:17	
1,4-Dichlorobenzene	ug/L	ND	1.0	03/27/12 17:17	
2,2-Dichloropropane	ug/L	ND	1.0	03/27/12 17:17	
2-Butanone (MEK)	ug/L	ND	5.0	03/27/12 17:17	
2-Chlorotoluene	ug/L	ND	1.0	03/27/12 17:17	
2-Hexanone	ug/L	ND	5.0	03/27/12 17:17	
4-Chlorotoluene	ug/L	ND	1.0	03/27/12 17:17	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	03/27/12 17:17	
Acetone	ug/L	ND	25.0	03/27/12 17:17	
Benzene	ug/L	ND	1.0	03/27/12 17:17	
Bromobenzene	ug/L	ND	1.0	03/27/12 17:17	
Bromochloromethane	ug/L	ND	1.0	03/27/12 17:17	
Bromodichloromethane	ug/L	ND	1.0	03/27/12 17:17	
Bromoform	ug/L	ND	1.0	03/27/12 17:17	
Bromomethane	ug/L	ND	5.0	03/27/12 17:17	
Carbon tetrachloride	ug/L	ND	1.0	03/27/12 17:17	
Chlorobenzene	ug/L	ND	1.0	03/27/12 17:17	
Chloroethane	ug/L	ND	1.0	03/27/12 17:17	
Chloroform	ug/L	ND	1.0	03/27/12 17:17	
Chloromethane	ug/L	ND	1.0	03/27/12 17:17	
cis-1,2-Dichloroethene	ug/L	ND	1.0	03/27/12 17:17	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/27/12 17:17	
Dibromochloromethane	ug/L	ND	1.0	03/27/12 17:17	
Dibromomethane	ug/L	ND	1.0	03/27/12 17:17	
Dichlorodifluoromethane	ug/L	ND	1.0	03/27/12 17:17	
Diisopropyl ether	ug/L	ND	1.0	03/27/12 17:17	
Ethylbenzene	ug/L	ND	1.0	03/27/12 17:17	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

METHOD BLANK: 741401 Matrix: Water

Associated Lab Samples: 92114401028

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	ND	1.0	03/27/12 17:17	
m&p-Xylene	ug/L	ND	2.0	03/27/12 17:17	
Methyl-tert-butyl ether	ug/L	ND	1.0	03/27/12 17:17	
Methylene Chloride	ug/L	ND	2.0	03/27/12 17:17	
Naphthalene	ug/L	ND	1.0	03/27/12 17:17	
o-Xylene	ug/L	ND	1.0	03/27/12 17:17	
p-Isopropyltoluene	ug/L	ND	1.0	03/27/12 17:17	
Styrene	ug/L	ND	1.0	03/27/12 17:17	
Tetrachloroethene	ug/L	ND	1.0	03/27/12 17:17	
Toluene	ug/L	ND	1.0	03/27/12 17:17	
trans-1,2-Dichloroethene	ug/L	ND	1.0	03/27/12 17:17	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/27/12 17:17	
Trichloroethene	ug/L	ND	1.0	03/27/12 17:17	
Trichlorofluoromethane	ug/L	ND	1.0	03/27/12 17:17	
Vinyl acetate	ug/L	ND	2.0	03/27/12 17:17	
Vinyl chloride	ug/L	ND	1.0	03/27/12 17:17	
1,2-Dichloroethane-d4 (S)	%	96	70-130	03/27/12 17:17	
4-Bromofluorobenzene (S)	%	104	70-130	03/27/12 17:17	
Dibromofluoromethane (S)	%	104	70-130	03/27/12 17:17	
Toluene-d8 (S)	%	101	70-130	03/27/12 17:17	

LABORATORY CONTROL SAMPLE: 741402

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	51.2	102	70-130	
1,1,1-Trichloroethane	ug/L	50	46.5	93	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	44.2	88	70-130	
1,1,2-Trichloroethane	ug/L	50	53.3	107	70-130	
1,1-Dichloroethane	ug/L	50	40.5	81	70-130	
1,1-Dichloroethene	ug/L	50	48.8	98	70-130	
1,1-Dichloropropene	ug/L	50	41.7	83	70-130	
1,2,3-Trichlorobenzene	ug/L	50	48.2	96	70-130	
1,2,3-Trichloropropane	ug/L	50	49.8	100	70-130	
1,2,4-Trichlorobenzene	ug/L	50	46.8	94	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	41.2	82	70-130	
1,2-Dibromoethane (EDB)	ug/L	50	47.4	95	70-130	
1,2-Dichlorobenzene	ug/L	50	50.1	100	70-130	
1,2-Dichloroethane	ug/L	50	44.8	90	70-130	
1,2-Dichloropropane	ug/L	50	44.2	88	70-130	
1,3-Dichlorobenzene	ug/L	50	49.6	99	70-130	
1,3-Dichloropropane	ug/L	50	43.8	88	70-130	
1,4-Dichlorobenzene	ug/L	50	51.3	103	70-130	
2,2-Dichloropropane	ug/L	50	43.6	87	70-130	
2-Butanone (MEK)	ug/L	100	91.6	92	70-130	
2-Chlorotoluene	ug/L	50	45.2	90	70-130	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: SEACO COLUMBIA

Pace Project No.: 92114401

LABORATORY CONTROL SAMPLE: 741402

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Hexanone	ug/L	100	99.2	99	70-130	
4-Chlorotoluene	ug/L	50	46.5	93	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	104	104	70-130	
Acetone	ug/L	100	95.9	96	70-130	
Benzene	ug/L	50	47.0	94	70-130	
Bromobenzene	ug/L	50	47.8	96	70-130	
Bromochloromethane	ug/L	50	56.4	113	70-130	
Bromodichloromethane	ug/L	50	48.3	97	70-130	
Bromoform	ug/L	50	51.7	103	70-130	
Bromomethane	ug/L	50	42.1	84	70-130	
Carbon tetrachloride	ug/L	50	55.8	112	70-130	
Chlorobenzene	ug/L	50	48.8	98	70-130	
Chloroethane	ug/L	50	43.7	87	70-130	
Chloroform	ug/L	50	44.1	88	70-130	
Chloromethane	ug/L	50	42.7	85	70-130	
cis-1,2-Dichloroethene	ug/L	50	45.0	90	70-130	
cis-1,3-Dichloropropene	ug/L	50	46.3	93	70-130	
Dibromochloromethane	ug/L	50	51.5	103	70-130	
Dibromomethane	ug/L	50	52.3	105	70-130	
Dichlorodifluoromethane	ug/L	50	39.7	79	70-130	
Diisopropyl ether	ug/L	50	47.2	94	70-130	
Ethylbenzene	ug/L	50	47.9	96	70-130	
Hexachloro-1,3-butadiene	ug/L	50	42.9	86	70-130	
m&p-Xylene	ug/L	100	94.2	94	70-130	
Methyl-tert-butyl ether	ug/L	50	46.7	93	70-130	
Methylene Chloride	ug/L	50	51.3	103	70-130	
Naphthalene	ug/L	50	49.1	98	70-130	
o-Xylene	ug/L	50	46.1	92	70-130	
p-Isopropyltoluene	ug/L	50	51.4	103	70-130	
Styrene	ug/L	50	50.1	100	70-130	
Tetrachloroethene	ug/L	50	48.9	98	70-130	
Toluene	ug/L	50	50.0	100	70-130	
trans-1,2-Dichloroethene	ug/L	50	42.5	85	70-130	
trans-1,3-Dichloropropene	ug/L	50	47.9	96	70-130	
Trichloroethene	ug/L	50	51.8	104	70-130	
Trichlorofluoromethane	ug/L	50	56.2	112	70-130	
Vinyl acetate	ug/L	100	107	107	70-130	
Vinyl chloride	ug/L	50	46.5	93	70-130	
1,2-Dichloroethane-d4 (S)	%			86	70-130	
4-Bromofluorobenzene (S)	%			97	70-130	
Dibromofluoromethane (S)	%			100	70-130	
Toluene-d8 (S)	%			98	70-130	

## QUALITY CONTROL DATA

Project: SEACO COLUMBIA

Pace Project No.: 92114401

QC Batch:	OEXT/16842	Analysis Method:	EPA 8081
QC Batch Method:	EPA 3546	Analysis Description:	8081 GCS Pesticides
Associated Lab Samples:	92114401011, 92114401013, 92114401015		

METHOD BLANK: 739248   Matrix: Solid

Associated Lab Samples: 92114401011, 92114401013, 92114401015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
4,4'-DDD	ug/kg	ND	2.0	03/22/12 18:28	
4,4'-DDE	ug/kg	ND	2.0	03/22/12 18:28	
4,4'-DDT	ug/kg	ND	2.0	03/22/12 18:28	
Aldrin	ug/kg	ND	2.0	03/22/12 18:28	
alpha-BHC	ug/kg	ND	2.0	03/22/12 18:28	
beta-BHC	ug/kg	ND	2.0	03/22/12 18:28	
Chlordane (Technical)	ug/kg	ND	7.0	03/22/12 18:28	
delta-BHC	ug/kg	ND	2.0	03/22/12 18:28	
Dieldrin	ug/kg	ND	2.0	03/22/12 18:28	
Endosulfan I	ug/kg	ND	2.0	03/22/12 18:28	
Endosulfan II	ug/kg	ND	2.0	03/22/12 18:28	
Endosulfan sulfate	ug/kg	ND	2.0	03/22/12 18:28	
Endrin	ug/kg	ND	2.0	03/22/12 18:28	
Endrin aldehyde	ug/kg	ND	2.0	03/22/12 18:28	
Endrin ketone	ug/kg	ND	2.0	03/22/12 18:28	
gamma-BHC (Lindane)	ug/kg	ND	2.0	03/22/12 18:28	
Heptachlor	ug/kg	ND	2.0	03/22/12 18:28	
Heptachlor epoxide	ug/kg	ND	2.0	03/22/12 18:28	
Methoxychlor	ug/kg	ND	5.0	03/22/12 18:28	
Mirex	ug/kg	ND	5.0	03/22/12 18:28	
Toxaphene	ug/kg	ND	7.0	03/22/12 18:28	
Decachlorobiphenyl (S)	%	91	50-150	03/22/12 18:28	
Tetrachloro-m-xylene (S)	%	78	50-150	03/22/12 18:28	

LABORATORY CONTROL SAMPLE: 739249

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4,4'-DDD	ug/kg	8.3	8.5	103	50-150	
4,4'-DDE	ug/kg	8.3	8.0	97	50-150	
4,4'-DDT	ug/kg	8.3	8.8	107	50-150	
Aldrin	ug/kg	8.3	7.1	86	50-150	
alpha-BHC	ug/kg	8.3	8.0	97	50-150	
beta-BHC	ug/kg	8.3	7.5	91	50-150	
delta-BHC	ug/kg	8.3	7.9	96	50-150	
Dieldrin	ug/kg	8.3	8.3	101	50-150	
Endosulfan I	ug/kg	8.3	8.0	97	50-150	
Endosulfan II	ug/kg	8.3	8.4	102	50-150	
Endosulfan sulfate	ug/kg	8.3	6.5	78	50-150	
Endrin	ug/kg	8.3	7.8	95	50-150	
Endrin aldehyde	ug/kg	8.3	7.6	92	50-150	
Endrin ketone	ug/kg	8.3	8.4	102	50-150	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: SEACO COLUMBIA

Pace Project No.: 92114401

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LABORATORY CONTROL SAMPLE: 739249

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
gamma-BHC (Lindane)	ug/kg	8.3	7.9	95	50-150	
Heptachlor	ug/kg	8.3	7.5	91	50-150	
Heptachlor epoxide	ug/kg	8.3	7.8	95	50-150	
Methoxychlor	ug/kg	24.8	26.4	107	50-150	
Mirex	ug/kg	24.8	23.0	93	50-150	
Decachlorobiphenyl (S)	%			97	50-150	
Tetrachloro-m-xylene (S)	%			84	50-150	

## QUALITY CONTROL DATA

Project: SEACO COLUMBIA

Pace Project No.: 92114401

QC Batch:	OEXT/16809	Analysis Method:	EPA 8270 by SIM
QC Batch Method:	EPA 3546	Analysis Description:	8270 MSSV PAH by SIM
Associated Lab Samples:	92114401001, 92114401002, 92114401003, 92114401004, 92114401005, 92114401006, 92114401007, 92114401008, 92114401009, 92114401010		

METHOD BLANK:	737862	Matrix:	Solid
Associated Lab Samples:	92114401001, 92114401002, 92114401003, 92114401004, 92114401005, 92114401006, 92114401007, 92114401008, 92114401009, 92114401010		

Parameter	Units	Blank Result	Reporting Limit		Qualifiers
			Analyzed		
1-Methylnaphthalene	ug/kg	ND	10.0	03/22/12 10:46	
2-Methylnaphthalene	ug/kg	ND	10.0	03/22/12 10:46	
Acenaphthene	ug/kg	ND	10.0	03/22/12 10:46	
Acenaphthylene	ug/kg	ND	10.0	03/22/12 10:46	
Anthracene	ug/kg	ND	10.0	03/22/12 10:46	
Benzo(a)anthracene	ug/kg	ND	10.0	03/22/12 10:46	
Benzo(a)pyrene	ug/kg	ND	10.0	03/22/12 10:46	
Benzo(b)fluoranthene	ug/kg	ND	10.0	03/22/12 10:46	
Benzo(g,h,i)perylene	ug/kg	ND	10.0	03/22/12 10:46	
Benzo(k)fluoranthene	ug/kg	ND	10.0	03/22/12 10:46	
Chrysene	ug/kg	ND	10.0	03/22/12 10:46	
Dibenz(a,h)anthracene	ug/kg	ND	10.0	03/22/12 10:46	
Fluoranthene	ug/kg	ND	10.0	03/22/12 10:46	
Fluorene	ug/kg	ND	10.0	03/22/12 10:46	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	10.0	03/22/12 10:46	
Naphthalene	ug/kg	ND	10.0	03/22/12 10:46	
Phenanthrene	ug/kg	ND	10.0	03/22/12 10:46	
Pyrene	ug/kg	ND	10.0	03/22/12 10:46	
2-Fluorobiphenyl (S)	%	67	10-110	03/22/12 10:46	
Nitrobenzene-d5 (S)	%	76	10-128	03/22/12 10:46	
Terphenyl-d14 (S)	%	88	39-119	03/22/12 10:46	

LABORATORY CONTROL SAMPLE: 737863

Parameter	Units	Spike Conc.	LCS		% Rec Limits	Qualifiers
			Result	% Rec		
1-Methylnaphthalene	ug/kg	33.3	31.5	94	29-108	
2-Methylnaphthalene	ug/kg	33.3	28.4	85	30-104	
Acenaphthene	ug/kg	33.3	29.7	89	38-109	
Acenaphthylene	ug/kg	33.3	28.2	85	41-109	
Anthracene	ug/kg	33.3	30.4	91	45-114	
Benzo(a)anthracene	ug/kg	33.3	28.3	85	45-109	
Benzo(a)pyrene	ug/kg	33.3	30.4	91	47-117	
Benzo(b)fluoranthene	ug/kg	33.3	32.6	98	32-113	
Benzo(g,h,i)perylene	ug/kg	33.3	30.4	91	10-149	
Benzo(k)fluoranthene	ug/kg	33.3	34.8	104	41-104	
Chrysene	ug/kg	33.3	29.5	88	35-116	
Dibenz(a,h)anthracene	ug/kg	33.3	30.5	91	13-139	
Fluoranthene	ug/kg	33.3	30.5	91	43-110	
Fluorene	ug/kg	33.3	29.1	87	45-111	
Indeno(1,2,3-cd)pyrene	ug/kg	33.3	29.8	90	17-135	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

LABORATORY CONTROL SAMPLE: 737863

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	33.3	29.2	88	26-120	
Phenanthrene	ug/kg	33.3	29.6	89	45-110	
Pyrene	ug/kg	33.3	30.2	91	38-114	
2-Fluorobiphenyl (S)	%			73	10-110	
Nitrobenzene-d5 (S)	%			88	10-128	
Terphenyl-d14 (S)	%			87	39-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 737864 737865

Parameter	Units	MS Spike		MSD Spike		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max	
		92114401004	Result	Conc.	Conc.						RPD	RPD
1-Methylnaphthalene	ug/kg	ND	35.6	36	35.7	27.3	100	76	50-150	27	30	
2-Methylnaphthalene	ug/kg	ND	35.6	36	32.0	25.0	90	70	50-150	24	30	
Acenaphthene	ug/kg	ND	35.6	36	32.4	26.1	91	73	50-150	21	30	
Acenaphthylene	ug/kg	ND	35.6	36	30.8	25.6	87	71	50-150	19	30	
Anthracene	ug/kg	ND	35.6	36	32.0	30.8	90	86	50-150	4	30	
Benz(a)anthracene	ug/kg	ND	35.6	36	28.6	30.4	80	84	50-150	6	30	
Benz(a)pyrene	ug/kg	ND	35.6	36	29.9	31.3	84	87	50-150	4	30	
Benz(b)fluoranthene	ug/kg	ND	35.6	36	32.2	31.6	90	88	50-150	2	30	
Benz(g,h,i)perylene	ug/kg	ND	35.6	36	29.6	31.3	83	87	50-150	6	30	
Benz(k)fluoranthene	ug/kg	ND	35.6	36	32.1	37.1	90	103	50-150	15	30	
Chrysene	ug/kg	ND	35.6	36	29.7	31.3	83	87	50-150	5	30	
Dibenz(a,h)anthracene	ug/kg	ND	35.6	36	28.2	30.3	79	84	50-150	7	30	
Fluoranthene	ug/kg	ND	35.6	36	31.7	32.7	89	91	50-150	3	30	
Fluorene	ug/kg	ND	35.6	36	31.7	26.3	89	73	50-150	18	30	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	35.6	36	27.8	29.6	78	82	50-150	6	30	
Naphthalene	ug/kg	ND	35.6	36	32.5	25.0	91	70	50-150	26	30	
Phenanthrene	ug/kg	ND	35.6	36	31.8	29.3	89	82	50-150	8	30	
Pyrene	ug/kg	ND	35.6	36	30.9	32.5	87	90	50-150	5	30	
2-Fluorobiphenyl (S)	%						74	60	10-110			
Nitrobenzene-d5 (S)	%						90	69	10-128			
Terphenyl-d14 (S)	%						86	90	39-119			

## QUALITY CONTROL DATA

Project: SEACO COLUMBIA

Pace Project No.: 92114401

QC Batch:	OEXT/16828	Analysis Method:	EPA 8270
QC Batch Method:	EPA 3510	Analysis Description:	8270 Water CPAH by SIM 3510 SC
Associated Lab Samples:	92114401016, 92114401017, 92114401018, 92114401019, 92114401020, 92114401022, 92114401023, 92114401024, 92114401025, 92114401026		

METHOD BLANK:	739000	Matrix:	Water
Associated Lab Samples:	92114401016, 92114401017, 92114401018, 92114401019, 92114401020, 92114401022, 92114401023, 92114401024, 92114401025, 92114401026		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/L	ND	2.0	03/23/12 14:26	
2-Methylnaphthalene	ug/L	ND	2.0	03/23/12 14:26	
Acenaphthene	ug/L	ND	2.0	03/23/12 14:26	
Acenaphthylene	ug/L	ND	1.5	03/23/12 14:26	
Anthracene	ug/L	ND	0.050	03/23/12 14:26	
Benzo(a)anthracene	ug/L	ND	0.10	03/23/12 14:26	
Benzo(a)pyrene	ug/L	ND	0.20	03/23/12 14:26	
Benzo(b)fluoranthene	ug/L	ND	0.30	03/23/12 14:26	
Benzo(g,h,i)perylene	ug/L	ND	0.20	03/23/12 14:26	
Benzo(k)fluoranthene	ug/L	ND	0.20	03/23/12 14:26	
Chrysene	ug/L	ND	0.10	03/23/12 14:26	
Dibenz(a,h)anthracene	ug/L	ND	0.20	03/23/12 14:26	
Fluoranthene	ug/L	ND	0.30	03/23/12 14:26	
Fluorene	ug/L	ND	0.31	03/23/12 14:26	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.20	03/23/12 14:26	
Naphthalene	ug/L	ND	1.5	03/23/12 14:26	
Phenanthrene	ug/L	ND	0.20	03/23/12 14:26	
Pyrene	ug/L	ND	0.10	03/23/12 14:26	
2-Fluorobiphenyl (S)	%	70	70-130	03/23/12 14:26	
Nitrobenzene-d5 (S)	%	86	70-130	03/23/12 14:26	
Terphenyl-d14 (S)	%	97	70-130	03/23/12 14:26	

LABORATORY CONTROL SAMPLE: 739001

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/L	1	ND	92	70-130	
2-Methylnaphthalene	ug/L	1	ND	89	70-130	
Acenaphthene	ug/L	1	ND	91	70-130	
Acenaphthylene	ug/L	1	ND	91	70-130	
Anthracene	ug/L	1	0.94	94	70-130	
Benzo(a)anthracene	ug/L	1	0.91	91	70-130	
Benzo(a)pyrene	ug/L	1	0.93	93	70-130	
Benzo(b)fluoranthene	ug/L	1	1.1	106	70-130	
Benzo(g,h,i)perylene	ug/L	1	1.0	100	70-130	
Benzo(k)fluoranthene	ug/L	1	0.97	97	70-130	
Chrysene	ug/L	1	0.92	92	70-130	
Dibenz(a,h)anthracene	ug/L	1	0.93	93	70-130	
Fluoranthene	ug/L	1	0.92	92	70-130	
Fluorene	ug/L	1	0.96	96	70-130	
Indeno(1,2,3-cd)pyrene	ug/L	1	0.93	93	70-130	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: SEACO COLUMBIA

Pace Project No.: 92114401

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LABORATORY CONTROL SAMPLE: 739001

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/L	1	ND	90	70-130	
Phenanthrene	ug/L	1	0.92	92	70-130	
Pyrene	ug/L	1	0.89	89	70-130	
2-Fluorobiphenyl (S)	%			63	70-130 S0	
Nitrobenzene-d5 (S)	%			78	70-130	
Terphenyl-d14 (S)	%			84	70-130	

## QUALITY CONTROL DATA

Project: SEACO COLUMBIA

Pace Project No.: 92114401

QC Batch:	PMST/4595	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples: 92114401002, 92114401003, 92114401004			

SAMPLE DUPLICATE: 738746

Parameter	Units	92114252001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	19.1	20.6	7	25	

SAMPLE DUPLICATE: 738747

Parameter	Units	92114477008 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	29.8	29.6	1	25	



**Pace Analytical Services, Inc.**  
205 East Meadow Road - Suite A  
Eden, NC 27288  
(336)623-8921

**Pace Analytical Services, Inc.**  
2225 Riverside Dr.  
Asheville, NC 28804  
(828)254-7176

**Pace Analytical Services, Inc.**  
9800 Kincey Ave. Suite 100  
Huntersville, NC 28078  
(704)875-9092

## QUALITY CONTROL DATA

Project: SEACO COLUMBIA

Pace Project No.: 92114401

QC Batch: PMST/4596

Analysis Method: ASTM D2974-87

QC Batch Method: ASTM D2974-87

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 92114401001

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SAMPLE DUPLICATE: 738748

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	27.6	27.0	2	25	

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SAMPLE DUPLICATE: 738749

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	4.5	4.6	2	25	

## QUALITY CONTROL DATA

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

---

QC Batch:	PMST/4606	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	92114401005, 92114401006, 92114401007, 92114401008, 92114401009, 92114401010, 92114401011, 92114401013, 92114401015		

---

SAMPLE DUPLICATE: 738950

Parameter	Units	92114401005 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	6.7	6.8	2	25	

SAMPLE DUPLICATE: 738951

Parameter	Units	92114652009 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	6.2	6.1	2	25	

## QUALIFIERS

Project: SEACO COLUMBIA  
 Pace Project No.: 92114401

### 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.

Acid preservation may not be appropriate for 2-Chloroethylvinyl ether, Styrene, and Vinyl chloride.

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

TNI - The NELAC Institute.

### LABORATORIES

PASI-A Pace Analytical Services - Asheville  
 PASI-C Pace Analytical Services - Charlotte

### ANALYTE QUALIFIERS

- B Analyte was detected in the associated method blank.
- D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
- D6 The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.
- L0 Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
- M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
- S0 Surrogate recovery outside laboratory control limits.
- S4 Surrogate recovery not evaluated against control limits due to sample dilution.

**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92114401011	GP-9 031412 1.5-2.0' (EXCESS)	EPA 3546	OEXT/16842	EPA 8081	GCSV/11627
92114401013	GP-1 031412 1.5-2.0' (EXCESS)	EPA 3546	OEXT/16842	EPA 8081	GCSV/11627
92114401015	GP-6 031512 0.5-1.0' (EXCESS)	EPA 3546	OEXT/16842	EPA 8081	GCSV/11627
92114401001	GP-1 031312 9-10'	EPA 3050	MPRP/10143	EPA 6010	ICP/9336
92114401002	GP-2 031312 9-10'	EPA 3050	MPRP/10143	EPA 6010	ICP/9336
92114401003	GP-3 031312 9-10'	EPA 3050	MPRP/10143	EPA 6010	ICP/9336
92114401004	GP-4 031312 9-10'	EPA 3050	MPRP/10190	EPA 6010	ICP/9382
92114401005	GP-5 031312 9-10'	EPA 3050	MPRP/10190	EPA 6010	ICP/9382
92114401006	GP-6 031312 9-10'	EPA 3050	MPRP/10190	EPA 6010	ICP/9382
92114401007	GP-7 031412 9-10'	EPA 3050	MPRP/10190	EPA 6010	ICP/9382
92114401008	GP-8 031412 9-10'	EPA 3050	MPRP/10190	EPA 6010	ICP/9382
92114401009	GP-9 031412 9-10'	EPA 3050	MPRP/10190	EPA 6010	ICP/9382
92114401010	GP-10 031412 9-10'	EPA 3050	MPRP/10190	EPA 6010	ICP/9382
92114401016	GP-1 031312 GW	EPA 3010	MPRP/10188	EPA 6010	ICP/9379
92114401017	GP-5 031312 GW	EPA 3010	MPRP/10188	EPA 6010	ICP/9379
92114401018	GP-4 031312 GW	EPA 3010	MPRP/10188	EPA 6010	ICP/9379
92114401019	GP-3 031312 GW	EPA 3010	MPRP/10188	EPA 6010	ICP/9379
92114401020	GP-2 031312 GW	EPA 3010	MPRP/10188	EPA 6010	ICP/9379
92114401022	GP-10 031412 GW	EPA 3010	MPRP/10188	EPA 6010	ICP/9379
92114401023	GP-9 031412 GW	EPA 3010	MPRP/10188	EPA 6010	ICP/9379
92114401024	GP-7 031412 GW	EPA 3010	MPRP/10188	EPA 6010	ICP/9379
92114401025	GP-8 031412 GW	EPA 3010	MPRP/10188	EPA 6010	ICP/9379
92114401026	GP-6 031412 GW	EPA 3010	MPRP/10188	EPA 6010	ICP/9379
92114401016	GP-1 031312 GW	EPA 7470	MERP/4134	EPA 7470	MERC/4058
92114401017	GP-5 031312 GW	EPA 7470	MERP/4134	EPA 7470	MERC/4058
92114401018	GP-4 031312 GW	EPA 7470	MERP/4134	EPA 7470	MERC/4058
92114401019	GP-3 031312 GW	EPA 7470	MERP/4134	EPA 7470	MERC/4058
92114401020	GP-2 031312 GW	EPA 7470	MERP/4134	EPA 7470	MERC/4058
92114401022	GP-10 031412 GW	EPA 7470	MERP/4134	EPA 7470	MERC/4058
92114401023	GP-9 031412 GW	EPA 7470	MERP/4134	EPA 7470	MERC/4058
92114401024	GP-7 031412 GW	EPA 7470	MERP/4134	EPA 7470	MERC/4058
92114401025	GP-8 031412 GW	EPA 7470	MERP/4134	EPA 7470	MERC/4058
92114401026	GP-6 031412 GW	EPA 7470	MERP/4134	EPA 7470	MERC/4058
92114401001	GP-1 031312 9-10'	EPA 7471	MERP/4126	EPA 7471	MERC/4050
92114401002	GP-2 031312 9-10'	EPA 7471	MERP/4139	EPA 7471	MERC/4065
92114401003	GP-3 031312 9-10'	EPA 7471	MERP/4139	EPA 7471	MERC/4065
92114401004	GP-4 031312 9-10'	EPA 7471	MERP/4139	EPA 7471	MERC/4065
92114401005	GP-5 031312 9-10'	EPA 7471	MERP/4139	EPA 7471	MERC/4065
92114401006	GP-6 031312 9-10'	EPA 7471	MERP/4139	EPA 7471	MERC/4065
92114401007	GP-7 031412 9-10'	EPA 7471	MERP/4139	EPA 7471	MERC/4065
92114401008	GP-8 031412 9-10'	EPA 7471	MERP/4139	EPA 7471	MERC/4065
92114401009	GP-9 031412 9-10'	EPA 7471	MERP/4139	EPA 7471	MERC/4065
92114401010	GP-10 031412 9-10'	EPA 7471	MERP/4139	EPA 7471	MERC/4065
92114401001	GP-1 031312 9-10'	EPA 3546	OEXT/16809	EPA 8270 by SIM	MSSV/6098
92114401002	GP-2 031312 9-10'	EPA 3546	OEXT/16809	EPA 8270 by SIM	MSSV/6098

**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: SEACO COLUMBIA  
Pace Project No.: 92114401

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92114401003	GP-3 031312 9-10'	EPA 3546	OEXT/16809	EPA 8270 by SIM	MSSV/6098
92114401004	GP-4 031312 9-10'	EPA 3546	OEXT/16809	EPA 8270 by SIM	MSSV/6098
92114401005	GP-5 031312 9-10'	EPA 3546	OEXT/16809	EPA 8270 by SIM	MSSV/6098
92114401006	GP-6 031312 9-10'	EPA 3546	OEXT/16809	EPA 8270 by SIM	MSSV/6098
92114401007	GP-7 031412 9-10'	EPA 3546	OEXT/16809	EPA 8270 by SIM	MSSV/6098
92114401008	GP-8 031412 9-10'	EPA 3546	OEXT/16809	EPA 8270 by SIM	MSSV/6098
92114401009	GP-9 031412 9-10'	EPA 3546	OEXT/16809	EPA 8270 by SIM	MSSV/6098
92114401010	GP-10 031412 9-10'	EPA 3546	OEXT/16809	EPA 8270 by SIM	MSSV/6098
92114401016	GP-1 031312 GW	EPA 3510	OEXT/16828	EPA 8270	MSSV/6100
92114401017	GP-5 031312 GW	EPA 3510	OEXT/16828	EPA 8270	MSSV/6100
92114401018	GP-4 031312 GW	EPA 3510	OEXT/16828	EPA 8270	MSSV/6100
92114401019	GP-3 031312 GW	EPA 3510	OEXT/16828	EPA 8270	MSSV/6100
92114401020	GP-2 031312 GW	EPA 3510	OEXT/16828	EPA 8270	MSSV/6100
92114401022	GP-10 031412 GW	EPA 3510	OEXT/16828	EPA 8270	MSSV/6100
92114401023	GP-9 031412 GW	EPA 3510	OEXT/16828	EPA 8270	MSSV/6100
92114401024	GP-7 031412 GW	EPA 3510	OEXT/16828	EPA 8270	MSSV/6100
92114401025	GP-8 031412 GW	EPA 3510	OEXT/16828	EPA 8270	MSSV/6100
92114401026	GP-6 031412 GW	EPA 3510	OEXT/16828	EPA 8270	MSSV/6100
92114401016	GP-1 031312 GW	EPA 8260	MSV/18611		
92114401017	GP-5 031312 GW	EPA 8260	MSV/18611		
92114401018	GP-4 031312 GW	EPA 8260	MSV/18611		
92114401019	GP-3 031312 GW	EPA 8260	MSV/18611		
92114401020	GP-2 031312 GW	EPA 8260	MSV/18611		
92114401021	PW-5 031212	EPA 8260	MSV/18611		
92114401022	GP-10 031412 GW	EPA 8260	MSV/18611		
92114401023	GP-9 031412 GW	EPA 8260	MSV/18611		
92114401024	GP-7 031412 GW	EPA 8260	MSV/18611		
92114401025	GP-8 031412 GW	EPA 8260	MSV/18611		
92114401026	GP-6 031412 GW	EPA 8260	MSV/18611		
92114401027	MW-5 031512	EPA 8260	MSV/18611		
92114401028	MW-1 031512	EPA 8260	MSV/18630		
92114401001	GP-1 031312 9-10'	ASTM D2974-87	PMST/4596		
92114401002	GP-2 031312 9-10'	ASTM D2974-87	PMST/4595		
92114401003	GP-3 031312 9-10'	ASTM D2974-87	PMST/4595		
92114401004	GP-4 031312 9-10'	ASTM D2974-87	PMST/4595		
92114401005	GP-5 031312 9-10'	ASTM D2974-87	PMST/4606		
92114401006	GP-6 031312 9-10'	ASTM D2974-87	PMST/4606		
92114401007	GP-7 031412 9-10'	ASTM D2974-87	PMST/4606		
92114401008	GP-8 031412 9-10'	ASTM D2974-87	PMST/4606		
92114401009	GP-9 031412 9-10'	ASTM D2974-87	PMST/4606		
92114401010	GP-10 031412 9-10'	ASTM D2974-87	PMST/4606		
92114401011	GP-9 031412 1.5-2.0' (EXCESS)	ASTM D2974-87	PMST/4606		
92114401013	GP-1 031412 1.5-2.0'(EXCESS)	ASTM D2974-87	PMST/4606		
92114401015	GP-6 031512 0.5-1.0' (EXCESS)	ASTM D2974-87	PMST/4606		

1931-1932

Pace Analytical  
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

- Note samples marked ~~BEGIN HOLD~~ \*  
Please hold these samples for possible  
later analysis.
  - Note sample marked ~~END HOLD~~ \*

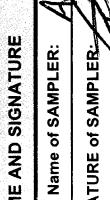
\*Important Note: By signing this form you are accepting Pace's NET 30 day payment term.





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: <b>ENVIRON</b>	Report To:	Copy To:	Attention:	Company Name:	REGULATORY AGENCY																																																																																																																
Address:				<input type="checkbox"/> NPDES	<input type="checkbox"/> GROUND WATER																																																																																																																
Email To:	Purchase Order No.:			<input type="checkbox"/> UST	<input type="checkbox"/> RCRA																																																																																																																
Phone:	Project Name: <b>SEACO Columbia</b>	Fax:	Pace Project Manager:	<input type="checkbox"/> OTHER	DRINKING WATER																																																																																																																
Requested Due Date/TAT:	Project Number:	10-day TAT	Pace Profile #:	Residual Chlorine (Y/N)																																																																																																																	
<table border="1"> <thead> <tr> <th colspan="2">SAMPLE ID (A-Z, 0-9, -, )</th> <th colspan="2">COLLECTED</th> <th colspan="2">Preservatives</th> <th colspan="2">Requested Analysis Filtered (Y/N)</th> </tr> <tr> <th>ITEM #</th> <th>Sample ID Sample IDs MUST BE UNIQUE</th> <th>MATRIX CODE MATRIX / CODE Drinking Water Water Waste Water Product Soil/Solid Oil Wipe Air Tissue Other</th> <th>START COMPOSITE END/GRAB</th> <th>TIME DATE</th> <th>TIME DATE</th> <th>TIME DATE</th> <th>Project No./Lab I.D.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td><b>GP-6 031412 GW</b></td> <td>WT G 3-14-12 1808</td> <td></td> <td></td> <td></td> <td></td> <td>10/20</td> </tr> <tr> <td>2</td> <td><del>MIW-5 031512</del></td> <td><del>WT G 3-15-12 1013</del></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td><b>MIW-5 031512</b></td> <td>WT G 3-15-12 1013</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td><b>MIW-1 031512</b></td> <td>WT G 1141</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td><b>GP-6 031512 051-0' (EXUS) SL G</b></td> <td>↓ 1220</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>6</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>7</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>8</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>9</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>10</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>11</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>12</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						SAMPLE ID (A-Z, 0-9, -, )		COLLECTED		Preservatives		Requested Analysis Filtered (Y/N)		ITEM #	Sample ID Sample IDs MUST BE UNIQUE	MATRIX CODE MATRIX / CODE Drinking Water Water Waste Water Product Soil/Solid Oil Wipe Air Tissue Other	START COMPOSITE END/GRAB	TIME DATE	TIME DATE	TIME DATE	Project No./Lab I.D.	1	<b>GP-6 031412 GW</b>	WT G 3-14-12 1808					10/20	2	<del>MIW-5 031512</del>	<del>WT G 3-15-12 1013</del>						3	<b>MIW-5 031512</b>	WT G 3-15-12 1013						4	<b>MIW-1 031512</b>	WT G 1141						5	<b>GP-6 031512 051-0' (EXUS) SL G</b>	↓ 1220						6								7								8								9								10								11								12							
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• See previous		3/10/12	9:30	2/4	4	10/7																																																																																																															
PRINT Name of SAMPLER: <b>ABI HARTMANN</b>		SIGNATURE OF SAMPLER: 		PRINT Name of SAMPLER: 		SIGNATURE OF SAMPLER: 																																																																																																															
Temp in °C		Sealed Container (Y/N)		Sealed Container (Y/N)		Samples intact (Y/N)																																																																																																															

SCURF Review:	<i>3/16/12</i>	Date:	<i>3/16/12</i>	SRF Review:	<i>LA</i>
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Comments/Resolution:			
Person Contacted:			
Date/Time:			
Field Data Required?	Y / N	Client Notification/Resolution:	

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Comments:	Temp should be above freezing to 6°C contents: <i>3/16/12</i>
Packing Material:	<input type="checkbox"/> Bubble Wrap <input checked="" type="checkbox"/> Bubble Bags <input type="checkbox"/> None <input type="checkbox"/> Other	Type of ice:	Thermometer used: IR Gun T1101 T1102 T1101: No Correction T1102: Subtract 1.2°C
Customer:		Comments: Samples on ice, cooling process has begun	
Optional		Comments: Samples on ice, cooling process has begun	
Where Received:		<input checked="" type="checkbox"/> Huntersville <input type="checkbox"/> Asheville <input type="checkbox"/> Eden	
Project #:		<i>92114901</i>	
Client Name:		<i>GVL/la</i>	
Document Name:		Document Revised: January 30, 2012	
Sample Condition Upon Receipt (SCUR)		Page 1 of 2	
Document Number:		Issuing Authority: F-CHR-CS-03-rev.06	
Place Analytical		<i>3/16/12</i>	

Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Comments: Samples arrived within Hold Time: <i>GF-4 031312 received a break via</i>
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Rush Turn Around Time Requested: <i>3/16/12</i>
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Sufficient Volume: <i>3/16/12</i>
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Containers intact: <i>GF-1 031312 + GF-5 031312 GL</i>
Filled volume received for Dissolved tests	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Sample Labels match COC: <i>GF-1 031312 GL</i>
Includes date/time/ID/Analysis Matrix:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Includes date/time/ID/Analysis Matrix: <i>GF-1 031312 GL + GF-5 031312 GL</i>
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	All containers needing preservation are found to be in compliance with EPA recommendation. <i>3/16/12</i>
Initial when completed	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Exceptions: VOA, colliform, TOC, O&G, WI-DRO (water) <i>3/16/12</i>
Initial when completed	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Samples checked for dechlorination: <i>3/16/12</i>
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Headspace in VOA Vials (>6mm): <i>3/16/12</i>
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Trip Blank Present: <i>3/16/12</i>
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Place Trip Blank Lot # (if purchased): <i>3/16/12</i>

**Pace Analytical Services, Inc.**  
205 East Meadow Road - Suite A  
Eden, NC 27288  
(336)623-8921

**Pace Analytical Services, Inc.**  
2225 Riverside Dr.  
Asheville, NC 28804  
(828)254-7176

**Pace Analytical Services, Inc.**  
9800 Kincey Ave. Suite 100  
Huntersville, NC 28078  
(704)875-9092

April 24, 2012

Ms. Sarah Libeau  
Environ Corporation  
4350 North Fairfax Dr  
Suite 300  
Arlington, VA 22203

RE: Project: SEACO 01-2928813  
Pace Project No.: 92116848

Dear Ms. Libeau:

Enclosed are the analytical results for sample(s) received by the laboratory on April 19, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Analyses were performed at the Pace Analytical Services location indicated on the sample analyte page for analysis unless otherwise footnoted.

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

Sincerely,



Kevin Godwin

kevin.godwin@pacelabs.com  
Project Manager

Enclosures



#### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
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**Pace Analytical Services, Inc.**  
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Huntersville, NC 28078  
(704)875-9092

## CERTIFICATIONS

Project: SEACO 01-2928813  
Pace Project No.: 92116848

### Charlotte Certification IDs

9800 Kincey Ave. Ste 100, Huntersville, NC 28078  
North Carolina Drinking Water Certification #: 37706  
North Carolina Field Services Certification #: 5342  
North Carolina Wastewater Certification #: 12  
South Carolina Certification #: 99006001  
South Carolina Drinking Water Cert. #: 99006003  
Virginia Drinking Water Certification #: 00213

Connecticut Certification #: PH-0104  
Florida/NELAP Certification #: E87627  
Kentucky UST Certification #: 84  
Louisiana DHH Drinking Water # LA 100031  
West Virginia Certification #: 357  
Virginia/VELAP Certification #: 460144

### Asheville Certification IDs

2225 Riverside Dr., Asheville, NC 28804  
Florida/NELAP Certification #: E87648  
Massachusetts Certification #: M-NC030  
North Carolina Drinking Water Certification #: 37712  
North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001  
Virginia Certification #: 00072  
West Virginia Certification #: 356  
Virginia/VELAP Certification #: 460147

## REPORT OF LABORATORY ANALYSIS

Page 2 of 12

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## SAMPLE SUMMARY

Project: SEACO 01-2928813

Pace Project No.: 92116848

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92116848001	SS-1	Solid	04/19/12 12:35	04/19/12 17:25
92116848002	SS-2	Solid	04/19/12 12:40	04/19/12 17:25
92116848003	SS-3	Solid	04/19/12 12:45	04/19/12 17:25
92116848004	SS-4	Solid	04/19/12 12:50	04/19/12 17:25
92116848005	SS-5	Solid	04/19/12 12:55	04/19/12 17:25
92116848006	IGWA-1	Water	04/19/12 12:00	04/19/12 17:25
92116848007	PW-6	Water	04/19/12 14:00	04/19/12 17:25
92116848008	MW-4	Water	04/19/12 14:30	04/19/12 17:25
92116848009	MW-3	Water	04/19/12 15:00	04/19/12 17:25

## REPORT OF LABORATORY ANALYSIS

Page 3 of 12

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## SAMPLE ANALYTE COUNT

Project: SEACO 01-2928813  
Pace Project No.: 92116848

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92116848001	SS-1	EPA 6010	JDA	1	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
92116848002	SS-2	EPA 6010	JDA	1	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
92116848003	SS-3	EPA 6010	JDA	1	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
92116848004	SS-4	EPA 6010	JMW	1	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
92116848005	SS-5	EPA 6010	JMW	1	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
92116848006	IGWA-1	EPA 6010	JMW	1	PASI-A
92116848007	PW-6	EPA 6010	JMW	1	PASI-A
92116848008	MW-4	EPA 6010	JMW	1	PASI-A
92116848009	MW-3	EPA 6010	JMW	1	PASI-A

## REPORT OF LABORATORY ANALYSIS

Page 4 of 12

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## ANALYTICAL RESULTS

Project: SEACO 01-2928813

Pace Project No.: 92116848

---

**Sample: SS-1**      Lab ID: **92116848001**      Collected: 04/19/12 12:35      Received: 04/19/12 17:25      Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	<b>2.0</b> mg/kg		0.36	1	04/20/12 16:10	04/21/12 17:21	7440-38-2	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87							
Percent Moisture	<b>0.22</b> %		0.10	1		04/20/12 12:42		

---

**Sample: SS-2**      Lab ID: **92116848002**      Collected: 04/19/12 12:40      Received: 04/19/12 17:25      Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	<b>0.81</b> mg/kg		0.44	1	04/20/12 16:10	04/21/12 17:26	7440-38-2	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87							
Percent Moisture	<b>1.1</b> %		0.10	1		04/20/12 12:43		

---

**Sample: SS-3**      Lab ID: **92116848003**      Collected: 04/19/12 12:45      Received: 04/19/12 17:25      Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	<b>436</b> mg/kg		0.51	1	04/20/12 16:10	04/21/12 17:30	7440-38-2	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87							
Percent Moisture	<b>14.0</b> %		0.10	1		04/20/12 12:43		

---

**Sample: SS-4**      Lab ID: **92116848004**      Collected: 04/19/12 12:50      Received: 04/19/12 17:25      Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	<b>32.4</b> mg/kg		0.46	1	04/20/12 16:10	04/22/12 12:32	7440-38-2	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87							
Percent Moisture	<b>0.83</b> %		0.10	1		04/20/12 12:43		

## ANALYTICAL RESULTS

Project: SEACO 01-2928813

Pace Project No.: 92116848

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**Sample: SS-5**      Lab ID: **92116848005**      Collected: 04/19/12 12:55      Received: 04/19/12 17:25      Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	14.8	mg/kg	0.48	1	04/20/12 16:10	04/22/12 12:44	7440-38-2	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87							
Percent Moisture	0.22	%	0.10	1		04/20/12 12:43		

---

**Sample: IGWA-1**      Lab ID: **92116848006**      Collected: 04/19/12 12:00      Received: 04/19/12 17:25      Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic, Dissolved	ND	ug/L	5.0	1	04/23/12 16:20	04/23/12 21:02	7440-38-2	

---

**Sample: PW-6**      Lab ID: **92116848007**      Collected: 04/19/12 14:00      Received: 04/19/12 17:25      Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic, Dissolved	65.4	ug/L	5.0	1	04/23/12 16:20	04/24/12 12:54	7440-38-2	

---

**Sample: MW-4**      Lab ID: **92116848008**      Collected: 04/19/12 14:30      Received: 04/19/12 17:25      Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic, Dissolved	ND	ug/L	5.0	1	04/23/12 16:20	04/23/12 21:09	7440-38-2	

---

**Sample: MW-3**      Lab ID: **92116848009**      Collected: 04/19/12 15:00      Received: 04/19/12 17:25      Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic, Dissolved	50.5	ug/L	5.0	1	04/23/12 16:20	04/24/12 12:57	7440-38-2	

## QUALITY CONTROL DATA

Project: SEACO 01-2928813

Pace Project No.: 92116848

QC Batch: MPRP/10412 Analysis Method: EPA 6010

QC Batch Method: EPA 3050 Analysis Description: 6010 MET

Associated Lab Samples: 92116848001, 92116848002, 92116848003

METHOD BLANK: 753152 Matrix: Solid

Associated Lab Samples: 92116848001, 92116848002, 92116848003

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Arsenic	mg/kg	ND	0.50	04/21/12 14:46	

LABORATORY CONTROL SAMPLE: 753153

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Arsenic	mg/kg	50	48.7	97	80-120	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 753154 753155

Parameter	Units	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	RPD	RPD	Qual
		92115836017	Spike	Spike	Result	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Arsenic	mg/kg	11.3	41.6	58.1	49.6	65.8	92	94	94	75-125	28	20	D6

## QUALITY CONTROL DATA

Project: SEACO 01-2928813

Pace Project No.: 92116848

QC Batch: MPRP/10413 Analysis Method: EPA 6010

QC Batch Method: EPA 3050 Analysis Description: 6010 MET

Associated Lab Samples: 92116848004, 92116848005

METHOD BLANK: 753161 Matrix: Solid

Associated Lab Samples: 92116848004, 92116848005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	ND	0.50	04/22/12 12:26	

LABORATORY CONTROL SAMPLE: 753162

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	49.7	99	80-120	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 753163 753164

Parameter	Units	92116848004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
Arsenic	mg/kg	32.4	49.4	44.3	79.6	68.1	96	81	75-125	16	20	

## QUALITY CONTROL DATA

Project: SEACO 01-2928813

Pace Project No.: 92116848

QC Batch:	MPRP/10422	Analysis Method:	EPA 6010
QC Batch Method:	EPA 3010	Analysis Description:	6010 MET Filtered
Associated Lab Samples:	92116848006, 92116848007, 92116848008, 92116848009		

METHOD BLANK: 753629                                  Matrix: Water

Associated Lab Samples: 92116848006, 92116848007, 92116848008, 92116848009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic, Dissolved	ug/L	ND	5.0	04/23/12 19:38	

LABORATORY CONTROL SAMPLE: 753630

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic, Dissolved	ug/L	500	460	92	80-120	

MATRIX SPIKE SAMPLE: 753631

Parameter	Units	92116009007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic, Dissolved	ug/L	ND	500	471	94	75-125	

SAMPLE DUPLICATE: 753632

Parameter	Units	92116009008 Result	Dup Result	RPD	Max RPD	Qualifiers
Arsenic, Dissolved	ug/L	ND	ND		20	

## QUALITY CONTROL DATA

Project: SEACO 01-2928813

Pace Project No.: 92116848

QC Batch: PMST/4706 Analysis Method: ASTM D2974-87

QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 92116848001, 92116848002, 92116848003, 92116848004, 92116848005

SAMPLE DUPLICATE: 752696

Parameter	Units	92116848001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	0.22	0.22	1	25	

SAMPLE DUPLICATE: 752698

Parameter	Units	92116841004 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	18.3	18.0	2	25	

## QUALIFIERS

Project: SEACO 01-2928813  
Pace Project No.: 92116848

### 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.

Acid preservation may not be appropriate for 2-Chloroethylvinyl ether, Styrene, and Vinyl chloride.

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

TNI - The NELAC Institute.

### LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-C Pace Analytical Services - Charlotte

### ANALYTE QUALIFIERS

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

## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SEACO 01-2928813  
Pace Project No.: 92116848

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92116848001	SS-1	EPA 3050	MPRP/10412	EPA 6010	ICP/9585
92116848002	SS-2	EPA 3050	MPRP/10412	EPA 6010	ICP/9585
92116848003	SS-3	EPA 3050	MPRP/10412	EPA 6010	ICP/9585
92116848004	SS-4	EPA 3050	MPRP/10413	EPA 6010	ICP/9586
92116848005	SS-5	EPA 3050	MPRP/10413	EPA 6010	ICP/9586
92116848006	IGWA-1	EPA 3010	MPRP/10422	EPA 6010	ICP/9601
92116848007	PW-6	EPA 3010	MPRP/10422	EPA 6010	ICP/9601
92116848008	MW-4	EPA 3010	MPRP/10422	EPA 6010	ICP/9601
92116848009	MW-3	EPA 3010	MPRP/10422	EPA 6010	ICP/9601
92116848001	SS-1	ASTM D2974-87	PMST/4706		
92116848002	SS-2	ASTM D2974-87	PMST/4706		
92116848003	SS-3	ASTM D2974-87	PMST/4706		
92116848004	SS-4	ASTM D2974-87	PMST/4706		
92116848005	SS-5	ASTM D2974-87	PMST/4706		

## 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:

Company: ENVIRON  
Address: 1050 Highland Manor  
Suite 410 Tampa, FL  
Email To: [EnviroEnviroCorp.com](http://EnviroEnviroCorp.com)  
Phone: [Fax:](tel:813-626-2282)

Requested Due Date/TAT:

**Section B**  
Required Project Information:

Report To: ENVIRON - Sarah Mills  
Copy To: ENVIRON - Jen Mills  
Purchase Order No.: JENNIFER  
Project Name: SEACO  
Project Number: Q1-292383B

**Section C**  
Invoice Information:

Attention: Company Name: SKM  
Address: ENVIRON  
Reference: Pace Project Manager:  
Pace Profile #:

Page: 1 of 1  
**1565205**

**REGULATORY AGENCY**  
NPDES  GROUND WATER  DRINKING WATER  
 UST  RCRA  OTHER

Request Due Date/TAT:

Project Name: SEACO  
Project Number: Q1-292383B

STATE: SC

Residual Chlorine (Y/N)  
Pace Project No./Lab I.D.  
001  
002  
003  
004  
005  
006  
007  
008  
009

Request Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information		Matrix Codes MATRIX / CODE		Drinking Water DW Water Waste Water WW Product P Soil/Solid SL Oil OL Wipe WP Air AR Tissue TS Other OT	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		Preservatives	Y/N
	DATE	TIME	DATE	TIME				COMPOSITE START	COMPOSITE END/GRAB		
1 SS-1	5/19/12	1235	1	X							
2 SS-2		1240									
3 SS-3		1245									
4 SS-4		1250									
5 SS-5		1255									
6 TGWA-1		1300									
7 Plus-6a		1400									
8 MW-4		1430									
9 MW-3		1500									
10											
11											
12											

ADDITIONAL COMMENTS

RELINQUISHED BY / AFFILIATION DATE TIME ACCEPTED BY / AFFILIATION DATE TIME SAMPLE CONDITIONS

Reserved bottles were rinsed. Samples were filtered.

\*3 Day TAT

SAMPLE NAME AND SIGNATURE	<i>Jen Mills Enviro</i>	
PRINT Name of SAMPLER:	Jen Mills	
SIGNATURE of SAMPLER:	<i>Jen Mills</i>	
DATE Signed (MM/DD/YY):	4/19/20	

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007



Document Name: <b>Sample Condition Upon Receipt (SCUR)</b>	Document Revised: January 30, 2012 Page 1 of 2
Document Number: <b>F-CHR-CS-03-rev.06</b>	Issuing Authority: Pace Huntersville Quality Office

Client Name: Enron Project # 92116848

Where Received:  Huntersville  Asheville  Eden

Courier:  Fed Ex  UPS  USPS Client  Commercial  Pace Other \_\_\_\_\_

Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yes  no

Optional

Proj. Due Date:

Proj. Name:

Packing Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_

Thermometer Used: IR Gun T1101 T1102 Type of Ice: Wet Blue None  Samples on ice, cooling process has begun

Temp Correction Factor T1101: No Correction T1102: Subtract 1.2°C

Corrected Cooler Temp.: 14.7 C Biological Tissue is Frozen: Yes No N/A

Temp should be above freezing to 6°C

Date and Initials of person examining contents: LMH

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9. <i>Piss Con. unpress.</i>
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:		
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

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

SCURF Review: LHS Date: 4/19/02 SRF Review: JY Date: 4/20/02

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