

12 March 2008

Mr. F. Thomas Lubozynski, P.E.  
Waste Program Administrator  
Solid and Hazardous Waste Program  
Florida Department of Environmental Protection, Central District  
3319 Maguire Boulevard, Suite 232  
Orlando, Florida 32803-3767

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DEP Central Dist.

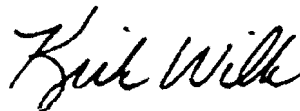
Re: 7th Semi-Annual Water Quality Monitoring Report  
Oak Hammock Disposal Facility, Osceola County, Florida  
Permit No. SC49-0199726-004 and SO49-0199726-005

Dear Mr. Lubozynski:

Submitted herewith is the subject report documenting the 7<sup>th</sup> semi-annual water quality monitoring event conducted at the Oak Hammock Disposal Facility (OHDF) located in Osceola County, Florida. This report is being submitted as required for compliance with the conditions contained within Exhibit I, Monitoring Plan Implementation Schedule (MPIS) of the above referenced permit. In accordance with the permit conditions, the semi-annual water quality monitoring event was performed in November 2007. The final laboratory analytical data was received on 14 January 2008. This report is being submitted within the sixty day period after receipt of final analytical data from the laboratory. This report satisfies the semi-annual water quality monitoring compliance requirements as described in Exhibit I of the permit.

As noted in the permit, one hard copy of the report along with an electronic copy of the report on a CD is being submitted to FDEP. The CD with a PDF copy of the entire report is attached to the inside of the front cover of the report. If you have any questions or need additional information, please do not hesitate to contact the undersigned.

Sincerely,



Kirk Wills  
Project Engineer

Attachments

Copy: Mike Kaiser, WSI

*Submitted to:*



Florida Department of  
Environmental Protection

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DEP. Central Dist.

**SEVENTH SEMI-ANNUAL WATER QUALITY  
MONITORING REPORT  
Oak Hammock Disposal Facility  
(J.E.D. Solid Waste Management Facility)  
Osceola County, Florida**

*Prepared for*



Waste Services of Florida, Inc.  
1501 Omni Way  
St. Cloud, Florida

*Prepared by*

**Geosyntec**<sup>®</sup>  
consultants

14055 Riveredge Drive, Suite 300  
Tampa, Florida 33637

Project Number FQ1144  
February 2008





ATTACHMENT I

# Florida Department of Environmental Protection

3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767

## GROUND WATER MONITORING REPORT

Rule 62-522.600(11)

### PART I GENERAL INFORMATION

- (1) Facility Name Oak Hammock Disposal, Class I Landfill
- Address 1501 Omni Way
- City St. Cloud Zip 34773 County Osceola
- Telephone Number (407) 891-3720 (2) WACS\_Facility 89544
- (3) DEP Permit Number SC49-0199726-004 and SO49-0199726-005
- (4) Authorized Representative's Name Title R. Shawn McCash, Senior Vice President
- Address 5002 T-Rex Avenue, Suite 200
- City Boca Raton Zip 33431 County Palm Beach
- Telephone Number (561) 237-3414
- (5) Type of Discharge NA
- (6) Method of Discharge NA

### CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submission of false information including the possibility of fine and imprisonment.



March 3, 2008  
Date

\_\_\_\_\_  
Owner or Authorized Representative's Signature

### PART II QUALITY ASSURANCE REQUIREMENTS

Sampling Organization Comp QAP # NA

Analytical Lab Comp QAP #/ HRS Certification E82502

Lab Name Columbia Analytical Services, Inc.

Address 9143 Phillips Highway, Suite 200, Jacksonville, Florida 32256

Phone Number (904) 739-2277

E-mail Address [cmyers@caslab.com](mailto:cmyers@caslab.com) or <http://www.caslab.com/>

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## **1. INTRODUCTION**

### **1.1 Terms of Reference**

This report documents the implementation of the Water Quality Monitoring Plan (Plan) for the Oak Hammock Disposal Facility (OHDF), which is commonly referred to as the J.E.D. Solid Waste Disposal (JED) Facility. The Plan was prepared as a part of the OHDF permit applications. The requirements for executing the Plan are presented in Exhibit I of the permit to construct and operate Phases 2 and 3 at the OHDF (Permit Numbers SC49-0199726-004 and SO49-0199726-005), issued by the Florida Department of Environmental Protection (FDEP) on 22 March 2007 and revised on 24 July 2007. This report presents the results for the seventh semi-annual water quality (groundwater, surface water, and leachate) monitoring event conducted between 14 November 2007 and 26 November 2007. This is the first water quality monitoring report to include both the Phase 1, and Phases 2 and 3 monitoring well networks.

This report was prepared on behalf of Waste Services Incorporated (WSI), parent company of Omni Waste of Osceola County, LLC, owner and operator of the JED Facility by Mr. Sangho “Jay” Eun and Mr. Kirk E. Wills of Geosyntec Consultants (Geosyntec). In accordance with Geosyntec’s peer review procedures, Mr. Donald Thompson, P.G. reviewed this report.

### **1.2 Overview**

The Plan and Exhibit I describe a water quality monitoring program at the OHDF that has as its intent to: (i) measure and report groundwater and surface water conditions for the monitoring network; (ii) monitor the groundwater flow direction; (iii) monitor the groundwater and surface water quality on a semi-annual basis; and (iv) monitor leachate quality on an annual basis. The seventh semi-annual water quality monitoring has been completed. This report includes presentation and discussions of the sample locations, sampling procedures, laboratory analyses and results, field data measurements, groundwater level measurements, groundwater flow direction, surface water quality monitoring, and leachate quality monitoring. In addition, this report includes a comparison of the analytical results of this sampling event to applicable Groundwater Cleanup Target Levels (GCTLs) as promulgated in Chapter 62-777, Florida Administrative Code (FAC).

### **1.3 Site Description**

The OHDF is located in eastern Osceola County, Florida, west of highway U.S. 441, and approximately 6.5 miles south of Holopaw. The facility includes a Class I landfill, which is linked to highway U.S. 441 by a 2.86-mile access road. The OHDF site comprises a total of approximately 2,179 acres. The landfill footprint at build-out is approximately 264 acres and consists of a total of 21 landfill cells that provide available waste capacity for a period of approximately 30 years. The FDEP issued a permit to construct and operate Phase 1 development of the OHDF facility in October 2003. Phase 1 development includes four landfill cells (Cells 1 through 4), located in the northern part of the landfill and covering approximately 53 acres. As part of Phase 1, forty-five (45) groundwater monitoring wells were installed in fifteen (15) clusters (MW-1 through MW-15) around the perimeter of the Phase 1 development area. The baseline water quality report for the Phase 1 monitoring well network was submitted to FDEP in May 2004. All components of the Phase 1 development have been constructed.

The FDEP issued a permit to construct and operate Phases 2 and 3 at the OHDF facility in March 2007. The development of Phase 2 and 3 includes six cells (Cells 5 through 10) with a total footprint of approximately 72 acres. As part of Phase 2 and 3 development, and as approved by FDEP, six (6) existing Phase 1 monitoring wells (MW-14 A, B, and C, and MW-15 A, B, and C), and ten (10) piezometers were decommissioned. The wells and piezometers were decommissioned for construction of future cells, construction of a storm water retention basin located within Phases 2 and 3, and due to the proximity of piezometers to the new network wells installed. The decommissioning of the monitoring wells and piezometers was discussed in the Phase 2 and 3 baseline water quality report. For the development of Phases 2 and 3, twenty four (24) additional groundwater monitoring wells were installed in eight (8) well clusters (MW-16 through MW-23) around the perimeter of the Phase 2 and 3 development areas in September 2007. The baseline water quality report for the Phases 2 and 3 monitoring well network was submitted to FDEP in January 2008. For monitoring purposes, the OHDF was given the Water Assurance Compliance System (WACS) facility identification number 89544.

## **2. MONITORING WELL DETAILS**

### **2.1 Well Layout and Construction**

For the Phase 1 development, forty five (45) groundwater monitoring wells were installed in fifteen (15) clusters (MW-1 through MW-15) around the perimeter of the Phase 1 development area. Monitoring well clusters were located such that the spacing between well clusters was no greater than 500 ft, in accordance with the FDEP permit requirements. For development of Phases 2 and 3, twenty four (24) groundwater monitoring wells were installed in eight (8) clusters (MW-16 through MW-23) around the perimeter of the Phase 2 and 3 development areas. In accordance with the FDEP permit requirements, the monitoring well clusters were located such that the spacing between detection well clusters (MW-16 through MW-21) was approximately 500 feet, and the spacing between background well clusters (MW-22 and MW-23) was approximately 800 feet. Each monitoring well cluster consisted of three (3) groundwater monitoring wells installed (i) across the water table to monitor the upper limit of the surficial aquifer (identified as A-zone [shallow] wells); (ii) within the lower limit of the upper surficial aquifer above the intermediate clay layer (identified as C-zone [deep] wells); and (iii) at an intermediate depth between the shallow and deep wells (identified as B-zone (intermediate) wells).

A layout depicting the location of groundwater monitoring wells installed for Phases 2 and 3, and the previously installed groundwater monitoring wells for Phase 1, and the piezometers installed as part of the hydro geologic investigation are shown on Figures 1, 2, and 3. As shown, groundwater monitoring well clusters MW-1 through MW-13 and MW-23 were installed along the top outer edge of the landfill perimeter berm. The ground surface at the location of the wells in the perimeter berm is at approximately Elevation 92 feet with respect to National Geodetic Vertical Datum of 1929 (NGVD, 1929). Groundwater monitoring well clusters MW-16 and MW-17 were installed along the outer edge of the landfill perimeter berm that serves as the initial storm water berm. The ground surface at these two well locations is at approximately Elevation 85 feet (NGVD, 1929). Groundwater monitoring well clusters MW-18 through MW-22 were installed along the interim Phase 3 storm water berm at the southern limit of the Phase 3 development at approximately Elevation 84 feet (NGVD, 1929). The locations of each well, in Florida state plane coordinates and latitude/longitude, and elevation (NGVD, 1929) were surveyed by professional land surveyors licensed in the State of Florida.

Wells were constructed with 2-in diameter schedule 40 PVC casing. The well screens were 10-ft in length with #6-slot (0.006-in.). A 30/45 graded silica sand was placed

around the screen to a height of 2 to 3 ft above the top of the screen. A seal of 30/65 graded fine silica sand was placed above the sand filter around the screen. The remaining annular space from the top of the fine sand filter seal to the existing ground surface was grouted using a tremie pipe with a cement/bentonite mixture containing no more than 5 percent bentonite by dry weight. The PVC well casings were extended approximately 2.5 to 3 ft above the existing ground surface. Surface completion consisted of a protective steel or aluminum casing with a lockable cover set in a concrete pad. Each well was provided with a well cap, padlock, and an identification label. A summary of the monitoring well construction details are presented in Table 1.

## 2.2 Turbidity Issues

As discussed in the baseline water quality reports for the Phase 1, and Phases 2 and 3 monitoring networks, the formation around the screened intervals consists primarily of a fine, brown to dark brown, silty sand. Due to the subsurface formation properties, fine-grained and colloidal material are able to pass through the sand filter pack in many wells, primarily in the B-zone and C-zone wells. Most of the intermediate and deep wells had turbidity values in excess of the 20-NTU criterion even after extended well development and the removal of multiple well volumes.

The difficulty in attaining the desired turbidity criterion was originally discussed at a meeting between Geosyntec and FDEP on 12 January 2004 during the well development activities associated with the wells installed as part of Phase 1. Geosyntec notified FDEP again on 14 September 2007 of the elevated turbidity levels even after extended well development during development of the Phase 2 and 3 monitoring wells. In accordance with these discussions, **it was agreed to collect field-filtered (1-micron) and unfiltered samples for metals analyses for any sample with a turbidity value greater than 20 NTU.** The data generated by the dual sampling is expected to help demonstrate: (i) what effect turbidity may have on metal analyses (i.e., compare total and dissolved metal concentrations); and (ii) whether groundwater samples with turbidities greater than 20 NTU showed higher concentrations of metals than those samples with turbidities less than 20 NTU.

### **3. MONITORING WELL SAMPLING**

#### **3.1 Sampling Locations and Procedures**

In accordance with the monitoring plan implementation schedule (MPIS), thirty three (33) monitoring wells installed as part of the Phase 1 development and all twenty four (24) monitoring wells installed as part of the Phase 2 and 3 development were sampled. Low-flow sampling techniques were used for groundwater sample collection. Except for the turbidity considerations as described in the previous section, all groundwater sampling was performed in accordance with the current FDEP Standard Operating Procedures (SOP's, February 2004) for groundwater sampling. Additionally for quality control (QC) purposes, two sample duplicates and one equipment blank were collected and analyzed.

Peristaltic pumps were used to purge and sample all A-zone (shallow) and a limited number of B-zone (intermediate), and C-zone (deep) groundwater monitoring wells where the measured turbidity from previous water quality events was below 20 NTU. A stainless steel submersible pump was used to purge and sample the remainder of the B-zone (intermediate) and C-zone (deep) groundwater wells where the turbidity from the previous water quality events was above 20 NTU. New tubing (silicone and/or polyethylene) was used at each monitoring well location.

During the purging process, a YSI 556 water quality meter equipped with a flow-through cell was used to monitor the following field parameters: pH; temperature; field conductivity; Eh; and dissolved oxygen. Turbidity levels were measured using a LaMotte 2020e turbidity meter. Field parameters were recorded on sample collection forms, which are contained in Appendix A. When the field parameters stabilized within the acceptable tolerances required by the FDEP SOP, well purging was considered complete and groundwater samples were collected. For wells where the turbidity was not less than 20 NTU, stability was established by purging at least 5 well volumes and observing variations in the measured turbidity. For problematic wells, once the turbidity had stabilized and all other parameters conformed to the guidance set forth in the FDEP SOP's, samples were collected. A non-filtered and field-filtered (1-micron) metals sample was collected for each monitoring well where turbidity measurements exceeded the 20 NTU level.

For monitoring wells where peristaltic pumps were used, volatile organic compound (VOC) sample vials were filled by removing the down well sample tubing, disconnecting



the tubing from the water quality meter flow through cell, and reversing the flow direction on the peristaltic pump.

For the monitoring wells that were purged and sampled with a submersible pump, all sample aliquots were filled directly from the down-well tubing.

The calibration of the water quality monitoring instruments was checked daily and re-calibrated when necessary. Water quality instrument calibration forms are presented in Appendix B. Samples were placed in coolers and packed with bagged ice for transport to the analytical laboratory. Chain-of-Custody (COC) forms were completed and accompanied the samples to the analytical laboratory. All COC forms have been included in Appendix C of this report. Trip blank samples accompanied all sample coolers with VOC samples. Temperature blanks were packed in each sample cooler. Security seals were affixed to every cooler shipped.

### **3.2 Sample Analyses**

Samples were analyzed by Columbia Analytical Services, Inc. (Columbia) of Jacksonville, Florida in accordance with the National Environmental Laboratory Accreditation Conference (NELAC) standards. Columbia holds certification from the Florida Department of Health (FDOH) for the analytical test methods used for this project and is certified in the State of Florida for analysis of environmental samples. A copy of Columbia's Florida Department of Health certificate is included in Appendix D.

Groundwater samples were analyzed by Columbia for total ammonia as nitrogen (N), chlorides, nitrate, total dissolved solids (TDS), iron, mercury, sodium, and the 40 CFR Part 258 Appendix I parameters. Other required parameters (i.e., pH; temperature; specific conductance; turbidity; Eh; and dissolved oxygen) were measured in the field during collection of the groundwater samples.

## 4. ANALYTICAL RESULTS

### 4.1 Field Parameters

Table 2 provides a summary of the field measurements of select water quality parameters utilized for determining sample stability for the semi-annual monitoring event.

### 4.2 Groundwater Monitoring Wells

The analytical results for groundwater sampling event have been transferred to a compact disc (CD) and is included in Appendix E. These data are presented in the FDEP electronic validator spreadsheet format, and PDF versions of the laboratory reports have also been included. Analytical results have been summarized in Tables 3 through 6 to show all parameters where a constituent concentration was reported above the method detection limit. Any parameter exceeding GCTLs has been highlighted. The following discussion regarding groundwater quality is organized by analytical methods.

#### *Total Metals (Method 6020 and Method 7470 for Mercury)*

Arsenic was detected in eighteen (18) monitoring wells in concentrations ranging between 0.6 and 19 ug/L. All reported concentrations are less than the GCTL for arsenic of 10 ug/L except for MW-11A and 13A, where the reported concentrations were 19 and 16 ug/L, respectively. As discussed in the first biennial water quality monitoring report (November 2006), a positive correlation exists between iron and arsenic levels for monitoring wells at the site. This has been documented throughout the State of Florida, and is due to the fact that low levels of naturally occurring arsenic are bound up primarily by ferric (iron) hydroxides in many Florida soils. This has been discussed in previous correspondence with FDEP. Both MW-11A and MW-13A have had arsenic concentrations above the GCTL during previous sampling events prior to waste being disposed in cells that these wells monitor. Arsenic was detected in three (3) wells (MW-16B, 17B, and 18C) where dissolved (filtered) metal samples were collected in concentrations ranging between 0.5 and 0.7 ug/L, which are all below the GCTL of 10 ug/L.

Barium was detected in all fifty seven (57) monitoring wells in concentrations ranging between 2.7 and 267 ug/L, all of which are all below the GCTL of 2,000 ug/L. For the twelve (12) wells (MW-8B, 16B, 17B, 20B, 21B, 22B, 4C, 18C, 19C, 20C, 21C, and 23C) where dissolved (filtered) metals samples were collected, concentrations of barium ranged between 5.5 and 129 ug/L, which are all below the GCTL.

Beryllium was detected in one (1) monitoring well, MW-19C at a concentration of 2.1 ug/L, which is below the GCTL of 4 ug/L. Beryllium was not detected in any of the dissolved (filtered) metal samples.

Cadmium was detected in one (1) monitoring well, MW-19C at a concentration of 0.87 ug/L, which is below the GCTL of 5 ug/L. Cadmium was not detected in any of the dissolved (filtered) metal samples.

Chromium was detected in forty three (43) monitoring wells at concentrations ranging between 2 and 32 ug/L, which are all below the GCTL of 100 ug/L. Chromium was detected in four (4) of the dissolved (filtered) metals samples (MW-8B, 16B, 17B, and 18C) at concentrations ranging between 3.5 and 10 ug/L, which are all below the GCTL.

Five (5) wells (MW-2A, 7A, 11A, 12A, and 19C) contained detectable concentrations of cobalt ranging between 1 and 1.4 ug/L, which are all below the GCTL of 140 ug/L. Cobalt was not detected in any dissolved (filtered) metals samples.

Copper was detected in five (5) monitoring wells (MW-11B, 12B, 13B, 21B, and 19C) at concentrations ranging between 2.8 and 11 ug/L, which are all below the GCTL of 1,000 ug/L. Copper was detected in two (2) wells (MW-16B and 17B) wells where dissolved (filtered) metals samples were collected at concentrations of 3.6 and 21. ug/L, respectively.

Iron was detected in all fifty seven (57) monitoring wells in concentrations ranging between 0.2 and 20.3 mg/L, all but two (2) wells (MW-5A and 21A) exceeded the GCTL of 0.3 mg/L. For the twelve (12) wells (MW-8B, 16B, 17B, 20B, 21B, 22B, 4C, 18C, 19C, 20C, 21C, and 23C) where dissolved (filtered) metals samples were collected, concentrations of iron ranged between 0.6 and 2.4 mg/L, all of which are above the GCTL. Iron has historically exceeded the GCTL in all wells at the site for all monitoring events including the baseline event. The iron concentrations reported for the 7<sup>th</sup> semi-annual event are typical of previous monitoring events.

Lead was detected in sixteen (16) monitoring wells in concentrations ranging between 1.1 and 19 ug/L, all of which were below the GCTL of 15 ug/L with the exception of MW-20B. Lead was detected in three (3) of the dissolved (filtered) metals samples (MW-8B, 16B and 17B) at concentrations ranging between 5 and 14 ug/L, all of which are below the GCTL.

Nickel was detected in five (5) monitoring wells (MW-20B, 21B, 19C, 21C, and 22C) at concentrations ranging between 2 and 4.6 ug/L, which are all below the GCTL of

100 ug/L. Nickel was detected in two (2) of the dissolved (filtered) metals samples for MW-1 and MW-21C at concentrations of 2.5 and 7.2 ug/L, respectively, which are below the GCTL.

Selenium was detected in three (3) monitoring wells (MW-20A, 20B, and 21B) at concentrations ranging between 2.2 and 3.1 ug/L, which are all below the GCTL of 50 ug/L. Selenium was detected in one (1) well (MW-16B) where a dissolved (filtered) metals sample was collected at a concentration of 2.8 ug/L.

Sodium was detected in all fifty seven (57) monitoring wells in concentrations ranging between 4 and 33 mg/L, which are all below the GCTL of 160 mg/L. For the twelve (12) wells (MW-8B, 16B, 17B, 20B, 21B, 22B, 4C, 18C, 19C, 20C, 21C, and 23C) where dissolved (filtered) metals samples were collected, concentrations of sodium ranged between 5.1 and 17 mg/L, which are all below the GCTL.

Vanadium was detected in twenty six (26) monitoring wells at concentrations ranging between 2 and 37 ug/L, which are all below the GCTL of 49 ug/L. Vanadium was detected in four (4) of the dissolved (filtered) metals samples (MW-8B, 16B, 17B, and 20B) at concentrations ranging between 2.5 and 11 ug/L, which are all below the GCTL.

Zinc was detected in one (1) monitoring well, MW-19C at a concentration of 12 ug/L, which is below the GCTL of 5,000 ug/L. Zinc was not detected in any dissolved (filtered) metals samples.

#### *40 CFR Part 258, Appendix I Volatile Compounds (Method 8260)*

One (1) well (MW-9A) contained a detectable concentration of benzene (1.4 ug/L), which is above the GCTL of 1.0 ug/L. The GCTL for benzene was exceeded during the sixth semi-annual water quality monitoring event at a concentration of 3.9 ug/L for the initial sample and 2.6 ug/L for the confirmational sample collected. The concentration of benzene has decreased since the sixth semi-annual event.

Ethyl benzene was detected in one (1) well (MW-9A) in a concentration of 1.7 ug/L, which is below the GCTL of 30 ug/L.

One (1) well (MW-9A) contained a detectable concentration of m&p-xylenes (2.2 ug/L), which is below the GCTL of 20 ug/L.

Toluene was detected in eight (8) wells (MW-16A, 17A, 19B, 21B, 22B, 16C, 17C, and 22C) at concentrations ranging between 1.3 and 8.6 ug/L, which are all below the GCTL of 40 ug/L. Although toluene was not detected in these wells during the baseline event, toluene has been encountered at the site during the first two monitoring events for several of the Phase 1 monitoring wells. For these Phase 1 wells, the toluene was thought to have been attributed to the extensive use of heavy equipment usage during construction activities. Toluene has not been detected in any of the Phase 1 wells since the 1<sup>st</sup> Semi-Annual event. Note that the Phase 2 and 3 monitoring wells where toluene was detected are not located adjacent to or down-gradient of any active disposal cells.

Vinyl Chloride was detected in one (1) well (MW-9A) in a concentration of 2.1 ug/L, which is above the GCTL of 1.0 ug/L. The GCTL for vinyl chloride was exceeded during the sixth semi-annual water quality monitoring event at a concentration of 3 ug/L for the initial sample and 3.8 ug/L for the confirmational sample collected. The concentration of vinyl chloride has decreased since the sixth semi-annual event.

#### *Ammonia-N (Method 350.1)*

Ammonia-N was detected in fifty six (56) monitoring wells in concentrations ranging between 0.1 mg/L and 9.4 mg/L. All reported concentrations are less than the GCTL for ammonia-N of 2.8 mg/L except for MW-4A, 5A, 9A, 10A, and 11A, where the reported concentrations ranged between 2.8 and 9.4 mg/L.

#### *Anions by IC (Method 300)*

Chloride was detected in all fifty seven (57) monitoring wells at concentrations ranging between 5 and 52 mg/L. All reported concentrations are less than the GCTL for chloride of 250 mg/L.

#### *Nitrate-N (Method)*

Nitrate-N was detected in MW-16A at a concentration of 0.29 mg/L, which is below the GCTL of 10 mg/L.

#### *Total Dissolved Solids (TDS) (Method 160.1)*

All fifty seven (57) wells contained detectable concentrations of TDS ranging between 32 and 330 mg/L. All reported concentrations are below the GCTL of 500 mg/L.

### 4.3 Data Validation

All analyses were performed within the method specified holding times.

An equipment blank was collected using the peristaltic pump set up used for collection of the groundwater samples. De-ionized water supplied by Columbia was pumped through the peristaltic tubing and analyzed for the same parameters as the groundwater samples. All constituents analyzed for were non-detect for all analyses performed.

Two blind field duplicates were collected: Dup-01 was a blind duplicate of sample MW-9A and Dup-02 was a blind duplicate of sample MW-17C. A review of the analytical data shows that the blind duplicate sample data are in general agreement to the original sample data for all analytes.

### 4.4 Impact of Turbidity on Metals Concentrations

As discussed in Section 2.2 of this report, extended well development was not successful in clearing up some of the B-zone (intermediate) and C-zone (deep) groundwater monitoring wells.

Turbidity levels were less than the FDEP guidance of 20 NTU in forty five (45) of the fifty seven (57) wells sampled. A review of the analytical results for these forty five low-turbidity wells shows that arsenic, barium, chromium, cobalt, copper, iron, lead, nickel, sodium, selenium, and vanadium were reported above the method detection limits. Arsenic and barium were detected in eleven (11) and all forty five (45) monitoring wells, respectively. Chromium and cobalt were detected in thirty five (35) and four (4) monitoring wells, respectively. Copper and iron were detected in three (3) and all forty five (45) monitoring wells, respectively. Lead and nickel were detected in seven (7) and one (1) monitoring wells, respectively. Sodium and Vanadium were detected in all forty five (45) and sixteen (16) monitoring wells, respectively. The reported concentrations are comparable to those reported for samples with turbidity levels greater than 20 NTU. Analytical results for metals are presented in Table 3.

Table 4 presents dissolved metals (filtered) analytical results for the twelve (12) wells (MW-8B, 16B, 17B, 20B, 21B, 22B, 4C, 18C, 19C, 20C, 21C and 23C). These wells displayed turbidity readings greater than 20 NTU, as a result, filtered samples were collected for each well. Turbidity values for the total metals samples ranged between 59.2 and 276 NTU.

## **5. GROUNDWATER LEVEL MEASUREMENTS AND FLOW DIRECTION**

### **5.1 Field Measurements**

Groundwater level measurements were obtained on 21 November 2007 from all of the Phase 1, 2 and 3 groundwater monitoring wells and the remaining piezometers installed as part of the original site hydrogeological investigation. All groundwater levels measurements were made within an approximate 4-hr period. The groundwater level measurements from the monitoring wells and piezometers are presented in Table 7.

It should be noted that, as part of the site hydrogeological investigation, a total of 27 piezometers were installed. Two (2) piezometers (DP-1 and DP-2) located at the northern part of the site within Cell 1 footprint were decommissioned and abandoned on 3 October 2003 by Ambient Technologies, Inc. (ATI) of St. Petersburg, Florida. Two (2) additional piezometers (DP-3 and DP-4) located within Cell 3 footprint were decommissioned and abandoned on 16 January 2006 by National Environmental Technology, Inc (NET) Drilling Services of Dover, Florida. For the development of Phases 2 and 3, six (6) of the Phase 1 groundwater monitoring wells (MW-14A, 14B, 14C, 15A, 15B, and 15C) and ten (10) additional piezometers (DP-5, DP-6, DP-7, DP-8, DP-9, DP-10, DP-11, DP-12, DP-13, and SZ-1) were decommissioned and abandoned on 10 and 11 July 2007 by National Environmental Technology, Inc (NET) Drilling Services of Dover, Florida. Geosyntec monitored all monitoring well and piezometer decommissioning activities.

### **5.2 Water level Contours**

The water level contour maps prepared from groundwater level measurements for the three upper surficial aquifer zones (i.e., A-zone, B-zone and C-zone) are presented in Figures 1, 2 and 3.

Historically, the direction of the horizontal component of groundwater flow for all three zones is predominantly east-northeast towards Bull Creek. However, the dewatering operation for the Bronsons' borrow area has created a localized groundwater depression on the west side of Phase 1. The groundwater flow along the western property boundary is predominantly west towards the dewatering area. Based on a review of the groundwater level elevation data collected from the remainder of the A-zone, B-zone, and C-zone monitoring well network, the direction of the horizontal component of groundwater flow is predominantly east-northeast toward Bull Creek.

Comparison of water levels between the A, B and C wells shows a similar vertical gradient ( $1\text{E}^{-3}$  ft/ft). These gradients are consistent with the regional gradient in the upper surficial aquifer and indicate an interconnected, sluggish flow regime in the saturated zone above the Intermediate Confining Unit (ICU).



## **6.0 SURFACE WATER SAMPLING**

### **6.1 Sampling Locations and Procedures**

Two (2) surface water sampling locations established during the initial hydrogeological investigation were selected by FDEP for routine water quality monitoring. As stated in the Permit, surface water samples are only to be collected when there is flow in Bull Creek.

Collection of surface water samples commenced at the upstream monitoring station (SW-4) followed by the downstream monitoring location (SW-4). Bull Creek was observed to be flowing at the time of sampling. Surface water samples were collected from the approximate center of Bull Creek. A YSI 556 water quality meter was used to measure field parameters including temperature, pH, dissolved oxygen, specific conductance, and Eh at each sampling location. Turbidity levels were measured using a LaMotte 2020e turbidity meter. Surface water samples were collected in accordance with FDEP surface water sampling SOPs.

### **6.2 Sample Analyses**

Surface water samples were analyzed by Columbia in accordance with the NELAC (National Environmental Laboratory Accreditation Conference) standards for unionized ammonia, total hardness as CaCO<sub>3</sub>, total organic carbon, chlorides, nitrate, total dissolved solids (TDS), total suspended solids (TSS), biological oxygen demand (BOD), chemical oxygen demand (COD), total nitrogen as N, nitrate as N, total phosphates as P, chlorophyll A, iron, mercury, fecal coli form, and the 40 CFR, Part 258 Appendix I parameters. Other required parameters (e.g., pH; temperature; specific conductance; turbidity; Eh; and dissolved oxygen) were field measured during collection of the surface water samples.

### **6.3 Field Measurements and Analytical Results**

Table 8 provides a summary of the final field parameter values and field data measured for the surface water samples.

The analytical results for the surface water samples collected are presented on a CD in Appendix E. Copies of the laboratory reports (PDF) and the electronic data files in the FDEP electronic validator spreadsheet format are included on the CD. Analytical results have been summarized in Table 8 to show all parameters where a constituent concentration was reported above the method detection limit and any parameter exceeding Surface Water Quality Criteria (SWQC) Class III concentrations.

The fecal coliform concentration for the SW-4 (upstream or background) monitoring station exceeded the SWQC for a Class III water standard of 800 #/100ml. Please note that the fecal coliform test was not required for any of the previous six semi-annual monitoring events. Although the SWQC was exceeded, this monitoring location is upstream of the site. The fecal coliform concentration for the downstream monitoring station (SW-3) was below the SWQC Class III level. The pH concentrations at SW-3 and 4 were both lower than the SWQC range of 6-8.5 standard units, but are consistent with normal ranges of pH as measured in rainfall (i.e., precipitation).

## **7.0 LEACHATE SAMPLING**

### **7.1 Sampling Location and Procedures**

In accordance with the permit requirements, a leachate sample is to be collected from each disposal cell on an annual basis. To date, Cells 1 through 4 have been constructed and have received waste. Cell 5 was under construction at the time of the seventh semi-annual water quality sampling event. Therefore, leachate samples for this seventh semi-annual sampling event were collected from primary leachate sump risers for Cells 1 through 4 only. These leachate samples collected as part of the seventh semi-annual sampling event fulfill the leachate sampling requirement for the year 2007.

The leachate samples were collected from the Cells 1 through 4 primary leachate sump risers using a peristaltic pump. An YSI 556 water quality meter was used to measure field parameters including temperature, pH, dissolved oxygen, specific conductance, Eh, and turbidity. The leachate samples were collected in accordance with FDEP SOP.

### **7.2 Sample Analyses**

The leachate sample was analyzed by Columbia-Jacksonville in accordance with the NELAC standards for total ammonia-N, bicarbonate, chlorides, nitrate, total dissolved solids (TDS), iron, mercury, sodium and the 40 CFR, Part 258 Appendix II parameters. Other required parameters (i.e., pH; temperature; specific conductance; turbidity; Eh; and dissolved oxygen) were field measured during collection of the leachate samples.

### **7.3 Field Measurements and Analytical Results**

Table 8 provides a summary of the final field parameter values and field data measured for the leachate samples.

The analytical results for the leachate samples are presented on a CD in Appendix E. Analytical results have been summarized in Table 8 to show all parameters where a constituent concentration was reported above the method detection limit. No constituents tested exceeded the regulatory levels listed in 40 CFR Part 261.24. It should be noted that the leachate from the Oak Hammock Disposal Facility is removed from the site for treatment.

Table 1 (1 of 3)

**SUMMARY OF MONITORING WELL CONSTRUCTION DETAILS  
SEVENTH SEMI-ANNUAL WATER QUALITY MONITORING EVENT  
OAK HAMMOCK DISPOSAL FACILITY**

Well Designation	Latitude (NAD 1983)	Longitude (NAD 1983)	WACS ID	Date Installed	Top of Casing Elevation, TOC (feet)	Total Depth (feet BTOC)	Screen Setting				Sand Pack (feet BTOC)	Fine-Grained Sand Seal (feet BTOC)
							(feet BTOC)		(feet Elevation)			
							Top	Bottom	Top	Bottom		
MW-1A	28 03 48.55	81 05 59.88	19900	9-Dec-03	95.1	23.0	13.0	23.0	82.1	72.1	10.6	8.2
MW-2A	28 03 51.99	81 05 59.90	19903	10-Dec-03	95.2	22.6	12.6	22.6	82.6	72.6	10.3	8.9
MW-3A	28 03 55.34	81 05 59.91	19906	11-Dec-03	94.6	22.8	12.8	22.8	81.9	71.9	10.4	9.0
MW-4A	28 03 58.97	81 05 59.92	19909	12-Dec-03	95.5	23.1	13.1	23.1	82.4	72.4	10.8	9.4
MW-5A	28 04 02.92	81 05 59.95	19912	24-Nov-03	95.3	22.5	12.5	22.5	82.8	72.8	10.1	9.1
MW-6A	28 04 06.50	81 05 59.15	19915	25-Nov-03	94.7	22.6	12.6	22.6	82.2	72.2	10.6	8.6
MW-7A	28 04 07.13	81 05 54.78	19918	26-Nov-03	95.5	23.3	13.3	23.3	82.2	72.2	10.3	9.3
MW-8A	28 04 06.20	81 05 50.64	19921	5-Dec-03	94.7	22.5	12.5	22.5	82.2	72.2	10.2	8.6
MW-9A	28 04 04.34	81 05 46.60	19924	4-Dec-03	94.7	22.4	12.4	22.4	82.3	72.3	10.0	8.6
MW-10A	28 04 00.07	81 05 44.77	19927	3-Dec-03	96.3	22.1	12.1	22.1	84.1	74.1	9.8	7.6
MW-11A	28 03 55.43	81 05 43.27	19930	3-Dec-03	93.6	22.8	12.8	22.8	80.7	70.7	10.5	9.1
MW-12A	28 03 52.08	81 05 43.26	19933	2-Dec-03	95.1	23.0	13.0	23.0	82.1	72.1	10.7	9.3
MW-13A	28 03 48.67	81 05 43.25	19936	8-Dec-03	95.2	22.5	12.5	22.5	82.7	72.7	10.2	7.7
MW-14A	Monitoring Well Abandoned 10 July 2007											
MW-15A	Monitoring Well Abandoned 10 July 2007											
MW-16A	28 03 44.55	81 05 40.22	22342	21-Sep-07	88.69	18.63	8.1	18.1	80.6	70.6	6.1	5.1
MW-17A	28 03 42.38	81 05 35.42	22345	22-Sep-07	88.86	19.88	9.4	19.4	79.5	69.5	7.4	6.4
MW-18A	28 03 37.21	81 05 35.16	22348	11-Sep-07	87.56	17.70	7.2	17.2	80.4	70.4	5.2	4.2
MW-19A	28 03 33.40	81 05 39.60	22351	11-Sep-07	87.54	17.65	7.2	17.2	80.4	70.4	5.2	4.2
MW-20A	28 03 31.82	81 05 45.45	22354	19-Sep-07	87.12	17.93	7.4	17.4	79.7	69.7	5.4	4.4
MW-21A	28 03 32.10	81 05 52.48	22357	14-Sep-07	87.20	18.04	7.5	17.5	79.7	69.7	5.5	4.5
MW-22A	28 03 32.35	81 05 59.48	22360	14-Sep-07	87.71	18.00	7.5	17.5	80.2	70.2	5.5	4.5
MW-23A	28 03 42.41	81 05 59.79	22363	25-Sep-07	97.90	27.75	17.3	27.3	80.7	70.7	15.3	14.3

Table 1 (2 of 3)

**SUMMARY OF MONITORING WELL CONSTRUCTION DETAILS  
SEVENTH SEMI-ANNUAL WATER QUALITY MONITORING EVENT  
OAK HAMMOCK DISPOSAL FACILITY**

Well Designation	Latitude (NAD 1983)	Longitude (NAD 1983)	WACS ID	Date Installed	Top of Casing Elevation, TOC (feet)	Total Depth (feet BTOC)	Screen Setting				Sand Pack (feet BTOC)	Fine-Grained Sand Seal (feet BTOC)
							(feet BTOC)		(feet Elevation)			
							Top	Bottom	Top	Bottom		
MW-1B	28 03 48.59	81 05 59.89	19901	9-Dec-03	95.0	47.9	37.9	47.9	57.1	47.1	35.6	33.1
MW-2B	28 03 51.94	81 05 59.90	19904	10-Dec-03	95.2	48.3	38.3	48.3	56.9	46.9	36.0	34.6
MW-3B	28 03 55.31	81 05 59.91	19907	11-Dec-03	94.7	47.6	37.6	47.6	57.1	47.1	35.3	33.9
MW-4B	28 03 59.01	81 05 59.92	19910	12-Dec-03	95.2	47.4	37.4	47.4	57.8	47.8	35.1	33.5
MW-5B	28 04 02.88	81 05 59.95	19913	24-Nov-03	95.3	47.1	37.1	47.1	58.2	48.2	34.4	32.7
MW-6B	28 04 06.48	81 05 59.18	19916	25-Nov-03	94.6	47.4	37.4	47.4	57.2	47.2	34.9	33.5
MW-7B	28 04 07.13	81 05 54.81	19919	26-Nov-03	95.3	47.5	37.5	47.5	57.8	47.8	34.5	33.5
MW-8B	28 04 06.19	81 05 50.60	19922	5-Dec-03	94.6	49.6	39.6	49.6	55.0	45.0	37.1	35.6
MW-9B	28 04 04.31	81 05 46.56	19925	4-Dec-03	94.6	49.1	39.1	49.1	55.5	45.5	36.8	35.3
MW-10B	28 04 00.04	81 05 44.75	19928	3-Dec-03	96.2	48.3	38.3	48.3	58.0	48.0	35.9	33.9
MW-11B	28 03 55.40	81 05 43.27	19931	2-Dec-03	93.6	47.9	37.9	47.9	55.7	45.7	35.5	34.0
MW-12B	28 03 52.05	81 05 43.27	19934	1-Dec-03	95.0	49.0	39.0	49.0	56.1	46.1	36.6	35.1
MW-13B	28 03 48.64	81 05 43.24	19937	8-Dec-03	95.1	47.2	37.2	47.2	58.0	48.0	34.8	33.4
MW-14B	Monitoring Well Abandoned 10 July 2007											
MW-15B	Monitoring Well Abandoned 10 July 2007											
MW-16B	28 03 44.52	81 05 40.17	22343	21-Sep-07	88.73	38.09	27.6	37.6	61.1	51.1	25.6	24.6
MW-17B	28 03 42.35	81 05 35.36	22346	20-Sep-07	88.79	40.18	29.7	39.7	59.1	49.1	27.7	26.7
MW-18B	28 03 37.16	81 05 35.19	22349	11-Sep-07	87.43	37.80	27.3	37.3	60.1	50.1	25.3	24.3
MW-19B	28 03 33.38	81 05 39.66	22352	11-Sep-07	87.64	37.73	27.2	37.2	60.4	50.4	25.2	24.2
MW-20B	28 03 31.82	81 05 45.51	22355	19-Sep-07	87.27	37.76	27.3	37.3	60.0	50.0	25.3	24.3
MW-21B	28 03 32.09	81 05 52.55	22358	17-Sep-07	87.23	37.63	27.1	37.1	60.1	50.1	25.1	24.1
MW-22B	28 03 32.36	81 05 59.54	22361	14-Sep-07	87.69	37.96	27.5	37.5	60.2	50.2	25.5	24.5
MW-23B	28 03 42.46	81 05 59.79	22364	25-Sep-07	97.91	42.75	32.3	42.3	65.7	55.7	30.3	29.3

Table 1 (3 of 3)

**SUMMARY OF MONITORING WELL CONSTRUCTION DETAILS  
SEVENTH SEMI-ANNUAL WATER QUALITY MONITORING EVENT  
OAK HAMMOCK DISPOSAL FACILITY**

Well Designation	Latitude (NAD 1983)	Longitude (NAD 1983)	WACS ID	Date Installed	Top of Casing Elevation, TOC (feet)	Total Depth (feet BTOC)	Screen Setting				Sand Pack (feet BTOC)	Fine-Grained Sand Seal (feet BTOC)
							(feet BTOC)		(feet Elevation)			
							Top	Bottom	Top	Bottom		
MW-1C	28 03 48.63	81 05 59.88	19902	9-Dec-03	95.2	75.2	65.2	75.2	30.0	20.0	62.9	61.4
MW-2C	28 03 51.90	81 05 59.89	19905	10-Dec-03	95.3	68.4	58.4	68.4	36.9	26.9	56.1	53.7
MW-3C	28 03 55.28	81 05 59.91	19908	11-Dec-03	94.7	68.7	58.7	68.7	36.0	26.0	56.3	54.8
MW-4C	28 03 59.04	81 05 59.92	19911	12-Dec-03	95.4	72.5	62.5	72.5	32.9	22.9	61.2	59.6
MW-5C	28 04 02.83	81 05 59.95	19914	24-Nov-03	95.4	73.0	63.0	73.0	32.4	22.4	60.7	58.7
MW-6C	28 04 06.46	81 05 59.22	19917	25-Nov-03	94.6	73.2	63.2	73.2	31.4	21.4	60.2	57.7
MW-7C	28 04 07.13	81 05 54.86	19920	25-Nov-03	94.9	73.3	63.3	73.3	31.6	21.6	60.3	59.3
MW-8C	28 04 06.17	81 05 50.55	19923	5-Dec-03	94.5	73.9	63.9	73.9	30.6	20.6	61.6	59.8
MW-9C	28 04 04.29	81 05 46.53	19926	4-Dec-03	94.5	73.8	63.8	73.8	30.8	20.8	61.4	59.4
MW-10C	28 04 00.01	81 05 44.74	19929	3-Dec-03	96.4	73.7	63.7	73.7	32.7	22.7	61.4	60.0
MW-11C	28 03 55.36	81 05 43.26	19932	2-Dec-03	93.7	73.4	63.4	73.4	30.3	20.3	61.0	59.6
MW-12C	28 03 52.01	81 05 43.26	19935	1-Dec-03	95.1	73.6	63.6	73.6	31.5	21.5	60.2	58.7
MW-13C	28 03 48.60	81 05 43.25	19938	8-Dec-03	95.0	73.0	63.0	73.0	32.1	22.1	60.7	58.2
MW-14C	Monitoring Well Abandoned 10 July 2007											
MW-15C	Monitoring Well Abandoned 10 July 2007											
MW-16C	28 03 44.50	81 05 40.11	22344	21-Sep-07	88.8	67.7	57.2	67.2	31.6	21.6	55.2	54.2
MW-17C	28 03 42.31	81 05 35.31	22347	20-Sep-07	88.9	67.3	56.8	66.8	32.0	22.0	54.8	53.8
MW-18C	28 03 37.10	81 05 35.22	22350	12-Sep-07	87.4	67.2	56.7	66.7	30.8	20.8	54.7	53.7
MW-19C	28 03 33.37	81 05 39.72	22353	10-Sep-07	87.4	66.7	56.2	66.2	31.2	21.2	54.2	53.2
MW-20C	28 03 31.82	81 05 45.57	22356	18-Sep-07	87.4	66.8	56.3	66.3	31.1	21.1	54.3	53.3
MW-21C	28 03 32.10	81 05 52.61	22359	17-Sep-07	87.1	62.6	52.1	62.1	35.1	25.1	50.1	49.1
MW-22B	28 03 32.36	81 05 59.60	22362	13-Sep-07	87.6	67.3	56.8	66.8	30.8	20.8	54.8	53.8
MW-23B	28 03 42.51	81 05 59.80	22365	24-Sep-07	97.9	67.1	56.6	66.6	41.4	31.4	54.6	53.6

Table 2

**SUMMARY OF FINAL FIELD PARAMETER RESULTS AND FIELD DATA  
SEVENTH SEMI-ANNUAL WATER QUALITY MONITORING EVENT**

Monitoring Well	pH (Standard Units)	Temperature (°C)	Specific Conductance (mS/cm) <sup>1</sup>	Turbidity (NTUs) <sup>2</sup>	Oxidation-Reduction Potential (mV) <sup>3</sup>	DO (mg/L) <sup>4</sup>	Purging Method
MW-2A	4.77	25.79	0.133	0.5	-130.3	0.26	Peristaltic Pump
MW-3A	4.48	26.32	0.307	0.3	-178.3	0.32	Peristaltic Pump
MW-4A	4.75	26.62	0.148	0.5	-180.4	0.42	Peristaltic Pump
MW-5A	4.19	27.00	0.185	6.2	-125.9	0.28	Peristaltic Pump
MW-7A	4.36	24.90	0.150	0.5	-182.6	0.41	Peristaltic Pump
MW-8A	4.16	25.36	0.254	1.0	-169.4	0.21	Peristaltic Pump
MW-9A	4.29	27.53	0.145	2.2	-116.5	0.27	Peristaltic Pump
MW-10A	4.40	26.69	0.123	4.7	-158.8	0.32	Peristaltic Pump
MW-11A	5.20	27.10	0.222	12.4	-125.6	0.16	Peristaltic Pump
MW-12A	4.54	26.13	0.139	0.0	-89.3	0.19	Peristaltic Pump
MW-13A	5.10	25.07	0.156	2.5	-157.9	0.78	Peristaltic Pump
MW-16A	4.81	26.11	0.120	2.4	-67.4	0.91	Peristaltic Pump
MW-17A	4.77	25.78	0.118	4.2	-126.9	0.25	Peristaltic Pump
MW-18A	4.84	24.53	0.087	3.1	-83.0	0.49	Peristaltic Pump
MW-19A	4.71	28.58	0.154	0.0	-133.2	0.27	Peristaltic Pump
MW-20A	4.97	26.01	0.222	3.9	-154.3	0.96	Peristaltic Pump
MW-21A	4.43	25.90	0.191	0.0	30.8	0.23	Peristaltic Pump
MW-22A	4.66	26.31	0.152	0.4	-128.3	0.40	Peristaltic Pump
MW-23A	5.29	27.58	0.162	3.2	-147.7	0.18	Peristaltic Pump
MW-2B	4.60	24.52	0.047	6.2	-74.9	0.29	Submersible Pump
MW-3B	4.70	25.03	0.072	6.2	-132.8	0.21	Submersible Pump
MW-4B	4.81	25.65	0.079	0.5	-163.3	0.41	Peristaltic Pump
MW-5B	4.13	25.72	0.052	0.4	-117.7	0.44	Peristaltic Pump
MW-7B	4.50	23.91	0.088	17.7	-191.9	0.26	Submersible Pump
MW-8B	4.63	24.03	0.055	59.2	-161.1	0.19	Submersible Pump
MW-9B	4.82	24.99	0.071	7.0	-137.0	0.31	Submersible Pump
MW-10B	5.57	24.73	0.087	0.4	-155.2	0.35	Peristaltic Pump
MW-11B	4.82	25.33	0.118	3.3	-165.9	0.10	Submersible Pump
MW-12B	4.46	24.95	0.077	5.7	-115.8	0.20	Submersible Pump
MW-13B	4.70	24.69	0.064	18.7	-127.2	0.11	Submersible Pump
MW-16B	5.06	25.17	0.087	276.0	-207.6	0.18	Submersible Pump
MW-17B	5.07	24.45	0.117	65.3	-144.9	0.42	Submersible Pump
MW-18B	4.94	24.45	0.116	5.4	-145.3	0.34	Submersible Pump
MW-19B	4.96	32.50	0.121	19.2	-169.0	0.87	Submersible Pump
MW-20B	5.09	24.24	0.110	190.0	-129.4	0.73	Submersible Pump
MW-21B	5.04	24.56	0.100	100.0	-116.6	0.35	Submersible Pump
MW-22B	5.02	24.32	0.057	113.0	-140.1	0.33	Submersible Pump
MW-23B	4.76	25.46	0.080	3.5	-198.2	0.20	Submersible Pump
MW-2C	5.32	24.02	0.048	4.2	-177.5	0.24	Submersible Pump
MW-3C	5.03	24.66	0.064	2.3	-144.6	0.58	Peristaltic Pump
MW-4C	5.92	24.17	0.120	59.0	-231.9	0.30	Submersible Pump
MW-5C	4.83	25.68	0.088	13.2	-121.4	0.67	Peristaltic Pump
MW-7C	4.92	23.73	0.064	4.6	-162.3	0.72	Peristaltic Pump
MW-8C	4.64	24.58	0.066	3.7	-124.2	0.44	Peristaltic Pump
MW-9C	5.02	25.24	0.065	0.9	-161.4	0.42	Peristaltic Pump
MW-10C	4.99	23.87	0.058	4.9	-175.0	0.37	Submersible Pump
MW-11C	5.08	24.90	0.132	0.9	-123.2	0.26	Peristaltic Pump
MW-12C	4.23	24.85	0.058	0.4	-112.6	0.29	Peristaltic Pump
MW-13C	6.03	24.39	0.065	2.2	-153.0	0.23	Peristaltic Pump
MW-16C	5.15	24.45	0.107	10.4	-51.3	0.27	Submersible Pump
MW-17C	5.45	23.90	0.125	18.0	-185.7	0.27	Submersible Pump
MW-18C	5.80	24.29	0.122	70.7	-112.9	0.33	Submersible Pump
MW-19C	5.25	28.26	0.101	226.0	-194.7	0.18	Submersible Pump
MW-20C	5.22	24.18	0.096	113.0	-129.7	1.26	Submersible Pump
MW-21C	5.10	24.48	0.101	68.2	-156.5	0.13	Submersible Pump
MW-22C	6.68	24.42	0.473	5.8	-58.5	0.56	Peristaltic Pump
MW-23C	5.83	24.27	0.113	80.1	-230.2	0.20	Submersible Pump

Notes:

<sup>1</sup> mS/cm = milli Siemens per centimeter<sup>2</sup> NTU = Nephelometric Turbidity Units<sup>3</sup> mV = millivolts<sup>4</sup> mg/L = milligram per liter



TABLE 3 (1 of 3)

**SUMMARY OF ANALYTICAL RESULTS (TOTAL METALS)  
SEVENTH SEMI-ANNUAL WATER QUALITY MONITORING EVENT**

Well ID	Type	Arsenic (ug/L)		Barium (ug/L)		Beryllium (ug/L)		Cadmium (ug/L)		Chromium (ug/L)	
GCTL		10		2,000		4		5		100	
MW-2A	B	0.5	I	11		0.12	I	0.12	U	2	
MW-3A	B	0.3	I	41		0.084	U	0.12	U	4	
MW-4A	B	0.8		18		0.084	U	0.12	U	2.8	
MW-5A	B	1.2		2.7		0.084	U	0.12	U	4.8	
MW-7A	D	0.7		15		0.084	U	0.12	U	3.3	
MW-8A	D	0.6	U	39		0.17	U	0.73	I	2.8	I
MW-9A	D	2.2		5.6		0.17	U	0.76	I	2.4	I
MW-10A	D	0.9	I	4.5		0.17	U	0.76	I	3.4	I
MW-11A	D	1.9		8.4		0.084	U	0.12	U	7	
MW-12A	D	4.1		9.5		0.084	U	0.12	U	3.3	
MW-13A	D	1.6		8.5		0.084	U	0.12	U	5.9	
MW-16A	D	0.6		24		0.084	U	0.14	I	2.1	
MW-17A	D	0.9		15		0.084	U	0.12	U	2.5	
MW-18A	D	0.3	I	8		0.084	U	0.12	U	2	
MW-19A	D	0.7		26		0.084	U	0.12	U	3.5	
MW-20A	D	0.3	I	13		0.084	U	0.12	U	2.9	
MW-21A	D	0.4	I	50		0.084	U	0.72	I	1.3	I
MW-22A	B	0.4	I	17		0.084	U	0.12	U	2.3	
MW-23A	B	0.4	I	10		0.084	U	0.12	U	2.4	
MW-2B	B	0.3	U	11		0.084	U	0.12	U	2.4	
MW-3B	B	0.3	U	16		0.091	I	0.12	U	2.1	
MW-4B	B	0.3	U	7.8		0.084	U	0.12	U	3	
MW-5B	B	0.3	U	11		0.084	U	0.12	U	2.3	
MW-7B	D	0.3	U	36		0.084	U	0.12	U	2.9	
MW-8B	D	0.6	U	52		0.17	U	0.78	I	5.6	
MW-9B	D	0.6	U	24		0.17	U	0.76	I	3.2	I
MW-10B	D	0.6	U	12		0.17	U	0.71	I	1.6	I
MW-11B	D	0.3	U	20		0.084	U	0.12	U	2.2	
MW-12B	D	0.3	U	28		0.084	U	0.12	U	2.1	
MW-13B	D	0.3	U	15		0.084	U	0.12	U	2.5	
MW-16B	D	0.6	U	121		0.18	I	0.91	I	11	
MW-17B	D	0.6	U	94		0.19	I	0.77	I	5.5	
MW-18B	D	0.3	U	15		0.093	I	0.12	U	2.6	
MW-19B	D	0.5	I	38		0.1	I	0.12	U	2.4	
MW-20B	D	0.6		234		0.57	I	0.21	I	15	
MW-21B	D	0.9		92		0.21	I	0.19	I	8.8	
MW-22B	B	0.7		13		0.084	U	0.12	U	1.8	I
MW-23B	B	0.3	U	18		0.1	I	0.12	U	4.3	
MW-2C	B	0.3	U	17		0.15	I	0.12	U	2.2	
MW-3C	B	0.3	U	13		0.084	U	0.12	U	2	I
MW-4C	B	0.3	U	6.7		0.084	U	0.12	U	1.8	I
MW-5C	B	0.3	U	32		0.11	I	0.12	U	2.4	
MW-7C	D	0.3	U	40		0.13	I	0.12	U	2.6	
MW-8C	D	0.6	U	20		0.17	U	0.73	I	4.7	
MW-9C	D	0.6	U	19		0.17	U	0.8	I	2	I
MW-10C	D	0.6	U	19		0.17	U	0.72	I	1.8	I
MW-11C	D	0.3	U	7.6		0.084	U	0.12	U	1.8	I
MW-12C	D	0.3	U	19		0.17	I	0.12	U	1.7	I
MW-13C	D	0.3	U	18		0.084	U	0.12	U	2.2	
MW-16C	D	0.6	U	33		0.17	U	0.76	I	3.1	I
MW-17C	D	0.3	U	25		0.084	U	0.12	U	2.8	
MW-18C	D	1.4		109		0.36	I	0.12	U	7.5	
MW-19C	D	1.4		267		2.1		0.87		32	
MW-20C	D	1.0		112		0.38	I	0.24	I	8.2	
MW-21C	D	1.0		87		0.38	I	0.15	I	14	
MW-22C	B	0.6		22		0.084	U	0.12	U	5.8	
MW-23C	B	0.3	U	15		0.1	I	0.12	U	7.1	
Dup-1 (MW-9A)		2.3		6.5		0.084	U	0.12	U	2.6	
Dup-2 (MW-17C)		0.3	U	26		0.089	I	0.12	U	5	

## Notes:

- <sup>1</sup> U = Not detected at value represented
- <sup>2</sup> I = Value is estimated to be between method detection limit and practical quantitation limit.
- <sup>3</sup> Constituent detections are shown in shaded cells (green color)
- <sup>4</sup> Constituent detections exceeding the GCTL are shown in shaded cells (red color)
- <sup>5</sup> Well type: (B) Background well (D) Detection well



TABLE 3 (2 of 3)

**SUMMARY OF ANALYTICAL RESULTS (TOTAL METALS)  
SEVENTH SEMI-ANNUAL WATER QUALITY MONITORING EVENT**

Well ID	Type	Cobalt (ug/L)		Copper (ug/L)		Iron (mg/L)	Lead (ug/L)		Nickel (ug/L)	
GCTL		140		1,000		0.3	15		100	
MW-2A	B	1.4		0.29	U	3.8	0.3	U	0.7	U
MW-3A	B	0.8	I	0.29	I	1.7	0.3	U	1.4	I
MW-4A	B	0.4	I	0.29	U	1.9	0.3	U	0.9	I
MW-5A	B	0.1	I	0.59	I	0.2	1.3		1.4	I
MW-7A	D	1.2		0.29	U	5.9	0.3	U	0.8	I
MW-8A	D	1.6	I	0.85	I	2.7	0.6	U	3.4	I
MW-9A	D	0.9	I	0.66	I	2.1	0.6	U	3.6	I
MW-10A	D	0.4	I	0.89	I	2.6	0.6	U	2.7	I
MW-11A	D	1		0.29	U	20.3	0.6	I	1.4	I
MW-12A	D	1.1		0.29	U	12.3	0.3	U	1.7	I
MW-13A	D	1	I	0.29	U	12.9	0.3	U	0.7	U
MW-16A	D	0.2	I	0.79	I	0.7	1.8		1.1	I
MW-17A	D	0.3	I	0.29	U	1.3	0.3	U	0.8	I
MW-18A	D	0.2	I	0.52	I	0.6	0.7	I	0.9	I
MW-19A	D	0.1	I	0.29	U	1.0	0.3	U	1.3	I
MW-20A	D	0.4	I	0.71	I	0.6	1.0	I	1.6	I
MW-21A	D	0.1	I	0.29	I	0.2	0.4	I	1.1	I
MW-22A	B	0.3	I	0.29	U	1.8	0.3	U	0.7	U
MW-23A	B	0.2	I	0.29	U	1.7	0.3	U	1.1	I
MW-2B	B	0.2	I	0.7	I	0.7	0.5	I	0.7	U
MW-3B	B	0.3	I	0.29	I	0.9	0.4	I	0.7	U
MW-4B	B	0.1	I	0.29	U	0.7	0.3	U	0.7	I
MW-5B	B	0.1	I	0.29	U	6.3	0.3	U	1.0	I
MW-7B	D	0.2	I	0.5	I	1.6	1.1		1.2	I
MW-8B	D	0.2	I	1.4	I	1.0	5.3		1.4	U
MW-9B	D	0.2	I	1.6	I	0.9	0.8	I	1.4	U
MW-10B	D	0.3	I	0.58	U	0.7	0.6	U	1.4	U
MW-11B	D	0.1	I	2.8		0.7	0.7	I	0.7	U
MW-12B	D	0.1	I	2.9		1.6	1.1		0.7	U
MW-13B	D	0.2	I	6.7		0.9	2.0		0.7	U
MW-16B	D	1.2	I	2.8	I	1.7	14.0		2.6	I
MW-17B	D	0.5	I	2.3	I	2.0	6.3		1.4	U
MW-18B	D	0.2	I	0.84	I	0.8	0.6	I	0.7	I
MW-19B	D	0.2	I	1.3	I	0.9	2.2		0.7	U
MW-20B	D	0.4	I	2	I	2.8	19.0		2.1	
MW-21B	D	0.4	I	4		3.1	7.8		2.0	
MW-22B	B	0.3	I	0.29	U	2.5	0.3	U	0.7	U
MW-23B	B	0.3	I	0.29	U	0.7	0.3	I	1.7	I
MW-2C	B	0.0	U	0.29	U	0.7	0.3	U	0.7	U
MW-3C	B	0.0	U	0.29	U	0.9	0.3	U	0.7	U
MW-4C	B	0.0	I	0.29	U	1.5	0.3	U	0.7	U
MW-5C	B	0.1	I	0.36	I	1.9	0.3	I	1.0	I
MW-7C	D	0.0	I	0.32	I	0.8	1.6		0.7	U
MW-8C	D	0.1	I	0.58	U	1.0	0.6	U	1.8	I
MW-9C	D	0.1	U	0.58	U	0.7	0.6	U	1.4	U
MW-10C	D	0.1	I	0.79	I	0.9	0.6	U	1.4	U
MW-11C	D	0.0	U	0.29	U	0.5	0.3	U	0.7	U
MW-12C	D	0.0	U	0.29	U	0.7	0.3	U	0.7	U
MW-13C	D	0.0	U	0.29	U	0.6	0.3	U	0.9	I
MW-16C	D	0.1	I	0.99	I	1.4	0.7	I	1.4	U
MW-17C	D	0.2	I	2	I	1.6	0.4	I	0.9	I
MW-18C	D	0.8	I	0.8	I	1.7	2.2		1.8	I
MW-19C	D	1.1		11		5.1	6.5		4.6	
MW-20C	D	0.3	I	1.6	I	2.9	2.5		1.1	I
MW-21C	D	0.2	I	1.8	I	2.5	1.3		3.4	
MW-22C	B	0.2	I	0.29	U	0.8	0.3	U	2.5	
MW-23C	B	0.2	I	0.48	I	0.6	0.7	I	1.5	I
Dup-1 (MW-9A)		1.0	I	0.29	U	2.1	0.3	U	3.2	
Dup-2 (MW-17C)		0.2	I	1.8	I	1.9	0.5	I	1.6	I

Notes:

<sup>1</sup> U = Not detected at value represented<sup>2</sup> I = Value is estimated to be between method detection limit and practical quantitation limit.<sup>3</sup> Constituent detections are shown in shaded cells (green color)<sup>4</sup> Constituent detections exceeding the GCTL are shown in shaded cells (red color)<sup>5</sup> Well type: (B) Background well (D) Detection well



TABLE 3 (3 of 3)

**SUMMARY OF ANALYTICAL RESULTS (TOTAL METALS)**  
**SEVENTH SEMI-ANNUAL WATER QUALITY MONITORING EVENT**

Well ID	Type	Selenium (ug/L)		Sodium (mg/L)	Vanadium (ug/L)		Zinc (ug/L)
GCTL		50		160	49		5,000
MW-2A	B	0.8	U	10	0.5	I	2.1
MW-3A	B	0.8	U	33	0.5	I	5.6
MW-4A	B	0.8	U	6.5	1.4	I	3.5
MW-5A	B	0.8	U	10	2.2		3.5
MW-7A	D	0.8	U	10	0.7	I	2.9
MW-8A	D	1.6	U	23	1.9	I	5.0
MW-9A	D	1.6	U	7.7	2.8	I	6.7
MW-10A	D	1.6	U	6.7	2.8	I	9.3
MW-11A	D	1	U	10	5.5		2.2
MW-12A	D	0.8	U	10	1.5	I	3.0
MW-13A	D	1	U	11	3.5		1.7
MW-16A	D	0.8	U	10	7.9		2.0
MW-17A	D	0.8	U	11	2.9		1.7
MW-18A	D	0.8	U	4	2.6		1.7
MW-19A	D	0.8	U	14	2.8		2.0
MW-20A	D	2.4		20	7.1		1.7
MW-21A	D	0.8	U	26	0.2	U	1.7
MW-22A	B	0.8	U	25	0.4	I	1.7
MW-23A	B	0.8	U	9.5	2.0		2.0
MW-2B	B	0.8	U	5	2.1		1.7
MW-3B	B	0.8	U	6.1	1.7	I	1.7
MW-4B	B	0.8	U	8.8	1.6	I	2.7
MW-5B	B	0.8	U	4.3	1.0	I	3.5
MW-7B	D	0.8	U	8	2.6		2.5
MW-8B	D	2.9	I	6.1	13.0		4.2
MW-9B	D	1.6	U	8.6	2.8	I	6.1
MW-10B	D	1.6	U	9	1.1	I	3.4
MW-11B	D	0.8	U	15	1.4	I	4.2
MW-12B	D	0.8	U	7.2	0.5	I	7.8
MW-13B	D	0.8	U	8.3	1.3	I	6.2
MW-16B	D	1.7	I	8.1	11.0		11.0
MW-17B	D	1.6	U	12	5.7		4.8
MW-18B	D	0.8	U	17	2.2		2.5
MW-19B	D	0.8	U	17	2.6		1.8
MW-20B	D	2.2		17	17.0		3.0
MW-21B	D	3.1		16	12.0		2.6
MW-22B	B	0.8	U	9.2	0.9	I	3.6
MW-23B	B	0.8	U	10	2.7		1.7
MW-2C	B	0.8	U	4.7	1.8	I	1.7
MW-3C	B	0.8	U	5.2	1.3	I	1.7
MW-4C	B	0.8	U	10	1.7	I	2.6
MW-5C	B	0.8	U	8.5	1.5	I	4.0
MW-7C	D	0.8	U	6.3	2.8		2.5
MW-8C	D	1.6	U	5.7	2.4	I	5.7
MW-9C	D	1.6	U	6	1.9	I	3.4
MW-10C	D	1.6	U	6.2	1.2	I	4.1
MW-11C	D	0.8	U	10	0.8	I	1.7
MW-12C	D	0.8	U	5.5	0.4	I	1.7
MW-13C	D	0.8	U	7.6	0.8	I	3.2
MW-16C	D	1.6	U	11	3.5	I	4.4
MW-17C	D	0.8	U	12	2.9		3.3
MW-18C	D	0.8	U	12	9.4		3.0
MW-19C	D	0.8	U	9.5	37.0		12.0
MW-20C	D	0.8	I	9.5	8.1		5.3
MW-21C	D	0.8	U	10	5.5		4.1
MW-22C	B	0.8	U	6.6	0.6	I	2.6
MW-23C	B	0.8	U	5.3	5.0		2.1
Dup-1 (MW-9A)		0.8	U	7.8	1.7	I	4.6
Dup-2 (MW-17C)		0.8	U	12	2.9		3.3

Notes:

- <sup>1</sup> U = Not detected at value represented
- <sup>2</sup> I = Value is estimated to be between method detection limit and practical quantitation limit.
- <sup>3</sup> Constituent detections are shown in shaded cells (green color)
- <sup>4</sup> Constituent detections exceeding the GCTL are shown in shaded cells (red color)
- <sup>5</sup> Well type: (B) Background well (D) Detection well



TABLE 4 (1 of 2)

**SUMMARY OF ANALYTICAL RESULTS (DISSOLVED METALS)  
SEVENTH SEMI-ANNUAL WATER QUALITY MONITORING EVENT**

Well ID	Type	Arsenic (ug/L)		Barium (ug/L)		Chromium (ug/L)		Copper (ug/L)		Iron (mg/L)	
GCTL		10		2,000		100		1,000		0.3	
MW-2A	B	NA		NA		NA		NA		NA	
MW-3A	B	NA		NA		NA		NA		NA	
MW-4A	B	NA		NA		NA		NA		NA	
MW-5A	B	NA		NA		NA		NA		NA	
MW-7A	D	NA		NA		NA		NA		NA	
MW-8A	D	NA		NA		NA		NA		NA	
MW-9A	D	NA		NA		NA		NA		NA	
MW-10A	D	NA		NA		NA		NA		NA	
MW-11A	D	NA		NA		NA		NA		NA	
MW-12A	D	NA		NA		NA		NA		NA	
MW-13A	D	NA		NA		NA		NA		NA	
MW-16A	D	NA		NA		NA		NA		NA	
MW-17A	D	NA		NA		NA		NA		NA	
MW-18A	D	NA		NA		NA		NA		NA	
MW-19A	D	NA		NA		NA		NA		NA	
MW-20A	D	NA		NA		NA		NA		NA	
MW-21A	D	NA		NA		NA		NA		NA	
MW-22A	B	NA		NA		NA		NA		NA	
MW-23A	B	NA		NA		NA		NA		NA	
MW-2B	B	NA		NA		NA		NA		NA	
MW-3B	B	NA		NA		NA		NA		NA	
MW-4B	B	NA		NA		NA		NA		NA	
MW-5B	B	NA		NA		NA		NA		NA	
MW-7B	D	NA		NA		NA		NA		NA	
MW-8B	D	0.4	I	51		4.1		1.2	I	1.0	
MW-9B	D	NA		NA		NA		NA		NA	
MW-10B	D	NA		NA		NA		NA		NA	
MW-11B	D	NA		NA		NA		NA		NA	
MW-12B	D	NA		NA		NA		NA		NA	
MW-13B	D	NA		NA		NA		NA		NA	
MW-16B	D	0.7		129		10		3.6		2.4	
MW-17B	D	0.6		87		3.5		2.1		2.0	
MW-18B	D	NA		NA		NA		NA		NA	
MW-19B	D	NA		NA		NA		NA		NA	
MW-20B	D	0.3	I	20		1.2	I	0.29	U	1.7	
MW-21B	D	0.4	I	12		1.1	I	0.29	U	2.4	
MW-22B	B	0.4	I	14		0.69	I	0.29	U	1.5	
MW-23B	B	NA		NA		NA		NA		NA	
MW-2C	B	NA		NA		NA		NA		NA	
MW-3C	B	NA		NA		NA		NA		NA	
MW-4C	B	0.3	U	9.9		1.2	I	0.3	I	0.8	
MW-5C	B	NA		NA		NA		NA		NA	
MW-7C	D	NA		NA		NA		NA		NA	
MW-8C	D	NA		NA		NA		NA		NA	
MW-9C	D	NA		NA		NA		NA		NA	
MW-10C	D	NA		NA		NA		NA		NA	
MW-11C	D	NA		NA		NA		NA		NA	
MW-12C	D	NA		NA		NA		NA		NA	
MW-13C	D	NA		NA		NA		NA		NA	
MW-16C	D	NA		NA		NA		NA		NA	
MW-17C	D	NA		NA		NA		NA		NA	
MW-18C	D	0.5		38		3.7		0.29	U	1.1	
MW-19C	D	0.3	U	39		1	I	1	I	1.2	
MW-20C	D	0.3	U	37		1	I	0.29	U	1.4	
MW-21C	D	0.3	U	30		2	I	0.3	I	1.3	
MW-22C	B	NA		NA		NA		NA		NA	
MW-23C	B	0.3	U	5.5		1.9	I	0.29	U	0.8	

## Notes:

<sup>1</sup> U = Not detected at value represented<sup>2</sup> I = Value is estimated to be between method detection limit and practical quantitation limit.<sup>3</sup> Constituent detections are shown in shaded cells (green color)<sup>4</sup> Constituent detections exceeding the GCTL are shown in shaded cells (red color)<sup>5</sup> Well type: (B) Background well (D) Detection well



TABLE 4 (2 of 2)

**SUMMARY OF ANALYTICAL RESULTS (DISSOLVED METALS)  
SEVENTH SEMI-ANNUAL WATER QUALITY MONITORING EVENT**

Well ID	Type	Lead (ug/L)		Nickel (ug/L)		Selenium (ug/L)		Sodium (mg/L)		Vanadium (mg/L)	
GCTL		15		100		50		180		49.0	
MW-2A	B	NA		NA		NA		NA		NA	
MW-3A	B	NA		NA		NA		NA		NA	
MW-4A	B	NA		NA		NA		NA		NA	
MW-5A	B	NA		NA		NA		NA		NA	
MW-7A	D	NA		NA		NA		NA		NA	
MW-8A	D	NA		NA		NA		NA		NA	
MW-9A	D	NA		NA		NA		NA		NA	
MW-10A	D	NA		NA		NA		NA		NA	
MW-11A	D	NA		NA		NA		NA		NA	
MW-12A	D	NA		NA		NA		NA		NA	
MW-13A	D	NA		NA		NA		NA		NA	
MW-16A	D	NA		NA		NA		NA		NA	
MW-17A	D	NA		NA		NA		NA		NA	
MW-18A	D	NA		NA		NA		NA		NA	
MW-19A	D	NA		NA		NA		NA		NA	
MW-20A	D	NA		NA		NA		NA		NA	
MW-21A	D	NA		NA		NA		NA		NA	
MW-22A	B	NA		NA		NA		NA		NA	
MW-23A	B	NA		NA		NA		NA		NA	
MW-2B	B	NA		NA		NA		NA		NA	
MW-3B	B	NA		NA		NA		NA		NA	
MW-4B	B	NA		NA		NA		NA		NA	
MW-5B	B	NA		NA		NA		NA		NA	
MW-7B	D	NA		NA		NA		NA		NA	
MW-8B	D	5.0		0.77	I	1	I	6		11.0	
MW-9B	D	NA		NA		NA		NA		NA	
MW-10B	D	NA		NA		NA		NA		NA	
MW-11B	D	NA		NA		NA		NA		NA	
MW-12B	D	NA		NA		NA		NA		NA	
MW-13B	D	NA		NA		NA		NA		NA	
MW-16B	D	14.0		2.5		2.8		8.4		11.0	
MW-17B	D	5.5		0.88	I	1.1	I	12		4.7	
MW-18B	D	NA		NA		NA		NA		NA	
MW-19B	D	NA		NA		NA		NA		NA	
MW-20B	D	0.8	I	0.69	U	0.79	U	17		2.5	
MW-21B	D	0.3	U	0.69	U	0.79	U	16		0.6	I
MW-22B	B	0.3	U	0.69	U	0.79	U	9.1		0.9	I
MW-23B	B	NA		NA		NA		NA		NA	
MW-2C	B	NA		NA		NA		NA		NA	
MW-3C	B	NA		NA		NA		NA		NA	
MW-4C	B	0.3	U	1.3	I	0.79	U	10		1.2	I
MW-5C	B	NA		NA		NA		NA		NA	
MW-7C	D	NA		NA		NA		NA		NA	
MW-8C	D	NA		NA		NA		NA		NA	
MW-9C	D	NA		NA		NA		NA		NA	
MW-10C	D	NA		NA		NA		NA		NA	
MW-11C	D	NA		NA		NA		NA		NA	
MW-12C	D	NA		NA		NA		NA		NA	
MW-13C	D	NA		NA		NA		NA		NA	
MW-16C	D	NA		NA		NA		NA		NA	
MW-17C	D	NA		NA		NA		NA		NA	
MW-18C	D	0.4	I	0.84	I	0.79	U	12		1.8	I
MW-19C	D	0.3	U	0.69	U	0.79	U	9.6		1.6	I
MW-20C	D	0.3	U	0.69	U	0.79	U	9.4		1.6	I
MW-21C	D	0.3	I	7.2		0.79	U	9.4		1.0	I
MW-22C	B	NA		NA		NA		NA		NA	
MW-23C	B	0.3	U	0.69	U	0.79	U	5.1		0.5	I

Notes:

<sup>1</sup> U = Not detected at value represented<sup>2</sup> I = Value is estimated to be between method detection limit and practical quantitation limit.<sup>3</sup> Constituent detections are shown in shaded cells (green color)<sup>4</sup> Constituent detections exceeding the GCTL are shown in shaded cells (red color)<sup>5</sup> Well type: (B) Background well (D) Detection well



TABLE 5

**SUMMARY OF ANALYTICAL RESULTS (VOLATILE COMPOUNDS)  
SEVENTH SEMI-ANNUAL WATER QUALITY MONITORING EVENT**

Well ID	Type	Benzene (ug/L)		Ethyl Benzene (ug/L)		m&p-Xylenes (ug/L)		Toluene (ug/L)		Vinyl Chloride (ug/L)	
GCTL		1.0		30		20		40		1.0	
MW-2A	B	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-3A	B	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-4A	B	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-5A	B	0.1	U	0.12	U	0.19	U	0.13	U	0.4	I
MW-7A	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-8A	D	0.3	I	0.12	U	0.19	U	0.13	U	0.12	U
MW-9A	D	1.4		1.7		2.2		0.33	I	2.1	
MW-10A	D	0.1	U	0.12	U	0.19	U	0.29	I	0.12	U
MW-11A	D	1	I	0.5	I	0.54	I	0.13	U	0.12	U
MW-12A	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-13A	D	0	U	0.12	U	0.21	I	0.3	I	0.12	U
MW-16A	D	0.1	U	0.12	U	0.19	U	8.6		0.12	U
MW-17A	D	0.1	U	0.12	U	0.19	U	1.6		0.12	U
MW-18A	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-19A	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-20A	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-21A	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-22A	B	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-23A	B	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-2B	B	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-3B	B	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-4B	B	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-5B	B	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-7B	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-8B	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-9B	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-10B	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-11B	D	0.1	U	0.12	U	0.19	I	0.13	U	0.12	U
MW-12B	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-13B	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-16B	D	0.1	U	0.12	U	0.19	U	0.19	I	0.12	U
MW-17B	D	0.1	U	0.12	U	0.19	U	0.48	I	0.12	U
MW-18B	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-19B	D	0.1	U	0.12	U	0.19	U	2.9		0.12	U
MW-20B	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-21B	D	0.1	U	0.12	U	0.19	U	3		0.12	U
MW-22B	B	0.1	U	0.12	U	0.19	U	3.7		0.12	U
MW-23B	B	0.1	U	0.12	U	0.19	U	0.35	I	0.12	U
MW-2C	B	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-3C	B	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-4C	B	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-5C	B	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-7C	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-8C	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-9C	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-10C	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-11C	D	0.1	U	0.28	I	0.67	I	0.23	I	0.12	U
MW-12C	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-13C	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-16C	D	0.1	U	0.12	U	0.19	U	6.6		0.12	U
MW-17C	D	0.1	U	0.12	U	0.19	U	2.6		0.12	U
MW-18C	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-19C	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-20C	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-21C	D	0.1	U	0.12	U	0.19	U	0.13	U	0.12	U
MW-22C	B	0.1	U	0.12	U	0.19	U	1.3		0.12	U
MW-23C	B	0.1	U	0.12	U	0.19	U	0.51	I	0.12	U
Dup-1 (MW-9A)		1.4		1.6		2.2		0.35	I	2.0	
Dup-2 (MW-17C)		0.1	U	0.12	U	0.19	U	2.3		0.12	U

Notes:

- <sup>1</sup> U = Not detected at value represented
- <sup>2</sup> I = Value is estimated to be between method detection limit and practical quantitation limit.
- <sup>3</sup> Constituent detections are shown in shaded cells (green color)
- <sup>4</sup> Constituent detections exceeding the GCTL are shown in shaded cells (red color)
- <sup>5</sup> Well type: (B) Background well (D) Detection well



TABLE 6

**SUMMARY OF ANALYTICAL RESULTS (MISCELLANEOUS)  
SEVENTH SEMI-ANNUAL WATER QUALITY MONITORING EVENT**

Well ID	Type	Ammonia-N (mg/L)	Chloride (mg/L)	Nitrate-N (mg/L)	Total Dissolved Solids (mg/L)
<b>GCTL</b>		<b>2.8</b>	<b>250</b>	<b>10</b>	<b>500</b>
MW-2A	B	0.2	27	0.064 U	61
MW-3A	B	1.3	5	0.064 U	150
MW-4A	B	2.3	18	0.064 U	110
MW-5A	B	3.4	23	0.064 U	190
MW-7A	D	1.8	24	0.064 UQ	69
MW-8A	D	1.6	52	0.003 U	150
MW-9A	D	3.7	19	0.003 U	95
MW-10A	D	6.0	13	0.003 U	97
MW-11A	D	9.4	10	0.064 U	180
MW-12A	D	0.7	10	0.064 U	100
MW-13A	D	1.3	17	0.064 U	110
MW-16A	D	1.3	16	0.290	110
MW-17A	D	1.8	15	0.064 U	99
MW-18A	D	0.4	12	0.064 U	79
MW-19A	D	0.9	15	0.064 U	100
MW-20A	D	0.1	25	0.064 U	170
MW-21A	D	0.2	42	0.120 I	110
MW-22A	B	0.4	36	0.064 U	100
MW-23A	B	0.6	19	0.064 U	110
MW-2B	B	0.2	8	0.064 U	37
MW-3B	B	0.2	15	0.064 U	50
MW-4B	B	0.04 I	10	0.064 U	81
MW-5B	B	0.2	9	0.064 UQ	42
MW-7B	D	0.2	19	0.064 UQ	69
MW-8B	D	0.2	8	0.003 U	86
MW-9B	D	0.1	14	0.003 U	61
MW-10B	D	0.1	15	0.003 U	59
MW-11B	D	0.1	24	0.064 U	69
MW-12B	D	0.1	16	0.064 U	56
MW-13B	D	0.1	13	0.064 U	59
MW-16B	D	0.6	14	0.003 U	180
MW-17B	D	0.3	19	0.003 U	110
MW-18B	D	0.1	23	0.064 U	81
MW-19B	D	0.2	25	0.064 U	87
MW-20B	D	0.5	25	0.064 U	210
MW-21B	D	0.4	23	0.064 U	120
MW-22B	B	0.3	11	0.064 U	67
MW-23B	B	0.2	17	0.064 U	48
MW-2C	B	0.1	7	0.064 U	44
MW-3C	B	0.1	8	0.064 U	35
MW-4C	B	0.2	9	0.064 U	100
MW-5C	B	0.1	16	0.064 UQ	59
MW-7C	D	0.1	8	0.064 UQ	59
MW-8C	D	0.1	8	0.003 U	57
MW-9C	D	0.1	8	0.003 U	50
MW-10C	D	0.2	8	0.003 U	56
MW-11C	D	0.1	18	0.064 U	85
MW-12C	D	0.1	8	0.064 U	43
MW-13C	D	0.2	11	0.064 U	32
MW-16C	D	0.2	20	0.003 U	81
MW-17C	D	0.2	18	0.064 U	94
MW-18C	D	0.2	19	0.064 U	91
MW-19C	D	0.8	17	0.064 U	120
MW-20C	D	0.4	19	0.064 U	93
MW-21C	D	0.3	18	0.064 U	83
MW-22C	B	0.1	8	0.064 U	330
MW-23C	B	0.3	8	0.064 U	74
Dup-1 (MW-9A)		5.3	19	0.003 U	100
Dup-2 (MW-17C)		0.2	18	0.064 U	110

Notes:

- <sup>1</sup> U = Not detected at value represented
- <sup>2</sup> I = Value is estimated to be between method detection limit and practical quantitation limit.
- <sup>3</sup> Constituent detections are shown in shaded cells (green color)
- <sup>4</sup> Constituent detections exceeding the GCTL are shown in shaded cells (red color)
- <sup>5</sup> Well type: (B) Background well (D) Detection well

Table 7  
(1 of 3)  
**GROUNDWATER LEVEL MEASUREMENTS**  
**SEVENTH SEMI-ANNUAL WATER QUALITY MONITORING EVENT**  
**OAK HAMMOCK DISPOSAL FACILITY**

Site Name: Oak Hammock Disposal Facility				Sampling Personnel: Joe Terry		
Location: Osceola County, Florida				Field Conditions: clear, ~67°F		
Date: 21-Nov-2007						
Well ID	Time	TOC Elevation	Depth to Water (ft)	Well Depth (ft)	GW Elevation	Field Observations
DP-1				Piezometer Abandoned 03 October 2003		
DP-2				Piezometer Abandoned 03 October 2003		
DP-3				Piezometer Abandoned 16 January 2006		
DP-4				Piezometer Abandoned 16 January 2006		
DP-5				Piezometer Abandoned 10 July 2007		
DP-6				Piezometer Abandoned 10 July 2007		
DP-7				Piezometer Abandoned 10 July 2007		
DP-8				Piezometer Abandoned 10 July 2007		
DP-9				Piezometer Abandoned 10 July 2007		
DP-10				Piezometer Abandoned 10 July 2007		
DP-11				Piezometer Abandoned 10 July 2007		
DP-12				Piezometer Abandoned 10 July 2007		
DP-13				Piezometer Abandoned 11 July 2007		
DP-14	9:30	82.0	5.47	18.6	76.50	
DP-15	9:30	82.0	5.53	53.7	76.45	protective casing lid broken
DP-16	8:45	82.6	5.20	18.5	77.37	protective casing hinge rusted
DP-17	8:45	82.6	5.28	53.7	77.30	protective casing hinge rusted
DP-18	8:25	84.4	6.77	52.9	77.61	protective casing rusted, lid broken
DP-19	8:25	84.3	6.68	18.4	77.66	protective casing lid broken
DP-20	10:25	83.1	5.45	18.4	77.62	protective casing lid broken
DP-21	10:25	83.0	5.50	53.7	77.50	
DP-22	10:05	81.0	5.07	18.6	75.93	protective casing lid broken
DP-23	10:05	81.3	4.94	53.8	76.33	
DP-24	10:20	82.2	5.30	18.6	76.92	protective casing lid broken
SZ-1				Piezometer Abandoned 10 July 2007		
SZ-2	10:25	83.2	6.70	75.4	76.46	protective casing lid broken
SZ-3	10:05	81.3	5.48	78.9	75.79	protective casing lid broken
MW-1A	7:35	95.1	20.36	23.0	74.76	protective casing rusting inside
MW-1B	7:35	95.0	20.27	47.9	74.73	protective casing rusting inside and dented
MW-1C	7:35	95.2	20.41	74.4	74.77	protective casing rusting inside
MW-2A	7:43	95.2	19.79	22.6	75.42	protective casing rusting inside, lid broken
MW-2B	7:43	95.2	19.77	48.1	75.40	protective casing rusting inside, lid broken
MW-2C	7:43	95.3	19.85	68.4	75.47	protective casing rusting inside
MW-3A	7:48	94.6	18.48	22.8	76.16	
MW-3B	7:48	94.7	18.49	47.7	76.19	
MW-3C	7:48	94.7	18.49	68.8	76.17	

Table 7  
(2 of 3)  
**GROUNDWATER LEVEL MEASUREMENTS**  
**SEVENTH SEMI-ANNUAL WATER QUALITY MONITORING EVENT**  
**OAK HAMMOCK DISPOSAL FACILITY**

Site Name: Oak Hammock Disposal Facility				Sampling Personnel: Joe Terry		
Location: Osceola County, Florida				Field Conditions: clear, ~67°F		
Date: 21-Nov-2007						
Well ID	Time	TOC Elevation	Depth to Water (ft)	Well Depth (ft)	GW Elevation	Field Observations
MW-4A	7:52	95.5	18.57	23.1	76.91	protective casing rusting inside, lid broken
MW-4B	7:52	95.2	18.30	47.4	76.88	protective casing rusting inside, lid broken
MW-4C	7:52	95.4	18.51	72.6	76.88	protective casing rusting inside
MW-5A	7:55	95.3	17.55	22.5	77.77	protective casing rusting inside
MW-5B	7:55	95.3	17.95	47.1	77.35	protective casing rusting inside
MW-5C	7:55	95.4	18.24	73.0	77.15	protective casing rusting inside
MW-6A	8:05	94.7	17.49	22.6	77.23	protective casing rusting inside
MW-6B	8:05	94.6	17.36	47.5	77.24	protective casing rusting inside
MW-6C	8:05	94.6	17.45	73.1	77.13	protective casing rusting inside
MW-7A	11:00	95.5	18.15	23.3	77.33	protective casing rusting inside, lid broken
MW-7B	11:00	95.3	17.93	48.0	77.34	protective casing rusting inside, lid broken
MW-7C	11:00	94.9	17.74	73.4	77.19	protective casing rusting inside, lid broken
MW-8A	10:55	94.7	17.32	22.5	77.35	protective casing rusting inside, lid broken
MW-8B	10:55	94.6	17.28	49.3	77.30	protective casing hinge rusted
MW-8C	10:55	94.5	17.34	73.8	77.16	protective casing hinge rusted
MW-9A	10:50	94.7	17.50	22.4	77.16	protective casing hinge rusted
MW-9B	10:50	94.6	17.50	49.1	77.13	protective casing hinge rusted
MW-9C	10:50	94.5	17.55	74.7	76.99	protective casing rusting inside
MW-10A	10:45	96.3	19.25	22.1	77.00	protective casing hinge rusted
MW-10B	10:45	96.2	19.25	48.3	76.98	protective casing hinge rusted
MW-10C	10:45	96.4	19.47	74.9	76.89	protective casing hinge rusted
MW-11A	10:42	93.6	16.74	22.8	76.82	protective casing rusting inside
MW-11B	10:42	93.6	16.77	47.9	76.82	protective casing rusting inside
MW-11C	10:42	93.7	16.82	73.6	76.83	protective casing rusting inside
MW-12A	10:37	95.1	18.01	23.0	77.09	protective casing rusting inside
MW-12B	10:37	95.0	17.99	49.0	77.02	protective casing rusting inside
MW-12C	10:37	95.1	18.12	73.6	76.98	protective casing rusting inside
MW-13A	10:30	95.2	17.98	22.5	77.21	protective casing rusting inside
MW-13B	10:30	95.1	17.90	47.3	77.22	protective casing rusting inside
MW-13C	10:30	95.0	17.88	73.0	77.16	protective casing rusting inside
MW-14A	Monitoring Well Abandoned 10 July 2007					
MW-14B	Monitoring Well Abandoned 10 July 2007					
MW-14C	Monitoring Well Abandoned 10 July 2007					
MW-15A	Monitoring Well Abandoned 10 July 2007					
MW-15B	Monitoring Well Abandoned 10 July 2007					
MW-15C	Monitoring Well Abandoned 10 July 2007					



Table 7  
(3 of 3)  
**GROUNDWATER LEVEL MEASUREMENTS**  
**SEVENTH SEMI-ANNUAL WATER QUALITY MONITORING EVENT**  
**OAK HAMMOCK DISPOSAL FACILITY**

Site Name: Oak Hammock Disposal Facility			Sampling Personnel: Joe Terry			
Location: Osceola County, Florida			Field Conditions: clear, ~67°F			
Date: 21-Nov-2007						
Well ID	Time	FOC Elevation	Depth to Water (ft)	Well Depth (ft)	GW Elevation	Field Observations
MW-16A	9:10	88.69	11.35	18.63	77.34	
MW-16B	9:10	88.73	11.41	38.09	77.32	
MW-16C	9:10	88.77	11.51	67.65	77.26	
MW-17A	9:05	88.86	11.77	19.88	77.09	
MW-17B	9:05	88.79	11.72	40.18	77.07	
MW-17C	9:05	88.85	11.83	67.33	77.02	
MW-18A	9:00	87.56	10.07	17.70	77.49	
MW-18B	9:00	87.43	9.95	37.80	77.48	
MW-18C	9:00	87.42	9.98	67.15	77.44	
MW-19A	8:40	87.54	9.72	17.65	77.82	
MW-19B	8:40	87.64	9.82	37.73	77.82	
MW-19C	8:40	87.44	9.65	66.70	77.79	
MW-20A	8:35	87.12	9.13	17.93	77.99	
MW-20B	8:35	87.27	9.29	37.76	77.98	
MW-20C	8:35	87.35	9.56	66.75	77.79	
MW-21A	8:30	87.20	9.57	18.04	77.63	
MW-21B	8:30	87.23	9.57	37.63	77.66	
MW-21C	8:30	87.13	9.51	62.57	77.62	
MW-22A	8:15	87.71	11.11	18.00	76.60	
MW-22B	8:15	87.69	11.13	37.96	76.56	
MW-22C	8:15	87.55	10.80	67.25	76.75	
MW-23A	7:30	97.90	23.43	27.75	74.47	
MW-23B	7:30	97.91	23.43	42.75	74.48	
MW-23C	7:30	97.93	23.45	67.05	74.48	

Table 8

**SUMMARY OF SURFACE WATER FIELD MEASUREMENTS AND ANALYTICAL RESULTS**  
**SEVENTH SEMI-ANNUAL WATER QUALITY MONITORING REPORT**  
**OAK HAMMOCK DISPOSAL FACILITY**

Parameter	Analytical Method	Units	FL-SWQC Class III	Monitoring Location	
				SW-3	SW-4
Arsenic	6020	mg/L	0.05	0.0005	ND
Barium	6020	mg/L	-	0.014	0.015
Chlorophyll a	SM 10200H	mg/m <sup>3</sup>	-	2.4	ND
COD	410.2	mg/L	-	87	95
Fecal Coli form	SM 9222D	#/100mL	800	560	1000
Hardness as CaCO <sub>3</sub>	6010B	mg/L	-	16	16
Iron	6010B	mg/L	1	0.795	0.875
Nitrogen, Total as N	351.2/300.0	mg/L	-	1.5	1.4
Organic Carbon, Total	415.1	mg/L	-	36	37
Phosphorus, Total	365.1	mg/L	-	0.045	0.053
Sodium	6020	mg/L	-	9.9	10
Total Dissolved Solids	160.1	mg/L	-	95	88
Dissolved Oxygen	Field Measurement	mg/L	5	7.41	7.47
pH	Field Measurement	std units	6-8.5	4.58	4.29
Temperature	Field Measurement	°C	-	15.11	14.08
Conductivity	Field Measurement	uS/cm	< 50% above background or 1275, whichever is >	95	98
Turbidity	Field Measurement	NTU	< 29 above background	0.2	0.3
Water Elevation <sup>(1)</sup>	Field Measurement	ft	-	73.1	77.30

Note (1): Surface Water Elevations referenced to NGVD 1929

Table 9

**SUMMARY OF FIELD MEASUREMENTS AND ANALYTICAL RESULTS  
SEVENTH SEMI-ANNUAL WATER QUALITY MONITORING EVENT  
OAK HAMMOCK DISPOSAL FACILITY**

Parameter	Units	Regulatory Level <sup>1</sup>	Monitoring Locations			
			L-1	L-2	L-3	L-4
FIELD MEASUREMENTS						
Temperature	°C		28.75	30.00	28.23	37.28
pH	Std Units		6.8	6.0	4.7	6.4
Conductivity	mS/cm		5.312	6.362	4.044	10.14
Turbidity	NTU		3.0	28.2	12.8	1.0
ORP	mV		-57.5	-208.5	-171.7	-295.3
Dissolved Oxygen	mg/L		0.3	0.26	0.22	0.22
ANALYTICAL RESULTS						
1,1-Dichloroethene	ug/L	700	1.6 U	1.6 U	12	1.6 U
2-Butanone (MEK)	ug/L	200,000	9.7 U	9.7 U	25000	9.7 U
4-methyl-2-pentanone (MIBK)	ug/L		9.4 U	9.4 U	420	9.4 U
4-Methylphenol	ug/L		0.81 U	16	2500	1.6 I
Acetone	ug/L		19 U	19 U	12000	63 I
Alkalinity, Total (as CaCO3)	mg/L		1200	570	420	2200
AMMONIA-N	mg/L		57	200	190	760
Antimony	ug/L		0.97 I	7 I	3.4	56
Arsenic	ug/L	5,000	21	27	13	97
Barium	ug/L	100,000	817	234	281	281
Benzene	ug/L	500	5.1 I	11	20	5.4 I
Cadmium	ug/L	1,000	0.6 U	0.6 U	0.12 U	3.6
Chloride	mg/L		1100	1800	720	2200
Chromium	ug/L	5,000	50	41	14	534
Cobalt	ug/L		12	3.2 I	1.5	28
Copper	ug/L		3 I	2.5 I	1.7 I	27
Ethyl benzene	ug/L		16	44	48	23
Ethylene dichloride	ug/L		1.1 U	1.1 U	22	1.1 U
Iron	ug/L		12700	2940	16500	346
Lead	ug/L	5,000	1.8 I	2.1 I	0.35 I	14
m&p-Xylenes	ug/L		6.5 I	55	56	40
Nickel	ug/L		59	41	27	168
o-Xylene	ug/L		0.83 U	26	22	19
Phenol	ug/L		1.9 U	1.9 U	300	2 U
Selenium	ug/L	1,000	12	12	3.8	162
Sodium	mg/L		1300	829	447	237
Sulfide	mg/L		50	11	29	16
Toluene	ug/L		1.3 U	51	930	44
Total Dissolved Solids	mg/L		4400	4100	2600	10000
Vanadium	ug/L		44	102	55	712

**Notes:**

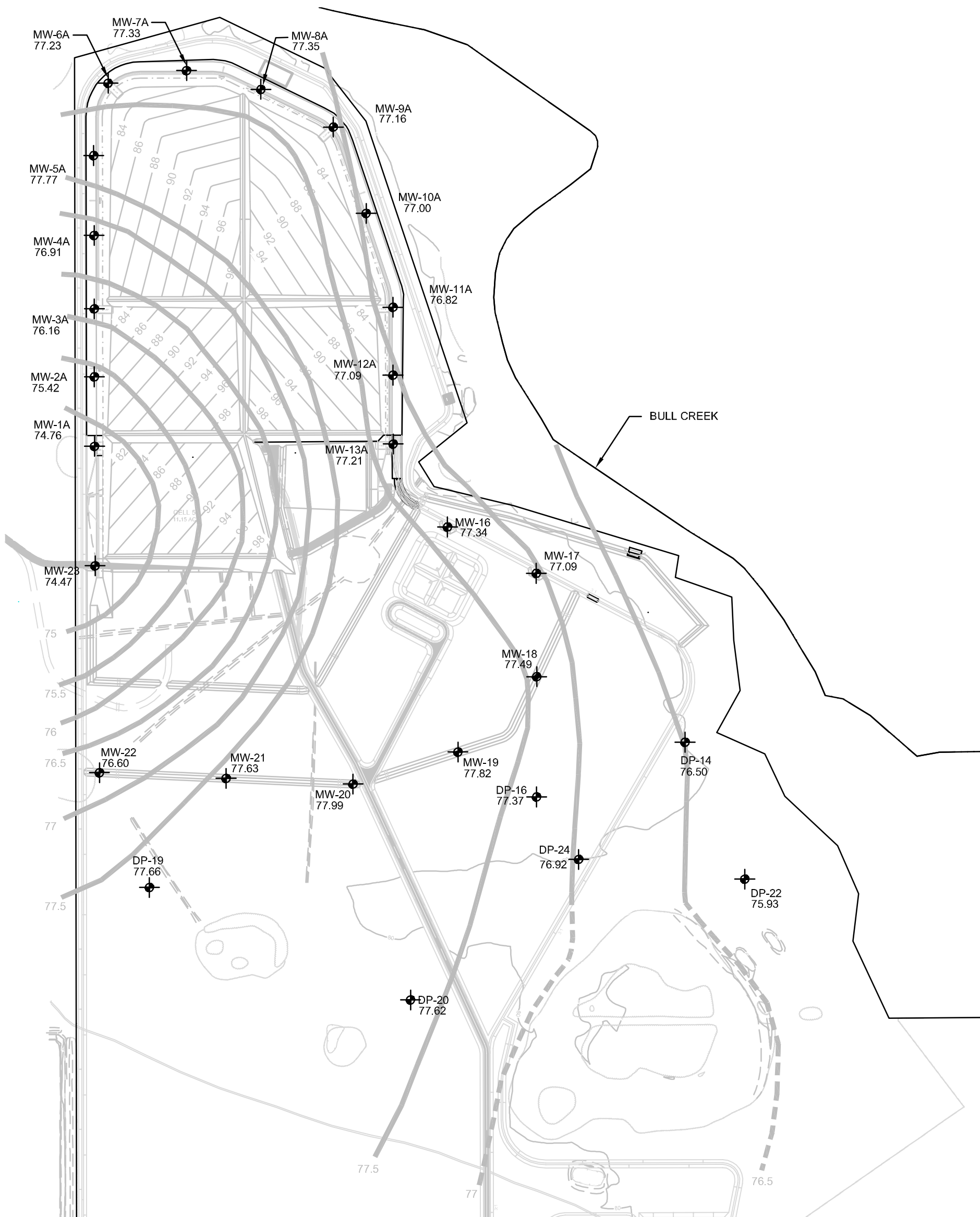
<sup>1</sup> Maximum concentration of contaminants for the toxicity characteristic listed in 40 CFR 261.24.

U = Not detected at value represented

I = Value is estimated to be between method detection limit and practical quantitation limit.

Only parameters with detections above the Method Reporting Limit are shown.

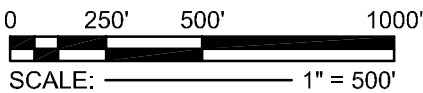
7th MONITORING EVENT ( NOV 2007)  
J.E.D. SOILD WASTE MANAGEMENT FACILITY  
WACS FACILITY ID 89455  
"A"-ZONE (SHALLOW) WELLS - WATER LEVEL CONTOURS  
FIGURE 1



LEGEND

- MONITORING WELL  
GROUNDWATER ELEVATION\*
- PIEZOMETER GROUNDWATER  
ELEVATION\*
- GROUNDWATER CONTOUR

\* WATER LEVEL MEASUREMENTS FROM  
21 NOV 2007 SITE WIDE SURVEY



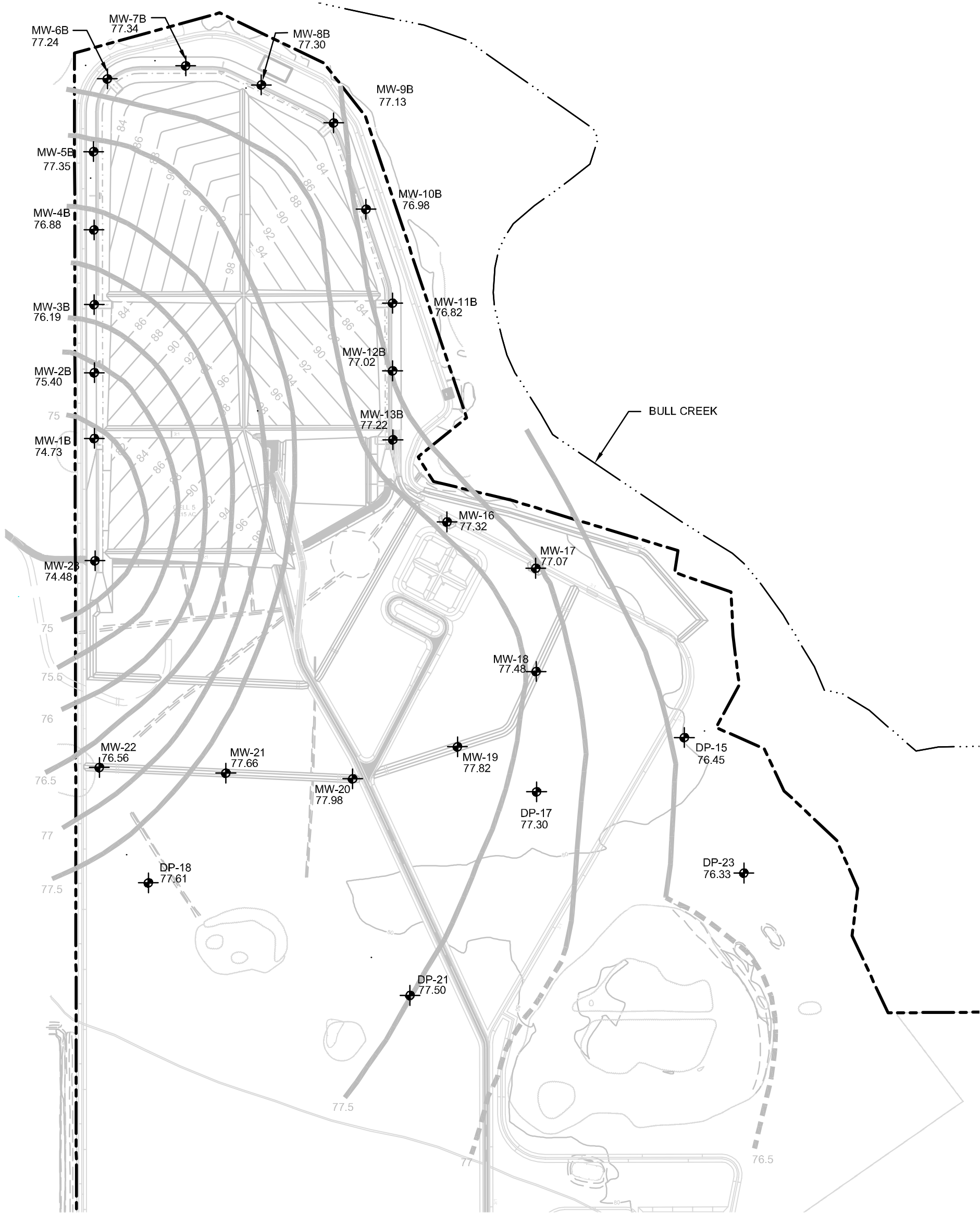
SCALE: 1" = 500'

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DATE:	FEBRUARY 2008	FILE NO.	FQ1144.02F01
PROJECT NO.	FQ1144	FIGURE NO.	1

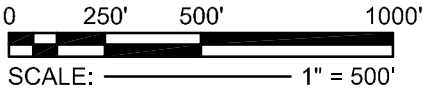
PHASES 2 AND 3 BASELINE MONITORING EVENT (NOV 2007)  
J.E.D. SOILD WASTE MANAGEMENT FACILITY  
WACS FACILITY ID 89455  
"B"-ZONE (INTERMEDIATE) WELLS - WATER LEVEL CONTOURS  
FIGURE 2



LEGEND

- Monitoring Well Groundwater Elevation\*  
78.70 MW-7B
- Piezometer Groundwater Elevation\*  
78.41 DP-17
- Groundwater Contour  
79.5

\* WATER LEVEL MEASUREMENTS FROM  
21 NOV 2007 SITE WIDE SURVEY



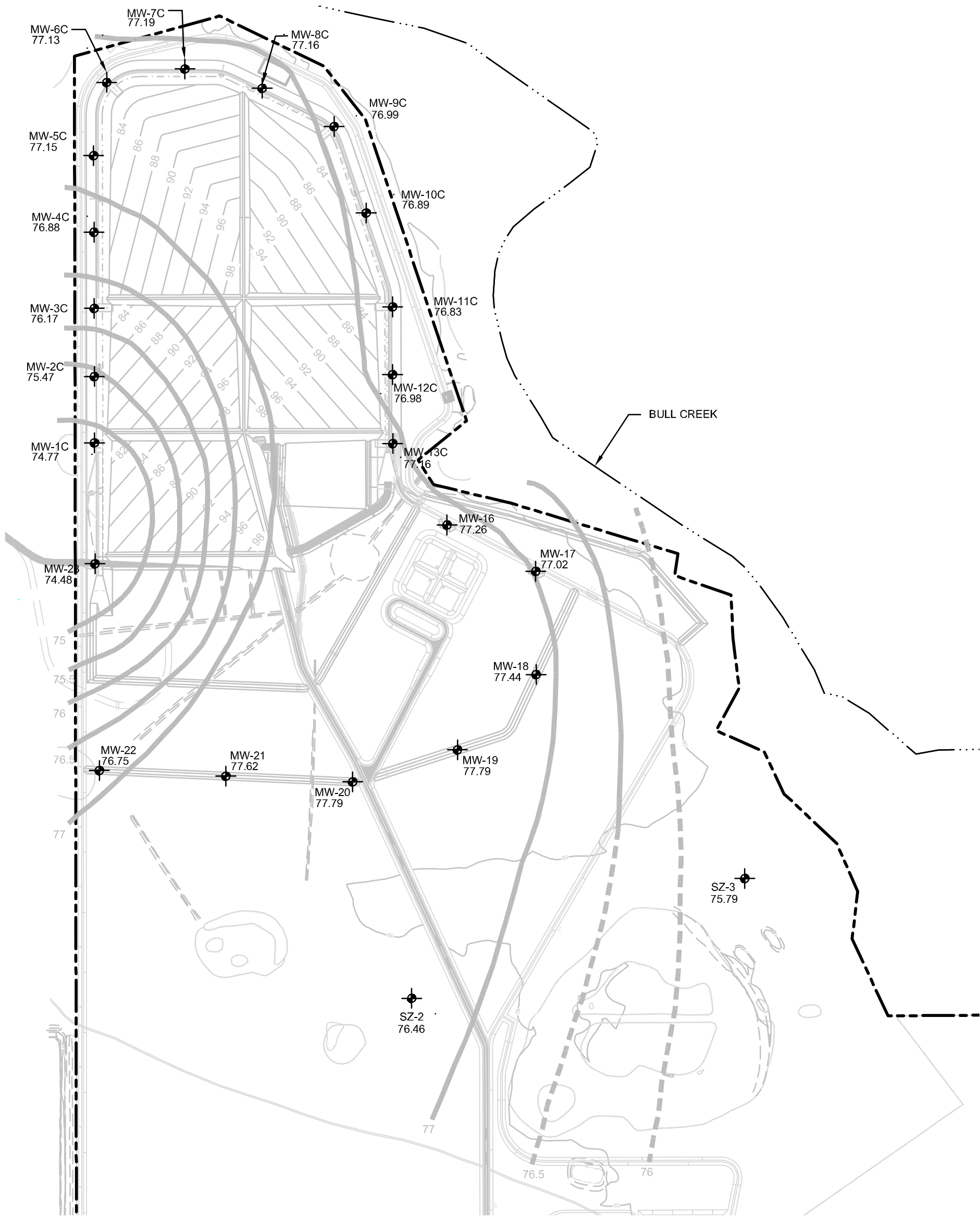
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consultants

TAMPA, FL

DATE:	FEBRUARY 2008	FILE NO.	FQ1144.02F02
PROJECT NO.	FQ1144	FIGURE NO.	2



PHASES 2 AND 3 BASELINE MONITORING EVENT (NOV 2007)  
J.E.D. SOILD WASTE MANAGEMENT FACILITY  
WACS FACILITY ID 89455  
"C"-ZONE (DEEP) WELLS - WATER LEVEL CONTOURS  
FIGURE 3



LEGEND

- MONITORING WELL  
GROUNDWATER ELEVATION\*
- PIEZOMETER GROUNDWATER  
ELEVATION\*
- GROUNDWATER CONTOUR

\* WATER LEVEL MEASUREMENTS FROM  
21 NOV 2007 SITE WIDE SURVEY

Geosyntec  
consultants

TAMPA, FL

DATE:	FEBRUARY 2008	FILE NO.	FQ1144.02F03
PROJECT NO.	FQ1144	FIGURE NO.	3

## Monitoring Well Sampling

Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 19 November 2007 Sampled By: S. Terry

Station (Well No.): MW-2A WACS ID: 19903 Purge Method: Pump ☒ Bailer ☐ Pump Type: Submersible (   Teflon    SS    Other) ☒ Peristaltic

Pump (Make & Model): Geopump II / Grundfos RF2 / PA Hurricane Purge Rate: 0.05 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A21734C

Water Level Meter: Solinst Time @ Start of Purging: 1120 Time @ End of Purging: 1730 Total Purging Time: 70 min.

Depth of Pump or Intake Tubing: 21 ft. (BTOC)

[illegible]

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

Note: When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every 1/4 well volume until purging requirements are satisfied.

Note: When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every 74 well volumes until the purge volume is equal to or greater than one well volume. When purging wells with a fully submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied. collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

Note: Three (3) consecutive readings within limits are to be obtained for sampling. Temperature:  $\pm 0.2^\circ\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: NW-2A Time Collected: 1230 Comments: \_\_\_\_\_



## Well Inspection

Field Conditions/Observations: m. cloudy, ~70°F, westerly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No Well Cap: ☒ Yes ☐ No Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_  
(If capped, remove and allow well to stabilize before recording water level)

### Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 19.76 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 22.60 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 19.91 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.15 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft. OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☐ Yes ☒ No Describe: \_\_\_\_\_

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(22.60 - 19.76) \times 0.16 = 0.5$  gal  
Well Capacity (gal/ft): 0.75"=0.02; 1"=0.04; 1.25"=0.06; 2"=0.16; 3"=0.37; 4"=0.65; 5"=1.02; 6"=1.47; 12"=5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P=Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.25 in. x (D) 0.25 in. x (L) 30 ft.) + (Fc) 0.25 gal = 0.3 gal

3 Well/Equipment Volumes = 1.0 gallons Purged Volume (actual): 3.5 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: ☐ 55 Gallon Drum ☐ Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☒ Peristaltic Pump ☐ Submersible Pump Sample Rate: 0.05 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

\_\_\_\_ ( \_\_\_\_\_ )

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 52081503671, 3662) ☐ Other (\_\_\_\_\_)

### Notes:

Heavy equipment operating in area occasional smell of exhaust in air



Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 19 November 2007 Sampled By: J. Kelly

Station (Well No.): MW-2B WACS ID: 19904 Pump Method: Pump ☒ Bailor ☐ Pump Type: X Submersible (    Teflon SS Other)    Peristaltic

Pump (Make & Model): Geopump II / Grundfos RF2 / PA Hurricane Purge Rate: 0.53 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A2173 AL

Water Level Meter: Solinst Time @ Start of Purging: 110 Time @ End of Purging: 1205 Total Purging Time: 55 min.

Depth of Pump or Intake Tubing: 43 ft. (BTCC)

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

**Note:** When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume. Take additional field parameter measurements every  $\frac{1}{4}$  well volume until purging requirements are satisfied.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every 1/4 well volume until purge requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 5 minutes apart until purge requirements are met. DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: MW-23 Time Collected: 1205 Comments:

## Well Inspection

Field Conditions/Observations: m. cloudy, ~70°F, westerly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No Well Cap: ☒ Yes ☐ No Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_

(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 19.72 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 48.05 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 20.03 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.31 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft. OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☒ Yes ☐ No Describe: sulfur-like

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(48.05 - 19.72) \times 0.16 = 4.55$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.375 in. x (D) 0.375 in. x (L) 55 ft.) + (Fc) 0.25 gal = 0.6 gal

3 Well Equipment Volumes = 1.8 gallons Purged Volume (actual): 29.15 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☐ Peristaltic Pump ☒ Submersible Pump Sample Rate: 0.08 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

(\_\_\_\_\_)

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 5208150 3671, 3662) ☐ Other (\_\_\_\_\_)

Notes:

Heavy equipment operating in area, occasional smell of exhaust in air



Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 19 November 2007 Sampled By: J. Terry

Station (Well No.): MW-2C WACS ID: 19105 Purge Method: Pump ☒ Bailer ☐ Pump Type: X Submersible ( ☐ Teflon X SS ☐ Other) Peristaltic

Pump (Make & Model): Geopump II / Grundfos RF2 (PA Hurricane) Purge Rate: 0.53 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A21734C

Water Level Meter: Solinst Time @ Start of Purging: 1215 Time @ End of Purging: 1250 Total Purging Time: 35 min.

Depth of Pump or Intake Tubing: 64 ft. (BTWC)

Note: When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

Note: When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every ¼ well volume until purging requirements are satisfied.

Note: When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following:  $\text{DO} \pm 0.2 \text{ mg/l}$  or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: MW-2C Time Collected: 1250 Comments:

## Well Inspection

Field Conditions/Observations: on cloudy, ~70°F, westerly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other

Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No

Well Cap: ☒ Yes ☐ No

Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_

(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01 ft)

Depth to Water (initial): 19.79 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 68.78 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 21.23 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 1.44 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft.

OVN/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☐ Yes ☒ No Describe: \_\_\_\_\_

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(68.78 - 19.79) \times 0.16 = 8.0$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.375 in. x (D) 0.375 in. x (L) 75 ft.) + (Fc) 0.25 gal = 0.7 gal

3 Well ~~Equipment~~ Volumes = 2.1 gallons Purged Volume (actual): 18.55 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☐ Peristaltic Pump ☒ Submersible Pump Sample Rate: 0.08 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

(\_\_\_\_\_)

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 5208 150 3671, 3662) ☐ Other (\_\_\_\_\_)

Notes:

Heavy equipment operating in area, occasional smell of exhaust in air



Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 19 November 2007 Sampled By: D. J. E. / J. /

Station (Well No.): MW-3A WACS ID: 19906 Pump Method: Pump ☒ Bailer ☐ Pump Type: Submersible (   Teflon    SS    Other) ☒ Peristaltic

Pump (Make & Model): Geopump II / Grundfos RF2 / PA Hurricane Purge Rate: 0.05 gpm Water Quality Meter (Make & Model): YSI 556 SN or ID: 06A2173 AL

Water Level Meter: Solinst Time @ Start of Purging: 0850 Time @ End of Purging: 0945 Total Purging Time: 55 min.

Depth of Pump or Intake Tubing: 21 ft. (BTWC)

[illegible]

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

**Note:** When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every 74 well volumes until purging requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.5^{\circ}\text{C}$ . DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs reading.

reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs. If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: MW-3A Time Collected: 0945 Comments:

## Well Inspection

Field Conditions/Observations: m. cloudy, ~60°F

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other

Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No

Well Cap: ☒ Yes ☐ No

Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_

(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 19.45 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 22.77 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 18.57 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.12 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft.

OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☒ Yes ☐ No Describe: rancid, sour

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(22.77 - 19.45) \times 0.16 = 0.7$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.75 in. x (D) 0.75 in. x (L) 32 ft.) + (Fc) 0.25 gal = 0.33 gal

3 Well Equipment Volumes = 1.0 gallons Purged Volume (actual): 2.75 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: ☐ 55 Gallon Drum ☐ Other ( )

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☒ Peristaltic Pump ☐ Submersible Pump Sample Rate: 0.05 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

( )

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 5208 150 3671, 3662) ☐ Other ( )

Notes: \_\_\_\_\_



Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 19 November 2007 Sampled By: J. Terry

Station (Well No.): MW-3B WACS ID: 19907 Purge Method: Pump ☒ Bailor ☐ Pump Type: ☒ Submersible ( ☐ Teflon ☒ SS ☐ Other) ☐ Peristaltic

Pump (Make & Model): Geopump II / Grundfos RF2 (PA Hurricane) Purge Rate: 0.5 gpm Water Quality Meter (Make & Model): YSI 556 SN or ID: 06A2173 AL

Water Level Meter: Solinst Time @ Start of Purging: 0255 Time @ End of Purging: 1000 Total Purging Time: 65 min.

Depth of Pump or Intake Tubing: 413 ft. (BTOC)

[illegible]

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

**Note:** When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every  $\frac{1}{4}$  well volume until purging requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 5 minutes apart until purge requirements are satisfied.

reading; DO is no greater than 20% saturation at field measured temperature, and Turbidity  $\leq 20$  NTUs. If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: MW-3B Time Collected: 1000 Comments:

## Well Inspection

Field Conditions/Observations: McCloudy, ~68°F

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other

Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No

Well Cap: ☒ Yes ☐ No

Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_

(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 18.47 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 47.67 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 18.95 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.38 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft.

OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☐ Yes ☒ No Describe: \_\_\_\_\_

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(47.67 - 18.47) \times 0.16 = 5.0$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) =  $P + (0.041D \times D \times L) + Fc$

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.315 in. x (D) 0.315 in. x (L) 55 ft.) + (Fc) 0.25 gal = 0.6 gal

3 Well/Equipment Volumes = 1.8 gallons Purged Volume (actual): 32.5 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☐ Peristaltic Pump ☒ Submersible Pump Sample Rate: 0.08 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

(\_\_\_\_\_)

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 5208 150 3671, 3662) ☐ Other (\_\_\_\_\_)

Notes: \_\_\_\_\_



Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 14 November 2007 Sampled By: J. Terry

Station (Well No.): MW-3C WACS ID: 19908 Purge Method: Pump ☒ Bailor ☐ Pump Type: Submersible (   Teflon    SS    Other) ☒ Peristaltic

Pump (Make & Model): Geopump II / Grundfos RF2 / PA Hurricane Purge Rate: 0.07 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A2173 4L

Water Level Meter: Solinst Time @ Start of Purging: 0845 Time @ End of Purging: 0925 Total Purging Time: 40 min.

Depth of Pump or Intake Tubing: 64 ft. (BTOC)

[illegible]

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

**Note:** When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 5 minutes apart until purge requirements are met.

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: MW-3C Time Collected: 6975 Comments:

## Well Inspection

Field Conditions/Observations: m. cloudy, ~68°F

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other

Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No

Well Cap: ☒ Yes ☐ No

Well Cap: ☒ Tight ☐ Loose

Comments:

(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01 ft)

Depth to Water (initial): 18.47 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 68.78 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 18.68 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.21 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft.

OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☒ Yes ☐ No Describe: solfw-like

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(68.78 - 18.47) \times 0.16 = 8.0$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.25 in. x (D) 0.25 in. x (L) 75 ft.) + (Fc) 0.25 gal = 0.45 gal

3 Well/Equipment Volumes = 1.4 gallons Purged Volume (actual): 2.8 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: ☐ 55 Gallon Drum ☐ Other ( )

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☒ Peristaltic Pump ☐ Submersible Pump Sample Rate: 0.07 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

( )

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 12081503671, 3662) ☐ Other ( )

Notes:

Heavy rain, very active in area, occasional smell of exhaust in the air



Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 1/2 November 2007 Sampled By: J. Kelly

Station (Well No.): MW-4A WACS ID: 19909 Pump Method: Pump ☒ Bailer ☐ Pump Type: Submersible (    Teflon    SS    Other) X Peristaltic

Pump (Make & Model): Geopump II Grundfos RF2 / PA Hurricane Purge Rate: 0.05 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A21734

Water Level Meter: Solinst Time @ Start of Purging: 1:15 Time @ End of Purging: 1:50 Total Purging Time: 50 min.

Depth of Pump or Intake Tubing: 21 ft. (BTCC)

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

**Note:** When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs.

reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs. If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater.

Sample ID: MW-4A Time Collected: 1505 Comments:

## Well Inspection

Field Conditions/Observations: p. cloudy, ~75°F, easterly breeze

**Well Inspection:**

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other Well Size (ID): 2 in. Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: X Yes      No      Well Cap: X Yes      No      Well Cap: X Tight      Loose

Comments: \_\_\_\_\_  
(If capped, remove and allow well to stabilize before recording water level)

**Well Sampling:** (Note: Measure Water Levels to Nearest 0.01 ft)

Depth to Water (initial): 18.21 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 23.13 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 18.31 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.10 ft. (Depth to Water (initial) – Depth to Water (final))

Free Product Thickness (if applicable): NA ft. OVM/PID Reading (if applicable): NA ppm.

Detectable Odor: X Yes      No Describe: rancid, sour Note: NA = Not Applicable

1 Well Volume (WV) = (depth of well – depth to water (initial)) x well capacity =  $\frac{(23.13 - 19.21) \times 0.16}{0.75} = 0.8$  gal

$$1 \text{ Equipment Volume (EV)} = P + (0.041D \times D \times L) + F_c$$

Where: P= Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

$$1 \text{ EV} = (P) \underline{0.0} \text{ gal} + (0.041 \times (D) \underline{0.25} \text{ in.} \times (D) \underline{0.25} \text{ in.} \times (L) \underline{30} \text{ ft.}) + (Fc) \underline{0.25} \text{ gal} = \underline{0.33} \text{ gal}$$

3 Well/Equipment Volumes = 1.0 gallons Purged Volume (actual): 2.5 gallons

Purge Water Contained?      Yes X No Container Used: 55 Gallon Drum Other (      )

Labeled:      Yes      No;      Purge Water Discharged to Ground?   X   Yes      No

Sampling Method: ☐ Bailer ☐ Peristaltic Pump ☐ Submersible Pump Sample Rate: 0.05 gpm

QA Sample Collected, ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size:  µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials      1 liter amber glass 2 125 ml plastic 1 250 ml plastic      500 ml plastic

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☒ Courier ☒ UPS (Airbill No. \_\_\_\_\_) Other ( \_\_\_\_\_ )

Notes: JT (11-15-07)



Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 1/5 November 2007 Sampled By: S. Jerry

Station (Well No.): MW-413 WACS ID: 19910 Pump Method: Pump ☒ Bailer ☐ Pump Type: Submersible (   Teflon    SS    Other) ☒ Peristaltic

Pump (Make & Model): Geopump In / Grundfos RF2 / PA Hurricane Purge Rate: 0.08 gpm Water Quality Meter (Make & Model): YSI 556 SN or ID: 06A2173 AL

Water Level Meter: Solinst Time @ Start of Purging: 1300 Time @ End of Purging: 1435 Total Purging Time: 95 min.

Depth of Pump or Intake Tubing: 413 ft. (BTOC)

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

**Note:** When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every  $\frac{1}{4}$  well volume until purging requirements are satisfied.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every 72 well volumes until purge requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and reading; DO is no greater than 20% saturation at field measured temperature, and Turbidity  $\leq 20$  NTUs

Sample ID: MW-413 Time Collected: 1435 Comments:

## Well Inspection

Field Conditions/Observations: p. cloudy, ~75°F, easterly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No Well Cap: ☒ Yes ☐ No Well Cap: ☒ Tight ☐ Loose

### Comments:

(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 17.92 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 47.43 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 18.03 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.11 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft.

OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☐ Yes ☒ No Describe: \_\_\_\_\_

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(47.43 - 17.92) \times 0.16 = 4.7$  gal  
Well Capacity (gal/ft): 0.75"=0.02; 1"=0.04; 1.25"=0.06; 2"=0.16; 3"=0.37; 4"=0.65; 5"=1.02; 6"=1.47; 12"=5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P=Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.25 in. x (D) 0.25 in. x (L) 55 ft.) + (Fc) 0.25 gal = 0.4 gal

3 Well/Equipment Volumes = 1.2 gallons Purged Volume (actual): 7.6 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: ☐ 55 Gallon Drum ☐ Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☒ Peristaltic Pump ☐ Submersible Pump Sample Rate: 0.08 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

( )

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☒ Courier ☒ UPS (Airbill No. \_\_\_\_\_) ☐ Other (\_\_\_\_\_)

Notes: PT (11-15-51)



Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 15 November 2007 Sampled By: J. Leary

Station (Well No.): MW-1/C WACS ID: 19911 Purge Method: Pump ☒ Bailor ☐ Pump Type: ☒ Submersible ( ☐ Teflon ☒ SS ☐ Other) Peristaltic

Pump (Make & Model): Geopump II / Grundfos RF2 / PA Hurricane Purge Rate: 0.53 gpm Water Quality Meter (Make & Model): YSI 556 SN or ID: 06A2173 AL

Water Level Meter: Solinst Time @ Start of Purging: 14:05 Time @ End of Purging: 15:45 Total Purging Time: 100 min.

Depth of Pump or Intake Tubing: 68 ft. (BTWC)

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

**Note:** When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

**Notes:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^\circ\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: NW-LC Time Collected: 1545 Comments: \_\_\_\_\_



## Well Inspection

Field Conditions/Observations: p. cloudy, ~75°F, easterly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other

Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No

Well Cap: ☒ Yes ☐ No

Well Cap: ☒ Tight ☐ Loose

Comments:

(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 18.12 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 72.62 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 20.23 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 2.11 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft.

OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☒ Yes ☐ No Describe: sw/sw-like

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(72.62 - 18.12) \times 0.16 = 8.7$  gal  
Well Capacity (gal/ft): 0.75"=0.02; 1"=0.04; 1.25"=0.06; 2"=0.16; 3"=0.37; 4"=0.65; 5"=1.02; 6"=1.47; 12"=5.88

1 Equipment Volume (EV) =  $P + (0.041D \times D \times L) + Fc$

Where: P=Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal +  $(0.041 \times (D) 0.375 \text{ in.} \times (D) 0.375 \text{ in.} \times (L) 78 \text{ ft.}) + (Fc) 0.25 \text{ gal} = 0.7 \text{ gal}$

3 Well/Equipment Volumes = 2.1 gallons Purged Volume (actual): 53.0 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other ( )

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☐ Peristaltic Pump ☒ Submersible Pump Sample Rate: 0.08 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☒ Yes ☐ No Filter Size: 1  $\mu\text{m}$ ; ☐ All Analyses; ☒ Metals Only;

Turbidity After Filter: 0.2 NTU

Analysis Required: NH<sub>3</sub>, Cl, Fe, Hg, NO<sub>3</sub>, Na, TDS, Appendix I, dissolved metals

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 3 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

( )

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☒ Courier ☒ UPS (Airbill No. \_\_\_\_\_) ☐ Other ( )

Notes: 9+ (11-15-07)



Site: Oak Hammock Disposal Facility Project No.: FO1144 Task: 02 Date: 15 November 2007 Sampled By: J. Verly

Station (Well No.): MW-5A WACS ID: 19912 Pump Method: Pump ☒ Bailer ☐ Pump Type: Submersible (☐ Teflon ☐ SS ☒ Other) Peristaltic

Pump (Make & Model): Geopump H / Grundfos RF2 / PA Hurricane Purge Rate: 0.05 gpm Water Quality Meter (Make & Model): YSI 556 SN or ID: 06A2173 A2

Water Level Meter: Solinst Time @ Start of Purging: 1230 Time @ End of Purging: 1310 Total Purging Time: 70 min.

Depth of Pump or Intake Tubing: 20 ft. (BTWC)

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

**Note:** When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

Note: When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every  $\frac{1}{4}$  well volume until purging requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs

reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs. If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: MW-5A Time Collected: 1340  
Comments: pH lower than previous event, checked calibration → O.K.



## Well Inspection

Field Conditions/Observations: p. Cloudy, ~75°F, easterly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No Well Cap: ☒ Yes ☐ No Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_  
(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 17.20 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 22.50 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 17.57 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.37 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft. OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☐ Yes ☒ No Describe: \_\_\_\_\_

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(22.5 - 17.2) \times 0.16 = 0.85$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.25 in. x (D) 0.25 in. x (L) 30 ft.) + (Fc) 0.25 gal = 0.33 gal

3 Well/Equipment Volumes = 1.0 gallons Purged Volume (actual): 3.50 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☒ Peristaltic Pump ☐ Submersible Pump Sample Rate: 0.05 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

(\_\_\_\_\_)

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☒ Courier ☒ UPS (Airbill No. \_\_\_\_\_) ☐ Other (\_\_\_\_\_)

Notes: GT (11-15-07)

Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 15 November 2007 Sampled By: S. Vetter

Station (Well No.): MW-5B WACS ID: 19913 Pump Method: Pump ☒ Bailer ☐ Pump Type: Submersible (   Teflon    SS    Other) ☒ Peristaltic

Pump (Make & Model): (Geopump II) Grundfos RF2 / PA Hurricane Purge Rate: 0.07 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A2173AL

Water Level Meter: Solinst Time @ Start of Purging: 1125 Time @ End of Purging: 1225 Total Purging Time: 60 min.

Depth of Pump or Intake Tubing: 42 ft. (BTWC)

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

Note: When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every 74 well volume until purging requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: AW-5B Time Collected: 1225 Comments: \_\_\_\_\_



## Well Inspection

Field Conditions/Observations: p. cloudy, ~75°F, easterly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other

Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No

Well Cap: ☒ Yes ☐ No

Well Cap: ☒ Tight ☐ Loose

### Comments:

(If capped, remove and allow well to stabilize before recording water level)

### Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 17.59 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 47.10 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 17.70 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.11 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft.

OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☒ Yes ☐ No Describe: sub/fw-like

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(47.10 - 17.59) \times 0.16 = 4.7$  gal  
Well Capacity (gal/ft): 0.75"=0.02; 1"=0.04; 1.25"=0.06; 2"=0.16; 3"=0.37; 4"=0.65; 5"=1.02; 6"=1.47; 12"=5.88

1 Equipment Volume (EV) =  $P + (0.041D \times D \times L) + Fc$

Where: P=Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal +  $(0.041 \times (D) \text{ 0.25 in. } \times (D) \text{ 0.25 in. } \times (L) \text{ 52 ft. }) + (Fc) \text{ 0.25 gal} = \text{0.41 gal}$

3 Well/Equipment Volumes = 1.2 gallons Purged Volume (actual): 4.2 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: ☐ 55 Gallon Drum ☐ Other ( )

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☒ Peristaltic Pump ☐ Submersible Pump

Sample Rate: 0.07 gpm

QA Sample Collected: ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

( )

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☒ Courier ☒ UPS (Airbill No. \_\_\_\_\_) ☐ Other ( )

Notes: GT (11-15-07)

Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 15 November 2007 Sampled By: S. J. Kelly

Station (Well No.): MW-5C WACS ID: 19914 Pump Method: Pump ☒ Bailer ☐ Pump Type: Submersible (   Teflon    SS    Other) ☒ Peristaltic

Pump (Make & Model): Geopump II / Grundfos RF2 / PA Hurricane Purge Rate: 2.08 \*gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A2173 4L

Water Level Meter: Solinst Time @ Start of Purging: 1115 Time @ End of Purging: 1155 Total Purging Time: 40 min.

Depth of Pump or Intake Tubing: 68 ft. (BTOC)

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

**Note:** When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every  $\frac{1}{4}$  well volume until purging requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^\circ\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs

reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs.

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: MW-5C Time Collected: 1155 Comments:



## Well Inspection

Field Conditions/Observations: p. cloudy, ~75°F, easterly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No Well Cap: ☒ Yes ☐ No Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_  
(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 17.88 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 73.04 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 18.05 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.17 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft. OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☐ Yes ☒ No Describe: \_\_\_\_\_

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(73.04 - 17.88) \times 0.16 = 8.9$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.25 in. x (L) 78 ft.) + (Fc) 0.25 gal = 0.5 gal

3 Well/Equipment Volumes = 1.5 gallons Purged Volume (actual): 2.54 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: ☐ 55 Gallon Drum ☐ Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☒ Peristaltic Pump ☐ Submersible Pump Sample Rate: 0.05 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

\_\_\_\_ (\_\_\_\_\_)

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☒ Courier ☒ UPS (Airbill No. \_\_\_\_\_) ☐ Other (\_\_\_\_\_)

Notes: GT (11-15-07)



Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 1/5 November 2007 Sampled By: J. Perry

Station (Well No.): MW-7A WACS ID: 19918 Purge Method: Pump ☒ Bailor ☐ Pump Type: Submersible ( ☐ Teflon SS Other) ☒ Peristaltic

Pump (Make & Model): Geopump II / Grundfos RF2 / PA Hurricane Purge Rate: 0.05 gpm Water Quality Meter (Make & Model): YSI 556 SN or ID: 06A2173 AL

Water Level Meter: Solinist Time @ Start of Purging: 0830 Time @ End of Purging: 1005 Total Purging Time: 95 min.

Depth of Pump or Intake Tubing: 20.5 ft. (BTWC)

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

**Note:** When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: MW-7A Time Collected: 1005 Comments: \_\_\_\_\_

## Well Inspection

Field Conditions/Observations: clear, ~70°F

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other

Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No

Well Cap: ☒ Yes ☐ No

Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_

(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 17.37 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 23.31 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 17.48 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.11 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft.

OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☒ Yes ☐ No

Describe: acid, sour

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(23.31 - 17.37) \times 0.16 = 1.0$  gal  
Well Capacity (gal/ft): 0.75"=0.02; 1"=0.04; 1.25"=0.06; 2"=0.16; 3"=0.37; 4"=0.65; 5"=1.02; 6"=1.47; 12"=5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P=Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.25 in. x (D) 0.25 in. x (L) 28 ft.) + (Fc) 0.25 gal = 0.32 gal

3 Well/Equipment Volumes = 1.0 gallons Purged Volume (actual): 4.75 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other ( )

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☒ Peristaltic Pump ☐ Submersible Pump

Sample Rate: 0.05 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

( )

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☒ Courier ☒ UPS (Airbill No. \_\_\_\_\_) ☐ Other ( )

Notes:

Heavy machinery working nearby, occasional smell of exhaust in the air



Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 15 November 2001 Sampled By: SA, G, J

Station (Well No.): MW-7B WACS ID: 19919 Pump Method: Pump ☒ Bailer ☐ Pump Type: ☒ Submersible ( ☐ Teflon ☒ SS Other) Peristaltic

Pump (Make & Model): Geopump II / Grundfos RF2 / RA Hurricane Purge Rate: 0.70 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A2173 AC

Water Level Meter: Solinst Time @ Start of Purging: 0835 Time @ End of Purging: 0940 Total Purging Time: 65 min.

Depth of Pump or Intake Tubing: 43 ft. (BTCC)

[illegible]

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

Note: When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every  $\frac{1}{4}$  well volume until purging requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^\circ\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied. when purging was not required. DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs

reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTU's.

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTU's or 10%, whichever is greater.

Sample ID: MW-7B3 Time Collected: 0940 Comments: \_\_\_\_\_



## Well Inspection

Field Conditions/Observations: clear, ~70°F

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other

Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No

Well Cap: ☒ Yes ☐ No

Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_

(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01 ft)

Depth to Water (initial): 17.20 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 47.99 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 21.03 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 3.83 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft.

OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☒ Yes ☐ No

Describe: sulfur-like

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(47.99 - 17.2) \times 0.16 = 5.0$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) =  $P + (0.041D \times D \times L) + Fc$

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal +  $(0.041 \times (D) \text{ 0.375 in. } \times (D) \text{ 0.375 in. } \times (L) \text{ 55 ft. }) + (Fc) \text{ 0.25 gal} = \text{0.6 gal}$

3 Well (Equipment) Volumes = 1.8 gallons Purged Volume (actual): 45.50 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: ☐ 55 Gallon Drum ☐ Other ( )

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☐ Peristaltic Pump ☒ Submersible Pump Sample Rate: 0.08 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_  $\mu\text{m}$ ; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

( )

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☒ Courier ☒ UPS (Airbill No. \_\_\_\_\_) ☐ Other ( )

Notes: GT (11-15-07)

Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 15 November 2007 Sampled By: J. Terry

Station (Well No.): MW-7C WACS ID: 19920 Purge Method: Pump ☒ Bailor ☐ Pump Type: Submersible (   Teflon    SS    Other) ☒ Peristaltic

Pump (Make & Model): Geopump II / Grundfos RF2 / PA Hurricane Purge Rate: 0.07 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A2173-4L

Time @ Start of Purging: 0820 Time @ End of Purging: 0915 Total Purging Time: 55 min.

Depth of Pump or Intake Tubing: 63 ft. (BTOC)

[illegible]

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

Note: When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

Note: When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every  $\frac{1}{4}$  well volume until purging requirements are satisfied.

Note: When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^\circ\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 3.0\%$  of reading. DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs

reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs. If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater.

Sample ID: MW-7C Time Collected: 0915 Comments:



## Well Inspection

Field Conditions/Observations: clear, 70°F

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other

Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No

Well Cap: ☒ Yes ☐ No

Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_

(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 17.20 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 73.35 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 17.31 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.11 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft.

OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☒ Yes ☐ No Describe: sulfur-like

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(73.35 - 17.2) \times 0.16 = 9.0$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) =  $P + (0.041D \times D \times L) + Fc$

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV =  $(P) 0.0$  gal +  $(0.041 \times (D) 0.25 \text{ in.} \times (L) 70 \text{ ft.}) + (Fc) 0.25$  gal = 0.5 gal

3 Well/Equipment Volumes = 1.5 gallons Purged Volume (actual): 3.85 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: ☐ 55 Gallon Drum ☐ Other ( )

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☒ Peristaltic Pump ☐ Submersible Pump

Sample Rate: 0.07 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_  $\mu\text{m}$ ; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

( )

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☒ Courier ☒ UPS (Airbill No. \_\_\_\_\_) ☐ Other ( )

Notes: GT (11-15-07)



Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 1/4 November 2007 Sampled By: S. Jerry

Station (Well No.): MW-8A WACS ID: 19421 Purge Method: Pump ☒ Bailer ☐ Pump Type: Submersible (Teflon SS Other) ☒ Peristaltic

Pump (Make & Model): Geopump II / Grundfos RF2 / PA Hurricane Purge Rate: 0.08 gpm Water Quality Meter (Make & Model): YSI 556 SN or ID: 06A2173 4L

Water Level Meter: Solinst Time @ Start of Purging: 1505 Time @ End of Purging: 1620 Total Purging Time: 75 min.

Total Purging Time: 75 min.

[illegible]

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

**Note:** When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every 14 well volumes until purge requirements are satisfied. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and feeding; DO is no greater than 20% saturation at new measured temperature, and Turbidity  $\leq 20$  NTUs.

Sample ID: MW-3A Time Collected: 1620 Comments:

## Well Inspection

Field Conditions/Observations: p. cloudy, ~72°F, slight n. easterly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other

Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No

Well Cap: ☒ Yes ☐ No

Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_

(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 16.77 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 22.50 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 17.71 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.94 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft.

OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☒ Yes ☐ No

Describe: rancid, sour

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(22.50 - 16.77) \times 0.16 = 0.92$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.25 in. x (D) 0.25 in. x (L) 30 ft.) + (Fc) 0.25 gal = 0.33 gal

3 Well (Equipment) Volumes = 1.0 gallons Purged Volume (actual): 6.00 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other ( )

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☒ Peristaltic Pump ☐ Submersible Pump Sample Rate: 0.03 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

( )

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 5208 150 3331, 3699) ☐ Other ( )

Notes: \_\_\_\_\_

Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 11/11 November 2007 Sampled By: J. Perry

Station (Well No.): MW-3B WACS ID: 19922 Pump Method: Pump ☒ Bailer ☐ Pump Type: X Submersible ( ☐ Teflon X SS ☐ Other) Peristaltic

Pump (Make & Model): Geopump II / Grundfos RF2 / PA Hurricane Purge Rate: 0.60 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A2173 AL

Water Level Meter: Solinst Time @ Start of Purging: 1455 Time @ End of Purging: 1600 Total Purging Time: 65 min.

Depth of Pump or Intake Tubing: 4 1/4 ft. (BTCC)

Note: When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

Note: When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

Note: When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every  $\frac{1}{4}$  well volume until purging requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 5 minutes apart until purge requirements are satisfied.

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: MW-83 Time Collected: 1600 Comments:



## Well Inspection

Field Conditions/Observations: p. cloudy, ~72°F, n. easterly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No Well Cap: ☒ Yes ☐ No Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_  
(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 16.59 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 49.30 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 23.27 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 6.68 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft. OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☒ Yes ☐ No Describe: slight sulfur - 1.2e cube

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(49.30 - 16.59) \times 0.16 =$  \_\_\_\_\_ gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.375 in. x (D) 0.375 in. x (L) 55 ft.) + (Fc) 0.25 gal = 0.6 gal

3 Well/Equipment Volumes = 1.8 gallons Purged Volume (actual): 39.0 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☐ Peristaltic Pump ☒ Submersible Pump Sample Rate: 0.08 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☒ Yes ☐ No Filter Size: 1 µm; ☐ All Analyses; ☒ Metals Only;

Turbidity After Filter: 4.9 NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I, Dissolved Metals

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

\_\_\_\_\_ ( )

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 32001503331, 36991) ☐ Other (\_\_\_\_\_)

Notes: \_\_\_\_\_

Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 11 November 2007 Sampled By: J. J. E. / N

Station (Well No.): MW-8C WACS ID: 19923 Pump Method: Pump ☒ Bailer ☐ Pump Type: \_\_\_\_\_ Submersible ( ☐ Teflon ☐ SS ☐ Other) ☒ Peristaltic

Pump (Make & Model): Geopump II / Grundfos RF2 / PA Hurricane Purge Rate: 0.07 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A2173 AL

Water Level Meter: Solinst Time @ Start of Purging: 1450 Time @ End of Purging: 1535 Total Purging Time: 45 min.

Depth of Pump or Intake Tubing: 69 ft. (BTWC)

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

**Note:** When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every ¼ well volume until purging requirements are satisfied.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

**Note:** Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/l or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: MW-3C Time Collected: 1535 Comments:

## Well Inspection

Field Conditions/Observations: p. cloudy, ~72°F, slight n. easterly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No Well Cap: ☒ Yes ☐ No Well Cap: ☒ Tight ☐ Loose

### Comments:

(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 16.75 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 73.75 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 3.15 <sup>PT (11-14-07)</sup> 16.90 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.13 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft.

OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☐ Yes ☒ No Describe: \_\_\_\_\_

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(73.75 - 16.75) \times 0.16 = 9.12$  gal  
Well Capacity (gal/ft): 0.75"=0.02; 1"=0.04; 1.25"=0.06; 2"=0.16; 3"=0.37; 4"=0.65; 5"=1.02; 6"=1.47; 12"=5.88

1 Equipment Volume (EV) =  $P + (0.041D \times D \times L) + Fc$

Where: P=Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal +  $(0.041 \times (D) \ 0.25 \text{ in.} \times (D) \ 0.25 \text{ in.} \times (L) \ 80 \text{ ft.}) + (Fc) \ 0.25 \text{ gal} = 0.5 \text{ gal}$

3 Well/Equipment Volumes = 1.5 gallons Purged Volume (actual): 3.15 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: ☐ 55 Gallon Drum ☐ Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☒ Peristaltic Pump ☐ Submersible Pump Sample Rate: 0.07 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_  $\mu\text{m}$ ; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

( )

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 52001503331, 3699) ☐ Other (\_\_\_\_\_)

Notes:



Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 1/7 November 2007 Sampled By: J. Perry

Station (Well No.): MW-94 WACS ID: 1921 Pump Method: Pump ☒ Bailor ☐ Pump Type: Submersible ( ☐ Teflon ☐ SS ☒ Other ) Peristaltic

Pump (Make & Model): Geopump II Grundfos RF2 / PA Hurricane Purge Rate: 02.08 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A2173AL

Water Level Meter: Solinst Time @ Start of Purging: 1315 Time @ End of Purging: 1315 Total Purging Time: 95 min.

Depth of Pump or Intake Tubing: 70 ft. (BTWC)

[illegible]

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

**Note:** When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume.

**Note:** Take additional field parameter measurements every  $\frac{1}{4}$  well volume until purging requirements are satisfied.

Note: When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to connecting first new parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^\circ\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of collecting first field parameter measurements. Take additional field parameter measurements as needed. If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2\text{ mg/L}$  or 10%, whichever is greater; and Turbidity  $\pm 5\text{ NTUs}$  or 10%, whichever is greater

Sample ID: MW-9A Time Collected: 1315 Comments:

## Well Inspection

Field Conditions/Observations: p. cloudy, ~72°F, slight S. westerly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No Well Cap: ☒ Yes ☐ No Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_  
(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01 ft)

Depth to Water (initial): 16.98 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 22.37 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 19.29 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 2.31 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft. OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☒ Yes ☐ No Describe: sour, acid

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(22.37 - 16.98) \times 0.16 = 0.9$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.25 in. x (D) 0.25 in. x (L) 35 ft.) + (Fc) 0.25 gal = 0.34 gal

3 Well/Equipment Volumes = 1.0 gallons Purged Volume (actual): 7.6 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☒ Peristaltic Pump ☐ Submersible Pump Sample Rate: 0.08 gpm

QA Sample Collected ☒ Yes ☐ No; ☒ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: DUP-2 QA Sample Time: 1325

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

(\_\_\_\_\_)

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 5203150 333 13619) ☐ Other (\_\_\_\_\_)

Notes: \_\_\_\_\_

Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 1/14 November 2007 Sampled By: J. J. Kelly

Station (Well No.): MW-9B WACS ID: 19925 Pump Method: Pump ☒ Bailor ☐ Pump Type: X Submersible ( ☐ Teflon ☒ SS ☐ Other) Peristaltic

Pump (Make & Model): Geopump II / Grundfos RF2 / FA Hurricane Purge Rate: 2.53 gpm Water Quality Meter (Make & Model): YSI 556 SN or ID: 06A2173 42

Water Level Meter: Solinst Time @ Start of Purging: 1205 Time @ End of Purging: 1340 Total Purging Time: 95 min.

Depth of Pump or Intake Tubing: 11 ft. (BTOC)

Note: When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

Note: When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

**Note:** When purging a well, purge the well volume until purging requirements are satisfied. Take additional field parameter measurements every ¼ well volume until purging requirements are satisfied.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of reading. DO is no greater than 70% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs.

reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs. If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: MW-9B Time Collected: 1340 Comments: \_\_\_\_\_



## Well Inspection

Field Conditions/Observations: p. cloudy, ~72°F, slight S. westerly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other

Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No

Well Cap: ☒ Yes ☐ No

Well Cap: ☒ Tight ☐ Loose

### Comments:

(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 16.98 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 44.10 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 21.80 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 4.82 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft.

OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☒ Yes ☐ No Describe: very slight sulfur-like odor

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(44.10 - 16.98) \times 0.16 = 5.0$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.375 in. x (D) 0.375 in. x (L) 38 ft.) + (Fc) 0.25 gal = 0.6 gal

3 Well Equipment Volumes = 1.8 gallons Purged Volume (actual): 50.35 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other ( )

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☐ Peristaltic Pump ☒ Submersible Pump

Sample Rate: 0.08 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

( )

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 520815033313699) ☐ Other ( )

Notes:

Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 11 November 2007 Sampled By: J. Cori

Station (Well No.): MW-9C WACS ID: 19426 Pump Method: Pump ☒ Bailor ☐ Pump Type: Submersible (   Teflon    SS    Other) ☒ Peristaltic

Pump (Make & Model): Geopump II Grundfos RF2 / PA Hurricane Pump Rate: 0.08 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A2173 4L

Water Level Meter: Solinst Time @ Start of Purging: 1155 Time @ End of Purging: 1405 Total Purging Time:            min.

Depth of Pump or Intake Tubing: 70 ft. (BTOC)

[illegible]

Note: When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

Note: When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

Note: When purging wells with a partially submerged well screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every 1/4 well volume until purging requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: MW-9C Time Collected: 1105 Comments:

## Well Inspection

Field Conditions/Observations: p. Cloudy, ~72°F, slight S. westerly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No Well Cap: ☒ Yes ☐ No Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_

(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 17.08 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 74.72 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 17.21 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.13 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft. OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☐ Yes ☒ No Describe: \_\_\_\_\_

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(74.72 - 17.08) \times 0.16 = 9.2$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.25 in. x (D) 0.25 in. x (L) 80 ft.) + (Fc) 0.25 gal = 0.5 gal

3 Well/Equipment Volumes = 1.5 gallons Purged Volume (actual): 10.4 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☒ Peristaltic Pump ☐ Submersible Pump Sample Rate: 0.08 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

\_\_\_\_ ( \_\_\_\_\_ )

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 5208 150 3331, 3694) ☐ Other (\_\_\_\_\_)

Notes: \_\_\_\_\_



Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 1/11 November 2007 Sampled By: J. Terry

Station (Well No.): MW-104 WACS ID: 19927 Pump Method: Pump ☒ Bailor ☐ Pump Type: Submersible (   Teflon    SS    Other) X Peristaltic

Pump (Make & Model): Geopump R / Grundfos RF2 / PA Hurricane Purge Rate: 0.08 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A2173 AC

Water Level Meter: Solinst Time @ Start of Purging: 0845 Time @ End of Purging: 1040 Total Purging Time: 115 min.

Depth of Pump or Intake Tubing: 20.5 ft. (BTOC)

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

**Note:** When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every ¼ well volume until purging requirements are satisfied.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^\circ\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $< 20$  NTUs.

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID:	MW-10A	Time Collected:	1040	Comments:
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## Well Inspection

Field Conditions/Observations: p. cloudy, ~69°F, slight S. westerly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No Well Cap: ☒ Yes ☐ No Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_  
(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 18.97 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 22.14 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 19.27 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.40 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft. OVM/PID Reading (if applicable): NA ppm.

Detectable Odor: ☒ Yes ☐ No Describe: slight sour, acid Note: NA = Not Applicable

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(22.14 - 18.97) \times 0.16 = 0.5$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.25 in. x (D) 0.25 in. x (L) 30 ft.) + (Fc) 0.25 gal = 0.33 gal

3 Well/Equipment Volumes = 1.0 gallons Purged Volume (actual): 9.2 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☒ Peristaltic Pump ☐ Submersible Pump Sample Rate: 0.08 gpm

QA Sample Collected ☒ Yes ☐ No; ☐ Blind Duplicate; ☒ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: Equipment Blank QA Sample Time: 10:55

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

\_\_\_\_\_ (\_\_\_\_\_)

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 5208 150 3331, 3699) ☐ Other (\_\_\_\_\_)

Notes: \_\_\_\_\_

Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 11/14 November 2007 Sampled By: J. Perry

Station (Well No.): MW-10B WACS ID: 1928 Pump Method: Pump ☒ Bailer ☐ Pump Type: \_\_\_\_\_ Submersible ( ☐ Teflon ☐ SS ☒ Other) ☒ Peristaltic

Pump (Make & Model): Geopump II/ Grundfos RF2/ PA Hurricane Purge Rate: 0.08 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A2173 AL

Water Level Meter: Solinst Time @ Start of Purging: 0840 Time @ End of Purging: 0935 Total Purging Time: 55 min.

Depth of Pump or Intake Tubing: 44 ft. (BTCC)

[illegible]

Note: When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

Note: When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

Note: When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to purging first field parameter measurements. Take additional field parameter measurements every  $\frac{1}{4}$  well volume until purging requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of reading. DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs

reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs. If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater.

Sample ID: MW-10B Time Collected: 0935 Comments:



## Well Inspection

Field Conditions/Observations: p. cloudy, ~69°F, slight S. westerly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No Well Cap: ☒ Yes ☐ No Well Cap: ☒ Tight ☐ Loose

### Comments:

(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 18.87 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 48.25 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 19.01 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.14 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft.

OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☒ Yes ☐ No Describe: sulfur-like

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(48.25 - 18.87) \times 0.16 = 4.7$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) =  $P + (0.041D \times D \times L) + Fc$

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal +  $(0.041 \times (D) \text{ 0.25 in. } \times (D) \text{ 0.25 in. } \times (L) \text{ 50 ft. }) + (Fc) \text{ 0.25 gal} = \text{0.4 gal}$

3 Well/Equipment Volumes = 1.2 gallons Purged Volume (actual): 4.4 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: ☐ 55 Gallon Drum ☐ Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☒ Peristaltic Pump ☐ Submersible Pump Sample Rate: 0.08 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_  $\mu\text{m}$ ; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

\_\_\_\_\_ (\_\_\_\_\_)

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 52081503331, 3699) ☐ Other (\_\_\_\_\_)

Notes: \_\_\_\_\_

Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 11/14 November 2007 Sampled By: J. Terry

Station (Well No.): MW-10C WACS ID: 19929 Purge Method: Pump ☒ Bailor ☐ Pump Type: X Submersible ( ☐ Teflon ☒ SS ☐ Other) Penstaltic

Pump (Make & Model): Geopump II / Grundfos RP2 (PA Hurricane) Purge Rate: 0.74 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A2173AL

Water Level Meter: Solinst Time @ Start of Purging: 0902 Time @ End of Purging: 1020 Total Purging Time: 80 min.

Depth of Pump or Intake Tubing: 70 ft. (BTOC)

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

**Note:** When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every ¼ well volume until purging requirements are satisfied.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to connecting first few parameter measurements. Take additional flow parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^\circ\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of reading. DO is measured at temperature less than  $20^\circ\text{C}$ , saturation level is  $9.09\text{ mg/L}$ . Dissolved oxygen concentration is reported as percent saturation.

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: \_\_\_\_\_  
 Sample ID: MW-10C  
 Time Collected: 1020  
 Comments: \_\_\_\_\_

## Well Inspection

Field Conditions/Observations: p. cloudy, ~69°F, slight S. westerly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No Well Cap: ☒ Yes ☐ No Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_  
(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 19.07 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 74.93 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 20.02 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.95 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft. OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☐ Yes ☒ No Describe: \_\_\_\_\_

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(74.93 - 19.07) \times 0.16 = 9.0$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.375 in. x (D) 0.375 in. x (L) 80 ft.) + (Fc) 0.25 gal = 0.7 gal

3 Well/Equipment Volumes = 2.1 gallons Purged Volume (actual): 59.2 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: ☐ 55 Gallon Drum ☐ Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☐ Peristaltic Pump ☒ Submersible Pump Sample Rate: 0.02 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

\_\_\_\_ ( \_\_\_\_\_ )

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 5208 150 333 1 3649) ☐ Other (\_\_\_\_\_)

Notes: \_\_\_\_\_



Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 1/5 November 2007 Sampled By: Δ11297  
 Station (Well No.): MW-11A WACS ID: 19930 Purge Method: Pump ☒ Bailer ☐ Pump Type: Submersible ( ☐ Teflon ☐ SS ☒ Other) ☒ Peristaltic  
 Pump (Make & Model): (Geopump II / Grundfos RF2 / PA Hurricane Purge Rate: 0.07 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A2173 AL  
 Water Level Meter: Solinst Time @ Start of Purging: 1310 Time @ End of Purging: 1415 Total Purging Time: 65 min.  
 Depth of Pump or Intake Tubing: 20 ft. (BTWC)

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

Note: When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of reading. DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: MW-11A Time Collected: 4/15 Comments:

## Well Inspection

Field Conditions/Observations: m. cloudy, ~72°F, westerly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other

Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No

Well Cap: ☒ Yes ☐ No

Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_

(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 16.40 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 22.84 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 16.52 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.12 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft.

OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☒ Yes ☐ No Describe: sour, acid

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(22.84 - 16.4) \times 0.16 = 1.0$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.25 in. x (D) 0.25 in. x (L) 30 ft.) + (Fc) 0.25 gal = 0.33 gal

3 Well/Equipment Volumes = 1.0 gallons Purged Volume (actual): 4.55 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other ( )

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☒ Peristaltic Pump ☐ Submersible Pump Sample Rate: 0.07 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

( )

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 5208 150 3680) ☐ Other ( )

Notes: \_\_\_\_\_

Site: Oak Hammock Disposal Facility Project No.: FO1144 Task: 02 Date: 13 November 2007 Sampled By: J. Henry, K. Heston

Station (Well No.): MW-115 WACS ID: 19931 Purge Method: Pump ☒ Bailor ☐ Pump Type: X Submersible ( ☐ Teflon ☒ SS ☐ Other) Peristaltic

Pump (Make & Model): Geopump II / Grundfos RP2 / PA Hurricane Purge Rate: 0.50 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A2173 AL

Water Level Meter: Solinst Time @ Start of Purging: 1325 Time @ End of Purging: 1455 Total Purging Time: 90 min.

Depth of Pump or Intake Tubing: 113 ft. (BTWC)

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

**Note:** When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^\circ\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs

reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs.

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: MW-113 Time Collected: 1455 Comments:



## Well Inspection

Field Conditions/Observations: m. cloudy, ~72°F, slight westerly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other

Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No

Well Cap: ☒ Yes ☐ No

Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_

(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 16.42 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 47.86 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 17.50 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 1.08 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft.

OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☐ Yes ☒ No Describe: \_\_\_\_\_

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(47.86 - 16.42) \times 0.16 = 5.0$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.375 in. x (D) 0.375 in. x (L) 55 ft.) + (Fc) 0.25 gal = 0.6 gal

3 Well/Equipment Volumes = 1.8 gallons Purged Volume (actual): 45.0 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☐ Peristaltic Pump ☒ Submersible Pump Sample Rate: 0.08 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

(\_\_\_\_\_)

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 52031503680) ☐ Other (\_\_\_\_\_)

Notes: \_\_\_\_\_

Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 13 November 2007 Sampled By: J. Perry

Station (Well No.): MW-11C WACS ID: 19932 Pump Method: Pump ☒ Bailer ☐ Pump Type: Submersible (   Teflon    SS    Other) ☒ Peristaltic

Pump (Make & Model): Geopump II / Grundfos RF2 / PA Hurricane Purge Rate: 0.10 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A2173 AL

Water Level Meter: Solinst Time @ Start of Purging: 1305 Time @ End of Purging: 1350 Total Purging Time: 45 min.

Depth of Pump or Intake Tubing: 69 ft. (BTWC)

Note: When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

**Note:** When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^\circ\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of collecting first field parameter measurements. Take additional field parameter measurements at 50% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs

reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs. If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater.

Sample ID: MW-11C Time Collected: 1350 Comments:

## Well Inspection

Field Conditions/Observations: m. cloudy, ~72°F, slight westerly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No Well Cap: ☒ Yes ☐ No Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_  
(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 16.47 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 73.61 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 16.70 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.23 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft. OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☐ Yes ☒ No Describe: \_\_\_\_\_

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(73.61 - 16.47) \times 0.16 = 9.1$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) =  $P + (0.041D \times D \times L) + Fc$

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal +  $(0.041 \times (D) \text{ 0.65 in. } \times (L) \text{ 80 ft. }) + (Fc) \text{ 0.25 gal} = \text{0.5 gal}$

3 Well/Equipment Volumes = 1.5 gallons Purged Volume (actual): 4.5 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☒ Peristaltic Pump ☐ Submersible Pump Sample Rate: 0.10 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_  $\mu$ m; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

\_\_\_\_\_ ( )

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 5209 150 3680) ☐ Other (\_\_\_\_\_)

Notes: \_\_\_\_\_



Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 12 November 2007 Sampled By: J. Perry

Station (Well No.): MW-12A WACS ID: 19933 Pump Method: Pump ☒ Bailor ☐ Pump Type: Submersible (   Teflon    SS    Other) ☒ Peristaltic

Pump (Make & Model): Geopump II / Grundfos RF2 / PA Hurricane Purge Rate: 0.07 gpm Water Quality Meter (Make & Model): YSI 556 SN or ID: 06A2173 AL

Water Level Meter: Solinst Time @ Start of Purging: 1035 Time @ End of Purging: 1150 Total Purging Time: 75 min.

Depth of Pump or Intake Tubing: 20 ft. (BTWC)

**NOTE:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

**NOTE:** When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every ¼ well volume until purging requirements are satisfied.

**NOTE:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied. Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: MW-12A Time Collected: 1150 Comments:

## Well Inspection

Field Conditions/Observations: 0. Cloudy, ~72°F, westerly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No Well Cap: ☒ Yes ☐ No Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_  
(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 17.64 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 23.00 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 18.00 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.36 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft. OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☒ Yes ☐ No Describe: sour, acid

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(23.00 - 17.64) \times 0.16 = 0.9$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) =  $P + (0.041D \times D \times L) + Fc$

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal +  $(0.041 \times (D) \ 0.25 \text{ in.} \times (D) \ 0.25 \text{ in.} \times (L) \ 30 \text{ ft.}) + (Fc) \ 0.25 \text{ gal} = 0.33 \text{ gal}$

3 Well/Equipment Volumes = 1.0 gallons Purged Volume (actual): 5.25 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other ( )

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☒ Peristaltic Pump ☐ Submersible Pump Sample Rate: 0.07 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_  $\mu\text{m}$ ; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH<sub>3</sub>, Cl, Fe, Hg, NO<sub>3</sub>, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

( )

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 5208 150 3680) ☐ Other ( )

Notes: \_\_\_\_\_

Site: Oak Hammock Disposal Facility Project No.: FO1144 Task: 02 Date: 12 November 2007 Sampled By: J. J. J. J.

Station (Well No.): MW-12B WACS ID: 19934 Pump Method: Pump ☒ Bailer ☐ Pump Type: ☒ Submersible ( ☐ Teflon ☒ SS ☐ Other) ☐ Peristaltic

Pump (Make & Model): Geopump II / Grundfos RF2 / PA Hurricane Purge Rate: 0.08 <sup>0.70</sup> gpm <sup>(11-367)</sup> Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A2173AL

Water Level Meter: Solinst Time @ Start of Purging: 1045 Time @ End of Purging: 1215 Total Purging Time: 90 min.

Depth of Pump or Intake Tubing: 212 ft. (BTCC)

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

**Note:** When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every ¼ well volume until purging requirements are satisfied.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

**Note:** Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: MW-12B Time Collected: 1215 Comments:



## Well Inspection

Field Conditions/Observations: m. cloudy, ~72°F, westerly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other

Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No

Well Cap: ☒ Yes ☐ No

Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_

(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 17.65 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 48.98 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 18.87 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 1.22 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft.

OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☐ Yes ☒ No Describe: \_\_\_\_\_

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(48.98 - 17.65) \times 0.16 = 5.0$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) =  $P + (0.041D \times D \times L) + Fc$

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal +  $(0.041 \times (D) \ 0.375 \text{ in.} \times (D) \ 0.375 \text{ in.} \times (L) \ 59 \text{ ft.}) + (Fc) \ 0.25 \text{ gal} = 0.6 \text{ gal}$

3 Well/Equipment Volumes = 1.8 gallons Purged Volume (actual): 63.0 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☐ Peristaltic Pump ☒ Submersible Pump

Sample Rate: 0.08 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_  $\mu\text{m}$ ; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

\_\_\_\_ ( )

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 52081503680) ☐ Other (\_\_\_\_\_)

Notes: \_\_\_\_\_

Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 11 November 2007 Sampled By: J. Perry

Station (Well No.): MW-12C WACS ID: 19935 Pump Method: Pump ☒ Bailer ☐ Pump Type: \_\_\_\_\_ Submersible ( ☐ Teflon ☐ SS ☐ Other) ☒ Peristaltic

Pump (Make & Model): Geopump II / Grundfos RF2 / PA Hurricane Purge Rate: 0.08 gpm Water Quality Meter (Make & Model): YSI 556 SN or ID: 06A2173 AL

Water Level Meter: Solinst Time @ Start of Purging: 1030 Time @ End of Purging: 1125 Total Purging Time: 55 min.

Depth of Pump or Intake Tubing: 69 ft. (BTCC)

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

Note: When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every ¼ well volume until purging requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: MW-12C Time Collected: 1/25 Comments:

## Well Inspection

Field Conditions/Observations: p. cloudy, ~72°F, westerly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No Well Cap: ☒ Yes ☐ No Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_  
(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 17.77 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 73.58 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 17.93 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.16 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft. OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☐ Yes ☒ No Describe: \_\_\_\_\_

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(73.58 - 17.77) \times 0.16 = 9.0$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.25 in. x (D) 0.25 in. x (L) 30 ft.) + (Fc) 0.25 gal = 0.33 gal

3 Well/Equipment Volumes = 91.015 gallons Purged Volume (actual): 4.4 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☒ Peristaltic Pump ☐ Submersible Pump Sample Rate: 0.08 gpm

QA Sample Collected: ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ BQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

(\_\_\_\_\_)

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 5208 150 3680) ☐ Other (\_\_\_\_\_)

Notes: \_\_\_\_\_



Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 15 November 2007 Sampled By: S. J. E. H. /

Station (Well No.): MW-13A WACS ID: 19936 Pump Method: Pump ☒ Bailer ☐ Pump Type: Submersible (   Teflon    SS    Other) ☒ Peristaltic

Pump (Make & Model): (Geopump ILL Grundfos RF2 / PA Hurricane Purge Rate: 0.07 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A2173 AL

Water Level Meter: Solinst Time @ Start of Purging: 0820 Time @ End of Purging: 0905 Total Purging Time: 45 min.

Depth of Pump or Intake Tubing: 20 ft. (BTWC)

[illegible]

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

Note: When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every 74 well volume until purging requirements are satisfied.

When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

Specific Conductance:  $\pm 5.0\%$  of reading  
Temperature:  $\pm 0.2^\circ\text{C}$

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^\circ\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 2.0\%$  standard units.

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: MW-13A Time Collected: 0905 Comments:

## Well Inspection

Field Conditions/Observations: clear, ~70°F, westerly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other

Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No

Well Cap: ☒ Yes ☐ No

Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_

(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 17.57 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 22.50 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 17.85 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.28 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft.

OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☒ Yes ☐ No

Describe: sour, acidic

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(22.5 - 17.57) \times 0.16 = 0.8$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) =  $P + (0.041D \times D \times L) + Fc$

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal +  $(0.041 \times (D) \ 0.25 \text{ in.} \times (D) \ 0.25 \text{ in.} \times (L) \ 30 \text{ ft.}) + (Fc) \ 0.25 \text{ gal} = 0.33 \text{ gal}$

3 Well/Equipment Volumes = 1.0 gallons Purged Volume (actual): 3.15 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other ( )

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☒ Peristaltic Pump ☐ Submersible Pump Sample Rate: 0.07 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_  $\mu\text{m}$ ; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

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pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 5208 150 3680) ☐ Other ( )

Notes: \_\_\_\_\_

Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 12 November 2007 Sampled By: J. Perry

Station (Well No.): MW-133 WACS ID: 19937 Pump Method: Pump ☒ Bailor ☐ Pump Type: ☒ Submersible ( ☐ Teflon ☒ SS ☐ Other) ☐ Penstaltic

Pump (Make & Model): Geopump II / Grundfos RF2 / PA Hurricane Purge Rate: 0.9 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A2173AL

Water Level Meter: Solinst Time @ Start of Purging: 0830 Time @ End of Purging: 0935 Total Purging Time: 65 min.

Depth of Pump or Intake Tubing: 47 ft. (BTCC)

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

Note: When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every 74 well volumes until purging is complete. When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every 74 well volumes until purging is complete.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs. If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: NW-13B Time Collected: 0935 Comments: \_\_\_\_\_

## Well Inspection

Field Conditions/Observations: clear, ~70°F, westerly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other

Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No

Well Cap: ☒ Yes ☐ No

Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_

(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 17.52 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 47.30 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 18.12 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.60 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft.

OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☐ Yes ☒ No Describe: \_\_\_\_\_

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(47.3 - 17.52) \times 0.16 = 5.0$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.315 in. x (D) 0.315 in. x (L) 55 ft.) + (Fc) 0.25 gal = 0.6 gal

3 Well/Equipment Volumes = 1.8 gallons Purged Volume (actual): 58.5 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☐ Peristaltic Pump ☒ Submersible Pump Sample Rate: 0.08 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

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pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 52081503680) ☐ Other (\_\_\_\_\_)

Notes: \_\_\_\_\_



Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 12 November 2007 Sampled By: J. L. C. /

Station (Well No.): MW-13C WACS ID: 19938 Purge Method: Pump ☒ Bailer ☐ Pump Type: Submersible (   Teflon    SS    Other) ☒ Peristaltic

Pump (Make & Model): Geopump II / Grundfos RF2 / PA Hurricane Purge Rate: 0.08 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A2173 AL

Water Level Meter: Solinst Time @ Start of Purging: 0840 Time @ End of Purging: 1015 Total Purging Time: 95 min. <sup>95 (11-28-07)</sup>

Depth of Pump or Intake Tubing: 68 ft. (BTOC)

[illegible]

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

**Note:** When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every  $\frac{1}{4}$  well volume until purging requirements are satisfied. When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^\circ\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs

readings; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: MW-13C Time Collected: 10/5

## Well Inspection

Field Conditions/Observations: Clear, ~72°F, westerly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other

Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No

Well Cap: ☒ Yes ☐ No

Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_

(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 17.50 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 73.0 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 17.77 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.27 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft.

OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☐ Yes ☒ No Describe: \_\_\_\_\_

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(73.0 - 17.50) \times 0.16 = 9.0$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.25 in. x (D) 0.25 in. x (L) 73 ft.) + (Fc) 0.25 gal = 0.44 gal

3 Well Equipment Volumes = 1.32 gallons Purged Volume (actual): 8.4 gallons <sup>7.6 gal (11-25-07)</sup>

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☒ Peristaltic Pump ☐ Submersible Pump Sample Rate: 0.08 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

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pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 52081503322) ☐ Other (\_\_\_\_\_)

Notes:

pH was higher than previous events. Recalibrated YSI after sampling and rechecked sample pH; stable reading was not obtainable instrument malfunction

Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 20 November 2007 Sampled By: D. Kelly, R. Kaspr

Station (Well No.): MW-16A WACS ID: \_\_\_\_\_ Pump Method: Pump ☒ Bailer ☐ Pump Type: \_\_\_\_\_ Submersible (\_\_\_\_ Teflon \_\_\_\_ SS \_\_\_\_ Other) \_\_\_\_\_ Peristaltic

Pump (Make & Model): Geopump II Grundfos RF2 / PA Hurricane Purge Rate: 0.08 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A2173 AL

Water Level Meter: Solinst Time @ Start of Purging: 1445 Time @ End of Purging: 1620 Total Purging Time: 95 min.

Depth of Pump or Intake Tubing: 15 ft. (BTOC)

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

Note: When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2\text{ }^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of reading. DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20\text{ NTUs}$

If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: NW-16A Time Collected: 1120 Comments: \_\_\_\_\_

## Well Inspection

Field Conditions/Observations: p. cloudy, ~75°F, westerly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No Well Cap: ☒ Yes ☐ No Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_  
(If capped, remove and allow well to stabilize before recording water level)

### Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 11.28 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 18.63 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 11.42 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 14 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft. OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☐ Yes ☒ No Describe: \_\_\_\_\_

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(18.63 - 11.28) \times 0.16 = 1.18$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 2.50 in. x (D) 2.50 in. x (L) 15 ft.) + (Fc) 0.25 gal = 0.24 gal

3 Well/Equipment Volumes = 0.86 gallons Purged Volume (actual): 7.6 gal (11.28 x 0.16)

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other (\_\_\_\_\_)

Labeled: ☐ Yes ☒ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☒ Bailer ☒ Peristaltic Pump ☒ Submersible Pump Sample Rate: 1.08 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: NA NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

\_\_\_\_ (\_\_\_\_)

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 5186073615, 6129) Other (\_\_\_\_\_)

Notes: \_\_\_\_\_



Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 14 November 2007 Sampled By: R. Kester

Station (Well No.): MW-16B WACS ID: 223413 Purge Method: Pump ☒ Bailer ☐ Pump Type: Submersible ( ☐ Teflon ☐ SS ☐ Other ) Peristaltic

Pump (Make & Model): Geopump II / Grundfos RP2 / PA Hurricane Purge Rate: 0.70 gpm Water Quality Meter (Make & Model): YSI 556 SN or ID: 9642173-07F102604 OT 01-14-07

Water Level Meter: Solinst Time @ Start of Purging: 0745 Time @ End of Purging: 1020 Total Purging Time: 155 min.

Depth of Pump or Intake Tubing: 33 ft. (BTCC)

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

Note: When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every  $\frac{1}{4}$  well volume until purging requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs. If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater.

Sample ID: MW-16B Time Collected: 1020 Comments: Sample collected when turbidity stabilized at 272. (PH  
Sample Filtered / TURB AFTER FILTER - 82.6

## Well Inspection

Field Conditions/Observations: p. cloudy, ~68°F, s. easterly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other

Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No

Well Cap: ☒ Yes ☐ No

Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_

(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 10.96 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 38.09 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 12.85 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 1.89 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft.

OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☐ Yes ☒ No Describe: \_\_\_\_\_

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(38.09 - 10.96) \times 0.16 = 4.34$  gal  
Well Capacity (gal/ft): 0.75"=0.02; 1"=0.04; 1.25"=0.06; 2"=0.16; 3"=0.37; 4"=0.65; 5"=1.02; 6"=1.47; 12"=5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P=Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.375 in. x (D) 0.375 in. x (L) 45 ft.) + (Fc) 0.25 gal = 0.5 gal

3 Well/Equipment Volumes = 1.5 gallons Purged Volume (actual): 110.5 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☐ Peristaltic Pump ☒ Submersible Pump Sample Rate: 70 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ BQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☒ Yes ☐ No Filter Size: 1 µm; ☐ All Analyses; ☒ Metals Only;

Turbidity After Filter: 82.6 NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

(\_\_\_\_\_)

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 7208 150 3331, 3899) Other (\_\_\_\_\_)

Notes: \_\_\_\_\_

Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 11/14/2007 Sampled By: R. Masnie

Station (Well No.): MW-16C WACS ID: 223414 Purge Method: Pump ☒ Bailer ☐ Pump Type: X Submersible (    Teflon X SS    Other)    Peristaltic

Pump (Make & Model): Geopump II / Grundfos RF2 / PA Hurricane Purge Rate: 70 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A2173 07F722604 IT (11-14-07)

Water Level Meter: Solinst Time @ Start of Purging: 10:52 Time @ End of Purging: 12:20 Total Purging Time: 88 min.

Depth of Pump or Intake Tubing: 64 ft. (BTOC)

[illegible]

Note: When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

Note: When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

Note: When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements every  $\frac{1}{4}$  well volume until purging requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied.

reading; DO is no greater than 20% saturation at field measured temperature; and turbidity  $\leq 20$  NTUs. If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: MW-16C Time Collected: 1720 Comments:

## Well Inspection

Field Conditions/Observations: Sunny, Light Southeast breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): locked

Well Labeled: ☒ Yes ☐ No Well Cap: ☒ Yes ☐ No Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_  
(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 11.11 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 67.65 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 13.88 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 2.77 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft. OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☐ Yes ☒ No Describe: \_\_\_\_\_

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(67.65 - 11.11) \times 0.16 = 9.0$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.375 in. x (D) 0.375 in. x (L) 74 ft.) + (Fc) 0.25 gal = 0.7 gal

3 Well/Equipment Volumes = 2.1 gallons Purged Volume (actual): 61.6 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☒ Bailer ☐ Peristaltic Pump ☒ Submersible Pump Sample Rate: 70 gpm

QA Sample Collected ☐ Yes ☒ No; ☒ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_  $\mu$ m; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

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pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 520615033313699) Other (\_\_\_\_\_)

Notes: \_\_\_\_\_



Site: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 20 November 2007 Sampled By: S. A. H. / S. H. S. / S. H. S.

Station (Well No.): MW-17A WACS ID: 223415 Pump Method: Pump ☒ Bailer ☐ Pump Type: Submersible (   Teflon    SS    Other) ☒ Peristaltic

Pump (Make & Model): Geopump II / Grandfos RF2 / PA Hurricane Purge Rate: 0.05 gpm Water Quality Meter (Make & Model): YSI 556 S/N or ID: 06A2173 AL

Water Level Meter: Solinst Time @ Start of Purging: 1450 Time @ End of Purging: 1615 Total Purging Time: 85 min.

Depth of Pump or Intake Tubing: 16 ft. (BTOC)

[illegible]

**Note:** When purging well with pump or intake tubing within a fully submerged well screen, purge minimum of 1 equipment volume prior to first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart, must purge minimum of 3 equipment volume + stabilized field parameters for sampling.

**Note:** When purging a well with well screen fully submerged and pump or intake tubing is placed in water column above the screened zone, purge minimum of one well volume sampling.

**Note:** When purging wells with a partially submerged well screen and pump or tubing placed within a submerged screen zone, purge a minimum of one well volume prior to collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 3 minutes apart until purge requirements are satisfied. Collecting first field parameter measurements every  $\frac{1}{4}$  well volume until purging requirements are satisfied. Take additional field parameter measurements every  $\frac{1}{4}$  well volume until purging requirements are satisfied.

Note: Three (3) consecutive readings within specified limits are to be obtained for sampling. Temperature:  $\pm 0.2^{\circ}\text{C}$ ; pH:  $\pm 0.2$  standard units; Specific Conductance:  $\pm 5.0\%$  of collecting first field parameter measurements. Take additional field parameter measurements no sooner than 2 to 5 minutes apart until purge requirements are met.

reading; DO is no greater than 20% saturation at field measured temperature; and Turbidity  $\leq 20$  NTUs. If DO or Turbidity measurements cannot meet the above requirements within 5 well volumes; Temp, pH, Conductivity ranges remain unchanged, however, DO and turbidity must meet the following: DO  $\pm 0.2$  mg/L or 10%, whichever is greater; and Turbidity  $\pm 5$  NTUs or 10%, whichever is greater

Sample ID: MW-17A Time Collected: 1615 Comments:

## Well Inspection

Field Conditions/Observations: p. cloudy, ~75°F, westerly breeze

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): \_\_\_\_\_

Well Labeled: ☒ Yes ☐ No Well Cap: ☒ Yes ☐ No Well Cap: ☒ Tight ☐ Loose

Comments: \_\_\_\_\_  
(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 11.70 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 19.88 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 12.12 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.42 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft. OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☐ Yes ☒ No Describe: \_\_\_\_\_

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(19.88 - 11.70) \times 0.16 = 1.3$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 0.25 in. x (D) 0.25 in. x (L) 25 ft.) + (Fc) 0.25 gal = 0.32 gal

3 Well/Equipment Volumes = 1.0 gallons Purged Volume (actual): 4.25 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☐ Bailer ☒ Peristaltic Pump ☐ Submersible Pump Sample Rate: 0.25 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☐ Yes ☒ No Filter Size: \_\_\_\_\_ µm; ☐ All Analyses; ☐ Metals Only;

Turbidity After Filter: \_\_\_\_\_ NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

\_\_\_\_ ( )

pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 5186 073 6115, 6124) ☐ Other (\_\_\_\_\_)

Notes: \_\_\_\_\_



## Well Inspection

Field Conditions/Observations: Sunny / P. Cloudy SE Breeze 8-10

### Well Inspection:

Well Type: ☐ Flush Mount ☒ Stick Up ☐ Other

Well Size (ID): 2 in. ☐ Steel ☒ PVC

Condition (locked, damaged, etc.): Locked

Well Labeled: ☒ Yes ☐ No

Well Cap: ☒ Yes ☐ No

Well Cap: ☒ Tight ☐ Loose

Comments:

(If capped, remove and allow well to stabilize before recording water level)

Well Sampling: (Note: Measure Water Levels to Nearest 0.01ft)

Depth to Water (initial): 14.52 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth of Well: 40.18 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Depth to Water (final): 15.42 ft. (measured from mark on top of riser pipe, otherwise measure from North side)

Draw down: 0.9 ft. (Depth to Water (initial) - Depth to Water (final))

Free Product Thickness (if applicable): NA ft.

OVM/PID Reading (if applicable): NA ppm.

Note: NA = Not Applicable

Detectable Odor: ☐ Yes ☒ No Describe: \_\_\_\_\_

1 Well Volume (WV) = (depth of well - depth to water (initial)) x well capacity =  $(40.18 - 14.52) \times 0.16 = 4.11$  gal  
Well Capacity (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

1 Equipment Volume (EV) = P + (0.041D x D x L) + Fc

Where: P = Pump Volume (gal); D = Tubing Diameter (inches); L = Length of Tubing (ft); Fc = Flow Cell Volume (gal)

1 EV = (P) 0.0 gal + (0.041 x (D) 375 in. x (D) 375 in. x (L) 45 ft.) + (Fc) 0.25 gal = .51 gal

3 Well/Equipment Volumes = 1.5 gallons Purged Volume (actual): 77.0 gallons

Purge Water Contained? ☐ Yes ☒ No Container Used: 55 Gallon Drum Other (\_\_\_\_\_)

Labeled: ☐ Yes ☐ No; Purge Water Discharged to Ground? ☒ Yes ☐ No

Sampling Method: ☒ Bailer ☐ Peristaltic Pump ☒ Submersible Pump Sample Rate: .70 gpm

QA Sample Collected ☐ Yes ☒ No; ☐ Blind Duplicate; ☐ EQ. Blank; ☐ Field Blank; ☐ MS/MSD

QA Sample ID: \_\_\_\_\_ QA Sample Time: \_\_\_\_\_

Filtered: ☒ Yes ☐ No Filter Size: 1  $\mu$ m; ☐ All Analyses; ☒ Metals Only;

Turbidity After Filter: 3.49 NTU

Analysis Required: NH3, Cl, Fe, Hg, NO3, Na, TDS, Appendix I

Sample Bottles Filled: 6 40 ml vials ☐ 1 liter amber glass 2 125 ml plastic 1 250 ml plastic ☐ 500 ml plastic

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pH Verification of Preserved Samples: Analysis \_\_\_\_\_ Required pH <2 Measured pH \_\_\_\_\_

Laboratory Performing Analysis: Columbia Analytical Services

Method of Shipment: ☐ Courier ☒ UPS (Airbill No. 52001503699331) Other (\_\_\_\_\_)

Notes:



# Field Instrument Calibration Record

Project Name: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 11 November 2007

Rental Company: EPS & US Environmental

Water Quality Instrument Make: YSI Instrument Model Number: 556 Instrument Serial Number: 06A2173AL

Turbidity Instrument Make: LaMotte Instrument Model Number: 2020e Instrument Serial Number: ME 10404

Time: 1700

Lot No.	Calibration Standard		Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
	Expiration Date	Standard Value						
2607159	June 2008	pH = 4.0	4.00	0.00	0.2	Y	I	PT
2609133	Aug 2008	pH = 7.0	7.00	0.00	0.2	Y	I	PT
2609459	March 2008	pH = 10.0	10.00	0.00	0.2	Y	I	PT
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
P566024	April 2008	Turbidity = 10 NTU	9.72	2.8	10%	Y	C	PT
		Turbidity = 50 NTU			6.5%			
117500E	June 2008	Conductivity = 0.500 mS/cm			5%			
2704103	April 2008	Conductivity = 0.084 mS/cm	0.084	0.00	5%	Y	I	PT
	Per Table →	D.O. = 9.34 mg/L @ 24.5°C	8.38	0.04	0.2 mg/l	Y	I	PT

Water Quality Instrument Make: YSI Instrument Model Number: 556 Instrument Serial Number: 07F100604

Turbidity Instrument Make: LaMotte Instrument Model Number: 2020e Instrument Serial Number: ME 12953

Lot No.	Calibration Standard		Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
	Expiration Date	Standard Value						
2607159	June 2008	pH = 4.0			0.2			
2609133	Aug 2008	pH = 7.0			0.2			
2609459	March 2008	pH = 10.0			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
P566024	April 2008	Turbidity = 10 NTU			10%			
		Turbidity = 50 NTU			6.5%			
117500E	June 2008	Conductivity = 0.500 mS/cm			5%			
2704103	April 2008	Conductivity = 0.084 mS/cm			5%			
	Per Table →	D.O. = mg/L @ °C			0.2 mg/l			

Note (1): Percent Deviation = (Standard Value - Instrument Response) ÷ Standard Value x 100

Note (2): Allowable Deviation: pH ± 0.2 of Standard Value; Conductivity ± 5 % of Standard Value; Salinity ± 3 % of Standard Value; DO ± 0.2 mg/L;

Turbidity 0.1-10 NTU ± 10% of Standard Value, 11-40 NTU ± 8% of Standard Value, 41-100 NTU ± 6.5% of Standard Value, >100 NTU ± 5% of Standard Value

Note (4): Initial, Continual, Final

# Field Instrument Calibration Record

Project Name: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 12 November 2007

Rental Company: EPS & US Environmental

Water Quality Instrument Make: YSI Instrument Model Number: 556 Instrument Serial Number: 06A2173AL

Turbidity Instrument Make: LaMotte Instrument Model Number: 2020e Instrument Serial Number: ME 10404

Time: 1545

Lot No.	Calibration Standard		Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
	Expiration Date	Standard Value						
2607159	June 2008	pH = 4.0	4.01	0.01	0.2	Y	I	PT
2609133	Aug 2008	pH = 7.0	7.00	0.00	0.2	Y	I	PT
2609459	March 2008	pH = 10.0	9.95	0.05	0.2	Y	I	PT
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
P566024	April 2008	Turbidity = 10 NTU	9.73	2.7	10%	Y	C	PT
		Turbidity = 50 NTU			6.5%			
117500E	June 2008	Conductivity = 0.500 mS/cm			5%			
2704103	April 2008	Conductivity = 0.084 mS/cm	0.085	1.2	5%	Y	C	PT
	Per Table →	D.O. = 8.31 mg/L @ 24.3 °C	8.45	0.08	0.2 mg/l	Y	I	PT

Water Quality Instrument Make: YSI Instrument Model Number: 556 Instrument Serial Number: 07F100604

Turbidity Instrument Make: LaMotte Instrument Model Number: 2020e Instrument Serial Number: ME 12953

Lot No.	Calibration Standard		Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
	Expiration Date	Standard Value						
2607159	June 2008	pH = 4.0			0.2			
2609133	Aug 2008	pH = 7.0			0.2			
2609459	March 2008	pH = 10.0			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
P566024	April 2008	Turbidity = 10 NTU			10%			
		Turbidity = 50 NTU			6.5%			
117500E	June 2008	Conductivity = 0.500 mS/cm			5%			
2704103	April 2008	Conductivity = 0.084 mS/cm			5%			
	Per Table →	D.O. = mg/L @ °C			0.2 mg/l			

Note (1): Percent Deviation = (Standard Value - Instrument Response) ÷ Standard Value x 100

Note (2): Allowable Deviation: pH ± 0.2 of Standard Value; Conductivity ± 5 % of Standard Value; Salinity ± 3 % of Standard Value; DO ± 0.2 mg/L; Turbidity 0.1-10 NTU ± 10% of Standard Value, 11-40 NTU ± 8% of Standard Value, 41-100 NTU ± 6.5% of Standard Value, >100 NTU ± 5% of Standard Value

Note (4): Initial, Continual, Final



# Field Instrument Calibration Record

Project Name: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 13 November 2007

Rental Company: EPS & US Environmental

Water Quality Instrument Make: YSI Instrument Model Number: 556 Instrument Serial Number: 06A2173AL

Turbidity Instrument Make: LaMotte Instrument Model Number: 2020e Instrument Serial Number: ME 10404

Time: 0530

Lot No.	Calibration Standard		Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
	Expiration Date	Standard Value						
2607159	June 2008	pH = 4.0	4.01	0.01	0.2	Y	I	GT
2609133	Aug 2008	pH = 7.0	7.00	0.00	0.2	Y	I	GT
2609459	March 2008	pH = 10.0	10.00	0.00	0.2	Y	I	GT
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
P566024	April 2008	Turbidity = 10 NTU	9.89	1.1	10%	Y	C	GT
		Turbidity = 50 NTU			6.5%			
117500E	June 2008	Conductivity = 0.500 mS/cm			5%			
2704103	April 2008	Conductivity = 0.084 mS/cm	0.084	0.00	5%	Y	C	GT
	Per Table →	D.O. = 8.35 mg/L @ 24.4 °C	8.41	0.05	0.2 mg/l	Y	I	GT

Water Quality Instrument Make: YSI Instrument Model Number: 556 Instrument Serial Number: 07F100604

Turbidity Instrument Make: LaMotte Instrument Model Number: 2020e Instrument Serial Number: ME 12953

Lot No.	Calibration Standard		Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
	Expiration Date	Standard Value						
2607159	June 2008	pH = 4.0	4.05	0.08	0.2	Y	C	GT
2609133	Aug 2008	pH = 7.0	7.05	0.05	0.2	Y	C	GT
2609459	March 2008	pH = 10.0			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
P566024	April 2008	Turbidity = 10 NTU	10.02	0.2	10%	Y	C	GT
		Turbidity = 50 NTU			6.5%			
117500E	June 2008	Conductivity = 0.500 mS/cm			5%			
2704103	April 2008	Conductivity = 0.084 mS/cm	0.088	4.8	5%	Y	C	GT
	Per Table →	D.O. = 8.387 mg/L @ 24.2 °C	8.42	0.03	0.2 mg/l	Y	I	GT

Note (1): Percent Deviation = (Standard Value - Instrument Response) ÷ Standard Value x 100

Note (2): Allowable Deviation: pH ± 0.2 of Standard Value; Conductivity ± 5% of Standard Value; Salinity ± 3% of Standard Value; DO ± 0.2 mg/L;

Turbidity 0.1-10 NTU ± 10% of Standard Value, 11-40 NTU ± 8% of Standard Value, 41-100 NTU ± 6.5% of Standard Value, >100 NTU ± 5% of Standard Value

Note (4): Initial, Continual, Final

# Field Instrument Calibration Record

Project Name: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 15 November 2007

Rental Company: EPS & US Environmental

Water Quality Instrument Make: YSI Instrument Model Number: 556 Instrument Serial Number: 06A2173AL

Turbidity Instrument Make: LaMotte Instrument Model Number: 2020e Instrument Serial Number: ME 10404

Time: 0600

Lot No.	Calibration Standard		Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
	Expiration Date	Standard Value						
2607159	June 2008	pH = 4.0	4.00	0.00	0.2	Y	C	GT
2609133	Aug 2008	pH = 7.0	7.01	0.01	0.2	Y	C	GT
2609459	March 2008	pH = 10.0			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
P566024	April 2008	Turbidity = 10 NTU	9.53	4.7	10%	Y	C	GT
		Turbidity = 50 NTU			6.5%			
117500E	June 2008	Conductivity = 0.500 mS/cm			5%			
2704103	April 2008	Conductivity = 0.084 mS/cm	0.086	2.4	5%	Y	C	GT
	Per Table →	D.O. = 8.463 mg/L @ 24.1 °C	8.42	0.02	0.2 mg/l	Y	I	GT

Water Quality Instrument Make: YSI Instrument Model Number: 556 Instrument Serial Number: 07F100604

Turbidity Instrument Make: LaMotte Instrument Model Number: 2020e Instrument Serial Number: ME 12953

Lot No.	Calibration Standard		Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
	Expiration Date	Standard Value						
2607159	June 2008	pH = 4.0	4.07	0.07	0.2	Y	C	GT
2609133	Aug 2008	pH = 7.0	7.00	0.00	0.2	Y	C	GT
2609459	March 2008	pH = 10.0			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
P566024	April 2008	Turbidity = 10 NTU	10.00	0.0	10%	Y	C	GT
		Turbidity = 50 NTU			6.5%			
117500E	June 2008	Conductivity = 0.500 mS/cm			5%			
2704103	April 2008	Conductivity = 0.084 mS/cm	0.088	4.8	5%	Y	C	GT
	Per Table →	D.O. = 8.466 mg/L @ 23.7 °C	8.48	0.01	0.2 mg/l	Y	I	GT

Note (1): Percent Deviation = (Standard Value - Instrument Response) ÷ Standard Value x 100

Note (2): Allowable Deviation: pH ± 0.2 of Standard Value; Conductivity ± 5% of Standard Value; Salinity ± 3% of Standard Value; DO ± 0.2 mg/L;

Turbidity 0.1-10 NTU ± 10% of Standard Value, 11-40 NTU ± 8% of Standard Value, 41-100 NTU ± 6.5% of Standard Value, >100 NTU ± 5% of Standard Value

Note (4): Initial, Continual, Final



# Field Instrument Calibration Record

Project Name: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 16 November 2007

Rental Company: EPS & US Environmental

Water Quality Instrument Make: YSI Instrument Model Number: 556 Instrument Serial Number: 06A2173AL

Turbidity Instrument Make: LaMotte Instrument Model Number: 2020e Instrument Serial Number: ME 10404

Time: 0540

Lot No.	Calibration Standard		Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
	Expiration Date	Standard Value						
2607159	June 2008	pH = 4.0	4.01	0.01	0.2	Y	I	PT
2609133	Aug 2008	pH = 7.0	7.00	0.00	0.2	Y	I	PT
2609459	March 2008	pH = 10.0			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
P566024	April 2008	Turbidity = 10 NTU	9.93	0.7	10%	Y	C	PT
		Turbidity = 50 NTU			6.5%			
117500E	June 2008	Conductivity = 0.500 mS/cm			5%			
2704103	April 2008	Conductivity = 0.084 mS/cm	0.084	0.0	5%	Y	C	PT
	Per Table →	D.O. = 8.514 mg/L @ 23.4 °C	8.55	0.04	0.2 mg/l	Y	I	PT

Water Quality Instrument Make: YSI Instrument Model Number: 556 Instrument Serial Number: 07F100604

Turbidity Instrument Make: LaMotte Instrument Model Number: 2020e Instrument Serial Number: ME 12953

Lot No.	Calibration Standard		Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
	Expiration Date	Standard Value						
2607159	June 2008	pH = 4.0			0.2			
2609133	Aug 2008	pH = 7.0			0.2			
2609459	March 2008	pH = 10.0			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
P566024	April 2008	Turbidity = 10 NTU			10%			
		Turbidity = 50 NTU			6.5%			
117500E	June 2008	Conductivity = 0.500 mS/cm			5%			
2704103	April 2008	Conductivity = 0.084 mS/cm			5%			
	Per Table →	D.O. = mg/L @ °C			0.2 mg/l			

Note (1): Percent Deviation = (Standard Value - Instrument Response) ÷ Standard Value x 100

Note (2): Allowable Deviation: pH ± 0.2 of Standard Value; Conductivity ± 5 % of Standard Value; Salinity ± 3 % of Standard Value; DO ± 0.2 mg/L;

Turbidity 0.1-10 NTU ± 10% of Standard Value, 11-40 NTU ± 8% of Standard Value, 41-100 NTU ± 6.5% of Standard Value, >100 NTU ± 5% of Standard Value

Note (4): Initial, Continual, Final

# Field Instrument Calibration Record

Project Name: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 19 November 2007

Rental Company: EPS & US Environmental

Water Quality Instrument Make: YSI Instrument Model Number: 556 Instrument Serial Number: 06A2173AL

Turbidity Instrument Make: LaMotte Instrument Model Number: 2020e Instrument Serial Number: ME 10404

Time: 0550

Lot No.	Calibration Standard		Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
	Expiration Date	Standard Value						
2607159	June 2008	pH = 4.0	4.13	0.13	0.2	Y	C	GT
2609133	Aug 2008	pH = 7.0	7.06	0.06	0.2	Y	C	GT
2609459	March 2008	pH = 10.0			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
P566024	April 2008	Turbidity = 10 NTU	9.54	1.6	10%	Y	C	GT
		Turbidity = 50 NTU			6.5%			
117500E	June 2008	Conductivity = 0.500 mS/cm			5%			
2704103	April 2008	Conductivity = 0.084 mS/cm	0.086	2.4	5%	Y	C	GT
	Per Table →	D.O. = 8.48 mg/L @ 24.0 °C	8.51	0.10	0.2 mg/l	Y	I	GT

Water Quality Instrument Make: YSI Instrument Model Number: 556 Instrument Serial Number: 07F100604

Turbidity Instrument Make: LaMotte Instrument Model Number: 2020e Instrument Serial Number: ME 12953

Lot No.	Calibration Standard		Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
	Expiration Date	Standard Value						
2607159	June 2008	pH = 4.0	4.09	0.09	0.2	Y	C	GT
2609133	Aug 2008	pH = 7.0	7.07	0.07	0.2	Y	C	GT
2609459	March 2008	pH = 10.0			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
P566024	April 2008	Turbidity = 10 NTU	10.01	0.1	10%	Y	C	GT
		Turbidity = 50 NTU			6.5%			
117500E	June 2008	Conductivity = 0.500 mS/cm			5%			
2704103	April 2008	Conductivity = 0.084 mS/cm	0.086	2.4	5%	Y	C	GT
	Per Table →	D.O. = 8.48 mg/L @ 23.5 °C	8.55	0.05	0.2 mg/l	Y	I	GT

Note (1): Percent Deviation = (Standard Value - Instrument Response) ÷ Standard Value x 100

Note (2): Allowable Deviation: pH ± 0.2 of Standard Value; Conductivity ± 5% of Standard Value; Salinity ± 3% of Standard Value; DO ± 0.2 mg/L;

Turbidity 0.1-10 NTU ± 10% of Standard Value, 11-40 NTU ± 8% of Standard Value, 41-100 NTU ± 6.5% of Standard Value, >100 NTU ± 5% of Standard Value

Note (4): Initial, Continual, Final



## Field Instrument Calibration Record

Project Name: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 20 November 2007

Rental Company: EPS & US Environmental

Water Quality Instrument Make: YSI Instrument Model Number: 556 Instrument Serial Number: 06A2173AL

Turbidity Instrument Make: LaMotte Instrument Model Number: 2020e Instrument Serial Number: ME 10404  
Time: 0515

Lot No.	Calibration Standard		Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
	Expiration Date	Standard Value						
2607159	June 2008	pH = 4.0	4.00	0.00	0.2	Y	C	GT
2609133	Aug 2008	pH = 7.0	6.93	0.07	0.2	Y	C	GT
2609459	March 2008	pH = 10.0			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
P566024	April 2008	Turbidity = 10 NTU	9.54	4.6	10%	Y	C	GT
		Turbidity = 50 NTU			6.5%			
117500E	June 2008	Conductivity = 0.500 mS/cm			5%			
2704103	April 2008	Conductivity = 0.084 mS/cm	0.084	0.0	5%	Y	I	GT
	Per Table →	D.O. = 8.46 mg/L @ 23.7°C	8.54	0.07	0.2 mg/l	Y	I	GT

Water Quality Instrument Make: YSI Instrument Model Number: 556 Instrument Serial Number: 07F100604

Turbidity Instrument Make: LaMotte Instrument Model Number: 2020e Instrument Serial Number: ME 12953

Lot No.	Calibration Standard		Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
	Expiration Date	Standard Value						
2607159	June 2008	pH = 4.0	4.11	0.11	0.2	Y	C	GT
2609133	Aug 2008	pH = 7.0	7.07	0.07	0.2	Y	C	GT
2609459	March 2008	pH = 10.0			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
P566024	April 2008	Turbidity = 10 NTU	10.00	0.0	10%	Y	C	GT
		Turbidity = 50 NTU			6.5%			
117500E	June 2008	Conductivity = 0.500 mS/cm			5%			
2704103	April 2008	Conductivity = 0.084 mS/cm	0.083	1.2	5%	Y	C	GT
	Per Table →	D.O. = 8.54 mg/L @ 23.2°C	8.61	0.06	0.2 mg/l	Y	I	GT

Note (1): Percent Deviation = (Standard Value - Instrument Response) ÷ Standard Value x 100

Note (2): Allowable Deviation: pH ± 0.2 of Standard Value; Conductivity ± 5 % of Standard Value; Salinity ± 3 % of Standard Value; DO ± 0.2 mg/L;

Turbidity 0.1-10 NTU ± 10% of Standard Value, 11-40 NTU ± 8% of Standard Value, 41-100 NTU ± 6.5% of Standard Value, >100 NTU ± 5% of Standard Value

Note (4): Initial, Continual, Final

# Field Instrument Calibration Record

Project Name: Oak Hammock Disposal Facility Project No.: FQ1144 Task: 02 Date: 26 November 2007

Rental Company: EPS & US Environmental

Water Quality Instrument Make: YSI Instrument Model Number: 556 Instrument Serial Number: 06A2173AL

Turbidity Instrument Make: LaMotte Instrument Model Number: 2020e Instrument Serial Number: ME 10404

Time: 0615

Calibration Standard		Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
Lot No.	Expiration Date						
2607159	June 2008	<u>4.10</u>	<u>0.10</u>	0.2	<u>Y</u>	<u>C</u>	<u>PT</u>
2609133	Aug 2008	<u>7.04</u>	<u>0.04</u>	0.2	<u>Y</u>	<u>C</u>	<u>PT</u>
2609459	March 2008			0.2			
P566024	April 2008	<u>10.02</u>	<u>0.2</u>	10%	<u>Y</u>	<u>C</u>	<u>PT</u>
				10%			
				6.5%			
117500E	June 2008			5%			
2704103	April 2008	<u>0.087</u>	<u>3.4</u>	5%	<u>Y</u>	<u>C</u>	<u>PT</u>
	Per Table →	<u>0.36</u>	<u>0.05</u>	0.2 mg/l	<u>Y</u>	<u>I</u>	<u>PT</u>

Water Quality Instrument Make: YSI Instrument Model Number: 556 Instrument Serial Number: 07F100604

Turbidity Instrument Make: LaMotte Instrument Model Number: 2020e Instrument Serial Number: ME 12953

Calibration Standard		Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
Lot No.	Expiration Date						
2607159	June 2008			0.2			
2609133	Aug 2008			0.2			
2609459	March 2008			0.2			
P566024	April 2008			10%			
				10%			
				6.5%			
117500E	June 2008			5%			
2704103	April 2008			5%			
	Per Table →			0.2 mg/l			

Note (1): Percent Deviation = (Standard Value - Instrument Response) ÷ Standard Value x 100

Note (2): Allowable Deviation: pH ± 0.2 of Standard Value; Conductivity ± 5 % of Standard Value; Salinity ± 3 % of Standard Value; DO ± 0.2 mg/L;

Turbidity 0.1-10 NTU ± 10% of Standard Value, 11-40 NTU ± 8% of Standard Value, 41-100 NTU ± 6.5% of Standard Value, >100 NTU ± 5% of Standard Value

Note (4): Initial, Continual, Final





REQUEST FORM

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## # SR #

50705456

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[www.caslab.com](http://www.caslab.com)

Project Name		Project Number		ANALYSIS REQUESTED (Include Method Number and Concentration)		PRESERVATIVE		NUMBER OF CONTAINERS		REMARKS/ALTERNATE DESCRIPTION		
Oak Hammock		FQ1144				10230				HCL 1. HNO <sub>3</sub> 2. H <sub>2</sub> SO <sub>4</sub> 3. NaOH 4. Zn Acetate 5. MeOH 6. NaHSO <sub>4</sub> 7. Other		
Project Manager		Email Address		Company/Address								
Kirk Willis		kwillis@geosyntec.com		Geosyntec								
141055 Rivedge Dr. Suite 300				Tampa, FL 33637								
Phone #		FAX #										
813-558-0990		813-558-9726										
Sampler's Signature		Sampler's Printed Name										
Joe Terry		Joe Terry										
CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX								
MW-13A		11-13-07	0905	GW	X	X	X	X			WACs ID #	
MW-13B			0935								19936	
MW-12A			1150								19937	
MW-12B			1215								19933	
MW-12C			1125								19934	
MW-11A			1415								19935	
MW-11B			1455								19930	
MW-11C			1350								19931	
Trip Blank											19932	
SPECIAL INSTRUCTIONS/COMMENTS					TURNAROUND REQUIREMENTS			REPORT REQUIREMENTS			INVOICE INFORMATION	
					<input type="checkbox"/> RUSH (SURCHARGES APPLY) <input checked="" type="checkbox"/> STANDARD REQUESTED FAX DATE REQUESTED REPORT DATE			<input type="checkbox"/> I. Results Only <input checked="" type="checkbox"/> II. Results + QC Summaries (LCS, DUP, MSMSD as required) <input type="checkbox"/> III. Results + QC and Calibration Summaries <input type="checkbox"/> IV. Data Validation Report with Raw Data <input type="checkbox"/> V. Specialized Forms / Custom Report Edata Yes No			PO# BILL TO:	
See QAPP <input type="checkbox"/>					CUSTODY SEALS: Y N					RECEIVED BY		
SAMPLE RECEIPT: CONDITION/COOLER TEMP:					RELINQUISHED BY					RECEIVED BY		
67					Signature					Signature		
Joe Terry					Printed Name					Printed Name		
Joe Terry					Firm					Firm		
Date/Time					Date/Time					Date/Time		
11-13-07/1545					11-13-07/1545					11-13-07/1545		

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JSCOC-08/28/06



## # RS

50705504

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# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

SR #

50705504

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PAGE 1 OF 2

Project Name		Project Number	ANALYSIS REQUESTED (Include Method Number and Container Description)									
Project Manager		Project Address	PRESERVATIVE	1	0	2	3	0	2			
Company/Address		Company/Address										
Oak Hammock		EQ 1144										
Kirk Wills		Kwills@geosyntec.com										
Geosyntec												
14055 Riveredge Dr. Suite 300												
Tampa, FL 33637												
Phone # 813-558-0990		FAX# 813-558-9726										
Sampler's Signature Joe Terry		Sampler's Printed Name Joe Terry										
CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	ANALYSIS REQUESTED (Include Method Number and Container Description)		PRESERVATIVE		REMARKS/ALTERNATE DESCRIPTION		
MW-10A		11-14-07	1040	GW	9	Dissolved Metals		X		WAGS ID # 19927		
MW-10B			0935		9	THS, Cu, Ni, Pb		X		19928		
MW-10C			1020		9	Metals		X		19929		
MW-9A			1315		9	Boil 100		X		19924		
MW-9B			1340		9			X		19925		
MW-9C			1405		9			X		19926		
MW-8A			1620		9			X		19921		
MW-8B			1600		10			X		19922		
MW-8C			1535		9			X		19923		
MW-16B			1020		10			X		22343		
SPECIAL INSTRUCTIONS/COMMENTS												
See QAPP <input type="checkbox"/>												
REPORT REQUIREMENTS												
I. Results Only <input type="checkbox"/> II. Results + QC Summaries (LCS, DUP, MS/MSD as required) <input checked="" type="checkbox"/> III. Results + QC and Calibration Summaries <input type="checkbox"/> IV. Data Validation Report with Raw Data <input type="checkbox"/> V. Specialized Forms / Custom Report <input type="checkbox"/>												
EDATA <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>												
TURNAROUND REQUIREMENTS												
RUSH (SURCHARGES APPLY) <input type="checkbox"/> STANDARD <input checked="" type="checkbox"/>												
REQUESTED FAX DATE												
REQUESTED REPORT DATE												
INVOICE INFORMATION												
PO#												
BILL TO:												
RECEIVED BY												
Signature												
Printed Name												
Firm												
Date/Time												
RELINQUISHED BY												
Signature												
Printed Name												
Firm												
Date/Time												
CUSTODY SEALS: Y N												
RECEIVED BY												
Signature												
Printed Name												
Firm												
Date/Time												
RELINQUISHED BY												
Signature												
Printed Name												
Firm												
Date/Time												
SAMPLE RECEIPT: CONDITION/COOLER TEMP:												
RELINQUISHED BY												
Signature												
Printed Name												
Firm												
Date/Time												
RELINQUISHED BY												
Signature												
Printed Name												
Firm												
Date/Time												





# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

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PAGE 1 OF 1

SR #

JO-705557

CAS Contact

Project Name		Project Number	ANALYSIS REQUESTED (Include Method Number and Preservative)									
Project Manager		Project Address	PRESERVATIVE									
Company Address		Company Address	NUMBER OF CONTAINERS									
Oak Hammock		Project Number	FQ11414									
Kirk Willis		Email Address	kwillis@geosyntec.com									
Geosyntec		Company Address	14055 Riveredge Dr. Suite 300									
Tampa, FL 33637		Phone #	813-558-0990									
813-558-0990		FAX #	813-558-9726									
Sample's Signature		Sample's Printed Name	Joe Terry									
Joe Terry		LAB ID	SAMPLING DATE									
CLIENT SAMPLE ID		MATRIX	TIME									
MW-4A		GW	11-15-07 1505									
MW-4B			1435									
MW-4C			1545									
MW-5A			1340									
MW-5B			1225									
MW-5C			1155									
MW-7A			1005									
MW-7B			0940									
MW-7C			0915									
Trip Blanks			3									
SPECIAL INSTRUCTIONS/COMMENTS			TURNAROUND REQUIREMENTS			REPORT REQUIREMENTS			INVOICE INFORMATION			
See QAPP <input type="checkbox"/>			RUSH (SURCHARGES APPLY)			I. Results Only			PO#			
			<input checked="" type="checkbox"/> STANDARD			<input checked="" type="checkbox"/> II. Results + QC Summaries (LCS, DUP, MS/MSD as required)			BILL TO:			
			REQUESTED FAX DATE			III. Results + QC and Calibration Summaries						
			REQUESTED REPORT DATE			IV. Data Validation Report with Raw Data						
SAMPLE RECEIPT: CONDITION/COOLER TEMP:			CUSTODY SEALS: Y N			RELINQUISHED BY			RECEIVED BY			
RELINQUISHED BY			RECEIVED BY			RELINQUISHED BY			RECEIVED BY			
Signature			Signature			Signature			Signature			
Printed Name			Printed Name			Printed Name			Printed Name			
Firm			Firm			Firm			Firm			
Date/Time			Date/Time			Date/Time			Date/Time			
11-16-07 1145			11-16-07 1415			11-16-07 1415			11-16-07 1415			



#STR#

10705535

CAS Contact

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0. NONE  
1. HCL  
2. HNO<sub>3</sub>  
3. H<sub>2</sub>SO<sub>4</sub>  
4. NaOH  
5. Zn. Acetate  
6. MeOH  
7. NaHSO<sub>4</sub>  
8. Other

4675203

REMARKS/  
ALTERNATE DESCRIPTION

Project Name		Project Number		ANALYSIS REQUESTED (Include Method Number and C)										PRESERVATIVE		REMARKS									
Project Manager		Email Address		Company/Address										FAX#		ALTERNATE DESCRIPTION									
Oak Hammock		FQ1144		Kwillsegeosyntec.com										813-558-9726		HCL HNO3 H2SO4 NaOH Zn. Acetate MeOH NaHSO4 Other									
Kirk Wills		Kwillsegeosyntec.com		Suite 300										813-558-9726		Feul Column									
Geosyntec		33637		Tampa, FL										813-558-0990		Chlorophyll A									
14055 Rnvedge Dr.		Suite 300		Tampa, FL										813-558-0990		TSS, TSS, NO3, NO2, P, CO2									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		NH3, TKN, T-N, T-P, CO2									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		Metals									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		TBC									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO11									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO20									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO11									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO20									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO11									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO20									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO11									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO20									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO11									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO20									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO11									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO20									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO11									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO20									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO11									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO20									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO11									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO20									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO11									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO20									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO11									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO20									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO11									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO20									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO11									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO20									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO11									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO20									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO11									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO20									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO11									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO20									
813-558-0990		813-558-9726		Tampa, FL										813-558-0990		BO11									
813-558-0990		813-558-9726																							

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# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

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PAGE 2 OF 2

SR #

70705576

CAS Contact

Project Name <b>Oak Hammock</b>		Project Number		ANALYSIS REQUESTED (Include Method Number and Container Preservative)																					
Project Manager <b>Kirk Wills</b>		Email Address <b>kwillsc@geosyntec.com</b>		PRESERVATIVE	1	0	2	3	0	2															
Company/Address <b>Geosyntec</b>				NUMBER OF CONTAINERS				B260 Metals NH <sub>3</sub> H <sub>2</sub> SO <sub>4</sub> Dissolved Metals				Preservative Key 0. NONE 1. HCL 2. HNO <sub>3</sub> 3. H <sub>2</sub> SO <sub>4</sub> 4. NaOH 5. Zn. Acetate 6. MeOH 7. NaHSO <sub>4</sub> 8. Other													
Phone # <b>813-558-0440</b>		FAX# <b>813-558-9726</b>		CLIENT SAMPLE ID		LAB ID		SAMPLING DATE		TIME		MATRIX		REMARKS/ ALTERNATE DESCRIPTION											
Sampler's Signature <i>[Signature]</i>		Sampler's Printed Name <b>Joe Terry, Rick Hasty</b>		MW-13A				11-19-07		1440		GW		WAGS ID# 22348											
MW-13B				11-19-07		1220		GW				9		22349											
MW-13C				11-19-07		1525		GW				10		22350											
Trip Blank								W				6													
DUP-2				11-19-07		0445		GW				9													
SPECIAL INSTRUCTIONS/COMMENTS														TURNAROUND REQUIREMENTS				REPORT REQUIREMENTS				INVOICE INFORMATION			
														RUSH (SURCHARGES APPLY) <input checked="" type="checkbox"/> STANDARD REQUESTED FAX DATE REQUESTED REPORT DATE				<input checked="" type="checkbox"/> I. Results Only <input checked="" type="checkbox"/> II. Results + QC Summaries (LCS, DUP, MS/MSD as required) <input type="checkbox"/> III. Results + QC and Calibration Summaries <input type="checkbox"/> IV. Data Validation Report with Raw Data <input type="checkbox"/> V. Specialized Forms / Custom Report Edata Yes No				PO# BILL TO:			
See QAPP <input type="checkbox"/>														CUSTODY SEALS: Y N				RECEIVED BY							
SAMPLE RECEIPT: CONDITION/COOLER TEMP: 19														RELINQUISHED BY				RELINQUISHED BY				RECEIVED BY			
Signature <i>[Signature]</i>														Signature <i>[Signature]</i>				Signature				Signature			
Printed Name <b>Joe Terry</b>														Printed Name <b>Joe Terry</b>				Printed Name				Printed Name			
Firm <b>Geosyntec</b>														Firm				Firm				Firm			
Date/Time <b>11-19-07</b>														Date/Time				Date/Time				Date/Time			

## CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

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# RS

50705516

CAS Contact

Project Name		Project Number		ANALYSIS REQUESTED (Include Method Number)										PRESERVATIVE		NUMBER OF CONTAINERS		REMARKS/ALTERNATE DESCRIPTION							
Project Manager		Email Address																							
Company/Address		Phone #																							
FAX#		Sampler's Printed Name																							
CLIENT SAMPLE ID		LAB ID		SAMPLING DATE		SAMPLING TIME		MATRIX																	
Oak Hammock		EQ1144																							
Kirk Wills		Kwills@geosyntec.com																							
Geosyntec		14055 Riveridge N. Suite 300																							
Tampa, FL 33637		Phone # 813-558-0940																							
FAX# 813-558-9726		Sampler's Printed Name Joe Terry, Rick Hestle																							
Client Signature		LAB ID		SAMPLING DATE		SAMPLING TIME		MATRIX																	
MW-3A		GW		11-19-07		0945		GW																	
MW-3B						1000																			
MW-3C						0925																			
MW-2A						1230																			
MW-2B						1205																			
MW-2C						1250																			
MW-23A						1340																			
MW-23B						1400																			
MW-23C						1520																			
MW-17C						0945																			
SPECIAL INSTRUCTIONS/COMMENTS														TURNAROUND REQUIREMENTS				REPORT REQUIREMENTS				INVOICE INFORMATION			
														RUSH (SURCHARGES APPLY)				I. Results Only				PO#			
														STANDARD				II. Results + QC Summaries (LCS, DUP, MS/MSD as required)				BILL TO:			
														REQUESTED FAX DATE				III. Results + QC and Calibration Summaries							
														REQUESTED REPORT DATE				IV. Data Validation Report with Raw Data							
																		V. Specialized Forms / Custom Report							
																		Edata Yes No							
See QAPP														CUSTODY SEALS: Y N				RELINQUISHED BY				RECEIVED BY			
SAMPLE RECEIPT: CONDITION/COOLER TEMP:														RELINQUISHED BY				RECEIVED BY							
RELINQUISHED BY														RELINQUISHED BY				RELINQUISHED BY				RELINQUISHED BY			
Signature Joe Terry														Signature Joe Terry				Signature Joe Terry				Signature Joe Terry			
Printed Name Joe Terry														Printed Name Joe Terry				Printed Name Joe Terry				Printed Name Joe Terry			
Firm Geosyntec														Firm Geosyntec				Firm Geosyntec				Firm Geosyntec			
Date/Time 11-19-07														Date/Time 11-19-07				Date/Time 11-19-07				Date/Time 11-19-07			





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CAS Contact

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SR #

50705603

CAS Contact

ANALYSIS REQUESTED (Include Method Number and)

PRESERVATIVE

Project Name  
Oak Hammock  
Project Manager  
Email Address  
Company/Address  
Geosyntec  
Phone #  
FAX #  
Sample's Signature  
Joe Terry  
Sample's Printed Name  
Joe Terry  
Rack H. Ste

- Preservative Key
0. NONE
  1. HCL
  2. HNO<sub>3</sub>
  3. H<sub>2</sub>SO<sub>4</sub>
  4. NaOH
  5. Zn Acetate
  6. MeOH
  7. NaHSO<sub>4</sub>
  8. Other

REMARKS/  
ALTERNATE DESCRIPTION

WMS ID #

22359

22360

SPECIAL INSTRUCTIONS/COMMENTS

TURNAROUND REQUIREMENTS

REPORT REQUIREMENTS

INVOICE INFORMATION

See QAPP ☐

SAMPLE RECEIPT: CONDITION/COOLER TEMP:

CUSTODY SEALS: Y N

RECEIVED BY

RELINQUISHED BY

RELINQUISHED BY

RECEIVED BY

Signature  
Joe Terry  
Printed Name  
Joe Terry  
Firm  
Geosyntec  
Date/Time  
11-20-07/1700

Signature  
Joe Terry  
Printed Name  
Joe Terry  
Firm  
Geosyntec  
Date/Time  
11-20-07/1700

Signature  
Joe Terry  
Printed Name  
Joe Terry  
Firm  
Geosyntec  
Date/Time  
11-20-07/1700

Signature  
Joe Terry  
Printed Name  
Joe Terry  
Firm  
Geosyntec  
Date/Time  
11-20-07/1700

Signature  
Joe Terry  
Printed Name  
Joe Terry  
Firm  
Geosyntec  
Date/Time  
11-20-07/1700



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# 35

020566a

CAS Contact

Project Name		Project Number		ANALYSIS REQUESTED (Include Method Number and Preservative)		REMARKS/ALTERNATE DESCRIPTION	
Project Manager		Email Address		PRESERVATIVE		REMARKS/ALTERNATE DESCRIPTION	
Company/Address		Phone #		FAX#		REMARKS/ALTERNATE DESCRIPTION	
Sampler's Signature		Sampler's Printed Name		Firm		REMARKS/ALTERNATE DESCRIPTION	
Out Hammack	FX 11414	Project Number	FX 11414	ANALYSIS REQUESTED (Include Method Number and Preservative)		REMARKS/ALTERNATE DESCRIPTION	
Kirk W. Hls	kawills@geosyntec.com	Project Manager	kawills@geosyntec.com	ANALYSIS REQUESTED (Include Method Number and Preservative)		REMARKS/ALTERNATE DESCRIPTION	
Geosyntec	14055 Riverchase Dr Suite 300	Company/Address	14055 Riverchase Dr Suite 300	ANALYSIS REQUESTED (Include Method Number and Preservative)		REMARKS/ALTERNATE DESCRIPTION	
Tampa, FL 33637		City/State/Zip	Tampa, FL 33637	ANALYSIS REQUESTED (Include Method Number and Preservative)		REMARKS/ALTERNATE DESCRIPTION	
BB-558-0990	BB-558-9726	Phone #	BB-558-9726	ANALYSIS REQUESTED (Include Method Number and Preservative)		REMARKS/ALTERNATE DESCRIPTION	
Joe Terry	Joe Terry	Sampler's Signature	Joe Terry	ANALYSIS REQUESTED (Include Method Number and Preservative)		REMARKS/ALTERNATE DESCRIPTION	
CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	ANALYSIS REQUESTED (Include Method Number and Preservative)	REMARKS/ALTERNATE DESCRIPTION
MW-22B		11-26-07	0930	GW	10		WAG ID# 22361
MW-22C		0905		GW	9		22362
L-1		1100		Leachate	17		19947
L-2		1315		Leachate	17		19948
L-3		1210		Leachate	17		19949
L-4		1415		Leachate	17		19950
Tr.p Blank				W	3		
<p>SPECIAL INSTRUCTIONS/COMMENTS</p> <p>Rinsed VOA vials of HCL preservative for samples L-1, L-2 &amp; L-4 due to effervescence of sample. (Rinsed w/sample water)</p>							
<p>See QAPP <input type="checkbox"/></p> <p>SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____</p> <p>RECEIVED BY: _____</p> <p>RELINQUISHED BY: _____</p> <p>Signature: Joe Terry Printed Name: Joe Terry Firm: Geosyntec Date/Time: 11-26-07 11:00</p> <p>Signature: [Signature] Printed Name: [Name] Firm: [Firm] Date/Time: [Date/Time]</p>							

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*Laboratory Scope of Accreditation*

Attachment to Certificate #: E82502-07, expiration date June 30, 2008. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E82502

EPA Lab Code:

FL00937

(904) 739-2277

E82502

Columbia Analytical Services, Inc. - FL

8540 Baycenter Road  
Jacksonville, FL 32256

Matrix: Drinking Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
1,1,1,2-Tetrachloroethane	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
1,1,1-Trichloroethane	EPA 524.2	Other Regulated Contaminants	NELAP	2/19/2002
1,1,2,2-Tetrachloroethane	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
1,1,2-Trichloroethane	EPA 524.2	Other Regulated Contaminants	NELAP	2/19/2002
1,1-Dichloroethane	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
1,1-Dichloroethylene	EPA 524.2	Other Regulated Contaminants	NELAP	2/19/2002
1,1-Dichloropropene	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
1,2,3-Trichlorobenzene	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
1,2,3-Trichloropropane	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
1,2,4-Trichlorobenzene	EPA 524.2	Other Regulated Contaminants	NELAP	2/19/2002
1,2,4-Trimethylbenzene	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
1,2-Dichlorobenzene	EPA 524.2	Other Regulated Contaminants	NELAP	2/19/2002
1,2-Dichloroethane	EPA 524.2	Other Regulated Contaminants	NELAP	2/19/2002
1,2-Dichloropropane	EPA 524.2	Other Regulated Contaminants	NELAP	2/19/2002
1,3,5-Trimethylbenzene	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
1,3-Dichlorobenzene	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
1,3-Dichloropropane	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
1,4-Dichlorobenzene	EPA 524.2	Other Regulated Contaminants	NELAP	2/19/2002
2,2-Dichloropropane	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
2-Chlorotoluene	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
4-Chlorotoluene	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
4-Isopropyltoluene	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
Alkalinity as CaCO <sub>3</sub>	SM 2320 B	Primary Inorganic Contaminants	NELAP	7/25/2005
Aluminum	EPA 200.7	Secondary Inorganic Contaminants	NELAP	2/19/2002
Aluminum	EPA 200.8	Secondary Inorganic Contaminants	NELAP	2/19/2002
Antimony	EPA 200.8	Primary Inorganic Contaminants	NELAP	2/19/2002
Arsenic	EPA 200.8	Primary Inorganic Contaminants	NELAP	2/19/2002
Barium	EPA 200.7	Primary Inorganic Contaminants	NELAP	2/19/2002
Barium	EPA 200.8	Primary Inorganic Contaminants	NELAP	2/19/2002
Benzene	EPA 524.2	Other Regulated Contaminants	NELAP	2/19/2002
Beryllium	EPA 200.8	Primary Inorganic Contaminants	NELAP	2/19/2002
Bromobenzene	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
Bromochloromethane	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
Bromodichloromethane	EPA 524.2	Other Regulated Contaminants, Group II Unregulated Contaminants	NELAP	2/19/2002

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 7/1/2007

Expiration Date: 6/30/2008



*Laboratory Scope of Accreditation*

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Attachment to Certificate #: E82502-07, expiration date June 30, 2008. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E82502

EPA Lab Code: FL00937

(904) 739-2277

E82502

Columbia Analytical Services, Inc. - FL

8540 Baycenter Road

Jacksonville, FL 32256

Matrix: Drinking Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Bromoform	EPA 524.2	Other Regulated Contaminants, Group II Unregulated Contaminants	NELAP	2/19/2002
Cadmium	EPA 200.7	Primary Inorganic Contaminants	NELAP	2/19/2002
Cadmium	EPA 200.8	Primary Inorganic Contaminants	NELAP	2/19/2002
Calcium	EPA 200.7	Primary Inorganic Contaminants	NELAP	2/19/2002
Carbon tetrachloride	EPA 524.2	Other Regulated Contaminants	NELAP	2/19/2002
Chloride	EPA 300.0	Secondary Inorganic Contaminants	NELAP	2/19/2002
Chlorobenzene	EPA 524.2	Other Regulated Contaminants	NELAP	2/19/2002
Chloroethane	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
Chloroform	EPA 524.2	Other Regulated Contaminants, Group II Unregulated Contaminants	NELAP	2/19/2002
Chromium	EPA 200.7	Primary Inorganic Contaminants	NELAP	2/19/2002
Chromium	EPA 200.8	Primary Inorganic Contaminants	NELAP	2/19/2002
cis-1,2-Dichloroethylene	EPA 524.2	Other Regulated Contaminants	NELAP	2/19/2002
cis-1,3-Dichloropropene	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
Color	EPA 110.2	Secondary Inorganic Contaminants	NELAP	2/19/2002
Conductivity	SM 2510 B	Primary Inorganic Contaminants	NELAP	8/30/2002
Copper	EPA 200.7	Secondary Inorganic Contaminants, Primary Inorganic Contaminants	NELAP	2/19/2002
Copper	EPA 200.8	Primary Inorganic Contaminants, Secondary Inorganic Contaminants	NELAP	2/19/2002
Cyanide	SM 4500CN-E	Primary Inorganic Contaminants	NELAP	2/19/2002
Dibromochloromethane	EPA 524.2	Other Regulated Contaminants, Group II Unregulated Contaminants	NELAP	2/19/2002
Dibromomethane	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
Dichlorodifluoromethane	EPA 524.2	Group II Unregulated Contaminants	NELAP	1/21/2003
Dichloromethane (DCM, Methylene chloride)	EPA 524.2	Other Regulated Contaminants	NELAP	2/19/2002
Ethylbenzene	EPA 524.2	Other Regulated Contaminants	NELAP	2/19/2002
Fluoride	EPA 300.0	Primary Inorganic Contaminants, Secondary Inorganic Contaminants	NELAP	2/19/2002
Fluoride	SM 4500 F-C	Primary Inorganic Contaminants, Secondary Inorganic Contaminants	NELAP	2/19/2002
Heterotrophic plate count	SM 9215 B	Microbiology	NELAP	9/22/2004
Hexachlorobutadiene	EPA 524.2	Group II Unregulated Contaminants	NELAP	7/25/2005
Iron	EPA 200.7	Secondary Inorganic Contaminants	NELAP	2/19/2002

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 7/1/2007

Expiration Date: 6/30/2008

*Laboratory Scope of Accreditation*

Attachment to Certificate #: E82502-07, expiration date June 30, 2008. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E82502

EPA Lab Code: FL00937

(904) 739-2277

E82502

Columbia Analytical Services, Inc. - FL  
8540 Baycenter Road  
Jacksonville, FL 32256

Matrix: Drinking Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Isopropylbenzene	EPA 524.2	Group II Unregulated Contaminants	NELAP	7/25/2005
Lead	EPA 200.8	Primary Inorganic Contaminants	NELAP	2/19/2002
Magnesium	EPA 200.7	Primary Inorganic Contaminants	NELAP	2/19/2002
Manganese	EPA 200.7	Secondary Inorganic Contaminants	NELAP	2/19/2002
Manganese	EPA 200.8	Secondary Inorganic Contaminants	NELAP	2/19/2002
Mercury	EPA 245.1	Primary Inorganic Contaminants	NELAP	2/19/2002
Methyl bromide (Bromomethane)	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
Methyl chloride (Chloromethane)	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
Methyl tert-butyl ether (MTBE)	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
Naphthalene	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
n-Butylbenzene	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
Nickel	EPA 200.7	Primary Inorganic Contaminants	NELAP	2/19/2002
Nickel	EPA 200.8	Primary Inorganic Contaminants	NELAP	2/19/2002
Nitrate	EPA 300.0	Primary Inorganic Contaminants	NELAP	2/19/2002
Nitrate as N	EPA 353.2	Primary Inorganic Contaminants	NELAP	7/25/2005
Nitrite	EPA 300.0	Primary Inorganic Contaminants	NELAP	2/19/2002
Nitrite as N	EPA 353.2	Primary Inorganic Contaminants	NELAP	7/25/2005
n-Propylbenzene	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
Odor	EPA 140.1	Secondary Inorganic Contaminants	NELAP	2/19/2002
pH	EPA 150.1	Secondary Inorganic Contaminants, Primary Inorganic Contaminants	NELAP	2/19/2002
sec-Butylbenzene	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
Selenium	EPA 200.8	Primary Inorganic Contaminants	NELAP	2/19/2002
Silver	EPA 200.7	Secondary Inorganic Contaminants	NELAP	2/19/2002
Silver	EPA 200.8	Secondary Inorganic Contaminants	NELAP	2/19/2002
Sodium	EPA 200.7	Primary Inorganic Contaminants	NELAP	2/19/2002
Styrene	EPA 524.2	Other Regulated Contaminants	NELAP	2/19/2002
Sulfate	EPA 300.0	Secondary Inorganic Contaminants, Primary Inorganic Contaminants	NELAP	2/19/2002
Surfactants - MBAS	EPA 425.1	Secondary Inorganic Contaminants	NELAP	2/19/2002
tert-Butylbenzene	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
Tetrachloroethylene (Perchloroethylene)	EPA 524.2	Other Regulated Contaminants	NELAP	2/19/2002
Thallium	EPA 200.8	Primary Inorganic Contaminants	NELAP	2/19/2002
Toluene	EPA 524.2	Other Regulated Contaminants	NELAP	2/19/2002
Total coliforms	SM 9222 B	Microbiology	NELAP	2/19/2002
Total coliforms & E. coli	COLITAG	Microbiology	NELAP	7/25/2005

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 7/1/2007

Expiration Date: 6/30/2008

*Laboratory Scope of Accreditation*

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Attachment to Certificate #: E82502-07, expiration date June 30, 2008. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E82502

EPA Lab Code:

FL00937

(904) 739-2277

E82502

Columbia Analytical Services, Inc. - FL

8540 Baycenter Road

Jacksonville, FL 32256

Matrix: Drinking Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Total cyanide	EPA 335.4	Primary Inorganic Contaminants	NELAP	7/25/2005
Total dissolved solids	EPA 160.1	Secondary Inorganic Contaminants	NELAP	2/19/2002
Total nitrate-nitrite	EPA 300.0	Primary Inorganic Contaminants	NELAP	2/19/2002
Total nitrate-nitrite	EPA 353.2	Primary Inorganic Contaminants	NELAP	7/25/2005
Total trihalomethanes	EPA 524.2	Other Regulated Contaminants	NELAP	2/19/2002
trans-1,2-Dichloroethylene	EPA 524.2	Other Regulated Contaminants	NELAP	2/19/2002
trans-1,3-Dichloropropylene	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
Trichloroethene (Trichloroethylene)	EPA 524.2	Other Regulated Contaminants	NELAP	2/19/2002
Trichlorofluoromethane	EPA 524.2	Group II Unregulated Contaminants	NELAP	2/19/2002
Turbidity	EPA 180.1	Secondary Inorganic Contaminants	NELAP	2/19/2002
Vinyl chloride	EPA 524.2	Other Regulated Contaminants	NELAP	2/19/2002
Xylene (total)	EPA 524.2	Other Regulated Contaminants	NELAP	2/19/2002
Zinc	EPA 200.7	Secondary Inorganic Contaminants	NELAP	2/19/2002
Zinc	EPA 200.8	Secondary Inorganic Contaminants	NELAP	2/19/2002

*Laboratory Scope of Accreditation*

Attachment to Certificate #: E82502-07, expiration date June 30, 2008. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E82502

EPA Lab Code: FL00937

(904) 739-2277

E82502

Columbia Analytical Services, Inc. - FL  
8540 Baycenter Road  
Jacksonville, FL 32256

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
1,1,1,2-Tetrachloroethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,1,1-Trichloroethane	EPA 624	Volatile Organics	NELAP	2/19/2002
1,1,1-Trichloroethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,1,2,2-Tetrachloroethane	EPA 624	Volatile Organics	NELAP	2/19/2002
1,1,2,2-Tetrachloroethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,1,2-Trichloroethane	EPA 624	Volatile Organics	NELAP	2/19/2002
1,1,2-Trichloroethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,1-Dichloroethane	EPA 624	Volatile Organics	NELAP	2/19/2002
1,1-Dichloroethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,1-Dichloroethylene	EPA 624	Volatile Organics	NELAP	2/19/2002
1,1-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,1-Dichloropropene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2,3-Trichlorobenzene	EPA 8260	Volatile Organics	NELAP	7/25/2005
1,2,3-Trichloropropane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2,4,5-Tetrachlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,2,4-Trichlorobenzene	EPA 625	Extractable Organics	NELAP	2/19/2002
1,2,4-Trichlorobenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2,4-Trichlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,2,4-Trimethylbenzene	EPA 8260	Volatile Organics	NELAP	7/25/2005
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8011	Volatile Organics	NELAP	7/1/2003
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8011	Volatile Organics	NELAP	7/1/2003
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2-Dichlorobenzene	EPA 624	Volatile Organics	NELAP	2/19/2002
1,2-Dichlorobenzene	EPA 625	Extractable Organics	NELAP	2/19/2002
1,2-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,2-Dichloroethane	EPA 624	Volatile Organics	NELAP	2/19/2002
1,2-Dichloroethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2-Dichloropropane	EPA 624	Volatile Organics	NELAP	2/19/2002
1,2-Dichloropropane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2-Diphenylhydrazine	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,3,5-Trimethylbenzene	EPA 8260	Volatile Organics	NELAP	7/25/2005
1,3,5-Trinitrobenzene (1,3,5-TNB)	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,3-Dichlorobenzene	EPA 624	Volatile Organics	NELAP	2/19/2002
1,3-Dichlorobenzene	EPA 625	Extractable Organics	NELAP	2/19/2002

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Issue Date: 7/1/2007

Expiration Date: 6/30/2008



*Laboratory Scope of Accreditation*

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Attachment to Certificate #: E82502-07, expiration date June 30, 2008. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E82502

EPA Lab Code:

FL00937

(904) 739-2277

E82502

Columbia Analytical Services, Inc. - FL

8540 Baycenter Road

Jacksonville, FL 32256

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
1,3-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,3-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,3-Dichloropropane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,3-Dinitrobenzene (1,3-DNB)	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,4-Dichlorobenzene	EPA 624	Volatile Organics	NELAP	2/19/2002
1,4-Dichlorobenzene	EPA 625	Extractable Organics	NELAP	2/19/2002
1,4-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,4-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,4-Dioxane (1,4-Diethyleneoxide)	CASF SOC-8270CSIM Rev. 1 (5/23/05)/GC-MS	Extractable Organics	NELAP	8/26/2005
1,4-Naphthoquinone	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,4-Phenylenediamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
1-Chlorohexane	EPA 8260	Volatile Organics	NELAP	7/25/2005
1-Chloronaphthalene	EPA 8270	Extractable Organics	NELAP	7/1/2003
1-Methylnaphthalene	CASF SOC-SVOAMS Rev. 0 (3/29/04)/GC-MS	Extractable Organics	NELAP	8/26/2005
1-Naphthylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,2-Dichloropropane	EPA 8260	Volatile Organics	NELAP	7/1/2003
2,3,4,6-Tetrachlorophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,4,5-Trichlorophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,4,6-Trichlorophenol	EPA 625	Extractable Organics	NELAP	2/19/2002
2,4,6-Trichlorophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,4-Dichlorophenol	EPA 625	Extractable Organics	NELAP	2/19/2002
2,4-Dichlorophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,4-Dimethylphenol	EPA 625	Extractable Organics	NELAP	2/19/2002
2,4-Dimethylphenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,4-Dinitrophenol	EPA 625	Extractable Organics	NELAP	2/19/2002
2,4-Dinitrophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,4-Dinitrotoluene (2,4-DNT)	EPA 625	Extractable Organics	NELAP	2/19/2002
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,6-Dichlorophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,6-Dinitrotoluene (2,6-DNT)	EPA 625	Extractable Organics	NELAP	2/19/2002
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Acetylaminofluorene	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260	Volatile Organics	NELAP	7/1/2003
2-Butanone (Methyl ethyl ketone, MEK)	NCASI 99.01	Volatile Organics	NELAP	4/9/2003
2-Chloroethyl vinyl ether	EPA 624	Volatile Organics	NELAP	2/19/2002

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Issue Date: 7/1/2007

Expiration Date: 6/30/2008

*Laboratory Scope of Accreditation*

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Attachment to Certificate #: E82502-07, expiration date June 30, 2008. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E82502

EPA Lab Code: FL00937

(904) 739-2277

**E82502**

**Columbia Analytical Services, Inc. - FL**  
**8540 Baycenter Road**  
**Jacksonville, FL 32256**

**Matrix: Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
2-Chloroethyl vinyl ether	EPA 8260	Volatile Organics	NELAP	7/1/2003
2-Chloronaphthalene	EPA 625	Extractable Organics	NELAP	2/19/2002
2-Chloronaphthalene	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Chlorophenol	EPA 625	Extractable Organics	NELAP	2/19/2002
2-Chlorophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Chlorotoluene	EPA 8260	Volatile Organics	NELAP	7/1/2003
2-Hexanone	EPA 8260	Volatile Organics	NELAP	7/1/2003
2-Methyl-4,6-dinitrophenol	EPA 625	Extractable Organics	NELAP	2/19/2002
2-Methyl-4,6-dinitrophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Methylnaphthalene	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Methylphenol (o-Cresol)	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Nitroaniline	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Nitrophenol	EPA 625	Extractable Organics	NELAP	2/19/2002
2-Nitrophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Nitropropane	EPA 8260	Volatile Organics	NELAP	7/25/2005
2-Picoline (2-Methylpyridine)	EPA 8270	Extractable Organics	NELAP	7/1/2003
3,3'-Dichlorobenzidine	EPA 625	Extractable Organics	NELAP	2/19/2002
3,3'-Dichlorobenzidine	EPA 8270	Extractable Organics	NELAP	7/1/2003
3,3'-Dimethylbenzidine	EPA 8270	Extractable Organics	NELAP	7/1/2003
3-Methylcholanthrene	EPA 8270	Extractable Organics	NELAP	7/1/2003
3-Nitroaniline	EPA 8270	Extractable Organics	NELAP	7/1/2003
4,4'-DDD	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
4,4'-DDD	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
4,4'-DDE	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
4,4'-DDE	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
4,4'-DDT	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
4,4'-DDT	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
4-Aminobiphenyl	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Bromophenyl phenyl ether	EPA 625	Extractable Organics	NELAP	2/19/2002
4-Bromophenyl phenyl ether	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Chloro-3-methylphenol	EPA 625	Extractable Organics	NELAP	2/19/2002
4-Chloro-3-methylphenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Chloroaniline	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Chlorophenyl phenylether	EPA 625	Extractable Organics	NELAP	2/19/2002
4-Chlorophenyl phenylether	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Chlorotoluene	EPA 8260	Volatile Organics	NELAP	7/1/2003

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**Issue Date: 7/1/2007**

**Expiration Date: 6/30/2008**

*Laboratory Scope of Accreditation*

Attachment to Certificate #: E82502-07, expiration date June 30, 2008. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E82502

EPA Lab Code: FL00937

(904) 739-2277

E82502

Columbia Analytical Services, Inc. - FL  
8540 Baycenter Road  
Jacksonville, FL 32256

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
4-Dimethyl aminoazobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Methyl-2-pentanone (MIBK)	EPA 8260	Volatile Organics	NELAP	7/1/2003
4-Methylphenol (p-Cresol)	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Nitroaniline	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Nitrophenol	EPA 625	Extractable Organics	NELAP	2/19/2002
4-Nitrophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
5-Nitro-o-toluidine	EPA 8270	Extractable Organics	NELAP	7/1/2003
7,12-Dimethylbenz(a) anthracene	EPA 8270	Extractable Organics	NELAP	7/1/2003
a-a-Dimethylphenethylamine	EPA 8270	Extractable Organics	NELAP	7/25/2005
Acenaphthene	EPA 625	Extractable Organics	NELAP	2/19/2002
Acenaphthene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Acenaphthylene	EPA 625	Extractable Organics	NELAP	2/19/2002
Acenaphthylene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Acetaldehyde	NCASI 99.01	Volatile Organics	NELAP	4/9/2003
Acetone	EPA 8260	Volatile Organics	NELAP	7/1/2003
Acetonitrile	EPA 8260	Volatile Organics	NELAP	7/1/2003
Acetophenone	EPA 8270	Extractable Organics	NELAP	7/1/2003
Acidity, as CaCO <sub>3</sub>	EPA 305.1	General Chemistry	NELAP	2/19/2002
Acrolein (Propenal)	EPA 624	Volatile Organics	NELAP	7/25/2005
Acrolein (Propenal)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Acrylonitrile	EPA 624	Volatile Organics	NELAP	7/25/2005
Acrylonitrile	EPA 8260	Volatile Organics	NELAP	7/1/2003
Aldrin	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Aldrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Alkalinity as CaCO <sub>3</sub>	EPA 310.1	General Chemistry	NELAP	2/19/2002
Alkalinity as CaCO <sub>3</sub>	SM 2320 B	General Chemistry	NELAP	7/25/2005
Allyl chloride (3-Chloropropene)	EPA 8260	Volatile Organics	NELAP	7/1/2003
alpha-BHC (alpha-Hexachlorocyclohexane)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
alpha-BHC (alpha-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
alpha-Chlordane	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Aluminum	EPA 200.7	Metals	NELAP	2/19/2002
Aluminum	EPA 200.8	Metals	NELAP	2/19/2002
Aluminum	EPA 6010	Metals	NELAP	7/1/2003
Aluminum	EPA 6020	Metals	NELAP	7/1/2003
Amenable cyanide	EPA 9012	General Chemistry	NELAP	9/22/2004
Ammonia as N	EPA 350.1	General Chemistry	NELAP	8/30/2002

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 7/1/2007

Expiration Date: 6/30/2008

*Laboratory Scope of Accreditation*

Page 9 of 28

Attachment to Certificate #: E82502-07, expiration date June 30, 2008. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E82502

EPA Lab Code: FL00937

(904) 739-2277

E82502

Columbia Analytical Services, Inc. - FL  
8540 Baycenter Road  
Jacksonville, FL 32256

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Aniline	EPA 8270	Extractable Organics	NELAP	7/1/2003
Anthracene	EPA 625	Extractable Organics	NELAP	2/19/2002
Anthracene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Antimony	EPA 200.7	Metals	NELAP	2/19/2002
Antimony	EPA 200.8	Metals	NELAP	2/19/2002
Antimony	EPA 6010	Metals	NELAP	7/1/2003
Antimony	EPA 6020	Metals	NELAP	7/1/2003
Aramite	EPA 8270	Extractable Organics	NELAP	7/1/2003
Aroclor-1016 (PCB-1016)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Aroclor-1016 (PCB-1016)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Aroclor-1221 (PCB-1221)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Aroclor-1221 (PCB-1221)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Aroclor-1232 (PCB-1232)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Aroclor-1232 (PCB-1232)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Aroclor-1242 (PCB-1242)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Aroclor-1242 (PCB-1242)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Aroclor-1248 (PCB-1248)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Aroclor-1248 (PCB-1248)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Aroclor-1254 (PCB-1254)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Aroclor-1254 (PCB-1254)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Aroclor-1260 (PCB-1260)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Aroclor-1260 (PCB-1260)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Arsenic	EPA 200.7	Metals	NELAP	2/19/2002
Arsenic	EPA 200.8	Metals	NELAP	2/19/2002
Arsenic	EPA 6010	Metals	NELAP	2/19/2002
Arsenic	EPA 6020	Metals	NELAP	2/19/2002
Barium	EPA 200.7	Metals	NELAP	2/19/2002
Barium	EPA 200.8	Metals	NELAP	2/19/2002
Barium	EPA 6010	Metals	NELAP	7/1/2003
Barium	EPA 6020	Metals	NELAP	7/1/2003
Benzene	EPA 624	Volatile Organics	NELAP	2/19/2002
Benzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Benzidine	EPA 625	Extractable Organics	NELAP	2/19/2002
Benzidine	EPA 8270	Extractable Organics	NELAP	7/1/2003
Benzo(a)anthracene	EPA 625	Extractable Organics	NELAP	2/19/2002
Benzo(a)anthracene	EPA 8270	Extractable Organics	NELAP	7/1/2003

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Issue Date: 7/1/2007

Expiration Date: 6/30/2008



*Laboratory Scope of Accreditation*

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Attachment to Certificate #: E82502-07, expiration date June 30, 2008. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E82502

EPA Lab Code: FL00937

(904) 739-2277

E82502

Columbia Analytical Services, Inc. - FL  
8540 Baycenter Road  
Jacksonville, FL 32256

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Benzo(a)pyrene	EPA 625	Extractable Organics	NELAP	2/19/2002
Benzo(a)pyrene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Benzo(b)fluoranthene	EPA 625	Extractable Organics	NELAP	2/19/2002
Benzo(b)fluoranthene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Benzo(g,h,i)perylene	EPA 625	Extractable Organics	NELAP	2/19/2002
Benzo(g,h,i)perylene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Benzo(k)fluoranthene	EPA 625	Extractable Organics	NELAP	2/19/2002
Benzo(k)fluoranthene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Benzoic acid	EPA 8270	Extractable Organics	NELAP	7/1/2003
Benzyl alcohol	EPA 8270	Extractable Organics	NELAP	7/1/2003
Beryllium	EPA 200.7	Metals	NELAP	2/19/2002
Beryllium	EPA 200.8	Metals	NELAP	2/19/2002
Beryllium	EPA 6010	Metals	NELAP	7/1/2003
Beryllium	EPA 6020	Metals	NELAP	7/1/2003
beta-BHC (beta-Hexachlorocyclohexane)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
beta-BHC (beta-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
beta-Naphthylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
Biochemical oxygen demand	EPA 405.1	General Chemistry	NELAP	2/19/2002
bis(2-Chloroethoxy)methane	EPA 625	Extractable Organics	NELAP	2/19/2002
bis(2-Chloroethoxy)methane	EPA 8270	Extractable Organics	NELAP	7/1/2003
bis(2-Chloroethyl) ether	EPA 625	Extractable Organics	NELAP	2/19/2002
bis(2-Chloroethyl) ether	EPA 8270	Extractable Organics	NELAP	7/1/2003
bis(2-Chloroisopropyl) ether (2,2'-Oxybis(1-chloropropane))	EPA 625	Extractable Organics	NELAP	2/19/2002
bis(2-Chloroisopropyl) ether (2,2'-Oxybis(1-chloropropane))	EPA 8270	Extractable Organics	NELAP	7/1/2003
bis(2-Ethylhexyl) phthalate (DEHP)	EPA 625	Extractable Organics	NELAP	2/19/2002
bis(2-Ethylhexyl) phthalate (DEHP)	EPA 8270	Extractable Organics	NELAP	7/1/2003
Boron	EPA 200.7	Metals	NELAP	2/19/2002
Boron	EPA 6010	Metals	NELAP	7/1/2003
Bromide	EPA 300.0	General Chemistry	NELAP	2/19/2002
Bromide	EPA 9056	General Chemistry	NELAP	7/1/2003
Bromobenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Bromochloromethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
Bromodichloromethane	EPA 624	Volatile Organics	NELAP	2/19/2002
Bromodichloromethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
Bromoform	EPA 624	Volatile Organics	NELAP	2/19/2002

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Issue Date: 7/1/2007

Expiration Date: 6/30/2008

*Laboratory Scope of Accreditation*

Attachment to Certificate #: E82502-07, expiration date June 30, 2008. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E82502

EPA Lab Code: FL00937

(904) 739-2277

E82502

Columbia Analytical Services, Inc. - FL  
8540 Baycenter Road  
Jacksonville, FL 32256

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Bromoform	EPA 8260	Volatile Organics	NELAP	7/1/2003
Butyl benzyl phthalate	EPA 625	Extractable Organics	NELAP	2/19/2002
Butyl benzyl phthalate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Cadmium	EPA 200.7	Metals	NELAP	2/19/2002
Cadmium	EPA 200.8	Metals	NELAP	2/19/2002
Cadmium	EPA 6010	Metals	NELAP	2/19/2002
Cadmium	EPA 6020	Metals	NELAP	2/19/2002
Calcium	EPA 200.7	Metals	NELAP	2/19/2002
Calcium	EPA 6010	Metals	NELAP	7/1/2003
Carbon disulfide	EPA 8260	Volatile Organics	NELAP	7/1/2003
Carbon tetrachloride	EPA 624	Volatile Organics	NELAP	2/19/2002
Carbon tetrachloride	EPA 8260	Volatile Organics	NELAP	7/1/2003
Carbonaceous BOD (CBOD)	SM 5210 B	General Chemistry	NELAP	2/19/2002
Chemical oxygen demand	EPA 410.2	General Chemistry	NELAP	2/19/2002
Chlordane (tech.)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Chlordane (tech.)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Chloride	EPA 300.0	General Chemistry	NELAP	2/19/2002
Chloride	EPA 9056	General Chemistry	NELAP	7/1/2003
Chlorobenzene	EPA 624	Volatile Organics	NELAP	2/19/2002
Chlorobenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Chlorobenzilate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Chloroethane	EPA 624	Volatile Organics	NELAP	2/19/2002
Chloroethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
Chloroform	EPA 624	Volatile Organics	NELAP	2/19/2002
Chloroform	EPA 8260	Volatile Organics	NELAP	7/1/2003
Chlorophylls	SM 10200 H	General Chemistry	NELAP	7/25/2005
Chloroprene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Chromium	EPA 200.7	Metals	NELAP	2/19/2002
Chromium	EPA 200.8	Metals	NELAP	2/19/2002
Chromium	EPA 6010	Metals	NELAP	7/1/2003
Chromium	EPA 6020	Metals	NELAP	7/1/2003
Chromium VI	EPA 7196	General Chemistry	NELAP	7/1/2003
Chromium VI	SM 3500-Cr D (18th/19th Ed.)/COLOR	Metals	NELAP	8/30/2002
Chrysene	EPA 625	Extractable Organics	NELAP	2/19/2002
Chrysene	EPA 8270	Extractable Organics	NELAP	7/1/2003
cis-1,2-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	7/1/2003

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Columbia Analytical Services, Inc. - FL  
8540 Baycenter Road  
Jacksonville, FL 32256

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
cis-1,3-Dichloropropene	EPA 624	Volatile Organics	NELAP	2/19/2002
cis-1,3-Dichloropropene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Cobalt	EPA 200.7	Metals	NELAP	2/19/2002
Cobalt	EPA 200.8	Metals	NELAP	2/19/2002
Cobalt	EPA 6010	Metals	NELAP	7/1/2003
Cobalt	EPA 6020	Metals	NELAP	7/1/2003
Color	EPA 110.2	General Chemistry	NELAP	2/19/2002
Conductivity	EPA 120.1	General Chemistry	NELAP	2/19/2002
Copper	EPA 200.7	Metals	NELAP	2/19/2002
Copper	EPA 200.8	Metals	NELAP	2/19/2002
Copper	EPA 6010	Metals	NELAP	2/19/2002
Copper	EPA 6020	Metals	NELAP	2/19/2002
Cyanide	SM 4500CN-E	General Chemistry	NELAP	2/19/2002
delta-BHC	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
delta-BHC	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Diallate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Dibenz(a, j) acridine	EPA 8270	Extractable Organics	NELAP	7/1/2003
Dibenz(a,h) anthracene	EPA 625	Extractable Organics	NELAP	2/19/2002
Dibenz(a,h) anthracene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Dibenzofuran	EPA 8270	Extractable Organics	NELAP	7/1/2003
Dibromochloromethane	EPA 624	Volatile Organics	NELAP	2/19/2002
Dibromochloromethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
Dibromomethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
Dichlorodifluoromethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
Dieldrin	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Dieldrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Diethyl ether	EPA 8260	Volatile Organics	NELAP	7/25/2005
Diethyl phthalate	EPA 625	Extractable Organics	NELAP	2/19/2002
Diethyl phthalate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Dimethoate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Dimethyl phthalate	EPA 625	Extractable Organics	NELAP	2/19/2002
Dimethyl phthalate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Di-n-butyl phthalate	EPA 625	Extractable Organics	NELAP	2/19/2002
Di-n-butyl phthalate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Di-n-octyl phthalate	EPA 625	Extractable Organics	NELAP	2/19/2002
Di-n-octyl phthalate	EPA 8270	Extractable Organics	NELAP	7/1/2003

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Columbia Analytical Services, Inc. - FL

8540 Baycenter Road

Jacksonville, FL 32256

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Diphenylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
Disulfoton	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/25/2005
Endosulfan I	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Endosulfan I	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Endosulfan II	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Endosulfan II	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Endosulfan sulfate	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Endosulfan sulfate	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Endrin	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Endrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Endrin aldehyde	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Endrin aldehyde	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Ethyl methacrylate	EPA 8260	Volatile Organics	NELAP	7/1/2003
Ethyl methanesulfonate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Ethylbenzene	EPA 624	Volatile Organics	NELAP	2/19/2002
Ethylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Famphur	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Fecal coliforms	SM 9222 D	Microbiology	NELAP	2/19/2002
Ferrous iron	SM 3500-Fe D (18th/19th Ed.)/COLOR	General Chemistry	NELAP	8/26/2005
Fluoranthene	EPA 625	Extractable Organics	NELAP	2/19/2002
Fluoranthene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Fluorene	EPA 625	Extractable Organics	NELAP	2/19/2002
Fluorene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Fluoride	EPA 300.0	General Chemistry	NELAP	2/19/2002
Fluoride	EPA 340.2	General Chemistry	NELAP	2/19/2002
Fluoride	EPA 9056	General Chemistry	NELAP	7/1/2003
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
gamma-Chlordane	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Heptachlor	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Heptachlor	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Heptachlor epoxide	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Heptachlor epoxide	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Hexachlorobenzene	EPA 625	Extractable Organics	NELAP	2/19/2002
Hexachlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003

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E82502

Columbia Analytical Services, Inc. - FL

8540 Baycenter Road

Jacksonville, FL 32256

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Hexachlorobutadiene	EPA 625	Extractable Organics	NELAP	2/19/2002
Hexachlorobutadiene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Hexachlorobutadiene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Hexachlorocyclopentadiene	EPA 625	Extractable Organics	NELAP	2/19/2002
Hexachlorocyclopentadiene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Hexachloroethane	EPA 625	Extractable Organics	NELAP	2/19/2002
Hexachloroethane	EPA 8270	Extractable Organics	NELAP	7/1/2003
Hexachlorophene	EPA 8270	Extractable Organics	NELAP	7/25/2005
Hexachloropropene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Ignitability	EPA 1020	General Chemistry	NELAP	7/1/2003
Indeno(1,2,3-cd)pyrene	EPA 625	Extractable Organics	NELAP	2/19/2002
Indeno(1,2,3-cd)pyrene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Iodomethane (Methyl iodide)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Iron	EPA 200.7	Metals	NELAP	2/19/2002
Iron	EPA 6010	Metals	NELAP	7/1/2003
Isobutyl alcohol (2-Methyl-1-propanol)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Isodrin	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Isophorone	EPA 625	Extractable Organics	NELAP	2/19/2002
Isophorone	EPA 8270	Extractable Organics	NELAP	7/1/2003
Isopropylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Isosafrole	EPA 8270	Extractable Organics	NELAP	7/1/2003
Kepone	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Kjeldahl nitrogen - total	EPA 351.2	General Chemistry	NELAP	8/30/2002
Lead	EPA 200.7	Metals	NELAP	2/19/2002
Lead	EPA 200.8	Metals	NELAP	2/19/2002
Lead	EPA 6010	Metals	NELAP	2/19/2002
Lead	EPA 6020	Metals	NELAP	2/19/2002
Magnesium	EPA 200.7	Metals	NELAP	2/19/2002
Magnesium	EPA 6010	Metals	NELAP	7/1/2003
Manganese	EPA 200.7	Metals	NELAP	2/19/2002
Manganese	EPA 200.8	Metals	NELAP	2/19/2002
Manganese	EPA 6010	Metals	NELAP	7/1/2003
Manganese	EPA 6020	Metals	NELAP	7/1/2003
Mercury	EPA 245.1	Metals	NELAP	2/19/2002
Mercury	EPA 7470	Metals	NELAP	2/19/2002
Methacrylonitrile	EPA 8260	Volatile Organics	NELAP	7/1/2003

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Attachment to Certificate #: E82502-07, expiration date June 30, 2008. This listing of accredited analytes should be used only when associated with a valid certificate.

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EPA Lab Code:

FL00937

(904) 739-2277

E82502

Columbia Analytical Services, Inc. - FL

8540 Baycenter Road

Jacksonville, FL 32256

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Methanol	NCASI 94.03	Volatile Organics	NELAP	4/9/2003
Methanol	NCASI 99.01	Volatile Organics	NELAP	4/9/2003
Methapyrilene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Methoxychlor	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Methyl bromide (Bromomethane)	EPA 624	Volatile Organics	NELAP	2/19/2002
Methyl bromide (Bromomethane)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Methyl chloride (Chloromethane)	EPA 624	Volatile Organics	NELAP	2/19/2002
Methyl chloride (Chloromethane)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Methyl methacrylate	EPA 8260	Volatile Organics	NELAP	7/1/2003
Methyl methanesulfonate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Methyl parathion (Parathion, methyl)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Methyl tert-butyl ether (MTBE)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Methylene chloride	EPA 624	Volatile Organics	NELAP	2/19/2002
Methylene chloride	EPA 8260	Volatile Organics	NELAP	7/1/2003
Molybdenum	EPA 200.7	Metals	NELAP	2/19/2002
Molybdenum	EPA 200.8	Metals	NELAP	2/19/2002
Molybdenum	EPA 6010	Metals	NELAP	2/19/2002
Molybdenum	EPA 6020	Metals	NELAP	7/25/2005
Naphthalene	EPA 625	Extractable Organics	NELAP	2/19/2002
Naphthalene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Naphthalene	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Butyl alcohol	EPA 8260	Volatile Organics	NELAP	7/1/2003
n-Butylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Nickel	EPA 200.7	Metals	NELAP	2/19/2002
Nickel	EPA 200.8	Metals	NELAP	2/19/2002
Nickel	EPA 6010	Metals	NELAP	2/19/2002
Nickel	EPA 6020	Metals	NELAP	2/19/2002
Nitrate	EPA 9056	General Chemistry	NELAP	7/1/2003
Nitrate as N	EPA 300.0	General Chemistry	NELAP	2/19/2002
Nitrate as N	EPA 353.2	General Chemistry	NELAP	8/30/2002
Nitrate-nitrite	EPA 300.0	General Chemistry	NELAP	2/19/2002
Nitrite	EPA 9056	General Chemistry	NELAP	7/1/2003
Nitrite as N	EPA 300.0	General Chemistry	NELAP	2/19/2002
Nitrite as N	EPA 353.2	General Chemistry	NELAP	8/30/2002
Nitrobenzene	EPA 625	Extractable Organics	NELAP	2/19/2002
Nitrobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003

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Jacksonville, FL 32256

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Nitroquinoline-1-oxide	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosodiethylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosodimethylamine	EPA 625	Extractable Organics	NELAP	2/19/2002
n-Nitrosodimethylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitroso-di-n-butylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosodi-n-propylamine	EPA 625	Extractable Organics	NELAP	2/19/2002
n-Nitrosodi-n-propylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosodiphenylamine	EPA 625	Extractable Organics	NELAP	2/19/2002
n-Nitrosodiphenylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosomethylethylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosomorpholine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosopiperidine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosopyrrolidine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Propylbenzene	EPA 8260	Volatile Organics	NELAP	7/25/2005
o,o,o-Triethyl phosphorothioate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Oil & Grease	EPA 1664	General Chemistry	NELAP	2/19/2002
Organic nitrogen	EPA 351.2 - EPA 350.1	General Chemistry	NELAP	7/25/2005
Organic nitrogen	EPA 351.4 - EPA 350.3	General Chemistry	NELAP	2/19/2002
Orthophosphate as P	EPA 365.1	General Chemistry	NELAP	8/30/2002
Orthophosphate as P	EPA 365.3	General Chemistry	NELAP	2/19/2002
o-Toluidine	EPA 8270	Extractable Organics	NELAP	7/1/2003
o-Xylene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Parathion, ethyl	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
p-Dioxane	EPA 8260	Volatile Organics	NELAP	7/1/2003
Pentachlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Pentachloronitrobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Pentachlorophenol	EPA 625	Extractable Organics	NELAP	2/19/2002
Pentachlorophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
pH	EPA 150.1	General Chemistry	NELAP	2/19/2002
Phenacetin	EPA 8270	Extractable Organics	NELAP	7/1/2003
Phenanthrene	EPA 625	Extractable Organics	NELAP	2/19/2002
Phenanthrene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Phenol	EPA 625	Extractable Organics	NELAP	2/19/2002
Phenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
Phorate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Phosphorus, total	EPA 365.1	General Chemistry	NELAP	8/30/2002

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State Laboratory ID: E82502

EPA Lab Code: FL00937

(904) 739-2277

E82502

Columbia Analytical Services, Inc. - FL

8540 Baycenter Road

Jacksonville, FL 32256

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Phosphorus, total	EPA 365.3	General Chemistry	NELAP	2/19/2002
p-Isopropyltoluene	EPA 8260	Volatile Organics	NELAP	7/25/2005
Potassium	EPA 200.7	Metals	NELAP	2/19/2002
Potassium	EPA 6010	Metals	NELAP	2/19/2002
Pronamide (Kerb)	EPA 8270	Extractable Organics	NELAP	7/1/2003
Propionaldehyde	NCASI 99.01	Volatile Organics	NELAP	4/9/2003
Propionitrile (Ethyl cyanide)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Pyrene	EPA 625	Extractable Organics	NELAP	2/19/2002
Pyrene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Pyridine	EPA 8270	Extractable Organics	NELAP	7/1/2003
Residue-filterable (TDS)	EPA 160.1	General Chemistry	NELAP	2/19/2002
Residue-nonfilterable (TSS)	EPA 160.2	General Chemistry	NELAP	2/19/2002
Residue-settleable	EPA 160.5	General Chemistry	NELAP	2/19/2002
Residue-total	EPA 160.3	General Chemistry	NELAP	2/19/2002
Residue-volatile	EPA 160.4	General Chemistry	NELAP	2/19/2002
Safrole	EPA 8270	Extractable Organics	NELAP	7/1/2003
sec-Butylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Selenium	EPA 200.7	Metals	NELAP	2/19/2002
Selenium	EPA 200.8	Metals	NELAP	2/19/2002
Selenium	EPA 6010	Metals	NELAP	2/19/2002
Selenium	EPA 6020	Metals	NELAP	7/25/2005
Silica-dissolved	EPA 370.1	General Chemistry	NELAP	8/30/2002
Silver	EPA 200.7	Metals	NELAP	2/19/2002
Silver	EPA 200.8	Metals	NELAP	2/19/2002
Silver	EPA 6010	Metals	NELAP	7/1/2003
Silver	EPA 6020	Metals	NELAP	7/1/2003
Sodium	EPA 200.7	Metals	NELAP	2/19/2002
Sodium	EPA 6010	Metals	NELAP	7/1/2003
Styrene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Sulfate	EPA 300.0	General Chemistry	NELAP	2/19/2002
Sulfate	EPA 9056	General Chemistry	NELAP	7/1/2003
Sulfide	EPA 376.1	General Chemistry	NELAP	7/25/2005
Sulfotep	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/25/2005
Surfactants - MBAS	EPA 425.1	General Chemistry	NELAP	2/19/2002
Tannin & Lignin	SM 5550 B	General Chemistry	NELAP	2/19/2002
tert-Butyl alcohol	EPA 8260	Volatile Organics	NELAP	7/1/2003

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Issue Date: 7/1/2007

Expiration Date: 6/30/2008



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Attachment to Certificate #: E82502-07, expiration date June 30, 2008. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E82502

EPA Lab Code: FL00937

(904) 739-2277

E82502

Columbia Analytical Services, Inc. - FL

8540 Baycenter Road

Jacksonville, FL 32256

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
tert-Butylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Tetrachloroethylene (Perchloroethylene)	EPA 624	Volatile Organics	NELAP	2/19/2002
Tetrachloroethylene (Perchloroethylene)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Thallium	EPA 200.7	Metals	NELAP	2/19/2002
Thallium	EPA 200.8	Metals	NELAP	2/19/2002
Thallium	EPA 6010	Metals	NELAP	7/1/2003
Thallium	EPA 6020	Metals	NELAP	7/1/2003
Thionazin (Zinophos)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Tin	EPA 200.7	Metals	NELAP	8/30/2002
Tin	EPA 6010	Metals	NELAP	7/1/2003
Titanium	CASF MET-ICPMS Rev. 4 (5/20/05)/ICP-MS	Metals	NELAP	8/26/2005
Titanium	EPA 6020	Metals	NELAP	7/25/2005
Toluene	EPA 624	Volatile Organics	NELAP	2/19/2002
Toluene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Total coliforms	SM 9222 B	Microbiology	NELAP	2/19/2002
Total cyanide	EPA 335.4	General Chemistry	NELAP	7/25/2005
Total cyanide	EPA 9012	General Chemistry	NELAP	9/22/2004
Total hardness as CaCO3	SM 2340 B	Metals	NELAP	9/30/2002
Total nitrate-nitrite	EPA 353.2	General Chemistry	NELAP	8/30/2002
Total nitrate-nitrite	EPA 9056	General Chemistry	NELAP	7/1/2003
Total organic carbon	EPA 415.1	General Chemistry	NELAP	2/19/2002
Total organic carbon	EPA 9060	General Chemistry	NELAP	7/1/2003
Total Petroleum Hydrocarbons (TPH)	EPA 1664	General Chemistry	NELAP	2/19/2002
Total Petroleum Hydrocarbons (TPH)	FL-PRO	Extractable Organics	NELAP	7/1/2003
Total Petroleum Hydrocarbons (TPH)	TX1005	Extractable Organics	NELAP	7/1/2003
Toxaphene (Chlorinated camphene)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Toxaphene (Chlorinated camphene)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
trans-1,2-Dichloroethylene	EPA 624	Volatile Organics	NELAP	2/19/2002
trans-1,2-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	7/1/2003
trans-1,3-Dichloropropylene	EPA 624	Volatile Organics	NELAP	2/19/2002
trans-1,3-Dichloropropylene	EPA 8260	Volatile Organics	NELAP	7/1/2003
trans-1,4-Dichloro-2-butene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Trichloroethene (Trichloroethylene)	EPA 624	Volatile Organics	NELAP	2/19/2002
Trichloroethene (Trichloroethylene)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Trichlorofluoromethane	EPA 624	Volatile Organics	NELAP	2/19/2002
Trichlorofluoromethane	EPA 8260	Volatile Organics	NELAP	7/1/2003

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State Laboratory ID: E82502

EPA Lab Code:

FL00937

(904) 739-2277

E82502

Columbia Analytical Services, Inc. - FL

8540 Baycenter Road

Jacksonville, FL 32256

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Turbidity	EPA 180.1	General Chemistry	NELAP	2/19/2002
Un-ionized Ammonia	DEP SOP 10/03/83	General Chemistry	NELAP	2/19/2002
Vanadium	EPA 200.7	Metals	NELAP	2/19/2002
Vanadium	EPA 200.8	Metals	NELAP	2/19/2002
Vanadium	EPA 6010	Metals	NELAP	7/1/2003
Vanadium	EPA 6020	Metals	NELAP	7/25/2005
Vinyl acetate	EPA 8260	Volatile Organics	NELAP	7/1/2003
Vinyl chloride	EPA 624	Volatile Organics	NELAP	2/19/2002
Vinyl chloride	EPA 8260	Volatile Organics	NELAP	7/1/2003
Xylene (total)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Zinc	EPA 200.7	Metals	NELAP	2/19/2002
Zinc	EPA 200.8	Metals	NELAP	2/19/2002
Zinc	EPA 6010	Metals	NELAP	2/19/2002
Zinc	EPA 6020	Metals	NELAP	2/19/2002

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Attachment to Certificate #: E82502-07, expiration date June 30, 2008. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E82502

EPA Lab Code:

FL00937

(904) 739-2277

E82502

Columbia Analytical Services, Inc. - FL

8540 Baycenter Road

Jacksonville, FL 32256

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
1,1,1,2-Tetrachloroethane	EPA 8260	Volatile Organics	NELAP	2/19/2002
1,1,1-Trichloroethane	EPA 8260	Volatile Organics	NELAP	2/19/2002
1,1,2,2-Tetrachloroethane	EPA 8260	Volatile Organics	NELAP	2/19/2002
1,1,2-Trichloroethane	EPA 8260	Volatile Organics	NELAP	2/19/2002
1,1-Dichloroethane	EPA 8260	Volatile Organics	NELAP	2/19/2002
1,1-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	2/19/2002
1,1-Dichloropropene	EPA 8260	Volatile Organics	NELAP	2/19/2002
1,2,3-Trichloropropane	EPA 8260	Volatile Organics	NELAP	2/19/2002
1,2,4,5-Tetrachlorobenzene	EPA 8270	Extractable Organics	NELAP	2/19/2002
1,2,4-Trichlorobenzene	EPA 8260	Volatile Organics	NELAP	2/19/2002
1,2,4-Trichlorobenzene	EPA 8270	Extractable Organics	NELAP	2/19/2002
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260	Volatile Organics	NELAP	2/19/2002
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260	Volatile Organics	NELAP	2/19/2002
1,2-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	2/19/2002
1,2-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	2/19/2002
1,2-Dichloroethane	EPA 8260	Volatile Organics	NELAP	2/19/2002
1,2-Dichloropropane	EPA 8260	Volatile Organics	NELAP	2/19/2002
1,2-Diphenylhydrazine	EPA 8270	Extractable Organics	NELAP	2/19/2002
1,3,5-Trinitrobenzene (1,3,5-TNB)	EPA 8270	Extractable Organics	NELAP	2/19/2002
1,3-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	2/19/2002
1,3-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	2/19/2002
1,3-Dichloropropane	EPA 8260	Volatile Organics	NELAP	2/19/2002
1,3-Dinitrobenzene (1,3-DNB)	EPA 8270	Extractable Organics	NELAP	2/19/2002
1,4-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	2/19/2002
1,4-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	2/19/2002
1,4-Naphthoquinone	EPA 8270	Extractable Organics	NELAP	2/19/2002
1,4-Phenylenediamine	EPA 8270	Extractable Organics	NELAP	2/19/2002
1-Chloronaphthalene	EPA 8270	Extractable Organics	NELAP	2/19/2002
1-Naphthylamine	EPA 8270	Extractable Organics	NELAP	2/19/2002
2,2-Dichloropropane	EPA 8260	Volatile Organics	NELAP	2/19/2002
2,3,4,6-Tetrachlorophenol	EPA 8270	Extractable Organics	NELAP	2/19/2002
2,4,5-Trichlorophenol	EPA 8270	Extractable Organics	NELAP	2/19/2002
2,4,6-Trichlorophenol	EPA 8270	Extractable Organics	NELAP	2/19/2002
2,4-Dichlorophenol	EPA 8270	Extractable Organics	NELAP	2/19/2002
2,4-Dimethylphenol	EPA 8270	Extractable Organics	NELAP	2/19/2002
2,4-Dinitrophenol	EPA 8270	Extractable Organics	NELAP	2/19/2002

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Issue Date: 7/1/2007

Expiration Date: 6/30/2008

*Laboratory Scope of Accreditation*

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Attachment to Certificate #: E82502-07, expiration date June 30, 2008. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E82502

EPA Lab Code: FL00937

(904) 739-2277

E82502

Columbia Analytical Services, Inc. - FL

8540 Baycenter Road

Jacksonville, FL 32256

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270	Extractable Organics	NELAP	2/19/2002
2,6-Dichlorophenol	EPA 8270	Extractable Organics	NELAP	2/19/2002
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270	Extractable Organics	NELAP	2/19/2002
2-Acetylaminofluorene	EPA 8270	Extractable Organics	NELAP	2/19/2002
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260	Volatile Organics	NELAP	2/19/2002
2-Chloroethyl vinyl ether	EPA 8260	Volatile Organics	NELAP	2/19/2002
2-Chloronaphthalene	EPA 8270	Extractable Organics	NELAP	2/19/2002
2-Chlorophenol	EPA 8270	Extractable Organics	NELAP	2/19/2002
2-Chlorotoluene	EPA 8260	Volatile Organics	NELAP	2/19/2002
2-Hexanone	EPA 8260	Volatile Organics	NELAP	2/19/2002
2-Methyl-4,6-dinitrophenol	EPA 8270	Extractable Organics	NELAP	2/19/2002
2-Methylnaphthalene	EPA 8270	Extractable Organics	NELAP	2/19/2002
2-Methylphenol (o-Cresol)	EPA 8270	Extractable Organics	NELAP	2/19/2002
2-Nitroaniline	EPA 8270	Extractable Organics	NELAP	2/19/2002
2-Nitrophenol	EPA 8270	Extractable Organics	NELAP	5/7/2003
2-Picoline (2-Methylpyridine)	EPA 8270	Extractable Organics	NELAP	2/19/2002
3,3'-Dichlorobenzidine	EPA 8270	Extractable Organics	NELAP	2/19/2002
3,3'-Dimethylbenzidine	EPA 8270	Extractable Organics	NELAP	2/19/2002
3-Methylcholanthrene	EPA 8270	Extractable Organics	NELAP	2/19/2002
3-Nitroaniline	EPA 8270	Extractable Organics	NELAP	2/19/2002
4,4'-DDD	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
4,4'-DDE	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
4,4'-DDT	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
4-Aminobiphenyl	EPA 8270	Extractable Organics	NELAP	2/19/2002
4-Bromophenyl phenyl ether	EPA 8270	Extractable Organics	NELAP	2/19/2002
4-Chloro-3-methylphenol	EPA 8270	Extractable Organics	NELAP	2/19/2002
4-Chloroaniline	EPA 8270	Extractable Organics	NELAP	2/19/2002
4-Chlorophenyl phenylether	EPA 8270	Extractable Organics	NELAP	2/19/2002
4-Chlorotoluene	EPA 8260	Volatile Organics	NELAP	2/19/2002
4-Dimethyl aminoazobenzene	EPA 8270	Extractable Organics	NELAP	2/19/2002
4-Methyl-2-pentanone (MIBK)	EPA 8260	Volatile Organics	NELAP	2/19/2002
4-Methylphenol (p-Cresol)	EPA 8270	Extractable Organics	NELAP	2/19/2002
4-Nitroaniline	EPA 8270	Extractable Organics	NELAP	2/19/2002
4-Nitrophenol	EPA 8270	Extractable Organics	NELAP	2/19/2002
5-Nitro-o-toluidine	EPA 8270	Extractable Organics	NELAP	2/19/2002
7,12-Dimethylbenz(a) anthracene	EPA 8270	Extractable Organics	NELAP	2/19/2002

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Issue Date: 7/1/2007

Expiration Date: 6/30/2008



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Attachment to Certificate #: E82502-07, expiration date June 30, 2008. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E82502

EPA Lab Code: FL00937

(904) 739-2277

E82502

Columbia Analytical Services, Inc. - FL

8540 Baycenter Road

Jacksonville, FL 32256

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
Acenaphthene	EPA 8270	Extractable Organics	NELAP	2/19/2002
Acenaphthylene	EPA 8270	Extractable Organics	NELAP	2/19/2002
Acetone	EPA 8260	Volatile Organics	NELAP	2/19/2002
Acetonitrile	EPA 8260	Volatile Organics	NELAP	2/19/2002
Acetophenone	EPA 8270	Extractable Organics	NELAP	2/19/2002
Acrolein (Propenal)	EPA 8260	Volatile Organics	NELAP	2/19/2002
Acrylonitrile	EPA 8260	Volatile Organics	NELAP	2/19/2002
Aldrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Allyl chloride (3-Chloropropene)	EPA 8260	Volatile Organics	NELAP	2/19/2002
alpha-BHC (alpha-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
alpha-Chlordane	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/30/2002
Aluminum	EPA 6010	Metals	NELAP	2/19/2002
Aluminum	EPA 6020	Metals	NELAP	2/19/2002
Amenable cyanide	EPA 9012	General Chemistry	NELAP	9/22/2004
Aniline	EPA 8270	Extractable Organics	NELAP	2/19/2002
Anthracene	EPA 8270	Extractable Organics	NELAP	2/19/2002
Antimony	EPA 6010	Metals	NELAP	2/19/2002
Antimony	EPA 6020	Metals	NELAP	2/19/2002
Aramite	EPA 8270	Extractable Organics	NELAP	2/19/2002
Aroclor-1016 (PCB-1016)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Aroclor-1221 (PCB-1221)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Aroclor-1232 (PCB-1232)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Aroclor-1242 (PCB-1242)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Aroclor-1248 (PCB-1248)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Aroclor-1254 (PCB-1254)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Aroclor-1260 (PCB-1260)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Arsenic	EPA 6010	Metals	NELAP	2/19/2002
Arsenic	EPA 6020	Metals	NELAP	2/19/2002
Barium	EPA 6010	Metals	NELAP	2/19/2002
Barium	EPA 6020	Metals	NELAP	2/19/2002
Benzene	EPA 8260	Volatile Organics	NELAP	2/19/2002
Benzidine	EPA 8270	Extractable Organics	NELAP	8/30/2002
Benzo(a)anthracene	EPA 8270	Extractable Organics	NELAP	2/19/2002
Benzo(a)pyrene	EPA 8270	Extractable Organics	NELAP	2/19/2002
Benzo(b)fluoranthene	EPA 8270	Extractable Organics	NELAP	2/19/2002
Benzo(g,h,i)perylene	EPA 8270	Extractable Organics	NELAP	2/19/2002

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State Laboratory ID: E82502

EPA Lab Code: FL00937

(904) 739-2277

**E82502**

**Columbia Analytical Services, Inc. - FL**  
**8540 Baycenter Road**  
**Jacksonville, FL 32256**

**Matrix: Solid and Chemical Materials**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Benzo(k)fluoranthene	EPA 8270	Extractable Organics	NELAP	2/19/2002
Benzoic acid	EPA 8270	Extractable Organics	NELAP	2/19/2002
Benzyl alcohol	EPA 8270	Extractable Organics	NELAP	2/19/2002
Beryllium	EPA 6010	Metals	NELAP	2/19/2002
Beryllium	EPA 6020	Metals	NELAP	2/19/2002
beta-BHC (beta-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
beta-Naphthylamine	EPA 8270	Extractable Organics	NELAP	2/19/2002
bis(2-Chloroethoxy)methane	EPA 8270	Extractable Organics	NELAP	2/19/2002
bis(2-Chloroethyl) ether	EPA 8270	Extractable Organics	NELAP	2/19/2002
bis(2-Chloroisopropyl) ether (2,2'-Oxybis(1-chloropropane))	EPA 8270	Extractable Organics	NELAP	2/19/2002
bis(2-Ethylhexyl) phthalate (DEHP)	EPA 8270	Extractable Organics	NELAP	2/19/2002
Boron	EPA 6010	Metals	NELAP	2/19/2002
Bromide	EPA 9056	General Chemistry	NELAP	2/19/2002
Bromobenzene	EPA 8260	Volatile Organics	NELAP	2/19/2002
Bromochloromethane	EPA 8260	Volatile Organics	NELAP	2/19/2002
Bromodichloromethane	EPA 8260	Volatile Organics	NELAP	2/19/2002
Bromoform	EPA 8260	Volatile Organics	NELAP	2/19/2002
Butyl benzyl phthalate	EPA 8270	Extractable Organics	NELAP	2/19/2002
Cadmium	EPA 6010	Metals	NELAP	2/19/2002
Cadmium	EPA 6020	Metals	NELAP	2/19/2002
Calcium	EPA 6010	Metals	NELAP	2/19/2002
Carbon disulfide	EPA 8260	Volatile Organics	NELAP	2/19/2002
Carbon tetrachloride	EPA 8260	Volatile Organics	NELAP	2/19/2002
Chlordane (tech.)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Chloride	EPA 9056	General Chemistry	NELAP	2/19/2002
Chlorobenzene	EPA 8260	Volatile Organics	NELAP	2/19/2002
Chlorobenzilate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Chloroethane	EPA 8260	Volatile Organics	NELAP	2/19/2002
Chloroform	EPA 8260	Volatile Organics	NELAP	2/19/2002
Chloroprene	EPA 8260	Volatile Organics	NELAP	2/19/2002
Chromium	EPA 6010	Metals	NELAP	2/19/2002
Chromium	EPA 6020	Metals	NELAP	2/19/2002
Chromium VI	EPA 7196	General Chemistry	NELAP	2/19/2002
Chrysene	EPA 8270	Extractable Organics	NELAP	2/19/2002
cis-1,2-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	2/19/2002
cis-1,3-Dichloropropene	EPA 8260	Volatile Organics	NELAP	2/19/2002

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State Laboratory ID: E82502

EPA Lab Code:

FL00937

(904) 739-2277

**E82502**

**Columbia Analytical Services, Inc. - FL**

**8540 Baycenter Road**

**Jacksonville, FL 32256**

**Matrix: Solid and Chemical Materials**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Cobalt	EPA 6010	Metals	NELAP	2/19/2002
Cobalt	EPA 6020	Metals	NELAP	2/19/2002
Copper	EPA 6010	Metals	NELAP	2/19/2002
Copper	EPA 6020	Metals	NELAP	2/19/2002
delta-BHC	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Diallate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Dibenz(a, j) acridine	EPA 8270	Extractable Organics	NELAP	2/19/2002
Dibenz(a,h) anthracene	EPA 8270	Extractable Organics	NELAP	2/19/2002
Dibenzofuran	EPA 8270	Extractable Organics	NELAP	2/19/2002
Dibromochloromethane	EPA 8260	Volatile Organics	NELAP	2/19/2002
Dibromomethane	EPA 8260	Volatile Organics	NELAP	2/19/2002
Dichlorodifluoromethane	EPA 8260	Volatile Organics	NELAP	2/19/2002
Dieldrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Diesel range organics (DRO)	EPA 8015	Extractable Organics	NELAP	2/19/2002
Diethyl phthalate	EPA 8270	Extractable Organics	NELAP	2/19/2002
Dimethoate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Dimethyl phthalate	EPA 8270	Extractable Organics	NELAP	2/19/2002
Di-n-butyl phthalate	EPA 8270	Extractable Organics	NELAP	2/19/2002
Di-n-octyl phthalate	EPA 8270	Extractable Organics	NELAP	2/19/2002
Diphenylamine	EPA 8270	Extractable Organics	NELAP	2/19/2002
Endosulfan I	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Endosulfan II	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Endosulfan sulfate	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Endrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Endrin aldehyde	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Ethyl methacrylate	EPA 8260	Volatile Organics	NELAP	2/19/2002
Ethyl methanesulfonate	EPA 8270	Extractable Organics	NELAP	2/19/2002
Ethylbenzene	EPA 8260	Volatile Organics	NELAP	2/19/2002
Famphur	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Fluoranthene	EPA 8270	Extractable Organics	NELAP	2/19/2002
Fluorene	EPA 8270	Extractable Organics	NELAP	2/19/2002
Fluoride	EPA 9056	General Chemistry	NELAP	2/19/2002
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
gamma-Chlordane	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/30/2002
Gasoline range organics (GRO)	EPA 8015	Extractable Organics	NELAP	2/19/2002
Heptachlor	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/19/2002

**Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.**

**Issue Date: 7/1/2007**

**Expiration Date: 6/30/2008**

*Laboratory Scope of Accreditation*

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Attachment to Certificate #: E82502-07, expiration date June 30, 2008. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E82502

EPA Lab Code:

FL00937

(904) 739-2277

E82502

Columbia Analytical Services, Inc. - FL

8540 Baycenter Road

Jacksonville, FL 32256

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
Heptachlor epoxide	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Hexachlorobenzene	EPA 8270	Extractable Organics	NELAP	2/19/2002
Hexachlorobutadiene	EPA 8260	Volatile Organics	NELAP	2/19/2002
Hexachlorobutadiene	EPA 8270	Extractable Organics	NELAP	2/19/2002
Hexachlorocyclopentadiene	EPA 8270	Extractable Organics	NELAP	2/19/2002
Hexachloroethane	EPA 8270	Extractable Organics	NELAP	2/19/2002
Hexachloropropene	EPA 8270	Extractable Organics	NELAP	2/19/2002
Ignitability	EPA 1020	General Chemistry	NELAP	2/19/2002
Indeno(1,2,3-cd)pyrene	EPA 8270	Extractable Organics	NELAP	2/19/2002
Iodomethane (Methyl iodide)	EPA 8260	Volatile Organics	NELAP	2/19/2002
Iron	EPA 6010	Metals	NELAP	2/19/2002
Isobutyl alcohol (2-Methyl-1-propanol)	EPA 8015	Volatile Organics	NELAP	2/19/2002
Isobutyl alcohol (2-Methyl-1-propanol)	EPA 8260	Volatile Organics	NELAP	2/19/2002
Isodrin	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Isophorone	EPA 8270	Extractable Organics	NELAP	2/19/2002
Isopropylbenzene	EPA 8260	Volatile Organics	NELAP	2/19/2002
Isosafrole	EPA 8270	Extractable Organics	NELAP	2/19/2002
Kepone	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Lead	EPA 6010	Metals	NELAP	2/19/2002
Lead	EPA 6020	Metals	NELAP	2/19/2002
Magnesium	EPA 6010	Metals	NELAP	2/19/2002
Manganese	EPA 6010	Metals	NELAP	2/19/2002
Manganese	EPA 6020	Metals	NELAP	2/19/2002
Mercury	EPA 7471	Metals	NELAP	2/19/2002
Methacrylonitrile	EPA 8260	Volatile Organics	NELAP	2/19/2002
Methanol	EPA 8015	Volatile Organics	NELAP	2/19/2002
Methapyrilene	EPA 8270	Extractable Organics	NELAP	2/19/2002
Methoxychlor	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Methyl bromide (Bromomethane)	EPA 8260	Volatile Organics	NELAP	2/19/2002
Methyl chloride (Chloromethane)	EPA 8260	Volatile Organics	NELAP	2/19/2002
Methyl methacrylate	EPA 8260	Volatile Organics	NELAP	2/19/2002
Methyl methanesulfonate	EPA 8270	Extractable Organics	NELAP	2/19/2002
Methyl parathion (Parathion, methyl)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Methyl tert-butyl ether (MTBE)	EPA 8260	Volatile Organics	NELAP	8/30/2002
Methylene chloride	EPA 8260	Volatile Organics	NELAP	2/19/2002
Molybdenum	EPA 6010	Metals	NELAP	2/19/2002

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 7/1/2007

Expiration Date: 6/30/2008



*Laboratory Scope of Accreditation*

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Attachment to Certificate #: E82502-07, expiration date June 30, 2008. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E82502

EPA Lab Code: FL00937

(904) 739-2277

**E82502**

**Columbia Analytical Services, Inc. - FL**

**8540 Baycenter Road**

**Jacksonville, FL 32256**

**Matrix: Solid and Chemical Materials**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Molybdenum	EPA 6020	Metals	NELAP	7/25/2005
Naphthalene	EPA 8260	Volatile Organics	NELAP	2/19/2002
Naphthalene	EPA 8270	Extractable Organics	NELAP	2/19/2002
n-Butyl alcohol	EPA 8015	Volatile Organics	NELAP	2/19/2002
n-Butylbenzene	EPA 8260	Volatile Organics	NELAP	2/19/2002
Nickel	EPA 6010	Metals	NELAP	2/19/2002
Nickel	EPA 6020	Metals	NELAP	2/19/2002
Nitrate	EPA 9056	General Chemistry	NELAP	2/19/2002
Nitrite	EPA 9056	General Chemistry	NELAP	2/19/2002
Nitrobenzene	EPA 8270	Extractable Organics	NELAP	2/19/2002
Nitroquinoline-1-oxide	EPA 8270	Extractable Organics	NELAP	2/19/2002
n-Nitrosodiethylamine	EPA 8270	Extractable Organics	NELAP	2/19/2002
n-Nitrosodimethylamine	EPA 8270	Extractable Organics	NELAP	2/19/2002
n-Nitroso-di-n-butylamine	EPA 8270	Extractable Organics	NELAP	2/19/2002
n-Nitrosodi-n-propylamine	EPA 8270	Extractable Organics	NELAP	2/19/2002
n-Nitrosodiphenylamine	EPA 8270	Extractable Organics	NELAP	2/19/2002
n-Nitrosomethylethylamine	EPA 8270	Extractable Organics	NELAP	2/19/2002
n-Nitrosomorpholine	EPA 8270	Extractable Organics	NELAP	8/30/2002
n-Nitrosopiperidine	EPA 8270	Extractable Organics	NELAP	2/19/2002
n-Nitrosopyrrolidine	EPA 8270	Extractable Organics	NELAP	2/19/2002
o,o,o-Triethyl phosphorothioate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
o-Toluidine	EPA 8270	Extractable Organics	NELAP	2/19/2002
o-Xylene	EPA 8260	Volatile Organics	NELAP	8/30/2002
Parathion, ethyl	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
p-Dioxane	EPA 8260	Volatile Organics	NELAP	2/19/2002
Pentachlorobenzene	EPA 8270	Extractable Organics	NELAP	2/19/2002
Pentachloronitrobenzene	EPA 8270	Extractable Organics	NELAP	2/19/2002
Pentachlorophenol	EPA 8270	Extractable Organics	NELAP	2/19/2002
pH	EPA 9045	General Chemistry	NELAP	2/19/2002
Phenacetin	EPA 8270	Extractable Organics	NELAP	2/19/2002
Phenanthrene	EPA 8270	Extractable Organics	NELAP	2/19/2002
Phenol	EPA 8270	Extractable Organics	NELAP	2/19/2002
Phorate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Potassium	EPA 6010	Metals	NELAP	2/19/2002
Pronamide (Kerb)	EPA 8270	Extractable Organics	NELAP	2/19/2002
Propionitrile (Ethyl cyanide)	EPA 8260	Volatile Organics	NELAP	2/19/2002

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 7/1/2007

Expiration Date: 6/30/2008

*Laboratory Scope of Accreditation*

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Attachment to Certificate #: E82502-07, expiration date June 30, 2008. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E82502

EPA Lab Code: FL00937

(904) 739-2277

**E82502**

**Columbia Analytical Services, Inc. - FL**  
**8540 Baycenter Road**  
**Jacksonville, FL 32256**

**Matrix: Solid and Chemical Materials**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Pyrene	EPA 8270	Extractable Organics	NELAP	2/19/2002
Pyridine	EPA 8270	Extractable Organics	NELAP	2/19/2002
Safrole	EPA 8270	Extractable Organics	NELAP	2/19/2002
sec-Butylbenzene	EPA 8260	Volatile Organics	NELAP	2/19/2002
Selenium	EPA 6010	Metals	NELAP	2/19/2002
Selenium	EPA 6020	Metals	NELAP	7/25/2005
Silver	EPA 6010	Metals	NELAP	2/19/2002
Silver	EPA 6020	Metals	NELAP	2/19/2002
Sodium	EPA 6010	Metals	NELAP	2/19/2002
Styrene	EPA 8260	Volatile Organics	NELAP	2/19/2002
Sulfate	EPA 9056	General Chemistry	NELAP	2/19/2002
Synthetic Precipitation Leaching Procedure	EPA 1312	General Chemistry	NELAP	2/19/2002
tert-Butylbenzene	EPA 8260	Volatile Organics	NELAP	2/19/2002
Tetrachloroethylene (Perchloroethylene)	EPA 8260	Volatile Organics	NELAP	2/19/2002
Thallium	EPA 6010	Metals	NELAP	2/19/2002
Thallium	EPA 6020	Metals	NELAP	2/19/2002
Thionazin (Zinophos)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	2/19/2002
Tin	EPA 6010	Metals	NELAP	8/30/2002
Toluene	EPA 8260	Volatile Organics	NELAP	2/19/2002
Total cyanide	EPA 9012	General Chemistry	NELAP	9/22/2004
Total nitrate-nitrite	EPA 9056	General Chemistry	NELAP	2/19/2002
Total organic carbon	EPA 9060	General Chemistry	NELAP	8/30/2002
Total Petroleum Hydrocarbons (TPH)	FL-PRO	Extractable Organics	NELAP	2/19/2002
Total Petroleum Hydrocarbons (TPH)	TX1005	Extractable Organics	NELAP	2/19/2002
Toxaphene (Chlorinated camphene)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	5/7/2003
Toxicity Characteristic Leaching Procedure	EPA 1311	General Chemistry	NELAP	2/19/2002
trans-1,2-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	2/19/2002
trans-1,3-Dichloropropylene	EPA 8260	Volatile Organics	NELAP	2/19/2002
trans-1,4-Dichloro-2-butene	EPA 8260	Volatile Organics	NELAP	8/30/2002
Trichloroethene (Trichloroethylene)	EPA 8260	Volatile Organics	NELAP	2/19/2002
Trichlorofluoromethane	EPA 8260	Volatile Organics	NELAP	2/19/2002
Vanadium	EPA 6010	Metals	NELAP	2/19/2002
Vanadium	EPA 6020	Metals	NELAP	7/25/2005
Vinyl acetate	EPA 8260	Volatile Organics	NELAP	2/19/2002
Vinyl chloride	EPA 8260	Volatile Organics	NELAP	2/19/2002
Xylene (total)	EPA 8260	Volatile Organics	NELAP	2/19/2002

**Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.**

**Issue Date: 7/1/2007**

**Expiration Date: 6/30/2008**

*Laboratory Scope of Accreditation*

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Attachment to Certificate #: E82502-07, expiration date June 30, 2008. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E82502

EPA Lab Code:

FL00937

(904) 739-2277

E82502

Columbia Analytical Services, Inc. - FL

8540 Baycenter Road

Jacksonville, FL 32256

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
Zinc	EPA 6010	Metals	NELAP	2/19/2002
Zinc	EPA 6020	Metals	NELAP	2/19/2002



State of Florida

Department of Health, Bureau of Laboratories

This is to certify that

E82502

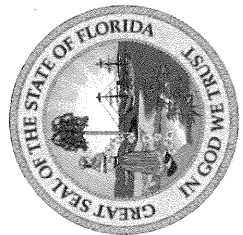
COLUMBIA ANALYTICAL SERVICES, INC. - FL  
8540 BAYCENTER ROAD  
JACKSONVILLE, FL 32256

has complied with Florida Administrative Code 64E-1,  
for the examination of Environmental samples in the following categories

DRINKING WATER - GROUP II UNREGULATED CONTAMINANTS, DRINKING WATER - MICROBIOLOGY, DRINKING WATER - OTHER REGULATED CONTAMINANTS, DRINKING WATER - PRIMARY INORGANIC CONTAMINANTS, DRINKING WATER - SECONDARY INORGANIC CONTAMINANTS, NON-POTABLE WATER - EXTRACTABLE ORGANICS, NON-POTABLE WATER - GENERAL CHEMISTRY, NON-POTABLE WATER - METALS, NON-POTABLE WATER - MICROBIOLOGY, NON-POTABLE WATER - PESTICIDES-HERBICIDES-PCB'S, NON-POTABLE WATER - VOLATILE ORGANICS, SOLID AND CHEMICAL MATERIALS - EXTRACTABLE ORGANICS, SOLID AND CHEMICAL MATERIALS - GENERAL CHEMISTRY, SOLID AND CHEMICAL MATERIALS - METALS, SOLID AND CHEMICAL MATERIALS - PESTICIDES-HERBICIDES-PCB'S, SOLID AND CHEMICAL MATERIALS - VOLATILE ORGANICS

Continued certification is contingent upon successful on-going compliance with the NELAC Standards and FAC Rule 64E-1 regulations. Specific methods and analytes certified are cited on the Laboratory Scope of Accreditation for this laboratory and are on file at the Bureau of Laboratories, P. O. Box 210, Jacksonville, Florida 32231. Clients and customers are urged to verify with this agency the laboratory's certification status in Florida for particular methods and analytes.

**EFFECTIVE July 01, 2007 THROUGH June 30, 2008**



*Max Salfinger*

Max Salfinger, M.D.  
Chief, Bureau of Laboratories  
Florida Department of Health  
DH Form 1697, 7/04  
NON-TRANSFERABLE E82502-07-7/1/2007  
Supersedes all previously issued certificates



November 28, 2007

Service Request No: J0705415

Kirk Wills  
GeoSyntec Consultants  
14055 Riveredge Drive  
Suite 300  
Tampa, FL 33637

**RE: Oak Hammock/FQ1144**

Dear Kirk:

Enclosed are the results of the sample(s) submitted to our laboratory on November 13, 2007. For your reference, these analyses have been assigned our service request number **J0705415**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. In accordance to the NELAC 2003 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please call if you have any questions. My extension is 224. You may also contact me via email at [CMyers@caslab.com](mailto:CMyers@caslab.com).

Respectfully submitted,

**Columbia Analytical Services, Inc.**



Craig Myers  
Project Chemist

Page 1 of 32

*Laboratory Manager: Greg Jordan  
Quality Assurance Officer: Kathy Brungard*

*CAS Jacksonville is NELAC-accredited by the State of Florida, #E82502 valid through 6/30/08. Other state accreditations include: Arkansas, #88-0600 valid through 1/12/06; Georgia, #958 valid through 6/30/08; Louisiana, #02086 valid through 6/30/08; Texas, #T104704197-06-TX valid through 5/31/08; North Carolina, #527 valid through 12/31/07; South Carolina, #96021001 valid through 6/30/07.*

## COLUMBIA ANALYTICAL SERVICES, INC.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock  
**Sample Matrix:** Water

**Service Request No.:** J0705415  
**Date Received:** 11/13/07

### CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables, including results of QC samples analyzed from this delivery group. When appropriate to the procedure, method blank results have been reported with each analytical test. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Parameters that are included in the NELAC Fields of Testing but are not included in the lab's NELAC accreditation are identified in the discussion of each analytical procedure.

#### Sample Receipt

One water sample and one trip blank were received for analysis at Columbia Analytical Services on 11/13/07. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at 4±2°C upon receipt at the lab except for aqueous samples designated for metals analyses, which were stored at room temperature.

#### Volatile Organic Compounds by GC-MS

The sample was analyzed for Volatile Organics using EPA Method 8260. The following observations were made regarding this delivery group.

#### Second Source Exceptions

The upper control criterion was exceeded for the following analyte in Second Source Verification (SSV) CAL1275: trans-1,4-Dichloro-2-butene. The field samples analyzed in this sequence did not contain the analyte in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

#### Batch QC Notes and Discussion

Quality control samples for MS/DMS were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

#### EDB and DBCP by GC-ECD

The sample was analyzed for EDB and DBCP using EPA Method 8011. No problems were observed.

#### Metals by ICP-MS/ICP-OES/CVAA

The sample was analyzed for Total Metals using EPA Methods 6020/6010B/7470A. No problems were observed.

Approved by \_\_\_\_\_



Date \_\_\_\_\_

11/28/07

#### Batch QC Notes and Discussion

Quality control samples (i.e., Dup/Spike or MS/DMS samples) were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

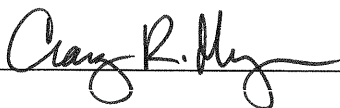
#### General Chemistry Parameters

The sample was analyzed for Inorganic Parameters using various EPA Methods. No problems were observed.

#### Batch QC Notes and Discussion

Quality control samples for Ammonia and Total Dissolved Solids (i.e., Dup/Spike or MS/DMS samples) were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

Approved by \_\_\_\_\_



Date \_\_\_\_\_

11/28/07

## Florida DEP Data Qualifiers

- B Results based upon colony counts outside the acceptable range.
- D Measurement was made in the field.
- H Value based on field kit determination; results may not be accurate.
- i The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J Estimated value (one of the following reasons is discussed in the project case narrative).
  - 1. The result may be inaccurate because the surrogate recovery limits have been exceeded.
  - 2. No known quality control criteria exists for the component.
  - 3. The reported value failed to meet the established quality control criteria for either precision or accuracy.
  - 4. The sample matrix interfered with the ability to make any accurate determination (e.g., primary and confirmation results show greater than 40% RPD).
  - 5. The data is questionable because of improper laboratory or field protocols (e.g., GC/MS Tune did not meet method criteria).
- K Off scale low. The value is less than the lowest calibration standard but greater than the method reporting limit (MRL).
- L Off scale high. The analyte is above the upper limit of the linear calibration range.
- M The MDL/MRL has been elevated because the analyte could not be accurately quantified due to matrix interference.
- N Presumptive evidence of the analyte. Confirmation was not performed.
- Q Sample held beyond the accepted holding time.
- T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only.
- U Indicates that the compound was analyzed for but not detected.
- V Indicates that the analyte was detected in both the sample and the associated method blank.
- Y The laboratory analysis was from an improperly preserved sample.
- Z Too many colonies were present (TNTC). The numeric value represents the filtration volume.



## Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144

**Service Request:** J0705415

**SAMPLE CROSS-REFERENCE**

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
J0705415-001	MW-13C	11/12/07	10:15
J0705415-002	Trip Blank	11/12/07	00:00

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705415  
**Date Collected:** 11/12/2007  
**Date Received:** 11/13/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-13C  
**Lab Code:** J0705415-001  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703797	
Vinyl Chloride	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703797	
Bromomethane	ND	U	1.0	0.15	1	11/15/07	11/15/07	JWG0703797	
Chloroethane	ND	U	1.0	0.19	1	11/15/07	11/15/07	JWG0703797	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/15/07	11/15/07	JWG0703797	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703797	
Acetone	ND	U	50	1.9	1	11/15/07	11/15/07	JWG0703797	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/15/07	11/15/07	JWG0703797	
Carbon Disulfide	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703797	
Methylene Chloride	ND	U	5.0	0.29	1	11/15/07	11/15/07	JWG0703797	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703797	
Acrylonitrile	ND	U	10	6.7	1	11/15/07	11/15/07	JWG0703797	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703797	
Vinyl Acetate	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703797	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703797	
2-Butanone (MEK)	ND	U	10	0.97	1	11/15/07	11/15/07	JWG0703797	
Bromochloromethane	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703797	
Chloroform	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703797	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/15/07	11/15/07	JWG0703797	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703797	
Benzene	ND	U	1.0	0.088	1	11/15/07	11/15/07	JWG0703797	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703797	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/15/07	11/15/07	JWG0703797	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703797	
Dibromomethane	ND	U	1.0	0.22	1	11/15/07	11/15/07	JWG0703797	
Bromodichloromethane	ND	U	1.0	0.099	1	11/15/07	11/15/07	JWG0703797	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703797	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/15/07	11/15/07	JWG0703797	
Toluene	ND	U	1.0	0.13	1	11/15/07	11/15/07	JWG0703797	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703797	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703797	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703797	
2-Hexanone	ND	U	25	1.4	1	11/15/07	11/15/07	JWG0703797	
Dibromochloromethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703797	

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705415  
**Date Collected:** 11/12/2007  
**Date Received:** 11/13/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-13C  
**Lab Code:** J0705415-001  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703797	
Chlorobenzene	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703797	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703797	
Ethylbenzene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703797	
m,p-Xylenes	ND	U	2.0	0.19	1	11/15/07	11/15/07	JWG0703797	
o-Xylene	ND	U	1.0	0.083	1	11/15/07	11/15/07	JWG0703797	
Styrene	ND	U	1.0	0.062	1	11/15/07	11/15/07	JWG0703797	
Bromoform	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703797	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703797	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/15/07	11/15/07	JWG0703797	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/15/07	11/15/07	JWG0703797	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/15/07	11/15/07	JWG0703797	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703797	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/15/07	11/15/07	JWG0703797	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	89	71-122	11/15/07	Acceptable
4-Bromofluorobenzene	108	75-120	11/15/07	Acceptable
Dibromofluoromethane	97	82-116	11/15/07	Acceptable
Toluene-d8	95	88-117	11/15/07	Acceptable

**Comments:** \_\_\_\_\_



## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705415  
**Date Collected:** 11/12/2007  
**Date Received:** 11/13/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Trip Blank  
**Lab Code:** J0705415-002  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703797	
Vinyl Chloride	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703797	
Bromomethane	ND	U	1.0	0.15	1	11/15/07	11/15/07	JWG0703797	
Chloroethane	ND	U	1.0	0.19	1	11/15/07	11/15/07	JWG0703797	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/15/07	11/15/07	JWG0703797	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703797	
Acetone	ND	U	50	1.9	1	11/15/07	11/15/07	JWG0703797	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/15/07	11/15/07	JWG0703797	
Carbon Disulfide	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703797	
Methylene Chloride	ND	U	5.0	0.29	1	11/15/07	11/15/07	JWG0703797	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703797	
Acrylonitrile	ND	U	10	6.7	1	11/15/07	11/15/07	JWG0703797	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703797	
Vinyl Acetate	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703797	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703797	
2-Butanone (MEK)	ND	U	10	0.97	1	11/15/07	11/15/07	JWG0703797	
Bromochloromethane	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703797	
Chloroform	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703797	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/15/07	11/15/07	JWG0703797	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703797	
Benzene	ND	U	1.0	0.088	1	11/15/07	11/15/07	JWG0703797	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703797	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/15/07	11/15/07	JWG0703797	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703797	
Dibromomethane	ND	U	1.0	0.22	1	11/15/07	11/15/07	JWG0703797	
Bromodichloromethane	ND	U	1.0	0.099	1	11/15/07	11/15/07	JWG0703797	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703797	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/15/07	11/15/07	JWG0703797	
Toluene	ND	U	1.0	0.13	1	11/15/07	11/15/07	JWG0703797	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703797	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703797	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703797	
2-Hexanone	ND	U	25	1.4	1	11/15/07	11/15/07	JWG0703797	
Dibromochloromethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703797	

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705415  
**Date Collected:** 11/12/2007  
**Date Received:** 11/13/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Trip Blank  
**Lab Code:** J0705415-002  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703797	
Chlorobenzene	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703797	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703797	
Ethylbenzene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703797	
m,p-Xylenes	ND	U	2.0	0.19	1	11/15/07	11/15/07	JWG0703797	
o-Xylene	ND	U	1.0	0.083	1	11/15/07	11/15/07	JWG0703797	
Styrene	ND	U	1.0	0.062	1	11/15/07	11/15/07	JWG0703797	
Bromoform	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703797	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703797	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/15/07	11/15/07	JWG0703797	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/15/07	11/15/07	JWG0703797	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/15/07	11/15/07	JWG0703797	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703797	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/15/07	11/15/07	JWG0703797	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	89	71-122	11/15/07	Acceptable
4-Bromofluorobenzene	103	75-120	11/15/07	Acceptable
Dibromofluoromethane	101	82-116	11/15/07	Acceptable
Toluene-d8	94	88-117	11/15/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705415  
**Date Collected:** NA  
**Date Received:** NA

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Method Blank  
**Lab Code:** JWG0703797-4  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/14/07	11/14/07	JWG0703797	
Vinyl Chloride	ND	U	1.0	0.12	1	11/14/07	11/14/07	JWG0703797	
Bromomethane	ND	U	1.0	0.15	1	11/14/07	11/14/07	JWG0703797	
Chloroethane	ND	U	1.0	0.19	1	11/14/07	11/14/07	JWG0703797	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/14/07	11/14/07	JWG0703797	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/14/07	11/14/07	JWG0703797	
Acetone	ND	U	50	1.9	1	11/14/07	11/14/07	JWG0703797	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/14/07	11/14/07	JWG0703797	
Carbon Disulfide	ND	U	10	1.1	1	11/14/07	11/14/07	JWG0703797	
Methylene Chloride	ND	U	5.0	0.29	1	11/14/07	11/14/07	JWG0703797	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/14/07	11/14/07	JWG0703797	
Acrylonitrile	ND	U	10	6.7	1	11/14/07	11/14/07	JWG0703797	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/14/07	11/14/07	JWG0703797	
Vinyl Acetate	ND	U	10	1.1	1	11/14/07	11/14/07	JWG0703797	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/14/07	11/14/07	JWG0703797	
2-Butanone (MEK)	ND	U	10	0.97	1	11/14/07	11/14/07	JWG0703797	
Bromochloromethane	ND	U	1.0	0.28	1	11/14/07	11/14/07	JWG0703797	
Chloroform	ND	U	1.0	0.12	1	11/14/07	11/14/07	JWG0703797	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/14/07	11/14/07	JWG0703797	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/14/07	11/14/07	JWG0703797	
Benzene	ND	U	1.0	0.088	1	11/14/07	11/14/07	JWG0703797	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/14/07	11/14/07	JWG0703797	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/14/07	11/14/07	JWG0703797	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/14/07	11/14/07	JWG0703797	
Dibromomethane	ND	U	1.0	0.22	1	11/14/07	11/14/07	JWG0703797	
Bromodichloromethane	ND	U	1.0	0.099	1	11/14/07	11/14/07	JWG0703797	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/14/07	11/14/07	JWG0703797	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/14/07	11/14/07	JWG0703797	
Toluene	ND	U	1.0	0.13	1	11/14/07	11/14/07	JWG0703797	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/14/07	11/14/07	JWG0703797	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/14/07	11/14/07	JWG0703797	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/14/07	11/14/07	JWG0703797	
2-Hexanone	ND	U	25	1.4	1	11/14/07	11/14/07	JWG0703797	
Dibromochloromethane	ND	U	1.0	0.12	1	11/14/07	11/14/07	JWG0703797	

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705415  
**Date Collected:** NA  
**Date Received:** NA

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Method Blank  
**Lab Code:** JWG0703797-4  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/14/07	11/14/07	JWG0703797	
Chlorobenzene	ND	U	1.0	0.10	1	11/14/07	11/14/07	JWG0703797	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/14/07	11/14/07	JWG0703797	
Ethylbenzene	ND	U	1.0	0.12	1	11/14/07	11/14/07	JWG0703797	
m,p-Xylenes	ND	U	2.0	0.19	1	11/14/07	11/14/07	JWG0703797	
o-Xylene	ND	U	1.0	0.083	1	11/14/07	11/14/07	JWG0703797	
Styrene	ND	U	1.0	0.062	1	11/14/07	11/14/07	JWG0703797	
Bromoform	ND	U	1.0	0.28	1	11/14/07	11/14/07	JWG0703797	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/14/07	11/14/07	JWG0703797	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/14/07	11/14/07	JWG0703797	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/14/07	11/14/07	JWG0703797	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/14/07	11/14/07	JWG0703797	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/14/07	11/14/07	JWG0703797	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/14/07	11/14/07	JWG0703797	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	82	71-122	11/14/07	Acceptable
4-Bromofluorobenzene	101	75-120	11/14/07	Acceptable
Dibromofluoromethane	86	82-116	11/14/07	Acceptable
Toluene-d8	92	88-117	11/14/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705415  
**Date Collected:** 11/12/2007  
**Date Received:** 11/13/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-13C  
**Lab Code:** J0705415-001  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703818	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703818	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	131	77-150	11/21/07	Acceptable

**Comments:** \_\_\_\_\_



## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705415  
**Date Collected:** NA  
**Date Received:** NA

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** Method Blank  
**Lab Code:** JWG0703818-3

**Units:** ug/L  
**Basis:** NA

**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703818	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703818	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	115	77-150	11/21/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705415  
**Date Collected:** 11/12/2007  
**Date Received:** 11/13/2007

## Total Metals

**Sample Name:** MW-13C  
**Lab Code:** J0705415-001

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/16/2007	11/19/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/16/2007	11/19/2007	U	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/16/2007	11/19/2007	18	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/16/2007	11/19/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/16/2007	11/19/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/16/2007	11/19/2007	2.2	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/16/2007	11/19/2007	U	
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/16/2007	11/19/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/20/2007	11/21/2007	561	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/16/2007	11/19/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/15/2007	11/15/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/16/2007	11/19/2007	0.85	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/16/2007	11/19/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/16/2007	11/19/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/16/2007	11/19/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/16/2007	11/19/2007	0.79	i
Zinc	EPA 3020A	6020	10	1.7	1.0	11/16/2007	11/19/2007	3.2	i

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705415  
**Date Collected:** N/A  
**Date Received:** N/A

### Total Metals

**Sample Name:** Method Blank  
**Lab Code:** MB5-1116

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.00	0.09	1.0	11/16/2007	11/19/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/16/2007	11/19/2007	U	
Barium	EPA 3020A	6020	2.00	0.14	1.0	11/16/2007	11/19/2007	U	
Beryllium	EPA 3020A	6020	1.00	0.08	1.0	11/16/2007	11/19/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/16/2007	11/19/2007	U	
Chromium	EPA 3020A	6020	2.00	0.12	1.0	11/16/2007	11/19/2007	0.17	i
Cobalt	EPA 3020A	6020	1.00	0.04	1.0	11/16/2007	11/19/2007	U	
Copper	EPA 3020A	6020	2.00	0.29	1.0	11/16/2007	11/19/2007	U	
Iron	EPA 3010A	6010B	50.0	17.0	1.0	11/20/2007	11/21/2007	U	
Lead	EPA 3020A	6020	1.00	0.30	1.0	11/16/2007	11/19/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/15/2007	11/15/2007	U	
Nickel	EPA 3020A	6020	2.00	0.69	1.0	11/16/2007	11/19/2007	U	
Selenium	EPA 3020A	6020	2.00	0.79	1.0	11/16/2007	11/19/2007	U	
Silver	EPA 3020A	6020	0.500	0.039	1.0	11/16/2007	11/19/2007	U	
Thallium	EPA 3020A	6020	1.00	0.08	1.0	11/16/2007	11/19/2007	U	
Vanadium	EPA 3020A	6020	2.00	0.18	1.0	11/16/2007	11/19/2007	0.65	i
Zinc	EPA 3020A	6020	10.0	1.7	1.0	11/16/2007	11/19/2007	U	

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705415  
**Date Collected:** 11/12/2007  
**Date Received:** 11/13/2007

### Total Metals Sodium

**Prep Method:** EPA 3010A  
**Analysis Method:** 6010B  
**Test Notes:**

**Units:** mg/L  
**Basis:** N/A

Sample Name:	Lab Code:	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
MW-13C	J0705415-001	0.50	0.15	1.0	11/20/2007	11/21/2007	7.6	
Method Blank	MB1-1120	0.50	0.15	1.0	11/20/2007	11/21/2007	U	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705415  
**Date Collected :** 11/12/07  
**Date Received :** 11/13/07

## Inorganic Parameters

**Sample Name :** MW-13C  
**Lab Code :** J0705415-001  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/14/07 11:27	0.17	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/13/07 12:59	11	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/13/07 13:56	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/15/07 08:30	32	



# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705415  
**Date Collected :** NA  
**Date Received :** NA

## Inorganic Parameters

**Sample Name :** Method Blank  
**Lab Code :** J0705415-MB  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/14/07 11:27	U	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/13/07 12:59	U	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/13/07 12:59	U	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/13/07 12:59	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/15/07 08:30	U	

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705415

**Surrogate Recovery Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** PERCENT  
**Level:** Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>	<u>Sur2</u>	<u>Sur3</u>	<u>Sur4</u>
MW-13C	J0705415-001	89	108	97	95
Trip Blank	J0705415-002	89	103	101	94
Method Blank	JWG0703797-4	82	101	86	92
Lab Control Sample	JWG0703797-3	83	93	91	99

**Surrogate Recovery Control Limits (%)**

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Sur1 = 1,2-Dichloroethane-d4	71-122
Sur2 = 4-Bromofluorobenzene	75-120
Sur3 = Dibromofluoromethane	82-116
Sur4 = Toluene-d8	88-117

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Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705415  
**Date Extracted:** 11/14/2007  
**Date Analyzed:** 11/14/2007

**Lab Control Spike Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703797

	Lab Control Sample JWG0703797-3			
	Lab Control Spike			%Rec Limits
Analyte Name	Result	Expected	%Rec	
Chloromethane	19.5	20.0	98	67-135
Vinyl Chloride	19.9	20.0	99	78-132
Bromomethane	24.7	20.0	124	79-130
Chloroethane	25.1	20.0	126	74-126
Trichlorofluoromethane	24.3	20.0	122	74-134
1,1-Dichloroethene	23.1	20.0	115	78-130
Acetone	103	100	103	67-133
Iodomethane (Methyl Iodide)	121	100	121	68-134
Carbon Disulfide	96.4	100	96	76-138
Methylene Chloride	22.4	20.0	112	72-124
trans-1,2-Dichloroethene	20.9	20.0	104	77-124
Acrylonitrile	110	100	110	77-127
1,1-Dichloroethane	22.8	20.0	114	80-128
Vinyl Acetate	89.4	100	89	61-148
cis-1,2-Dichloroethene	20.9	20.0	104	80-126
2-Butanone (MEK)	87.8	100	88	73-127
Bromochloromethane	22.7	20.0	114	79-129
Chloroform	19.8	20.0	99	83-124
1,1,1-Trichloroethane (TCA)	19.7	20.0	99	79-124
Carbon Tetrachloride	20.5	20.0	103	81-125
Benzene	20.3	20.0	102	79-119
1,2-Dichloroethane (EDC)	19.6	20.0	98	80-124
Trichloroethene (TCE)	20.0	20.0	100	76-124
1,2-Dichloropropane	19.1	20.0	96	79-123
Dibromomethane	23.1	20.0	115	83-123
Bromodichloromethane	19.3	20.0	97	81-123
cis-1,3-Dichloropropene	18.1	20.0	91	86-123
4-Methyl-2-pentanone (MIBK)	92.3	100	92	72-136
Toluene	21.1	20.0	105	86-117
trans-1,3-Dichloropropene	18.2	20.0	91	83-124
1,1,2-Trichloroethane	18.0	20.0	90	86-114
Tetrachloroethene (PCE)	19.8	20.0	99	80-121
2-Hexanone	103	100	103	71-138
Dibromochloromethane	19.3	20.0	96	82-121
1,2-Dibromoethane (EDB)	19.3	20.0	96	88-117
Chlorobenzene	19.6	20.0	98	86-113

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705415  
**Date Extracted:** 11/14/2007  
**Date Analyzed:** 11/14/2007

**Lab Control Spike Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703797

Analyte Name	Lab Control Sample JWG0703797-3 Lab Control Spike			%Rec Limits
	Result	Expected	%Rec	
1,1,1,2-Tetrachloroethane	18.8	20.0	94	85-117
Ethylbenzene	20.9	20.0	104	90-118
m,p-Xylenes	43.1	40.0	108	86-121
o-Xylene	20.6	20.0	103	89-119
Styrene	21.3	20.0	106	89-122
Bromoform	22.0	20.0	110	68-129
1,1,2,2-Tetrachloroethane	18.6	20.0	93	83-120
1,2,3-Trichloropropane	18.2	20.0	91	83-123
1,4-Dichlorobenzene	20.3	20.0	102	83-113
trans-1,4-Dichloro-2-butene	20.7	20.0	103	53-143
1,2-Dichlorobenzene	22.4	20.0	112	84-115
1,2-Dibromo-3-chloropropane (DBCP)	21.1	20.0	105	62-123

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705415

**Surrogate Recovery Summary**  
**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** PERCENT  
**Level:** Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>
MW-13C	J0705415-001	131
Method Blank	JWG0703818-3	115
Lab Control Sample	JWG0703818-1	118
Duplicate Lab Control Sample	JWG0703818-2	117

**Surrogate Recovery Control Limits (%)**

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Sur1 = 1,1,1,2-Tetrachloroethane 77-150

---

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.



**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705415  
**Date Extracted:** 11/16/2007  
**Date Analyzed:** 11/21/2007

**Lab Control Spike/Duplicate Lab Control Spike Summary**  
**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703818

Analyte Name	Lab Control Sample JWG0703818-1 Lab Control Spike			Duplicate Lab Control Sample JWG0703818-2 Duplicate Lab Control Spike			%Rec Limits	RPD	RPD Limit
	Result	Expected	%Rec	Result	Expected	%Rec			
1,2-Dibromoethane (EDB)	0.300	0.250	120	0.266	0.250	106	70-130	12	20
1,2-Dibromo-3-chloropropane (DBCP)	0.287	0.250	115	0.287	0.250	115	70-130	0	20

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705415  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date Extracted:** 11/16/2007  
**Date Analyzed:** 11/19/2007

### Laboratory Control Sample Summary Total Metals

**Sample Name:** Lab Control Sample  
**Lab Code:** LCS5-1116

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	True Value	Results	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Antimony	EPA 3020A	6020	50.0	50.4	101	80 - 120	
Arsenic	EPA 3020A	6020	50.0	51.3	103	80 - 120	
Barium	EPA 3020A	6020	50.0	49.6	99	80 - 120	
Beryllium	EPA 3020A	6020	50.0	49.5	99	80 - 120	
Cadmium	EPA 3020A	6020	50.0	50.1	100	80 - 120	
Chromium	EPA 3020A	6020	50.0	50.0	100	80 - 120	
Cobalt	EPA 3020A	6020	50.0	50.2	100	80 - 120	
Copper	EPA 3020A	6020	50.0	50.6	101	80 - 120	
Iron	EPA 3010A	6010B	2000	2030	102	80 - 120	
Lead	EPA 3020A	6020	50.0	50.2	100	80 - 120	
Mercury	METHOD	7470A	5.00	4.64	93	80 - 120	
Nickel	EPA 3020A	6020	50.0	48.7	97	80 - 120	
Selenium	EPA 3020A	6020	50.0	50.2	100	80 - 120	
Silver	EPA 3020A	6020	50.0	45.3	91	80 - 120	
Thallium	EPA 3020A	6020	50.0	48.8	98	80 - 120	
Vanadium	EPA 3020A	6020	50.0	51.7	103	80 - 120	
Zinc	EPA 3020A	6020	100	103.0	103	80 - 120	

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705415  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date Extracted:** 11/20/2007  
**Date Analyzed:** 11/21/2007

### Laboratory Control Sample Summary Total Metals

**Sample Name:** Lab Control Sample  
**Lab Code:** LCS1-1120

**Units:** mg/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	True Value	Results	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sodium	EPA 3010A	6010B	10.00	10.1	101	80 - 120	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705415  
**Date Collected :** 11/12/07  
**Date Received :** 11/13/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/13/07

### Duplicate Summary Inorganic Parameters

**Sample Name :** MW-13C  
**Lab Code :** J0705415-001DUP  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	Sample Result	Duplicate Sample		Relative Percent Difference	Result Notes
					Sample Result	Average		
Chloride	mg/L (ppm)	300.0	0.2	11	12	11.5	9	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	U	U	U	-	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705415  
**Date Collected :** 11/12/07  
**Date Received :** 11/13/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/13/07

### Matrix Spike Summary Inorganic Parameters

**Sample Name :** MW-13C  
**Lab Code :** J0705415-001MS  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS	Result Notes
								Percent Recovery Acceptance Limits	
Chloride	mg/L (ppm)	300.0	0.2	100	11	102.2	91	90-110	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	10	U	9.84	98	90-110	



# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705415  
**Date Collected :** NA  
**Date Received :** NA  
**Date Extracted :** NA  
**Date Analyzed :** 11/13-15/07

### Laboratory Control Sample Summary Inorganic Parameters

**Sample Name :** Laboratory Control Sample  
**Lab Code :** J0705415-LCS  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS	Result Notes
						Percent Recovery Acceptance Limits	
Ammonia as Nitrogen	mg/L (ppm)	350.1	5.00	5.04	101	90-110	
Chloride	mg/L (ppm)	300.0	10	9.77	98	90-110	
Chloride	mg/L (ppm)	300.0	250	240	96	90-110	
Nitrate as Nitrogen	mg/L (ppm)	300.0	10	9.41	94	90-110	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	300	299	100	85-115	

**Columbia Analytical Services, Inc.**  
Cooler Receipt and Preservation Form

Client: Geosyntec Service Request # 50705415  
 Project: Oak Hammock  
 Cooler received on 11-13-07 and opened on 11-13-07 by DMK  
 COURIER: CAS UPS FEDEX DHL CLIENT Tracking # J2081503322

- |    |   |            |        |     |
|----|---|------------|--------|-----|
| 1  | Were custody seals on outside of cooler?                                      | <u>Yes</u> | No     | N/A |
| 2  | Were seals intact, signed and dated?  | <u>Yes</u> | No     | N/A |
| 3  | Were custody papers properly filled out?                                      | <u>Yes</u> | No     | N/A |
| 4  | Temperature of cooler(s) upon receipt (Should be 4 +/- 2 degrees C)           | <u>1.6</u> |        |     |
| 5  | Correct Temperature?  | <u>Yes</u> | No     | N/A |
| 6  | Were Ice or Ice Packs present   | <u>Yes</u> | No     | N/A |
| 7  | Did all bottles arrive in good condition (unbroken, etc....)?                 | <u>Yes</u> | No     | N/A |
| 8  | Were all bottle labels complete (sample ID, preservation, etc....)?           | <u>Yes</u> | No     | N/A |
| 9  | Did all bottle labels and tags agree with custody papers?                     | <u>Yes</u> | No     | N/A |
| 10 | Were the correct bottles used for the tests indicated?                        | <u>Yes</u> | No     | N/A |
| 11 | Were all of the preserved bottles received with the appropriate preservative? | <u>Yes</u> | No     | N/A |
|    | <u>HNO3 pH&lt;2</u> <u>H2SO4 pH&lt;2</u> ZnAc2/NaOH pH>9 NaOH pH>12 HCl pH<2  |            |        |     |
|    | Preservative additions noted below  |            |        |     |
| 12 | Were all samples received within analysis holding times?                      | <u>Yes</u> | No     | N/A |
| 13 | Were VOA vials checked for absence of air bubbles? If present, note below     | <u>Yes</u> | No     | N/A |
| 14 | Where did the bottles originate?  | <u>CAS</u> | Client |     |

Sample ID	Reagent	Manuf. Lot # or CAS Chem ID	ml added	Initials

Additional comments and/or explanation of all discrepancies noted above:

Client approval to run samples if discrepancies noted: \_\_\_\_\_ Date: \_\_\_\_\_

SR #: J 0703415

Date:

11-1357

**Initials:**

ONE

Note that pH is checked and meets the required pH criterion listed in the column heading unless otherwise noted on cooler receipt form.

[illegible]



# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

8540 Baycenter Rd. • Jacksonville, FL 32256 • (904) 739-2277 • 800-695-7222 x06 • FAX (904) 739-2011

PAGE 1 OF 1

SR #

CAS Contact

50705415

Project Name <b>Duke Hamack</b>		Project Number <b>FQ11141</b>		ANALYSIS REQUESTED (Include Method Number)															
Project Manager <b>Kirk Wills</b>		Email Address <b>kwillsegeosyntec.com</b>		PRESERVATIVE	1	0	2	3	0										
Company/Address <b>Geosyntec</b>				B260 Metals VH3 CL, NO3, TS															
14055 Riveredge Dr. Suite 300																			
Tampa, FL 33637																			
Phone # <b>813-558-0990</b>		FAX # <b>813-558-9726</b>																	
Sampler's Signature <b>Joe Terry</b>		Sampler's Printed Name <b>Joe Terry</b>																	
CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	TIME	MATRIX															
MW-13C		11-12-07	1015	GW	9	X	X	X	X										
TRIP Blank					3	X													
SPECIAL INSTRUCTIONS/COMMENTS					TURNAROUND REQUIREMENTS RUSH (SURCHARGES APPLY) <input checked="" type="checkbox"/> STANDARD REQUESTED FAX DATE REQUESTED REPORT DATE					REPORT REQUIREMENTS <input checked="" type="checkbox"/> I. Results Only <input checked="" type="checkbox"/> II. Results + QC Summaries (LCS, DUP, MSMSD as required) <input type="checkbox"/> III. Results + QC and Calibration Summaries <input type="checkbox"/> IV. Data Validation Report with Raw Data <input type="checkbox"/> V. Specialized Forms / Custom Report Edata <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					INVOICE INFORMATION PO# BILL TO:				
See QAPP <input type="checkbox"/>					CUSTODY SEALS: Y N					RECEIVED BY									
SAMPLE RECEIPT: CONDITION/COOLER TEMP: 32					RELINQUISHED BY					RELINQUISHED BY									
Signature <b>Joe Terry</b>					Signature <b>VP</b>					Signature <b>Matthew Kelman</b>									
Printed Name <b>Joe Terry</b>					Printed Name <b>VP</b>					Printed Name									
Firm <b>Geosyntec</b>					Firm					Firm									
Date/Time <b>11-12-07</b>					Date/Time					Date/Time <b>11-13-07 9:45</b>									

November 30, 2007

Service Request No: J0705456

Kirk Wills  
GeoSyntec Consultants  
14055 Riveredge Drive  
Suite 300  
Tampa, FL 33637

**RE: Oak Hammock/FQ1144**

Dear Kirk:

Enclosed are the results of the sample(s) submitted to our laboratory on November 14, 2007. For your reference, these analyses have been assigned our service request number **J0705456**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. In accordance to the NELAC 2003 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please call if you have any questions. My extension is 224. You may also contact me via email at [CMyers@caslab.com](mailto:CMyers@caslab.com).

Respectfully submitted,

**Columbia Analytical Services, Inc.**



Craig Myers  
Project Chemist

Page 1 of 64

*Laboratory Manager: Greg Jordan*

*Quality Assurance Officer: Kathy Brungard*

*CAS Jacksonville is NELAC-accredited by the State of Florida, #E82502 valid through 6/30/08. Other state accreditations include: Arkansas, #88-0600 valid through 1/12/06; Georgia, #958 valid through 6/30/08; Louisiana, #02086 valid through 6/30/08; Texas, #T104704197-06-TX valid through 5/31/08; North Carolina, #527 valid through 12/31/07; South Carolina, #96021001 valid through 6/30/07.*



## COLUMBIA ANALYTICAL SERVICES, INC.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock  
**Sample Matrix:** Water

**Service Request No.:** J0705456  
**Date Received:** 11/14/07

### CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables, including results of QC samples analyzed from this delivery group. When appropriate to the procedure, method blank results have been reported with each analytical test. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Parameters that are included in the NELAC Fields of Testing but are not included in the lab's NELAC accreditation are identified in the discussion of each analytical procedure.

#### Sample Receipt

Eight water samples and one trip blank were received for analysis at Columbia Analytical Services on 11/14/07. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at  $4\pm 2^{\circ}\text{C}$  upon receipt at the lab except for aqueous samples designated for metals analyses, which were stored at room temperature.

#### Volatile Organic Compounds by GC-MS

The sample was analyzed for Volatile Organics using EPA Method 8260. The following observations were made regarding this delivery group.

#### Second Source Exceptions

The upper control criterion was exceeded for the following analyte in Second Source Verification (SSV) CAL 1275: trans-1-4-Dichloro-2-butene. The field samples analyzed in this sequence did not contain the analyte in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

#### Batch QC Notes and Discussion

Quality control samples for MS/DMS were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

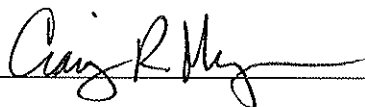
#### EDB and DBCP by GC-ECD

The sample was analyzed for EDB and DBCP using EPA Method 8011. No problems were observed.

#### Metals by ICP-MS/ICP-OES/CVAA

The sample was analyzed for Total Metals using EPA Methods 6020/6010B/7470A. No problems were observed.

Approved by \_\_\_\_\_



Date \_\_\_\_\_

11/30/07

#### Batch QC Notes and Discussion

Quality control samples (i.e., Dup/Spike or MS/DMS samples) were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

#### General Chemistry Parameters

The sample was analyzed for Inorganic Parameters using various EPA Methods. No problems were observed.

#### Batch QC Notes and Discussion

Quality control samples for some parameters (i.e., Dup/Spike or MS/DMS samples) were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

Approved by Craig R. Meyer Date 11/30/07

## Florida DEP Data Qualifiers

B	Results based upon colony counts outside the acceptable range.
D	Measurement was made in the field.
H	Value based on field kit determination; results may not be accurate.
i	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J	Estimated value (one of the following reasons is discussed in the project case narrative). <ol style="list-style-type: none"><li>1. The result may be inaccurate because the surrogate recovery limits have been exceeded.</li><li>2. No known quality control criteria exists for the component.</li><li>3. The reported value failed to meet the established quality control criteria for either precision or accuracy.</li><li>4. The sample matrix interfered with the ability to make any accurate determination (e.g., primary and confirmation results show greater than 40% RPD).</li><li>5. The data is questionable because of improper laboratory or field protocols (e.g., GC/MS Tune did not meet method criteria).</li></ol>
K	Off scale low. The value is less than the lowest calibration standard but greater than the method reporting limit (MRL).
L	Off scale high. The analyte is above the upper limit of the linear calibration range.
M	The MDL/MRL has been elevated because the analyte could not be accurately quantified due to matrix interference.
N	Presumptive evidence of the analyte. Confirmation was not performed.
Q	Sample held beyond the accepted holding time.
T	Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only.
U	Indicates that the compound was analyzed for but not detected.
V	Indicates that the analyte was detected in both the sample and the associated method blank.
Y	The laboratory analysis was from an improperly preserved sample.
Z	Too many colonies were present (TNTC). The numeric value represents the filtration volume.

## Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144

**Service Request:** J0705456

### SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
J0705456-001	MW-13A	11/13/07	09:05
J0705456-002	MW-13B	11/13/07	09:35
J0705456-003	MW-12A	11/13/07	11:50
J0705456-004	MW-12B	11/13/07	12:15
J0705456-005	MW-12C	11/13/07	11:25
J0705456-006	MW-11A	11/13/07	14:15
J0705456-007	MW-11B	11/13/07	14:55
J0705456-008	MW-11C	11/13/07	13:50
J0705456-009	Trip Blank	11/13/07	00:00



## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-13A  
**Lab Code:** J0705456-001  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Vinyl Chloride	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Bromomethane	ND	U	1.0	0.15	1	11/15/07	11/15/07	JWG0703809	
Chloroethane	ND	U	1.0	0.19	1	11/15/07	11/15/07	JWG0703809	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/15/07	11/15/07	JWG0703809	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
Acetone	ND	U	50	1.9	1	11/15/07	11/15/07	JWG0703809	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/15/07	11/15/07	JWG0703809	
Carbon Disulfide	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703809	
Methylene Chloride	ND	U	5.0	0.29	1	11/15/07	11/15/07	JWG0703809	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Acrylonitrile	ND	U	10	6.7	1	11/15/07	11/15/07	JWG0703809	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703809	
Vinyl Acetate	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703809	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
2-Butanone (MEK)	ND	U	10	0.97	1	11/15/07	11/15/07	JWG0703809	
Bromochloromethane	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703809	
Chloroform	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/15/07	11/15/07	JWG0703809	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
Benzene	ND	U	1.0	0.088	1	11/15/07	11/15/07	JWG0703809	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/15/07	11/15/07	JWG0703809	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703809	
Dibromomethane	ND	U	1.0	0.22	1	11/15/07	11/15/07	JWG0703809	
Bromodichloromethane	ND	U	1.0	0.099	1	11/15/07	11/15/07	JWG0703809	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/15/07	11/15/07	JWG0703809	
<b>Toluene</b>	<b>0.30</b>	<b>I</b>	1.0	0.13	1	11/15/07	11/15/07	JWG0703809	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
2-Hexanone	ND	U	25	1.4	1	11/15/07	11/15/07	JWG0703809	
Dibromochloromethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-13A  
**Lab Code:** J0705456-001  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Chlorobenzene	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703809	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Ethylbenzene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
<b>m,p-Xylenes</b>	<b>0.21</b>	<b>I</b>	2.0	0.19	1	11/15/07	11/15/07	JWG0703809	
o-Xylene	ND	U	1.0	0.083	1	11/15/07	11/15/07	JWG0703809	
Styrene	ND	U	1.0	0.062	1	11/15/07	11/15/07	JWG0703809	
Bromoform	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703809	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/15/07	11/15/07	JWG0703809	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/15/07	11/15/07	JWG0703809	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/15/07	11/15/07	JWG0703809	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703809	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/15/07	11/15/07	JWG0703809	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	81	71-122	11/15/07	Acceptable
4-Bromofluorobenzene	113	75-120	11/15/07	Acceptable
Dibromofluoromethane	93	82-116	11/15/07	Acceptable
Toluene-d8	96	88-117	11/15/07	Acceptable

**Comments:**

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-13B  
**Lab Code:** J0705456-002  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Vinyl Chloride	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Bromomethane	ND	U	1.0	0.15	1	11/15/07	11/15/07	JWG0703809	
Chloroethane	ND	U	1.0	0.19	1	11/15/07	11/15/07	JWG0703809	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/15/07	11/15/07	JWG0703809	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
Acetone	ND	U	50	1.9	1	11/15/07	11/15/07	JWG0703809	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/15/07	11/15/07	JWG0703809	
Carbon Disulfide	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703809	
Methylene Chloride	ND	U	5.0	0.29	1	11/15/07	11/15/07	JWG0703809	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Acrylonitrile	ND	U	10	6.7	1	11/15/07	11/15/07	JWG0703809	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703809	
Vinyl Acetate	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703809	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
2-Butanone (MEK)	ND	U	10	0.97	1	11/15/07	11/15/07	JWG0703809	
Bromochloromethane	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703809	
Chloroform	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/15/07	11/15/07	JWG0703809	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
Benzene	ND	U	1.0	0.088	1	11/15/07	11/15/07	JWG0703809	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/15/07	11/15/07	JWG0703809	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703809	
Dibromomethane	ND	U	1.0	0.22	1	11/15/07	11/15/07	JWG0703809	
Bromodichloromethane	ND	U	1.0	0.099	1	11/15/07	11/15/07	JWG0703809	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/15/07	11/15/07	JWG0703809	
Toluene	ND	U	1.0	0.13	1	11/15/07	11/15/07	JWG0703809	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
2-Hexanone	ND	U	25	1.4	1	11/15/07	11/15/07	JWG0703809	
Dibromochloromethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-13B  
**Lab Code:** J0705456-002  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Chlorobenzene	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703809	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Ethylbenzene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
m,p-Xylenes	ND	U	2.0	0.19	1	11/15/07	11/15/07	JWG0703809	
o-Xylene	ND	U	1.0	0.083	1	11/15/07	11/15/07	JWG0703809	
Styrene	ND	U	1.0	0.062	1	11/15/07	11/15/07	JWG0703809	
Bromoform	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703809	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/15/07	11/15/07	JWG0703809	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/15/07	11/15/07	JWG0703809	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/15/07	11/15/07	JWG0703809	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703809	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/15/07	11/15/07	JWG0703809	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	80	71-122	11/15/07	Acceptable
4-Bromofluorobenzene	108	75-120	11/15/07	Acceptable
Dibromofluoromethane	97	82-116	11/15/07	Acceptable
Toluene-d8	91	88-117	11/15/07	Acceptable

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-12A  
**Lab Code:** J0705456-003  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Vinyl Chloride	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Bromomethane	ND	U	1.0	0.15	1	11/15/07	11/15/07	JWG0703809	
Chloroethane	ND	U	1.0	0.19	1	11/15/07	11/15/07	JWG0703809	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/15/07	11/15/07	JWG0703809	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
Acetone	ND	U	50	1.9	1	11/15/07	11/15/07	JWG0703809	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/15/07	11/15/07	JWG0703809	
Carbon Disulfide	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703809	
Methylene Chloride	ND	U	5.0	0.29	1	11/15/07	11/15/07	JWG0703809	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Acrylonitrile	ND	U	10	6.7	1	11/15/07	11/15/07	JWG0703809	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703809	
Vinyl Acetate	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703809	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
2-Butanone (MEK)	ND	U	10	0.97	1	11/15/07	11/15/07	JWG0703809	
Bromochloromethane	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703809	
Chloroform	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/15/07	11/15/07	JWG0703809	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
Benzene	ND	U	1.0	0.088	1	11/15/07	11/15/07	JWG0703809	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/15/07	11/15/07	JWG0703809	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703809	
Dibromomethane	ND	U	1.0	0.22	1	11/15/07	11/15/07	JWG0703809	
Bromodichloromethane	ND	U	1.0	0.099	1	11/15/07	11/15/07	JWG0703809	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/15/07	11/15/07	JWG0703809	
Toluene	ND	U	1.0	0.13	1	11/15/07	11/15/07	JWG0703809	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
2-Hexanone	ND	U	25	1.4	1	11/15/07	11/15/07	JWG0703809	
Dibromochloromethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	

Comments:



## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-12A  
**Lab Code:** J0705456-003  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Chlorobenzene	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703809	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Ethylbenzene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
m,p-Xylenes	ND	U	2.0	0.19	1	11/15/07	11/15/07	JWG0703809	
o-Xylene	ND	U	1.0	0.083	1	11/15/07	11/15/07	JWG0703809	
Styrene	ND	U	1.0	0.062	1	11/15/07	11/15/07	JWG0703809	
Bromoform	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703809	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/15/07	11/15/07	JWG0703809	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/15/07	11/15/07	JWG0703809	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/15/07	11/15/07	JWG0703809	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703809	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/15/07	11/15/07	JWG0703809	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	82	71-122	11/15/07	Acceptable
4-Bromofluorobenzene	108	75-120	11/15/07	Acceptable
Dibromofluoromethane	92	82-116	11/15/07	Acceptable
Toluene-d8	97	88-117	11/15/07	Acceptable

Comments:

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705456  
 Date Collected: 11/13/2007  
 Date Received: 11/14/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-12B  
 Lab Code: J0705456-004  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Vinyl Chloride	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Bromomethane	ND	U	1.0	0.15	1	11/15/07	11/15/07	JWG0703809	
Chloroethane	ND	U	1.0	0.19	1	11/15/07	11/15/07	JWG0703809	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/15/07	11/15/07	JWG0703809	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
Acetone	ND	U	50	1.9	1	11/15/07	11/15/07	JWG0703809	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/15/07	11/15/07	JWG0703809	
Carbon Disulfide	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703809	
Methylene Chloride	ND	U	5.0	0.29	1	11/15/07	11/15/07	JWG0703809	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Acrylonitrile	ND	U	10	6.7	1	11/15/07	11/15/07	JWG0703809	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703809	
Vinyl Acetate	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703809	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
2-Butanone (MEK)	ND	U	10	0.97	1	11/15/07	11/15/07	JWG0703809	
Bromochloromethane	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703809	
Chloroform	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/15/07	11/15/07	JWG0703809	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
Benzene	ND	U	1.0	0.088	1	11/15/07	11/15/07	JWG0703809	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/15/07	11/15/07	JWG0703809	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703809	
Dibromomethane	ND	U	1.0	0.22	1	11/15/07	11/15/07	JWG0703809	
Bromodichloromethane	ND	U	1.0	0.099	1	11/15/07	11/15/07	JWG0703809	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/15/07	11/15/07	JWG0703809	
Toluene	ND	U	1.0	0.13	1	11/15/07	11/15/07	JWG0703809	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
2-Hexanone	ND	U	25	1.4	1	11/15/07	11/15/07	JWG0703809	
Dibromochloromethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-12B  
**Lab Code:** J0705456-004  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Chlorobenzene	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703809	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Ethylbenzene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
m,p-Xylenes	ND	U	2.0	0.19	1	11/15/07	11/15/07	JWG0703809	
o-Xylene	ND	U	1.0	0.083	1	11/15/07	11/15/07	JWG0703809	
Styrene	ND	U	1.0	0.062	1	11/15/07	11/15/07	JWG0703809	
Bromoform	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703809	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/15/07	11/15/07	JWG0703809	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/15/07	11/15/07	JWG0703809	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/15/07	11/15/07	JWG0703809	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703809	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/15/07	11/15/07	JWG0703809	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	79	71-122	11/15/07	Acceptable
4-Bromofluorobenzene	108	75-120	11/15/07	Acceptable
Dibromofluoromethane	98	82-116	11/15/07	Acceptable
Toluene-d8	96	88-117	11/15/07	Acceptable

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-12C  
**Lab Code:** J0705456-005  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Vinyl Chloride	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Bromomethane	ND	U	1.0	0.15	1	11/15/07	11/15/07	JWG0703809	
Chloroethane	ND	U	1.0	0.19	1	11/15/07	11/15/07	JWG0703809	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/15/07	11/15/07	JWG0703809	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
Acetone	ND	U	50	1.9	1	11/15/07	11/15/07	JWG0703809	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/15/07	11/15/07	JWG0703809	
Carbon Disulfide	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703809	
Methylene Chloride	ND	U	5.0	0.29	1	11/15/07	11/15/07	JWG0703809	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Acrylonitrile	ND	U	10	6.7	1	11/15/07	11/15/07	JWG0703809	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703809	
Vinyl Acetate	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703809	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
2-Butanone (MEK)	ND	U	10	0.97	1	11/15/07	11/15/07	JWG0703809	
Bromochloromethane	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703809	
Chloroform	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/15/07	11/15/07	JWG0703809	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
Benzene	ND	U	1.0	0.088	1	11/15/07	11/15/07	JWG0703809	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/15/07	11/15/07	JWG0703809	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703809	
Dibromomethane	ND	U	1.0	0.22	1	11/15/07	11/15/07	JWG0703809	
Bromodichloromethane	ND	U	1.0	0.099	1	11/15/07	11/15/07	JWG0703809	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/15/07	11/15/07	JWG0703809	
Toluene	ND	U	1.0	0.13	1	11/15/07	11/15/07	JWG0703809	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
2-Hexanone	ND	U	25	1.4	1	11/15/07	11/15/07	JWG0703809	
Dibromochloromethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-12C  
**Lab Code:** J0705456-005  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Chlorobenzene	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703809	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Ethylbenzene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
m,p-Xylenes	ND	U	2.0	0.19	1	11/15/07	11/15/07	JWG0703809	
o-Xylene	ND	U	1.0	0.083	1	11/15/07	11/15/07	JWG0703809	
Styrene	ND	U	1.0	0.062	1	11/15/07	11/15/07	JWG0703809	
Bromoform	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703809	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/15/07	11/15/07	JWG0703809	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/15/07	11/15/07	JWG0703809	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/15/07	11/15/07	JWG0703809	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703809	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/15/07	11/15/07	JWG0703809	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	85	71-122	11/15/07	Acceptable
4-Bromofluorobenzene	106	75-120	11/15/07	Acceptable
Dibromofluoromethane	103	82-116	11/15/07	Acceptable
Toluene-d8	96	88-117	11/15/07	Acceptable

Comments:



**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-11A  
**Lab Code:** J0705456-006  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Vinyl Chloride	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Bromomethane	ND	U	1.0	0.15	1	11/15/07	11/15/07	JWG0703809	
Chloroethane	ND	U	1.0	0.19	1	11/15/07	11/15/07	JWG0703809	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/15/07	11/15/07	JWG0703809	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
Acetone	ND	U	50	1.9	1	11/15/07	11/15/07	JWG0703809	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/15/07	11/15/07	JWG0703809	
Carbon Disulfide	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703809	
<b>Methylene Chloride</b>	<b>0.36</b>	<b>I</b>	5.0	0.29	1	11/15/07	11/15/07	JWG0703809	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Acrylonitrile	ND	U	10	6.7	1	11/15/07	11/15/07	JWG0703809	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703809	
Vinyl Acetate	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703809	
<b>cis-1,2-Dichloroethene</b>	<b>0.42</b>	<b>I</b>	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
2-Butanone (MEK)	ND	U	10	0.97	1	11/15/07	11/15/07	JWG0703809	
Bromochloromethane	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703809	
Chloroform	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/15/07	11/15/07	JWG0703809	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
<b>Benzene</b>	<b>0.70</b>	<b>I</b>	1.0	0.088	1	11/15/07	11/15/07	JWG0703809	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/15/07	11/15/07	JWG0703809	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703809	
Dibromomethane	ND	U	1.0	0.22	1	11/15/07	11/15/07	JWG0703809	
Bromodichloromethane	ND	U	1.0	0.099	1	11/15/07	11/15/07	JWG0703809	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/15/07	11/15/07	JWG0703809	
Toluene	ND	U	1.0	0.13	1	11/15/07	11/15/07	JWG0703809	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
2-Hexanone	ND	U	25	1.4	1	11/15/07	11/15/07	JWG0703809	
Dibromochloromethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-11A  
**Lab Code:** J0705456-006  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Chlorobenzene	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703809	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Ethylbenzene	0.50	I	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
m,p-Xylenes	0.54	I	2.0	0.19	1	11/15/07	11/15/07	JWG0703809	
o-Xylene	0.16	I	1.0	0.083	1	11/15/07	11/15/07	JWG0703809	
Styrene	ND	U	1.0	0.062	1	11/15/07	11/15/07	JWG0703809	
Bromoform	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703809	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/15/07	11/15/07	JWG0703809	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/15/07	11/15/07	JWG0703809	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/15/07	11/15/07	JWG0703809	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703809	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/15/07	11/15/07	JWG0703809	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	89	71-122	11/15/07	Acceptable
4-Bromofluorobenzene	107	75-120	11/15/07	Acceptable
Dibromofluoromethane	101	82-116	11/15/07	Acceptable
Toluene-d8	97	88-117	11/15/07	Acceptable

**Comments:**

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-11B  
**Lab Code:** J0705456-007  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Vinyl Chloride	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Bromomethane	ND	U	1.0	0.15	1	11/15/07	11/15/07	JWG0703809	
Chloroethane	ND	U	1.0	0.19	1	11/15/07	11/15/07	JWG0703809	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/15/07	11/15/07	JWG0703809	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
Acetone	ND	U	50	1.9	1	11/15/07	11/15/07	JWG0703809	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/15/07	11/15/07	JWG0703809	
Carbon Disulfide	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703809	
Methylene Chloride	ND	U	5.0	0.29	1	11/15/07	11/15/07	JWG0703809	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Acrylonitrile	ND	U	10	6.7	1	11/15/07	11/15/07	JWG0703809	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703809	
Vinyl Acetate	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703809	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
2-Butanone (MEK)	ND	U	10	0.97	1	11/15/07	11/15/07	JWG0703809	
Bromochloromethane	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703809	
Chloroform	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/15/07	11/15/07	JWG0703809	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
Benzene	ND	U	1.0	0.088	1	11/15/07	11/15/07	JWG0703809	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/15/07	11/15/07	JWG0703809	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703809	
Dibromomethane	ND	U	1.0	0.22	1	11/15/07	11/15/07	JWG0703809	
Bromodichloromethane	ND	U	1.0	0.099	1	11/15/07	11/15/07	JWG0703809	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/15/07	11/15/07	JWG0703809	
Toluene	ND	U	1.0	0.13	1	11/15/07	11/15/07	JWG0703809	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
2-Hexanone	ND	U	25	1.4	1	11/15/07	11/15/07	JWG0703809	
Dibromochloromethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-11B  
**Lab Code:** J0705456-007  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Chlorobenzene	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703809	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Ethylbenzene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
<b>m,p-Xylenes</b>	<b>0.19</b>	<b>I</b>	2.0	0.19	1	11/15/07	11/15/07	JWG0703809	
o-Xylene	ND	U	1.0	0.083	1	11/15/07	11/15/07	JWG0703809	
Styrene	ND	U	1.0	0.062	1	11/15/07	11/15/07	JWG0703809	
Bromoform	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703809	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/15/07	11/15/07	JWG0703809	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/15/07	11/15/07	JWG0703809	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/15/07	11/15/07	JWG0703809	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703809	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/15/07	11/15/07	JWG0703809	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	86	71-122	11/15/07	Acceptable
4-Bromofluorobenzene	111	75-120	11/15/07	Acceptable
Dibromofluoromethane	95	82-116	11/15/07	Acceptable
Toluene-d8	102	88-117	11/15/07	Acceptable

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-11C  
**Lab Code:** J0705456-008  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Vinyl Chloride	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Bromomethane	ND	U	1.0	0.15	1	11/15/07	11/15/07	JWG0703809	
Chloroethane	ND	U	1.0	0.19	1	11/15/07	11/15/07	JWG0703809	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/15/07	11/15/07	JWG0703809	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
Acetone	ND	U	50	1.9	1	11/15/07	11/15/07	JWG0703809	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/15/07	11/15/07	JWG0703809	
Carbon Disulfide	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703809	
Methylene Chloride	ND	U	5.0	0.29	1	11/15/07	11/15/07	JWG0703809	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Acrylonitrile	ND	U	10	6.7	1	11/15/07	11/15/07	JWG0703809	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703809	
Vinyl Acetate	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703809	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
2-Butanone (MEK)	ND	U	10	0.97	1	11/15/07	11/15/07	JWG0703809	
Bromochloromethane	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703809	
Chloroform	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/15/07	11/15/07	JWG0703809	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
Benzene	ND	U	1.0	0.088	1	11/15/07	11/15/07	JWG0703809	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/15/07	11/15/07	JWG0703809	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703809	
Dibromomethane	ND	U	1.0	0.22	1	11/15/07	11/15/07	JWG0703809	
Bromodichloromethane	ND	U	1.0	0.099	1	11/15/07	11/15/07	JWG0703809	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/15/07	11/15/07	JWG0703809	
<b>Toluene</b>	<b>0.23</b>	<b>I</b>	1.0	0.13	1	11/15/07	11/15/07	JWG0703809	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
2-Hexanone	ND	U	25	1.4	1	11/15/07	11/15/07	JWG0703809	
Dibromochloromethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	

Comments:



## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-11C  
**Lab Code:** J0705456-008  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Chlorobenzene	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703809	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Ethylbenzene	0.28	I	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
m,p-Xylenes	0.67	I	2.0	0.19	1	11/15/07	11/15/07	JWG0703809	
o-Xylene	0.16	I	1.0	0.083	1	11/15/07	11/15/07	JWG0703809	
Styrene	ND	U	1.0	0.062	1	11/15/07	11/15/07	JWG0703809	
Bromoform	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703809	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/15/07	11/15/07	JWG0703809	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/15/07	11/15/07	JWG0703809	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/15/07	11/15/07	JWG0703809	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703809	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/15/07	11/15/07	JWG0703809	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	91	71-122	11/15/07	Acceptable
4-Bromofluorobenzene	113	75-120	11/15/07	Acceptable
Dibromofluoromethane	98	82-116	11/15/07	Acceptable
Toluene-d8	95	88-117	11/15/07	Acceptable

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Trip Blank  
**Lab Code:** J0705456-009  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Vinyl Chloride	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Bromomethane	ND	U	1.0	0.15	1	11/15/07	11/15/07	JWG0703809	
Chloroethane	ND	U	1.0	0.19	1	11/15/07	11/15/07	JWG0703809	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/15/07	11/15/07	JWG0703809	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
Acetone	ND	U	50	1.9	1	11/15/07	11/15/07	JWG0703809	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/15/07	11/15/07	JWG0703809	
Carbon Disulfide	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703809	
Methylene Chloride	ND	U	5.0	0.29	1	11/15/07	11/15/07	JWG0703809	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Acrylonitrile	ND	U	10	6.7	1	11/15/07	11/15/07	JWG0703809	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703809	
Vinyl Acetate	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703809	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
2-Butanone (MEK)	ND	U	10	0.97	1	11/15/07	11/15/07	JWG0703809	
Bromochloromethane	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703809	
Chloroform	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/15/07	11/15/07	JWG0703809	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
Benzene	ND	U	1.0	0.088	1	11/15/07	11/15/07	JWG0703809	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/15/07	11/15/07	JWG0703809	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703809	
Dibromomethane	ND	U	1.0	0.22	1	11/15/07	11/15/07	JWG0703809	
Bromodichloromethane	ND	U	1.0	0.099	1	11/15/07	11/15/07	JWG0703809	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/15/07	11/15/07	JWG0703809	
Toluene	ND	U	1.0	0.13	1	11/15/07	11/15/07	JWG0703809	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
2-Hexanone	ND	U	25	1.4	1	11/15/07	11/15/07	JWG0703809	
Dibromochloromethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Trip Blank  
**Lab Code:** J0705456-009  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Chlorobenzene	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703809	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Ethylbenzene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
m,p-Xylenes	ND	U	2.0	0.19	1	11/15/07	11/15/07	JWG0703809	
o-Xylene	ND	U	1.0	0.083	1	11/15/07	11/15/07	JWG0703809	
Styrene	ND	U	1.0	0.062	1	11/15/07	11/15/07	JWG0703809	
Bromoform	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703809	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/15/07	11/15/07	JWG0703809	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/15/07	11/15/07	JWG0703809	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/15/07	11/15/07	JWG0703809	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703809	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/15/07	11/15/07	JWG0703809	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	80	71-122	11/15/07	Acceptable
4-Bromofluorobenzene	105	75-120	11/15/07	Acceptable
Dibromofluoromethane	87	82-116	11/15/07	Acceptable
Toluene-d8	95	88-117	11/15/07	Acceptable

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** NA  
**Date Received:** NA

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Method Blank  
**Lab Code:** JWG0703809-4  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Vinyl Chloride	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Bromomethane	ND	U	1.0	0.15	1	11/15/07	11/15/07	JWG0703809	
Chloroethane	ND	U	1.0	0.19	1	11/15/07	11/15/07	JWG0703809	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/15/07	11/15/07	JWG0703809	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
Acetone	ND	U	50	1.9	1	11/15/07	11/15/07	JWG0703809	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/15/07	11/15/07	JWG0703809	
Carbon Disulfide	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703809	
Methylene Chloride	ND	U	5.0	0.29	1	11/15/07	11/15/07	JWG0703809	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Acrylonitrile	ND	U	10	6.7	1	11/15/07	11/15/07	JWG0703809	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703809	
Vinyl Acetate	ND	U	10	1.1	1	11/15/07	11/15/07	JWG0703809	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
2-Butanone (MEK)	ND	U	10	0.97	1	11/15/07	11/15/07	JWG0703809	
Bromochloromethane	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703809	
Chloroform	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/15/07	11/15/07	JWG0703809	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
Benzene	ND	U	1.0	0.088	1	11/15/07	11/15/07	JWG0703809	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/15/07	11/15/07	JWG0703809	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/15/07	11/15/07	JWG0703809	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703809	
Dibromomethane	ND	U	1.0	0.22	1	11/15/07	11/15/07	JWG0703809	
Bromodichloromethane	ND	U	1.0	0.099	1	11/15/07	11/15/07	JWG0703809	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/15/07	11/15/07	JWG0703809	
Toluene	ND	U	1.0	0.13	1	11/15/07	11/15/07	JWG0703809	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/15/07	11/15/07	JWG0703809	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
2-Hexanone	ND	U	25	1.4	1	11/15/07	11/15/07	JWG0703809	
Dibromochloromethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** NA  
**Date Received:** NA

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Method Blank  
**Lab Code:** JWG0703809-4  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Chlorobenzene	ND	U	1.0	0.10	1	11/15/07	11/15/07	JWG0703809	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
Ethylbenzene	ND	U	1.0	0.12	1	11/15/07	11/15/07	JWG0703809	
m,p-Xylenes	ND	U	2.0	0.19	1	11/15/07	11/15/07	JWG0703809	
o-Xylene	ND	U	1.0	0.083	1	11/15/07	11/15/07	JWG0703809	
Styrene	ND	U	1.0	0.062	1	11/15/07	11/15/07	JWG0703809	
Bromoform	ND	U	1.0	0.28	1	11/15/07	11/15/07	JWG0703809	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/15/07	11/15/07	JWG0703809	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/15/07	11/15/07	JWG0703809	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/15/07	11/15/07	JWG0703809	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/15/07	11/15/07	JWG0703809	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/15/07	11/15/07	JWG0703809	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/15/07	11/15/07	JWG0703809	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	76	71-122	11/15/07	Acceptable
4-Bromofluorobenzene	107	75-120	11/15/07	Acceptable
Dibromofluoromethane	90	82-116	11/15/07	Acceptable
Toluene-d8	95	88-117	11/15/07	Acceptable

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-13A  
**Lab Code:** J0705456-001  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703818	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703818	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	108	77-150	11/21/07	Acceptable

Comments: \_\_\_\_\_



## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-13B  
**Lab Code:** J0705456-002  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703818	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703818	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	143	77-150	11/21/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-12A  
**Lab Code:** J0705456-003  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703818	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703818	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	107	77-150	11/21/07	Acceptable

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-12B  
**Lab Code:** J0705456-004  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703818	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703818	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	136	77-150	11/21/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-12C  
**Lab Code:** J0705456-005  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703818	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703818	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	129	77-150	11/21/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-11A  
**Lab Code:** J0705456-006  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703818	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703818	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	118	77-150	11/21/07	Acceptable

Comments: \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-11B  
**Lab Code:** J0705456-007  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703818	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703818	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	123	77-150	11/21/07	Acceptable

Comments: \_\_\_\_\_



## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-11C  
**Lab Code:** J0705456-008  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703818	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703818	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	117	77-150	11/21/07	Acceptable

Comments: \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Collected:** NA  
**Date Received:** NA

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** Method Blank  
**Lab Code:** JWG0703818-3  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703818	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703818	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	115	77-150	11/21/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705456  
 Date Collected: 11/13/2007  
 Date Received: 11/14/2007

## Total Metals

Sample Name: MW-13A  
 Lab Code: J0705456-001

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/19/2007	11/27/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/19/2007	11/27/2007	16	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/19/2007	11/27/2007	8.5	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/19/2007	11/27/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/19/2007	11/27/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/19/2007	11/27/2007	5.9	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/19/2007	11/27/2007	0.78	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/19/2007	11/27/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/20/2007	11/21/2007	17300	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/19/2007	11/27/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/19/2007	11/19/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/19/2007	11/27/2007	U	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/19/2007	11/27/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/19/2007	11/27/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/19/2007	11/27/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/19/2007	11/27/2007	3.5	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/19/2007	11/27/2007	U	

## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705456  
 Date Collected: 11/13/2007  
 Date Received: 11/14/2007

## Total Metals

Sample Name: MW-13B  
 Lab Code: J0705456-002

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/19/2007	11/27/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/19/2007	11/27/2007	U	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/19/2007	11/27/2007	15	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/19/2007	11/27/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/19/2007	11/27/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/19/2007	11/27/2007	2.5	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/19/2007	11/27/2007	0.18	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/19/2007	11/27/2007	6.7	
Iron	EPA 3010A	6010B	50	17	1.0	11/20/2007	11/21/2007	864	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/19/2007	11/27/2007	2.0	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/19/2007	11/19/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/19/2007	11/27/2007	U	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/19/2007	11/27/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/19/2007	11/27/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/19/2007	11/27/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/19/2007	11/27/2007	1.3	i
Zinc	EPA 3020A	6020	10	1.7	1.0	11/19/2007	11/27/2007	6.2	i

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## Total Metals

**Sample Name:** MW-12A  
**Lab Code:** J0705456-003

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/19/2007	11/27/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/19/2007	11/27/2007	4.1	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/19/2007	11/27/2007	9.5	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/19/2007	11/27/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/19/2007	11/27/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/19/2007	11/27/2007	3.3	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/19/2007	11/27/2007	1.1	
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/19/2007	11/27/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/20/2007	11/21/2007	17300	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/19/2007	11/27/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/19/2007	11/19/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/19/2007	11/27/2007	1.7	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/19/2007	11/27/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/19/2007	11/27/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/19/2007	11/27/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/19/2007	11/27/2007	1.5	i
Zinc	EPA 3020A	6020	10	1.7	1.0	11/19/2007	11/27/2007	3.0	i

## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705456  
 Date Collected: 11/13/2007  
 Date Received: 11/14/2007

## Total Metals

Sample Name: MW-12B  
 Lab Code: J0705456-004

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/19/2007	11/27/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/19/2007	11/27/2007	U	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/19/2007	11/27/2007	28	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/19/2007	11/27/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/19/2007	11/27/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/19/2007	11/27/2007	2.1	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/19/2007	11/27/2007	0.12	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/19/2007	11/27/2007	2.9	
Iron	EPA 3010A	6010B	50	17	1.0	11/20/2007	11/21/2007	988	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/19/2007	11/27/2007	1.1	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/19/2007	11/19/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/19/2007	11/27/2007	U	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/19/2007	11/27/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/19/2007	11/27/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/19/2007	11/27/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/19/2007	11/27/2007	0.46	i
Zinc	EPA 3020A	6020	10	1.7	1.0	11/19/2007	11/27/2007	7.8	i



## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705456  
 Date Collected: 11/13/2007  
 Date Received: 11/14/2007

## Total Metals

Sample Name: MW-12C  
 Lab Code: J0705456-005

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/19/2007	11/27/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/19/2007	11/27/2007	U	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/19/2007	11/27/2007	19	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/19/2007	11/27/2007	0.17	i
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/19/2007	11/27/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/19/2007	11/27/2007	1.7	i
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/19/2007	11/27/2007	U	
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/19/2007	11/27/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/20/2007	11/21/2007	670	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/19/2007	11/27/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/19/2007	11/19/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/19/2007	11/27/2007	U	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/19/2007	11/27/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/19/2007	11/27/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/19/2007	11/27/2007	0.099	i
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/19/2007	11/27/2007	0.40	i
Zinc	EPA 3020A	6020	10	1.7	1.0	11/19/2007	11/27/2007	U	

## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705456  
 Date Collected: 11/13/2007  
 Date Received: 11/14/2007

## Total Metals

Sample Name: MW-11A  
 Lab Code: J0705456-006

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/19/2007	11/27/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/19/2007	11/27/2007	19	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/19/2007	11/27/2007	8.4	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/19/2007	11/27/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/19/2007	11/27/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/19/2007	11/27/2007	7.0	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/19/2007	11/27/2007	1.0	
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/19/2007	11/27/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/20/2007	11/21/2007	20300	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/19/2007	11/27/2007	0.58	i
Mercury	METHOD	7470A	0.50	0.14	1.0	11/19/2007	11/19/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/19/2007	11/27/2007	1.4	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/19/2007	11/27/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/19/2007	11/27/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/19/2007	11/27/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/19/2007	11/27/2007	5.5	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/19/2007	11/27/2007	2.2	i

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705456  
**Date Collected:** 11/13/2007  
**Date Received:** 11/14/2007

## Total Metals

**Sample Name:** MW-11B  
**Lab Code:** J0705456-007

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/19/2007	11/27/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/19/2007	11/27/2007	U	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/19/2007	11/27/2007	20	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/19/2007	11/27/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/19/2007	11/27/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/19/2007	11/27/2007	2.2	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/19/2007	11/27/2007	0.12	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/19/2007	11/27/2007	2.8	
Iron	EPA 3010A	6010B	50	17	1.0	11/20/2007	11/21/2007	713	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/19/2007	11/27/2007	0.65	i
Mercury	METHOD	7470A	0.50	0.14	1.0	11/19/2007	11/19/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/19/2007	11/27/2007	U	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/19/2007	11/27/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/19/2007	11/27/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/19/2007	11/27/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/19/2007	11/27/2007	1.4	i
Zinc	EPA 3020A	6020	10	1.7	1.0	11/19/2007	11/27/2007	4.2	i

## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705456  
 Date Collected: 11/13/2007  
 Date Received: 11/14/2007

## Total Metals

Sample Name: MW-11C  
 Lab Code: J0705456-008

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/19/2007	11/27/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/19/2007	11/27/2007	U	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/19/2007	11/27/2007	7.6	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/19/2007	11/27/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/19/2007	11/27/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/19/2007	11/27/2007	1.8	i
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/19/2007	11/27/2007	U	
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/19/2007	11/27/2007	U	
Iron	EPA.3010A	6010B	50	17	1.0	11/20/2007	11/21/2007	512	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/19/2007	11/27/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/19/2007	11/19/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/19/2007	11/27/2007	U	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/19/2007	11/27/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/19/2007	11/27/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/19/2007	11/27/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/19/2007	11/27/2007	0.78	i
Zinc	EPA 3020A	6020	10	1.7	1.0	11/19/2007	11/27/2007	U	

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705456  
**Date Collected:** N/A  
**Date Received:** N/A

## Total Metals

**Sample Name:** Method Blank  
**Lab Code:** MB6-1119

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.00	0.09	1.0	11/19/2007	11/27/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/19/2007	11/27/2007	U	
Barium	EPA 3020A	6020	2.00	0.14	1.0	11/19/2007	11/27/2007	U	
Beryllium	EPA 3020A	6020	1.00	0.08	1.0	11/19/2007	11/27/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/19/2007	11/27/2007	U	
Chromium	EPA 3020A	6020	2.00	0.12	1.0	11/19/2007	11/27/2007	0.20	
Cobalt	EPA 3020A	6020	1.00	0.04	1.0	11/19/2007	11/27/2007	U	
Copper	EPA 3020A	6020	2.00	0.29	1.0	11/19/2007	11/27/2007	U	
Iron	EPA 3010A	6010B	50.0	17.0	1.0	11/20/2007	11/21/2007	U	
Lead	EPA 3020A	6020	1.00	0.30	1.0	11/19/2007	11/27/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/19/2007	11/19/2007	U	
Nickel	EPA 3020A	6020	2.00	0.69	1.0	11/19/2007	11/27/2007	U	
Selenium	EPA 3020A	6020	2.00	0.79	1.0	11/19/2007	11/27/2007	U	
Silver	EPA 3020A	6020	0.500	0.039	1.0	11/19/2007	11/27/2007	U	
Thallium	EPA 3020A	6020	1.00	0.08	1.0	11/19/2007	11/27/2007	U	
Vanadium	EPA 3020A	6020	2.00	0.18	1.0	11/19/2007	11/27/2007	U	
Zinc	EPA 3020A	6020	10.0	1.7	1.0	11/19/2007	11/27/2007	U	

## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705456  
 Date Collected: 11/13/2007  
 Date Received: 11/14/2007

**Total Metals  
Sodium**

Prep Method: EPA 3010A  
 Analysis Method: 6010B  
 Test Notes:

Units: mg/L  
 Basis: N/A

Sample Name:	Lab Code:	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
MW-13A	J0705456-001	0.50	0.15	1.0	11/20/2007	11/21/2007	11	
MW-13B	J0705456-002	0.50	0.15	1.0	11/20/2007	11/21/2007	8.3	
MW-12A	J0705456-003	0.50	0.15	1.0	11/20/2007	11/21/2007	10	
MW-12B	J0705456-004	0.50	0.15	1.0	11/20/2007	11/21/2007	7.2	
MW-12C	J0705456-005	0.50	0.15	1.0	11/20/2007	11/21/2007	5.5	
MW-11A	J0705456-006	0.50	0.15	1.0	11/20/2007	11/21/2007	10	
MW-11B	J0705456-007	0.50	0.15	1.0	11/20/2007	11/21/2007	15	
MW-11C	J0705456-008	0.50	0.15	1.0	11/20/2007	11/21/2007	10	
Method Blank	MB1-1120	0.50	0.15	1.0	11/20/2007	11/21/2007	U	



## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705456  
**Date Collected :** 11/13/07  
**Date Received :** 11/14/07

## Inorganic Parameters

**Sample Name :** MW-13A  
**Lab Code :** J0705456-001  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/17/07 16:38	1.3	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/14/07 21:35	17	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/15/07 23:29	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/16/07 08:30	110	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705456  
**Date Collected :** 11/13/07  
**Date Received :** 11/14/07

## Inorganic Parameters

**Sample Name :** MW-13B  
**Lab Code :** J0705456-002  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/17/07 16:38	0.14	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/14/07 21:35	13	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/15/07 23:48	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/16/07 08:30	59	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705456  
**Date Collected :** 11/13/07  
**Date Received :** 11/14/07

## Inorganic Parameters

**Sample Name :** MW-12A  
**Lab Code :** J0705456-003  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/17/07 16:38	0.70	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/14/07 21:35	10	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/15/07 00:07	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/16/07 08:30	100	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705456  
**Date Collected :** 11/13/07  
**Date Received :** 11/14/07

## Inorganic Parameters

**Sample Name :** MW-12B  
**Lab Code :** J0705456-004  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/17/07 16:38	0.12	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/14/07 21:35	16	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/15/07 00:26	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/16/07 08:30	56	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705456  
**Date Collected :** 11/13/07  
**Date Received :** 11/14/07

## Inorganic Parameters

**Sample Name :** MW-12C  
**Lab Code :** J0705456-005  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/17/07 16:38	0.11	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/14/07 21:35	8.4	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/15/07 01:42	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/16/07 08:30	43	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705456  
**Date Collected :** 11/13/07  
**Date Received :** 11/14/07

## Inorganic Parameters

**Sample Name :** MW-11A  
**Lab Code :** J0705456-006  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/17/07 16:38	9.4	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/14/07 21:35	10	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/15/07 02:01	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/16/07 08:30	180	



## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705456  
**Date Collected :** 11/13/07  
**Date Received :** 11/14/07

## Inorganic Parameters

**Sample Name :** MW-11B  
**Lab Code :** J0705456-007  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/17/07 16:38	0.056	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/14/07 21:35	24	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/15/07 02:20	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/16/07 08:30	69	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705456  
**Date Collected :** 11/13/07  
**Date Received :** 11/14/07

## Inorganic Parameters

**Sample Name :** MW-11C  
**Lab Code :** J0705456-008  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/17/07 16:38	0.086	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/14/07 21:35	18	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/15/07 02:39	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/16/07 08:30	85	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705456  
**Date Collected :** NA  
**Date Received :** NA

## Inorganic Parameters

**Sample Name :** Method Blank  
**Lab Code :** J0705456-MB  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/17/07 16:38	U	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/14/07 21:35	U	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/14/07 21:35	U	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/14/07 21:35	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/16/07 08:30	U	

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456

**Surrogate Recovery Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** PERCENT  
**Level:** Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>	<u>Sur2</u>	<u>Sur3</u>	<u>Sur4</u>
MW-13A	J0705456-001	81	113	93	96
MW-13B	J0705456-002	80	108	97	91
MW-12A	J0705456-003	82	108	92	97
MW-12B	J0705456-004	79	108	98	96
MW-12C	J0705456-005	85	106	103	96
MW-11A	J0705456-006	89	107	101	97
MW-11B	J0705456-007	86	111	95	102
MW-11C	J0705456-008	91	113	98	95
Trip Blank	J0705456-009	80	105	87	95
Method Blank	JWG0703809-4	76	107	90	95
Lab Control Sample	JWG0703809-3	83	97	94	99

**Surrogate Recovery Control Limits (%)**

Sur1 = 1,2-Dichloroethane-d4	71-122
Sur2 = 4-Bromofluorobenzene	75-120
Sur3 = Dibromofluoromethane	82-116
Sur4 = Toluene-d8	88-117

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Extracted:** 11/15/2007  
**Date Analyzed:** 11/15/2007

**Lab Control Spike Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703809

Lab Control Sample JWG0703809-3 Lab Control Spike				
Analyte Name	Result	Expected	%Rec	%Rec Limits
Chloromethane	16.9	20.0	85	67-135
Vinyl Chloride	17.5	20.0	87	78-132
Bromomethane	19.2	20.0	96	79-130
Chloroethane	20.6	20.0	103	74-126
Trichlorofluoromethane	22.1	20.0	110	74-134
1,1-Dichloroethene	22.4	20.0	112	78-130
Acetone	103	100	103	67-133
Iodomethane (Methyl Iodide)	118	100	118	68-134
Carbon Disulfide	87.9	100	88	76-138
Methylene Chloride	20.9	20.0	105	72-124
trans-1,2-Dichloroethene	20.4	20.0	102	77-124
Acrylonitrile	101	100	101	77-127
1,1-Dichloroethane	22.1	20.0	111	80-128
Vinyl Acetate	91.1	100	91	61-148
cis-1,2-Dichloroethene	21.6	20.0	108	80-126
2-Butanone (MEK)	85.4	100	85	73-127
Bromochloromethane	21.0	20.0	105	79-129
Chloroform	20.9	20.0	104	83-124
1,1,1-Trichloroethane (TCA)	20.7	20.0	103	79-124
Carbon Tetrachloride	20.1	20.0	101	81-125
Benzene	19.7	20.0	99	79-119
1,2-Dichloroethane (EDC)	20.5	20.0	102	80-124
Trichloroethene (TCE)	19.6	20.0	98	76-124
1,2-Dichloropropane	18.8	20.0	94	79-123
Dibromomethane	21.9	20.0	110	83-123
Bromodichloromethane	18.6	20.0	93	81-123
cis-1,3-Dichloropropene	19.1	20.0	95	86-123
4-Methyl-2-pentanone (MIBK)	95.6	100	96	72-136
Toluene	20.9	20.0	104	86-117
trans-1,3-Dichloropropene	19.2	20.0	96	83-124
1,1,2-Trichloroethane	19.1	20.0	95	86-114
Tetrachloroethene (PCE)	21.1	20.0	106	80-121
2-Hexanone	99.7	100	100	71-138
Dibromochloromethane	19.6	20.0	98	82-121
1,2-Dibromoethane (EDB)	20.7	20.0	104	88-117
Chlorobenzene	20.7	20.0	103	86-113

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456  
**Date Extracted:** 11/15/2007  
**Date Analyzed:** 11/15/2007

**Lab Control Spike Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703809

Lab Control Sample  
 JWG0703809-3  
**Lab Control Spike**

<b>Analyte Name</b>	<b>Result</b>	<b>Expected</b>	<b>%Rec</b>	<b>%Rec Limits</b>
1,1,1,2-Tetrachloroethane	19.9	20.0	100	85-117
Ethylbenzene	20.1	20.0	100	90-118
m,p-Xylenes	39.3	40.0	98	86-121
o-Xylene	19.7	20.0	99	89-119
Styrene	20.3	20.0	101	89-122
Bromoform	22.3	20.0	112	68-129
1,1,2,2-Tetrachloroethane	18.4	20.0	92	83-120
1,2,3-Trichloropropane	18.9	20.0	94	83-123
1,4-Dichlorobenzene	21.1	20.0	106	83-113
trans-1,4-Dichloro-2-butene	16.4	20.0	82	53-143
1,2-Dichlorobenzene	21.3	20.0	106	84-115
1,2-Dibromo-3-chloropropane (DBCP)	20.8	20.0	104	62-123

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.



**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705456

**Surrogate Recovery Summary**  
**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** PERCENT  
**Level:** Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>
MW-13A	J0705456-001	108
MW-13B	J0705456-002	143
MW-12A	J0705456-003	107
MW-12B	J0705456-004	136
MW-12C	J0705456-005	129
MW-11A	J0705456-006	118
MW-11B	J0705456-007	123
MW-11C	J0705456-008	117
Method Blank	JWG0703818-3	115
Lab Control Sample	JWG0703818-1	118
Duplicate Lab Control Sample	JWG0703818-2	117

**Surrogate Recovery Control Limits (%)**

---

Sur1 = 1,1,1,2-Tetrachloroethane 77-150

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Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705456  
 Date Extracted: 11/16/2007  
 Date Analyzed: 11/21/2007

**Lab Control Spike/Duplicate Lab Control Spike Summary**  
**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

Extraction Method: METHOD  
 Analysis Method: 8011

Units: ug/L  
 Basis: NA  
 Level: Low  
 Extraction Lot: JWG0703818

Analyte Name	Lab Control Sample JWG0703818-1 Lab Control Spike			Duplicate Lab Control Sample JWG0703818-2 Duplicate Lab Control Spike			%Rec Limits	RPD	RPD Limit
	Result	Expected	%Rec	Result	Expected	%Rec			
1,2-Dibromoethane (EDB)	0.300	0.250	120	0.266	0.250	106	70-130	12	20
1,2-Dibromo-3-chloropropane (DBCP)	0.287	0.250	115	0.287	0.250	115	70-130	0	20

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705456  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date Extracted:** 11/19/2007  
**Date Analyzed:** 11/27/2007

Laboratory Control Sample Summary  
Total Metals

**Sample Name:** Lab Control Sample  
**Lab Code:** LCS6-1119

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	True Value	Results	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Antimony	EPA 3020A	6020	50.0	53.6	107	80 - 120	
Arsenic	EPA 3020A	6020	50.0	50.5	101	80 - 120	
Barium	EPA 3020A	6020	50.0	52.1	104	80 - 120	
Beryllium	EPA 3020A	6020	50.0	50.4	101	80 - 120	
Cadmium	EPA 3020A	6020	50.0	52.4	105	80 - 120	
Chromium	EPA 3020A	6020	50.0	53.4	107	80 - 120	
Cobalt	EPA 3020A	6020	50.0	52.8	106	80 - 120	
Copper	EPA 3020A	6020	50.0	51.1	102	80 - 120	
Iron	EPA 3010A	6010B	2000	2030	102	80 - 120	
Lead	EPA 3020A	6020	50.0	54.2	108	80 - 120	
Mercury	METHOD	7470A	5.00	5.42	108	80 - 120	
Nickel	EPA 3020A	6020	50.0	52.3	105	80 - 120	
Selenium	EPA 3020A	6020	50.0	52.1	104	80 - 120	
Silver	EPA 3020A	6020	50.0	55.7	111	80 - 120	
Thallium	EPA 3020A	6020	50.0	53.8	108	80 - 120	
Vanadium	EPA 3020A	6020	50.0	53.7	107	80 - 120	
Zinc	EPA 3020A	6020	100	110.0	110	80 - 120	

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705456  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date Extracted:** 11/20/2007  
**Date Analyzed:** 11/21/2007

Laboratory Control Sample Summary  
Total Metals

**Sample Name:** Lab Control Sample  
**Lab Code:** LCS1-1120

**Units:** mg/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	True Value	Results	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sodium	EPA 3010A	6010B	10.00	10.1	101	80 - 120	

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705456  
**Date Collected :** 11/13/07  
**Date Received :** 11/14/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/17/07

Duplicate Summary  
 Inorganic Parameters

**Sample Name :** MW-11C  
**Lab Code :** J0705456-008DUP  
**Test Notes :**

Basis : NA

Analyte	Units	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.086	0.094	0.09	9	

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705456  
**Date Collected :** 11/13/07  
**Date Received :** 11/14/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/17/07

Matrix Spike Summary  
Inorganic Parameters

**Sample Name :** MW-11C  
**Lab Code :** J0705456-008MS  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS	Result Notes
								Percent Recovery Acceptance Limits	
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	5.00	0.086	5.41	106	90-110	



## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705456  
**Date Collected :** NA  
**Date Received :** NA  
**Date Extracted :** NA  
**Date Analyzed :** 11/14-17/07

Laboratory Control Sample Summary  
Inorganic Parameters

**Sample Name :** Laboratory Control Sample  
**Lab Code :** J0705456-LCS  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS	Result Notes
						Percent Recovery Acceptance Limits	
Ammonia as Nitrogen	mg/L (ppm)	350.1	5.00	5.20	104	90-110	
Chloride	mg/L (ppm)	300.0	250	245	98	90-110	
Chloride	mg/L (ppm)	300.0	10	9.89	99	90-110	
Nitrate as Nitrogen	mg/L (ppm)	300.0	10	9.91	99	90-110	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	300	316	105	85-115	

## Cooler Receipt and Preservation Form

Client: Geosyntec  
Project: Bak Hammock

Service Request #

50705456Cooler received on 11-14-07and opened on 11-14-07 by DMK

COURIER: CAS

UPS

FEDEX

DHL

CLIENT

Tracking #

59081503680

- 1 Were custody seals on outside of cooler?
- 2 Were seals intact, signed and dated?
- 3 Were custody papers properly filled out?
- 4 Temperature of cooler(s) upon receipt (Should be 4 +/- 2 degrees C) 1.6
- 5 Correct Temperature?
- 6 Were Ice or Ice Packs present
- 7 Did all bottles arrive in good condition (unbroken, etc....)?
- 8 Were all bottle labels complete (sample ID, preservation, etc....)?
- 9 Did all bottle labels and tags agree with custody papers?
- 10 Were the correct bottles used for the tests indicated?
- 11 Were all of the preserved bottles received with the appropriate preservative?

HNO3 pH<2H2SO4 pH<2

ZnAc2/NaOH pH&gt;9

NaOH pH&gt;12

HCl pH&lt;2

Preservative additions noted below

- 12 Were all samples received within analysis holding times?
- 13 Were VOA vials checked for absence of air bubbles? If present, note below
- 14 Where did the bottles originate?

Yes No N/AYes No N/AYes No N/AYes No N/AYes No N/AYes No N/AYes No N/AYes No N/AYes No N/AYes No N/AYes No N/AYes No N/ACAS Client

Sample ID	Reagent	Manuf. Lot # or CAS Chem ID	ml added	Initials

Additional comments and/or explanation of all discrepancies noted above:

Client approval to run samples if discrepancies noted:

Date:

SR #: J0205456

Date:

11-17-07

Initials:

DME

Note that pH is checked and meets the required pH criterion listed in the column heading unless otherwise noted on cooler receipt form.

Bottle Code																																								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30											
40mL	40mL	40mL	40mL	125mL	125mL	125mL	125mL	250mL	250mL	250mL	250mL	250mL	250mL	250mL	500mL	500mL	500mL	1L	1L	1L	1L	1L	20z	40z	80z	160z	5g	100mL	Misc.											
Pres.	G	G	G	P	P	P	P	P	P	P	P	P	P	G	P	P	P	P	P	G	G	G	G	G	G	G	ENC	P	Misc.											
Req pH	N/A	HCl	H2SO4	N/A	HCl	H2SO4	HNO3	N/A	H2SO4	HNO3	ZnAcetate	NaOH	NaOH	HNO3	H2SO4	HNO3	HNO3	HNO3	HNO3	HCl	H2SO4	<2	N/A	N/A	N/A	N/A	N/A	Sodium Thiosulfate	N/A											
Sample #	-001	-002	-003	-004	-005	-006	-007	-008	-009	-010	-011	-012	-013	-014	-015	-016	-017	-018	-019	-020	-021	-022	-023	-024	-025	-026	-027	-028	-029	-030	-031	-032	-033	-034	-035	-036	-037	-038	-039	-040



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# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

8540 Baycenter Rd. • Jacksonville, FL 32256 • (904) 739-2277 • 800-695-7222 x06 • FAX (904) 739-2011

PAGE 1 OF 1

SR #

50705456

Project Name		Project Number		ANALYSIS REQUESTED (Include Method Number and Preservative)		NUMBER OF CONTAINERS		PRESERVATIVE		REMARKS/ALTERNATE DESCRIPTION	
CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	TIME	MATRIX							
MW-13A		11-13-07	0905	GW				X	X	X	WACS ID # 19936
MW-13B			0935								19937
MW-12A			1150								19933
MW-12B			1215								19934
MW-12C			1125								19935
MW-11A			1415								19930
MW-11B			1455								19931
MW-11C			1350								19932
Trip Blank								X			

SPECIAL INSTRUCTIONS/COMMENTS		TURNAROUND REQUIREMENTS		REPORT REQUIREMENTS		INVOICE INFORMATION	
		RUSH (SURCHARGES APPLY) <input checked="" type="checkbox"/> STANDARD REQUESTED FAX DATE REQUESTED REPORT DATE		<input type="checkbox"/> I. Results Only <input checked="" type="checkbox"/> II. Results + QC Summaries (LCS, DUP, MSMSD as required) <input type="checkbox"/> III. Results + QC and Calibration Summaries <input type="checkbox"/> IV. Data Validation Report with Raw Data <input type="checkbox"/> V. Specialized Forms / Custom Report Edata Yes No		PO# BILL TO:	

SAMPLE RECEIPT: CONDITION/COOLER TEMP.		CUSTODY SEALS: Y N		RECEIVED BY		RELINQUISHED BY	
67				Signature: Joe Terry		Signature: Joe Terry	
RELINQUISHED BY		RELINQUISHED BY		Printed Name: Joe Terry		Printed Name: Joe Terry	
Firm: Geosyntec		Firm: UPS		Firm: UPS		Firm: UPS	
Date/Time: 11-13-07/1545		Date/Time: 11-13-07/1545		Date/Time: 11-13-07/1545		Date/Time: 11-13-07/1545	

See QAPP ☐

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

December 04, 2007

Service Request No: J0705504

Kirk Wills  
GeoSyntec Consultants  
14055 Riveredge Drive  
Suite 300  
Tampa, FL 33637

**RE: Oak Hammock/FQ1144**

Dear Kirk:

Enclosed are the results of the sample(s) submitted to our laboratory on November 15, 2007. For your reference, these analyses have been assigned our service request number **J0705504**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. In accordance to the NELAC 2003 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please call if you have any questions. My extension is 224. You may also contact me via email at [CMyers@caslab.com](mailto:CMyers@caslab.com).

Respectfully submitted,

**Columbia Analytical Services, Inc.**



Craig Myers  
Project Chemist

Page 1 of 111

*Laboratory Manager: Greg Jordan  
Quality Assurance Officer: Kathy Brungard*

*CAS Jacksonville is NELAC-accredited by the State of Florida, #E82502 valid through 6/30/08. Other state accreditations include: Arkansas, #88-0600 valid through 1/12/06; Georgia, #958 valid through 6/30/08; Louisiana, #02086 valid through 6/30/08; Texas, #T104704197-06-TX valid through 5/31/08; North Carolina, #527 valid through 12/31/07; South Carolina, #96021001 valid through 6/30/07.*



## COLUMBIA ANALYTICAL SERVICES, INC.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock  
**Sample Matrix:** Water

**Service Request No.:** J0705504  
**Date Received:** 11/15/07

### CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables, including results of QC samples analyzed from this delivery group. When appropriate to the procedure, method blank results have been reported with each analytical test. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Parameters that are included in the NELAC Fields of Testing but are not included in the lab's NELAC accreditation are identified in the discussion of each analytical procedure.

#### Sample Receipt

Fourteen water samples and one trip blank were received for analysis at Columbia Analytical Services on 11/15/07. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at  $4 \pm 2^{\circ}\text{C}$  upon receipt at the lab except for aqueous samples designated for metals analyses, which were stored at room temperature.

#### Volatile Organic Compounds by GC-MS

The sample was analyzed for Volatile Organics using EPA Method 8260. The following observations were made regarding this delivery group.

#### Second Source Exceptions

The upper control criterion was exceeded for the following analyte in Second Source Verification (SSV) CAL 1275: trans-1,4-Dichloro-2-butene. The field samples analyzed in this sequence did not contain the analyte in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

#### Lab Control Sample Exceptions

The spike recovery of Iodomethane (Methyl Iodide) for Laboratory Control Sample (LCS) JWG0703835-3 was outside the upper control criterion. The analyte in question was not detected in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data are not significantly affected. No further corrective action was appropriate.

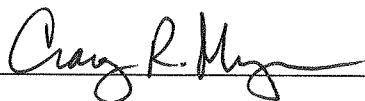
#### Batch QC Notes and Discussion

Quality control samples for MS/DMS were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

#### EDB and DBCP by GC-ECD

The sample was analyzed for EDB and DBCP using EPA Method 8011. No problems were observed.

Approved by \_\_\_\_\_



Date \_\_\_\_\_

12/4/07



### Metals by ICP-MS/ICP-OES/CVAA

The sample was analyzed for Total Metals using EPA Methods 6020/6010B/7470A. The following observations were made regarding this delivery group.

### Matrix Spike Recovery Exceptions

The matrix spike dup recovery of Total Iron for sample MW-16B was outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. No further corrective action was appropriate.

### Elevated Method Reporting Limits

The samples for analysis of total metals by EPA Method 6020 (ICP-MS) were diluted in order to eliminate matrix effects and internal standard failure. The reporting limits are adjusted to reflect the dilution.

### Batch QC Notes and Discussion

Quality control samples for some parameters (i.e., Dup/Spike or MS/DMS samples) were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

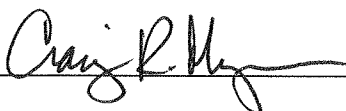
### General Chemistry Parameters

The sample was analyzed for Inorganic Parameters using various EPA Methods. No problems were observed.

### Batch QC Notes and Discussion

Quality control samples for some parameters (i.e., Dup/Spike or MS/DMS samples) were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

Approved by \_\_\_\_\_



Date \_\_\_\_\_

12/4/07

## Florida DEP Data Qualifiers

- B Results based upon colony counts outside the acceptable range.
- D Measurement was made in the field.
- H Value based on field kit determination; results may not be accurate.
- i The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J Estimated value (one of the following reasons is discussed in the project case narrative).
1. The result may be inaccurate because the surrogate recovery limits have been exceeded.
  2. No known quality control criteria exists for the component.
  3. The reported value failed to meet the established quality control criteria for either precision or accuracy.
  4. The sample matrix interfered with the ability to make any accurate determination (e.g., primary and confirmation results show greater than 40% RPD).
  5. The data is questionable because of improper laboratory or field protocols (e.g., GC/MS Tune did not meet method criteria).
- K Off scale low. The value is less than the lowest calibration standard but greater than the method reporting limit (MRL).
- L Off scale high. The analyte is above the upper limit of the linear calibration range.
- M The MDL/MRL has been elevated because the analyte could not be accurately quantified due to matrix interference.
- N Presumptive evidence of the analyte. Confirmation was not performed.
- Q Sample held beyond the accepted holding time.
- T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only.
- U Indicates that the compound was analyzed for but not detected.
- V Indicates that the analyte was detected in both the sample and the associated method blank.
- Y The laboratory analysis was from an improperly preserved sample.
- Z Too many colonies were present (TNTC). The numeric value represents the filtration volume.

## Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144

**Service Request:** J0705504

**SAMPLE CROSS-REFERENCE**

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
J0705504-001	MW-10A	11/14/07	10:40
J0705504-002	MW-10B	11/14/07	09:35
J0705504-003	MW-10C	11/14/07	10:20
J0705504-004	MW-9A	11/14/07	13:15
J0705504-005	MW-9B	11/14/07	13:40
J0705504-006	MW-9C	11/14/07	14:05
J0705504-007	MW-8A	11/14/07	16:20
J0705504-008	MW-8B	11/14/07	16:00
J0705504-009	MW-8C	11/14/07	15:35
J0705504-010	MW-16B	11/14/07	10:20
J0705504-011	MW-16C	11/14/07	12:20
J0705504-012	MW-17B	11/14/07	15:50
J0705504-013	Equipment Blank	11/14/07	10:55
J0705504-014	Dup-1	11/14/07	13:25
J0705504-015	Trip Blank	11/14/07	00:00

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705504  
 Date Collected: 11/14/2007  
 Date Received: 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-10A  
 Lab Code: J0705504-001  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Vinyl Chloride	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Bromomethane	ND	U	1.0	0.15	1	11/16/07	11/16/07	JWG0703835	
Chloroethane	ND	U	1.0	0.19	1	11/16/07	11/16/07	JWG0703835	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
Acetone	ND	U	50	1.9	1	11/16/07	11/16/07	JWG0703835	
Iodomethane (Methyl Iodide)	ND	UJ	5.0	1.1	1	11/16/07	11/16/07	JWG0703835	J(3)
Carbon Disulfide	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
Methylene Chloride	ND	U	5.0	0.29	1	11/16/07	11/16/07	JWG0703835	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Acrylonitrile	ND	U	10	6.7	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
Vinyl Acetate	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
2-Butanone (MEK)	ND	U	10	0.97	1	11/16/07	11/16/07	JWG0703835	
Bromochloromethane	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
Chloroform	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/16/07	11/16/07	JWG0703835	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Benzene	ND	U	1.0	0.088	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
Dibromomethane	ND	U	1.0	0.22	1	11/16/07	11/16/07	JWG0703835	
Bromodichloromethane	ND	U	1.0	0.099	1	11/16/07	11/16/07	JWG0703835	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/16/07	11/16/07	JWG0703835	
<b>Toluene</b>	<b>0.29</b>	<b>I</b>	1.0	0.13	1	11/16/07	11/16/07	JWG0703835	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
2-Hexanone	ND	U	25	1.4	1	11/16/07	11/16/07	JWG0703835	
Dibromochloromethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-10A  
**Lab Code:** J0705504-001  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Chlorobenzene	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Ethylbenzene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
m,p-Xylenes	ND	U	2.0	0.19	1	11/16/07	11/16/07	JWG0703835	
o-Xylene	ND	U	1.0	0.083	1	11/16/07	11/16/07	JWG0703835	
Styrene	ND	U	1.0	0.062	1	11/16/07	11/16/07	JWG0703835	
Bromoform	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/16/07	11/16/07	JWG0703835	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/16/07	11/16/07	JWG0703835	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/16/07	11/16/07	JWG0703835	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/16/07	11/16/07	JWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	77	71-122	11/16/07	Acceptable
4-Bromofluorobenzene	111	75-120	11/16/07	Acceptable
Dibromofluoromethane	91	82-116	11/16/07	Acceptable
Toluene-d8	98	88-117	11/16/07	Acceptable

Comments:



## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-10B  
**Lab Code:** J0705504-002  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Vinyl Chloride	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Bromomethane	ND	U	1.0	0.15	1	11/16/07	11/16/07	JWG0703835	
Chloroethane	ND	U	1.0	0.19	1	11/16/07	11/16/07	JWG0703835	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
Acetone	ND	U	50	1.9	1	11/16/07	11/16/07	JWG0703835	
Iodomethane (Methyl Iodide)	ND	UJ	5.0	1.1	1	11/16/07	11/16/07	JWG0703835	J(3)
Carbon Disulfide	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
Methylene Chloride	ND	U	5.0	0.29	1	11/16/07	11/16/07	JWG0703835	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Acrylonitrile	ND	U	10	6.7	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
Vinyl Acetate	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
2-Butanone (MEK)	ND	U	10	0.97	1	11/16/07	11/16/07	JWG0703835	
Bromochloromethane	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
Chloroform	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/16/07	11/16/07	JWG0703835	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Benzene	ND	U	1.0	0.088	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
Dibromomethane	ND	U	1.0	0.22	1	11/16/07	11/16/07	JWG0703835	
Bromodichloromethane	ND	U	1.0	0.099	1	11/16/07	11/16/07	JWG0703835	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/16/07	11/16/07	JWG0703835	
Toluene	ND	U	1.0	0.13	1	11/16/07	11/16/07	JWG0703835	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
2-Hexanone	ND	U	25	1.4	1	11/16/07	11/16/07	JWG0703835	
Dibromochloromethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-10B  
**Lab Code:** J0705504-002  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Chlorobenzene	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Ethylbenzene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
m,p-Xylenes	ND	U	2.0	0.19	1	11/16/07	11/16/07	JWG0703835	
o-Xylene	ND	U	1.0	0.083	1	11/16/07	11/16/07	JWG0703835	
Styrene	ND	U	1.0	0.062	1	11/16/07	11/16/07	JWG0703835	
Bromoform	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/16/07	11/16/07	JWG0703835	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/16/07	11/16/07	JWG0703835	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/16/07	11/16/07	JWG0703835	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/16/07	11/16/07	JWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	86	71-122	11/16/07	Acceptable
4-Bromofluorobenzene	107	75-120	11/16/07	Acceptable
Dibromofluoromethane	97	82-116	11/16/07	Acceptable
Toluene-d8	97	88-117	11/16/07	Acceptable

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-10C  
**Lab Code:** J0705504-003  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Vinyl Chloride	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Bromomethane	ND	U	1.0	0.15	1	11/16/07	11/16/07	JWG0703835	
Chloroethane	ND	U	1.0	0.19	1	11/16/07	11/16/07	JWG0703835	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
Acetone	ND	U	50	1.9	1	11/16/07	11/16/07	JWG0703835	
Iodomethane (Methyl Iodide)	ND	UJ	5.0	1.1	1	11/16/07	11/16/07	JWG0703835	J(3)
Carbon Disulfide	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
Methylene Chloride	ND	U	5.0	0.29	1	11/16/07	11/16/07	JWG0703835	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Acrylonitrile	ND	U	10	6.7	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
Vinyl Acetate	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
2-Butanone (MEK)	ND	U	10	0.97	1	11/16/07	11/16/07	JWG0703835	
Bromochloromethane	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
Chloroform	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/16/07	11/16/07	JWG0703835	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Benzene	ND	U	1.0	0.088	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
Dibromomethane	ND	U	1.0	0.22	1	11/16/07	11/16/07	JWG0703835	
Bromodichloromethane	ND	U	1.0	0.099	1	11/16/07	11/16/07	JWG0703835	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/16/07	11/16/07	JWG0703835	
Toluene	ND	U	1.0	0.13	1	11/16/07	11/16/07	JWG0703835	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
2-Hexanone	ND	U	25	1.4	1	11/16/07	11/16/07	JWG0703835	
Dibromochloromethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-10C  
**Lab Code:** J0705504-003  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Chlorobenzene	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Ethylbenzene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
m,p-Xylenes	ND	U	2.0	0.19	1	11/16/07	11/16/07	JWG0703835	
o-Xylene	ND	U	1.0	0.083	1	11/16/07	11/16/07	JWG0703835	
Styrene	ND	U	1.0	0.062	1	11/16/07	11/16/07	JWG0703835	
Bromoform	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/16/07	11/16/07	JWG0703835	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/16/07	11/16/07	JWG0703835	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/16/07	11/16/07	JWG0703835	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/16/07	11/16/07	JWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	81	71-122	11/16/07	Acceptable
4-Bromofluorobenzene	106	75-120	11/16/07	Acceptable
Dibromofluoromethane	96	82-116	11/16/07	Acceptable
Toluene-d8	98	88-117	11/16/07	Acceptable

**Comments:**

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-9A  
**Lab Code:** J0705504-004  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
<b>Vinyl Chloride</b>	<b>2.1</b>		1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Bromomethane	ND	U	1.0	0.15	1	11/16/07	11/16/07	JWG0703835	
Chloroethane	ND	U	1.0	0.19	1	11/16/07	11/16/07	JWG0703835	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
Acetone	ND	U	50	1.9	1	11/16/07	11/16/07	JWG0703835	
Iodomethane (Methyl Iodide)	ND	UJ	5.0	1.1	1	11/16/07	11/16/07	JWG0703835	J(3)
Carbon Disulfide	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
Methylene Chloride	ND	U	5.0	0.29	1	11/16/07	11/16/07	JWG0703835	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Acrylonitrile	ND	U	10	6.7	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
Vinyl Acetate	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
<b>cis-1,2-Dichloroethene</b>	<b>0.50</b>	I	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
2-Butanone (MEK)	ND	U	10	0.97	1	11/16/07	11/16/07	JWG0703835	
Bromochloromethane	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
Chloroform	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/16/07	11/16/07	JWG0703835	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
<b>Benzene</b>	<b>1.4</b>		1.0	0.088	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
Dibromomethane	ND	U	1.0	0.22	1	11/16/07	11/16/07	JWG0703835	
Bromodichloromethane	ND	U	1.0	0.099	1	11/16/07	11/16/07	JWG0703835	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/16/07	11/16/07	JWG0703835	
<b>Toluene</b>	<b>0.33</b>	I	1.0	0.13	1	11/16/07	11/16/07	JWG0703835	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
2-Hexanone	ND	U	25	1.4	1	11/16/07	11/16/07	JWG0703835	
Dibromochloromethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-9A  
**Lab Code:** J0705504-004  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Chlorobenzene	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Ethylbenzene	1.7		1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
m,p-Xylenes	2.2		2.0	0.19	1	11/16/07	11/16/07	JWG0703835	
o-Xylene	0.74	I	1.0	0.083	1	11/16/07	11/16/07	JWG0703835	
Styrene	ND	U	1.0	0.062	1	11/16/07	11/16/07	JWG0703835	
Bromoform	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/16/07	11/16/07	JWG0703835	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/16/07	11/16/07	JWG0703835	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/16/07	11/16/07	JWG0703835	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/16/07	11/16/07	JWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	77	71-122	11/16/07	Acceptable
4-Bromofluorobenzene	99	75-120	11/16/07	Acceptable
Dibromofluoromethane	93	82-116	11/16/07	Acceptable
Toluene-d8	97	88-117	11/16/07	Acceptable

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705504  
 Date Collected: 11/14/2007  
 Date Received: 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-9B  
 Lab Code: J0705504-005  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Vinyl Chloride	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Bromomethane	ND	U	1.0	0.15	1	11/16/07	11/16/07	JWG0703835	
Chloroethane	ND	U	1.0	0.19	1	11/16/07	11/16/07	JWG0703835	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
Acetone	ND	U	50	1.9	1	11/16/07	11/16/07	JWG0703835	
Iodomethane (Methyl Iodide)	ND	UJ	5.0	1.1	1	11/16/07	11/16/07	JWG0703835	J(3)
Carbon Disulfide	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
Methylene Chloride	ND	U	5.0	0.29	1	11/16/07	11/16/07	JWG0703835	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Acrylonitrile	ND	U	10	6.7	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
Vinyl Acetate	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
2-Butanone (MEK)	ND	U	10	0.97	1	11/16/07	11/16/07	JWG0703835	
Bromochloromethane	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
Chloroform	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/16/07	11/16/07	JWG0703835	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Benzene	ND	U	1.0	0.088	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
Dibromomethane	ND	U	1.0	0.22	1	11/16/07	11/16/07	JWG0703835	
Bromodichloromethane	ND	U	1.0	0.099	1	11/16/07	11/16/07	JWG0703835	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/16/07	11/16/07	JWG0703835	
Toluene	ND	U	1.0	0.13	1	11/16/07	11/16/07	JWG0703835	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
2-Hexanone	ND	U	25	1.4	1	11/16/07	11/16/07	JWG0703835	
Dibromochloromethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	

Comments:



## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-9B  
**Lab Code:** J0705504-005  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Chlorobenzene	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Ethylbenzene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
m,p-Xylenes	ND	U	2.0	0.19	1	11/16/07	11/16/07	JWG0703835	
o-Xylene	ND	U	1.0	0.083	1	11/16/07	11/16/07	JWG0703835	
Styrene	ND	U	1.0	0.062	1	11/16/07	11/16/07	JWG0703835	
Bromoform	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/16/07	11/16/07	JWG0703835	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/16/07	11/16/07	JWG0703835	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/16/07	11/16/07	JWG0703835	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/16/07	11/16/07	JWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	79	71-122	11/16/07	Acceptable
4-Bromofluorobenzene	113	75-120	11/16/07	Acceptable
Dibromofluoromethane	97	82-116	11/16/07	Acceptable
Toluene-d8	98	88-117	11/16/07	Acceptable

**Comments:**

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705504  
 Date Collected: 11/14/2007  
 Date Received: 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-9C  
 Lab Code: J0705504-006  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Vinyl Chloride	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Bromomethane	ND	U	1.0	0.15	1	11/16/07	11/16/07	JWG0703835	
Chloroethane	ND	U	1.0	0.19	1	11/16/07	11/16/07	JWG0703835	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
Acetone	ND	U	50	1.9	1	11/16/07	11/16/07	JWG0703835	
Iodomethane (Methyl Iodide)	ND	UJ	5.0	1.1	1	11/16/07	11/16/07	JWG0703835	J(3)
Carbon Disulfide	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
Methylene Chloride	ND	U	5.0	0.29	1	11/16/07	11/16/07	JWG0703835	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Acrylonitrile	ND	U	10	6.7	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
Vinyl Acetate	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
2-Butanone (MEK)	ND	U	10	0.97	1	11/16/07	11/16/07	JWG0703835	
Bromochloromethane	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
Chloroform	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/16/07	11/16/07	JWG0703835	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Benzene	ND	U	1.0	0.088	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
Dibromomethane	ND	U	1.0	0.22	1	11/16/07	11/16/07	JWG0703835	
Bromodichloromethane	ND	U	1.0	0.099	1	11/16/07	11/16/07	JWG0703835	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/16/07	11/16/07	JWG0703835	
Toluene	ND	U	1.0	0.13	1	11/16/07	11/16/07	JWG0703835	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
2-Hexanone	ND	U	25	1.4	1	11/16/07	11/16/07	JWG0703835	
Dibromochloromethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705504  
 Date Collected: 11/14/2007  
 Date Received: 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-9C  
 Lab Code: J0705504-006  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Chlorobenzene	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Ethylbenzene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
m,p-Xylenes	ND	U	2.0	0.19	1	11/16/07	11/16/07	JWG0703835	
o-Xylene	ND	U	1.0	0.083	1	11/16/07	11/16/07	JWG0703835	
Styrene	ND	U	1.0	0.062	1	11/16/07	11/16/07	JWG0703835	
Bromoform	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/16/07	11/16/07	JWG0703835	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/16/07	11/16/07	JWG0703835	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/16/07	11/16/07	JWG0703835	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/16/07	11/16/07	JWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	84	71-122	11/16/07	Acceptable
4-Bromofluorobenzene	106	75-120	11/16/07	Acceptable
Dibromofluoromethane	96	82-116	11/16/07	Acceptable
Toluene-d8	98	88-117	11/16/07	Acceptable

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-8A  
**Lab Code:** J0705504-007  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Vinyl Chloride	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Bromomethane	ND	U	1.0	0.15	1	11/16/07	11/16/07	JWG0703835	
Chloroethane	ND	U	1.0	0.19	1	11/16/07	11/16/07	JWG0703835	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
Acetone	ND	U	50	1.9	1	11/16/07	11/16/07	JWG0703835	
Iodomethane (Methyl Iodide)	ND	UJ	5.0	1.1	1	11/16/07	11/16/07	JWG0703835	J(3)
Carbon Disulfide	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
Methylene Chloride	ND	U	5.0	0.29	1	11/16/07	11/16/07	JWG0703835	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Acrylonitrile	ND	U	10	6.7	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
Vinyl Acetate	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
2-Butanone (MEK)	ND	U	10	0.97	1	11/16/07	11/16/07	JWG0703835	
Bromochloromethane	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
Chloroform	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/16/07	11/16/07	JWG0703835	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
<b>Benzene</b>	<b>0.31</b>	<b>I</b>	1.0	0.088	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
Dibromomethane	ND	U	1.0	0.22	1	11/16/07	11/16/07	JWG0703835	
Bromodichloromethane	ND	U	1.0	0.099	1	11/16/07	11/16/07	JWG0703835	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/16/07	11/16/07	JWG0703835	
Toluene	ND	U	1.0	0.13	1	11/16/07	11/16/07	JWG0703835	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
2-Hexanone	ND	U	25	1.4	1	11/16/07	11/16/07	JWG0703835	
Dibromochloromethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	

**Comments:**

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705504  
 Date Collected: 11/14/2007  
 Date Received: 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-8A  
 Lab Code: J0705504-007  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Chlorobenzene	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Ethylbenzene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
m,p-Xylenes	ND	U	2.0	0.19	1	11/16/07	11/16/07	JWG0703835	
o-Xylene	ND	U	1.0	0.083	1	11/16/07	11/16/07	JWG0703835	
Styrene	ND	U	1.0	0.062	1	11/16/07	11/16/07	JWG0703835	
Bromoform	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/16/07	11/16/07	JWG0703835	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/16/07	11/16/07	JWG0703835	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/16/07	11/16/07	JWG0703835	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/16/07	11/16/07	JWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	83	71-122	11/16/07	Acceptable
4-Bromofluorobenzene	104	75-120	11/16/07	Acceptable
Dibromofluoromethane	99	82-116	11/16/07	Acceptable
Toluene-d8	95	88-117	11/16/07	Acceptable

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705504  
 Date Collected: 11/14/2007  
 Date Received: 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-8B  
 Lab Code: J0705504-008  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Vinyl Chloride	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Bromomethane	ND	U	1.0	0.15	1	11/16/07	11/16/07	JWG0703835	
Chloroethane	ND	U	1.0	0.19	1	11/16/07	11/16/07	JWG0703835	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
Acetone	ND	U	50	1.9	1	11/16/07	11/16/07	JWG0703835	
Iodomethane (Methyl Iodide)	ND	UJ	5.0	1.1	1	11/16/07	11/16/07	JWG0703835	J(3)
Carbon Disulfide	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
Methylene Chloride	ND	U	5.0	0.29	1	11/16/07	11/16/07	JWG0703835	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Acrylonitrile	ND	U	10	6.7	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
Vinyl Acetate	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
2-Butanone (MEK)	ND	U	10	0.97	1	11/16/07	11/16/07	JWG0703835	
Bromochloromethane	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
Chloroform	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/16/07	11/16/07	JWG0703835	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Benzene	ND	U	1.0	0.088	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
Dibromomethane	ND	U	1.0	0.22	1	11/16/07	11/16/07	JWG0703835	
Bromodichloromethane	ND	U	1.0	0.099	1	11/16/07	11/16/07	JWG0703835	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/16/07	11/16/07	JWG0703835	
Toluene	ND	U	1.0	0.13	1	11/16/07	11/16/07	JWG0703835	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
2-Hexanone	ND	U	25	1.4	1	11/16/07	11/16/07	JWG0703835	
Dibromochloromethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705504  
 Date Collected: 11/14/2007  
 Date Received: 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-8B  
 Lab Code: J0705504-008  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Chlorobenzene	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Ethylbenzene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
m,p-Xylenes	ND	U	2.0	0.19	1	11/16/07	11/16/07	JWG0703835	
o-Xylene	ND	U	1.0	0.083	1	11/16/07	11/16/07	JWG0703835	
Styrene	ND	U	1.0	0.062	1	11/16/07	11/16/07	JWG0703835	
Bromoform	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/16/07	11/16/07	JWG0703835	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/16/07	11/16/07	JWG0703835	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/16/07	11/16/07	JWG0703835	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/16/07	11/16/07	JWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	83	71-122	11/16/07	Acceptable
4-Bromofluorobenzene	103	75-120	11/16/07	Acceptable
Dibromofluoromethane	98	82-116	11/16/07	Acceptable
Toluene-d8	100	88-117	11/16/07	Acceptable

Comments:



## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-8C  
**Lab Code:** J0705504-009  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Vinyl Chloride	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Bromomethane	ND	U	1.0	0.15	1	11/16/07	11/16/07	JWG0703835	
Chloroethane	ND	U	1.0	0.19	1	11/16/07	11/16/07	JWG0703835	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
Acetone	ND	U	50	1.9	1	11/16/07	11/16/07	JWG0703835	
Iodomethane (Methyl Iodide)	ND	UJ	5.0	1.1	1	11/16/07	11/16/07	JWG0703835	J(3)
Carbon Disulfide	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
Methylene Chloride	ND	U	5.0	0.29	1	11/16/07	11/16/07	JWG0703835	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Acrylonitrile	ND	U	10	6.7	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
Vinyl Acetate	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
2-Butanone (MEK)	ND	U	10	0.97	1	11/16/07	11/16/07	JWG0703835	
Bromochloromethane	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
Chloroform	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/16/07	11/16/07	JWG0703835	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Benzene	ND	U	1.0	0.088	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
Dibromomethane	ND	U	1.0	0.22	1	11/16/07	11/16/07	JWG0703835	
Bromodichloromethane	ND	U	1.0	0.099	1	11/16/07	11/16/07	JWG0703835	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/16/07	11/16/07	JWG0703835	
Toluene	ND	U	1.0	0.13	1	11/16/07	11/16/07	JWG0703835	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
2-Hexanone	ND	U	25	1.4	1	11/16/07	11/16/07	JWG0703835	
Dibromochloromethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	

**Comments:**

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705504  
 Date Collected: 11/14/2007  
 Date Received: 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-8C  
 Lab Code: J0705504-009  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Chlorobenzene	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Ethylbenzene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
m,p-Xylenes	ND	U	2.0	0.19	1	11/16/07	11/16/07	JWG0703835	
o-Xylene	ND	U	1.0	0.083	1	11/16/07	11/16/07	JWG0703835	
Styrene	ND	U	1.0	0.062	1	11/16/07	11/16/07	JWG0703835	
Bromoform	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/16/07	11/16/07	JWG0703835	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/16/07	11/16/07	JWG0703835	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/16/07	11/16/07	JWG0703835	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/16/07	11/16/07	JWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	81	71-122	11/16/07	Acceptable
4-Bromofluorobenzene	101	75-120	11/16/07	Acceptable
Dibromofluoromethane	90	82-116	11/16/07	Acceptable
Toluene-d8	98	88-117	11/16/07	Acceptable

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705504  
 Date Collected: 11/14/2007  
 Date Received: 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-16B  
 Lab Code: J0705504-010  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Vinyl Chloride	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Bromomethane	ND	U	1.0	0.15	1	11/16/07	11/16/07	JWG0703835	
Chloroethane	ND	U	1.0	0.19	1	11/16/07	11/16/07	JWG0703835	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
Acetone	ND	U	50	1.9	1	11/16/07	11/16/07	JWG0703835	
Iodomethane (Methyl Iodide)	ND	UJ	5.0	1.1	1	11/16/07	11/16/07	JWG0703835	J(3)
Carbon Disulfide	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
Methylene Chloride	ND	U	5.0	0.29	1	11/16/07	11/16/07	JWG0703835	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Acrylonitrile	ND	U	10	6.7	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
Vinyl Acetate	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
2-Butanone (MEK)	ND	U	10	0.97	1	11/16/07	11/16/07	JWG0703835	
Bromochloromethane	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
Chloroform	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/16/07	11/16/07	JWG0703835	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Benzene	ND	U	1.0	0.088	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
Dibromomethane	ND	U	1.0	0.22	1	11/16/07	11/16/07	JWG0703835	
Bromodichloromethane	ND	U	1.0	0.099	1	11/16/07	11/16/07	JWG0703835	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/16/07	11/16/07	JWG0703835	
<b>Toluene</b>	<b>0.19</b>	<b>I</b>	1.0	0.13	1	11/16/07	11/16/07	JWG0703835	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
2-Hexanone	ND	U	25	1.4	1	11/16/07	11/16/07	JWG0703835	
Dibromochloromethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705504  
 Date Collected: 11/14/2007  
 Date Received: 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-16B  
 Lab Code: J0705504-010  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Chlorobenzene	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Ethylbenzene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
m,p-Xylenes	ND	U	2.0	0.19	1	11/16/07	11/16/07	JWG0703835	
o-Xylene	ND	U	1.0	0.083	1	11/16/07	11/16/07	JWG0703835	
Styrene	ND	U	1.0	0.062	1	11/16/07	11/16/07	JWG0703835	
Bromoform	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/16/07	11/16/07	JWG0703835	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/16/07	11/16/07	JWG0703835	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/16/07	11/16/07	JWG0703835	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/16/07	11/16/07	JWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	88	71-122	11/16/07	Acceptable
4-Bromofluorobenzene	103	75-120	11/16/07	Acceptable
Dibromofluoromethane	97	82-116	11/16/07	Acceptable
Toluene-d8	98	88-117	11/16/07	Acceptable

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-16C  
**Lab Code:** J0705504-011  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Vinyl Chloride	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Bromomethane	ND	U	1.0	0.15	1	11/16/07	11/16/07	JWG0703835	
Chloroethane	ND	U	1.0	0.19	1	11/16/07	11/16/07	JWG0703835	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
Acetone	ND	U	50	1.9	1	11/16/07	11/16/07	JWG0703835	
Iodomethane (Methyl Iodide)	ND	UJ	5.0	1.1	1	11/16/07	11/16/07	JWG0703835	J(3)
Carbon Disulfide	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
Methylene Chloride	ND	U	5.0	0.29	1	11/16/07	11/16/07	JWG0703835	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Acrylonitrile	ND	U	10	6.7	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
Vinyl Acetate	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
2-Butanone (MEK)	ND	U	10	0.97	1	11/16/07	11/16/07	JWG0703835	
Bromochloromethane	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
Chloroform	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/16/07	11/16/07	JWG0703835	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Benzene	ND	U	1.0	0.088	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
Dibromomethane	ND	U	1.0	0.22	1	11/16/07	11/16/07	JWG0703835	
Bromodichloromethane	ND	U	1.0	0.099	1	11/16/07	11/16/07	JWG0703835	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/16/07	11/16/07	JWG0703835	
<b>Toluene</b>	<b>6.6</b>		1.0	0.13	1	11/16/07	11/16/07	JWG0703835	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
2-Hexanone	ND	U	25	1.4	1	11/16/07	11/16/07	JWG0703835	
Dibromochloromethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705504  
 Date Collected: 11/14/2007  
 Date Received: 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-16C  
 Lab Code: J0705504-011  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Chlorobenzene	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Ethylbenzene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
m,p-Xylenes	ND	U	2.0	0.19	1	11/16/07	11/16/07	JWG0703835	
o-Xylene	ND	U	1.0	0.083	1	11/16/07	11/16/07	JWG0703835	
Styrene	ND	U	1.0	0.062	1	11/16/07	11/16/07	JWG0703835	
Bromoform	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/16/07	11/16/07	JWG0703835	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/16/07	11/16/07	JWG0703835	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/16/07	11/16/07	JWG0703835	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/16/07	11/16/07	JWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	85	71-122	11/16/07	Acceptable
4-Bromofluorobenzene	106	75-120	11/16/07	Acceptable
Dibromofluoromethane	96	82-116	11/16/07	Acceptable
Toluene-d8	95	88-117	11/16/07	Acceptable

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-17B  
**Lab Code:** J0705504-012  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Vinyl Chloride	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Bromomethane	ND	U	1.0	0.15	1	11/16/07	11/16/07	JWG0703835	
Chloroethane	ND	U	1.0	0.19	1	11/16/07	11/16/07	JWG0703835	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
Acetone	ND	U	50	1.9	1	11/16/07	11/16/07	JWG0703835	
Iodomethane (Methyl Iodide)	ND	UJ	5.0	1.1	1	11/16/07	11/16/07	JWG0703835	J(3)
Carbon Disulfide	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
Methylene Chloride	ND	U	5.0	0.29	1	11/16/07	11/16/07	JWG0703835	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Acrylonitrile	ND	U	10	6.7	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
Vinyl Acetate	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
2-Butanone (MEK)	ND	U	10	0.97	1	11/16/07	11/16/07	JWG0703835	
Bromochloromethane	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
Chloroform	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/16/07	11/16/07	JWG0703835	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Benzene	ND	U	1.0	0.088	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
Dibromomethane	ND	U	1.0	0.22	1	11/16/07	11/16/07	JWG0703835	
Bromodichloromethane	ND	U	1.0	0.099	1	11/16/07	11/16/07	JWG0703835	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/16/07	11/16/07	JWG0703835	
<b>Toluene</b>	<b>0.48</b>	<b>I</b>	1.0	0.13	1	11/16/07	11/16/07	JWG0703835	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
2-Hexanone	ND	U	25	1.4	1	11/16/07	11/16/07	JWG0703835	
Dibromochloromethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	

Comments:



## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705504  
 Date Collected: 11/14/2007  
 Date Received: 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-17B  
 Lab Code: J0705504-012  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Chlorobenzene	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Ethylbenzene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
m,p-Xylenes	ND	U	2.0	0.19	1	11/16/07	11/16/07	JWG0703835	
o-Xylene	ND	U	1.0	0.083	1	11/16/07	11/16/07	JWG0703835	
Styrene	ND	U	1.0	0.062	1	11/16/07	11/16/07	JWG0703835	
Bromoform	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/16/07	11/16/07	JWG0703835	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/16/07	11/16/07	JWG0703835	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/16/07	11/16/07	JWG0703835	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/16/07	11/16/07	JWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	86	71-122	11/16/07	Acceptable
4-Bromofluorobenzene	107	75-120	11/16/07	Acceptable
Dibromofluoromethane	97	82-116	11/16/07	Acceptable
Toluene-d8	93	88-117	11/16/07	Acceptable

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Equipment Blank  
**Lab Code:** J0705504-013  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Vinyl Chloride	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Bromomethane	ND	U	1.0	0.15	1	11/16/07	11/16/07	JWG0703835	
Chloroethane	ND	U	1.0	0.19	1	11/16/07	11/16/07	JWG0703835	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
Acetone	ND	U	50	1.9	1	11/16/07	11/16/07	JWG0703835	
Iodomethane (Methyl Iodide)	ND	UJ	5.0	1.1	1	11/16/07	11/16/07	JWG0703835	J(3)
Carbon Disulfide	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
<b>Methylene Chloride</b>	<b>0.43</b>	<b>I</b>	5.0	0.29	1	11/16/07	11/16/07	JWG0703835	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Acrylonitrile	ND	U	10	6.7	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
Vinyl Acetate	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
2-Butanone (MEK)	ND	U	10	0.97	1	11/16/07	11/16/07	JWG0703835	
Bromochloromethane	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
Chloroform	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/16/07	11/16/07	JWG0703835	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Benzene	ND	U	1.0	0.088	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
Dibromomethane	ND	U	1.0	0.22	1	11/16/07	11/16/07	JWG0703835	
Bromodichloromethane	ND	U	1.0	0.099	1	11/16/07	11/16/07	JWG0703835	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/16/07	11/16/07	JWG0703835	
Toluene	ND	U	1.0	0.13	1	11/16/07	11/16/07	JWG0703835	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
2-Hexanone	ND	U	25	1.4	1	11/16/07	11/16/07	JWG0703835	
Dibromochloromethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705504  
 Date Collected: 11/14/2007  
 Date Received: 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: Equipment Blank  
 Lab Code: J0705504-013  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Chlorobenzene	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Ethylbenzene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
m,p-Xylenes	ND	U	2.0	0.19	1	11/16/07	11/16/07	JWG0703835	
o-Xylene	ND	U	1.0	0.083	1	11/16/07	11/16/07	JWG0703835	
Styrene	ND	U	1.0	0.062	1	11/16/07	11/16/07	JWG0703835	
Bromoform	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/16/07	11/16/07	JWG0703835	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/16/07	11/16/07	JWG0703835	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/16/07	11/16/07	JWG0703835	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/16/07	11/16/07	JWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	89	71-122	11/16/07	Acceptable
4-Bromofluorobenzene	111	75-120	11/16/07	Acceptable
Dibromofluoromethane	104	82-116	11/16/07	Acceptable
Toluene-d8	102	88-117	11/16/07	Acceptable

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Dup-1  
**Lab Code:** J0705504-014  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
<b>Vinyl Chloride</b>	<b>2.0</b>	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Bromomethane	ND U	1.0	0.15	1	11/16/07	11/16/07	JWG0703835	
Chloroethane	ND U	1.0	0.19	1	11/16/07	11/16/07	JWG0703835	
Trichlorofluoromethane	ND U	1.0	0.21	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
Acetone	ND U	50	1.9	1	11/16/07	11/16/07	JWG0703835	
Iodomethane (Methyl Iodide)	ND UJ	5.0	1.1	1	11/16/07	11/16/07	JWG0703835	J(3)
Carbon Disulfide	ND U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
Methylene Chloride	ND U	5.0	0.29	1	11/16/07	11/16/07	JWG0703835	
trans-1,2-Dichloroethene	ND U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Acrylonitrile	ND U	10	6.7	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethane	ND U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
Vinyl Acetate	ND U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
<b>cis-1,2-Dichloroethene</b>	<b>0.40 I</b>	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
2-Butanone (MEK)	ND U	10	0.97	1	11/16/07	11/16/07	JWG0703835	
Bromochloromethane	ND U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
Chloroform	ND U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.17	1	11/16/07	11/16/07	JWG0703835	
Carbon Tetrachloride	ND U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
<b>Benzene</b>	<b>1.4</b>	1.0	0.088	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloroethane (EDC)	ND U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Trichloroethene (TCE)	ND U	1.0	0.20	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloropropane	ND U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
Dibromomethane	ND U	1.0	0.22	1	11/16/07	11/16/07	JWG0703835	
Bromodichloromethane	ND U	1.0	0.099	1	11/16/07	11/16/07	JWG0703835	
cis-1,3-Dichloropropene	ND U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
4-Methyl-2-pentanone (MIBK)	ND U	25	0.94	1	11/16/07	11/16/07	JWG0703835	
<b>Toluene</b>	<b>0.35 I</b>	1.0	0.13	1	11/16/07	11/16/07	JWG0703835	
trans-1,3-Dichloropropene	ND U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,2-Trichloroethane	ND U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Tetrachloroethene (PCE)	ND U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
2-Hexanone	ND U	25	1.4	1	11/16/07	11/16/07	JWG0703835	
Dibromochloromethane	ND U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705504  
 Date Collected: 11/14/2007  
 Date Received: 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: Dup-1  
 Lab Code: J0705504-014  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Chlorobenzene	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Ethylbenzene	1.6		1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
m,p-Xylenes	2.2		2.0	0.19	1	11/16/07	11/16/07	JWG0703835	
o-Xylene	0.73	I	1.0	0.083	1	11/16/07	11/16/07	JWG0703835	
Styrene	ND	U	1.0	0.062	1	11/16/07	11/16/07	JWG0703835	
Bromoform	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/16/07	11/16/07	JWG0703835	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/16/07	11/16/07	JWG0703835	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/16/07	11/16/07	JWG0703835	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/16/07	11/16/07	JWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	83	71-122	11/16/07	Acceptable
4-Bromofluorobenzene	107	75-120	11/16/07	Acceptable
Dibromofluoromethane	94	82-116	11/16/07	Acceptable
Toluene-d8	98	88-117	11/16/07	Acceptable

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705504  
 Date Collected: 11/14/2007  
 Date Received: 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: Trip Blank  
 Lab Code: J0705504-015  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Vinyl Chloride	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Bromomethane	ND	U	1.0	0.15	1	11/16/07	11/16/07	JWG0703835	
Chloroethane	ND	U	1.0	0.19	1	11/16/07	11/16/07	JWG0703835	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
Acetone	ND	U	50	1.9	1	11/16/07	11/16/07	JWG0703835	
Iodomethane (Methyl Iodide)	ND	UJ	5.0	1.1	1	11/16/07	11/16/07	JWG0703835	J(3)
Carbon Disulfide	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
Methylene Chloride	ND	U	5.0	0.29	1	11/16/07	11/16/07	JWG0703835	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Acrylonitrile	ND	U	10	6.7	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
Vinyl Acetate	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
2-Butanone (MEK)	ND	U	10	0.97	1	11/16/07	11/16/07	JWG0703835	
Bromochloromethane	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
Chloroform	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/16/07	11/16/07	JWG0703835	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Benzene	ND	U	1.0	0.088	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
Dibromomethane	ND	U	1.0	0.22	1	11/16/07	11/16/07	JWG0703835	
Bromodichloromethane	ND	U	1.0	0.099	1	11/16/07	11/16/07	JWG0703835	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/16/07	11/16/07	JWG0703835	
Toluene	ND	U	1.0	0.13	1	11/16/07	11/16/07	JWG0703835	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
2-Hexanone	ND	U	25	1.4	1	11/16/07	11/16/07	JWG0703835	
Dibromochloromethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Trip Blank  
**Lab Code:** J0705504-015  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Chlorobenzene	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Ethylbenzene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
m,p-Xylenes	ND	U	2.0	0.19	1	11/16/07	11/16/07	JWG0703835	
o-Xylene	ND	U	1.0	0.083	1	11/16/07	11/16/07	JWG0703835	
Styrene	ND	U	1.0	0.062	1	11/16/07	11/16/07	JWG0703835	
Bromoform	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/16/07	11/16/07	JWG0703835	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/16/07	11/16/07	JWG0703835	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/16/07	11/16/07	JWG0703835	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/16/07	11/16/07	JWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	83	71-122	11/16/07	Acceptable
4-Bromofluorobenzene	106	75-120	11/16/07	Acceptable
Dibromofluoromethane	93	82-116	11/16/07	Acceptable
Toluene-d8	95	88-117	11/16/07	Acceptable

Comments:



## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705504  
 Date Collected: NA  
 Date Received: NA

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: Method Blank  
 Lab Code: JWG0703835-4  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Vinyl Chloride	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Bromomethane	ND	U	1.0	0.15	1	11/16/07	11/16/07	JWG0703835	
Chloroethane	ND	U	1.0	0.19	1	11/16/07	11/16/07	JWG0703835	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
Acetone	ND	U	50	1.9	1	11/16/07	11/16/07	JWG0703835	
Iodomethane (Methyl Iodide)	ND	UJ	5.0	1.1	1	11/16/07	11/16/07	JWG0703835	J(3)
Carbon Disulfide	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
Methylene Chloride	ND	U	5.0	0.29	1	11/16/07	11/16/07	JWG0703835	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Acrylonitrile	ND	U	10	6.7	1	11/16/07	11/16/07	JWG0703835	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
Vinyl Acetate	ND	U	10	1.1	1	11/16/07	11/16/07	JWG0703835	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
2-Butanone (MEK)	ND	U	10	0.97	1	11/16/07	11/16/07	JWG0703835	
Bromochloromethane	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
Chloroform	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/16/07	11/16/07	JWG0703835	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Benzene	ND	U	1.0	0.088	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/16/07	11/16/07	JWG0703835	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/16/07	11/16/07	JWG0703835	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
Dibromomethane	ND	U	1.0	0.22	1	11/16/07	11/16/07	JWG0703835	
Bromodichloromethane	ND	U	1.0	0.099	1	11/16/07	11/16/07	JWG0703835	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/16/07	11/16/07	JWG0703835	
Toluene	ND	U	1.0	0.13	1	11/16/07	11/16/07	JWG0703835	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/16/07	11/16/07	JWG0703835	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
2-Hexanone	ND	U	25	1.4	1	11/16/07	11/16/07	JWG0703835	
Dibromochloromethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705504  
 Date Collected: NA  
 Date Received: NA

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: Method Blank  
 Lab Code: JWG0703835-4  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Chlorobenzene	ND	U	1.0	0.10	1	11/16/07	11/16/07	JWG0703835	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
Ethylbenzene	ND	U	1.0	0.12	1	11/16/07	11/16/07	JWG0703835	
m,p-Xylenes	ND	U	2.0	0.19	1	11/16/07	11/16/07	JWG0703835	
o-Xylene	ND	U	1.0	0.083	1	11/16/07	11/16/07	JWG0703835	
Styrene	ND	U	1.0	0.062	1	11/16/07	11/16/07	JWG0703835	
Bromoform	ND	U	1.0	0.28	1	11/16/07	11/16/07	JWG0703835	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/16/07	11/16/07	JWG0703835	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/16/07	11/16/07	JWG0703835	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/16/07	11/16/07	JWG0703835	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/16/07	11/16/07	JWG0703835	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/16/07	11/16/07	JWG0703835	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/16/07	11/16/07	JWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	79	71-122	11/16/07	Acceptable
4-Bromofluorobenzene	105	75-120	11/16/07	Acceptable
Dibromofluoromethane	83	82-116	11/16/07	Acceptable
Toluene-d8	97	88-117	11/16/07	Acceptable

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-10A  
**Lab Code:** J0705504-001  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703819	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703819	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	138	77-150	11/21/07	Acceptable

**Comments:** \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-10B  
**Lab Code:** J0705504-002  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703819	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703819	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	133	77-150	11/21/07	Acceptable

Comments: \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-10C  
**Lab Code:** J0705504-003  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703819	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703819	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	128	77-150	11/21/07	Acceptable

Comments: \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-9A  
**Lab Code:** J0705504-004  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703819	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703819	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	108	77-150	11/21/07	Acceptable

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-9B  
**Lab Code:** J0705504-005  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703819	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703819	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	132	77-150	11/21/07	Acceptable

Comments:



## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-9C  
**Lab Code:** J0705504-006  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703819	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703819	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	136	77-150	11/21/07	Acceptable

Comments: \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-8A  
**Lab Code:** J0705504-007  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703819	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703819	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	116	77-150	11/21/07	Acceptable

Comments: \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-8B  
**Lab Code:** J0705504-008  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703819	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703819	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	134	77-150	11/21/07	Acceptable

Comments: \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-8C  
**Lab Code:** J0705504-009  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703819	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703819	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	132	77-150	11/21/07	Acceptable

Comments: \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-16B  
**Lab Code:** J0705504-010  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703819	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703819	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	130	77-150	11/21/07	Acceptable

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-16C  
**Lab Code:** J0705504-011  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703819	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703819	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	135	77-150	11/21/07	Acceptable

Comments: \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-17B  
**Lab Code:** J0705504-012  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703819	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703819	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	133	77-150	11/21/07	Acceptable

Comments: \_\_\_\_\_



## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** Equipment Blank  
**Lab Code:** J0705504-013  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703819	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703819	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	128	77-150	11/21/07	Acceptable

Comments: \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** Dup-1  
**Lab Code:** J0705504-014  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703819	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703819	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	111	77-150	11/21/07	Acceptable

Comments: \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Collected:** NA  
**Date Received:** NA

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** Method Blank  
**Lab Code:** JWG0703819-3  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/16/07	11/21/07	JWG0703819	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/16/07	11/21/07	JWG0703819	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	116	77-150	11/21/07	Acceptable

Comments: \_\_\_\_\_

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

### Total Metals

**Sample Name:** MW-10A  
**Lab Code:** J0705504-001

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	4.0	0.18	2.0	11/21/2007	11/28/2007	U	
Arsenic	EPA 3020A	6020	1.0	0.56	2.0	11/21/2007	11/28/2007	0.92	i
Barium	EPA 3020A	6020	4.0	0.28	2.0	11/21/2007	11/28/2007	4.5	
Beryllium	EPA 3020A	6020	2.0	0.17	2.0	11/21/2007	11/28/2007	U	
Cadmium	EPA 3020A	6020	1.0	0.24	2.0	11/21/2007	11/28/2007	0.76	i
Chromium	EPA 3020A	6020	4.0	0.24	2.0	11/21/2007	11/28/2007	3.4	i
Cobalt	EPA 3020A	6020	2.0	0.082	2.0	11/21/2007	11/28/2007	0.44	i
Copper	EPA 3020A	6020	4.0	0.58	2.0	11/21/2007	11/28/2007	0.89	i
Iron	EPA 3010A	6010B	50	17	1.0	11/20/2007	11/21/2007	2840	
Lead	EPA 3020A	6020	2.0	0.60	2.0	11/21/2007	11/28/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	4.0	1.4	2.0	11/21/2007	11/28/2007	2.7	i
Selenium	EPA 3020A	6020	4.0	1.6	2.0	11/21/2007	11/28/2007	U	
Silver	EPA 3020A	6020	1.0	0.078	2.0	11/21/2007	11/28/2007	U	
Thallium	EPA 3020A	6020	2.00	0.15	2.0	11/21/2007	11/28/2007	U	
Vanadium	EPA 3020A	6020	4.0	0.36	2.0	11/21/2007	11/28/2007	2.8	i
Zinc	EPA 3020A	6020	20	3.4	2.0	11/21/2007	11/28/2007	9.3	i

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

### Total Metals

**Sample Name:** MW-10B  
**Lab Code:** J0705504-002

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	4.0	0.18	2.0	11/21/2007	11/28/2007	U	
Arsenic	EPA 3020A	6020	1.0	0.56	2.0	11/21/2007	11/28/2007	U	
Barium	EPA 3020A	6020	4.0	0.28	2.0	11/21/2007	11/28/2007	12	
Beryllium	EPA 3020A	6020	2.0	0.17	2.0	11/21/2007	11/28/2007	U	
Cadmium	EPA 3020A	6020	1.0	0.24	2.0	11/21/2007	11/28/2007	0.71	i
Chromium	EPA 3020A	6020	4.0	0.24	2.0	11/21/2007	11/28/2007	1.6	i
Cobalt	EPA 3020A	6020	2.0	0.082	2.0	11/21/2007	11/28/2007	0.32	i
Copper	EPA 3020A	6020	4.0	0.58	2.0	11/21/2007	11/28/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/20/2007	11/21/2007	672	
Lead	EPA 3020A	6020	2.0	0.60	2.0	11/21/2007	11/28/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	4.0	1.4	2.0	11/21/2007	11/28/2007	U	
Selenium	EPA 3020A	6020	4.0	1.6	2.0	11/21/2007	11/28/2007	U	
Silver	EPA 3020A	6020	1.0	0.078	2.0	11/21/2007	11/28/2007	U	
Thallium	EPA 3020A	6020	2.00	0.15	2.0	11/21/2007	11/28/2007	U	
Vanadium	EPA 3020A	6020	4.0	0.36	2.0	11/21/2007	11/28/2007	1.1	i
Zinc	EPA 3020A	6020	20	3.4	2.0	11/21/2007	11/28/2007	3.4	i

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## Total Metals

**Sample Name:** MW-10C  
**Lab Code:** J0705504-003

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	4.0	0.18	2.0	11/21/2007	11/28/2007	U	
Arsenic	EPA 3020A	6020	1.0	0.56	2.0	11/21/2007	11/28/2007	U	
Barium	EPA 3020A	6020	4.0	0.28	2.0	11/21/2007	11/28/2007	19	
Beryllium	EPA 3020A	6020	2.0	0.17	2.0	11/21/2007	11/28/2007	U	
Cadmium	EPA 3020A	6020	1.0	0.24	2.0	11/21/2007	11/28/2007	0.72	i
Chromium	EPA 3020A	6020	4.0	0.24	2.0	11/21/2007	11/28/2007	1.8	i
Cobalt	EPA 3020A	6020	2.0	0.082	2.0	11/21/2007	11/28/2007	0.11	i
Copper	EPA 3020A	6020	4.0	0.58	2.0	11/21/2007	11/28/2007	0.79	i
Iron	EPA 3010A	6010B	50	17	1.0	11/20/2007	11/21/2007	862	
Lead	EPA 3020A	6020	2.0	0.60	2.0	11/21/2007	11/28/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	4.0	1.4	2.0	11/21/2007	11/28/2007	U	
Selenium	EPA 3020A	6020	4.0	1.6	2.0	11/21/2007	11/28/2007	U	
Silver	EPA 3020A	6020	1.0	0.078	2.0	11/21/2007	11/28/2007	U	
Thallium	EPA 3020A	6020	2.00	0.15	2.0	11/21/2007	11/28/2007	U	
Vanadium	EPA 3020A	6020	4.0	0.36	2.0	11/21/2007	11/28/2007	1.2	i
Zinc	EPA 3020A	6020	20	3.4	2.0	11/21/2007	11/28/2007	4.1	i

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705504  
 Date Collected: 11/14/2007  
 Date Received: 11/15/2007

## Total Metals

Sample Name: MW-9A  
 Lab Code: J0705504-004

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	4.0	0.18	2.0	11/21/2007	11/28/2007	U	
Arsenic	EPA 3020A	6020	1.0	0.56	2.0	11/21/2007	11/28/2007	2.2	
Barium	EPA 3020A	6020	4.0	0.28	2.0	11/21/2007	11/28/2007	5.6	
Beryllium	EPA 3020A	6020	2.0	0.17	2.0	11/21/2007	11/28/2007	U	
Cadmium	EPA 3020A	6020	1.0	0.24	2.0	11/21/2007	11/28/2007	0.76	i
Chromium	EPA 3020A	6020	4.0	0.24	2.0	11/21/2007	11/28/2007	2.4	i
Cobalt	EPA 3020A	6020	2.0	0.082	2.0	11/21/2007	11/28/2007	0.88	i
Copper	EPA 3020A	6020	4.0	0.58	2.0	11/21/2007	11/28/2007	0.66	i
Iron	EPA 3010A	6010B	50	17	1.0	11/20/2007	11/21/2007	2100	
Lead	EPA 3020A	6020	2.0	0.60	2.0	11/21/2007	11/28/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	4.0	1.4	2.0	11/21/2007	11/28/2007	3.6	i
Selenium	EPA 3020A	6020	4.0	1.6	2.0	11/21/2007	11/28/2007	U	
Silver	EPA 3020A	6020	1.0	0.078	2.0	11/21/2007	11/28/2007	U	
Thallium	EPA 3020A	6020	2.00	0.15	2.0	11/21/2007	11/28/2007	U	
Vanadium	EPA 3020A	6020	4.0	0.36	2.0	11/21/2007	11/28/2007	2.8	i
Zinc	EPA 3020A	6020	20	3.4	2.0	11/21/2007	11/28/2007	6.7	i



# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

### Total Metals

**Sample Name:** MW-9B  
**Lab Code:** J0705504-005

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	4.0	0.18	2.0	11/21/2007	11/28/2007	U	
Arsenic	EPA 3020A	6020	1.0	0.56	2.0	11/21/2007	11/28/2007	U	
Barium	EPA 3020A	6020	4.0	0.28	2.0	11/21/2007	11/28/2007	24	
Beryllium	EPA 3020A	6020	2.0	0.17	2.0	11/21/2007	11/28/2007	U	
Cadmium	EPA 3020A	6020	1.0	0.24	2.0	11/21/2007	11/28/2007	0.76	i
Chromium	EPA 3020A	6020	4.0	0.24	2.0	11/21/2007	11/28/2007	3.2	i
Cobalt	EPA 3020A	6020	2.0	0.082	2.0	11/21/2007	11/28/2007	0.21	i
Copper	EPA 3020A	6020	4.0	0.58	2.0	11/21/2007	11/28/2007	1.6	i
Iron	EPA 3010A	6010B	50	17	1.0	11/20/2007	11/21/2007	920	
Lead	EPA 3020A	6020	2.0	0.60	2.0	11/21/2007	11/28/2007	0.81	i
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	4.0	1.4	2.0	11/21/2007	11/28/2007	U	
Selenium	EPA 3020A	6020	4.0	1.6	2.0	11/21/2007	11/28/2007	U	
Silver	EPA 3020A	6020	1.0	0.078	2.0	11/21/2007	11/28/2007	U	
Thallium	EPA 3020A	6020	2.00	0.15	2.0	11/21/2007	11/28/2007	U	
Vanadium	EPA 3020A	6020	4.0	0.36	2.0	11/21/2007	11/28/2007	2.8	i
Zinc	EPA 3020A	6020	20	3.4	2.0	11/21/2007	11/28/2007	6.1	i

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705504  
 Date Collected: 11/14/2007  
 Date Received: 11/15/2007

## Total Metals

Sample Name: MW-9C  
 Lab Code: J0705504-006

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	4.0	0.18	2.0	11/21/2007	11/28/2007	U	
Arsenic	EPA 3020A	6020	1.0	0.56	2.0	11/21/2007	11/28/2007	U	
Barium	EPA 3020A	6020	4.0	0.28	2.0	11/21/2007	11/28/2007	19	
Beryllium	EPA 3020A	6020	2.0	0.17	2.0	11/21/2007	11/28/2007	U	
Cadmium	EPA 3020A	6020	1.0	0.24	2.0	11/21/2007	11/28/2007	0.80	i
Chromium	EPA 3020A	6020	4.0	0.24	2.0	11/21/2007	11/28/2007	2.0	i
Cobalt	EPA 3020A	6020	2.0	0.082	2.0	11/21/2007	11/28/2007	U	
Copper	EPA 3020A	6020	4.0	0.58	2.0	11/21/2007	11/28/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/20/2007	11/21/2007	684	
Lead	EPA 3020A	6020	2.0	0.60	2.0	11/21/2007	11/28/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	4.0	1.4	2.0	11/21/2007	11/28/2007	U	
Selenium	EPA 3020A	6020	4.0	1.6	2.0	11/21/2007	11/28/2007	U	
Silver	EPA 3020A	6020	1.0	0.078	2.0	11/21/2007	11/28/2007	U	
Thallium	EPA 3020A	6020	2.00	0.15	2.0	11/21/2007	11/28/2007	U	
Vanadium	EPA 3020A	6020	4.0	0.36	2.0	11/21/2007	11/28/2007	1.9	i
Zinc	EPA 3020A	6020	20	3.4	2.0	11/21/2007	11/28/2007	U	

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## Total Metals

**Sample Name:** MW-8A  
**Lab Code:** J0705504-007

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	4.0	0.18	2.0	11/21/2007	11/28/2007	U	
Arsenic	EPA 3020A	6020	1.0	0.56	2.0	11/21/2007	11/28/2007	U	
Barium	EPA 3020A	6020	4.0	0.28	2.0	11/21/2007	11/28/2007	39	
Beryllium	EPA 3020A	6020	2.0	0.17	2.0	11/21/2007	11/28/2007	U	
Cadmium	EPA 3020A	6020	1.0	0.24	2.0	11/21/2007	11/28/2007	0.73	i
Chromium	EPA 3020A	6020	4.0	0.24	2.0	11/21/2007	11/28/2007	2.8	i
Cobalt	EPA 3020A	6020	2.0	0.082	2.0	11/21/2007	11/28/2007	1.6	i
Copper	EPA 3020A	6020	4.0	0.58	2.0	11/21/2007	11/28/2007	0.85	i
Iron	EPA 3010A	6010B	50	17	1.0	11/20/2007	11/21/2007	2670	
Lead	EPA 3020A	6020	2.0	0.60	2.0	11/21/2007	11/28/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	4.0	1.4	2.0	11/21/2007	11/28/2007	3.4	i
Selenium	EPA 3020A	6020	4.0	1.6	2.0	11/21/2007	11/28/2007	U	
Silver	EPA 3020A	6020	1.0	0.078	2.0	11/21/2007	11/28/2007	U	
Thallium	EPA 3020A	6020	2.00	0.15	2.0	11/21/2007	11/28/2007	U	
Vanadium	EPA 3020A	6020	4.0	0.36	2.0	11/21/2007	11/28/2007	1.9	i
Zinc	EPA 3020A	6020	20	3.4	2.0	11/21/2007	11/28/2007	5.0	i

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

### Total Metals

**Sample Name:** MW-8B  
**Lab Code:** J0705504-008

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	4.0	0.18	2.0	11/21/2007	11/28/2007	U	
Arsenic	EPA 3020A	6020	1.0	0.56	2.0	11/21/2007	11/28/2007	U	
Barium	EPA 3020A	6020	4.0	0.28	2.0	11/21/2007	11/28/2007	52	
Beryllium	EPA 3020A	6020	2.0	0.17	2.0	11/21/2007	11/28/2007	U	
Cadmium	EPA 3020A	6020	1.0	0.24	2.0	11/21/2007	11/28/2007	0.78	i
Chromium	EPA 3020A	6020	4.0	0.24	2.0	11/21/2007	11/28/2007	5.6	
Cobalt	EPA 3020A	6020	2.0	0.082	2.0	11/21/2007	11/28/2007	0.18	i
Copper	EPA 3020A	6020	4.0	0.58	2.0	11/21/2007	11/28/2007	1.4	i
Iron	EPA 3010A	6010B	50	17	1.0	11/20/2007	11/21/2007	989	
Lead	EPA 3020A	6020	2.0	0.60	2.0	11/21/2007	11/28/2007	5.3	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	4.0	1.4	2.0	11/21/2007	11/28/2007	U	
Selenium	EPA 3020A	6020	4.0	1.6	2.0	11/21/2007	11/28/2007	2.9	i
Silver	EPA 3020A	6020	1.0	0.078	2.0	11/21/2007	11/28/2007	U	
Thallium	EPA 3020A	6020	2.00	0.15	2.0	11/21/2007	11/28/2007	U	
Vanadium	EPA 3020A	6020	4.0	0.36	2.0	11/21/2007	11/28/2007	13	
Zinc	EPA 3020A	6020	20	3.4	2.0	11/21/2007	11/28/2007	4.2	i

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## Total Metals

**Sample Name:** MW-8C  
**Lab Code:** J0705504-009

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	4.0	0.18	2.0	11/21/2007	11/28/2007	U	
Arsenic	EPA 3020A	6020	1.0	0.56	2.0	11/21/2007	11/28/2007	U	
Barium	EPA 3020A	6020	4.0	0.28	2.0	11/21/2007	11/28/2007	20	
Beryllium	EPA 3020A	6020	2.0	0.17	2.0	11/21/2007	11/28/2007	U	
Cadmium	EPA 3020A	6020	1.0	0.24	2.0	11/21/2007	11/28/2007	0.73	i
Chromium	EPA 3020A	6020	4.0	0.24	2.0	11/21/2007	11/28/2007	4.7	
Cobalt	EPA 3020A	6020	2.0	0.082	2.0	11/21/2007	11/28/2007	0.10	i
Copper	EPA 3020A	6020	4.0	0.58	2.0	11/21/2007	11/28/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/20/2007	11/21/2007	965	
Lead	EPA 3020A	6020	2.0	0.60	2.0	11/21/2007	11/28/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	4.0	1.4	2.0	11/21/2007	11/28/2007	1.8	i
Selenium	EPA 3020A	6020	4.0	1.6	2.0	11/21/2007	11/28/2007	U	
Silver	EPA 3020A	6020	1.0	0.078	2.0	11/21/2007	11/28/2007	U	
Thallium	EPA 3020A	6020	2.00	0.15	2.0	11/21/2007	11/28/2007	U	
Vanadium	EPA 3020A	6020	4.0	0.36	2.0	11/21/2007	11/28/2007	2.4	i
Zinc	EPA 3020A	6020	20	3.4	2.0	11/21/2007	11/28/2007	5.7	i

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

### Total Metals

**Sample Name:** MW-16B  
**Lab Code:** J0705504-010

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	4.0	0.18	2.0	11/21/2007	11/28/2007	0.25	i
Arsenic	EPA 3020A	6020	1.0	0.56	2.0	11/21/2007	11/28/2007	U	
Barium	EPA 3020A	6020	4.0	0.28	2.0	11/21/2007	11/28/2007	121	
Beryllium	EPA 3020A	6020	2.0	0.17	2.0	11/21/2007	11/28/2007	0.18	i
Cadmium	EPA 3020A	6020	1.0	0.24	2.0	11/21/2007	11/28/2007	0.91	i
Chromium	EPA 3020A	6020	4.0	0.24	2.0	11/21/2007	11/28/2007	11	
Cobalt	EPA 3020A	6020	2.0	0.082	2.0	11/21/2007	11/28/2007	1.2	i
Copper	EPA 3020A	6020	4.0	0.58	2.0	11/21/2007	11/28/2007	2.8	i
Iron	EPA 3010A	6010B	50	17	1.0	11/20/2007	11/21/2007	1660	
Lead	EPA 3020A	6020	2.0	0.60	2.0	11/21/2007	11/28/2007	14	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	4.0	1.4	2.0	11/21/2007	11/28/2007	2.6	i
Selenium	EPA 3020A	6020	4.0	1.6	2.0	11/21/2007	11/28/2007	1.7	i
Silver	EPA 3020A	6020	1.0	0.078	2.0	11/21/2007	11/28/2007	U	
Thallium	EPA 3020A	6020	2.00	0.15	2.0	11/21/2007	11/28/2007	U	
Vanadium	EPA 3020A	6020	4.0	0.36	2.0	11/21/2007	11/28/2007	11	
Zinc	EPA 3020A	6020	20	3.4	2.0	11/21/2007	11/28/2007	11	i

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

### Total Metals

**Sample Name:** MW-16C  
**Lab Code:** J0705504-011

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	4.0	0.18	2.0	11/21/2007	11/28/2007	U	
Arsenic	EPA 3020A	6020	1.0	0.56	2.0	11/21/2007	11/28/2007	U	
Barium	EPA 3020A	6020	4.0	0.28	2.0	11/21/2007	11/28/2007	33	
Beryllium	EPA 3020A	6020	2.0	0.17	2.0	11/21/2007	11/28/2007	U	
Cadmium	EPA 3020A	6020	1.0	0.24	2.0	11/21/2007	11/28/2007	0.76	i
Chromium	EPA 3020A	6020	4.0	0.24	2.0	11/21/2007	11/28/2007	3.1	i
Cobalt	EPA 3020A	6020	2.0	0.082	2.0	11/21/2007	11/28/2007	0.11	i
Copper	EPA 3020A	6020	4.0	0.58	2.0	11/21/2007	11/28/2007	0.99	i
Iron	EPA 3010A	6010B	50	17	1.0	11/20/2007	11/21/2007	1430	
Lead	EPA 3020A	6020	2.0	0.60	2.0	11/21/2007	11/28/2007	0.65	i
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	4.0	1.4	2.0	11/21/2007	11/28/2007	U	
Selenium	EPA 3020A	6020	4.0	1.6	2.0	11/21/2007	11/28/2007	U	
Silver	EPA 3020A	6020	1.0	0.078	2.0	11/21/2007	11/28/2007	U	
Thallium	EPA 3020A	6020	2.00	0.15	2.0	11/21/2007	11/28/2007	U	
Vanadium	EPA 3020A	6020	4.0	0.36	2.0	11/21/2007	11/28/2007	3.5	i
Zinc	EPA 3020A	6020	20	3.4	2.0	11/21/2007	11/28/2007	4.4	i



# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

### Total Metals

**Sample Name:** MW-17B  
**Lab Code:** J0705504-012

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	4.0	0.18	2.0	11/21/2007	11/28/2007	U	
Arsenic	EPA 3020A	6020	1.0	0.56	2.0	11/21/2007	11/28/2007	U	
Barium	EPA 3020A	6020	4.0	0.28	2.0	11/21/2007	11/28/2007	94	
Beryllium	EPA 3020A	6020	2.0	0.17	2.0	11/21/2007	11/28/2007	0.19	i
Cadmium	EPA 3020A	6020	1.0	0.24	2.0	11/21/2007	11/28/2007	0.77	i
Chromium	EPA 3020A	6020	4.0	0.24	2.0	11/21/2007	11/28/2007	5.5	
Cobalt	EPA 3020A	6020	2.0	0.082	2.0	11/21/2007	11/28/2007	0.47	i
Copper	EPA 3020A	6020	4.0	0.58	2.0	11/21/2007	11/28/2007	2.3	i
Iron	EPA 3010A	6010B	50	17	1.0	11/20/2007	11/21/2007	1960	
Lead	EPA 3020A	6020	2.0	0.60	2.0	11/21/2007	11/28/2007	6.3	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	4.0	1.4	2.0	11/21/2007	11/28/2007	U	
Selenium	EPA 3020A	6020	4.0	1.6	2.0	11/21/2007	11/28/2007	U	
Silver	EPA 3020A	6020	1.0	0.078	2.0	11/21/2007	11/28/2007	U	
Thallium	EPA 3020A	6020	2.00	0.15	2.0	11/21/2007	11/28/2007	U	
Vanadium	EPA 3020A	6020	4.0	0.36	2.0	11/21/2007	11/28/2007	5.7	
Zinc	EPA 3020A	6020	20	3.4	2.0	11/21/2007	11/28/2007	4.8	i

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

### Total Metals

**Sample Name:** Equipment Blank  
**Lab Code:** J0705504-013

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/21/2007	11/28/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/21/2007	11/28/2007	U	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/21/2007	11/28/2007	0.76	i
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/21/2007	11/28/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/21/2007	11/28/2007	0.36	i
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/21/2007	11/28/2007	0.49	i
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/21/2007	11/28/2007	U	
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/21/2007	11/28/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/20/2007	11/21/2007	U	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/21/2007	11/28/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/21/2007	11/28/2007	U	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/21/2007	11/28/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/21/2007	11/28/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/21/2007	11/28/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/21/2007	11/28/2007	U	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/21/2007	11/28/2007	3.3	i

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

### Total Metals

**Sample Name:** Dup-1  
**Lab Code:** J0705504-014

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/21/2007	11/29/2007	0.12	i
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/21/2007	11/29/2007	2.3	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/21/2007	11/29/2007	6.5	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/21/2007	11/29/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/21/2007	11/29/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/21/2007	11/29/2007	2.6	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/21/2007	11/29/2007	0.95	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/21/2007	11/29/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/20/2007	11/21/2007	2120	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/21/2007	11/29/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/21/2007	11/29/2007	3.2	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/21/2007	11/29/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/21/2007	11/29/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/21/2007	11/29/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/21/2007	11/29/2007	1.7	i
Zinc	EPA 3020A	6020	10	1.7	1.0	11/21/2007	11/29/2007	4.6	i

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705504  
**Date Collected:** N/A  
**Date Received:** N/A

### Total Metals

**Sample Name:** Method Blank  
**Lab Code:** MB6-1121

**Units:** ug/L

**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.00	0.09	1.0	11/21/2007	11/29/2007	U	
Antimony	EPA 3020A	6020	2.00	0.09	1.0	11/21/2007	11/28/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/21/2007	11/29/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/21/2007	11/28/2007	U	
Barium	EPA 3020A	6020	2.00	0.14	1.0	11/21/2007	11/29/2007	U	
Barium	EPA 3020A	6020	2.00	0.14	1.0	11/21/2007	11/28/2007	U	
Beryllium	EPA 3020A	6020	1.00	0.08	1.0	11/21/2007	11/29/2007	U	
Beryllium	EPA 3020A	6020	1.00	0.08	1.0	11/21/2007	11/28/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/21/2007	11/29/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/21/2007	11/28/2007	0.36	i
Chromium	EPA 3020A	6020	2.00	0.12	1.0	11/21/2007	11/29/2007	0.43	i
Chromium	EPA 3020A	6020	2.00	0.12	1.0	11/21/2007	11/28/2007	0.42	i
Cobalt	EPA 3020A	6020	1.00	0.04	1.0	11/21/2007	11/29/2007	U	
Cobalt	EPA 3020A	6020	1.00	0.04	1.0	11/21/2007	11/28/2007	U	
Copper	EPA 3020A	6020	2.00	0.29	1.0	11/21/2007	11/29/2007	U	
Copper	EPA 3020A	6020	2.00	0.29	1.0	11/21/2007	11/28/2007	U	
Iron	EPA 3010A	6010B	50.0	17.0	1.0	11/20/2007	11/21/2007	U	
Lead	EPA 3020A	6020	1.00	0.30	1.0	11/21/2007	11/29/2007	U	
Lead	EPA 3020A	6020	1.00	0.30	1.0	11/21/2007	11/28/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	2.00	0.69	1.0	11/21/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.00	0.69	1.0	11/21/2007	11/28/2007	U	
Selenium	EPA 3020A	6020	2.00	0.79	1.0	11/21/2007	11/29/2007	U	
Selenium	EPA 3020A	6020	2.00	0.79	1.0	11/21/2007	11/28/2007	U	
Silver	EPA 3020A	6020	0.500	0.039	1.0	11/21/2007	11/29/2007	U	
Silver	EPA 3020A	6020	0.500	0.039	1.0	11/21/2007	11/28/2007	U	
Thallium	EPA 3020A	6020	1.00	0.08	1.0	11/21/2007	11/29/2007	U	
Thallium	EPA 3020A	6020	1.00	0.08	1.0	11/21/2007	11/28/2007	U	
Vanadium	EPA 3020A	6020	2.00	0.18	1.0	11/21/2007	11/29/2007	U	
Vanadium	EPA 3020A	6020	2.00	0.18	1.0	11/21/2007	11/28/2007	U	
Zinc	EPA 3020A	6020	10.0	1.7	1.0	11/21/2007	11/29/2007	U	
Zinc	EPA 3020A	6020	10.0	1.7	1.0	11/21/2007	11/28/2007	U	

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

### Total Metals Sodium

**Prep Method:** EPA 3010A  
**Analysis Method:** 6010B  
**Test Notes:**

**Units:** mg/L  
**Basis:** N/A

Sample Name:	Lab Code:	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
MW-10A	J0705504-001	0.50	0.15	1.0	11/20/2007	11/21/2007	6.7	
MW-10B	J0705504-002	0.50	0.15	1.0	11/20/2007	11/21/2007	9.0	
MW-10C	J0705504-003	0.50	0.15	1.0	11/20/2007	11/21/2007	6.2	
MW-9A	J0705504-004	0.50	0.15	1.0	11/20/2007	11/21/2007	7.7	
MW-9B	J0705504-005	0.50	0.15	1.0	11/20/2007	11/21/2007	8.6	
MW-9C	J0705504-006	0.50	0.15	1.0	11/20/2007	11/21/2007	6.0	
MW-8A	J0705504-007	0.50	0.15	1.0	11/20/2007	11/21/2007	23	
MW-8B	J0705504-008	0.50	0.15	1.0	11/20/2007	11/21/2007	6.1	
MW-8C	J0705504-009	0.50	0.15	1.0	11/20/2007	11/21/2007	5.7	
MW-16B	J0705504-010	0.50	0.15	1.0	11/20/2007	11/21/2007	8.1	
MW-16C	J0705504-011	0.50	0.15	1.0	11/20/2007	11/21/2007	11	
MW-17B	J0705504-012	0.50	0.15	1.0	11/20/2007	11/21/2007	12	
Equipment Blank	J0705504-013	0.50	0.15	1.0	11/20/2007	11/21/2007	U	
Dup-1	J0705504-014	0.50	0.15	1.0	11/20/2007	11/21/2007	7.8	
Method Blank	MB2-1120	0.50	0.15	1.0	11/20/2007	11/21/2007	U	

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

### Dissolved Metals

**Sample Name:** MW-8B  
**Lab Code:** J0705504-008

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3005A	6020	2.0	0.088	1.0	11/16/2007	11/30/2007	0.14	i
Arsenic	EPA 3005A	6020	0.50	0.28	1.0	11/16/2007	11/30/2007	0.36	i
Barium	EPA 3005A	6020	2.0	0.14	1.0	11/16/2007	11/30/2007	51	
Beryllium	EPA 3005A	6020	1.0	0.084	1.0	11/16/2007	11/30/2007	0.16	i
Cadmium	EPA 3005A	6020	0.50	0.12	1.0	11/16/2007	11/30/2007	U	
Chromium	EPA 3005A	6020	2.0	0.12	1.0	11/16/2007	11/30/2007	4.1	
Cobalt	EPA 3005A	6020	1.0	0.041	1.0	11/16/2007	11/30/2007	0.15	i
Copper	EPA 3005A	6020	2.0	0.29	1.0	11/16/2007	11/30/2007	1.2	i
Iron	EPA 3005A	6010B	50	17	1.0	11/16/2007	11/20/2007	1030	
Lead	EPA 3005A	6020	1.0	0.30	1.0	11/16/2007	11/30/2007	5.0	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/19/2007	11/19/2007	U	
Nickel	EPA 3005A	6020	2.0	0.69	1.0	11/16/2007	11/30/2007	0.77	i
Selenium	EPA 3005A	6020	2.0	0.79	1.0	11/16/2007	11/30/2007	1.0	i
Silver	EPA 3005A	6020	0.50	0.039	1.0	11/16/2007	11/30/2007	U	
Thallium	EPA 3005A	6020	1.00	0.077	1.0	11/16/2007	11/30/2007	0.11	i
Vanadium	EPA 3005A	6020	2.0	0.18	1.0	11/16/2007	11/30/2007	11	
Zinc	EPA 3005A	6020	10	1.7	1.0	11/16/2007	11/30/2007	U	

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## Dissolved Metals

**Sample Name:** MW-16B  
**Lab Code:** J0705504-010

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3005A	6020	2.0	0.088	1.0	11/16/2007	11/30/2007	0.43	i
Arsenic	EPA 3005A	6020	0.50	0.28	1.0	11/16/2007	11/30/2007	0.74	
Barium	EPA 3005A	6020	2.0	0.14	1.0	11/16/2007	11/30/2007	129	
Beryllium	EPA 3005A	6020	1.0	0.084	1.0	11/16/2007	11/30/2007	0.26	i
Cadmium	EPA 3005A	6020	0.50	0.12	1.0	11/16/2007	11/30/2007	U	
Chromium	EPA 3005A	6020	2.0	0.12	1.0	11/16/2007	11/30/2007	10	
Cobalt	EPA 3005A	6020	1.0	0.041	1.0	11/16/2007	11/30/2007	0.61	i
Copper	EPA 3005A	6020	2.0	0.29	1.0	11/16/2007	11/30/2007	3.6	
Iron	EPA 3005A	6010B	50	17	1.0	11/16/2007	11/20/2007	2420	
Lead	EPA 3005A	6020	1.0	0.30	1.0	11/16/2007	11/30/2007	14	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/19/2007	11/19/2007	U	
Nickel	EPA 3005A	6020	2.0	0.69	1.0	11/16/2007	11/30/2007	2.5	
Selenium	EPA 3005A	6020	2.0	0.79	1.0	11/16/2007	11/30/2007	2.8	
Silver	EPA 3005A	6020	0.50	0.039	1.0	11/16/2007	11/30/2007	U	
Thallium	EPA 3005A	6020	1.00	0.077	1.0	11/16/2007	11/30/2007	U	
Vanadium	EPA 3005A	6020	2.0	0.18	1.0	11/16/2007	11/30/2007	11	
Zinc	EPA 3005A	6020	10	1.7	1.0	11/16/2007	11/30/2007	3.4	i



## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

## Dissolved Metals

**Sample Name:** MW-17B  
**Lab Code:** J0705504-012

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3005A	6020	2.0	0.088	1.0	11/16/2007	11/30/2007	0.14	i
Arsenic	EPA 3005A	6020	0.50	0.28	1.0	11/16/2007	11/30/2007	0.64	
Barium	EPA 3005A	6020	2.0	0.14	1.0	11/16/2007	11/30/2007	87	
Beryllium	EPA 3005A	6020	1.0	0.084	1.0	11/16/2007	11/30/2007	0.12	i
Cadmium	EPA 3005A	6020	0.50	0.12	1.0	11/16/2007	11/30/2007	U	
Chromium	EPA 3005A	6020	2.0	0.12	1.0	11/16/2007	11/30/2007	3.5	
Cobalt	EPA 3005A	6020	1.0	0.041	1.0	11/16/2007	11/30/2007	0.32	i
Copper	EPA 3005A	6020	2.0	0.29	1.0	11/16/2007	11/30/2007	2.1	
Iron	EPA 3005A	6010B	50	17	1.0	11/16/2007	11/20/2007	1960	
Lead	EPA 3005A	6020	1.0	0.30	1.0	11/16/2007	11/30/2007	5.5	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/19/2007	11/19/2007	U	
Nickel	EPA 3005A	6020	2.0	0.69	1.0	11/16/2007	11/30/2007	0.88	i
Selenium	EPA 3005A	6020	2.0	0.79	1.0	11/16/2007	11/30/2007	1.1	i
Silver	EPA 3005A	6020	0.50	0.039	1.0	11/16/2007	11/30/2007	U	
Thallium	EPA 3005A	6020	1.00	0.077	1.0	11/16/2007	11/30/2007	U	
Vanadium	EPA 3005A	6020	2.0	0.18	1.0	11/16/2007	11/30/2007	4.7	
Zinc	EPA 3005A	6020	10	1.7	1.0	11/16/2007	11/30/2007	2.5	i

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705504  
 Date Collected: N/A  
 Date Received: N/A

## Dissolved Metals

Sample Name: Method Blank  
 Lab Code: MB3-1116

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3005A	6020	2.00	0.09	1.0	11/16/2007	11/29/2007	U	
Arsenic	EPA 3005A	6020	0.50	0.28	1.0	11/16/2007	11/29/2007	U	
Barium	EPA 3005A	6020	2.00	0.14	1.0	11/16/2007	11/29/2007	U	
Beryllium	EPA 3005A	6020	1.00	0.08	1.0	11/16/2007	11/29/2007	U	
Cadmium	EPA 3005A	6020	0.50	0.12	1.0	11/16/2007	11/29/2007	U	
Chromium	EPA 3005A	6020	2.00	0.12	1.0	11/16/2007	11/29/2007	U	
Cobalt	EPA 3005A	6020	1.00	0.04	1.0	11/16/2007	11/29/2007	U	
Copper	EPA 3005A	6020	2.00	0.29	1.0	11/16/2007	11/29/2007	U	
Iron	EPA 3005A	6010B	50.0	17.0	1.0	11/16/2007	11/20/2007	U	
Lead	EPA 3005A	6020	1.00	0.30	1.0	11/16/2007	11/29/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/19/2007	11/19/2007	U	
Nickel	EPA 3005A	6020	2.00	0.69	1.0	11/16/2007	11/29/2007	U	
Selenium	EPA 3005A	6020	2.00	0.79	1.0	11/16/2007	11/29/2007	U	
Silver	EPA 3005A	6020	0.500	0.039	1.0	11/16/2007	11/29/2007	U	
Thallium	EPA 3005A	6020	1.00	0.08	1.0	11/16/2007	11/29/2007	U	
Vanadium	EPA 3005A	6020	2.00	0.18	1.0	11/16/2007	11/29/2007	U	
Zinc	EPA 3005A	6020	10.0	1.7	1.0	11/16/2007	11/29/2007	U	

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705504  
**Date Collected:** N/A  
**Date Received:** N/A

### Dissolved Metals

**Sample Name:** FILTBLK  
**Lab Code:** FILTBLK

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/16/2007	11/30/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/16/2007	11/30/2007	U	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/16/2007	11/30/2007	U	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/16/2007	11/30/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/16/2007	11/30/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/16/2007	11/30/2007	0.60	i
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/16/2007	11/30/2007	U	
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/16/2007	11/30/2007	U	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/16/2007	11/30/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/16/2007	11/30/2007	U	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/16/2007	11/30/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/16/2007	11/30/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/16/2007	11/30/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/16/2007	11/30/2007	U	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/16/2007	11/30/2007	U	

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007

### Dissolved Metals Sodium

**Prep Method:** EPA 3005A  
**Analysis Method:** 6010B  
**Test Notes:**

**Units:** mg/L  
**Basis:** N/A

Sample Name:	Lab Code:	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
MW-8B	J0705504-008	0.50	0.15	1.0	11/16/2007	11/20/2007	6.0	
MW-16B	J0705504-010	0.50	0.15	1.0	11/16/2007	11/20/2007	8.4	
MW-17B	J0705504-012	0.50	0.15	1.0	11/16/2007	11/20/2007	12	
Method Blank	MB2-1116	0.50	0.15	1.0	11/16/2007	11/20/2007	U	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705504  
**Date Collected :** 11/14/07  
**Date Received :** 11/15/07

## Inorganic Parameters

**Sample Name :** MW-10A  
**Lab Code :** J0705504-001  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.1	0.074	2	11/27/07 14:38	6.0	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/29/07 21:17	13	
Nitrate as Nitrogen	mg/L (ppm)	353.2	0.02	0.003	1	11/15/07 18:25	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/19/07 16:30	97	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705504  
**Date Collected :** 11/14/07  
**Date Received :** 11/15/07

## Inorganic Parameters

**Sample Name :** MW-10B  
**Lab Code :** J0705504-002  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:06	0.13	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/29/07 21:17	15	
Nitrate as Nitrogen	mg/L (ppm)	353.2	0.02	0.003	1	11/15/07 18:25	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/19/07 16:30	59	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705504  
**Date Collected :** 11/14/07  
**Date Received :** 11/15/07

## Inorganic Parameters

**Sample Name :** MW-10C  
**Lab Code :** J0705504-003  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:06	0.15	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/29/07 21:17	7.7	
Nitrate as Nitrogen	mg/L (ppm)	353.2	0.02	0.003	1	11/15/07 18:25	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/19/07 16:30	56	



# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705504  
**Date Collected :** 11/14/07  
**Date Received :** 11/15/07

## Inorganic Parameters

**Sample Name :** MW-9A  
**Lab Code :** J0705504-004  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:06	5.7	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/29/07 21:17	19	
Nitrate as Nitrogen	mg/L (ppm)	353.2	0.02	0.003	1	11/15/07 18:25	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/19/07 16:30	95	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705504  
**Date Collected :** 11/14/07  
**Date Received :** 11/15/07

## Inorganic Parameters

**Sample Name :** MW-9B  
**Lab Code :** J0705504-005  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:06	0.14	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/29/07 21:17	14	
Nitrate as Nitrogen	mg/L (ppm)	353.2	0.02	0.003	1	11/15/07 18:25	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/19/07 16:30	61	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705504  
**Date Collected :** 11/14/07  
**Date Received :** 11/15/07

## Inorganic Parameters

**Sample Name :** MW-9C  
**Lab Code :** J0705504-006  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:38	0.12	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/29/07 21:17	7.8	
Nitrate as Nitrogen	mg/L (ppm)	353.2	0.02	0.003	1	11/15/07 18:25	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/19/07 16:30	50	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705504  
**Date Collected :** 11/14/07  
**Date Received :** 11/15/07

## Inorganic Parameters

**Sample Name :** MW-8A  
**Lab Code :** J0705504-007  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:38	1.6	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/29/07 21:17	52	
Nitrate as Nitrogen	mg/L (ppm)	353.2	0.02	0.003	1	11/15/07 18:25	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/19/07 16:30	150	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705504  
**Date Collected :** 11/14/07  
**Date Received :** 11/15/07

## Inorganic Parameters

**Sample Name :** MW-8B  
**Lab Code :** J0705504-008  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:38	0.18	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/29/07 21:17	8.1	
Nitrate as Nitrogen	mg/L (ppm)	353.2	0.02	0.003	1	11/15/07 18:25	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/19/07 16:30	86	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705504  
**Date Collected :** 11/14/07  
**Date Received :** 11/15/07

## Inorganic Parameters

**Sample Name :** MW-8C  
**Lab Code :** J0705504-009  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:38	0.11	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/29/07 21:17	7.6	
Nitrate as Nitrogen	mg/L (ppm)	353.2	0.02	0.003	1	11/15/07 18:25	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/19/07 16:30	57	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705504  
**Date Collected :** 11/14/07  
**Date Received :** 11/15/07

## Inorganic Parameters

**Sample Name :** MW-16B  
**Lab Code :** J0705504-010  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:38	0.61	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/29/07 21:17	14	
Nitrate as Nitrogen	mg/L (ppm)	353.2	0.02	0.003	1	11/15/07 18:25	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/19/07 16:30	180	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705504  
**Date Collected :** 11/14/07  
**Date Received :** 11/15/07

## Inorganic Parameters

**Sample Name :** MW-16C  
**Lab Code :** J0705504-011  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:38	0.15	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/29/07 21:17	20	
Nitrate as Nitrogen	mg/L (ppm)	353.2	0.02	0.003	1	11/15/07 18:25	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/19/07 16:30	81	



# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705504  
**Date Collected :** 11/14/07  
**Date Received :** 11/15/07

## Inorganic Parameters

**Sample Name :** MW-17B  
**Lab Code :** J0705504-012  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:38	0.28	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/29/07 21:17	19	
Nitrate as Nitrogen	mg/L (ppm)	353.2	0.02	0.003	1	11/15/07 18:25	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/19/07 16:30	110	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705504  
**Date Collected :** 11/14/07  
**Date Received :** 11/15/07

## Inorganic Parameters

**Sample Name :** Equipment Blank  
**Lab Code :** J0705504-013  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:38	U	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/29/07 21:17	U	
Nitrate as Nitrogen	mg/L (ppm)	353.2	0.02	0.003	1	11/15/07 18:25	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/19/07 16:30	U	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705504  
**Date Collected :** 11/14/07  
**Date Received :** 11/15/07

## Inorganic Parameters

**Sample Name :** Dup-1  
**Lab Code :** J0705504-014  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:38	5.3	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/29/07 21:17	19	
Nitrate as Nitrogen	mg/L (ppm)	353.2	0.02	0.003	1	11/15/07 18:25	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/19/07 16:30	100	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705504  
**Date Collected :** NA  
**Date Received :** NA

## Inorganic Parameters

**Sample Name :** Method Blank  
**Lab Code :** J0705504-MB  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:38	U	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/29/07 21:17	U	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/29/07 21:17	U	
Nitrate as Nitrogen	mg/L (ppm)	353.2	0.02	0.003	1	11/15/07 18:25	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/19/07 16:30	U	

## COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705504

**Surrogate Recovery Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: PERCENT  
 Level: Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>	<u>Sur2</u>	<u>Sur3</u>	<u>Sur4</u>
MW-10A	J0705504-001	77	111	91	98
MW-10B	J0705504-002	86	107	97	97
MW-10C	J0705504-003	81	106	96	98
MW-9A	J0705504-004	77	99	93	97
MW-9B	J0705504-005	79	113	97	98
MW-9C	J0705504-006	84	106	96	98
MW-8A	J0705504-007	83	104	99	95
MW-8B	J0705504-008	83	103	98	100
MW-8C	J0705504-009	81	101	90	98
MW-16B	J0705504-010	88	103	97	98
MW-16C	J0705504-011	85	106	96	95
MW-17B	J0705504-012	86	107	97	93
Equipment Blank	J0705504-013	89	111	104	102
Dup-1	J0705504-014	83	107	94	98
Trip Blank	J0705504-015	83	106	93	95
Method Blank	JWG0703835-4	79	105	83	97
Lab Control Sample	JWG0703835-3	84	94	96	96

**Surrogate Recovery Control Limits (%)**


---

Sur1 = 1,2-Dichloroethane-d4	71-122
Sur2 = 4-Bromofluorobenzene	75-120
Sur3 = Dibromofluoromethane	82-116
Sur4 = Toluene-d8	88-117

---

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Extracted:** 11/16/2007  
**Date Analyzed:** 11/16/2007

**Lab Control Spike Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703835

Lab Control Sample  
 JWG0703835-3

**Lab Control Spike**

Analyte Name	Result	Expected	%Rec	%Rec Limits
Chloromethane	19.0	20.0	95	67-135
Vinyl Chloride	19.2	20.0	96	78-132
Bromomethane	21.1	20.0	105	79-130
Chloroethane	22.4	20.0	112	74-126
Trichlorofluoromethane	23.6	20.0	118	74-134
1,1-Dichloroethene	23.5	20.0	118	78-130
Acetone	107	100	107	67-133
Iodomethane (Methyl Iodide)	153	100	153 *	68-134
Carbon Disulfide	111	100	111	76-138
Methylene Chloride	21.5	20.0	108	72-124
trans-1,2-Dichloroethene	21.8	20.0	109	77-124
Acrylonitrile	105	100	105	77-127
1,1-Dichloroethane	22.8	20.0	114	80-128
Vinyl Acetate	94.6	100	95	61-148
cis-1,2-Dichloroethene	22.1	20.0	111	80-126
2-Butanone (MEK)	92.7	100	93	73-127
Bromochloromethane	23.0	20.0	115	79-129
Chloroform	20.9	20.0	105	83-124
1,1,1-Trichloroethane (TCA)	21.3	20.0	106	79-124
Carbon Tetrachloride	20.8	20.0	104	81-125
Benzene	20.7	20.0	104	79-119
1,2-Dichloroethane (EDC)	20.6	20.0	103	80-124
Trichloroethene (TCE)	20.9	20.0	104	76-124
1,2-Dichloropropane	20.3	20.0	101	79-123
Dibromomethane	21.8	20.0	109	83-123
Bromodichloromethane	19.5	20.0	97	81-123
cis-1,3-Dichloropropene	19.2	20.0	96	86-123
4-Methyl-2-pentanone (MIBK)	97.8	100	98	72-136
Toluene	21.4	20.0	107	86-117
trans-1,3-Dichloropropene	19.2	20.0	96	83-124
1,1,2-Trichloroethane	19.3	20.0	96	86-114
Tetrachloroethene (PCE)	21.4	20.0	107	80-121
2-Hexanone	103	100	103	71-138
Dibromochloromethane	19.8	20.0	99	82-121
1,2-Dibromoethane (EDB)	19.8	20.0	99	88-117
Chlorobenzene	20.9	20.0	104	86-113

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Extracted:** 11/16/2007  
**Date Analyzed:** 11/16/2007

**Lab Control Spike Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703835

Analyte Name	Lab Control Sample JWG0703835-3 Lab Control Spike			%Rec Limits
	Result	Expected	%Rec	
1,1,1,2-Tetrachloroethane	20.3	20.0	101	85-117
Ethylbenzene	20.5	20.0	102	90-118
m,p-Xylenes	41.0	40.0	102	86-121
o-Xylene	20.4	20.0	102	89-119
Styrene	20.8	20.0	104	89-122
Bromoform	21.8	20.0	109	68-129
1,1,2,2-Tetrachloroethane	19.7	20.0	98	83-120
1,2,3-Trichloropropane	19.6	20.0	98	83-123
1,4-Dichlorobenzene	21.3	20.0	106	83-113
trans-1,4-Dichloro-2-butene	19.7	20.0	99	53-143
1,2-Dichlorobenzene	22.1	20.0	111	84-115
1,2-Dibromo-3-chloropropane (DBCP)	21.2	20.0	106	62-123

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: GeoSyntec Consultants  
Project: Oak Hammock/FQ1144  
Sample Matrix: Water

Service Request: J0705504

Surrogate Recovery Summary  
1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

Extraction Method: METHOD  
Analysis Method: 8011

Units: PERCENT  
Level: Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>
MW-10A	J0705504-001	138
MW-10B	J0705504-002	133
MW-10C	J0705504-003	128
MW-9A	J0705504-004	108
MW-9B	J0705504-005	132
MW-9C	J0705504-006	136
MW-8A	J0705504-007	116
MW-8B	J0705504-008	134
MW-8C	J0705504-009	132
MW-16B	J0705504-010	130
MW-16C	J0705504-011	135
MW-17B	J0705504-012	133
Equipment Blank	J0705504-013	128
Dup-1	J0705504-014	111
Method Blank	JWG0703819-3	116
Lab Control Sample	JWG0703819-1	117
Duplicate Lab Control Sample	JWG0703819-2	118

## Surrogate Recovery Control Limits (%)

---

Sur1 = 1,1,1,2-Tetrachloroethane 77-150

---

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.



## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705504  
**Date Extracted:** 11/16/2007  
**Date Analyzed:** 11/21/2007

**Lab Control Spike/Duplicate Lab Control Spike Summary**  
**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703819

Analyte Name	Lab Control Sample JWG0703819-1 Lab Control Spike			Duplicate Lab Control Sample JWG0703819-2 Duplicate Lab Control Spike			%Rec Limits	RPD	RPD Limit
	Result	Expected	%Rec	Result	Expected	%Rec			
1,2-Dibromoethane (EDB)	0.261	0.250	104	0.266	0.250	106	70-130	2	20
1,2-Dibromo-3-chloropropane (DBCP)	0.288	0.250	115	0.289	0.250	116	70-130	0	20

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705504  
**Date Collected:** 11/14/2007  
**Date Received:** 11/15/2007  
**Date Extracted:** 11/20/2007  
**Date Analyzed:** 11/21/2007

### Matrix Spike/Matrix Spike Duplicate Summary Total Metals

**Sample Name:** MW-16B  
**Lab Code:** J0705504-010

J0705504-010S

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	Spike Level		Sample Result	Spike Result		Percent Recovery			% Rec Acceptance		Result Notes
				MS	DMS		MS	DMS	MS	DMS	RPD	Limits		
Iron	EPA 3010	6010B	50	2000	2000	1660	4090	4970	122	166	19	75 - 125		N

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705504  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date Extracted:** 11/21/2007  
**Date Analyzed:** 11/29/2007

### Laboratory Control Sample Summary Total Metals

**Sample Name:** Lab Control Sample  
**Lab Code:** LCS6-1121

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	True Value	Results	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Antimony	EPA 3020A	6020	50.0	50.9	102	80 - 120	
Antimony	EPA 3020A	6020	50.0	51.8	104	80 - 120	
Arsenic	EPA 3020A	6020	50.0	48.8	98	80 - 120	
Arsenic	EPA 3020A	6020	50.0	50.7	101	80 - 120	
Barium	EPA 3020A	6020	50.0	50.9	102	80 - 120	
Barium	EPA 3020A	6020	50.0	52.3	105	80 - 120	
Beryllium	EPA 3020A	6020	50.0	47.0	94	80 - 120	
Beryllium	EPA 3020A	6020	50.0	50.4	101	80 - 120	
Cadmium	EPA 3020A	6020	50.0	49.1	98	80 - 120	
Cadmium	EPA 3020A	6020	50.0	49.9	100	80 - 120	
Chromium	EPA 3020A	6020	50.0	51.0	102	80 - 120	
Chromium	EPA 3020A	6020	50.0	52.1	104	80 - 120	
Cobalt	EPA 3020A	6020	50.0	49.8	100	80 - 120	
Cobalt	EPA 3020A	6020	50.0	55.1	110	80 - 120	
Copper	EPA 3020A	6020	50.0	49.4	99	80 - 120	
Copper	EPA 3020A	6020	50.0	51.9	104	80 - 120	
Iron	EPA 3010A	6010B	2000	2090	104	80 - 120	
Lead	EPA 3020A	6020	50.0	50.5	101	80 - 120	
Lead	EPA 3020A	6020	50.0	51.0	102	80 - 120	
Mercury	METHOD	7470A	5.00	5.42	108	80 - 120	
Nickel	EPA 3020A	6020	50.0	50.1	100	80 - 120	
Nickel	EPA 3020A	6020	50.0	51.2	102	80 - 120	
Selenium	EPA 3020A	6020	50.0	47.2	94	80 - 120	
Selenium	EPA 3020A	6020	50.0	51.2	102	80 - 120	
Silver	EPA 3020A	6020	50.0	55.5	111	80 - 120	
Silver	EPA 3020A	6020	50.0	55.7	111	80 - 120	
Thallium	EPA 3020A	6020	50.0	49.9	100	80 - 120	
Thallium	EPA 3020A	6020	50.0	50.7	101	80 - 120	
Vanadium	EPA 3020A	6020	50.0	49.6	99	80 - 120	
Vanadium	EPA 3020A	6020	50.0	51.7	103	80 - 120	
Zinc	EPA 3020A	6020	100	105.0	105	80 - 120	
Zinc	EPA 3020A	6020	100	111.0	111	80 - 120	

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705504  
 Date Collected: 11/14/2007  
 Date Received: 11/15/2007  
 Date Extracted: 11/20/2007  
 Date Analyzed: 11/21/2007

### Matrix Spike/Matrix Spike Duplicate Summary Total Metals

Sample Name: MW-16B  
 Lab Code: J0705504-010

J0705504-010S

Units: mg/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	Spike Level		Sample Result	Spike Result		Percent Recovery			% Rec Acceptance		Result Notes
				MS	DMS		MS	DMS	MS	DMS	RPD	Limits		
Sodium	EPA 3010	6010B	0.5	10.0	10.0	8.1	18.8	18.9	107	108	1	75 - 125		

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705504  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date Extracted:** 11/20/2007  
**Date Analyzed:** 11/21/2007

### Laboratory Control Sample Summary Total Metals

**Sample Name:** Lab Control Sample  
**Lab Code:** LCS2-1120

**Units:** mg/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	True Value	Results	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sodium	EPA 3010A	6010B	10.00	10.4	104	80 - 120	

## COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705504  
 Date Collected: N/A  
 Date Received: N/A  
 Date Extracted: 11/16/2007  
 Date Analyzed: 11/29/2007

Laboratory Control Sample Summary  
 Dissolved Metals

Sample Name: Lab Control Sample  
 Lab Code: LCS3-1116

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	True Value	Results	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Antimony	EPA 3005A	6020	50.0	53.8	108	80 - 120	
Arsenic	EPA 3005A	6020	50.0	51.1	102	80 - 120	
Barium	EPA 3005A	6020	50.0	52.3	105	80 - 120	
Beryllium	EPA 3005A	6020	50.0	51.3	103	80 - 120	
Cadmium	EPA 3005A	6020	50.0	52.3	105	80 - 120	
Chromium	EPA 3005A	6020	50.0	51.1	102	80 - 120	
Cobalt	EPA 3005A	6020	50.0	51.7	103	80 - 120	
Copper	EPA 3005A	6020	50.0	51.5	103	80 - 120	
Iron	EPA 3005A	6010B	2000	1990	100	80 - 120	
Lead	EPA 3005A	6020	50.0	52.2	104	80 - 120	
Mercury	METHOD	7470A	5.00	4.73	95	80 - 120	
Nickel	EPA 3005A	6020	50.0	53.7	107	80 - 120	
Selenium	EPA 3005A	6020	50.0	51.5	103	80 - 120	
Silver	EPA 3005A	6020	50.0	47.0	94	80 - 120	
Thallium	EPA 3005A	6020	50.0	50.3	101	80 - 120	
Vanadium	EPA 3005A	6020	50.0	51.3	103	80 - 120	
Zinc	EPA 3005A	6020	100	99.0	99	80 - 120	

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705504  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date Extracted:** 11/16/2007  
**Date Analyzed:** 11/20/2007

### Laboratory Control Sample Summary Dissolved Metals

**Sample Name:** Lab Control Sample  
**Lab Code:** LCS2-1116

**Units:** mg/L  
**Basis:** N/A

<b>Analyte</b>	<b>Prep Method</b>	<b>Analysis Method</b>	<b>True Value</b>	<b>Results</b>	<b>Percent Recovery</b>	<b>CAS Percent Recovery Acceptance Limits</b>	<b>Result Notes</b>
Sodium	EPA 3005A	6010B	10.00	9.7	97	80 - 120	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705504  
**Date Collected :** 11/14/07  
**Date Received :** 11/15/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/15-29/07

### Duplicate Summary Inorganic Parameters

**Sample Name :** MW-10A  
**Lab Code :** J0705504-001DUP  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	Sample Result	Duplicate		Relative Percent Difference	Result Notes
					Sample Result	Average		
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.1	6.0	6.0	6	<1	
Chloride	mg/L (ppm)	300.0	0.2	13	13	13	<1	
Nitrate as Nitrogen	mg/L (ppm)	353.2	0.02	U	U	U	-	



# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705504  
**Date Collected :** 11/14/07  
**Date Received :** 11/15/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/15-29/07

### Matrix Spike Summary Inorganic Parameters

**Sample Name :** MW-10A  
**Lab Code :** J0705504-001MS  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS	Result Notes
								Percent Recovery Acceptance Limits	
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.1	10	6.0	15.9	99	90-110	
Chloride	mg/L (ppm)	300.0	0.2	100	13	110	97	90-110	
Nitrate as Nitrogen	mg/L (ppm)	353.2	0.02	0.30	U	0.259	86	80-120	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705504  
**Date Collected :** 11/14/07  
**Date Received :** 11/15/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/19/07

### Duplicate Summary Inorganic Parameters

**Sample Name :** MW-8A  
**Lab Code :** J0705504-007DUP  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>Sample Result</b>	<b>Duplicate Sample Result</b>	<b>Average</b>	<b>Relative Percent Difference</b>	<b>Result Notes</b>
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	150	170	160	13	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705504  
**Date Collected :** 11/14/07  
**Date Received :** 11/15/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/15-29/07

### Duplicate Summary Inorganic Parameters

**Sample Name :** MW-16C  
**Lab Code :** J0705504-011DUP  
**Test Notes :**

Basis : NA

Analyte	Units	Analysis Method	MRL	Sample Result	Duplicate Sample		Relative Percent Difference	Result Notes
					Result	Average		
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.15	0.15	0.15	<1	
Chloride	mg/L (ppm)	300.0	0.2	20	19	19.5	5	
Nitrate as Nitrogen	mg/L (ppm)	353.2	0.02	U	U	U	-	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705504  
**Date Collected :** 11/14/07  
**Date Received :** 11/15/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/15-29/07

### Matrix Spike Summary Inorganic Parameters

**Sample Name :** MW-16C  
**Lab Code :** J0705504-011MS  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS	Result Notes
								Percent Recovery Acceptance Limits	
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	5.00	0.15	5.50	107	90-110	
Chloride	mg/L (ppm)	300.0	0.2	100	20	114	94	90-110	
Nitrate as Nitrogen	mg/L (ppm)	353.2	0.02	0.10	U	0.083	83	80-120	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705504  
**Date Collected :** NA  
**Date Received :** NA  
**Date Extracted :** NA  
**Date Analyzed :** 11/15-29/07

### Laboratory Control Sample Summary Inorganic Parameters

**Sample Name :** Laboratory Control Sample  
**Lab Code :** J0705504-LCS  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS	Result Notes
						Percent Recovery Acceptance Limits	
Ammonia as Nitrogen	mg/L (ppm)	350.1	5.00	5.35	107	90-110	
Chloride	mg/L (ppm)	300.0	10	9.84	98	90-110	
Chloride	mg/L (ppm)	300.0	250	241	96	90-110	
Nitrate as Nitrogen	mg/L (ppm)	353.2	0.125	0.116	93	80-120	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	300	294	98	85-115	

**Columbia Analytical Services, Inc.**  
Cooler Receipt and Preservation Form

Client: Geosyntec

Service Request # 50705509

Project: \_\_\_\_\_

Cooler received on 11-15-01

and opened on 11-15-01 by DMR

COURIER: CAS UPS ~~FEDEX~~ DHL

CLIENT Tracking # 51081503699  
52081503331

- |    |   |            |            |     |
|----|---|------------|------------|-----|
| 1  | Were custody seals on outside of cooler?                                      | <u>Yes</u> | No         | N/A |
| 2  | Were seals intact, signed and dated?  | <u>Yes</u> | No         | N/A |
| 3  | Were custody papers properly filled out?                                      | <u>Yes</u> | No         | N/A |
| 4  | Temperature of cooler(s) upon receipt (Should be 4 +/- 2 degrees C)           | <u>1.0</u> | <u>0.4</u> |     |
| 5  | Correct Temperature?  | <u>Yes</u> | No         | N/A |
| 6  | Were Ice or Ice Packs present   | <u>Yes</u> | No         | N/A |
| 7  | Did all bottles arrive in good condition (unbroken, etc....)?                 | <u>Yes</u> | No         | N/A |
| 8  | Were all bottle labels complete (sample ID, preservation, etc....)?           | <u>Yes</u> | No         | N/A |
| 9  | Did all bottle labels and tags agree with custody papers?                     | <u>Yes</u> | No         | N/A |
| 10 | Were the correct bottles used for the tests indicated?                        | <u>Yes</u> | No         | N/A |
| 11 | Were all of the preserved bottles received with the appropriate preservative? | <u>Yes</u> | No         | N/A |

HNO3 pH<2 H2SO4 pH<2 ZnAc2/NaOH pH>9 NaOH pH>12 HCl pH<2  
Preservative additions noted below

- |    |   |            |        |     |
|----|---|------------|--------|-----|
| 12 | Were all samples received within analysis holding times?                  | <u>Yes</u> | No     | N/A |
| 13 | Were VOA vials checked for absence of air bubbles? If present, note below | <u>Yes</u> | No     | N/A |
| 14 | Where did the bottles originate?  | <u>CAS</u> | Client |     |

Sample ID	Reagent	Manuf. Lot # or CAS Chem ID	ml added	Initials

Additional comments and/or explanation of all discrepancies noted above:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Client approval to run samples if discrepancies noted: \_\_\_\_\_ Date: \_\_\_\_\_

6

**Initials:**

Note that pH is checked and meets the required pH criterion listed in the column heading unless otherwise noted on cooler receipt form.

[illegible]

## CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

An Employee - Owned Company  
www.caslab.com

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PAGE 1 OF 2

# SR

CAS Contact

50705504

CAS Contact

[illegible]





# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

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PAGE 2 OF 2

SR # 50705504  
CAS Contact

Project Name <b>Oak Hammock</b>		Project Number <b>FQ1144</b>		ANALYSIS REQUESTED (Include Method Number and Container Preservative)																																					
Project Manager <b>Kirk Willis</b>		Email Address <b>kwillis@geosyntec.com</b>		PRESERVATIVE	1	0	2	3	0	2																															
Company/Address <b>Geosyntec</b>				8260				Metals				8260				Preservative Key 0. NONE 1. HCL 2. HNO3 3. H2SO4 4. NaOH 5. Zn Acetate 6. MeOH 7. NaHSO4 8. Other																									
Phone # <b>813-538-0990</b>		FAX# <b>813-558-9726</b>		NUMBER OF CONTAINERS				8260				Metals				8260				Preservative Key 0. NONE 1. HCL 2. HNO3 3. H2SO4 4. NaOH 5. Zn Acetate 6. MeOH 7. NaHSO4 8. Other																					
Sampler's Signature <b>Joe Terry</b>		Sampler's Printed Name <b>Joe Terry</b>		LAB ID		SAMPLING DATE		SAMPLING TIME		MATRIX										REMARKS/ ALTERNATE DESCRIPTION																					
CLIENT SAMPLE ID <b>MW-16C</b>						11-14-07		1220		GW		9		X		X		X		WACs ID # 22344																					
CLIENT SAMPLE ID <b>MW-17B</b>						11-14-07		1550		GW		10		X		X		X		22346																					
CLIENT SAMPLE ID <b>Equipment Blank</b>						11-14-07		1055		W		9		X		X		X																							
CLIENT SAMPLE ID <b>Rup-I</b>						11-14-07		1325		GW		9		X		X		X																							
CLIENT SAMPLE ID <b>Trip Blank</b>						11-14-07		1325		GW		6		X		X		X																							
SPECIAL INSTRUCTIONS/COMMENTS												TURNAROUND REQUIREMENTS RUSH (SURCHARGES APPLY) <input checked="" type="checkbox"/> STANDARD REQUESTED FAX DATE REQUESTED REPORT DATE										REPORT REQUIREMENTS <input checked="" type="checkbox"/> I. Results Only <input checked="" type="checkbox"/> II. Results + QC Summaries (LCS, DUP, MSMSD as required) <input type="checkbox"/> III. Results + QC and Calibration Summaries <input type="checkbox"/> IV. Data Validation Report with Raw Data <input type="checkbox"/> V. Specialized Forms / Custom Report Edata Yes No										INVOICE INFORMATION PO# BILL TO:									
See QAPP <input type="checkbox"/>												CUSTODY SEALS: Y N										RECEIVED BY										RECEIVED BY									
SAMPLE RECEIPT: CONDITION/COOLER TEMP:												RELINQUISHED BY										RELINQUISHED BY										RELINQUISHED BY									
Signature <b>Joe Terry</b>		Signature <b>Joe Terry</b>										Signature <b>Joe Terry</b>										Signature <b>Joe Terry</b>										Signature <b>Joe Terry</b>									
Printed Name <b>Joe Terry</b>		Printed Name <b>Joe Terry</b>										Printed Name <b>Joe Terry</b>										Printed Name <b>Joe Terry</b>										Printed Name <b>Joe Terry</b>									
Firm <b>Geosyntec</b>		Firm <b>Geosyntec</b>										Firm <b>Geosyntec</b>										Firm <b>Geosyntec</b>										Firm <b>Geosyntec</b>									
Date/Time <b>11-14-07/1700</b>		Date/Time <b>11-14-07/1700</b>										Date/Time <b>11-14-07/1700</b>										Date/Time <b>11-14-07/1700</b>										Date/Time <b>11-14-07/1700</b>									

December 11, 2007

Service Request No: J0705535

Kirk Wills  
GeoSyntec Consultants  
14055 Riveredge Drive  
Suite 300  
Tampa, FL 33637

**RE: Oak Hammock/FQ1144**

Dear Kirk:

Enclosed are the results of the sample(s) submitted to our laboratory on November 16, 2007. For your reference, these analyses have been assigned our service request number **J0705535**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. In accordance to the NELAC 2003 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please call if you have any questions. My extension is 224. You may also contact me via email at [CMyers@caslab.com](mailto:CMyers@caslab.com).

Respectfully submitted,

**Columbia Analytical Services, Inc.**



Craig Myers  
Project Chemist

Page 1 of 39

*Laboratory Manager: Greg Jordan  
Quality Assurance Officer: Kathy Brungard*

*CAS Jacksonville is NELAC-accredited by the State of Florida, #E82502 valid through 6/30/08. Other state accreditations include: Arkansas, #88-0600 valid through 1/12/06; Georgia, #958 valid through 6/30/08; Louisiana, #02086 valid through 6/30/08; Texas, #T104704197-06-TX valid through 5/31/08; North Carolina, #527 valid through 12/31/07; South Carolina, #96021001 valid through 6/30/07.*

## COLUMBIA ANALYTICAL SERVICES, INC.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock  
**Sample Matrix:** Water

**Service Request No.:** J0705535  
**Date Received:** 11/16/07

### CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables, including results of QC samples analyzed from this delivery group. When appropriate to the procedure, method blank results have been reported with each analytical test. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Parameters that are included in the NELAC Fields of Testing but are not included in the lab's NELAC accreditation are identified in the discussion of each analytical procedure.

#### Sample Receipt

Two water samples and one trip blank were received for analysis at Columbia Analytical Services on 11/16/07. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at  $4\pm 2^{\circ}\text{C}$  upon receipt at the lab except for aqueous samples designated for metals analyses, which were stored at room temperature.

#### Volatile Organic Compounds by GC-MS

The samples were analyzed for Volatile Organics using EPA Method 8260. The following observations were made regarding this delivery group.

#### Second Source Exceptions

The upper control criterion was exceeded for the following analyte in Second Source Verification (SSV) CAL 1275: trans-1,4-Dichloro-2-butene. The field samples analyzed in this sequence did not contain the analyte in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

#### Method Blank Exceptions

Method Blank JWG0703854-4 contained a low level of Methylene Chloride above the Method Detection Limit (MDL), but less than the Method Reporting Limit (MRL). Samples SW-4 and Trip Blank exhibited this compound in approximately the same concentration as the method blank. The data is flagged with a qualifier to indicate the results are estimated values. The method blank results may indicate the potential for a false positive.

#### Lab Control Sample Exceptions

The spike recoveries of 1,1-Dichloroethene and trans-1,4-Dichloro-2-butene for Laboratory Control Sample (LCS) JWG0703854-3 were outside the upper control criterion. The analytes in question were not detected in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

#### Batch QC Notes and Discussion

Quality control samples for MS/DMS were performed using samples from another sample delivery group (SDG).

Approved by \_\_\_\_\_



Date \_\_\_\_\_

12/11/07

The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

#### **EDB and DBCP by GC-ECD**

The samples were analyzed for EDB and DBCP using EPA Method 8011. No problems were observed.

#### **Metals by ICP-MS/ICP-OES/CVAA**

The samples were analyzed for Total Metals using EPA Methods 6020/6010B/7470A. No problems were observed.

#### **Batch QC Notes and Discussion**

Quality control samples (i.e., Dup/Spike or MS/DMS samples) were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

#### **General Chemistry Parameters**

The samples were analyzed for Inorganic Parameters using various EPA and Standard Methods. The following observations were made regarding this delivery group.

#### **Sample Notes and Discussion**

The fecal coliform result for sample SW-4 is based on colony counts outside the optimal colony range of 20-60 CFU. The data has been qualified. This is an informational flag and does not impact the quality of the data.

#### **Batch QC Notes and Discussion**

Quality control samples for some parameters (i.e., Dup/Spike or MS/DMS samples) were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

Approved by \_\_\_\_\_



Date \_\_\_\_\_

12/11/07

## Florida DEP Data Qualifiers

- B Results based upon colony counts outside the acceptable range.
- D Measurement was made in the field.
- H Value based on field kit determination; results may not be accurate.
- i The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J Estimated value (one of the following reasons is discussed in the project case narrative).
1. The result may be inaccurate because the surrogate recovery limits have been exceeded.
  2. No known quality control criteria exists for the component.
  3. The reported value failed to meet the established quality control criteria for either precision or accuracy.
  4. The sample matrix interfered with the ability to make any accurate determination (e.g., primary and confirmation results show greater than 40% RPD).
  5. The data is questionable because of improper laboratory or field protocols (e.g., GC/MS Tune did not meet method criteria).
- K Off scale low. The value is less than the lowest calibration standard but greater than the method reporting limit (MRL).
- L Off scale high. The analyte is above the upper limit of the linear calibration range.
- M The MDL/MRL has been elevated because the analyte could not be accurately quantified due to matrix interference.
- N Presumptive evidence of the analyte. Confirmation was not performed.
- Q Sample held beyond the accepted holding time.
- T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only.
- U Indicates that the compound was analyzed for but not detected.
- V Indicates that the analyte was detected in both the sample and the associated method blank.
- Y The laboratory analysis was from an improperly preserved sample.
- Z Too many colonies were present (TNTC). The numeric value represents the filtration volume.

## Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: GeoSyntec Consultants  
Project: Oak Hammock/FQ1144

Service Request: J0705535

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
J0705535-001	SW-3	11/16/07	10:00
J0705535-002	SW-4	11/16/07	09:45
J0705535-003	Trip Blank	11/16/07	00:00

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705535  
**Date Collected:** 11/16/2007  
**Date Received:** 11/16/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** SW-3  
**Lab Code:** J0705535-001  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/20/07	11/20/07	JWG0703854	
Vinyl Chloride	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
Bromomethane	ND	U	1.0	0.15	1	11/20/07	11/20/07	JWG0703854	
Chloroethane	ND	U	1.0	0.19	1	11/20/07	11/20/07	JWG0703854	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/20/07	11/20/07	JWG0703854	
1,1-Dichloroethene	ND	UJ	1.0	0.16	1	11/20/07	11/20/07	JWG0703854	J(3)
Acetone	ND	U	50	1.9	1	11/20/07	11/20/07	JWG0703854	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/20/07	11/20/07	JWG0703854	
Carbon Disulfide	ND	U	10	1.1	1	11/20/07	11/20/07	JWG0703854	
Methylene Chloride	ND	U	5.0	0.29	1	11/20/07	11/20/07	JWG0703854	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/20/07	11/20/07	JWG0703854	
Acrylonitrile	ND	U	10	6.7	1	11/20/07	11/20/07	JWG0703854	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/20/07	11/20/07	JWG0703854	
Vinyl Acetate	ND	U	10	1.1	1	11/20/07	11/20/07	JWG0703854	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
2-Butanone (MEK)	ND	U	10	0.97	1	11/20/07	11/20/07	JWG0703854	
Bromochloromethane	ND	U	1.0	0.28	1	11/20/07	11/20/07	JWG0703854	
Chloroform	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/20/07	11/20/07	JWG0703854	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/20/07	11/20/07	JWG0703854	
Benzene	ND	U	1.0	0.088	1	11/20/07	11/20/07	JWG0703854	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/20/07	11/20/07	JWG0703854	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/20/07	11/20/07	JWG0703854	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/20/07	11/20/07	JWG0703854	
Dibromomethane	ND	U	1.0	0.22	1	11/20/07	11/20/07	JWG0703854	
Bromodichloromethane	ND	U	1.0	0.099	1	11/20/07	11/20/07	JWG0703854	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/20/07	11/20/07	JWG0703854	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/20/07	11/20/07	JWG0703854	
Toluene	ND	U	1.0	0.13	1	11/20/07	11/20/07	JWG0703854	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/20/07	11/20/07	JWG0703854	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/20/07	11/20/07	JWG0703854	
2-Hexanone	ND	U	25	1.4	1	11/20/07	11/20/07	JWG0703854	
Dibromochloromethane	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	

**Comments:** \_\_\_\_\_



## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705535  
**Date Collected:** 11/16/2007  
**Date Received:** 11/16/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** SW-3  
**Lab Code:** J0705535-001  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
Chlorobenzene	ND	U	1.0	0.10	1	11/20/07	11/20/07	JWG0703854	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
Ethylbenzene	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
m,p-Xylenes	ND	U	2.0	0.19	1	11/20/07	11/20/07	JWG0703854	
o-Xylene	ND	U	1.0	0.083	1	11/20/07	11/20/07	JWG0703854	
Styrene	ND	U	1.0	0.062	1	11/20/07	11/20/07	JWG0703854	
Bromoform	ND	U	1.0	0.28	1	11/20/07	11/20/07	JWG0703854	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/20/07	11/20/07	JWG0703854	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/20/07	11/20/07	JWG0703854	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/20/07	11/20/07	JWG0703854	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/20/07	11/20/07	JWG0703854	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/20/07	11/20/07	JWG0703854	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/20/07	11/20/07	JWG0703854	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	86	71-122	11/20/07	Acceptable
4-Bromofluorobenzene	108	75-120	11/20/07	Acceptable
Dibromofluoromethane	98	82-116	11/20/07	Acceptable
Toluene-d8	95	88-117	11/20/07	Acceptable

**Comments:** \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705535  
**Date Collected:** 11/16/2007  
**Date Received:** 11/16/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** SW-4  
**Lab Code:** J0705535-002  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/20/07	11/20/07	JWG0703854	
Vinyl Chloride	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
Bromomethane	ND	U	1.0	0.15	1	11/20/07	11/20/07	JWG0703854	
Chloroethane	ND	U	1.0	0.19	1	11/20/07	11/20/07	JWG0703854	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/20/07	11/20/07	JWG0703854	
1,1-Dichloroethene	ND	UJ	1.0	0.16	1	11/20/07	11/20/07	JWG0703854	J(3)
Acetone	ND	U	50	1.9	1	11/20/07	11/20/07	JWG0703854	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/20/07	11/20/07	JWG0703854	
Carbon Disulfide	ND	U	10	1.1	1	11/20/07	11/20/07	JWG0703854	
<b>Methylene Chloride</b>	<b>0.49</b>	<b>I</b>	5.0	0.29	1	11/20/07	11/20/07	JWG0703854	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/20/07	11/20/07	JWG0703854	
Acrylonitrile	ND	U	10	6.7	1	11/20/07	11/20/07	JWG0703854	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/20/07	11/20/07	JWG0703854	
Vinyl Acetate	ND	U	10	1.1	1	11/20/07	11/20/07	JWG0703854	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
2-Butanone (MEK)	ND	U	10	0.97	1	11/20/07	11/20/07	JWG0703854	
Bromochloromethane	ND	U	1.0	0.28	1	11/20/07	11/20/07	JWG0703854	
Chloroform	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/20/07	11/20/07	JWG0703854	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/20/07	11/20/07	JWG0703854	
Benzene	ND	U	1.0	0.088	1	11/20/07	11/20/07	JWG0703854	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/20/07	11/20/07	JWG0703854	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/20/07	11/20/07	JWG0703854	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/20/07	11/20/07	JWG0703854	
Dibromomethane	ND	U	1.0	0.22	1	11/20/07	11/20/07	JWG0703854	
Bromodichloromethane	ND	U	1.0	0.099	1	11/20/07	11/20/07	JWG0703854	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/20/07	11/20/07	JWG0703854	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/20/07	11/20/07	JWG0703854	
Toluene	ND	U	1.0	0.13	1	11/20/07	11/20/07	JWG0703854	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/20/07	11/20/07	JWG0703854	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/20/07	11/20/07	JWG0703854	
2-Hexanone	ND	U	25	1.4	1	11/20/07	11/20/07	JWG0703854	
Dibromochloromethane	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	

**Comments:** \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705535  
**Date Collected:** 11/16/2007  
**Date Received:** 11/16/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** SW-4  
**Lab Code:** J0705535-002  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
Chlorobenzene	ND	U	1.0	0.10	1	11/20/07	11/20/07	JWG0703854	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
Ethylbenzene	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
m,p-Xylenes	ND	U	2.0	0.19	1	11/20/07	11/20/07	JWG0703854	
o-Xylene	ND	U	1.0	0.083	1	11/20/07	11/20/07	JWG0703854	
Styrene	ND	U	1.0	0.062	1	11/20/07	11/20/07	JWG0703854	
Bromoform	ND	U	1.0	0.28	1	11/20/07	11/20/07	JWG0703854	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/20/07	11/20/07	JWG0703854	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/20/07	11/20/07	JWG0703854	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/20/07	11/20/07	JWG0703854	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/20/07	11/20/07	JWG0703854	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/20/07	11/20/07	JWG0703854	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/20/07	11/20/07	JWG0703854	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	88	71-122	11/20/07	Acceptable
4-Bromofluorobenzene	109	75-120	11/20/07	Acceptable
Dibromofluoromethane	103	82-116	11/20/07	Acceptable
Toluene-d8	96	88-117	11/20/07	Acceptable

Comments: \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705535  
**Date Collected:** 11/16/2007  
**Date Received:** 11/16/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Trip Blank  
**Lab Code:** J0705535-003  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/20/07	11/20/07	JWG0703854	
Vinyl Chloride	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
Bromomethane	ND	U	1.0	0.15	1	11/20/07	11/20/07	JWG0703854	
Chloroethane	ND	U	1.0	0.19	1	11/20/07	11/20/07	JWG0703854	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/20/07	11/20/07	JWG0703854	
1,1-Dichloroethene	ND	UJ	1.0	0.16	1	11/20/07	11/20/07	JWG0703854	J(3)
Acetone	ND	U	50	1.9	1	11/20/07	11/20/07	JWG0703854	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/20/07	11/20/07	JWG0703854	
Carbon Disulfide	ND	U	10	1.1	1	11/20/07	11/20/07	JWG0703854	
<b>Methylene Chloride</b>	<b>0.51</b>	<b>I</b>	5.0	0.29	1	11/20/07	11/20/07	JWG0703854	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/20/07	11/20/07	JWG0703854	
Acrylonitrile	ND	U	10	6.7	1	11/20/07	11/20/07	JWG0703854	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/20/07	11/20/07	JWG0703854	
Vinyl Acetate	ND	U	10	1.1	1	11/20/07	11/20/07	JWG0703854	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
2-Butanone (MEK)	ND	U	10	0.97	1	11/20/07	11/20/07	JWG0703854	
Bromochloromethane	ND	U	1.0	0.28	1	11/20/07	11/20/07	JWG0703854	
Chloroform	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/20/07	11/20/07	JWG0703854	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/20/07	11/20/07	JWG0703854	
Benzene	ND	U	1.0	0.088	1	11/20/07	11/20/07	JWG0703854	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/20/07	11/20/07	JWG0703854	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/20/07	11/20/07	JWG0703854	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/20/07	11/20/07	JWG0703854	
Dibromomethane	ND	U	1.0	0.22	1	11/20/07	11/20/07	JWG0703854	
Bromodichloromethane	ND	U	1.0	0.099	1	11/20/07	11/20/07	JWG0703854	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/20/07	11/20/07	JWG0703854	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/20/07	11/20/07	JWG0703854	
Toluene	ND	U	1.0	0.13	1	11/20/07	11/20/07	JWG0703854	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/20/07	11/20/07	JWG0703854	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/20/07	11/20/07	JWG0703854	
2-Hexanone	ND	U	25	1.4	1	11/20/07	11/20/07	JWG0703854	
Dibromochloromethane	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	

**Comments:** \_\_\_\_\_

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705535  
 Date Collected: 11/16/2007  
 Date Received: 11/16/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: Trip Blank  
 Lab Code: J0705535-003  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
Chlorobenzene	ND	U	1.0	0.10	1	11/20/07	11/20/07	JWG0703854	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
Ethylbenzene	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
m,p-Xylenes	ND	U	2.0	0.19	1	11/20/07	11/20/07	JWG0703854	
o-Xylene	ND	U	1.0	0.083	1	11/20/07	11/20/07	JWG0703854	
Styrene	ND	U	1.0	0.062	1	11/20/07	11/20/07	JWG0703854	
Bromoform	ND	U	1.0	0.28	1	11/20/07	11/20/07	JWG0703854	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/20/07	11/20/07	JWG0703854	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/20/07	11/20/07	JWG0703854	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/20/07	11/20/07	JWG0703854	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/20/07	11/20/07	JWG0703854	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/20/07	11/20/07	JWG0703854	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/20/07	11/20/07	JWG0703854	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	81	71-122	11/20/07	Acceptable
4-Bromofluorobenzene	111	75-120	11/20/07	Acceptable
Dibromofluoromethane	95	82-116	11/20/07	Acceptable
Toluene-d8	95	88-117	11/20/07	Acceptable

Comments: \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705535  
**Date Collected:** NA  
**Date Received:** NA

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Method Blank  
**Lab Code:** JWG0703854-4  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/20/07	11/20/07	JWG0703854	
Vinyl Chloride	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
Bromomethane	ND	U	1.0	0.15	1	11/20/07	11/20/07	JWG0703854	
Chloroethane	ND	U	1.0	0.19	1	11/20/07	11/20/07	JWG0703854	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/20/07	11/20/07	JWG0703854	
1,1-Dichloroethene	ND	UJ	1.0	0.16	1	11/20/07	11/20/07	JWG0703854	J(3)
Acetone	ND	U	50	1.9	1	11/20/07	11/20/07	JWG0703854	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/20/07	11/20/07	JWG0703854	
Carbon Disulfide	ND	U	10	1.1	1	11/20/07	11/20/07	JWG0703854	
<b>Methylene Chloride</b>	<b>0.52</b>	<b>I</b>	5.0	0.29	1	11/20/07	11/20/07	JWG0703854	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/20/07	11/20/07	JWG0703854	
Acrylonitrile	ND	U	10	6.7	1	11/20/07	11/20/07	JWG0703854	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/20/07	11/20/07	JWG0703854	
Vinyl Acetate	ND	U	10	1.1	1	11/20/07	11/20/07	JWG0703854	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
2-Butanone (MEK)	ND	U	10	0.97	1	11/20/07	11/20/07	JWG0703854	
Bromochloromethane	ND	U	1.0	0.28	1	11/20/07	11/20/07	JWG0703854	
Chloroform	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/20/07	11/20/07	JWG0703854	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/20/07	11/20/07	JWG0703854	
Benzene	ND	U	1.0	0.088	1	11/20/07	11/20/07	JWG0703854	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/20/07	11/20/07	JWG0703854	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/20/07	11/20/07	JWG0703854	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/20/07	11/20/07	JWG0703854	
Dibromomethane	ND	U	1.0	0.22	1	11/20/07	11/20/07	JWG0703854	
Bromodichloromethane	ND	U	1.0	0.099	1	11/20/07	11/20/07	JWG0703854	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/20/07	11/20/07	JWG0703854	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/20/07	11/20/07	JWG0703854	
Toluene	ND	U	1.0	0.13	1	11/20/07	11/20/07	JWG0703854	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/20/07	11/20/07	JWG0703854	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/20/07	11/20/07	JWG0703854	
2-Hexanone	ND	U	25	1.4	1	11/20/07	11/20/07	JWG0703854	
Dibromochloromethane	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705535  
**Date Collected:** NA  
**Date Received:** NA

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Method Blank  
**Lab Code:** JWG0703854-4  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
Chlorobenzene	ND	U	1.0	0.10	1	11/20/07	11/20/07	JWG0703854	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
Ethylbenzene	ND	U	1.0	0.12	1	11/20/07	11/20/07	JWG0703854	
m,p-Xylenes	ND	U	2.0	0.19	1	11/20/07	11/20/07	JWG0703854	
o-Xylene	ND	U	1.0	0.083	1	11/20/07	11/20/07	JWG0703854	
Styrene	ND	U	1.0	0.062	1	11/20/07	11/20/07	JWG0703854	
Bromoform	ND	U	1.0	0.28	1	11/20/07	11/20/07	JWG0703854	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/20/07	11/20/07	JWG0703854	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/20/07	11/20/07	JWG0703854	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/20/07	11/20/07	JWG0703854	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/20/07	11/20/07	JWG0703854	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/20/07	11/20/07	JWG0703854	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/20/07	11/20/07	JWG0703854	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	81	71-122	11/20/07	Acceptable
4-Bromofluorobenzene	107	75-120	11/20/07	Acceptable
Dibromofluoromethane	88	82-116	11/20/07	Acceptable
Toluene-d8	95	88-117	11/20/07	Acceptable

**Comments:** \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705535  
**Date Collected:** 11/16/2007  
**Date Received:** 11/16/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** SW-3  
**Lab Code:** J0705535-001  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/26/07	JWG0703869	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/26/07	JWG0703869	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	106	77-150	11/26/07	Acceptable

**Comments:** \_\_\_\_\_



## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705535  
**Date Collected:** 11/16/2007  
**Date Received:** 11/16/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** SW-4  
**Lab Code:** J0705535-002  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/26/07	JWG0703869	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/26/07	JWG0703869	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	105	77-150	11/26/07	Acceptable

**Comments:** \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705535  
**Date Collected:** NA  
**Date Received:** NA

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** Method Blank  
**Lab Code:** JWG0703869-3  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/26/07	JWG0703869	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/26/07	JWG0703869	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	109	77-150	11/26/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705535  
 Date Collected: 11/16/2007  
 Date Received: 11/16/2007

## Total Metals

Sample Name: SW-3  
 Lab Code: J0705535-001

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/21/2007	11/29/2007	0.23	i
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/21/2007	11/29/2007	0.50	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/21/2007	11/29/2007	14	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/21/2007	11/29/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/21/2007	11/29/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/21/2007	11/29/2007	1.7	i
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/21/2007	11/29/2007	0.26	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/21/2007	11/29/2007	0.41	i
Iron	EPA 3010A	6010B	50	17	1.0	11/26/2007	11/26/2007	795	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/21/2007	11/29/2007	0.34	i
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/21/2007	11/29/2007	0.75	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/21/2007	11/29/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/21/2007	11/29/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/21/2007	11/29/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/21/2007	11/29/2007	0.95	i
Zinc	EPA 3020A	6020	10	1.7	1.0	11/21/2007	11/29/2007	6.9	i

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705535  
**Date Collected:** 11/16/2007  
**Date Received:** 11/16/2007

## Total Metals

**Sample Name:** SW-4  
**Lab Code:** J0705535-002

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/21/2007	11/29/2007	0.12	i
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/21/2007	11/29/2007	0.36	i
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/21/2007	11/29/2007	15	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/21/2007	11/29/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/21/2007	11/29/2007	0.13	i
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/21/2007	11/29/2007	1.6	i
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/21/2007	11/29/2007	0.26	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/21/2007	11/29/2007	0.52	i
Iron	EPA 3010A	6010B	50	17	1.0	11/26/2007	11/26/2007	875	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/21/2007	11/29/2007	0.43	i
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/21/2007	11/29/2007	0.80	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/21/2007	11/29/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/21/2007	11/29/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/21/2007	11/29/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/21/2007	11/29/2007	1.6	i
Zinc	EPA 3020A	6020	10	1.7	1.0	11/21/2007	11/29/2007	7.5	i

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705535  
**Date Collected:** N/A  
**Date Received:** N/A

### Total Metals

**Sample Name:** Method Blank  
**Lab Code:** MB7-1121

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.00	0.09	1.0	11/21/2007	11/29/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/21/2007	11/29/2007	U	
Barium	EPA 3020A	6020	2.00	0.14	1.0	11/21/2007	11/29/2007	U	
Beryllium	EPA 3020A	6020	1.00	0.08	1.0	11/21/2007	11/29/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/21/2007	11/29/2007	U	
Chromium	EPA 3020A	6020	2.00	0.12	1.0	11/21/2007	11/29/2007	0.30	i
Cobalt	EPA 3020A	6020	1.00	0.04	1.0	11/21/2007	11/29/2007	U	
Copper	EPA 3020A	6020	2.00	0.29	1.0	11/21/2007	11/29/2007	U	
Iron	EPA 3010A	6010B	50.0	17.0	1.0	11/26/2007	11/26/2007	U	
Lead	EPA 3020A	6020	1.00	0.30	1.0	11/21/2007	11/29/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	2.00	0.69	1.0	11/21/2007	11/29/2007	U	
Selenium	EPA 3020A	6020	2.00	0.79	1.0	11/21/2007	11/29/2007	U	
Silver	EPA 3020A	6020	0.500	0.039	1.0	11/21/2007	11/29/2007	U	
Thallium	EPA 3020A	6020	1.00	0.08	1.0	11/21/2007	11/29/2007	U	
Vanadium	EPA 3020A	6020	2.00	0.18	1.0	11/21/2007	11/29/2007	U	
Zinc	EPA 3020A	6020	10.0	1.7	1.0	11/21/2007	11/29/2007	U	

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705535  
**Date Collected:** 11/16/2007  
**Date Received:** 11/16/2007

## Hardness, Total

Prep Method: METHOD  
Analysis Method: SM 2340B  
Test Notes:

Units: mg/L (ppm)  
Basis: NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
SW-3	J0705535-001	1.7	1	11/26/2007	11/26/2007	16	
SW-4	J0705535-002	1.7	1	11/26/2007	11/26/2007	16	
Method Blank	J071126-MB	1.7	1	11/26/2007	11/26/2007	U	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705535  
**Date Collected :** 11/16/07  
**Date Received :** 11/16/07

## Inorganic Parameters

**Sample Name :** SW-3  
**Lab Code :** J0705535-001  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as N, Unionized	mg/L (ppm)	FDEP	0.05	0.006	1	12/04/07 16:30	U	
Biochemical Oxygen Demand (BOD)	mg/L (ppm)	405.1	4	0.86	1	11/16/07 16:00	3.4	i
Carbon, Total Organic	mg/L (ppm)	415.1	1	0.41	1	12/04/07 11:11	36	
Chemical Oxygen Demand	mg/L (ppm)	410.2	5	1.5	1	11/27/07 19:00	87	
Chlorophyll a (Monochromatic)	mg/m3	SM 10200 H	2.2	2.2	2.2	12/04/07 11:30	2.4	
Coliform, Fecal	CFU/100mL	SM 9222D	10	10	10	11/16/07 15:10	560	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/17/07 18:59	U	
Nitrogen, Total as Nitrogen	mg/L (ppm)	300.0 + 351.2	0.5	0.089	1	12/04/07 14:50	1.5	
Phosphorus, Total	mg/L (ppm)	365.1	0.01	0.004	1	12/10/07 08:35	0.045	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/21/07 15:00	95	
Solids, Total Suspended (TSS)	mg/L (ppm)	160.2	5	1.6	1	11/20/07 12:00	3.3	i

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705535  
**Date Collected :** 11/16/07  
**Date Received :** 11/16/07

## Inorganic Parameters

**Sample Name :** SW-4  
**Lab Code :** J0705535-002  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as N, Unionized	mg/L (ppm)	FDEP	0.05	0.006	1	12/04/07 16:30	U	
Biochemical Oxygen Demand (BOD)	mg/L (ppm)	405.1	4	0.86	1	11/16/07 16:00	3.0	i
Carbon, Total Organic	mg/L (ppm)	415.1	1	0.41	1	12/04/07 11:11	37	
Chemical Oxygen Demand	mg/L (ppm)	410.2	5	1.5	1	11/27/07 19:00	95	
Chlorophyll a (Monochromatic)	mg/m3	SM 10200 H	1.1	1.1	1.1	12/04/07 11:30	U	
Coliform, Fecal	CFU/100mL	SM 9222D	9	9	9	11/16/07 15:10	1000	B
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/17/07 19:18	U	
Nitrogen, Total as Nitrogen	mg/L (ppm)	300.0 + 351.2	0.5	0.089	1	12/04/07 14:50	1.4	
Phosphorus, Total	mg/L (ppm)	365.1	0.01	0.004	1	12/10/07 08:35	0.053	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/21/07 15:00	88	
Solids, Total Suspended (TSS)	mg/L (ppm)	160.2	5	1.6	1	11/20/07 12:00	3.5	i



## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705535  
**Date Collected :** NA  
**Date Received :** NA

## Inorganic Parameters

**Sample Name :** Method Blank  
**Lab Code :** J0705535-MB  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as N, Unionized	mg/L (ppm)	FDEP	0.05	0.006	1	12/04/07 16:30	U	
Biochemical Oxygen Demand (BOD)	mg/L (ppm)	405.1	4	0.86	1	11/16/07 16:00	U	
Carbon, Total Organic	mg/L (ppm)	415.1	1	0.41	1	12/04/07 11:11	U	
Chemical Oxygen Demand	mg/L (ppm)	410.2	5	1.5	1	11/27/07 19:00	U	
Chlorophyll a (Monochromatic)	mg/m3	SM 10200 H	1	1	1	12/04/07 11:30	U	
Coliform, Fecal	CFU/100mL	SM 9222D	1	1	1	11/16/07 13:05	U	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/17/07 09:28	U	
Nitrogen, Total as Nitrogen	mg/L (ppm)	300.0 + 351.2	0.5	0.089	1	12/04/07 14:50	U	
Phosphorus, Total	mg/L (ppm)	365.1	0.01	0.004	1	12/10/07 08:35	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/21/07 15:00	U	
Solids, Total Suspended (TSS)	mg/L (ppm)	160.2	5	1.6	1	11/20/07 12:00	U	

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705535

**Surrogate Recovery Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** PERCENT  
**Level:** Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>	<u>Sur2</u>	<u>Sur3</u>	<u>Sur4</u>
SW-3	J0705535-001	86	108	98	95
SW-4	J0705535-002	88	109	103	96
Trip Blank	J0705535-003	81	111	95	95
Method Blank	JWG0703854-4	81	107	88	95
Lab Control Sample	JWG0703854-3	88	96	96	97

**Surrogate Recovery Control Limits (%)**

---

Sur1 = 1,2-Dichloroethane-d4	71-122
Sur2 = 4-Bromofluorobenzene	75-120
Sur3 = Dibromofluoromethane	82-116
Sur4 = Toluene-d8	88-117

---

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705535  
 Date Extracted: 11/20/2007  
 Date Analyzed: 11/20/2007

**Lab Control Spike Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low  
 Extraction Lot: JWG0703854

Analyte Name	Lab Control Sample JWG0703854-3 Lab Control Spike			%Rec Limits
	Result	Expected	%Rec	
Chloromethane	17.6	20.0	88	67-135
Vinyl Chloride	19.7	20.0	99	78-132
Bromomethane	19.1	20.0	95	79-130
Chloroethane	23.1	20.0	115	74-126
Trichlorofluoromethane	23.3	20.0	117	74-134
1,1-Dichloroethene	27.1	20.0	135 *	78-130
Acetone	111	100	111	67-133
Iodomethane (Methyl Iodide)	104	100	104	68-134
Carbon Disulfide	85.6	100	86	76-138
Methylene Chloride	22.0	20.0	110	72-124
trans-1,2-Dichloroethene	22.1	20.0	110	77-124
Acrylonitrile	108	100	108	77-127
1,1-Dichloroethane	24.3	20.0	121	80-128
Vinyl Acetate	88.1	100	88	61-148
cis-1,2-Dichloroethene	23.5	20.0	118	80-126
2-Butanone (MEK)	95.4	100	95	73-127
Bromochloromethane	23.5	20.0	118	79-129
Chloroform	22.4	20.0	112	83-124
1,1,1-Trichloroethane (TCA)	22.0	20.0	110	79-124
Carbon Tetrachloride	22.2	20.0	111	81-125
Benzene	21.1	20.0	105	79-119
1,2-Dichloroethane (EDC)	22.2	20.0	111	80-124
Trichloroethene (TCE)	20.7	20.0	103	76-124
1,2-Dichloropropane	21.0	20.0	105	79-123
Dibromomethane	23.3	20.0	116	83-123
Bromodichloromethane	20.1	20.0	100	81-123
cis-1,3-Dichloropropene	19.3	20.0	96	86-123
4-Methyl-2-pentanone (MIBK)	102	100	102	72-136
Toluene	21.3	20.0	106	86-117
trans-1,3-Dichloropropene	19.1	20.0	96	83-124
1,1,2-Trichloroethane	20.2	20.0	101	86-114
Tetrachloroethene (PCE)	21.8	20.0	109	80-121
2-Hexanone	111	100	111	71-138
Dibromochloromethane	20.0	20.0	100	82-121
1,2-Dibromoethane (EDB)	20.6	20.0	103	88-117
Chlorobenzene	21.0	20.0	105	86-113

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705535  
**Date Extracted:** 11/20/2007  
**Date Analyzed:** 11/20/2007

**Lab Control Spike Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703854

Analyte Name	Lab Control Sample JWG0703854-3 Lab Control Spike			%Rec Limits
	Result	Expected	%Rec	
1,1,1,2-Tetrachloroethane	20.7	20.0	104	85-117
Ethylbenzene	20.4	20.0	102	90-118
m,p-Xylenes	41.0	40.0	103	86-121
o-Xylene	20.2	20.0	101	89-119
Styrene	20.2	20.0	101	89-122
Bromoform	23.5	20.0	117	68-129
1,1,2,2-Tetrachloroethane	20.0	20.0	100	83-120
1,2,3-Trichloropropane	20.4	20.0	102	83-123
1,4-Dichlorobenzene	20.6	20.0	103	83-113
trans-1,4-Dichloro-2-butene	32.9	20.0	164 *	53-143
1,2-Dichlorobenzene	21.4	20.0	107	84-115
1,2-Dibromo-3-chloropropane (DBCP)	21.8	20.0	109	62-123

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705535

**Surrogate Recovery Summary**  
**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** PERCENT  
**Level:** Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>
SW-3	J0705535-001	106
SW-4	J0705535-002	105
Method Blank	JWG0703869-3	109
Lab Control Sample	JWG0703869-1	113
Duplicate Lab Control Sample	JWG0703869-2	114

**Surrogate Recovery Control Limits (%)**

---

Sur1 = 1,1,1,2-Tetrachloroethane 77-150

---

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705535  
**Date Extracted:** 11/21/2007  
**Date Analyzed:** 11/26/2007

**Lab Control Spike/Duplicate Lab Control Spike Summary**  
**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703869

Analyte Name	Lab Control Sample JWG0703869-1 Lab Control Spike			Duplicate Lab Control Sample JWG0703869-2 Duplicate Lab Control Spike			%Rec Limits	RPD	RPD Limit
	Result	Expected	%Rec	Result	Expected	%Rec			
1,2-Dibromoethane (EDB)	0.278	0.250	111	0.280	0.250	112	70-130	1	20
1,2-Dibromo-3-chloropropane (DBCP)	0.277	0.250	111	0.279	0.250	112	70-130	1	20

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705535  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date Extracted:** 11/21/2007  
**Date Analyzed:** 11/29/2007

### Laboratory Control Sample Summary Total Metals

**Sample Name:** Lab Control Sample  
**Lab Code:** LCS7-1121

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	True Value	Results	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Antimony	EPA 3020A	6020	50.0	49.6	99	80 - 120	
Arsenic	EPA 3020A	6020	50.0	53.3	107	80 - 120	
Barium	EPA 3020A	6020	50.0	49.1	98	80 - 120	
Beryllium	EPA 3020A	6020	50.0	46.2	92	80 - 120	
Cadmium	EPA 3020A	6020	50.0	48.4	97	80 - 120	
Chromium	EPA 3020A	6020	50.0	48.6	97	80 - 120	
Cobalt	EPA 3020A	6020	50.0	47.4	95	80 - 120	
Copper	EPA 3020A	6020	50.0	47.6	95	80 - 120	
Iron	EPA 3010A	6010B	2000	1980	99	80 - 120	
Lead	EPA 3020A	6020	50.0	50.9	102	80 - 120	
Mercury	METHOD	7470A	5.00	5.42	108	80 - 120	
Nickel	EPA 3020A	6020	50.0	48.4	97	80 - 120	
Selenium	EPA 3020A	6020	50.0	49.8	100	80 - 120	
Silver	EPA 3020A	6020	50.0	53.3	107	80 - 120	
Thallium	EPA 3020A	6020	50.0	50.5	101	80 - 120	
Vanadium	EPA 3020A	6020	50.0	48.3	97	80 - 120	
Zinc	EPA 3020A	6020	100	101.0	101	80 - 120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**LCS Matrix:** Water

**Service Request:** J0705535  
**Date Collected:** NA  
**Date Received:** NA  
**Date Extracted:** 11/26/2007  
**Date Analyzed:** 11/26/2007

Laboratory Control Sample Summary  
Total Metals

**Sample Name:** Lab Control Sample  
**Lab Code:** J071126-LCS  
**Test Notes:**

**Units:** mg/L (ppm)  
**Basis:** NA

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Hardness as CaCO <sub>3</sub> , Total	METHOD	SM 2340B	91.1	86.9	95	85-115	



# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705535  
**Date Collected :** 11/16/07  
**Date Received :** 11/16/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/20-12/10/07

### Duplicate Summary Inorganic Parameters

**Sample Name :** SW-3  
**Lab Code :** J0705535-001DUP  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Chemical Oxygen Demand	mg/L (ppm)	410.2	5	87	91	89	4	
Chlorophyll a (Monochromatic)	mg/m3	SM 10200 H	2.2	2.4	2.9	2.65	19	
Phosphorus, Total	mg/L (ppm)	365.1	0.01	0.045	0.037	0.041	20	
Solids, Total Suspended (TSS)	mg/L (ppm)	160.2	5	3.3	3.3	3.3	<1	i

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705535  
**Date Collected :** 11/16/07  
**Date Received :** 11/16/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/27-12/10/07

Matrix Spike Summary  
Inorganic Parameters

**Sample Name :** SW-3  
**Lab Code :** J0705535-001MS  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS	Result Notes
								Percent Recovery Acceptance Limits	
Chemical Oxygen Demand	mg/L (ppm)	410.2	5	50	87	138	102	85-115	
Phosphorus, Total	mg/L (ppm)	365.1	0.01	0.500	0.045	0.550	101	90-110	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705535  
**Date Collected :** 11/16/07  
**Date Received :** 11/16/07  
**Date Extracted :** 12/05/07  
**Date Analyzed :** 12/10/07

### Duplicate Summary Inorganic Parameters

**Sample Name :** SW-4  
**Lab Code :** J0705535-002DUP  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Phosphorus, Total	mg/L (ppm)	365.1	0.01	0.053	0.049	0.051	8	

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705535  
**Date Collected :** 11/16/07  
**Date Received :** 11/16/07  
**Date Extracted :** 12/05/07  
**Date Analyzed :** 12/10/07

Matrix Spike Summary  
Inorganic Parameters

**Sample Name :** SW-4  
**Lab Code :** J0705535-002MS  
**Test Notes :**

Basis : NA

Analyte	Units	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Phosphorus, Total	mg/L (ppm)	365.1	0.01	0.500	0.053	0.563	102	90-110	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705535  
**Date Collected :** NA  
**Date Received :** NA  
**Date Extracted :** NA  
**Date Analyzed :** 11/16-12/10/07

### Laboratory Control Sample Summary Inorganic Parameters

**Sample Name :** Laboratory Control Sample  
**Lab Code :** J0705535-LCS  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS	Result Notes
						Percent Recovery Acceptance Limits	
Biochemical Oxygen Demand (BOD)	mg/L (ppm)	405.1	198	196	99	85-115	
Carbon, Total Organic	mg/L (ppm)	415.1	50	52.3	105	90-110	
Chemical Oxygen Demand	mg/L (ppm)	410.2	85.8	86.3	101	85-115	
Nitrate as Nitrogen	mg/L (ppm)	300.0	10	9.78	98	90-110	
Phosphorus, Total	mg/L (ppm)	365.1	0.500	0.506	101	90-110	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	300	298	99	85-115	
Solids, Total Suspended (TSS)	mg/L (ppm)	160.2	80	78.0	98	85-115	

## Cooler Receipt and Preservation Form

Client:

Beeswax

Service Request #

70705535

Project:

Oak Hammock

Cooler received on

11-16-07and opened on 11-16-07 byDME

COURIER:

CAS

UPS

FEDEX

DHL

CLIENT

Tracking #

DME

- |    |  |            |               |            |
|----|--|------------|---------------|------------|
| 1  | Were custody seals on outside of cooler?   | <u>Yes</u> | <u>No</u>     | <u>N/A</u> |
| 2  | Were seals intact, signed and dated?   | <u>Yes</u> | <u>No</u>     | <u>N/A</u> |
| 3  | Were custody papers properly filled out?   | <u>Yes</u> | <u>No</u>     | <u>N/A</u> |
| 4  | Temperature of cooler(s) upon receipt (Should be 4 +/- 2 degrees C)  | <u>0-6</u> |               |            |
| 5  | Correct Temperature?   | <u>Yes</u> | <u>No</u>     | <u>N/A</u> |
| 6  | Were Ice or Ice Packs present  | <u>Yes</u> | <u>No</u>     | <u>N/A</u> |
| 7  | Did all bottles arrive in good condition (unbroken, etc....)?  | <u>Yes</u> | <u>No</u>     | <u>N/A</u> |
| 8  | Were all bottle labels complete (sample ID, preservation, etc....)?  | <u>Yes</u> | <u>No</u>     | <u>N/A</u> |
| 9  | Did all bottle labels and tags agree with custody papers?  | <u>Yes</u> | <u>No</u>     | <u>N/A</u> |
| 10 | Were the correct bottles used for the tests indicated?   | <u>Yes</u> | <u>No</u>     | <u>N/A</u> |
| 11 | Were all of the preserved bottles received with the appropriate preservative?                              | <u>Yes</u> | <u>No</u>     | <u>N/A</u> |
|    | <u>HNO3 pH&lt;2</u> <u>H2SO4 pH&lt;2</u> <u>ZnAc2/NaOH pH&gt;9</u> <u>NaOH pH&gt;12</u> <u>HCl pH&lt;2</u> |            |               |            |
|    | Preservative additions noted below   |            |               |            |
| 12 | Were all samples received within analysis holding times?   | <u>Yes</u> | <u>No</u>     | <u>N/A</u> |
| 13 | Were VOA vials checked for absence of air bubbles? If present, note below                                  | <u>Yes</u> | <u>No</u>     | <u>N/A</u> |
| 14 | Where did the bottles originate?   | <u>CAS</u> | <u>Client</u> |            |

Sample ID	Reagent	Manuf. Lot # or CAS Chem ID	ml added	Initials

Additional comments and/or explanation of all discrepancies noted above:

Client approval to run samples if discrepancies noted:

Date:

**Initials:**

Note that pH is checked and meets the required pH criterion listed in the column heading unless otherwise noted on cooler receipt form.

[illegible]



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10705535

CAS Contact

Project Name		Project Number		Project Manager		Company/Address		Phone #		FAX #		Sample's Signature		Sample's Printed Name		Matrix		LAB ID		SAMPLING DATE		TIME		MATRIX	
Oak Hammock		FQ 11-14		Kirk Wills		Kwills@geosyntec.com		14055 Rivedge Dr.		Suite 300		Joe Terry		Joe Terry		SW-3		SW-3		11-16-07		1000		SW	
Kirk Wills		FQ 11-14		Kwills@geosyntec.com		Kwills@geosyntec.com		Tampa, FL		33637		Joe Terry		Joe Terry		SW-4		SW-4		11-16-07		0945		SW	
Geosyntec		FQ 11-14		Kwills@geosyntec.com		Kwills@geosyntec.com		Tampa, FL		33637		Joe Terry		Joe Terry		Trip Blank		Trip Blank							
14055 Rivedge Dr.		FQ 11-14		Kwills@geosyntec.com		Kwills@geosyntec.com		Tampa, FL		33637		Joe Terry		Joe Terry											
Tampa, FL		FQ 11-14		Kwills@geosyntec.com		Kwills@geosyntec.com		Tampa, FL		33637		Joe Terry		Joe Terry											
813-558-0990		FQ 11-14		Kwills@geosyntec.com		Kwills@geosyntec.com		Tampa, FL		33637		Joe Terry		Joe Terry											
813-558-9726		FQ 11-14		Kwills@geosyntec.com		Kwills@geosyntec.com		Tampa, FL		33637		Joe Terry		Joe Terry											
Joe Terry		FQ 11-14		Kwills@geosyntec.com		Kwills@geosyntec.com		Tampa, FL		33637		Joe Terry		Joe Terry											
Joe Terry		FQ 11-14		Kwills@geosyntec.com		Kwills@geosyntec.com		Tampa, FL		33637		Joe Terry		Joe Terry											
Joe Terry		FQ 11-14		Kwills@geosyntec.com		Kwills@geosyntec.com		Tampa, FL		33637		Joe Terry		Joe Terry											
Joe Terry		FQ 11-14		Kwills@geosyntec.com		Kwills@geosyntec.com		Tampa, FL		33637		Joe Terry		Joe Terry											
Joe Terry		FQ 11-14		Kwills@geosyntec.com		Kwills@geosyntec.com		Tampa, FL		33637		Joe Terry		Joe Terry											
Joe Terry		FQ 11-14		Kwills@geosyntec.com		Kwills@geosyntec.com		Tampa, FL		33637		Joe Terry		Joe Terry											
Joe Terry		FQ 11-14		Kwills@geosyntec.com		Kwills@geosyntec.com		Tampa, FL		33637		Joe Terry		Joe Terry											
Joe Terry		FQ 11-14		Kwills@geosyntec.com		Kwills@geosyntec.com		Tampa, FL		33637		Joe Terry		Joe Terry											
Joe Terry		FQ 11-14		Kwills@geosyntec.com		Kwills@geosyntec.com		Tampa, FL		33637		Joe Terry		Joe Terry											
Joe Terry		FQ 11-14		Kwills@geosyntec.com		Kwills@geosyntec.com		Tampa, FL		33637		Joe Terry		Joe Terry											
Joe Terry		FQ 11-14		Kwills@geosyntec.com		Kwills@geosyntec.com		Tampa, FL		33637		Joe Terry		Joe Terry											
Joe Terry		FQ 11-14		Kwills@geosyntec.com		Kwills@geosyntec.com		Tampa, FL		33637		Joe Terry		Joe Terry											
Joe Terry		FQ 11-14		Kwills@geosyntec.com		Kwills@geosyntec.com		Tampa, FL		33637		Joe Terry		Joe Terry											
Joe Terry		FQ 11-14		Kwills@geosyntec.com		Kwills@geosyntec.com		Tampa, FL		33637		Joe Terry		Joe Terry											
Joe Terry		FQ 11-14		Kwills@geosyntec.com		Kwills@geosyntec.com		Tampa, FL		33637		Joe Terry		Joe Terry											
Joe Terry		FQ 11-14		Kwills@geosyntec.com		Kwills@geosyntec.com		Tampa, FL		33637		Joe Terry		Joe Terry											
Joe Terry		FQ 11-14		Kwills@geosyntec.com		Kwills@geosyntec.com		Tampa, FL		33637		Joe Terry		Joe Terry											

Distribut on: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

JSCOC-08/28/06



December 04, 2007

Service Request No: J0705537

Kirk Wills  
GeoSyntec Consultants  
14055 Riveredge Drive  
Suite 300  
Tampa, FL 33637

**RE: Oak Hammock/FQ1144**

Dear Kirk:

Enclosed are the results of the sample(s) submitted to our laboratory on November 16, 2007. For your reference, these analyses have been assigned our service request number **J0705537**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. In accordance to the NELAC 2003 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please call if you have any questions. My extension is 224. You may also contact me via email at [CMyers@caslab.com](mailto:CMyers@caslab.com).

Respectfully submitted,

**Columbia Analytical Services, Inc.**



Craig Myers  
Project Chemist

Page 1 of 79

*Laboratory Manager: Greg Jordan*  
*Quality Assurance Officer: Kathy Brungard*

*CAS Jacksonville is NELAC-accredited by the State of Florida, #E82502 valid through 6/30/08. Other state accreditations include: Arkansas, #88-0600 valid through 1/12/06; Georgia, #958 valid through 6/30/08; Louisiana, #02086 valid through 6/30/08; Texas, #T104704197-06-TX valid through 5/31/08; North Carolina, #527 valid through 12/31/07; South Carolina, #96021001 valid through 6/30/07.*

## COLUMBIA ANALYTICAL SERVICES, INC.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock  
**Sample Matrix:** Water

**Service Request No.:** J0705537  
**Date Received:** 11/16/07

### CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables, including results of QC samples analyzed from this delivery group. When appropriate to the procedure, method blank results have been reported with each analytical test. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Parameters that are included in the NELAC Fields of Testing but are not included in the lab's NELAC accreditation are identified in the discussion of each analytical procedure.

#### Sample Receipt

Nine water samples and one trip blank were received for analysis at Columbia Analytical Services on 11/16/07. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at  $4\pm 2^{\circ}\text{C}$  upon receipt at the lab except for aqueous samples designated for metals analyses, which were stored at room temperature.

#### Volatile Organic Compounds by GC-MS

The sample was analyzed for Volatile Organics using EPA Method 8260. The following observations were made regarding this delivery group.

#### Second Source Exceptions

The upper control criterion was exceeded for the following analyte in Second Source Verification (SSV) CAL1283: trans-1,4-Dichloro-2-butene. The field samples analyzed in this sequence did not contain the analyte in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

#### Batch QC Notes and Discussion

Quality control samples for MS/DMS were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

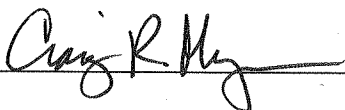
#### EDB and DBCP by GC-ECD

The sample was analyzed for EDB and DBCP using EPA Method 8011. No problems were observed.

#### Metals by ICP-MS/ICP-OES/CVAA

The sample was analyzed for Total Metals using EPA Methods 6020/6010B/7470A. No problems were observed.

Approved by \_\_\_\_\_



Date \_\_\_\_\_

12/4/07

#### Batch QC Notes and Discussion

Quality control samples for some parameters (i.e., Dup/Spike or MS/DMS samples) were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

#### General Chemistry Parameters

The sample was analyzed for Inorganic Parameters using various EPA Methods. The following observations were made regarding this delivery group.

#### Holding Time Exceptions

The analysis of samples MW-5B, MW-5C, MW-7A, MW-7B, and MW-7C was performed past the recommended holding time for the analysis of Nitrate by a few hours. The samples were originally loaded on the instrument on 11/16/07, however due to instrument failure, they were analyzed the next day 11/17/07. Efforts were made to analyze the samples as soon as the error was identified. The data is flagged to indicate the holding time violation.

#### Batch QC Notes and Discussion

Quality control samples for Chloride and Nitrate (i.e., Dup/Spike or MS/DMS samples) were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

Approved by \_\_\_\_\_



Date \_\_\_\_\_

12/4/07

## Florida DEP Data Qualifiers

- B Results based upon colony counts outside the acceptable range.
- D Measurement was made in the field.
- H Value based on field kit determination; results may not be accurate.
- i The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J Estimated value (one of the following reasons is discussed in the project case narrative).
1. The result may be inaccurate because the surrogate recovery limits have been exceeded.
  2. No known quality control criteria exists for the component.
  3. The reported value failed to meet the established quality control criteria for either precision or accuracy.
  4. The sample matrix interfered with the ability to make any accurate determination (e.g., primary and confirmation results show greater than 40% RPD).
  5. The data is questionable because of improper laboratory or field protocols (e.g., GC/MS Tune did not meet method criteria).
- K Off scale low. The value is less than the lowest calibration standard but greater than the method reporting limit (MRL).
- L Off scale high. The analyte is above the upper limit of the linear calibration range.
- M The MDL/MRL has been elevated because the analyte could not be accurately quantified due to matrix interference.
- N Presumptive evidence of the analyte. Confirmation was not performed.
- Q Sample held beyond the accepted holding time.
- T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only.
- U Indicates that the compound was analyzed for but not detected.
- V Indicates that the analyte was detected in both the sample and the associated method blank.
- Y The laboratory analysis was from an improperly preserved sample.
- Z Too many colonies were present (TNTC). The numeric value represents the filtration volume.

## Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

**SAMPLE CROSS-REFERENCE**

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
J0705537-001	MW-4A	11/15/07	15:05
J0705537-002	MW-4B	11/15/07	14:35
J0705537-003	MW-4C	11/15/07	15:45
J0705537-004	MW-5A	11/15/07	13:40
J0705537-005	MW-5B	11/15/07	12:25
J0705537-006	MW-5C	11/15/07	11:55
J0705537-007	MW-7A	11/15/07	10:05
J0705537-008	MW-7B	11/15/07	09:40
J0705537-009	MW-7C	11/15/07	09:15
J0705537-010	Trip Blanks	11/15/07	00:00

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705537  
 Date Collected: 11/15/2007  
 Date Received: 11/16/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-4A  
 Lab Code: J0705537-001  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Vinyl Chloride	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Bromomethane	ND	U	1.0	0.15	1	11/26/07	11/26/07	JWG0703900	
Chloroethane	ND	U	1.0	0.19	1	11/26/07	11/26/07	JWG0703900	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/26/07	11/26/07	JWG0703900	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
Acetone	ND	U	50	1.9	1	11/26/07	11/26/07	JWG0703900	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/26/07	11/26/07	JWG0703900	
Carbon Disulfide	ND	U	10	1.1	1	11/26/07	11/26/07	JWG0703900	
Methylene Chloride	ND	U	5.0	0.29	1	11/26/07	11/26/07	JWG0703900	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Acrylonitrile	ND	U	10	6.7	1	11/26/07	11/26/07	JWG0703900	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/26/07	11/26/07	JWG0703900	
Vinyl Acetate	ND	U	10	1.1	1	11/26/07	11/26/07	JWG0703900	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
2-Butanone (MEK)	ND	U	10	0.97	1	11/26/07	11/26/07	JWG0703900	
Bromochloromethane	ND	U	1.0	0.28	1	11/26/07	11/26/07	JWG0703900	
Chloroform	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/26/07	11/26/07	JWG0703900	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
Benzene	ND	U	1.0	0.088	1	11/26/07	11/26/07	JWG0703900	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/26/07	11/26/07	JWG0703900	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/26/07	11/26/07	JWG0703900	
Dibromomethane	ND	U	1.0	0.22	1	11/26/07	11/26/07	JWG0703900	
Bromodichloromethane	ND	U	1.0	0.099	1	11/26/07	11/26/07	JWG0703900	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/26/07	11/26/07	JWG0703900	
Toluene	ND	U	1.0	0.13	1	11/26/07	11/26/07	JWG0703900	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
2-Hexanone	ND	U	25	1.4	1	11/26/07	11/26/07	JWG0703900	
Dibromochloromethane	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	

Comments:

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705537  
 Date Collected: 11/15/2007  
 Date Received: 11/16/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-4A  
 Lab Code: J0705537-001  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Chlorobenzene	ND	U	1.0	0.10	1	11/26/07	11/26/07	JWG0703900	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Ethylbenzene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
m,p-Xylenes	ND	U	2.0	0.19	1	11/26/07	11/26/07	JWG0703900	
o-Xylene	ND	U	1.0	0.083	1	11/26/07	11/26/07	JWG0703900	
Styrene	ND	U	1.0	0.062	1	11/26/07	11/26/07	JWG0703900	
Bromoform	ND	U	1.0	0.28	1	11/26/07	11/26/07	JWG0703900	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/26/07	11/26/07	JWG0703900	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/26/07	11/26/07	JWG0703900	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/26/07	11/26/07	JWG0703900	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/26/07	11/26/07	JWG0703900	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/26/07	11/26/07	JWG0703900	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	101	71-122	11/26/07	Acceptable
4-Bromofluorobenzene	102	75-120	11/26/07	Acceptable
Dibromofluoromethane	100	82-116	11/26/07	Acceptable
Toluene-d8	110	88-117	11/26/07	Acceptable

Comments:



Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705537  
 Date Collected: 11/15/2007  
 Date Received: 11/16/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-4B  
 Lab Code: J0705537-002  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Vinyl Chloride	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Bromomethane	ND	U	1.0	0.15	1	11/26/07	11/26/07	JWG0703900	
Chloroethane	ND	U	1.0	0.19	1	11/26/07	11/26/07	JWG0703900	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/26/07	11/26/07	JWG0703900	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
Acetone	ND	U	50	1.9	1	11/26/07	11/26/07	JWG0703900	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/26/07	11/26/07	JWG0703900	
Carbon Disulfide	ND	U	10	1.1	1	11/26/07	11/26/07	JWG0703900	
Methylene Chloride	ND	U	5.0	0.29	1	11/26/07	11/26/07	JWG0703900	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Acrylonitrile	ND	U	10	6.7	1	11/26/07	11/26/07	JWG0703900	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/26/07	11/26/07	JWG0703900	
Vinyl Acetate	ND	U	10	1.1	1	11/26/07	11/26/07	JWG0703900	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
2-Butanone (MEK)	ND	U	10	0.97	1	11/26/07	11/26/07	JWG0703900	
Bromochloromethane	ND	U	1.0	0.28	1	11/26/07	11/26/07	JWG0703900	
Chloroform	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/26/07	11/26/07	JWG0703900	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
Benzene	ND	U	1.0	0.088	1	11/26/07	11/26/07	JWG0703900	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/26/07	11/26/07	JWG0703900	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/26/07	11/26/07	JWG0703900	
Dibromomethane	ND	U	1.0	0.22	1	11/26/07	11/26/07	JWG0703900	
Bromodichloromethane	ND	U	1.0	0.099	1	11/26/07	11/26/07	JWG0703900	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/26/07	11/26/07	JWG0703900	
Toluene	ND	U	1.0	0.13	1	11/26/07	11/26/07	JWG0703900	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
2-Hexanone	ND	U	25	1.4	1	11/26/07	11/26/07	JWG0703900	
Dibromochloromethane	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	

Comments:

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-4B  
**Lab Code:** J0705537-002  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Chlorobenzene	ND	U	1.0	0.10	1	11/26/07	11/26/07	JWG0703900	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Ethylbenzene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
m,p-Xylenes	ND	U	2.0	0.19	1	11/26/07	11/26/07	JWG0703900	
o-Xylene	ND	U	1.0	0.083	1	11/26/07	11/26/07	JWG0703900	
Styrene	ND	U	1.0	0.062	1	11/26/07	11/26/07	JWG0703900	
Bromoform	ND	U	1.0	0.28	1	11/26/07	11/26/07	JWG0703900	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/26/07	11/26/07	JWG0703900	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/26/07	11/26/07	JWG0703900	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/26/07	11/26/07	JWG0703900	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/26/07	11/26/07	JWG0703900	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/26/07	11/26/07	JWG0703900	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	99	71-122	11/26/07	Acceptable
4-Bromofluorobenzene	101	75-120	11/26/07	Acceptable
Dibromofluoromethane	101	82-116	11/26/07	Acceptable
Toluene-d8	109	88-117	11/26/07	Acceptable

**Comments:**

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-4C  
**Lab Code:** J0705537-003  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Vinyl Chloride	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Bromomethane	ND	U	1.0	0.15	1	11/26/07	11/26/07	JWG0703900	
Chloroethane	ND	U	1.0	0.19	1	11/26/07	11/26/07	JWG0703900	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/26/07	11/26/07	JWG0703900	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
Acetone	ND	U	50	1.9	1	11/26/07	11/26/07	JWG0703900	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/26/07	11/26/07	JWG0703900	
Carbon Disulfide	ND	U	10	1.1	1	11/26/07	11/26/07	JWG0703900	
Methylene Chloride	ND	U	5.0	0.29	1	11/26/07	11/26/07	JWG0703900	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Acrylonitrile	ND	U	10	6.7	1	11/26/07	11/26/07	JWG0703900	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/26/07	11/26/07	JWG0703900	
Vinyl Acetate	ND	U	10	1.1	1	11/26/07	11/26/07	JWG0703900	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
2-Butanone (MEK)	ND	U	10	0.97	1	11/26/07	11/26/07	JWG0703900	
Bromochloromethane	ND	U	1.0	0.28	1	11/26/07	11/26/07	JWG0703900	
Chloroform	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/26/07	11/26/07	JWG0703900	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
Benzene	ND	U	1.0	0.088	1	11/26/07	11/26/07	JWG0703900	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/26/07	11/26/07	JWG0703900	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/26/07	11/26/07	JWG0703900	
Dibromomethane	ND	U	1.0	0.22	1	11/26/07	11/26/07	JWG0703900	
Bromodichloromethane	ND	U	1.0	0.099	1	11/26/07	11/26/07	JWG0703900	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/26/07	11/26/07	JWG0703900	
Toluene	ND	U	1.0	0.13	1	11/26/07	11/26/07	JWG0703900	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
2-Hexanone	ND	U	25	1.4	1	11/26/07	11/26/07	JWG0703900	
Dibromochloromethane	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	

Comments:

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

### Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-4C  
**Lab Code:** J0705537-003  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Chlorobenzene	ND	U	1.0	0.10	1	11/26/07	11/26/07	JWG0703900	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Ethylbenzene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
m,p-Xylenes	ND	U	2.0	0.19	1	11/26/07	11/26/07	JWG0703900	
o-Xylene	ND	U	1.0	0.083	1	11/26/07	11/26/07	JWG0703900	
Styrene	ND	U	1.0	0.062	1	11/26/07	11/26/07	JWG0703900	
Bromoform	ND	U	1.0	0.28	1	11/26/07	11/26/07	JWG0703900	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/26/07	11/26/07	JWG0703900	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/26/07	11/26/07	JWG0703900	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/26/07	11/26/07	JWG0703900	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/26/07	11/26/07	JWG0703900	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/26/07	11/26/07	JWG0703900	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	100	71-122	11/26/07	Acceptable
4-Bromofluorobenzene	101	75-120	11/26/07	Acceptable
Dibromofluoromethane	101	82-116	11/26/07	Acceptable
Toluene-d8	110	88-117	11/26/07	Acceptable

Comments:

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705537  
 Date Collected: 11/15/2007  
 Date Received: 11/16/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-5A  
 Lab Code: J0705537-004  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Vinyl Chloride	0.40	I	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Bromomethane	ND	U	1.0	0.15	1	11/26/07	11/26/07	JWG0703900	
Chloroethane	ND	U	1.0	0.19	1	11/26/07	11/26/07	JWG0703900	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/26/07	11/26/07	JWG0703900	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
Acetone	ND	U	50	1.9	1	11/26/07	11/26/07	JWG0703900	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/26/07	11/26/07	JWG0703900	
Carbon Disulfide	ND	U	10	1.1	1	11/26/07	11/26/07	JWG0703900	
Methylene Chloride	ND	U	5.0	0.29	1	11/26/07	11/26/07	JWG0703900	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Acrylonitrile	ND	U	10	6.7	1	11/26/07	11/26/07	JWG0703900	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/26/07	11/26/07	JWG0703900	
Vinyl Acetate	ND	U	10	1.1	1	11/26/07	11/26/07	JWG0703900	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
2-Butanone (MEK)	ND	U	10	0.97	1	11/26/07	11/26/07	JWG0703900	
Bromochloromethane	ND	U	1.0	0.28	1	11/26/07	11/26/07	JWG0703900	
Chloroform	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/26/07	11/26/07	JWG0703900	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
Benzene	ND	U	1.0	0.088	1	11/26/07	11/26/07	JWG0703900	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/26/07	11/26/07	JWG0703900	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/26/07	11/26/07	JWG0703900	
Dibromomethane	ND	U	1.0	0.22	1	11/26/07	11/26/07	JWG0703900	
Bromodichloromethane	ND	U	1.0	0.099	1	11/26/07	11/26/07	JWG0703900	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/26/07	11/26/07	JWG0703900	
Toluene	ND	U	1.0	0.13	1	11/26/07	11/26/07	JWG0703900	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
2-Hexanone	ND	U	25	1.4	1	11/26/07	11/26/07	JWG0703900	
Dibromochloromethane	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	

Comments:

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-5A  
**Lab Code:** J0705537-004  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Chlorobenzene	ND	U	1.0	0.10	1	11/26/07	11/26/07	JWG0703900	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Ethylbenzene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
m,p-Xylenes	ND	U	2.0	0.19	1	11/26/07	11/26/07	JWG0703900	
o-Xylene	ND	U	1.0	0.083	1	11/26/07	11/26/07	JWG0703900	
Styrene	ND	U	1.0	0.062	1	11/26/07	11/26/07	JWG0703900	
Bromoform	ND	U	1.0	0.28	1	11/26/07	11/26/07	JWG0703900	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/26/07	11/26/07	JWG0703900	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/26/07	11/26/07	JWG0703900	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/26/07	11/26/07	JWG0703900	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/26/07	11/26/07	JWG0703900	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/26/07	11/26/07	JWG0703900	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	101	71-122	11/26/07	Acceptable
4-Bromofluorobenzene	103	75-120	11/26/07	Acceptable
Dibromofluoromethane	101	82-116	11/26/07	Acceptable
Toluene-d8	111	88-117	11/26/07	Acceptable

Comments: \_\_\_\_\_

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-5B  
**Lab Code:** J0705537-005  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Vinyl Chloride	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Bromomethane	ND	U	1.0	0.15	1	11/26/07	11/26/07	JWG0703900	
Chloroethane	ND	U	1.0	0.19	1	11/26/07	11/26/07	JWG0703900	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/26/07	11/26/07	JWG0703900	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
Acetone	ND	U	50	1.9	1	11/26/07	11/26/07	JWG0703900	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/26/07	11/26/07	JWG0703900	
Carbon Disulfide	ND	U	10	1.1	1	11/26/07	11/26/07	JWG0703900	
Methylene Chloride	ND	U	5.0	0.29	1	11/26/07	11/26/07	JWG0703900	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Acrylonitrile	ND	U	10	6.7	1	11/26/07	11/26/07	JWG0703900	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/26/07	11/26/07	JWG0703900	
Vinyl Acetate	ND	U	10	1.1	1	11/26/07	11/26/07	JWG0703900	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
2-Butanone (MEK)	ND	U	10	0.97	1	11/26/07	11/26/07	JWG0703900	
Bromochloromethane	ND	U	1.0	0.28	1	11/26/07	11/26/07	JWG0703900	
Chloroform	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/26/07	11/26/07	JWG0703900	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
Benzene	ND	U	1.0	0.088	1	11/26/07	11/26/07	JWG0703900	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/26/07	11/26/07	JWG0703900	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/26/07	11/26/07	JWG0703900	
Dibromomethane	ND	U	1.0	0.22	1	11/26/07	11/26/07	JWG0703900	
Bromodichloromethane	ND	U	1.0	0.099	1	11/26/07	11/26/07	JWG0703900	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/26/07	11/26/07	JWG0703900	
Toluene	ND	U	1.0	0.13	1	11/26/07	11/26/07	JWG0703900	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
2-Hexanone	ND	U	25	1.4	1	11/26/07	11/26/07	JWG0703900	
Dibromochloromethane	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	

Comments:

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

### Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-5B  
**Lab Code:** J0705537-005  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Chlorobenzene	ND	U	1.0	0.10	1	11/26/07	11/26/07	JWG0703900	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Ethylbenzene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
m,p-Xylenes	ND	U	2.0	0.19	1	11/26/07	11/26/07	JWG0703900	
o-Xylene	ND	U	1.0	0.083	1	11/26/07	11/26/07	JWG0703900	
Styrene	ND	U	1.0	0.062	1	11/26/07	11/26/07	JWG0703900	
Bromoform	ND	U	1.0	0.28	1	11/26/07	11/26/07	JWG0703900	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/26/07	11/26/07	JWG0703900	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/26/07	11/26/07	JWG0703900	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/26/07	11/26/07	JWG0703900	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/26/07	11/26/07	JWG0703900	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/26/07	11/26/07	JWG0703900	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	100	71-122	11/26/07	Acceptable
4-Bromofluorobenzene	101	75-120	11/26/07	Acceptable
Dibromofluoromethane	100	82-116	11/26/07	Acceptable
Toluene-d8	110	88-117	11/26/07	Acceptable

Comments: \_\_\_\_\_



Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705537  
 Date Collected: 11/15/2007  
 Date Received: 11/16/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-5C  
 Lab Code: J0705537-006  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Vinyl Chloride	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Bromomethane	ND	U	1.0	0.15	1	11/26/07	11/26/07	JWG0703900	
Chloroethane	ND	U	1.0	0.19	1	11/26/07	11/26/07	JWG0703900	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/26/07	11/26/07	JWG0703900	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
Acetone	ND	U	50	1.9	1	11/26/07	11/26/07	JWG0703900	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/26/07	11/26/07	JWG0703900	
Carbon Disulfide	ND	U	10	1.1	1	11/26/07	11/26/07	JWG0703900	
Methylene Chloride	ND	U	5.0	0.29	1	11/26/07	11/26/07	JWG0703900	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Acrylonitrile	ND	U	10	6.7	1	11/26/07	11/26/07	JWG0703900	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/26/07	11/26/07	JWG0703900	
Vinyl Acetate	ND	U	10	1.1	1	11/26/07	11/26/07	JWG0703900	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
2-Butanone (MEK)	ND	U	10	0.97	1	11/26/07	11/26/07	JWG0703900	
Bromochloromethane	ND	U	1.0	0.28	1	11/26/07	11/26/07	JWG0703900	
Chloroform	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/26/07	11/26/07	JWG0703900	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
Benzene	ND	U	1.0	0.088	1	11/26/07	11/26/07	JWG0703900	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/26/07	11/26/07	JWG0703900	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/26/07	11/26/07	JWG0703900	
Dibromomethane	ND	U	1.0	0.22	1	11/26/07	11/26/07	JWG0703900	
Bromodichloromethane	ND	U	1.0	0.099	1	11/26/07	11/26/07	JWG0703900	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/26/07	11/26/07	JWG0703900	
Toluene	ND	U	1.0	0.13	1	11/26/07	11/26/07	JWG0703900	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
2-Hexanone	ND	U	25	1.4	1	11/26/07	11/26/07	JWG0703900	
Dibromochloromethane	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	

Comments:

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705537  
 Date Collected: 11/15/2007  
 Date Received: 11/16/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-5C  
 Lab Code: J0705537-006  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Chlorobenzene	ND	U	1.0	0.10	1	11/26/07	11/26/07	JWG0703900	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Ethylbenzene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
m,p-Xylenes	ND	U	2.0	0.19	1	11/26/07	11/26/07	JWG0703900	
o-Xylene	ND	U	1.0	0.083	1	11/26/07	11/26/07	JWG0703900	
Styrene	ND	U	1.0	0.062	1	11/26/07	11/26/07	JWG0703900	
Bromoform	ND	U	1.0	0.28	1	11/26/07	11/26/07	JWG0703900	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/26/07	11/26/07	JWG0703900	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/26/07	11/26/07	JWG0703900	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/26/07	11/26/07	JWG0703900	
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/26/07	11/26/07	JWG0703900	J(3)
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/26/07	11/26/07	JWG0703900	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	100	71-122	11/26/07	Acceptable
4-Bromofluorobenzene	102	75-120	11/26/07	Acceptable
Dibromofluoromethane	100	82-116	11/26/07	Acceptable
Toluene-d8	109	88-117	11/26/07	Acceptable

Comments:

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

### Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-7A  
**Lab Code:** J0705537-007  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Vinyl Chloride	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Bromomethane	ND	U	1.0	0.15	1	11/26/07	11/26/07	JWG0703900	
Chloroethane	ND	U	1.0	0.19	1	11/26/07	11/26/07	JWG0703900	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/26/07	11/26/07	JWG0703900	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
Acetone	ND	U	50	1.9	1	11/26/07	11/26/07	JWG0703900	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/26/07	11/26/07	JWG0703900	
Carbon Disulfide	ND	U	10	1.1	1	11/26/07	11/26/07	JWG0703900	
Methylene Chloride	ND	U	5.0	0.29	1	11/26/07	11/26/07	JWG0703900	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Acrylonitrile	ND	U	10	6.7	1	11/26/07	11/26/07	JWG0703900	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/26/07	11/26/07	JWG0703900	
Vinyl Acetate	ND	U	10	1.1	1	11/26/07	11/26/07	JWG0703900	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
2-Butanone (MEK)	ND	U	10	0.97	1	11/26/07	11/26/07	JWG0703900	
Bromochloromethane	ND	U	1.0	0.28	1	11/26/07	11/26/07	JWG0703900	
Chloroform	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/26/07	11/26/07	JWG0703900	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
Benzene	ND	U	1.0	0.088	1	11/26/07	11/26/07	JWG0703900	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/26/07	11/26/07	JWG0703900	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/26/07	11/26/07	JWG0703900	
Dibromomethane	ND	U	1.0	0.22	1	11/26/07	11/26/07	JWG0703900	
Bromodichloromethane	ND	U	1.0	0.099	1	11/26/07	11/26/07	JWG0703900	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/26/07	11/26/07	JWG0703900	
Toluene	ND	U	1.0	0.13	1	11/26/07	11/26/07	JWG0703900	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
2-Hexanone	ND	U	25	1.4	1	11/26/07	11/26/07	JWG0703900	
Dibromochloromethane	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	

**Comments:**

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-7A  
**Lab Code:** J0705537-007  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Chlorobenzene	ND	U	1.0	0.10	1	11/26/07	11/26/07	JWG0703900	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Ethylbenzene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
m,p-Xylenes	ND	U	2.0	0.19	1	11/26/07	11/26/07	JWG0703900	
o-Xylene	ND	U	1.0	0.083	1	11/26/07	11/26/07	JWG0703900	
Styrene	ND	U	1.0	0.062	1	11/26/07	11/26/07	JWG0703900	
Bromoform	ND	U	1.0	0.28	1	11/26/07	11/26/07	JWG0703900	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/26/07	11/26/07	JWG0703900	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/26/07	11/26/07	JWG0703900	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/26/07	11/26/07	JWG0703900	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/26/07	11/26/07	JWG0703900	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/26/07	11/26/07	JWG0703900	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	100	71-122	11/26/07	Acceptable
4-Bromofluorobenzene	101	75-120	11/26/07	Acceptable
Dibromofluoromethane	100	82-116	11/26/07	Acceptable
Toluene-d8	110	88-117	11/26/07	Acceptable

Comments:

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705537  
 Date Collected: 11/15/2007  
 Date Received: 11/16/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-7B  
 Lab Code: J0705537-008  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Vinyl Chloride	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Bromomethane	ND	U	1.0	0.15	1	11/26/07	11/26/07	JWG0703900	
Chloroethane	ND	U	1.0	0.19	1	11/26/07	11/26/07	JWG0703900	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/26/07	11/26/07	JWG0703900	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
Acetone	ND	U	50	1.9	1	11/26/07	11/26/07	JWG0703900	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/26/07	11/26/07	JWG0703900	
Carbon Disulfide	ND	U	10	1.1	1	11/26/07	11/26/07	JWG0703900	
Methylene Chloride	ND	U	5.0	0.29	1	11/26/07	11/26/07	JWG0703900	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Acrylonitrile	ND	U	10	6.7	1	11/26/07	11/26/07	JWG0703900	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/26/07	11/26/07	JWG0703900	
Vinyl Acetate	ND	U	10	1.1	1	11/26/07	11/26/07	JWG0703900	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
2-Butanone (MEK)	ND	U	10	0.97	1	11/26/07	11/26/07	JWG0703900	
Bromochloromethane	ND	U	1.0	0.28	1	11/26/07	11/26/07	JWG0703900	
Chloroform	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/26/07	11/26/07	JWG0703900	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
Benzene	ND	U	1.0	0.088	1	11/26/07	11/26/07	JWG0703900	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/26/07	11/26/07	JWG0703900	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/26/07	11/26/07	JWG0703900	
Dibromomethane	ND	U	1.0	0.22	1	11/26/07	11/26/07	JWG0703900	
Bromodichloromethane	ND	U	1.0	0.099	1	11/26/07	11/26/07	JWG0703900	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/26/07	11/26/07	JWG0703900	
Toluene	ND	U	1.0	0.13	1	11/26/07	11/26/07	JWG0703900	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
2-Hexanone	ND	U	25	1.4	1	11/26/07	11/26/07	JWG0703900	
Dibromochloromethane	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	

Comments:

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-7B  
**Lab Code:** J0705537-008  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Chlorobenzene	ND	U	1.0	0.10	1	11/26/07	11/26/07	JWG0703900	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Ethylbenzene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
m,p-Xylenes	ND	U	2.0	0.19	1	11/26/07	11/26/07	JWG0703900	
o-Xylene	ND	U	1.0	0.083	1	11/26/07	11/26/07	JWG0703900	
Styrene	ND	U	1.0	0.062	1	11/26/07	11/26/07	JWG0703900	
Bromoform	ND	U	1.0	0.28	1	11/26/07	11/26/07	JWG0703900	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/26/07	11/26/07	JWG0703900	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/26/07	11/26/07	JWG0703900	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/26/07	11/26/07	JWG0703900	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/26/07	11/26/07	JWG0703900	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/26/07	11/26/07	JWG0703900	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	101	71-122	11/26/07	Acceptable
4-Bromofluorobenzene	103	75-120	11/26/07	Acceptable
Dibromofluoromethane	101	82-116	11/26/07	Acceptable
Toluene-d8	110	88-117	11/26/07	Acceptable

**Comments:**

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705537  
 Date Collected: 11/15/2007  
 Date Received: 11/16/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-7C  
 Lab Code: J0705537-009  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Vinyl Chloride	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Bromomethane	ND	U	1.0	0.15	1	11/26/07	11/26/07	JWG0703900	
Chloroethane	ND	U	1.0	0.19	1	11/26/07	11/26/07	JWG0703900	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/26/07	11/26/07	JWG0703900	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
Acetone	ND	U	50	1.9	1	11/26/07	11/26/07	JWG0703900	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/26/07	11/26/07	JWG0703900	
Carbon Disulfide	ND	U	10	1.1	1	11/26/07	11/26/07	JWG0703900	
Methylene Chloride	ND	U	5.0	0.29	1	11/26/07	11/26/07	JWG0703900	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Acrylonitrile	ND	U	10	6.7	1	11/26/07	11/26/07	JWG0703900	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/26/07	11/26/07	JWG0703900	
Vinyl Acetate	ND	U	10	1.1	1	11/26/07	11/26/07	JWG0703900	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
2-Butanone (MEK)	ND	U	10	0.97	1	11/26/07	11/26/07	JWG0703900	
Bromochloromethane	ND	U	1.0	0.28	1	11/26/07	11/26/07	JWG0703900	
Chloroform	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/26/07	11/26/07	JWG0703900	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
Benzene	ND	U	1.0	0.088	1	11/26/07	11/26/07	JWG0703900	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/26/07	11/26/07	JWG0703900	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/26/07	11/26/07	JWG0703900	
Dibromomethane	ND	U	1.0	0.22	1	11/26/07	11/26/07	JWG0703900	
Bromodichloromethane	ND	U	1.0	0.099	1	11/26/07	11/26/07	JWG0703900	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/26/07	11/26/07	JWG0703900	
Toluene	ND	U	1.0	0.13	1	11/26/07	11/26/07	JWG0703900	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
2-Hexanone	ND	U	25	1.4	1	11/26/07	11/26/07	JWG0703900	
Dibromochloromethane	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	

Comments:

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705537  
 Date Collected: 11/15/2007  
 Date Received: 11/16/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-7C  
 Lab Code: J0705537-009  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Chlorobenzene	ND	U	1.0	0.10	1	11/26/07	11/26/07	JWG0703900	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Ethylbenzene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
m,p-Xylenes	ND	U	2.0	0.19	1	11/26/07	11/26/07	JWG0703900	
o-Xylene	ND	U	1.0	0.083	1	11/26/07	11/26/07	JWG0703900	
Styrene	ND	U	1.0	0.062	1	11/26/07	11/26/07	JWG0703900	
Bromoform	ND	U	1.0	0.28	1	11/26/07	11/26/07	JWG0703900	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/26/07	11/26/07	JWG0703900	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/26/07	11/26/07	JWG0703900	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/26/07	11/26/07	JWG0703900	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/26/07	11/26/07	JWG0703900	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/26/07	11/26/07	JWG0703900	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	99	71-122	11/26/07	Acceptable
4-Bromofluorobenzene	102	75-120	11/26/07	Acceptable
Dibromofluoromethane	100	82-116	11/26/07	Acceptable
Toluene-d8	111	88-117	11/26/07	Acceptable

Comments:



Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705537  
 Date Collected: 11/15/2007  
 Date Received: 11/16/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: Trip Blanks  
 Lab Code: J0705537-010  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Vinyl Chloride	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Bromomethane	ND	U	1.0	0.15	1	11/26/07	11/26/07	JWG0703900	
Chloroethane	ND	U	1.0	0.19	1	11/26/07	11/26/07	JWG0703900	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/26/07	11/26/07	JWG0703900	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
Acetone	ND	U	50	1.9	1	11/26/07	11/26/07	JWG0703900	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/26/07	11/26/07	JWG0703900	
Carbon Disulfide	ND	U	10	1.1	1	11/26/07	11/26/07	JWG0703900	
Methylene Chloride	ND	U	5.0	0.29	1	11/26/07	11/26/07	JWG0703900	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Acrylonitrile	ND	U	10	6.7	1	11/26/07	11/26/07	JWG0703900	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/26/07	11/26/07	JWG0703900	
Vinyl Acetate	ND	U	10	1.1	1	11/26/07	11/26/07	JWG0703900	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
2-Butanone (MEK)	ND	U	10	0.97	1	11/26/07	11/26/07	JWG0703900	
Bromochloromethane	ND	U	1.0	0.28	1	11/26/07	11/26/07	JWG0703900	
Chloroform	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/26/07	11/26/07	JWG0703900	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
Benzene	ND	U	1.0	0.088	1	11/26/07	11/26/07	JWG0703900	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/26/07	11/26/07	JWG0703900	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/26/07	11/26/07	JWG0703900	
Dibromomethane	ND	U	1.0	0.22	1	11/26/07	11/26/07	JWG0703900	
Bromodichloromethane	ND	U	1.0	0.099	1	11/26/07	11/26/07	JWG0703900	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/26/07	11/26/07	JWG0703900	
Toluene	ND	U	1.0	0.13	1	11/26/07	11/26/07	JWG0703900	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
2-Hexanone	ND	U	25	1.4	1	11/26/07	11/26/07	JWG0703900	
Dibromochloromethane	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	

Comments:

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705537  
 Date Collected: 11/15/2007  
 Date Received: 11/16/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: Trip Blanks  
 Lab Code: J0705537-010  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Chlorobenzene	ND	U	1.0	0.10	1	11/26/07	11/26/07	JWG0703900	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Ethylbenzene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
m,p-Xylenes	ND	U	2.0	0.19	1	11/26/07	11/26/07	JWG0703900	
o-Xylene	ND	U	1.0	0.083	1	11/26/07	11/26/07	JWG0703900	
Styrene	ND	U	1.0	0.062	1	11/26/07	11/26/07	JWG0703900	
Bromoform	ND	U	1.0	0.28	1	11/26/07	11/26/07	JWG0703900	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/26/07	11/26/07	JWG0703900	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/26/07	11/26/07	JWG0703900	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/26/07	11/26/07	JWG0703900	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/26/07	11/26/07	JWG0703900	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/26/07	11/26/07	JWG0703900	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	101	71-122	11/26/07	Acceptable
4-Bromofluorobenzene	102	75-120	11/26/07	Acceptable
Dibromofluoromethane	101	82-116	11/26/07	Acceptable
Toluene-d8	110	88-117	11/26/07	Acceptable

Comments:

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Collected:** NA  
**Date Received:** NA

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Method Blank  
**Lab Code:** JWG0703900-4  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Vinyl Chloride	ND U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Bromomethane	ND U	1.0	0.15	1	11/26/07	11/26/07	JWG0703900	
Chloroethane	ND U	1.0	0.19	1	11/26/07	11/26/07	JWG0703900	
Trichlorofluoromethane	ND U	1.0	0.21	1	11/26/07	11/26/07	JWG0703900	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
Acetone	ND U	50	1.9	1	11/26/07	11/26/07	JWG0703900	
Iodomethane (Methyl Iodide)	ND U	5.0	1.1	1	11/26/07	11/26/07	JWG0703900	
Carbon Disulfide	ND U	10	1.1	1	11/26/07	11/26/07	JWG0703900	
Methylene Chloride	ND U	5.0	0.29	1	11/26/07	11/26/07	JWG0703900	
trans-1,2-Dichloroethene	ND U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Acrylonitrile	ND U	10	6.7	1	11/26/07	11/26/07	JWG0703900	
1,1-Dichloroethane	ND U	1.0	0.080	1	11/26/07	11/26/07	JWG0703900	
Vinyl Acetate	ND U	10	1.1	1	11/26/07	11/26/07	JWG0703900	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
2-Butanone (MEK)	ND U	10	0.97	1	11/26/07	11/26/07	JWG0703900	
Bromochloromethane	ND U	1.0	0.28	1	11/26/07	11/26/07	JWG0703900	
Chloroform	ND U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.17	1	11/26/07	11/26/07	JWG0703900	
Carbon Tetrachloride	ND U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
Benzene	ND U	1.0	0.088	1	11/26/07	11/26/07	JWG0703900	
1,2-Dichloroethane (EDC)	ND U	1.0	0.11	1	11/26/07	11/26/07	JWG0703900	
Trichloroethene (TCE)	ND U	1.0	0.20	1	11/26/07	11/26/07	JWG0703900	
1,2-Dichloropropane	ND U	1.0	0.10	1	11/26/07	11/26/07	JWG0703900	
Dibromomethane	ND U	1.0	0.22	1	11/26/07	11/26/07	JWG0703900	
Bromodichloromethane	ND U	1.0	0.099	1	11/26/07	11/26/07	JWG0703900	
cis-1,3-Dichloropropene	ND U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
4-Methyl-2-pentanone (MIBK)	ND U	25	0.94	1	11/26/07	11/26/07	JWG0703900	
Toluene	ND U	1.0	0.13	1	11/26/07	11/26/07	JWG0703900	
trans-1,3-Dichloropropene	ND U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
1,1,2-Trichloroethane	ND U	1.0	0.14	1	11/26/07	11/26/07	JWG0703900	
Tetrachloroethene (PCE)	ND U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
2-Hexanone	ND U	25	1.4	1	11/26/07	11/26/07	JWG0703900	
Dibromochloromethane	ND U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	

Comments:

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Collected:** NA  
**Date Received:** NA

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Method Blank  
**Lab Code:** JWG0703900-4  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Chlorobenzene	ND	U	1.0	0.10	1	11/26/07	11/26/07	JWG0703900	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
Ethylbenzene	ND	U	1.0	0.12	1	11/26/07	11/26/07	JWG0703900	
m,p-Xylenes	ND	U	2.0	0.19	1	11/26/07	11/26/07	JWG0703900	
o-Xylene	ND	U	1.0	0.083	1	11/26/07	11/26/07	JWG0703900	
Styrene	ND	U	1.0	0.062	1	11/26/07	11/26/07	JWG0703900	
Bromoform	ND	U	1.0	0.28	1	11/26/07	11/26/07	JWG0703900	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/26/07	11/26/07	JWG0703900	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/26/07	11/26/07	JWG0703900	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/26/07	11/26/07	JWG0703900	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/26/07	11/26/07	JWG0703900	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/26/07	11/26/07	JWG0703900	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/26/07	11/26/07	JWG0703900	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	101	71-122	11/26/07	Acceptable
4-Bromofluorobenzene	102	75-120	11/26/07	Acceptable
Dibromofluoromethane	101	82-116	11/26/07	Acceptable
Toluene-d8	110	88-117	11/26/07	Acceptable

**Comments:** \_\_\_\_\_

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Sample Name:** MW-4A  
**Lab Code:** J0705537-001  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703869	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703869	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	129	77-150	11/27/07	Acceptable

**Comments:** \_\_\_\_\_

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Sample Name:** MW-4B  
**Lab Code:** J0705537-002  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703869	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703869	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	130	77-150	11/27/07	Acceptable

**Comments:**

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Sample Name:** MW-4C  
**Lab Code:** J0705537-003  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703869	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703869	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	137	77-150	11/27/07	Acceptable

**Comments:** \_\_\_\_\_

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Sample Name:** MW-5A  
**Lab Code:** J0705537-004  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703869	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703869	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	105	77-150	11/27/07	Acceptable

**Comments:**



**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Sample Name:** MW-5B  
**Lab Code:** J0705537-005  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703869	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703869	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	119	77-150	11/27/07	Acceptable

**Comments:**

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Sample Name:** MW-5C  
**Lab Code:** J0705537-006  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703869	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703869	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	122	77-150	11/27/07	Acceptable

**Comments:** \_\_\_\_\_

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Sample Name:** MW-7A  
**Lab Code:** J0705537-007  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703869	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703869	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	122	77-150	11/27/07	Acceptable

**Comments:**

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Sample Name:** MW-7B  
**Lab Code:** J0705537-008  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703869	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703869	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	122	77-150	11/27/07	Acceptable

**Comments:**

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-7C  
**Lab Code:** J0705537-009  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703869	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703869	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	124	77-150	11/27/07	Acceptable

**Comments:** \_\_\_\_\_

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Collected:** NA  
**Date Received:** NA

**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Sample Name:** Method Blank  
**Lab Code:** JWG0703869-3  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/26/07	JWG0703869	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/26/07	JWG0703869	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	109	77-150	11/26/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

## Total Metals

**Sample Name:** MW-4A  
**Lab Code:** J0705537-001

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/21/2007	11/29/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/21/2007	11/29/2007	0.80	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/21/2007	11/29/2007	18	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/21/2007	11/29/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/21/2007	11/29/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/21/2007	11/29/2007	2.8	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/21/2007	11/29/2007	0.35	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/21/2007	11/29/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/26/2007	11/27/2007	1920	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/21/2007	11/29/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/21/2007	11/29/2007	0.91	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/21/2007	11/29/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/21/2007	11/29/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/21/2007	11/29/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/21/2007	11/29/2007	1.4	i
Zinc	EPA 3020A	6020	10	1.7	1.0	11/21/2007	11/29/2007	3.5	i

## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705537  
 Date Collected: 11/15/2007  
 Date Received: 11/16/2007

## Total Metals

Sample Name: MW-4B  
 Lab Code: J0705537-002

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/21/2007	11/29/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/21/2007	11/29/2007	U	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/21/2007	11/29/2007	7.8	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/21/2007	11/29/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/21/2007	11/29/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/21/2007	11/29/2007	3.0	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/21/2007	11/29/2007	0.12	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/21/2007	11/29/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/26/2007	11/27/2007	742	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/21/2007	11/29/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/21/2007	11/29/2007	0.72	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/21/2007	11/29/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/21/2007	11/29/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/21/2007	11/29/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/21/2007	11/29/2007	1.6	i
Zinc	EPA 3020A	6020	10	1.7	1.0	11/21/2007	11/29/2007	2.7	i



## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705537  
 Date Collected: 11/15/2007  
 Date Received: 11/16/2007

## Total Metals

Sample Name: MW-4C  
 Lab Code: J0705537-003

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/21/2007	11/29/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/21/2007	11/29/2007	U	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/21/2007	11/29/2007	6.7	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/21/2007	11/29/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/21/2007	11/29/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/21/2007	11/29/2007	1.8	i
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/21/2007	11/29/2007	0.043	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/21/2007	11/29/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/26/2007	11/27/2007	1480	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/21/2007	11/29/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/21/2007	11/29/2007	U	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/21/2007	11/29/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/21/2007	11/29/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/21/2007	11/29/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/21/2007	11/29/2007	1.7	i
Zinc	EPA 3020A	6020	10	1.7	1.0	11/21/2007	11/29/2007	2.6	i

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

## Total Metals

**Sample Name:** MW-5A  
**Lab Code:** J0705537-004

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/21/2007	11/29/2007	0.20	i
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/21/2007	11/29/2007	1.2	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/21/2007	11/29/2007	2.7	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/21/2007	11/29/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/21/2007	11/29/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/21/2007	11/29/2007	4.8	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/21/2007	11/29/2007	0.13	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/21/2007	11/29/2007	0.59	i
Iron	EPA 3010A	6010B	50	17	1.0	11/26/2007	11/27/2007	231	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/21/2007	11/29/2007	1.3	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/21/2007	11/29/2007	1.4	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/21/2007	11/29/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/21/2007	11/29/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/21/2007	11/29/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/21/2007	11/29/2007	2.2	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/21/2007	11/29/2007	3.5	i

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

## Total Metals

**Sample Name:** MW-5B  
**Lab Code:** J0705537-005

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/21/2007	11/29/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/21/2007	11/29/2007	U	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/21/2007	11/29/2007	11	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/21/2007	11/29/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/21/2007	11/29/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/21/2007	11/29/2007	2.3	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/21/2007	11/29/2007	0.11	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/21/2007	11/29/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/26/2007	11/27/2007	326	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/21/2007	11/29/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/21/2007	11/29/2007	0.99	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/21/2007	11/29/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/21/2007	11/29/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/21/2007	11/29/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/21/2007	11/29/2007	1.0	i
Zinc	EPA 3020A	6020	10	1.7	1.0	11/21/2007	11/29/2007	3.5	i

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

## Total Metals

**Sample Name:** MW-5C  
**Lab Code:** J0705537-006

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/21/2007	11/29/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/21/2007	11/29/2007	U	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/21/2007	11/29/2007	32	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/21/2007	11/29/2007	0.11	i
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/21/2007	11/29/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/21/2007	11/29/2007	2.4	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/21/2007	11/29/2007	0.087	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/21/2007	11/29/2007	0.36	i
Iron	EPA 3010A	6010B	50	17	1.0	11/26/2007	11/27/2007	1340	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/21/2007	11/29/2007	0.34	i
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/21/2007	11/29/2007	0.95	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/21/2007	11/29/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/21/2007	11/29/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/21/2007	11/29/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/21/2007	11/29/2007	1.5	i
Zinc	EPA 3020A	6020	10	1.7	1.0	11/21/2007	11/29/2007	4.0	i

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

## Total Metals

**Sample Name:** MW-7A  
**Lab Code:** J0705537-007

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/21/2007	11/29/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/21/2007	11/29/2007	0.68	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/21/2007	11/29/2007	15	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/21/2007	11/29/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/21/2007	11/29/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/21/2007	11/29/2007	3.3	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/21/2007	11/29/2007	1.2	
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/21/2007	11/29/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/26/2007	11/27/2007	5900	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/21/2007	11/29/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/21/2007	11/29/2007	0.84	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/21/2007	11/29/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/21/2007	11/29/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/21/2007	11/29/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/21/2007	11/29/2007	0.73	i
Zinc	EPA 3020A	6020	10	1.7	1.0	11/21/2007	11/29/2007	2.9	i

## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705537  
 Date Collected: 11/15/2007  
 Date Received: 11/16/2007

## Total Metals

Sample Name: MW-7B  
 Lab Code: J0705537-008

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/21/2007	11/29/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/21/2007	11/29/2007	U	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/21/2007	11/29/2007	36	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/21/2007	11/29/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/21/2007	11/29/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/21/2007	11/29/2007	2.9	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/21/2007	11/29/2007	0.21	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/21/2007	11/29/2007	0.50	i
Iron	EPA 3010A	6010B	50	17	1.0	11/26/2007	11/27/2007	1580	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/21/2007	11/29/2007	1.1	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/21/2007	11/29/2007	1.2	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/21/2007	11/29/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/21/2007	11/29/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/21/2007	11/29/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/21/2007	11/29/2007	2.6	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/21/2007	11/29/2007	2.5	i

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

## Total Metals

**Sample Name:** MW-7C  
**Lab Code:** J0705537-009

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/21/2007	11/29/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/21/2007	11/29/2007	U	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/21/2007	11/29/2007	40	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/21/2007	11/29/2007	0.13	i
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/21/2007	11/29/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/21/2007	11/29/2007	2.6	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/21/2007	11/29/2007	0.049	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/21/2007	11/29/2007	0.32	i
Iron	EPA 3010A	6010B	50	17	1.0	11/26/2007	11/27/2007	890	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/21/2007	11/29/2007	1.6	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/21/2007	11/29/2007	U	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/21/2007	11/29/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/21/2007	11/29/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/21/2007	11/29/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/21/2007	11/29/2007	2.8	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/21/2007	11/29/2007	2.5	i

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705537  
**Date Collected:** N/A  
**Date Received:** N/A

## Total Metals

**Sample Name:** Method Blank  
**Lab Code:** MB7-1121

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.00	0.09	1.0	11/21/2007	11/29/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/21/2007	11/29/2007	U	
Barium	EPA 3020A	6020	2.00	0.14	1.0	11/21/2007	11/29/2007	U	
Beryllium	EPA 3020A	6020	1.00	0.08	1.0	11/21/2007	11/29/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/21/2007	11/29/2007	U	
Chromium	EPA 3020A	6020	2.00	0.12	1.0	11/21/2007	11/29/2007	0.30	i
Cobalt	EPA 3020A	6020	1.00	0.04	1.0	11/21/2007	11/29/2007	U	
Copper	EPA 3020A	6020	2.00	0.29	1.0	11/21/2007	11/29/2007	U	
Iron	EPA 3010A	6010B	50.0	17.0	1.0	11/26/2007	11/26/2007	U	
Lead	EPA 3020A	6020	1.00	0.30	1.0	11/21/2007	11/29/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3020A	6020	2.00	0.69	1.0	11/21/2007	11/29/2007	U	
Selenium	EPA 3020A	6020	2.00	0.79	1.0	11/21/2007	11/29/2007	U	
Silver	EPA 3020A	6020	0.500	0.039	1.0	11/21/2007	11/29/2007	U	
Thallium	EPA 3020A	6020	1.00	0.08	1.0	11/21/2007	11/29/2007	U	
Vanadium	EPA 3020A	6020	2.00	0.18	1.0	11/21/2007	11/29/2007	U	
Zinc	EPA 3020A	6020	10.0	1.7	1.0	11/21/2007	11/29/2007	U	



## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705537  
 Date Collected: 11/15/2007  
 Date Received: 11/16/2007

**Total Metals  
Sodium**

Prep Method: EPA 3010A  
 Analysis Method: 6010B  
 Test Notes:

Units: mg/L  
 Basis: N/A

Sample Name:	Lab Code:	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
MW-4A	J0705537-001	0.50	0.15	1.0	11/26/2007	11/27/2007	6.5	
MW-4B	J0705537-002	0.50	0.15	1.0	11/26/2007	11/27/2007	8.8	
MW-4C	J0705537-003	0.50	0.15	1.0	11/26/2007	11/27/2007	10	
MW-5A	J0705537-004	0.50	0.15	1.0	11/26/2007	11/27/2007	10	
MW-5B	J0705537-005	0.50	0.15	1.0	11/26/2007	11/27/2007	4.3	
MW-5C	J0705537-006	0.50	0.15	1.0	11/26/2007	11/27/2007	8.5	
MW-7A	J0705537-007	0.50	0.15	1.0	11/26/2007	11/27/2007	10	
MW-7B	J0705537-008	0.50	0.15	1.0	11/26/2007	11/27/2007	8.0	
MW-7C	J0705537-009	0.50	0.15	1.0	11/26/2007	11/27/2007	6.3	
Method Blank	MB4-1126	0.50	0.15	1.0	11/26/2007	11/26/2007	U	

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

## Dissolved Metals

**Sample Name:** MW-4C  
**Lab Code:** J0705537-003

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3005A	6020	2.0	0.088	1.0	11/19/2007	11/30/2007	U	
Arsenic	EPA 3005A	6020	0.50	0.28	1.0	11/19/2007	11/30/2007	U	
Barium	EPA 3005A	6020	2.0	0.14	1.0	11/19/2007	11/30/2007	9.9	
Beryllium	EPA 3005A	6020	1.0	0.084	1.0	11/19/2007	11/30/2007	U	
Cadmium	EPA 3005A	6020	0.50	0.12	1.0	11/19/2007	11/30/2007	U	
Chromium	EPA 3005A	6020	2.0	0.12	1.0	11/19/2007	11/30/2007	1.2	i
Cobalt	EPA 3005A	6020	1.0	0.041	1.0	11/19/2007	11/30/2007	U	
Copper	EPA 3005A	6020	2.0	0.29	1.0	11/19/2007	11/30/2007	0.30	i
Iron	EPA 3005A	6010B	50	17	1.0	11/28/2007	11/29/2007	624	
Lead	EPA 3005A	6020	1.0	0.30	1.0	11/19/2007	11/30/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3005A	6020	2.0	0.69	1.0	11/19/2007	11/30/2007	1.3	i
Selenium	EPA 3005A	6020	2.0	0.79	1.0	11/19/2007	11/30/2007	U	
Silver	EPA 3005A	6020	0.50	0.039	1.0	11/19/2007	11/30/2007	U	
Thallium	EPA 3005A	6020	1.00	0.077	1.0	11/19/2007	11/30/2007	U	
Vanadium	EPA 3005A	6020	2.0	0.18	1.0	11/19/2007	11/30/2007	1.2	i
Zinc	EPA 3005A	6020	10	1.7	1.0	11/19/2007	11/30/2007	6.4	i

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705537  
**Date Collected:** N/A  
**Date Received:** N/A

## Dissolved Metals

**Sample Name:** Method Blank  
**Lab Code:** MB2-1119

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3005A	6020	2.00	0.09	1.0	11/19/2007	11/30/2007	U	
Arsenic	EPA 3005A	6020	0.50	0.28	1.0	11/19/2007	11/30/2007	U	
Barium	EPA 3005A	6020	2.00	0.14	1.0	11/19/2007	11/30/2007	U	
Beryllium	EPA 3005A	6020	1.00	0.08	1.0	11/19/2007	11/30/2007	U	
Cadmium	EPA 3005A	6020	0.50	0.12	1.0	11/19/2007	11/30/2007	U	
Chromium	EPA 3005A	6020	2.00	0.12	1.0	11/19/2007	11/30/2007	U	
Cobalt	EPA 3005A	6020	1.00	0.04	1.0	11/19/2007	11/30/2007	U	
Copper	EPA 3005A	6020	2.00	0.29	1.0	11/19/2007	11/30/2007	U	
Iron	EPA 3005A	6010B	50.0	17.0	1.0	11/28/2007	11/29/2007	U	
Lead	EPA 3005A	6020	1.00	0.30	1.0	11/19/2007	11/30/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3005A	6020	2.00	0.69	1.0	11/19/2007	11/30/2007	U	
Selenium	EPA 3005A	6020	2.00	0.79	1.0	11/19/2007	11/30/2007	U	
Silver	EPA 3005A	6020	0.500	0.039	1.0	11/19/2007	11/30/2007	U	
Thallium	EPA 3005A	6020	1.00	0.08	1.0	11/19/2007	11/30/2007	U	
Vanadium	EPA 3005A	6020	2.00	0.18	1.0	11/19/2007	11/30/2007	0.22	i
Zinc	EPA 3005A	6020	10.0	1.7	1.0	11/19/2007	11/30/2007	U	

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007

**Dissolved Metals**  
**Sodium**

**Prep Method:** EPA 3005A

**Units:** mg/L

**Analysis Method:** 6010B

**Basis:** N/A

**Test Notes:**

<b>Sample Name:</b>	<b>Lab Code:</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date Extracted</b>	<b>Date Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
MW-4C	J0705537-003	0.50	0.15	1.0	11/28/2007	11/29/2007	10	
Method Blank	MB6-1128	0.50	0.15	1.0	11/28/2007	11/29/2007	U	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705537  
**Date Collected :** 11/15/07  
**Date Received :** 11/16/07

## Inorganic Parameters

**Sample Name :** MW-4A  
**Lab Code :** J0705537-001  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:38	2.8	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/17/07 09:28	18	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/17/07 14:14	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/21/07 16:30	110	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705537  
**Date Collected :** 11/15/07  
**Date Received :** 11/16/07

## Inorganic Parameters

**Sample Name :** MW-4B  
**Lab Code :** J0705537-002  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:38	0.041	i
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/17/07 09:28	10	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/17/07 13:55	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/21/07 16:30	81	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705537  
**Date Collected :** 11/15/07  
**Date Received :** 11/16/07

## Inorganic Parameters

**Sample Name :** MW-4C  
**Lab Code :** J0705537-003  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:38	0.19	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/17/07 09:28	9.4	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/17/07 14:33	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/21/07 16:30	100	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705537  
**Date Collected :** 11/15/07  
**Date Received :** 11/16/07

## Inorganic Parameters

**Sample Name :** MW-5A  
**Lab Code :** J0705537-004  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:38	8.4	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/17/07 09:28	23	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/17/07 13:36	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/21/07 16:30	190	



## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705537  
**Date Collected :** 11/15/07  
**Date Received :** 11/16/07

## Inorganic Parameters

**Sample Name :** MW-5B  
**Lab Code :** J0705537-005  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:38	0.18	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/17/07 09:28	9.3	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/17/07 17:24	U	Q
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/21/07 16:30	42	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705537  
**Date Collected :** 11/15/07  
**Date Received :** 11/16/07

## Inorganic Parameters

**Sample Name :** MW-5C  
**Lab Code :** J0705537-006  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:38	0.10	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/17/07 09:28	16	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/17/07 17:43	U	Q
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/21/07 16:30	59	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705537  
**Date Collected :** 11/15/07  
**Date Received :** 11/16/07

## Inorganic Parameters

**Sample Name :** MW-7A  
**Lab Code :** J0705537-007  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:38	1.8	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/17/07 09:28	24	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/17/07 18:02	U	Q
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/21/07 16:30	69	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705537  
**Date Collected :** 11/15/07  
**Date Received :** 11/16/07

## Inorganic Parameters

**Sample Name :** MW-7B  
**Lab Code :** J0705537-008  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:38	0.15	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/17/07 09:28	19	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/17/07 18:21	U	Q
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/21/07 16:30	69	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705537  
**Date Collected :** 11/15/07  
**Date Received :** 11/16/07

## Inorganic Parameters

**Sample Name :** MW-7C  
**Lab Code :** J0705537-009  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:38	0.11	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/17/07 09:28	8.3	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/17/07 18:40	U	Q
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/21/07 16:30	59	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705537  
**Date Collected :** NA  
**Date Received :** NA

## Inorganic Parameters

**Sample Name :** Method Blank  
**Lab Code :** J0705537-MB  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/27/07 14:38	U	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/17/07 09:28	U	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/17/07 09:28	U	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/17/07 09:28	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/21/07 16:30	U	

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537

**Surrogate Recovery Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

**Extraction Method:** EPA 5030B

**Units:** PERCENT

**Analysis Method:** 8260B

**Level:** Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>	<u>Sur2</u>	<u>Sur3</u>	<u>Sur4</u>
MW-4A	J0705537-001	101	102	100	110
MW-4B	J0705537-002	99	101	101	109
MW-4C	J0705537-003	100	101	101	110
MW-5A	J0705537-004	101	103	101	111
MW-5B	J0705537-005	100	101	100	110
MW-5C	J0705537-006	100	102	100	109
MW-7A	J0705537-007	100	101	100	110
MW-7B	J0705537-008	101	103	101	110
MW-7C	J0705537-009	99	102	100	111
Trip Blanks	J0705537-010	101	102	101	110
Method Blank	JWG0703900-4	101	102	101	110
Lab Control Sample	JWG0703900-3	96	98	101	110

**Surrogate Recovery Control Limits (%)**

---

Sur1 = 1,2-Dichloroethane-d4	71-122
Sur2 = 4-Bromofluorobenzene	75-120
Sur3 = Dibromofluoromethane	82-116
Sur4 = Toluene-d8	88-117

---

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Extracted:** 11/26/2007  
**Date Analyzed:** 11/26/2007

**Lab Control Spike Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703900

Analyte Name	Lab Control Sample JWG0703900-3 Lab Control Spike			%Rec Limits
	Result	Expected	%Rec	
Chloromethane	24.5	20.0	122	67-135
Vinyl Chloride	24.6	20.0	123	78-132
Bromomethane	22.9	20.0	115	79-130
Chloroethane	22.8	20.0	114	74-126
Trichlorofluoromethane	23.3	20.0	116	74-134
1,1-Dichloroethene	23.5	20.0	117	78-130
Acetone	104	100	104	67-133
Iodomethane (Methyl Iodide)	111	100	111	68-134
Carbon Disulfide	107	100	107	76-138
Methylene Chloride	21.4	20.0	107	72-124
trans-1,2-Dichloroethene	21.0	20.0	105	77-124
Acrylonitrile	105	100	105	77-127
1,1-Dichloroethane	21.6	20.0	108	80-128
Vinyl Acetate	117	100	117	61-148
cis-1,2-Dichloroethene	22.3	20.0	111	80-126
2-Butanone (MEK)	102	100	102	73-127
Bromochloromethane	21.3	20.0	106	79-129
Chloroform	21.2	20.0	106	83-124
1,1,1-Trichloroethane (TCA)	21.9	20.0	109	79-124
Carbon Tetrachloride	22.1	20.0	111	81-125
Benzene	21.5	20.0	108	79-119
1,2-Dichloroethane (EDC)	20.1	20.0	101	80-124
Trichloroethene (TCE)	22.6	20.0	113	76-124
1,2-Dichloropropane	21.5	20.0	107	79-123
Dibromomethane	21.9	20.0	110	83-123
Bromodichloromethane	21.2	20.0	106	81-123
cis-1,3-Dichloropropene	21.3	20.0	106	86-123
4-Methyl-2-pentanone (MIBK)	110	100	110	72-136
Toluene	22.6	20.0	113	86-117
trans-1,3-Dichloropropene	20.2	20.0	101	83-124
1,1,2-Trichloroethane	22.4	20.0	112	86-114
Tetrachloroethene (PCE)	24.3	20.0	121	80-121
2-Hexanone	109	100	109	71-138
Dibromochloromethane	22.5	20.0	113	82-121
1,2-Dibromoethane (EDB)	21.6	20.0	108	88-117
Chlorobenzene	22.6	20.0	113	86-113

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.



**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Extracted:** 11/26/2007  
**Date Analyzed:** 11/26/2007

**Lab Control Spike Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703900

Lab Control Sample JWG0703900-3 Lab Control Spike				
Analyte Name	Result	Expected	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	22.4	20.0	112	85-117
Ethylbenzene	22.7	20.0	114	90-118
m,p-Xylenes	46.4	40.0	116	86-121
o-Xylene	22.5	20.0	113	89-119
Styrene	21.7	20.0	109	89-122
Bromoform	23.7	20.0	119	68-129
1,1,2,2-Tetrachloroethane	21.9	20.0	110	83-120
1,2,3-Trichloropropane	21.5	20.0	107	83-123
1,4-Dichlorobenzene	21.1	20.0	105	83-113
trans-1,4-Dichloro-2-butene	27.5	20.0	137	53-143
1,2-Dichlorobenzene	20.9	20.0	104	84-115
1,2-Dibromo-3-chloropropane (DBCP)	21.9	20.0	110	62-123

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537

**Surrogate Recovery Summary**  
**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** PERCENT  
**Level:** Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>
MW-4A	J0705537-001	129
MW-4B	J0705537-002	130
MW-4C	J0705537-003	137
MW-5A	J0705537-004	105
MW-5B	J0705537-005	119
MW-5C	J0705537-006	122
MW-7A	J0705537-007	122
MW-7B	J0705537-008	122
MW-7C	J0705537-009	124
Method Blank	JWG0703869-3	109
Lab Control Sample	JWG0703869-1	113
Duplicate Lab Control Sample	JWG0703869-2	114

**Surrogate Recovery Control Limits (%)**

---

Sur1 = 1,1,1,2-Tetrachloroethane 77-150

---

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705537  
**Date Extracted:** 11/21/2007  
**Date Analyzed:** 11/26/2007

**Lab Control Spike/Duplicate Lab Control Spike Summary**  
**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703869

Analyte Name	Lab Control Sample JWG0703869-1 Lab Control Spike			Duplicate Lab Control Sample JWG0703869-2 Duplicate Lab Control Spike			%Rec Limits	RPD	RPD Limit
	Result	Expected	%Rec	Result	Expected	%Rec			
1,2-Dibromoethane (EDB)	0.278	0.250	111	0.280	0.250	112	70-130	1	20
1,2-Dibromo-3-chloropropane (DBCP)	0.277	0.250	111	0.279	0.250	112	70-130	1	20

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705537  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date Extracted:** 11/21/2007  
**Date Analyzed:** 11/29/2007

Laboratory Control Sample Summary  
Total Metals

**Sample Name:** Lab Control Sample  
**Lab Code:** LCS7-1121

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	True Value	Results	Percent Recovery	CAS Percent	Result Notes
						Recovery Acceptance Limits	
Antimony	EPA 3020A	6020	50.0	49.6	99	80 - 120	
Arsenic	EPA 3020A	6020	50.0	53.3	107	80 - 120	
Barium	EPA 3020A	6020	50.0	49.1	98	80 - 120	
Beryllium	EPA 3020A	6020	50.0	46.2	92	80 - 120	
Cadmium	EPA 3020A	6020	50.0	48.4	97	80 - 120	
Chromium	EPA 3020A	6020	50.0	48.6	97	80 - 120	
Cobalt	EPA 3020A	6020	50.0	47.4	95	80 - 120	
Copper	EPA 3020A	6020	50.0	47.6	95	80 - 120	
Iron	EPA 3010A	6010B	2000	2040	102	80 - 120	
Lead	EPA 3020A	6020	50.0	50.9	102	80 - 120	
Mercury	METHOD	7470A	5.00	4.86	97	80 - 120	
Nickel	EPA 3020A	6020	50.0	48.4	97	80 - 120	
Selenium	EPA 3020A	6020	50.0	49.8	100	80 - 120	
Silver	EPA 3020A	6020	50.0	53.3	107	80 - 120	
Thallium	EPA 3020A	6020	50.0	50.5	101	80 - 120	
Vanadium	EPA 3020A	6020	50.0	48.3	97	80 - 120	
Zinc	EPA 3020A	6020	100	101.0	101	80 - 120	

## COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705537  
**Date Collected:** 11/15/2007  
**Date Received:** 11/16/2007  
**Date Extracted:** 11/21/2007  
**Date Analyzed:** 11/29/2007

Matrix Spike/Matrix Spike Duplicate Summary  
Total Metals

**Sample Name:** MW-4C  
**Lab Code:** J0705537-003

J0705537-003S

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	Spike Level		Sample Result	Spike Result		Percent Recovery			% Rec	Result Notes
				MS	DMS		MS	DMS	MS	DMS	RPD	Acceptance Limits	
Antimony	EPA 3020	6020	2.0	50.0	50.0	0.1	51.3	49.4	102	99	4	75 - 125	
Arsenic	EPA 3020	6020	0.5	50.0	50.0	U	54.7	53.1	109	106	3	75 - 125	
Barium	EPA 3020	6020	2.0	50.0	50.0	6.7	58.5	56.2	104	99	4	75 - 125	
Beryllium	EPA 3020	6020	1.0	50.0	50.0	U	49.9	48.9	100	98	2	75 - 125	
Cadmium	EPA 3020	6020	0.5	50.0	50.0	U	50.0	48.9	100	98	2	75 - 125	
Chromium	EPA 3020	6020	2.0	50.0	50.0	1.8	53.4	51.4	103	99	4	75 - 125	
Cobalt	EPA 3020	6020	1.0	50.0	50.0	0.0	52.0	49.7	104	99	5	75 - 125	
Copper	EPA 3020	6020	2.0	50.0	50.0	U	50.8	49.3	102	99	3	75 - 125	
Lead	EPA 3020	6020	1.0	50.0	50.0	U	51.4	49.3	103	99	4	75 - 125	
Nickel	EPA 3020	6020	2.0	50.0	50.0	U	52.2	50.1	104	100	4	75 - 125	
Selenium	EPA 3020	6020	2.0	50.0	50.0	U	50.2	49.2	100	98	2	75 - 125	
Silver	EPA 3020	6020	0.5	50.0	50.0	0.0	55.9	52.5	112	105	6	75 - 125	
Thallium	EPA 3020	6020	1.0	50.0	50.0	U	50.9	49.0	102	98	4	75 - 125	
Vanadium	EPA 3020	6020	2.0	50.0	50.0	1.7	53.8	51.2	104	99	5	75 - 125	
Zinc	EPA 3020	6020	10.0	100	100	2.6	108.0	101.0	105	98	7	75 - 125	

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705537  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date Extracted:** 11/26/2007  
**Date Analyzed:** 11/26/2007

### Laboratory Control Sample Summary Total Metals

**Sample Name:** Lab Control Sample  
**Lab Code:** LCS4-1126

**Units:** mg/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	True Value	Results	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sodium	EPA 3010A	6010B	10.00	10.1	101	80 - 120	

## COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705537  
 Date Collected: N/A  
 Date Received: N/A  
 Date Extracted: 11/19/2007  
 Date Analyzed: 11/30/2007

Laboratory Control Sample Summary  
 Dissolved Metals

Sample Name: Lab Control Sample  
 Lab Code: LCS2-1119

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	True Value	Results	Percent Recovery	CAS Percent	Result Notes
						Recovery Acceptance Limits	
Antimony	EPA 3005A	6020	50.0	53.4	107	80 - 120	
Arsenic	EPA 3005A	6020	50.0	52.8	106	80 - 120	
Barium	EPA 3005A	6020	50.0	51.8	104	80 - 120	
Beryllium	EPA 3005A	6020	50.0	49.6	99	80 - 120	
Cadmium	EPA 3005A	6020	50.0	53.3	107	80 - 120	
Chromium	EPA 3005A	6020	50.0	52.4	105	80 - 120	
Cobalt	EPA 3005A	6020	50.0	51.3	103	80 - 120	
Copper	EPA 3005A	6020	50.0	50.5	101	80 - 120	
Iron	EPA 3005A	6010B	2000	1970	98	80 - 120	
Lead	EPA 3005A	6020	50.0	53.5	107	80 - 120	
Mercury	METHOD	7470A	5.00	5.42	108	80 - 120	
Nickel	EPA 3005A	6020	50.0	50.7	101	80 - 120	
Selenium	EPA 3005A	6020	50.0	53.2	106	80 - 120	
Silver	EPA 3005A	6020	50.0	53.9	108	80 - 120	
Thallium	EPA 3005A	6020	50.0	51.3	103	80 - 120	
Vanadium	EPA 3005A	6020	50.0	50.0	100	80 - 120	
Zinc	EPA 3005A	6020	100	104.0	104	80 - 120	

**COLUMBIA ANALYTICAL SERVICES, INC**

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705537  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date Extracted:** 11/28/2007  
**Date Analyzed:** 11/29/2007

Laboratory Control Sample Summary  
Dissolved Metals

**Sample Name:** Lab Control Sample  
**Lab Code:** LCS6-1128

**Units:** mg/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	True Value	Results	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sodium	EPA 3005A	6010B	10.00	10.1	101	80 - 120	



## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705537  
**Date Collected :** 11/15/07  
**Date Received :** 11/16/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/27/07

Duplicate Summary  
Inorganic Parameters

**Sample Name :** MW-4A  
**Lab Code :** J0705537-001DUP  
**Test Notes :**

Basis : NA

Analyte	Units	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	2.8	2.8	2.8	<1	

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705537  
**Date Collected :** 11/15/07  
**Date Received :** 11/16/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/27/07

Matrix Spike Summary  
Inorganic Parameters

**Sample Name :** MW-4A  
**Lab Code :** J0705537-001MS  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	5.00	2.8	7.70	98	90-110	

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705537  
**Date Collected :** 11/15/07  
**Date Received :** 11/16/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/21/07

Duplicate Summary  
Inorganic Parameters

**Sample Name :** MW-5A  
**Lab Code :** J0705537-004DUP  
**Test Notes :**

Basis : NA

Analyte	Units	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	190	190	190	<1	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705537  
**Date Collected :** NA  
**Date Received :** NA  
**Date Extracted :** NA  
**Date Analyzed :** 11/17-27/07

### Laboratory Control Sample Summary Inorganic Parameters

**Sample Name :** Laboratory Control Sample  
**Lab Code :** J0705537-LCS  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS	Result Notes
						Percent Recovery Acceptance Limits	
Ammonia as Nitrogen	mg/L (ppm)	350.1	5.00	5.35	107	90-110	
Chloride	mg/L (ppm)	300.0	10	9.91	99	90-110	
Chloride	mg/L (ppm)	300.0	250	241	96	90-110	
Nitrate as Nitrogen	mg/L (ppm)	300.0	10	9.78	98	90-110	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	300	303	101	85-115	

**Columbia Analytical Services, Inc.  
Cooler Receipt and Preservation Form**

Client: Geosyntec  
Project: Oak Hammock

Service Request # JO705537

Cooler received on 11-16-07

and opened on 11-16-07 by DWK

COURIER: CAS UPS FEDEX DHL CLIENT Tracking #                     

- |    |   |            |    |     |
|----|---|------------|----|-----|
| 1  | Were custody seals on outside of cooler?                                      | <u>Yes</u> | No | N/A |
| 2  | Were seals intact, signed and dated?  | <u>Yes</u> | No | N/A |
| 3  | Were custody papers properly filled out?                                      | <u>Yes</u> | No | N/A |
| 4  | Temperature of cooler(s) upon receipt (Should be 4 +/- 2 degrees C)           | <u>3.4</u> |    |     |
| 5  | Correct Temperature?  | <u>Yes</u> | No | N/A |
| 6  | Were Ice or Ice Packs present   | <u>Yes</u> | No | N/A |
| 7  | Did all bottles arrive in good condition (unbroken, etc....)?                 | <u>Yes</u> | No | N/A |
| 8  | Were all bottle labels complete (sample ID, preservation, etc....)?           | <u>Yes</u> | No | N/A |
| 9  | Did all bottle labels and tags agree with custody papers?                     | <u>Yes</u> | No | N/A |
| 10 | Were the correct bottles used for the tests indicated?                        | <u>Yes</u> | No | N/A |
| 11 | Were all of the preserved bottles received with the appropriate preservative? | <u>Yes</u> | No | N/A |

HNO3 pH<2   H2SO4 pH<2   ZnAc2/NaOH pH>9   NaOH pH>12   HCl pH<2  
Preservative additions noted below

- |    |   |            |        |     |
|----|---|------------|--------|-----|
| 12 | Were all samples received within analysis holding times?                  | <u>Yes</u> | No     | N/A |
| 13 | Were VOA vials checked for absence of air bubbles? If present, note below | <u>Yes</u> | No     | N/A |
| 14 | Where did the bottles originate?  | <u>CAS</u> | Client |     |

Sample ID	Reagent	Manuf. Lot # or CAS Chem ID	ml added	Initials

Additional comments and/or explanation of all discrepancies noted above:

Client approval to run samples if discrepancies noted:

Date:





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# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

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PAGE 1 OF 1

SR #

50705537

CAS Contact

Project Name <b>Oak Hammack</b>		Project Number <b>FQ11414</b>		ANALYSIS REQUESTED (Include Method Number and Preservative)															
Project Manager <b>Kirk Wills</b>		Email Address <b>kwill@geosyntec.com</b>		PRESERVATIVE	1	0	2	3	0	2									
Company Address <b>Greasyntec</b>				NUMBER OF CONTAINERS															
<b>14055 Riveredge Dr. Suite 300</b>																			
<b>Tampa, FL 33637</b>																			
Phone # <b>813-558-0990</b>		FAX # <b>813-558-9726</b>																	
Sampler's Signature <b>Joe Terry</b>		Sampler's Printed Name <b>Joe Terry</b>																	
CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	TIME	MATRIX															
MW-4A		11-15-07	1505	GW	9	X	X	X	X	X									
MW-4B		1435			9														
MW-4C		1545			10														
MW-5A		1340			9														
MW-5B		1225			9														
MW-5C		1155			9														
MW-7A		1005			9														
MW-7B		0940			9														
MW-7C		0915			9														
Trip Blanks					3	X													
SPECIAL INSTRUCTIONS/COMMENTS					TURNAROUND REQUIREMENTS RUSH (SURCHARGES APPLY) <input checked="" type="checkbox"/> STANDARD REQUESTED FAX DATE REQUESTED REPORT DATE					REPORT REQUIREMENTS <input checked="" type="checkbox"/> I. Results Only <input checked="" type="checkbox"/> II. Results + QC Summaries (LCS, DUP, MS/MSD as required) <input type="checkbox"/> III. Results + QC and Calibration Summaries <input type="checkbox"/> IV. Data Validation Report with Raw Data <input type="checkbox"/> V. Specialized Forms / Custom Report Edata <input type="checkbox"/> Yes <input type="checkbox"/> No					INVOICE INFORMATION PO# BILL TO:				
See OAPP <input type="checkbox"/>					CUSTODY SEALS: Y N					RECEIVED BY									
SAMPLE RECEIPT: CONDITION/COOLER TEMP:					RELINQUISHED BY					RELINQUISHED BY									
79					Signature <b>Joe Terry</b>					Signature									
Printed Name <b>Joe Terry</b>					Printed Name <b>Joe Terry</b>					Printed Name									
Firm <b>Greasyntec</b>					Firm <b>CAS</b>					Firm									
Date/Time <b>11-16-07 1145</b>					Date/Time <b>11-16-07 1445</b>					Date/Time									

December 05, 2007

Service Request No: J0705576

Kirk Wills  
GeoSyntec Consultants  
14055 Riveredge Drive  
Suite 300  
Tampa, FL 33637

**RE: Oak Hammock/FQ1144**

Dear Kirk:

Enclosed are the results of the sample(s) submitted to our laboratory on November 20, 2007. For your reference, these analyses have been assigned our service request number **J0705576**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. In accordance to the NELAC 2003 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please call if you have any questions. My extension is 224. You may also contact me via email at [CMyers@caslab.com](mailto:CMyers@caslab.com).

Respectfully submitted,

**Columbia Analytical Services, Inc.**



Craig Myers  
Project Chemist

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*Laboratory Manager: Greg Jordan  
Quality Assurance Officer: Kathy Brungard*

*CAS Jacksonville is NELAC-accredited by the State of Florida, #E82502 valid through 6/30/08. Other state accreditations include: Arkansas, #88-0600 valid through 1/12/06; Georgia, #958 valid through 6/30/08; Louisiana, #02086 valid through 6/30/08; Texas, #T104704197-06-TX valid through 5/31/08; North Carolina, #527 valid through 12/31/07; South Carolina, #96021001 valid through 6/30/07.*



## COLUMBIA ANALYTICAL SERVICES, INC.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock  
**Sample Matrix:** Water

**Service Request No.:** J0705576  
**Date Received:** 11/20/07

### CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables, including results of QC samples analyzed from this delivery group. When appropriate to the procedure, method blank results have been reported with each analytical test. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Parameters that are included in the NELAC Fields of Testing but are not included in the lab's NELAC accreditation are identified in the discussion of each analytical procedure.

#### Sample Receipt

Fourteen water samples and one trip blank were received for analysis at Columbia Analytical Services on 11/20/07. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at  $4\pm 2^{\circ}\text{C}$  upon receipt at the lab except for aqueous samples designated for metals analyses, which were stored at room temperature.

#### Volatile Organic Compounds by GC-MS

The sample was analyzed for Volatile Organics using EPA Method 8260. The following observations were made regarding this delivery group.

#### Second Source Exceptions

The upper control criterion was exceeded for the following analyte in Second Source Verification (SSV) CAL1283: trans-1,4-Dichloro-2-butene. The field samples analyzed in this sequence did not contain the analyte in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

#### Batch QC Notes and Discussion

Quality control samples for MS/DMS were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

#### EDB and DBCP by GC-ECD

The sample was analyzed for EDB and DBCP using EPA Method 8011. No problems were observed.

#### Metals by ICP-MS/ICP-OES/CVAA

The sample was analyzed for Total Metals using EPA Methods 6020/6010B/7470A. The following observations were made regarding this delivery group.

Approved by



Date

12/5/07

#### Matrix Spike Recovery Exceptions

The matrix spike recoveries of Mercury for sample MW-3A were outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. No further corrective action was appropriate.

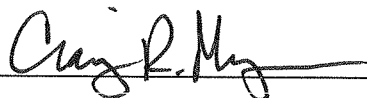
#### Batch QC Notes and Discussion

Quality control samples for some parameters (i.e., Dup/Spike or MS/DMS samples) were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

#### General Chemistry Parameters

The sample was analyzed for Inorganic Parameters using various EPA Methods. No problems were observed.

Approved by \_\_\_\_\_



Date \_\_\_\_\_

12/5/07

## Florida DEP Data Qualifiers

- B Results based upon colony counts outside the acceptable range.
- D Measurement was made in the field.
- H Value based on field kit determination; results may not be accurate.
- i The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J Estimated value (one of the following reasons is discussed in the project case narrative).
1. The result may be inaccurate because the surrogate recovery limits have been exceeded.
  2. No known quality control criteria exists for the component.
  3. The reported value failed to meet the established quality control criteria for either precision or accuracy.
  4. The sample matrix interfered with the ability to make any accurate determination (e.g., primary and confirmation results show greater than 40% RPD).
  5. The data is questionable because of improper laboratory or field protocols (e.g., GC/MS Tune did not meet method criteria).
- K Off scale low. The value is less than the lowest calibration standard but greater than the method reporting limit (MRL).
- L Off scale high. The analyte is above the upper limit of the linear calibration range.
- M The MDL/MRL has been elevated because the analyte could not be accurately quantified due to matrix interference.
- N Presumptive evidence of the analyte. Confirmation was not performed.
- Q Sample held beyond the accepted holding time.
- T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only.
- U Indicates that the compound was analyzed for but not detected.
- V Indicates that the analyte was detected in both the sample and the associated method blank.
- Y The laboratory analysis was from an improperly preserved sample.
- Z Too many colonies were present (TNTC). The numeric value represents the filtration volume.

## Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144

**Service Request:** J0705576

### SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
J0705576-001	MW-3A	11/19/07	09:45
J0705576-002	MW-3B	11/19/07	10:00
J0705576-003	MW-3C	11/19/07	09:25
J0705576-004	MW-2A	11/19/07	12:30
J0705576-005	MW-2B	11/19/07	12:05
J0705576-006	MW-2C	11/19/07	12:50
J0705576-007	MW-23A	11/19/07	13:40
J0705576-008	MW-23B	11/19/07	14:00
J0705576-009	MW-23C	11/19/07	15:20
J0705576-010	MW-17C	11/19/07	09:45
J0705576-011	MW-18A	11/19/07	14:40
J0705576-012	MW-18B	11/19/07	12:20
J0705576-013	MW-18C	11/19/07	15:25
J0705576-014	Trip Blank	11/19/07	00:00
J0705576-015	Dup-2	11/19/07	09:45

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705576  
 Date Collected: 11/19/2007  
 Date Received: 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-3A  
 Lab Code: J0705576-001  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Vinyl Chloride	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Bromomethane	ND	U	1.0	0.15	1	11/27/07	11/27/07	JWG0703909	
Chloroethane	ND	U	1.0	0.19	1	11/27/07	11/27/07	JWG0703909	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
Acetone	ND	U	50	1.9	1	11/27/07	11/27/07	JWG0703909	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/27/07	11/27/07	JWG0703909	
Carbon Disulfide	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
Methylene Chloride	ND	U	5.0	0.29	1	11/27/07	11/27/07	JWG0703909	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Acrylonitrile	ND	U	10	6.7	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
Vinyl Acetate	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
2-Butanone (MEK)	ND	U	10	0.97	1	11/27/07	11/27/07	JWG0703909	
Bromochloromethane	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
Chloroform	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/27/07	11/27/07	JWG0703909	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Benzene	ND	U	1.0	0.088	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
Dibromomethane	ND	U	1.0	0.22	1	11/27/07	11/27/07	JWG0703909	
Bromodichloromethane	ND	U	1.0	0.099	1	11/27/07	11/27/07	JWG0703909	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/27/07	11/27/07	JWG0703909	
Toluene	ND	U	1.0	0.13	1	11/27/07	11/27/07	JWG0703909	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
2-Hexanone	ND	U	25	1.4	1	11/27/07	11/27/07	JWG0703909	
Dibromochloromethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-3A  
**Lab Code:** J0705576-001  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Chlorobenzene	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Ethylbenzene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
m,p-Xylenes	ND	U	2.0	0.19	1	11/27/07	11/27/07	JWG0703909	
o-Xylene	ND	U	1.0	0.083	1	11/27/07	11/27/07	JWG0703909	
Styrene	ND	U	1.0	0.062	1	11/27/07	11/27/07	JWG0703909	
Bromoform	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/27/07	11/27/07	JWG0703909	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/27/07	11/27/07	JWG0703909	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/27/07	11/27/07	JWG0703909	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/27/07	11/27/07	JWG0703909	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	98	71-122	11/27/07	Acceptable
4-Bromofluorobenzene	100	75-120	11/27/07	Acceptable
Dibromofluoromethane	100	82-116	11/27/07	Acceptable
Toluene-d8	110	88-117	11/27/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-3B  
**Lab Code:** J0705576-002  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Vinyl Chloride	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Bromomethane	ND	U	1.0	0.15	1	11/27/07	11/27/07	JWG0703909	
Chloroethane	ND	U	1.0	0.19	1	11/27/07	11/27/07	JWG0703909	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
Acetone	ND	U	50	1.9	1	11/27/07	11/27/07	JWG0703909	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/27/07	11/27/07	JWG0703909	
Carbon Disulfide	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
Methylene Chloride	ND	U	5.0	0.29	1	11/27/07	11/27/07	JWG0703909	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Acrylonitrile	ND	U	10	6.7	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
Vinyl Acetate	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
2-Butanone (MEK)	ND	U	10	0.97	1	11/27/07	11/27/07	JWG0703909	
Bromochloromethane	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
Chloroform	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/27/07	11/27/07	JWG0703909	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Benzene	ND	U	1.0	0.088	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
Dibromomethane	ND	U	1.0	0.22	1	11/27/07	11/27/07	JWG0703909	
Bromodichloromethane	ND	U	1.0	0.099	1	11/27/07	11/27/07	JWG0703909	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/27/07	11/27/07	JWG0703909	
Toluene	ND	U	1.0	0.13	1	11/27/07	11/27/07	JWG0703909	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
2-Hexanone	ND	U	25	1.4	1	11/27/07	11/27/07	JWG0703909	
Dibromochloromethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	

Comments:



## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-3B  
**Lab Code:** J0705576-002  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Chlorobenzene	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Ethylbenzene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
m,p-Xylenes	ND	U	2.0	0.19	1	11/27/07	11/27/07	JWG0703909	
o-Xylene	ND	U	1.0	0.083	1	11/27/07	11/27/07	JWG0703909	
Styrene	ND	U	1.0	0.062	1	11/27/07	11/27/07	JWG0703909	
Bromoform	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/27/07	11/27/07	JWG0703909	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/27/07	11/27/07	JWG0703909	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/27/07	11/27/07	JWG0703909	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/27/07	11/27/07	JWG0703909	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	99	71-122	11/27/07	Acceptable
4-Bromofluorobenzene	98	75-120	11/27/07	Acceptable
Dibromofluoromethane	100	82-116	11/27/07	Acceptable
Toluene-d8	110	88-117	11/27/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-3C  
**Lab Code:** J0705576-003  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Vinyl Chloride	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Bromomethane	ND	U	1.0	0.15	1	11/27/07	11/27/07	JWG0703909	
Chloroethane	ND	U	1.0	0.19	1	11/27/07	11/27/07	JWG0703909	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
Acetone	ND	U	50	1.9	1	11/27/07	11/27/07	JWG0703909	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/27/07	11/27/07	JWG0703909	
Carbon Disulfide	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
Methylene Chloride	ND	U	5.0	0.29	1	11/27/07	11/27/07	JWG0703909	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Acrylonitrile	ND	U	10	6.7	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
Vinyl Acetate	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
2-Butanone (MEK)	ND	U	10	0.97	1	11/27/07	11/27/07	JWG0703909	
Bromochloromethane	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
Chloroform	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/27/07	11/27/07	JWG0703909	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Benzene	ND	U	1.0	0.088	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
Dibromomethane	ND	U	1.0	0.22	1	11/27/07	11/27/07	JWG0703909	
Bromodichloromethane	ND	U	1.0	0.099	1	11/27/07	11/27/07	JWG0703909	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/27/07	11/27/07	JWG0703909	
Toluene	ND	U	1.0	0.13	1	11/27/07	11/27/07	JWG0703909	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
2-Hexanone	ND	U	25	1.4	1	11/27/07	11/27/07	JWG0703909	
Dibromochloromethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	

Comments:

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705576  
 Date Collected: 11/19/2007  
 Date Received: 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-3C  
 Lab Code: J0705576-003  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Chlorobenzene	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Ethylbenzene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
m,p-Xylenes	ND	U	2.0	0.19	1	11/27/07	11/27/07	JWG0703909	
o-Xylene	ND	U	1.0	0.083	1	11/27/07	11/27/07	JWG0703909	
Styrene	ND	U	1.0	0.062	1	11/27/07	11/27/07	JWG0703909	
Bromoform	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/27/07	11/27/07	JWG0703909	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/27/07	11/27/07	JWG0703909	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/27/07	11/27/07	JWG0703909	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/27/07	11/27/07	JWG0703909	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	99	71-122	11/27/07	Acceptable
4-Bromofluorobenzene	100	75-120	11/27/07	Acceptable
Dibromofluoromethane	101	82-116	11/27/07	Acceptable
Toluene-d8	110	88-117	11/27/07	Acceptable

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-2A  
**Lab Code:** J0705576-004  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Vinyl Chloride	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Bromomethane	ND	U	1.0	0.15	1	11/27/07	11/27/07	JWG0703909	
Chloroethane	ND	U	1.0	0.19	1	11/27/07	11/27/07	JWG0703909	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
Acetone	ND	U	50	1.9	1	11/27/07	11/27/07	JWG0703909	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/27/07	11/27/07	JWG0703909	
Carbon Disulfide	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
Methylene Chloride	ND	U	5.0	0.29	1	11/27/07	11/27/07	JWG0703909	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Acrylonitrile	ND	U	10	6.7	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
Vinyl Acetate	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
2-Butanone (MEK)	ND	U	10	0.97	1	11/27/07	11/27/07	JWG0703909	
Bromochloromethane	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
Chloroform	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/27/07	11/27/07	JWG0703909	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Benzene	ND	U	1.0	0.088	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
Dibromomethane	ND	U	1.0	0.22	1	11/27/07	11/27/07	JWG0703909	
Bromodichloromethane	ND	U	1.0	0.099	1	11/27/07	11/27/07	JWG0703909	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/27/07	11/27/07	JWG0703909	
Toluene	ND	U	1.0	0.13	1	11/27/07	11/27/07	JWG0703909	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
2-Hexanone	ND	U	25	1.4	1	11/27/07	11/27/07	JWG0703909	
Dibromochloromethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-2A  
**Lab Code:** J0705576-004  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Chlorobenzene	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Ethylbenzene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
m,p-Xylenes	ND	U	2.0	0.19	1	11/27/07	11/27/07	JWG0703909	
o-Xylene	ND	U	1.0	0.083	1	11/27/07	11/27/07	JWG0703909	
Styrene	ND	U	1.0	0.062	1	11/27/07	11/27/07	JWG0703909	
Bromoform	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/27/07	11/27/07	JWG0703909	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/27/07	11/27/07	JWG0703909	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/27/07	11/27/07	JWG0703909	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/27/07	11/27/07	JWG0703909	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	100	71-122	11/27/07	Acceptable
4-Bromofluorobenzene	99	75-120	11/27/07	Acceptable
Dibromofluoromethane	103	82-116	11/27/07	Acceptable
Toluene-d8	111	88-117	11/27/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-2B  
**Lab Code:** J0705576-005  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Vinyl Chloride	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Bromomethane	ND	U	1.0	0.15	1	11/27/07	11/27/07	JWG0703909	
Chloroethane	ND	U	1.0	0.19	1	11/27/07	11/27/07	JWG0703909	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
Acetone	ND	U	50	1.9	1	11/27/07	11/27/07	JWG0703909	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/27/07	11/27/07	JWG0703909	
Carbon Disulfide	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
Methylene Chloride	ND	U	5.0	0.29	1	11/27/07	11/27/07	JWG0703909	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Acrylonitrile	ND	U	10	6.7	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
Vinyl Acetate	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
2-Butanone (MEK)	ND	U	10	0.97	1	11/27/07	11/27/07	JWG0703909	
Bromochloromethane	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
Chloroform	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/27/07	11/27/07	JWG0703909	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Benzene	ND	U	1.0	0.088	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
Dibromomethane	ND	U	1.0	0.22	1	11/27/07	11/27/07	JWG0703909	
Bromodichloromethane	ND	U	1.0	0.099	1	11/27/07	11/27/07	JWG0703909	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/27/07	11/27/07	JWG0703909	
Toluene	ND	U	1.0	0.13	1	11/27/07	11/27/07	JWG0703909	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
2-Hexanone	ND	U	25	1.4	1	11/27/07	11/27/07	JWG0703909	
Dibromochloromethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	

**Comments:** \_\_\_\_\_

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705576  
 Date Collected: 11/19/2007  
 Date Received: 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-2B  
 Lab Code: J0705576-005  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Chlorobenzene	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Ethylbenzene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
m,p-Xylenes	ND	U	2.0	0.19	1	11/27/07	11/27/07	JWG0703909	
o-Xylene	ND	U	1.0	0.083	1	11/27/07	11/27/07	JWG0703909	
Styrene	ND	U	1.0	0.062	1	11/27/07	11/27/07	JWG0703909	
Bromoform	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/27/07	11/27/07	JWG0703909	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/27/07	11/27/07	JWG0703909	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/27/07	11/27/07	JWG0703909	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/27/07	11/27/07	JWG0703909	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	100	71-122	11/27/07	Acceptable
4-Bromofluorobenzene	100	75-120	11/27/07	Acceptable
Dibromofluoromethane	101	82-116	11/27/07	Acceptable
Toluene-d8	111	88-117	11/27/07	Acceptable

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-2C  
**Lab Code:** J0705576-006  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Vinyl Chloride	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Bromomethane	ND	U	1.0	0.15	1	11/27/07	11/27/07	JWG0703909	
Chloroethane	ND	U	1.0	0.19	1	11/27/07	11/27/07	JWG0703909	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
Acetone	ND	U	50	1.9	1	11/27/07	11/27/07	JWG0703909	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/27/07	11/27/07	JWG0703909	
Carbon Disulfide	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
Methylene Chloride	ND	U	5.0	0.29	1	11/27/07	11/27/07	JWG0703909	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Acrylonitrile	ND	U	10	6.7	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
Vinyl Acetate	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
2-Butanone (MEK)	ND	U	10	0.97	1	11/27/07	11/27/07	JWG0703909	
Bromochloromethane	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
Chloroform	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/27/07	11/27/07	JWG0703909	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Benzene	ND	U	1.0	0.088	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
Dibromomethane	ND	U	1.0	0.22	1	11/27/07	11/27/07	JWG0703909	
Bromodichloromethane	ND	U	1.0	0.099	1	11/27/07	11/27/07	JWG0703909	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/27/07	11/27/07	JWG0703909	
Toluene	ND	U	1.0	0.13	1	11/27/07	11/27/07	JWG0703909	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
2-Hexanone	ND	U	25	1.4	1	11/27/07	11/27/07	JWG0703909	
Dibromochloromethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	

Comments:



## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-2C  
**Lab Code:** J0705576-006  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Chlorobenzene	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Ethylbenzene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
m,p-Xylenes	ND	U	2.0	0.19	1	11/27/07	11/27/07	JWG0703909	
o-Xylene	ND	U	1.0	0.083	1	11/27/07	11/27/07	JWG0703909	
Styrene	ND	U	1.0	0.062	1	11/27/07	11/27/07	JWG0703909	
Bromoform	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/27/07	11/27/07	JWG0703909	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/27/07	11/27/07	JWG0703909	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/27/07	11/27/07	JWG0703909	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/27/07	11/27/07	JWG0703909	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	100	71-122	11/27/07	Acceptable
4-Bromofluorobenzene	100	75-120	11/27/07	Acceptable
Dibromofluoromethane	100	82-116	11/27/07	Acceptable
Toluene-d8	110	88-117	11/27/07	Acceptable

Comments: \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-23A  
**Lab Code:** J0705576-007  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Vinyl Chloride	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Bromomethane	ND	U	1.0	0.15	1	11/27/07	11/27/07	JWG0703909	
Chloroethane	ND	U	1.0	0.19	1	11/27/07	11/27/07	JWG0703909	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
Acetone	ND	U	50	1.9	1	11/27/07	11/27/07	JWG0703909	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/27/07	11/27/07	JWG0703909	
Carbon Disulfide	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
Methylene Chloride	ND	U	5.0	0.29	1	11/27/07	11/27/07	JWG0703909	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Acrylonitrile	ND	U	10	6.7	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
Vinyl Acetate	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
2-Butanone (MEK)	ND	U	10	0.97	1	11/27/07	11/27/07	JWG0703909	
Bromochloromethane	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
Chloroform	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/27/07	11/27/07	JWG0703909	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Benzene	ND	U	1.0	0.088	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
Dibromomethane	ND	U	1.0	0.22	1	11/27/07	11/27/07	JWG0703909	
Bromodichloromethane	ND	U	1.0	0.099	1	11/27/07	11/27/07	JWG0703909	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/27/07	11/27/07	JWG0703909	
Toluene	ND	U	1.0	0.13	1	11/27/07	11/27/07	JWG0703909	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
2-Hexanone	ND	U	25	1.4	1	11/27/07	11/27/07	JWG0703909	
Dibromochloromethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	

**Comments:**

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-23A  
**Lab Code:** J0705576-007  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Chlorobenzene	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Ethylbenzene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
m,p-Xylenes	ND	U	2.0	0.19	1	11/27/07	11/27/07	JWG0703909	
o-Xylene	ND	U	1.0	0.083	1	11/27/07	11/27/07	JWG0703909	
Styrene	ND	U	1.0	0.062	1	11/27/07	11/27/07	JWG0703909	
Bromoform	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/27/07	11/27/07	JWG0703909	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/27/07	11/27/07	JWG0703909	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/27/07	11/27/07	JWG0703909	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/27/07	11/27/07	JWG0703909	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	98	71-122	11/27/07	Acceptable
4-Bromofluorobenzene	99	75-120	11/27/07	Acceptable
Dibromofluoromethane	100	82-116	11/27/07	Acceptable
Toluene-d8	111	88-117	11/27/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-23B  
**Lab Code:** J0705576-008  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Vinyl Chloride	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Bromomethane	ND	U	1.0	0.15	1	11/27/07	11/27/07	JWG0703909	
Chloroethane	ND	U	1.0	0.19	1	11/27/07	11/27/07	JWG0703909	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
Acetone	ND	U	50	1.9	1	11/27/07	11/27/07	JWG0703909	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/27/07	11/27/07	JWG0703909	
Carbon Disulfide	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
Methylene Chloride	ND	U	5.0	0.29	1	11/27/07	11/27/07	JWG0703909	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Acrylonitrile	ND	U	10	6.7	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
Vinyl Acetate	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
2-Butanone (MEK)	ND	U	10	0.97	1	11/27/07	11/27/07	JWG0703909	
Bromochloromethane	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
Chloroform	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/27/07	11/27/07	JWG0703909	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Benzene	ND	U	1.0	0.088	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
Dibromomethane	ND	U	1.0	0.22	1	11/27/07	11/27/07	JWG0703909	
Bromodichloromethane	ND	U	1.0	0.099	1	11/27/07	11/27/07	JWG0703909	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/27/07	11/27/07	JWG0703909	
<b>Toluene</b>	<b>0.35</b>	<b>I</b>	1.0	0.13	1	11/27/07	11/27/07	JWG0703909	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
2-Hexanone	ND	U	25	1.4	1	11/27/07	11/27/07	JWG0703909	
Dibromochloromethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	

Comments:

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705576  
 Date Collected: 11/19/2007  
 Date Received: 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-23B  
 Lab Code: J0705576-008  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Chlorobenzene	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Ethylbenzene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
m,p-Xylenes	ND	U	2.0	0.19	1	11/27/07	11/27/07	JWG0703909	
o-Xylene	ND	U	1.0	0.083	1	11/27/07	11/27/07	JWG0703909	
Styrene	ND	U	1.0	0.062	1	11/27/07	11/27/07	JWG0703909	
Bromoform	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/27/07	11/27/07	JWG0703909	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/27/07	11/27/07	JWG0703909	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/27/07	11/27/07	JWG0703909	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/27/07	11/27/07	JWG0703909	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	101	71-122	11/27/07	Acceptable
4-Bromofluorobenzene	100	75-120	11/27/07	Acceptable
Dibromofluoromethane	101	82-116	11/27/07	Acceptable
Toluene-d8	110	88-117	11/27/07	Acceptable

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-23C  
**Lab Code:** J0705576-009  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Vinyl Chloride	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Bromomethane	ND	U	1.0	0.15	1	11/27/07	11/27/07	JWG0703909	
Chloroethane	ND	U	1.0	0.19	1	11/27/07	11/27/07	JWG0703909	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
Acetone	ND	U	50	1.9	1	11/27/07	11/27/07	JWG0703909	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/27/07	11/27/07	JWG0703909	
Carbon Disulfide	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
Methylene Chloride	ND	U	5.0	0.29	1	11/27/07	11/27/07	JWG0703909	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Acrylonitrile	ND	U	10	6.7	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
Vinyl Acetate	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
2-Butanone (MEK)	ND	U	10	0.97	1	11/27/07	11/27/07	JWG0703909	
Bromochloromethane	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
Chloroform	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/27/07	11/27/07	JWG0703909	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Benzene	ND	U	1.0	0.088	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
Dibromomethane	ND	U	1.0	0.22	1	11/27/07	11/27/07	JWG0703909	
Bromodichloromethane	ND	U	1.0	0.099	1	11/27/07	11/27/07	JWG0703909	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/27/07	11/27/07	JWG0703909	
<b>Toluene</b>	<b>0.51</b>	<b>I</b>	1.0	0.13	1	11/27/07	11/27/07	JWG0703909	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
2-Hexanone	ND	U	25	1.4	1	11/27/07	11/27/07	JWG0703909	
Dibromochloromethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-23C  
**Lab Code:** J0705576-009  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Chlorobenzene	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Ethylbenzene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
m,p-Xylenes	ND	U	2.0	0.19	1	11/27/07	11/27/07	JWG0703909	
o-Xylene	ND	U	1.0	0.083	1	11/27/07	11/27/07	JWG0703909	
Styrene	ND	U	1.0	0.062	1	11/27/07	11/27/07	JWG0703909	
Bromoform	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/27/07	11/27/07	JWG0703909	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/27/07	11/27/07	JWG0703909	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/27/07	11/27/07	JWG0703909	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/27/07	11/27/07	JWG0703909	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	99	71-122	11/27/07	Acceptable
4-Bromofluorobenzene	98	75-120	11/27/07	Acceptable
Dibromofluoromethane	102	82-116	11/27/07	Acceptable
Toluene-d8	110	88-117	11/27/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-17C  
**Lab Code:** J0705576-010  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Vinyl Chloride	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Bromomethane	ND	U	1.0	0.15	1	11/27/07	11/27/07	JWG0703909	
Chloroethane	ND	U	1.0	0.19	1	11/27/07	11/27/07	JWG0703909	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
Acetone	ND	U	50	1.9	1	11/27/07	11/27/07	JWG0703909	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/27/07	11/27/07	JWG0703909	
Carbon Disulfide	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
Methylene Chloride	ND	U	5.0	0.29	1	11/27/07	11/27/07	JWG0703909	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Acrylonitrile	ND	U	10	6.7	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
Vinyl Acetate	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
2-Butanone (MEK)	ND	U	10	0.97	1	11/27/07	11/27/07	JWG0703909	
Bromochloromethane	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
Chloroform	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/27/07	11/27/07	JWG0703909	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Benzene	ND	U	1.0	0.088	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
Dibromomethane	ND	U	1.0	0.22	1	11/27/07	11/27/07	JWG0703909	
Bromodichloromethane	ND	U	1.0	0.099	1	11/27/07	11/27/07	JWG0703909	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/27/07	11/27/07	JWG0703909	
<b>Toluene</b>	<b>2.6</b>		1.0	0.13	1	11/27/07	11/27/07	JWG0703909	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
2-Hexanone	ND	U	25	1.4	1	11/27/07	11/27/07	JWG0703909	
Dibromochloromethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	

**Comments:** \_\_\_\_\_



## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-17C  
**Lab Code:** J0705576-010  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Chlorobenzene	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Ethylbenzene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
m,p-Xylenes	ND	U	2.0	0.19	1	11/27/07	11/27/07	JWG0703909	
o-Xylene	ND	U	1.0	0.083	1	11/27/07	11/27/07	JWG0703909	
Styrene	ND	U	1.0	0.062	1	11/27/07	11/27/07	JWG0703909	
Bromoform	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/27/07	11/27/07	JWG0703909	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/27/07	11/27/07	JWG0703909	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/27/07	11/27/07	JWG0703909	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/27/07	11/27/07	JWG0703909	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	101	71-122	11/27/07	Acceptable
4-Bromofluorobenzene	100	75-120	11/27/07	Acceptable
Dibromofluoromethane	101	82-116	11/27/07	Acceptable
Toluene-d8	110	88-117	11/27/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-18A  
**Lab Code:** J0705576-011  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Vinyl Chloride	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Bromomethane	ND	U	1.0	0.15	1	11/27/07	11/27/07	JWG0703909	
Chloroethane	ND	U	1.0	0.19	1	11/27/07	11/27/07	JWG0703909	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
Acetone	ND	U	50	1.9	1	11/27/07	11/27/07	JWG0703909	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/27/07	11/27/07	JWG0703909	
Carbon Disulfide	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
Methylene Chloride	ND	U	5.0	0.29	1	11/27/07	11/27/07	JWG0703909	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Acrylonitrile	ND	U	10	6.7	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
Vinyl Acetate	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
2-Butanone (MEK)	ND	U	10	0.97	1	11/27/07	11/27/07	JWG0703909	
Bromochloromethane	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
Chloroform	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/27/07	11/27/07	JWG0703909	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Benzene	ND	U	1.0	0.088	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
Dibromomethane	ND	U	1.0	0.22	1	11/27/07	11/27/07	JWG0703909	
Bromodichloromethane	ND	U	1.0	0.099	1	11/27/07	11/27/07	JWG0703909	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/27/07	11/27/07	JWG0703909	
Toluene	ND	U	1.0	0.13	1	11/27/07	11/27/07	JWG0703909	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
2-Hexanone	ND	U	25	1.4	1	11/27/07	11/27/07	JWG0703909	
Dibromochloromethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	

**Comments:**

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-18A  
**Lab Code:** J0705576-011  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Chlorobenzene	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Ethylbenzene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
m,p-Xylenes	ND	U	2.0	0.19	1	11/27/07	11/27/07	JWG0703909	
o-Xylene	ND	U	1.0	0.083	1	11/27/07	11/27/07	JWG0703909	
Styrene	ND	U	1.0	0.062	1	11/27/07	11/27/07	JWG0703909	
Bromoform	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/27/07	11/27/07	JWG0703909	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/27/07	11/27/07	JWG0703909	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/27/07	11/27/07	JWG0703909	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/27/07	11/27/07	JWG0703909	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	98	71-122	11/27/07	Acceptable
4-Bromofluorobenzene	100	75-120	11/27/07	Acceptable
Dibromofluoromethane	102	82-116	11/27/07	Acceptable
Toluene-d8	109	88-117	11/27/07	Acceptable

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-18B  
**Lab Code:** J0705576-012  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Vinyl Chloride	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Bromomethane	ND	U	1.0	0.15	1	11/27/07	11/27/07	JWG0703909	
Chloroethane	ND	U	1.0	0.19	1	11/27/07	11/27/07	JWG0703909	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
Acetone	ND	U	50	1.9	1	11/27/07	11/27/07	JWG0703909	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/27/07	11/27/07	JWG0703909	
Carbon Disulfide	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
Methylene Chloride	ND	U	5.0	0.29	1	11/27/07	11/27/07	JWG0703909	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Acrylonitrile	ND	U	10	6.7	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
Vinyl Acetate	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
2-Butanone (MEK)	ND	U	10	0.97	1	11/27/07	11/27/07	JWG0703909	
Bromochloromethane	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
Chloroform	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/27/07	11/27/07	JWG0703909	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Benzene	ND	U	1.0	0.088	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
Dibromomethane	ND	U	1.0	0.22	1	11/27/07	11/27/07	JWG0703909	
Bromodichloromethane	ND	U	1.0	0.099	1	11/27/07	11/27/07	JWG0703909	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/27/07	11/27/07	JWG0703909	
Toluene	ND	U	1.0	0.13	1	11/27/07	11/27/07	JWG0703909	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
2-Hexanone	ND	U	25	1.4	1	11/27/07	11/27/07	JWG0703909	
Dibromochloromethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-18B  
**Lab Code:** J0705576-012  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Chlorobenzene	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Ethylbenzene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
m,p-Xylenes	ND	U	2.0	0.19	1	11/27/07	11/27/07	JWG0703909	
o-Xylene	ND	U	1.0	0.083	1	11/27/07	11/27/07	JWG0703909	
Styrene	ND	U	1.0	0.062	1	11/27/07	11/27/07	JWG0703909	
Bromoform	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/27/07	11/27/07	JWG0703909	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/27/07	11/27/07	JWG0703909	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/27/07	11/27/07	JWG0703909	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/27/07	11/27/07	JWG0703909	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	100	71-122	11/27/07	Acceptable
4-Bromofluorobenzene	99	75-120	11/27/07	Acceptable
Dibromofluoromethane	100	82-116	11/27/07	Acceptable
Toluene-d8	111	88-117	11/27/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-18C  
**Lab Code:** J0705576-013  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Vinyl Chloride	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Bromomethane	ND	U	1.0	0.15	1	11/27/07	11/27/07	JWG0703909	
Chloroethane	ND	U	1.0	0.19	1	11/27/07	11/27/07	JWG0703909	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
Acetone	ND	U	50	1.9	1	11/27/07	11/27/07	JWG0703909	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/27/07	11/27/07	JWG0703909	
Carbon Disulfide	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
Methylene Chloride	ND	U	5.0	0.29	1	11/27/07	11/27/07	JWG0703909	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Acrylonitrile	ND	U	10	6.7	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
Vinyl Acetate	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
2-Butanone (MEK)	ND	U	10	0.97	1	11/27/07	11/27/07	JWG0703909	
Bromochloromethane	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
Chloroform	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/27/07	11/27/07	JWG0703909	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Benzene	ND	U	1.0	0.088	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
Dibromomethane	ND	U	1.0	0.22	1	11/27/07	11/27/07	JWG0703909	
Bromodichloromethane	ND	U	1.0	0.099	1	11/27/07	11/27/07	JWG0703909	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/27/07	11/27/07	JWG0703909	
Toluene	ND	U	1.0	0.13	1	11/27/07	11/27/07	JWG0703909	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
2-Hexanone	ND	U	25	1.4	1	11/27/07	11/27/07	JWG0703909	
Dibromochloromethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-18C  
**Lab Code:** J0705576-013  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Chlorobenzene	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Ethylbenzene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
m,p-Xylenes	ND	U	2.0	0.19	1	11/27/07	11/27/07	JWG0703909	
o-Xylene	ND	U	1.0	0.083	1	11/27/07	11/27/07	JWG0703909	
Styrene	ND	U	1.0	0.062	1	11/27/07	11/27/07	JWG0703909	
Bromoform	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/27/07	11/27/07	JWG0703909	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/27/07	11/27/07	JWG0703909	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/27/07	11/27/07	JWG0703909	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/27/07	11/27/07	JWG0703909	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	99	71-122	11/27/07	Acceptable
4-Bromofluorobenzene	101	75-120	11/27/07	Acceptable
Dibromofluoromethane	100	82-116	11/27/07	Acceptable
Toluene-d8	111	88-117	11/27/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Trip Blank  
**Lab Code:** J0705576-014  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Vinyl Chloride	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Bromomethane	ND	U	1.0	0.15	1	11/27/07	11/27/07	JWG0703909	
Chloroethane	ND	U	1.0	0.19	1	11/27/07	11/27/07	JWG0703909	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
Acetone	ND	U	50	1.9	1	11/27/07	11/27/07	JWG0703909	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/27/07	11/27/07	JWG0703909	
Carbon Disulfide	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
Methylene Chloride	ND	U	5.0	0.29	1	11/27/07	11/27/07	JWG0703909	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Acrylonitrile	ND	U	10	6.7	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
Vinyl Acetate	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
2-Butanone (MEK)	ND	U	10	0.97	1	11/27/07	11/27/07	JWG0703909	
Bromochloromethane	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
Chloroform	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/27/07	11/27/07	JWG0703909	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Benzene	ND	U	1.0	0.088	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
Dibromomethane	ND	U	1.0	0.22	1	11/27/07	11/27/07	JWG0703909	
Bromodichloromethane	ND	U	1.0	0.099	1	11/27/07	11/27/07	JWG0703909	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/27/07	11/27/07	JWG0703909	
Toluene	ND	U	1.0	0.13	1	11/27/07	11/27/07	JWG0703909	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
2-Hexanone	ND	U	25	1.4	1	11/27/07	11/27/07	JWG0703909	
Dibromochloromethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	

Comments:



## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Trip Blank  
**Lab Code:** J0705576-014  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Chlorobenzene	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Ethylbenzene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
m,p-Xylenes	ND	U	2.0	0.19	1	11/27/07	11/27/07	JWG0703909	
o-Xylene	ND	U	1.0	0.083	1	11/27/07	11/27/07	JWG0703909	
Styrene	ND	U	1.0	0.062	1	11/27/07	11/27/07	JWG0703909	
Bromoform	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/27/07	11/27/07	JWG0703909	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/27/07	11/27/07	JWG0703909	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/27/07	11/27/07	JWG0703909	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/27/07	11/27/07	JWG0703909	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	99	71-122	11/27/07	Acceptable
4-Bromofluorobenzene	99	75-120	11/27/07	Acceptable
Dibromofluoromethane	100	82-116	11/27/07	Acceptable
Toluene-d8	111	88-117	11/27/07	Acceptable

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Dup-2  
**Lab Code:** J0705576-015  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Vinyl Chloride	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Bromomethane	ND	U	1.0	0.15	1	11/27/07	11/27/07	JWG0703909	
Chloroethane	ND	U	1.0	0.19	1	11/27/07	11/27/07	JWG0703909	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
Acetone	ND	U	50	1.9	1	11/27/07	11/27/07	JWG0703909	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/27/07	11/27/07	JWG0703909	
Carbon Disulfide	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
Methylene Chloride	ND	U	5.0	0.29	1	11/27/07	11/27/07	JWG0703909	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Acrylonitrile	ND	U	10	6.7	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
Vinyl Acetate	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
2-Butanone (MEK)	ND	U	10	0.97	1	11/27/07	11/27/07	JWG0703909	
Bromochloromethane	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
Chloroform	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/27/07	11/27/07	JWG0703909	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Benzene	ND	U	1.0	0.088	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
Dibromomethane	ND	U	1.0	0.22	1	11/27/07	11/27/07	JWG0703909	
Bromodichloromethane	ND	U	1.0	0.099	1	11/27/07	11/27/07	JWG0703909	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/27/07	11/27/07	JWG0703909	
<b>Toluene</b>	<b>2.3</b>		1.0	0.13	1	11/27/07	11/27/07	JWG0703909	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
2-Hexanone	ND	U	25	1.4	1	11/27/07	11/27/07	JWG0703909	
Dibromochloromethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Dup-2  
**Lab Code:** J0705576-015  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Chlorobenzene	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Ethylbenzene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
m,p-Xylenes	ND	U	2.0	0.19	1	11/27/07	11/27/07	JWG0703909	
o-Xylene	ND	U	1.0	0.083	1	11/27/07	11/27/07	JWG0703909	
Styrene	ND	U	1.0	0.062	1	11/27/07	11/27/07	JWG0703909	
Bromoform	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/27/07	11/27/07	JWG0703909	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/27/07	11/27/07	JWG0703909	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/27/07	11/27/07	JWG0703909	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/27/07	11/27/07	JWG0703909	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	99	71-122	11/27/07	Acceptable
4-Bromofluorobenzene	100	75-120	11/27/07	Acceptable
Dibromofluoromethane	100	82-116	11/27/07	Acceptable
Toluene-d8	111	88-117	11/27/07	Acceptable

Comments: \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** NA  
**Date Received:** NA

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Method Blank  
**Lab Code:** JWG0703909-4  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Vinyl Chloride	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Bromomethane	ND	U	1.0	0.15	1	11/27/07	11/27/07	JWG0703909	
Chloroethane	ND	U	1.0	0.19	1	11/27/07	11/27/07	JWG0703909	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
Acetone	ND	U	50	1.9	1	11/27/07	11/27/07	JWG0703909	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/27/07	11/27/07	JWG0703909	
Carbon Disulfide	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
Methylene Chloride	ND	U	5.0	0.29	1	11/27/07	11/27/07	JWG0703909	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Acrylonitrile	ND	U	10	6.7	1	11/27/07	11/27/07	JWG0703909	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
Vinyl Acetate	ND	U	10	1.1	1	11/27/07	11/27/07	JWG0703909	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
2-Butanone (MEK)	ND	U	10	0.97	1	11/27/07	11/27/07	JWG0703909	
Bromochloromethane	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
Chloroform	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/27/07	11/27/07	JWG0703909	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Benzene	ND	U	1.0	0.088	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/27/07	11/27/07	JWG0703909	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/27/07	11/27/07	JWG0703909	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
Dibromomethane	ND	U	1.0	0.22	1	11/27/07	11/27/07	JWG0703909	
Bromodichloromethane	ND	U	1.0	0.099	1	11/27/07	11/27/07	JWG0703909	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/27/07	11/27/07	JWG0703909	
Toluene	ND	U	1.0	0.13	1	11/27/07	11/27/07	JWG0703909	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/27/07	11/27/07	JWG0703909	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
2-Hexanone	ND	U	25	1.4	1	11/27/07	11/27/07	JWG0703909	
Dibromochloromethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	

**Comments:**

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** NA  
**Date Received:** NA

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Method Blank  
**Lab Code:** JWG0703909-4  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Chlorobenzene	ND	U	1.0	0.10	1	11/27/07	11/27/07	JWG0703909	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
Ethylbenzene	ND	U	1.0	0.12	1	11/27/07	11/27/07	JWG0703909	
m,p-Xylenes	ND	U	2.0	0.19	1	11/27/07	11/27/07	JWG0703909	
o-Xylene	ND	U	1.0	0.083	1	11/27/07	11/27/07	JWG0703909	
Styrene	ND	U	1.0	0.062	1	11/27/07	11/27/07	JWG0703909	
Bromoform	ND	U	1.0	0.28	1	11/27/07	11/27/07	JWG0703909	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/27/07	11/27/07	JWG0703909	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/27/07	11/27/07	JWG0703909	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/27/07	11/27/07	JWG0703909	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/27/07	11/27/07	JWG0703909	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/27/07	11/27/07	JWG0703909	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/27/07	11/27/07	JWG0703909	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	98	71-122	11/27/07	Acceptable
4-Bromofluorobenzene	100	75-120	11/27/07	Acceptable
Dibromofluoromethane	101	82-116	11/27/07	Acceptable
Toluene-d8	109	88-117	11/27/07	Acceptable

Comments: \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-3A  
**Lab Code:** J0705576-001  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703869	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703869	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	129	77-150	11/27/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-3B  
**Lab Code:** J0705576-002  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703869	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703869	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	111	77-150	11/27/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-3C  
**Lab Code:** J0705576-003  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703869	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703869	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	123	77-150	11/27/07	Acceptable

**Comments:**



## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-2A  
**Lab Code:** J0705576-004  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703869	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703869	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	139	77-150	11/27/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-2B  
**Lab Code:** J0705576-005  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703869	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703869	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	110	77-150	11/27/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-2C  
**Lab Code:** J0705576-006  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703869	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703869	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	120	77-150	11/27/07	Acceptable

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-23A  
**Lab Code:** J0705576-007  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703869	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703869	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	126	77-150	11/27/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-23B  
**Lab Code:** J0705576-008  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703869	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703869	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	124	77-150	11/27/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-23C  
**Lab Code:** J0705576-009  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703869	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703869	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	130	77-150	11/27/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-17C  
**Lab Code:** J0705576-010  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/26/07	JWG0703870	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/26/07	JWG0703870	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	130	77-150	11/26/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-18A  
**Lab Code:** J0705576-011  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/26/07	JWG0703870	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/26/07	JWG0703870	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	111	77-150	11/26/07	Acceptable

**Comments:** \_\_\_\_\_



## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-18B  
**Lab Code:** J0705576-012  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/26/07	JWG0703870	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/26/07	JWG0703870	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	124	77-150	11/26/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-18C  
**Lab Code:** J0705576-013  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/26/07	JWG0703870	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/26/07	JWG0703870	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	130	77-150	11/26/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** Dup-2  
**Lab Code:** J0705576-015  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/26/07	JWG0703870	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/26/07	JWG0703870	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	136	77-150	11/26/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Collected:** NA  
**Date Received:** NA

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** Method Blank  
**Lab Code:** JWG0703869-3  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/26/07	JWG0703869	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/26/07	JWG0703869	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	109	77-150	11/26/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576

**Date Collected:** NA

**Date Received:** NA

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** Method Blank  
**Lab Code:** JWG0703870-3

**Units:** ug/L

**Basis:** NA

**Extraction Method:** METHOD

**Level:** Low

**Analysis Method:** 8011

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/26/07	JWG0703870	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/26/07	JWG0703870	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	111	77-150	11/26/07	Acceptable

**Comments:**

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705576  
 Date Collected: 11/19/2007  
 Date Received: 11/20/2007

## Total Metals

Sample Name: MW-3A  
 Lab Code: J0705576-001

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	12/02/2007	0.20	i
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	12/02/2007	0.31	i
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	12/02/2007	41	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	12/02/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	12/02/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	12/02/2007	4.0	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	12/02/2007	0.76	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	12/02/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	1680	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	12/02/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	12/02/2007	1.4	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	12/02/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	12/02/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	12/02/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	12/02/2007	0.52	i
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	12/02/2007	5.6	i

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Total Metals

**Sample Name:** MW-3B  
**Lab Code:** J0705576-002

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	12/02/2007	0.089	i
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	12/02/2007	U	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	12/02/2007	16	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	12/02/2007	0.091	i
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	12/02/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	12/02/2007	2.1	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	12/02/2007	0.28	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	12/02/2007	0.29	i
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	877	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	12/02/2007	0.43	i
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	12/02/2007	U	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	12/02/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	12/02/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	12/02/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	12/02/2007	1.7	i
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	12/02/2007	U	

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Total Metals

**Sample Name:** MW-3C  
**Lab Code:** J0705576-003

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	12/02/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	12/02/2007	U	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	12/02/2007	13	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	12/02/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	12/02/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	12/02/2007	2.0	i
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	12/02/2007	U	
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	12/02/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	902	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	12/02/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	12/02/2007	U	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	12/02/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	12/02/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	12/02/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	12/02/2007	1.3	i
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	12/02/2007	U	



## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Total Metals

**Sample Name:** MW-2A  
**Lab Code:** J0705576-004

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	12/02/2007	0.088	i
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	12/02/2007	0.47	i
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	12/02/2007	11	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	12/02/2007	0.12	i
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	12/02/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	12/02/2007	2.0	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	12/02/2007	1.4	
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	12/02/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	3790	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	12/02/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	12/02/2007	U	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	12/02/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	12/02/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	12/02/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	12/02/2007	0.51	i
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	12/02/2007	2.1	i

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705576  
 Date Collected: 11/19/2007  
 Date Received: 11/20/2007

## Total Metals

Sample Name: MW-2B  
 Lab Code: J0705576-005

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	12/02/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	12/02/2007	U	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	12/02/2007	11	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	12/02/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	12/02/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	12/02/2007	2.4	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	12/02/2007	0.24	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	12/02/2007	0.70	i
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	697	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	12/02/2007	0.48	i
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	12/02/2007	U	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	12/02/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	12/02/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	12/02/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	12/02/2007	2.1	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	12/02/2007	U	

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Total Metals

**Sample Name:** MW-2C  
**Lab Code:** J0705576-006

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	12/02/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	12/02/2007	U	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	12/02/2007	17	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	12/02/2007	0.15	i
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	12/02/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	12/02/2007	2.2	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	12/02/2007	U	
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	12/02/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	659	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	12/02/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	12/02/2007	U	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	12/02/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	12/02/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	12/02/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	12/02/2007	1.8	i
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	12/02/2007	U	

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

### Total Metals

**Sample Name:** MW-23A  
**Lab Code:** J0705576-007

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	12/02/2007	0.10	i
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	12/02/2007	0.42	i
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	12/02/2007	10	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	12/02/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	12/02/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	12/02/2007	2.4	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	12/02/2007	0.17	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	12/02/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	1700	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	12/02/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	12/02/2007	1.1	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	12/02/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	12/02/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	12/02/2007	0.091	i
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	12/02/2007	2.0	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	12/02/2007	2.0	i

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705576  
 Date Collected: 11/19/2007  
 Date Received: 11/20/2007

## Total Metals

Sample Name: MW-23B  
 Lab Code: J0705576-008

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	12/02/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	12/02/2007	U	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	12/02/2007	18	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	12/02/2007	0.10	i
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	12/02/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	12/02/2007	4.3	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	12/02/2007	0.34	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	12/02/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	654	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	12/02/2007	0.30	i
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	12/02/2007	1.7	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	12/02/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	12/02/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	12/02/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	12/02/2007	2.7	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	12/02/2007	U	

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Total Metals

**Sample Name:** MW-23C  
**Lab Code:** J0705576-009

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	12/02/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	12/02/2007	U	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	12/02/2007	15	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	12/02/2007	0.10	i
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	12/02/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	12/02/2007	7.1	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	12/02/2007	0.16	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	12/02/2007	0.48	i
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	574	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	12/02/2007	0.65	i
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	12/02/2007	1.5	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	12/02/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	12/02/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	12/02/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	12/02/2007	5.0	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	12/02/2007	2.1	i

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Total Metals

**Sample Name:** MW-17C  
**Lab Code:** J0705576-010

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	12/02/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	12/02/2007	U	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	12/02/2007	25	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	12/02/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	12/02/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	12/02/2007	2.8	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	12/02/2007	0.22	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	12/02/2007	2.0	i
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	956	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	12/02/2007	0.44	i
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	12/02/2007	0.87	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	12/02/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	12/02/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	12/02/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	12/02/2007	2.9	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	12/02/2007	3.3	i

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705576  
 Date Collected: 11/19/2007  
 Date Received: 11/20/2007

## Total Metals

Sample Name: MW-18A  
 Lab Code: J0705576-011

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	12/02/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	12/02/2007	0.30	i
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	12/02/2007	8.0	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	12/02/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	12/02/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	12/02/2007	2.0	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	12/02/2007	0.20	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	12/02/2007	0.52	i
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	634	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	12/02/2007	0.68	i
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	12/02/2007	0.88	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	12/02/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	12/02/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	12/02/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	12/02/2007	2.6	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	12/02/2007	U	



# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

### Total Metals

**Sample Name:** MW-18B  
**Lab Code:** J0705576-012

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	12/02/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	12/02/2007	U	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	12/02/2007	15	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	12/02/2007	0.093	i
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	12/02/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	12/02/2007	2.6	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	12/02/2007	0.15	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	12/02/2007	0.84	i
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	836	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	12/02/2007	0.61	i
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	12/02/2007	0.72	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	12/02/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	12/02/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	12/02/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	12/02/2007	2.2	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	12/02/2007	2.5	i

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Total Metals

**Sample Name:** MW-18C  
**Lab Code:** J0705576-013

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	12/02/2007	0.13	i
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	12/02/2007	1.4	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	12/02/2007	109	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	12/02/2007	0.36	i
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	12/02/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	12/02/2007	7.5	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	12/02/2007	0.78	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	12/02/2007	0.80	i
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	1720	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	12/02/2007	2.2	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	12/02/2007	1.8	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	12/02/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	12/02/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	12/02/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	12/02/2007	9.4	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	12/02/2007	3.0	i

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Total Metals

**Sample Name:** Dup-2  
**Lab Code:** J0705576-015

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	12/02/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	12/02/2007	U	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	12/02/2007	26	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	12/02/2007	0.089	i
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	12/02/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	12/02/2007	5.0	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	12/02/2007	0.24	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	12/02/2007	1.8	i
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	1010	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	12/02/2007	0.49	i
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	12/02/2007	1.6	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	12/02/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	12/02/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	12/02/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	12/02/2007	2.9	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	12/02/2007	3.3	i

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** N/A  
**Date Received:** N/A

## Total Metals

**Sample Name:** Method Blank  
**Lab Code:** MB2-1128

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.00	0.09	1.0	11/28/2007	12/02/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	12/02/2007	U	
Barium	EPA 3020A	6020	2.00	0.14	1.0	11/28/2007	12/02/2007	U	
Beryllium	EPA 3020A	6020	1.00	0.08	1.0	11/28/2007	12/02/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	12/02/2007	U	
Chromium	EPA 3020A	6020	2.00	0.12	1.0	11/28/2007	12/02/2007	0.44	i
Cobalt	EPA 3020A	6020	1.00	0.04	1.0	11/28/2007	12/02/2007	U	
Copper	EPA 3020A	6020	2.00	0.29	1.0	11/28/2007	12/02/2007	U	
Iron	EPA 3010A	6010B	50.0	17.0	1.0	11/27/2007	11/28/2007	U	
Lead	EPA 3020A	6020	1.00	0.30	1.0	11/28/2007	12/02/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.00	0.69	1.0	11/28/2007	12/02/2007	U	
Selenium	EPA 3020A	6020	2.00	0.79	1.0	11/28/2007	12/02/2007	U	
Silver	EPA 3020A	6020	0.500	0.039	1.0	11/28/2007	12/02/2007	U	
Thallium	EPA 3020A	6020	1.00	0.08	1.0	11/28/2007	12/02/2007	U	
Vanadium	EPA 3020A	6020	2.00	0.18	1.0	11/28/2007	12/02/2007	U	
Zinc	EPA 3020A	6020	10.0	1.7	1.0	11/28/2007	12/02/2007	U	

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

**Total Metals  
Sodium**

**Prep Method:** EPA 3010A  
**Analysis Method:** 6010B  
**Test Notes:**

**Units:** mg/L  
**Basis:** N/A

Sample Name:	Lab Code:	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
MW-3A	J0705576-001	0.50	0.15	1.0	11/27/2007	11/28/2007	33	
MW-3B	J0705576-002	0.50	0.15	1.0	11/27/2007	11/28/2007	6.1	
MW-3C	J0705576-003	0.50	0.15	1.0	11/27/2007	11/28/2007	5.2	
MW-2A	J0705576-004	0.50	0.15	1.0	11/27/2007	11/28/2007	10	
MW-2B	J0705576-005	0.50	0.15	1.0	11/27/2007	11/28/2007	5.0	
MW-2C	J0705576-006	0.50	0.15	1.0	11/27/2007	11/28/2007	4.7	
MW-23A	J0705576-007	0.50	0.15	1.0	11/27/2007	11/28/2007	9.5	
MW-23B	J0705576-008	0.50	0.15	1.0	11/27/2007	11/28/2007	10	
MW-23C	J0705576-009	0.50	0.15	1.0	11/27/2007	11/28/2007	5.3	
MW-17C	J0705576-010	0.50	0.15	1.0	11/27/2007	11/28/2007	12	
MW-18A	J0705576-011	0.50	0.15	1.0	11/27/2007	11/28/2007	4.0	
MW-18B	J0705576-012	0.50	0.15	1.0	11/27/2007	11/28/2007	17	
MW-18C	J0705576-013	0.50	0.15	1.0	11/27/2007	11/28/2007	12	
Dup-2	J0705576-015	0.50	0.15	1.0	11/27/2007	11/28/2007	12	
Method Blank	MB3-1127	0.50	0.15	1.0	11/27/2007	11/28/2007	U	

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705576  
 Date Collected: 11/19/2007  
 Date Received: 11/20/2007

## Dissolved Metals

Sample Name: MW-23C  
 Lab Code: J0705576-009

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3005A	6020	2.0	0.088	1.0	11/28/2007	11/29/2007	0.095	i
Arsenic	EPA 3005A	6020	0.50	0.28	1.0	11/28/2007	11/29/2007	U	
Barium	EPA 3005A	6020	2.0	0.14	1.0	11/28/2007	11/29/2007	5.5	
Beryllium	EPA 3005A	6020	1.0	0.084	1.0	11/28/2007	11/29/2007	U	
Cadmium	EPA 3005A	6020	0.50	0.12	1.0	11/28/2007	11/29/2007	U	
Chromium	EPA 3005A	6020	2.0	0.12	1.0	11/28/2007	11/29/2007	1.9	i
Cobalt	EPA 3005A	6020	1.0	0.041	1.0	11/28/2007	11/29/2007	U	
Copper	EPA 3005A	6020	2.0	0.29	1.0	11/28/2007	11/29/2007	U	
Iron	EPA 3005A	6010B	50	17	1.0	11/28/2007	11/29/2007	576	
Lead	EPA 3005A	6020	1.0	0.30	1.0	11/28/2007	11/29/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3005A	6020	2.0	0.69	1.0	11/28/2007	11/29/2007	U	
Selenium	EPA 3005A	6020	2.0	0.79	1.0	11/28/2007	11/29/2007	U	
Silver	EPA 3005A	6020	0.50	0.039	1.0	11/28/2007	11/29/2007	U	
Thallium	EPA 3005A	6020	1.00	0.077	1.0	11/28/2007	11/29/2007	U	
Vanadium	EPA 3005A	6020	2.0	0.18	1.0	11/28/2007	11/29/2007	0.53	i
Zinc	EPA 3005A	6020	10	1.7	1.0	11/28/2007	11/29/2007	2.5	i

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

## Dissolved Metals

**Sample Name:** MW-18C  
**Lab Code:** J0705576-013

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3005A	6020	2.0	0.088	1.0	11/28/2007	11/29/2007	U	
Arsenic	EPA 3005A	6020	0.50	0.28	1.0	11/28/2007	11/29/2007	0.54	
Barium	EPA 3005A	6020	2.0	0.14	1.0	11/28/2007	11/29/2007	38	
Beryllium	EPA 3005A	6020	1.0	0.084	1.0	11/28/2007	11/29/2007	0.094	i
Cadmium	EPA 3005A	6020	0.50	0.12	1.0	11/28/2007	11/29/2007	U	
Chromium	EPA 3005A	6020	2.0	0.12	1.0	11/28/2007	11/29/2007	3.7	
Cobalt	EPA 3005A	6020	1.0	0.041	1.0	11/28/2007	11/29/2007	0.072	i
Copper	EPA 3005A	6020	2.0	0.29	1.0	11/28/2007	11/29/2007	U	
Iron	EPA 3005A	6010B	50	17	1.0	11/28/2007	11/29/2007	1120	
Lead	EPA 3005A	6020	1.0	0.30	1.0	11/28/2007	11/29/2007	0.40	i
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3005A	6020	2.0	0.69	1.0	11/28/2007	11/29/2007	0.84	i
Selenium	EPA 3005A	6020	2.0	0.79	1.0	11/28/2007	11/29/2007	U	
Silver	EPA 3005A	6020	0.50	0.039	1.0	11/28/2007	11/29/2007	U	
Thallium	EPA 3005A	6020	1.00	0.077	1.0	11/28/2007	11/29/2007	U	
Vanadium	EPA 3005A	6020	2.0	0.18	1.0	11/28/2007	11/29/2007	1.8	i
Zinc	EPA 3005A	6020	10	1.7	1.0	11/28/2007	11/29/2007	3.0	i

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705576  
 Date Collected: N/A  
 Date Received: N/A

## Dissolved Metals

Sample Name: Method Blank  
 Lab Code: MB7-1128

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3005A	6020	2.00	0.09	1.0	11/28/2007	11/29/2007	U	
Arsenic	EPA 3005A	6020	0.50	0.28	1.0	11/28/2007	11/29/2007	U	
Barium	EPA 3005A	6020	2.00	0.14	1.0	11/28/2007	11/29/2007	U	
Beryllium	EPA 3005A	6020	1.00	0.08	1.0	11/28/2007	11/29/2007	U	
Cadmium	EPA 3005A	6020	0.50	0.12	1.0	11/28/2007	11/29/2007	U	
Chromium	EPA 3005A	6020	2.00	0.12	1.0	11/28/2007	11/29/2007	U	
Cobalt	EPA 3005A	6020	1.00	0.04	1.0	11/28/2007	11/29/2007	U	
Copper	EPA 3005A	6020	2.00	0.29	1.0	11/28/2007	11/29/2007	U	
Iron	EPA 3005A	6010B	50.0	17.0	1.0	11/28/2007	11/29/2007	U	
Lead	EPA 3005A	6020	1.00	0.30	1.0	11/28/2007	11/29/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/26/2007	11/26/2007	U	
Nickel	EPA 3005A	6020	2.00	0.69	1.0	11/28/2007	11/29/2007	U	
Selenium	EPA 3005A	6020	2.00	0.79	1.0	11/28/2007	11/29/2007	U	
Silver	EPA 3005A	6020	0.500	0.039	1.0	11/28/2007	11/29/2007	U	
Thallium	EPA 3005A	6020	1.00	0.08	1.0	11/28/2007	11/29/2007	U	
Vanadium	EPA 3005A	6020	2.00	0.18	1.0	11/28/2007	11/29/2007	U	
Zinc	EPA 3005A	6020	10.0	1.7	1.0	11/28/2007	11/29/2007	U	



# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007

### Dissolved Metals Sodium

**Prep Method:** EPA 3005A  
**Analysis Method:** 6010B  
**Test Notes:**

**Units:** mg/L  
**Basis:** N/A

Sample Name:	Lab Code:	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
MW-23C	J0705576-009	0.50	0.15	1.0	11/28/2007	11/29/2007	5.1	
MW-18C	J0705576-013	0.50	0.15	1.0	11/28/2007	11/29/2007	12	
Method Blank	MB6-1128	0.50	0.15	1.0	11/28/2007	11/29/2007	U	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705576  
**Date Collected :** 11/19/07  
**Date Received :** 11/20/07

## Inorganic Parameters

**Sample Name :** MW-3A  
**Lab Code :** J0705576-001  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 15:59	1.3	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/20/07 17:07	4.9	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/20/07 21:33	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/26/07 15:00	150	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705576  
**Date Collected :** 11/19/07  
**Date Received :** 11/20/07

## Inorganic Parameters

**Sample Name :** MW-3B  
**Lab Code :** J0705576-002  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 15:59	0.17	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/20/07 17:07	15	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/20/07 21:52	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/26/07 15:00	50	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705576  
**Date Collected :** 11/19/07  
**Date Received :** 11/20/07

## Inorganic Parameters

**Sample Name :** MW-3C  
**Lab Code :** J0705576-003  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 15:59	0.13	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/20/07 17:07	7.9	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/20/07 22:11	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/26/07 15:00	35	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705576  
**Date Collected :** 11/19/07  
**Date Received :** 11/20/07

## Inorganic Parameters

**Sample Name :** MW-2A  
**Lab Code :** J0705576-004  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 15:59	0.21	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/20/07 17:07	27	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/20/07 22:30	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/26/07 15:00	61	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705576  
**Date Collected :** 11/19/07  
**Date Received :** 11/20/07

## Inorganic Parameters

**Sample Name :** MW-2B  
**Lab Code :** J0705576-005  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 15:59	0.15	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/20/07 17:07	7.7	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/20/07 22:49	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/26/07 15:00	37	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705576  
**Date Collected :** 11/19/07  
**Date Received :** 11/20/07

## Inorganic Parameters

**Sample Name :** MW-2C  
**Lab Code :** J0705576-006  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 15:59	0.13	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/20/07 17:07	7.0	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/20/07 23:46	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/26/07 15:00	44	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705576  
**Date Collected :** 11/19/07  
**Date Received :** 11/20/07

### Inorganic Parameters

**Sample Name :** MW-23A  
**Lab Code :** J0705576-007  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 15:59	0.57	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/20/07 17:07	19	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/21/07 00:05	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/26/07 15:00	110	



## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705576  
**Date Collected :** 11/19/07  
**Date Received :** 11/20/07

## Inorganic Parameters

**Sample Name :** MW-23B  
**Lab Code :** J0705576-008  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 15:59	0.16	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/20/07 17:07	17	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/21/07 01:21	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/26/07 15:00	48	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705576  
**Date Collected :** 11/19/07  
**Date Received :** 11/20/07

## Inorganic Parameters

**Sample Name :** MW-23C  
**Lab Code :** J0705576-009  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 15:59	0.27	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/20/07 17:07	8.4	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/21/07 01:40	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/26/07 15:00	74	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705576  
**Date Collected :** 11/19/07  
**Date Received :** 11/20/07

## Inorganic Parameters

**Sample Name :** MW-17C  
**Lab Code :** J0705576-010  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 15:59	0.22	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/20/07 17:07	18	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/21/07 01:59	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/26/07 15:00	94	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705576  
**Date Collected :** 11/19/07  
**Date Received :** 11/20/07

## Inorganic Parameters

**Sample Name :** MW-18A  
**Lab Code :** J0705576-011  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 15:59	0.37	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/20/07 17:07	12	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/21/07 02:18	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/26/07 15:00	79	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705576  
**Date Collected :** 11/19/07  
**Date Received :** 11/20/07

## Inorganic Parameters

**Sample Name :** MW-18B  
**Lab Code :** J0705576-012  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 15:59	0.069	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/20/07 17:07	23	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/21/07 02:37	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/26/07 15:00	81	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705576  
**Date Collected :** 11/19/07  
**Date Received :** 11/20/07

## Inorganic Parameters

**Sample Name :** MW-18C  
**Lab Code :** J0705576-013  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 15:59	0.24	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/20/07 17:07	19	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/21/07 02:56	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/26/07 15:00	91	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705576  
**Date Collected :** 11/19/07  
**Date Received :** 11/20/07

## Inorganic Parameters

**Sample Name :** Dup-2  
**Lab Code :** J0705576-015  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 15:59	0.23	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/20/07 17:07	18	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/21/07 03:15	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/26/07 15:00	110	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705576  
**Date Collected :** NA  
**Date Received :** NA

## Inorganic Parameters

**Sample Name :** Method Blank  
**Lab Code :** J0705576-MB  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 15:59	U	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/20/07 17:07	U	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/20/07 17:07	U	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/20/07 17:07	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/26/07 15:00	U	



Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705576

**Surrogate Recovery Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: PERCENT  
 Level: Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>	<u>Sur2</u>	<u>Sur3</u>	<u>Sur4</u>
MW-3A	J0705576-001	98	100	100	110
MW-3B	J0705576-002	99	98	100	110
MW-3C	J0705576-003	99	100	101	110
MW-2A	J0705576-004	100	99	103	111
MW-2B	J0705576-005	100	100	101	111
MW-2C	J0705576-006	100	100	100	110
MW-23A	J0705576-007	98	99	100	111
MW-23B	J0705576-008	101	100	101	110
MW-23C	J0705576-009	99	98	102	110
MW-17C	J0705576-010	101	100	101	110
MW-18A	J0705576-011	98	100	102	109
MW-18B	J0705576-012	100	99	100	111
MW-18C	J0705576-013	99	101	100	111
Trip Blank	J0705576-014	99	99	100	111
Dup-2	J0705576-015	99	100	100	111
Method Blank	JWG0703909-4	98	100	101	109
Lab Control Sample	JWG0703909-3	101	96	101	111

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**Surrogate Recovery Control Limits (%)**

Sur1 = 1,2-Dichloroethane-d4	71-122
Sur2 = 4-Bromofluorobenzene	75-120
Sur3 = Dibromofluoromethane	82-116
Sur4 = Toluene-d8	88-117

---

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705576  
 Date Extracted: 11/27/2007  
 Date Analyzed: 11/27/2007

**Lab Control Spike Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low  
 Extraction Lot: JWG0703909

Analyte Name	Lab Control Sample JWG0703909-3 Lab Control Spike			%Rec Limits
	Result	Expected	%Rec	
Chloromethane	23.3	20.0	116	67-135
Vinyl Chloride	22.3	20.0	112	78-132
Bromomethane	22.1	20.0	110	79-130
Chloroethane	21.6	20.0	108	74-126
Trichlorofluoromethane	22.3	20.0	111	74-134
1,1-Dichloroethene	22.4	20.0	112	78-130
Acetone	107	100	107	67-133
Iodomethane (Methyl Iodide)	108	100	108	68-134
Carbon Disulfide	101	100	101	76-138
Methylene Chloride	20.8	20.0	104	72-124
trans-1,2-Dichloroethene	20.1	20.0	101	77-124
Acrylonitrile	105	100	105	77-127
1,1-Dichloroethane	20.6	20.0	103	80-128
Vinyl Acetate	114	100	114	61-148
cis-1,2-Dichloroethene	21.9	20.0	110	80-126
2-Butanone (MEK)	101	100	101	73-127
Bromochloromethane	21.8	20.0	109	79-129
Chloroform	20.7	20.0	104	83-124
1,1,1-Trichloroethane (TCA)	20.7	20.0	103	79-124
Carbon Tetrachloride	20.5	20.0	102	81-125
Benzene	21.1	20.0	105	79-119
1,2-Dichloroethane (EDC)	20.4	20.0	102	80-124
Trichloroethene (TCE)	22.0	20.0	110	76-124
1,2-Dichloropropane	20.9	20.0	104	79-123
Dibromomethane	21.1	20.0	106	83-123
Bromodichloromethane	20.3	20.0	102	81-123
cis-1,3-Dichloropropene	19.8	20.0	99	86-123
4-Methyl-2-pentanone (MIBK)	106	100	106	72-136
Toluene	21.8	20.0	109	86-117
trans-1,3-Dichloropropene	18.5	20.0	92	83-124
1,1,2-Trichloroethane	21.2	20.0	106	86-114
Tetrachloroethene (PCE)	23.7	20.0	118	80-121
2-Hexanone	106	100	106	71-138
Dibromochloromethane	21.3	20.0	107	82-121
1,2-Dibromoethane (EDB)	20.8	20.0	104	88-117
Chlorobenzene	22.0	20.0	110	86-113

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Extracted:** 11/27/2007  
**Date Analyzed:** 11/27/2007

**Lab Control Spike Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703909

Analyte Name	Lab Control Sample JWG0703909-3 Lab Control Spike			%Rec Limits
	Result	Expected	%Rec	
1,1,1,2-Tetrachloroethane	21.7	20.0	108	85-117
Ethylbenzene	22.0	20.0	110	90-118
m,p-Xylenes	45.2	40.0	113	86-121
o-Xylene	22.1	20.0	110	89-119
Styrene	21.3	20.0	107	89-122
Bromoform	22.3	20.0	112	68-129
1,1,2,2-Tetrachloroethane	21.3	20.0	106	83-120
1,2,3-Trichloropropane	21.8	20.0	109	83-123
1,4-Dichlorobenzene	20.4	20.0	102	83-113
trans-1,4-Dichloro-2-butene	20.0	20.0	100	53-143
1,2-Dichlorobenzene	20.3	20.0	102	84-115
1,2-Dibromo-3-chloropropane (DBCP)	20.5	20.0	103	62-123

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576

**Surrogate Recovery Summary**  
**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** PERCENT  
**Level:** Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>
MW-3A	J0705576-001	129
MW-3B	J0705576-002	111
MW-3C	J0705576-003	123
MW-2A	J0705576-004	139
MW-2B	J0705576-005	110
MW-2C	J0705576-006	120
MW-23A	J0705576-007	126
MW-23B	J0705576-008	124
MW-23C	J0705576-009	130
MW-17C	J0705576-010	130
MW-18A	J0705576-011	111
MW-18B	J0705576-012	124
MW-18C	J0705576-013	130
Dup-2	J0705576-015	136
Method Blank	JWG0703869-3	109
Method Blank	JWG0703870-3	111
Lab Control Sample	JWG0703869-1	113
Duplicate Lab Control Sample	JWG0703869-2	114
Lab Control Sample	JWG0703870-1	111
Duplicate Lab Control Sample	JWG0703870-2	109

**Surrogate Recovery Control Limits (%)**

---

Sur1 = 1,1,1,2-Tetrachloroethane 77-150

---

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Extracted:** 11/21/2007  
**Date Analyzed:** 11/26/2007

**Lab Control Spike/Duplicate Lab Control Spike Summary**  
**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703869

Analyte Name	Lab Control Sample JWG0703869-1 Lab Control Spike			Duplicate Lab Control Sample JWG0703869-2 Duplicate Lab Control Spike			%Rec Limits	RPD	RPD Limit
	Result	Expected	%Rec	Result	Expected	%Rec			
1,2-Dibromoethane (EDB)	0.278	0.250	111	0.280	0.250	112	70-130	1	20
1,2-Dibromo-3-chloropropane (DBCP)	0.277	0.250	111	0.279	0.250	112	70-130	1	20

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705576  
**Date Extracted:** 11/21/2007  
**Date Analyzed:** 11/26/2007

**Lab Control Spike/Duplicate Lab Control Spike Summary**  
**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703870

Analyte Name	Lab Control Sample JWG0703870-1 Lab Control Spike			Duplicate Lab Control Sample JWG0703870-2 Duplicate Lab Control Spike			%Rec Limits	RPD	RPD Limit
	Result	Expected	%Rec	Result	Expected	%Rec			
1,2-Dibromoethane (EDB)	0.270	0.250	108	0.264	0.250	106	70-130	2	20
1,2-Dibromo-3-chloropropane (DBCP)	0.274	0.250	110	0.269	0.250	108	70-130	2	20

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007  
**Date Extracted:** 11/29/2007  
**Date Analyzed:** 11/29/2007

Matrix Spike/Matrix Spike Duplicate Summary  
Total Metals

**Sample Name:** MW-3A  
**Lab Code:** J0705576-001

J0705576-001S

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	Spike Level		Sample Result	Spike Result		Percent Recovery			% Rec	Result
				MS	DMS		MS	DMS	MS	DMS	RPD	Acceptance Limits	
Mercury	METHOD	7470A	0.50	5.00	5.00	U	2.83	3.22	57	64	13	75 - 125	N

## COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007  
**Date Extracted:** 11/28/2007  
**Date Analyzed:** 12/02/2007

Matrix Spike/Matrix Spike Duplicate Summary  
Total Metals

**Sample Name:** MW-23A  
**Lab Code:** J0705576-007

J0705576-007S

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	Spike Level		Sample Result	Spike Result		Percent Recovery			% Rec	Result Notes
				MS	DMS		MS	DMS	MS	DMS	RPD	Acceptance Limits	
Antimony	EPA 3020	6020	2.0	50.0	50.0	0.1	48.1	48.5	96	97	1	75 - 125	
Arsenic	EPA 3020	6020	0.5	50.0	50.0	0.4	54.2	56.6	108	112	4	75 - 125	
Barium	EPA 3020	6020	2.0	50.0	50.0	10.3	60.9	61.1	101	102	<1	75 - 125	
Beryllium	EPA 3020	6020	1.0	50.0	50.0	U	50.4	49.6	101	99	2	75 - 125	
Cadmium	EPA 3020	6020	0.5	50.0	50.0	U	48.0	48.2	96	96	<1	75 - 125	
Chromium	EPA 3020	6020	2.0	50.0	50.0	2.4	53.0	53.0	101	101	<1	75 - 125	
Cobalt	EPA 3020	6020	1.0	50.0	50.0	0.2	52.2	51.1	104	102	2	75 - 125	
Copper	EPA 3020	6020	2.0	50.0	50.0	U	49.6	50.0	99	100	1	75 - 125	
Lead	EPA 3020	6020	1.0	50.0	50.0	U	50.1	50.3	100	101	<1	75 - 125	
Nickel	EPA 3020	6020	2.0	50.0	50.0	1.1	50.8	52.4	99	103	3	75 - 125	
Selenium	EPA 3020	6020	2.0	50.0	50.0	U	51.7	53.1	103	106	3	75 - 125	
Silver	EPA 3020	6020	0.5	50.0	50.0	0.0	49.3	49.1	99	98	<1	75 - 125	
Thallium	EPA 3020	6020	1.0	50.0	50.0	0.1	49.8	50.2	99	100	1	75 - 125	
Vanadium	EPA 3020	6020	2.0	50.0	50.0	2.0	53.0	54.1	102	104	2	75 - 125	
Zinc	EPA 3020	6020	10.0	100	100	2.0	109.0	107.0	107	105	2	75 - 125	



# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007  
**Date Extracted:** 11/27/2007  
**Date Analyzed:** 11/28/2007

### Matrix Spike/Matrix Spike Duplicate Summary Total Metals

**Sample Name:** MW-23C  
**Lab Code:** J0705576-009

J0705576-009S

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	Spike Level		Sample Result	Spike Result		Percent Recovery			% Rec	Result Notes
				MS	DMS		MS	DMS	MS	DMS	RPD	Acceptance Limits	
Iron	EPA 3010	6010B	50	2000	2000	574	2600	2570	101	100	1	75 - 125	

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007  
**Date Extracted:** 11/26/2007  
**Date Analyzed:** 11/26/2007

### Matrix Spike/Matrix Spike Duplicate Summary Dissolved Metals

**Sample Name:** MW-23C  
**Lab Code:** J0705576-009

J0705576-009S

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	Spike Level		Sample Result	Spike Result		Percent Recovery			% Rec	Result Notes
				MS	DMS		MS	DMS	MS	DMS	RPD	Acceptance Limits	
Mercury	METHOD	7470A	0.50	5.00	5.00	U	5.17	5.19	103	104	<1	75 - 125	

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007  
**Date Extracted:** 11/27/2007  
**Date Analyzed:** 11/28/2007

### Matrix Spike/Matrix Spike Duplicate Summary Total Metals

**Sample Name:** MW-23C  
**Lab Code:** J0705576-009

J0705576-009S

**Units:** mg/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	Spike Level		Sample Result	Spike Result		Percent Recovery			% Rec	Result Notes
				MS	DMS		MS	DMS	MS	DMS	RPD	Acceptance Limits	
Sodium	EPA 3010	6010B	0.5	10.0	10.0	5.3	14.5	14.7	92	94	1	75 - 125	

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007  
**Date Extracted:** 11/28/2007  
**Date Analyzed:** 12/02/2007

### Matrix Spike/Matrix Spike Duplicate Summary Total Metals

**Sample Name:** MW-18B  
**Lab Code:** J0705576-012

J0705576-012S

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	Spike Level		Sample Result	Spike Result		Percent Recovery			% Rec	Result Notes
				MS	DMS		MS	DMS	MS	DMS	RPD	Acceptance Limits	
Antimony	EPA 3020	6020	2.0	50.0	50.0	0.1	49.7	49.3	99	98	1	75 - 125	
Arsenic	EPA 3020	6020	0.5	50.0	50.0	0.3	53.1	53.2	106	106	<1	75 - 125	
Barium	EPA 3020	6020	2.0	50.0	50.0	15.2	65.9	66.5	101	103	1	75 - 125	
Beryllium	EPA 3020	6020	1.0	50.0	50.0	0.1	48.4	48.8	97	97	1	75 - 125	
Cadmium	EPA 3020	6020	0.5	50.0	50.0	U	49.5	48.4	99	97	2	75 - 125	
Chromium	EPA 3020	6020	2.0	50.0	50.0	2.6	52.5	53.8	100	102	2	75 - 125	
Cobalt	EPA 3020	6020	1.0	50.0	50.0	0.2	52.1	52.6	104	105	1	75 - 125	
Copper	EPA 3020	6020	2.0	50.0	50.0	0.8	50.9	50.6	100	100	1	75 - 125	
Lead	EPA 3020	6020	1.0	50.0	50.0	0.6	50.9	51.0	101	101	<1	75 - 125	
Nickel	EPA 3020	6020	2.0	50.0	50.0	0.7	51.1	51.4	101	101	1	75 - 125	
Selenium	EPA 3020	6020	2.0	50.0	50.0	U	50.4	49.7	101	99	1	75 - 125	
Silver	EPA 3020	6020	0.5	50.0	50.0	0.0	49.3	48.5	99	97	2	75 - 125	
Thallium	EPA 3020	6020	1.0	50.0	50.0	U	49.8	49.7	100	99	<1	75 - 125	
Vanadium	EPA 3020	6020	2.0	50.0	50.0	2.2	53.6	53.9	103	103	1	75 - 125	
Zinc	EPA 3020	6020	10.0	100	100	2.5	104.0	107.0	102	104	3	75 - 125	

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007  
**Date Extracted:** 11/27/2007  
**Date Analyzed:** 11/28/2007

### Matrix Spike/Matrix Spike Duplicate Summary Total Metals

**Sample Name:** MW-18C  
**Lab Code:** J0705576-013

J0705576-013S

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	Spike Level		Sample Result	Spike Result		Percent Recovery			% Rec	Result Notes
				MS	DMS		MS	DMS	MS	DMS	RPD	Acceptance Limits	
Iron	EPA 3010	6010B	50	2000	2000	1720	3460	3610	87	94	4	75 - 125	

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** 11/19/2007  
**Date Received:** 11/20/2007  
**Date Extracted:** 11/27/2007  
**Date Analyzed:** 11/28/2007

### Matrix Spike/Matrix Spike Duplicate Summary Total Metals

**Sample Name:** MW-18C  
**Lab Code:** J0705576-013

J0705576-013S

**Units:** mg/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	Spike Level		Sample Result	Spike Result		Percent Recovery			% Rec Acceptance		Result Notes
				MS	DMS		MS	DMS	MS	DMS	RPD	Limits		
Sodium	EPA 3010	6010B	0.5	10.0	10.0	12.1	20.8	21.3	87	92	2	75 - 125		

## COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date Extracted:** 11/28/2007  
**Date Analyzed:** 12/02/2007

Laboratory Control Sample Summary  
Total Metals

**Sample Name:** Lab Control Sample  
**Lab Code:** LCS2-1128

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	True Value	Results	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Antimony	EPA 3020A	6020	50.0	47.8	96	80 - 120	
Arsenic	EPA 3020A	6020	50.0	52.9	106	80 - 120	
Barium	EPA 3020A	6020	50.0	49.8	100	80 - 120	
Beryllium	EPA 3020A	6020	50.0	49.5	99	80 - 120	
Cadmium	EPA 3020A	6020	50.0	48.4	97	80 - 120	
Chromium	EPA 3020A	6020	50.0	51.1	102	80 - 120	
Cobalt	EPA 3020A	6020	50.0	51.9	104	80 - 120	
Copper	EPA 3020A	6020	50.0	49.8	100	80 - 120	
Iron	EPA 3010A	6010B	2000	2080	104	80 - 120	
Lead	EPA 3020A	6020	50.0	50.2	100	80 - 120	
Mercury	METHOD	7470A	5.00	4.83	97	80 - 120	
Nickel	EPA 3020A	6020	50.0	51.3	103	80 - 120	
Selenium	EPA 3020A	6020	50.0	50.3	101	80 - 120	
Silver	EPA 3020A	6020	50.0	50.0	100	80 - 120	
Thallium	EPA 3020A	6020	50.0	49.6	99	80 - 120	
Vanadium	EPA 3020A	6020	50.0	50.7	101	80 - 120	
Zinc	EPA 3020A	6020	100	105.0	105	80 - 120	

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date Extracted:** 11/27/2007  
**Date Analyzed:** 11/28/2007

### Laboratory Control Sample Summary Total Metals

**Sample Name:** Lab Control Sample  
**Lab Code:** LCS3-1127

**Units:** mg/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	True Value	Results	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sodium	EPA 3010A	6010B	10.00	9.1	91	80 - 120	



# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date Extracted:** 11/28/2007  
**Date Analyzed:** 11/29/2007

### Laboratory Control Sample Summary Dissolved Metals

**Sample Name:** Lab Control Sample  
**Lab Code:** LCS7-1128

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	True Value	Results	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Antimony	EPA 3005A	6020	50.0	57.1	114	80 - 120	
Arsenic	EPA 3005A	6020	50.0	56.0	112	80 - 120	
Barium	EPA 3005A	6020	50.0	55.6	111	80 - 120	
Beryllium	EPA 3005A	6020	50.0	52.2	104	80 - 120	
Cadmium	EPA 3005A	6020	50.0	56.4	113	80 - 120	
Chromium	EPA 3005A	6020	50.0	53.9	108	80 - 120	
Cobalt	EPA 3005A	6020	50.0	51.4	103	80 - 120	
Copper	EPA 3005A	6020	50.0	51.9	104	80 - 120	
Iron	EPA 3005A	6010B	2000	1970	98	80 - 120	
Lead	EPA 3005A	6020	50.0	55.5	111	80 - 120	
Mercury	METHOD	7470A	5.00	5.42	108	80 - 120	
Nickel	EPA 3005A	6020	50.0	55.7	111	80 - 120	
Selenium	EPA 3005A	6020	50.0	56.5	113	80 - 120	
Silver	EPA 3005A	6020	50.0	59.8	120	80 - 120	
Thallium	EPA 3005A	6020	50.0	52.9	106	80 - 120	
Vanadium	EPA 3005A	6020	50.0	54.8	110	80 - 120	
Zinc	EPA 3005A	6020	100	108.0	108	80 - 120	

**COLUMBIA ANALYTICAL SERVICES, INC****QA/QC Report**

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705576  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date Extracted:** 11/28/2007  
**Date Analyzed:** 11/29/2007

**Laboratory Control Sample Summary**  
**Dissolved Metals**

**Sample Name:** Lab Control Sample  
**Lab Code:** LCS6-1128

**Units:** mg/L  
**Basis:** N/A

<b>Analyte</b>	<b>Prep Method</b>	<b>Analysis Method</b>	<b>True Value</b>	<b>Results</b>	<b>Percent Recovery</b>	<b>CAS Percent Recovery Acceptance Limits</b>	<b>Result Notes</b>
Sodium	EPA 3005A	6010B	10.00	10.1	101	80 - 120	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705576  
**Date Collected :** 11/19/07  
**Date Received :** 11/20/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/26/07

### Duplicate Summary Inorganic Parameters

**Sample Name :** MW-3A  
**Lab Code :** J0705576-001DUP  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	150	160	155	6	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705576  
**Date Collected :** 11/19/07  
**Date Received :** 11/20/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/29/07

### Duplicate Summary Inorganic Parameters

**Sample Name :** MW-3B  
**Lab Code :** J0705576-002DUP  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.17	0.17	0.17	<1	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705576  
**Date Collected :** 11/19/07  
**Date Received :** 11/20/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/29/07

### Matrix Spike Summary Inorganic Parameters

**Sample Name :** MW-3B  
**Lab Code :** J0705576-002MS  
**Test Notes :**

Basis : NA

Analyte	Units	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS	Result Notes
								Percent Recovery Acceptance Limits	
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	5.00	0.17	5.55	108	90-110	

**COLUMBIA ANALYTICAL SERVICES, INC.****QA/QC Report**

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705576  
**Date Collected :** 11/19/07  
**Date Received :** 11/20/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/20/07

**Duplicate Summary**  
**Inorganic Parameters**

**Sample Name :** MW-2B  
**Lab Code :** J0705576-005DUP  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>Sample Result</b>	<b>Duplicate Sample Result</b>	<b>Average</b>	<b>Relative Percent Difference</b>	<b>Result Notes</b>
Chloride	mg/L (ppm)	300.0	0.2	7.7	7.7	7.7	<1	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	U	U	U	-	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705576  
**Date Collected :** 11/19/07  
**Date Received :** 11/20/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/20/07

### Matrix Spike Summary Inorganic Parameters

**Sample Name :** MW-2B  
**Lab Code :** J0705576-005MS  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS	Result Notes
								Percent Recovery Acceptance Limits	
Chloride	mg/L (ppm)	300.0	0.2	100	7.7	102	94	90-110	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	10	U	10.1	101	90-110	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705576  
**Date Collected :** 11/19/07  
**Date Received :** 11/20/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/29/07

### Duplicate Summary Inorganic Parameters

**Sample Name :** MW-18A  
**Lab Code :** J0705576-011DUP  
**Test Notes :**

Basis : NA

Analyte	Units	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.37	0.35	0.36	6	



# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705576  
**Date Collected :** 11/19/07  
**Date Received :** 11/20/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/29/07

### Matrix Spike Summary Inorganic Parameters

**Sample Name :** MW-18A  
**Lab Code :** J0705576-011MS  
**Test Notes :**

Basis : NA

Analyte	Units	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS	Result Notes
								Percent Recovery Acceptance Limits	
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	5.00	0.37	5.70	107	90-110	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705576  
**Date Collected :** NA  
**Date Received :** NA  
**Date Extracted :** NA  
**Date Analyzed :** 11/20-29/07

### Laboratory Control Sample Summary Inorganic Parameters

**Sample Name :** Laboratory Control Sample  
**Lab Code :** J0705576-LCS  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	5.00	5.39	108	90-110	
Chloride	mg/L (ppm)	300.0	10	9.94	99	90-110	
Chloride	mg/L (ppm)	300.0	250	248	99	90-110	
Nitrate as Nitrogen	mg/L (ppm)	300.0	10	10.01	100	90-110	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	300	300	100	85-115	

## Cooler Receipt and Preservation Form

Client:

GEOSYNTEC (Tampa)

Service Request #

50705576

Project:

Oak Hammock

Cooler received on

11/20/07

and opened on 11/20/07 by

SN

COURIER: CAS

UPS

FEDEX

DHL

CLIENT

Tracking #

J2081503662 CNA

- 1 Were custody seals on outside of cooler?
- 2 Were seals intact, signed and dated?
- 3 Were custody papers properly filled out?
- 4 Temperature of cooler(s) upon receipt (Should be 4 +/- 2 degrees C)
- 5 Correct Temperature?
- 6 Were Ice or Ice Packs present?
- 7 Did all bottles arrive in good condition (unbroken, etc....)?
- 8 Were all bottle labels complete (sample ID, preservation, etc....)?
- 9 Did all bottle labels and tags agree with custody papers?
- 10 Were the correct bottles used for the tests indicated?
- 11 Were all of the preserved bottles received with the appropriate preservative?

HNO3 pH&lt;2

H2SO4 pH&lt;2

ZnAc2/NaOH pH&gt;9

NaOH pH&gt;12

HCl pH&lt;2

Preservative additions noted below

- 12 Were all samples received within analysis holding times?
- 13 Were VOA vials checked for absence of air bubbles? If present, note below
- 14 Where did the bottles originate?

Yes	No	N/A
Yes	No	N/A
Yes	No	N/A
1.0	1.5	
Yes	No	N/A
Yes	No	N/A
Yes	No	N/A
Yes	No	N/A
Yes	No	N/A
Yes	No	N/A
Yes	No	N/A

Yes	No	N/A
Yes	No	N/A
CAS	Client	

Sample ID	Reagent	Manuf. Lot # or CAS Chem ID	ml added	Initials

Additional comments and/or explanation of all discrepancies noted above:

Client approval to run samples if discrepancies noted:

Date:

1793051892C

Initials:

Date:

Note that pH is checked and meets the required pH criterion listed in the column heading unless otherwise noted on cooler receipt form.

[illegible]



# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

8540 Baycenter Rd. • Jacksonville, FL 32256 • (904) 739-2277 • 800-695-7222 x06 • FAX (904) 739-2011

PAGE 1 OF 2

SR #

50205576

CAS Contact

Project Name		Project Number		ANALYSIS REQUESTED (Include Method Number)		PRESERVATIVE		NUMBER OF CONTAINERS		REMARKS/ ALTERNATE DESCRIPTION		
Oak Hammock		FB1144				1 0 2 3 0 2						
Project Manager		Email Address										
Kirk Wills		Kwills@geosynke.com										
Company/Address												
Geosynke												
14055 R. Veredg N. Suite 300												
Tampa, FL 33637												
Phone #		FAX#										
813-558-0940		813-558-9726										
Sampler's Signature		Sampler's Printed Name										
Joe Terry, Rick Hester		Joe Terry, Rick Hester										
CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	TIME	MATRIX								
MW-3A		11-19-07	09:15	GW	9	X	X	X	X	WAGS ID #		
MW-3B			1000		9					19906		
MW-3C			0925		9					19907		
MW-2A			1230		9					19908		
MW-2B			1205		9					19903		
MW-2C			1250		9					19904		
MW-23A			1340		9					19905		
MW-23B			1400		9					22363		
MW-23C			1520		9					22364		
MW-17C			09:15	↓	10					22365		
										22347		
SPECIAL INSTRUCTIONS/COMMENTS					TURNAROUND REQUIREMENTS RUSH (SURCHARGES APPLY) <input checked="" type="checkbox"/> STANDARD			REPORT REQUIREMENTS I. Results Only <input checked="" type="checkbox"/> II. Results + QC Summaries (LCS, DUP, MS/MSD as required) III. Results + QC and Calibration Summaries IV. Data Validation Report with Raw Data V. Specialized Forms / Custom Report			INVOICE INFORMATION	
					REQUESTED FAX DATE			EDATA Yes No			PO#	
					REQUESTED REPORT DATE						BILL TO:	
SAMPLE RECEIPT: CONDITION/COOLER TEMP:					CUSTODY SEALS: Y N			RELINQUISHED BY			RECEIVED BY	
18								Signature			Signature	
Printed Name					Printed Name			Printed Name			Printed Name	
Firm					Firm			Firm			Firm	
Date/Time					Date/Time			Date/Time			Date/Time	
11-19-07								11-20-07			0955	



SR # 0705576 CAS Contact

PAGE 2 OF 2

CAS Contact

[illegible]

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

JSCOC-08/28/06

December 06, 2007

Service Request No: J0705603

Kirk Wills  
GeoSyntec Consultants  
14055 Riveredge Drive  
Suite 300  
Tampa, FL 33637

**RE: Oak Hammock/FQ1144**

Dear Kirk:

Enclosed are the results of the sample(s) submitted to our laboratory on November 21, 2007. For your reference, these analyses have been assigned our service request number **J0705603**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. In accordance to the NELAC 2003 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please call if you have any questions. My extension is 224. You may also contact me via email at [CMyers@caslab.com](mailto:CMyers@caslab.com).

Respectfully submitted,

**Columbia Analytical Services, Inc.**



Craig Myers  
Project Chemist

Page 1 of 111

*Laboratory Manager: Greg Jordan  
Quality Assurance Officer: Kathy Brungard*

*CAS Jacksonville is NELAC-accredited by the State of Florida, #E82502 valid through 6/30/08. Other state accreditations include: Arkansas, #88-0600 valid through 1/12/06; Georgia, #958 valid through 6/30/08; Louisiana, #02086 valid through 6/30/08; Texas, #T104704197-06-TX valid through 5/31/08; North Carolina, #527 valid through 12/31/07; South Carolina, #96021001 valid through 6/30/07.*

## COLUMBIA ANALYTICAL SERVICES, INC.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock  
**Sample Matrix:** Water

**Service Request No.:** J0705603  
**Date Received:** 11/21/07

### CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables, including results of QC samples analyzed from this delivery group. When appropriate to the procedure, method blank results have been reported with each analytical test. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Parameters that are included in the NELAC Fields of Testing but are not included in the lab's NELAC accreditation are identified in the discussion of each analytical procedure.

#### Sample Receipt

Twelve water samples and one trip blank were received for analysis at Columbia Analytical Services on 11/21/07. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at  $4 \pm 2^{\circ}\text{C}$  upon receipt at the lab except for aqueous samples designated for metals analyses, which were stored at room temperature.

#### Volatile Organic Compounds by GC-MS

The samples were analyzed for Volatile Organics using EPA Method 8260. The following observations were made regarding this delivery group.

#### Second Source Exceptions

The upper control criterion was exceeded for the following analyte in Second Source Verification (SSV) CAL1283: trans-1,4-Dichloro-2-butene. The field samples analyzed in this sequence did not contain the analyte in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

#### Relative Percent Difference Exceptions

The Relative Percent Difference (RPD) for the following analyte in the replicate matrix spike analyses of sample MW-16A was outside control criteria: trans-1,4-Dichloro-2-butene. All spike recoveries in the MS, DMS, and associated Laboratory Control Sample (LCS) were within acceptance limits, indicating the analytical batch was in control. No further corrective action was appropriate.

#### Lab Control Sample Exceptions

The spike recovery of Tetrachloroethene (PCE) for Laboratory Control Sample (LCS) JWG0703939-3 was outside the upper control criterion. The analyte in question was not detected in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

#### EDB and DBCP by GC-ECD

The samples were analyzed for EDB and DBCP using EPA Method 8011. No problems were observed.

Approved by \_\_\_\_\_



Date \_\_\_\_\_

12/6/07



#### Metals by ICP-MS/ICP-OES/CVAA

The samples were analyzed for Total Metals using EPA Methods 6020/6010B/7470A. No problems were observed.

#### Batch QC Notes and Discussion

Quality control samples for some parameters (i.e., Dup/Spike or MS/DMS samples) were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

#### General Chemistry Parameters

The samples were analyzed for Inorganic Parameters using various EPA Methods. No problems were observed.

Approved by \_\_\_\_\_



Date \_\_\_\_\_

12/6/07

## Florida DEP Data Qualifiers

- B Results based upon colony counts outside the acceptable range.
- D Measurement was made in the field.
- H Value based on field kit determination; results may not be accurate.
- i The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J Estimated value (one of the following reasons is discussed in the project case narrative).
1. The result may be inaccurate because the surrogate recovery limits have been exceeded.
  2. No known quality control criteria exists for the component.
  3. The reported value failed to meet the established quality control criteria for either precision or accuracy.
  4. The sample matrix interfered with the ability to make any accurate determination (e.g., primary and confirmation results show greater than 40% RPD).
  5. The data is questionable because of improper laboratory or field protocols (e.g., GC/MS Tune did not meet method criteria).
- K Off scale low. The value is less than the lowest calibration standard but greater than the method reporting limit (MRL).
- L Off scale high. The analyte is above the upper limit of the linear calibration range.
- M The MDL/MRL has been elevated because the analyte could not be accurately quantified due to matrix interference.
- N Presumptive evidence of the analyte. Confirmation was not performed.
- Q Sample held beyond the accepted holding time.
- T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only.
- U Indicates that the compound was analyzed for but not detected.
- V Indicates that the analyte was detected in both the sample and the associated method blank.
- Y The laboratory analysis was from an improperly preserved sample.
- Z Too many colonies were present (TNTC). The numeric value represents the filtration volume.

## Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144

**Service Request:** J0705603

**SAMPLE CROSS-REFERENCE**

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
J0705603-001	MW-16A	11/20/07	16:20
J0705603-002	MW-17A	11/20/07	16:15
J0705603-003	MW-19A	11/20/07	08:40
J0705603-004	MW-19B	11/20/07	09:20
J0705603-005	MW-19C	11/20/07	09:25
J0705603-006	MW-20A	11/20/07	10:45
J0705603-007	MW-20B	11/20/07	12:36
J0705603-008	MW-20C	11/20/07	12:00
J0705603-009	MW-21A	11/20/07	11:45
J0705603-010	MW-21B	11/20/07	14:50
J0705603-011	MW-21C	11/20/07	15:00
J0705603-012	MW-22A	11/20/07	12:10
J0705603-013	Trip Blank	11/20/07	00:00

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-16A  
**Lab Code:** J0705603-001  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Vinyl Chloride	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Bromomethane	ND	U	1.0	0.15	1	11/28/07	11/28/07	JWG0703939	
Chloroethane	ND	U	1.0	0.19	1	11/28/07	11/28/07	JWG0703939	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
<b>Acetone</b>	<b>32</b>	<b>I</b>	50	1.9	1	11/28/07	11/28/07	JWG0703939	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/28/07	11/28/07	JWG0703939	
Carbon Disulfide	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
Methylene Chloride	ND	U	5.0	0.29	1	11/28/07	11/28/07	JWG0703939	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Acrylonitrile	ND	U	10	6.7	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
Vinyl Acetate	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
2-Butanone (MEK)	ND	U	10	0.97	1	11/28/07	11/28/07	JWG0703939	
Bromochloromethane	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
Chloroform	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/28/07	11/28/07	JWG0703939	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Benzene	ND	U	1.0	0.088	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
Dibromomethane	ND	U	1.0	0.22	1	11/28/07	11/28/07	JWG0703939	
Bromodichloromethane	ND	U	1.0	0.099	1	11/28/07	11/28/07	JWG0703939	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/28/07	11/28/07	JWG0703939	
<b>Toluene</b>	<b>8.6</b>		1.0	0.13	1	11/28/07	11/28/07	JWG0703939	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Tetrachloroethene (PCE)	ND	UJ	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	J(3)
2-Hexanone	ND	U	25	1.4	1	11/28/07	11/28/07	JWG0703939	
Dibromochloromethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-16A  
**Lab Code:** J0705603-001  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Chlorobenzene	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Ethylbenzene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
m,p-Xylenes	ND	U	2.0	0.19	1	11/28/07	11/28/07	JWG0703939	
o-Xylene	ND	U	1.0	0.083	1	11/28/07	11/28/07	JWG0703939	
Styrene	ND	U	1.0	0.062	1	11/28/07	11/28/07	JWG0703939	
Bromoform	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/28/07	11/28/07	JWG0703939	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/28/07	11/28/07	JWG0703939	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/28/07	11/28/07	JWG0703939	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/28/07	11/28/07	JWG0703939	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	97	71-122	11/28/07	Acceptable
4-Bromofluorobenzene	103	75-120	11/28/07	Acceptable
Dibromofluoromethane	99	82-116	11/28/07	Acceptable
Toluene-d8	116	88-117	11/28/07	Acceptable

Comments: \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-17A  
**Lab Code:** J0705603-002  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Vinyl Chloride	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Bromomethane	ND	U	1.0	0.15	1	11/28/07	11/28/07	JWG0703939	
Chloroethane	ND	U	1.0	0.19	1	11/28/07	11/28/07	JWG0703939	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
Acetone	ND	U	50	1.9	1	11/28/07	11/28/07	JWG0703939	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/28/07	11/28/07	JWG0703939	
Carbon Disulfide	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
Methylene Chloride	ND	U	5.0	0.29	1	11/28/07	11/28/07	JWG0703939	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Acrylonitrile	ND	U	10	6.7	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
Vinyl Acetate	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
2-Butanone (MEK)	ND	U	10	0.97	1	11/28/07	11/28/07	JWG0703939	
Bromochloromethane	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
Chloroform	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/28/07	11/28/07	JWG0703939	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Benzene	ND	U	1.0	0.088	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
Dibromomethane	ND	U	1.0	0.22	1	11/28/07	11/28/07	JWG0703939	
Bromodichloromethane	ND	U	1.0	0.099	1	11/28/07	11/28/07	JWG0703939	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/28/07	11/28/07	JWG0703939	
<b>Toluene</b>	<b>1.6</b>		1.0	0.13	1	11/28/07	11/28/07	JWG0703939	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Tetrachloroethene (PCE)	ND	UJ	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	J(3)
2-Hexanone	ND	U	25	1.4	1	11/28/07	11/28/07	JWG0703939	
Dibromochloromethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	

Comments: \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-17A  
**Lab Code:** J0705603-002  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Chlorobenzene	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Ethylbenzene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
m,p-Xylenes	ND	U	2.0	0.19	1	11/28/07	11/28/07	JWG0703939	
o-Xylene	ND	U	1.0	0.083	1	11/28/07	11/28/07	JWG0703939	
Styrene	ND	U	1.0	0.062	1	11/28/07	11/28/07	JWG0703939	
Bromoform	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/28/07	11/28/07	JWG0703939	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/28/07	11/28/07	JWG0703939	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/28/07	11/28/07	JWG0703939	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/28/07	11/28/07	JWG0703939	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	97	71-122	11/28/07	Acceptable
4-Bromofluorobenzene	102	75-120	11/28/07	Acceptable
Dibromofluoromethane	99	82-116	11/28/07	Acceptable
Toluene-d8	115	88-117	11/28/07	Acceptable

**Comments:** \_\_\_\_\_



## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-19A  
**Lab Code:** J0705603-003  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Vinyl Chloride	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Bromomethane	ND	U	1.0	0.15	1	11/28/07	11/28/07	JWG0703939	
Chloroethane	ND	U	1.0	0.19	1	11/28/07	11/28/07	JWG0703939	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
Acetone	ND	U	50	1.9	1	11/28/07	11/28/07	JWG0703939	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/28/07	11/28/07	JWG0703939	
Carbon Disulfide	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
Methylene Chloride	ND	U	5.0	0.29	1	11/28/07	11/28/07	JWG0703939	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Acrylonitrile	ND	U	10	6.7	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
Vinyl Acetate	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
2-Butanone (MEK)	ND	U	10	0.97	1	11/28/07	11/28/07	JWG0703939	
Bromochloromethane	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
Chloroform	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/28/07	11/28/07	JWG0703939	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Benzene	ND	U	1.0	0.088	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
Dibromomethane	ND	U	1.0	0.22	1	11/28/07	11/28/07	JWG0703939	
Bromodichloromethane	ND	U	1.0	0.099	1	11/28/07	11/28/07	JWG0703939	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/28/07	11/28/07	JWG0703939	
Toluene	ND	U	1.0	0.13	1	11/28/07	11/28/07	JWG0703939	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Tetrachloroethene (PCE)	ND	UJ	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	J(3)
2-Hexanone	ND	U	25	1.4	1	11/28/07	11/28/07	JWG0703939	
Dibromochloromethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-19A  
**Lab Code:** J0705603-003  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Chlorobenzene	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Ethylbenzene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
m,p-Xylenes	ND	U	2.0	0.19	1	11/28/07	11/28/07	JWG0703939	
o-Xylene	ND	U	1.0	0.083	1	11/28/07	11/28/07	JWG0703939	
Styrene	ND	U	1.0	0.062	1	11/28/07	11/28/07	JWG0703939	
Bromoform	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/28/07	11/28/07	JWG0703939	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/28/07	11/28/07	JWG0703939	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/28/07	11/28/07	JWG0703939	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/28/07	11/28/07	JWG0703939	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	98	71-122	11/28/07	Acceptable
4-Bromofluorobenzene	102	75-120	11/28/07	Acceptable
Dibromofluoromethane	100	82-116	11/28/07	Acceptable
Toluene-d8	115	88-117	11/28/07	Acceptable

**Comments:** \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-19B  
**Lab Code:** J0705603-004  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Vinyl Chloride	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Bromomethane	ND	U	1.0	0.15	1	11/28/07	11/28/07	JWG0703939	
Chloroethane	ND	U	1.0	0.19	1	11/28/07	11/28/07	JWG0703939	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
<b>Acetone</b>	<b>6.8</b>	<b>I</b>	50	1.9	1	11/28/07	11/28/07	JWG0703939	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/28/07	11/28/07	JWG0703939	
Carbon Disulfide	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
Methylene Chloride	ND	U	5.0	0.29	1	11/28/07	11/28/07	JWG0703939	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Acrylonitrile	ND	U	10	6.7	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
Vinyl Acetate	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
2-Butanone (MEK)	ND	U	10	0.97	1	11/28/07	11/28/07	JWG0703939	
Bromochloromethane	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
Chloroform	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/28/07	11/28/07	JWG0703939	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Benzene	ND	U	1.0	0.088	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
Dibromomethane	ND	U	1.0	0.22	1	11/28/07	11/28/07	JWG0703939	
Bromodichloromethane	ND	U	1.0	0.099	1	11/28/07	11/28/07	JWG0703939	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/28/07	11/28/07	JWG0703939	
<b>Toluene</b>	<b>2.9</b>		1.0	0.13	1	11/28/07	11/28/07	JWG0703939	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Tetrachloroethene (PCE)	ND	UJ	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	J(3)
2-Hexanone	ND	U	25	1.4	1	11/28/07	11/28/07	JWG0703939	
Dibromochloromethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-19B  
**Lab Code:** J0705603-004  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Chlorobenzene	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Ethylbenzene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
m,p-Xylenes	ND	U	2.0	0.19	1	11/28/07	11/28/07	JWG0703939	
o-Xylene	ND	U	1.0	0.083	1	11/28/07	11/28/07	JWG0703939	
Styrene	ND	U	1.0	0.062	1	11/28/07	11/28/07	JWG0703939	
Bromoform	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/28/07	11/28/07	JWG0703939	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/28/07	11/28/07	JWG0703939	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/28/07	11/28/07	JWG0703939	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/28/07	11/28/07	JWG0703939	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	97	71-122	11/28/07	Acceptable
4-Bromofluorobenzene	101	75-120	11/28/07	Acceptable
Dibromofluoromethane	99	82-116	11/28/07	Acceptable
Toluene-d8	115	88-117	11/28/07	Acceptable

Comments: \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705603  
 Date Collected: 11/20/2007  
 Date Received: 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-19C  
 Lab Code: J0705603-005  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Vinyl Chloride	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Bromomethane	ND	U	1.0	0.15	1	11/28/07	11/28/07	JWG0703939	
Chloroethane	ND	U	1.0	0.19	1	11/28/07	11/28/07	JWG0703939	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
Acetone	ND	U	50	1.9	1	11/28/07	11/28/07	JWG0703939	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/28/07	11/28/07	JWG0703939	
Carbon Disulfide	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
Methylene Chloride	ND	U	5.0	0.29	1	11/28/07	11/28/07	JWG0703939	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Acrylonitrile	ND	U	10	6.7	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
Vinyl Acetate	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
2-Butanone (MEK)	ND	U	10	0.97	1	11/28/07	11/28/07	JWG0703939	
Bromochloromethane	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
Chloroform	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/28/07	11/28/07	JWG0703939	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Benzene	ND	U	1.0	0.088	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
Dibromomethane	ND	U	1.0	0.22	1	11/28/07	11/28/07	JWG0703939	
Bromodichloromethane	ND	U	1.0	0.099	1	11/28/07	11/28/07	JWG0703939	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/28/07	11/28/07	JWG0703939	
Toluene	ND	U	1.0	0.13	1	11/28/07	11/28/07	JWG0703939	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Tetrachloroethene (PCE)	ND	UJ	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	J(3)
2-Hexanone	ND	U	25	1.4	1	11/28/07	11/28/07	JWG0703939	
Dibromochloromethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-19C  
**Lab Code:** J0705603-005  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Chlorobenzene	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Ethylbenzene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
m,p-Xylenes	ND	U	2.0	0.19	1	11/28/07	11/28/07	JWG0703939	
o-Xylene	ND	U	1.0	0.083	1	11/28/07	11/28/07	JWG0703939	
Styrene	ND	U	1.0	0.062	1	11/28/07	11/28/07	JWG0703939	
Bromoform	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/28/07	11/28/07	JWG0703939	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/28/07	11/28/07	JWG0703939	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/28/07	11/28/07	JWG0703939	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/28/07	11/28/07	JWG0703939	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	100	71-122	11/28/07	Acceptable
4-Bromofluorobenzene	102	75-120	11/28/07	Acceptable
Dibromofluoromethane	99	82-116	11/28/07	Acceptable
Toluene-d8	117	88-117	11/28/07	Acceptable

**Comments:** \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-20A  
**Lab Code:** J0705603-006  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Vinyl Chloride	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Bromomethane	ND	U	1.0	0.15	1	11/28/07	11/28/07	JWG0703939	
Chloroethane	ND	U	1.0	0.19	1	11/28/07	11/28/07	JWG0703939	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
Acetone	ND	U	50	1.9	1	11/28/07	11/28/07	JWG0703939	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/28/07	11/28/07	JWG0703939	
Carbon Disulfide	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
Methylene Chloride	ND	U	5.0	0.29	1	11/28/07	11/28/07	JWG0703939	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Acrylonitrile	ND	U	10	6.7	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
Vinyl Acetate	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
2-Butanone (MEK)	ND	U	10	0.97	1	11/28/07	11/28/07	JWG0703939	
Bromochloromethane	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
Chloroform	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/28/07	11/28/07	JWG0703939	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Benzene	ND	U	1.0	0.088	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
Dibromomethane	ND	U	1.0	0.22	1	11/28/07	11/28/07	JWG0703939	
Bromodichloromethane	ND	U	1.0	0.099	1	11/28/07	11/28/07	JWG0703939	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/28/07	11/28/07	JWG0703939	
Toluene	ND	U	1.0	0.13	1	11/28/07	11/28/07	JWG0703939	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Tetrachloroethene (PCE)	ND	UJ	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	J(3)
2-Hexanone	ND	U	25	1.4	1	11/28/07	11/28/07	JWG0703939	
Dibromochloromethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-20A  
**Lab Code:** J0705603-006  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Chlorobenzene	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Ethylbenzene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
m,p-Xylenes	ND	U	2.0	0.19	1	11/28/07	11/28/07	JWG0703939	
o-Xylene	ND	U	1.0	0.083	1	11/28/07	11/28/07	JWG0703939	
Styrene	ND	U	1.0	0.062	1	11/28/07	11/28/07	JWG0703939	
Bromoform	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/28/07	11/28/07	JWG0703939	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/28/07	11/28/07	JWG0703939	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/28/07	11/28/07	JWG0703939	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/28/07	11/28/07	JWG0703939	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	97	71-122	11/28/07	Acceptable
4-Bromofluorobenzene	102	75-120	11/28/07	Acceptable
Dibromofluoromethane	99	82-116	11/28/07	Acceptable
Toluene-d8	116	88-117	11/28/07	Acceptable

**Comments:** \_\_\_\_\_



## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-20B  
**Lab Code:** J0705603-007  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Vinyl Chloride	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Bromomethane	ND	U	1.0	0.15	1	11/28/07	11/28/07	JWG0703939	
Chloroethane	ND	U	1.0	0.19	1	11/28/07	11/28/07	JWG0703939	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
<b>Acetone</b>	<b>5.7</b>	<b>I</b>	50	1.9	1	11/28/07	11/28/07	JWG0703939	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/28/07	11/28/07	JWG0703939	
Carbon Disulfide	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
Methylene Chloride	ND	U	5.0	0.29	1	11/28/07	11/28/07	JWG0703939	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Acrylonitrile	ND	U	10	6.7	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
Vinyl Acetate	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
2-Butanone (MEK)	ND	U	10	0.97	1	11/28/07	11/28/07	JWG0703939	
Bromochloromethane	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
Chloroform	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/28/07	11/28/07	JWG0703939	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Benzene	ND	U	1.0	0.088	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
Dibromomethane	ND	U	1.0	0.22	1	11/28/07	11/28/07	JWG0703939	
Bromodichloromethane	ND	U	1.0	0.099	1	11/28/07	11/28/07	JWG0703939	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/28/07	11/28/07	JWG0703939	
Toluene	ND	U	1.0	0.13	1	11/28/07	11/28/07	JWG0703939	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Tetrachloroethene (PCE)	ND	UJ	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	J(3)
2-Hexanone	ND	U	25	1.4	1	11/28/07	11/28/07	JWG0703939	
Dibromochloromethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	

**Comments:**

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705603  
 Date Collected: 11/20/2007  
 Date Received: 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-20B  
 Lab Code: J0705603-007  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Chlorobenzene	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Ethylbenzene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
m,p-Xylenes	ND	U	2.0	0.19	1	11/28/07	11/28/07	JWG0703939	
o-Xylene	ND	U	1.0	0.083	1	11/28/07	11/28/07	JWG0703939	
Styrene	ND	U	1.0	0.062	1	11/28/07	11/28/07	JWG0703939	
Bromoform	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/28/07	11/28/07	JWG0703939	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/28/07	11/28/07	JWG0703939	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/28/07	11/28/07	JWG0703939	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/28/07	11/28/07	JWG0703939	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	97	71-122	11/28/07	Acceptable
4-Bromofluorobenzene	101	75-120	11/28/07	Acceptable
Dibromofluoromethane	99	82-116	11/28/07	Acceptable
Toluene-d8	115	88-117	11/28/07	Acceptable

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-20C  
**Lab Code:** J0705603-008  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Vinyl Chloride	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Bromomethane	ND	U	1.0	0.15	1	11/28/07	11/28/07	JWG0703939	
Chloroethane	ND	U	1.0	0.19	1	11/28/07	11/28/07	JWG0703939	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
Acetone	ND	U	50	1.9	1	11/28/07	11/28/07	JWG0703939	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/28/07	11/28/07	JWG0703939	
Carbon Disulfide	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
Methylene Chloride	ND	U	5.0	0.29	1	11/28/07	11/28/07	JWG0703939	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Acrylonitrile	ND	U	10	6.7	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
Vinyl Acetate	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
2-Butanone (MEK)	ND	U	10	0.97	1	11/28/07	11/28/07	JWG0703939	
Bromochloromethane	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
Chloroform	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/28/07	11/28/07	JWG0703939	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Benzene	ND	U	1.0	0.088	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
Dibromomethane	ND	U	1.0	0.22	1	11/28/07	11/28/07	JWG0703939	
Bromodichloromethane	ND	U	1.0	0.099	1	11/28/07	11/28/07	JWG0703939	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/28/07	11/28/07	JWG0703939	
Toluene	ND	U	1.0	0.13	1	11/28/07	11/28/07	JWG0703939	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Tetrachloroethene (PCE)	ND	UJ	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	J(3)
2-Hexanone	ND	U	25	1.4	1	11/28/07	11/28/07	JWG0703939	
Dibromochloromethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	

**Comments:** \_\_\_\_\_

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705603  
 Date Collected: 11/20/2007  
 Date Received: 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-20C  
 Lab Code: J0705603-008  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Chlorobenzene	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Ethylbenzene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
m,p-Xylenes	ND	U	2.0	0.19	1	11/28/07	11/28/07	JWG0703939	
o-Xylene	ND	U	1.0	0.083	1	11/28/07	11/28/07	JWG0703939	
Styrene	ND	U	1.0	0.062	1	11/28/07	11/28/07	JWG0703939	
Bromoform	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/28/07	11/28/07	JWG0703939	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/28/07	11/28/07	JWG0703939	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/28/07	11/28/07	JWG0703939	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/28/07	11/28/07	JWG0703939	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	99	71-122	11/28/07	Acceptable
4-Bromofluorobenzene	102	75-120	11/28/07	Acceptable
Dibromofluoromethane	100	82-116	11/28/07	Acceptable
Toluene-d8	116	88-117	11/28/07	Acceptable

Comments: \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-21A  
**Lab Code:** J0705603-009  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Vinyl Chloride	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Bromomethane	ND	U	1.0	0.15	1	11/28/07	11/28/07	JWG0703939	
Chloroethane	ND	U	1.0	0.19	1	11/28/07	11/28/07	JWG0703939	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
Acetone	ND	U	50	1.9	1	11/28/07	11/28/07	JWG0703939	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/28/07	11/28/07	JWG0703939	
Carbon Disulfide	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
Methylene Chloride	ND	U	5.0	0.29	1	11/28/07	11/28/07	JWG0703939	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Acrylonitrile	ND	U	10	6.7	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
Vinyl Acetate	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
2-Butanone (MEK)	ND	U	10	0.97	1	11/28/07	11/28/07	JWG0703939	
Bromochloromethane	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
Chloroform	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/28/07	11/28/07	JWG0703939	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Benzene	ND	U	1.0	0.088	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
Dibromomethane	ND	U	1.0	0.22	1	11/28/07	11/28/07	JWG0703939	
Bromodichloromethane	ND	U	1.0	0.099	1	11/28/07	11/28/07	JWG0703939	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/28/07	11/28/07	JWG0703939	
Toluene	ND	U	1.0	0.13	1	11/28/07	11/28/07	JWG0703939	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Tetrachloroethene (PCE)	ND	UJ	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	J(3)
2-Hexanone	ND	U	25	1.4	1	11/28/07	11/28/07	JWG0703939	
Dibromochloromethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-21A  
**Lab Code:** J0705603-009  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Chlorobenzene	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Ethylbenzene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
m,p-Xylenes	ND	U	2.0	0.19	1	11/28/07	11/28/07	JWG0703939	
o-Xylene	ND	U	1.0	0.083	1	11/28/07	11/28/07	JWG0703939	
Styrene	ND	U	1.0	0.062	1	11/28/07	11/28/07	JWG0703939	
Bromoform	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/28/07	11/28/07	JWG0703939	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/28/07	11/28/07	JWG0703939	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/28/07	11/28/07	JWG0703939	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/28/07	11/28/07	JWG0703939	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	97	71-122	11/28/07	Acceptable
4-Bromofluorobenzene	101	75-120	11/28/07	Acceptable
Dibromofluoromethane	99	82-116	11/28/07	Acceptable
Toluene-d8	115	88-117	11/28/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-21B  
**Lab Code:** J0705603-010  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Vinyl Chloride	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Bromomethane	ND	U	1.0	0.15	1	11/28/07	11/28/07	JWG0703939	
Chloroethane	ND	U	1.0	0.19	1	11/28/07	11/28/07	JWG0703939	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
Acetone	ND	U	50	1.9	1	11/28/07	11/28/07	JWG0703939	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/28/07	11/28/07	JWG0703939	
Carbon Disulfide	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
Methylene Chloride	ND	U	5.0	0.29	1	11/28/07	11/28/07	JWG0703939	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Acrylonitrile	ND	U	10	6.7	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
Vinyl Acetate	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
2-Butanone (MEK)	ND	U	10	0.97	1	11/28/07	11/28/07	JWG0703939	
Bromochloromethane	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
Chloroform	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/28/07	11/28/07	JWG0703939	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Benzene	ND	U	1.0	0.088	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
Dibromomethane	ND	U	1.0	0.22	1	11/28/07	11/28/07	JWG0703939	
Bromodichloromethane	ND	U	1.0	0.099	1	11/28/07	11/28/07	JWG0703939	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/28/07	11/28/07	JWG0703939	
<b>Toluene</b>	<b>3.0</b>		1.0	0.13	1	11/28/07	11/28/07	JWG0703939	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Tetrachloroethene (PCE)	ND	UJ	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	J(3)
2-Hexanone	ND	U	25	1.4	1	11/28/07	11/28/07	JWG0703939	
Dibromochloromethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705603  
 Date Collected: 11/20/2007  
 Date Received: 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-21B  
 Lab Code: J0705603-010  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Chlorobenzene	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Ethylbenzene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
m,p-Xylenes	ND	U	2.0	0.19	1	11/28/07	11/28/07	JWG0703939	
o-Xylene	ND	U	1.0	0.083	1	11/28/07	11/28/07	JWG0703939	
Styrene	ND	U	1.0	0.062	1	11/28/07	11/28/07	JWG0703939	
Bromoform	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/28/07	11/28/07	JWG0703939	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/28/07	11/28/07	JWG0703939	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/28/07	11/28/07	JWG0703939	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/28/07	11/28/07	JWG0703939	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	98	71-122	11/28/07	Acceptable
4-Bromofluorobenzene	102	75-120	11/28/07	Acceptable
Dibromofluoromethane	99	82-116	11/28/07	Acceptable
Toluene-d8	116	88-117	11/28/07	Acceptable

Comments:



## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-21C  
**Lab Code:** J0705603-011  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Vinyl Chloride	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Bromomethane	ND	U	1.0	0.15	1	11/28/07	11/28/07	JWG0703939	
Chloroethane	ND	U	1.0	0.19	1	11/28/07	11/28/07	JWG0703939	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
Acetone	ND	U	50	1.9	1	11/28/07	11/28/07	JWG0703939	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/28/07	11/28/07	JWG0703939	
Carbon Disulfide	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
Methylene Chloride	ND	U	5.0	0.29	1	11/28/07	11/28/07	JWG0703939	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Acrylonitrile	ND	U	10	6.7	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
Vinyl Acetate	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
2-Butanone (MEK)	ND	U	10	0.97	1	11/28/07	11/28/07	JWG0703939	
Bromochloromethane	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
Chloroform	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/28/07	11/28/07	JWG0703939	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Benzene	ND	U	1.0	0.088	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
Dibromomethane	ND	U	1.0	0.22	1	11/28/07	11/28/07	JWG0703939	
Bromodichloromethane	ND	U	1.0	0.099	1	11/28/07	11/28/07	JWG0703939	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/28/07	11/28/07	JWG0703939	
Toluene	ND	U	1.0	0.13	1	11/28/07	11/28/07	JWG0703939	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Tetrachloroethene (PCE)	ND	UJ	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	J(3)
2-Hexanone	ND	U	25	1.4	1	11/28/07	11/28/07	JWG0703939	
Dibromochloromethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-21C  
**Lab Code:** J0705603-011  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Chlorobenzene	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Ethylbenzene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
m,p-Xylenes	ND	U	2.0	0.19	1	11/28/07	11/28/07	JWG0703939	
o-Xylene	ND	U	1.0	0.083	1	11/28/07	11/28/07	JWG0703939	
Styrene	ND	U	1.0	0.062	1	11/28/07	11/28/07	JWG0703939	
Bromoform	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/28/07	11/28/07	JWG0703939	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/28/07	11/28/07	JWG0703939	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/28/07	11/28/07	JWG0703939	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/28/07	11/28/07	JWG0703939	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	98	71-122	11/28/07	Acceptable
4-Bromofluorobenzene	102	75-120	11/28/07	Acceptable
Dibromofluoromethane	101	82-116	11/28/07	Acceptable
Toluene-d8	116	88-117	11/28/07	Acceptable

**Comments:** \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-22A  
**Lab Code:** J0705603-012  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Vinyl Chloride	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Bromomethane	ND	U	1.0	0.15	1	11/28/07	11/28/07	JWG0703939	
Chloroethane	ND	U	1.0	0.19	1	11/28/07	11/28/07	JWG0703939	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
Acetone	ND	U	50	1.9	1	11/28/07	11/28/07	JWG0703939	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/28/07	11/28/07	JWG0703939	
Carbon Disulfide	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
Methylene Chloride	ND	U	5.0	0.29	1	11/28/07	11/28/07	JWG0703939	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Acrylonitrile	ND	U	10	6.7	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
Vinyl Acetate	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
2-Butanone (MEK)	ND	U	10	0.97	1	11/28/07	11/28/07	JWG0703939	
Bromochloromethane	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
Chloroform	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/28/07	11/28/07	JWG0703939	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Benzene	ND	U	1.0	0.088	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
Dibromomethane	ND	U	1.0	0.22	1	11/28/07	11/28/07	JWG0703939	
Bromodichloromethane	ND	U	1.0	0.099	1	11/28/07	11/28/07	JWG0703939	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/28/07	11/28/07	JWG0703939	
Toluene	ND	U	1.0	0.13	1	11/28/07	11/28/07	JWG0703939	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Tetrachloroethene (PCE)	ND	UJ	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	J(3)
2-Hexanone	ND	U	25	1.4	1	11/28/07	11/28/07	JWG0703939	
Dibromochloromethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-22A  
**Lab Code:** J0705603-012  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Chlorobenzene	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Ethylbenzene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
m,p-Xylenes	ND	U	2.0	0.19	1	11/28/07	11/28/07	JWG0703939	
o-Xylene	ND	U	1.0	0.083	1	11/28/07	11/28/07	JWG0703939	
Styrene	ND	U	1.0	0.062	1	11/28/07	11/28/07	JWG0703939	
Bromoform	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/28/07	11/28/07	JWG0703939	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/28/07	11/28/07	JWG0703939	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/28/07	11/28/07	JWG0703939	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/28/07	11/28/07	JWG0703939	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	97	71-122	11/28/07	Acceptable
4-Bromofluorobenzene	102	75-120	11/28/07	Acceptable
Dibromofluoromethane	101	82-116	11/28/07	Acceptable
Toluene-d8	115	88-117	11/28/07	Acceptable

**Comments:** \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705603  
 Date Collected: 11/20/2007  
 Date Received: 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: Trip Blank  
 Lab Code: J0705603-013  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Vinyl Chloride	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Bromomethane	ND	U	1.0	0.15	1	11/28/07	11/28/07	JWG0703939	
Chloroethane	ND	U	1.0	0.19	1	11/28/07	11/28/07	JWG0703939	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
Acetone	ND	U	50	1.9	1	11/28/07	11/28/07	JWG0703939	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/28/07	11/28/07	JWG0703939	
Carbon Disulfide	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
Methylene Chloride	ND	U	5.0	0.29	1	11/28/07	11/28/07	JWG0703939	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Acrylonitrile	ND	U	10	6.7	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
Vinyl Acetate	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
2-Butanone (MEK)	ND	U	10	0.97	1	11/28/07	11/28/07	JWG0703939	
Bromochloromethane	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
Chloroform	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/28/07	11/28/07	JWG0703939	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Benzene	ND	U	1.0	0.088	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
Dibromomethane	ND	U	1.0	0.22	1	11/28/07	11/28/07	JWG0703939	
Bromodichloromethane	ND	U	1.0	0.099	1	11/28/07	11/28/07	JWG0703939	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/28/07	11/28/07	JWG0703939	
Toluene	ND	U	1.0	0.13	1	11/28/07	11/28/07	JWG0703939	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Tetrachloroethene (PCE)	ND	UJ	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	J(3)
2-Hexanone	ND	U	25	1.4	1	11/28/07	11/28/07	JWG0703939	
Dibromochloromethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Trip Blank  
**Lab Code:** J0705603-013  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Chlorobenzene	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Ethylbenzene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
m,p-Xylenes	ND	U	2.0	0.19	1	11/28/07	11/28/07	JWG0703939	
o-Xylene	ND	U	1.0	0.083	1	11/28/07	11/28/07	JWG0703939	
Styrene	ND	U	1.0	0.062	1	11/28/07	11/28/07	JWG0703939	
Bromoform	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/28/07	11/28/07	JWG0703939	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/28/07	11/28/07	JWG0703939	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/28/07	11/28/07	JWG0703939	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/28/07	11/28/07	JWG0703939	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	98	71-122	11/28/07	Acceptable
4-Bromofluorobenzene	102	75-120	11/28/07	Acceptable
Dibromofluoromethane	100	82-116	11/28/07	Acceptable
Toluene-d8	115	88-117	11/28/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** NA  
**Date Received:** NA

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Method Blank  
**Lab Code:** JWG0703939-4  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Vinyl Chloride	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Bromomethane	ND	U	1.0	0.15	1	11/28/07	11/28/07	JWG0703939	
Chloroethane	ND	U	1.0	0.19	1	11/28/07	11/28/07	JWG0703939	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
Acetone	ND	U	50	1.9	1	11/28/07	11/28/07	JWG0703939	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/28/07	11/28/07	JWG0703939	
Carbon Disulfide	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
Methylene Chloride	ND	U	5.0	0.29	1	11/28/07	11/28/07	JWG0703939	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Acrylonitrile	ND	U	10	6.7	1	11/28/07	11/28/07	JWG0703939	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
Vinyl Acetate	ND	U	10	1.1	1	11/28/07	11/28/07	JWG0703939	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
2-Butanone (MEK)	ND	U	10	0.97	1	11/28/07	11/28/07	JWG0703939	
Bromochloromethane	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
Chloroform	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/28/07	11/28/07	JWG0703939	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Benzene	ND	U	1.0	0.088	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/28/07	11/28/07	JWG0703939	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/28/07	11/28/07	JWG0703939	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
Dibromomethane	ND	U	1.0	0.22	1	11/28/07	11/28/07	JWG0703939	
Bromodichloromethane	ND	U	1.0	0.099	1	11/28/07	11/28/07	JWG0703939	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/28/07	11/28/07	JWG0703939	
Toluene	ND	U	1.0	0.13	1	11/28/07	11/28/07	JWG0703939	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/28/07	11/28/07	JWG0703939	
Tetrachloroethene (PCE)	ND	UJ	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	J(3)
2-Hexanone	ND	U	25	1.4	1	11/28/07	11/28/07	JWG0703939	
Dibromochloromethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	

**Comments:**

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** NA  
**Date Received:** NA

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** Method Blank  
**Lab Code:** JWG0703939-4  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Chlorobenzene	ND	U	1.0	0.10	1	11/28/07	11/28/07	JWG0703939	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
Ethylbenzene	ND	U	1.0	0.12	1	11/28/07	11/28/07	JWG0703939	
m,p-Xylenes	ND	U	2.0	0.19	1	11/28/07	11/28/07	JWG0703939	
o-Xylene	ND	U	1.0	0.083	1	11/28/07	11/28/07	JWG0703939	
Styrene	ND	U	1.0	0.062	1	11/28/07	11/28/07	JWG0703939	
Bromoform	ND	U	1.0	0.28	1	11/28/07	11/28/07	JWG0703939	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/28/07	11/28/07	JWG0703939	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/28/07	11/28/07	JWG0703939	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/28/07	11/28/07	JWG0703939	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/28/07	11/28/07	JWG0703939	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/28/07	11/28/07	JWG0703939	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/28/07	11/28/07	JWG0703939	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	98	71-122	11/28/07	Acceptable
4-Bromofluorobenzene	102	75-120	11/28/07	Acceptable
Dibromofluoromethane	100	82-116	11/28/07	Acceptable
Toluene-d8	116	88-117	11/28/07	Acceptable

**Comments:** \_\_\_\_\_



## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-16A  
**Lab Code:** J0705603-001  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/26/07	JWG0703870	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/26/07	JWG0703870	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	108	77-150	11/26/07	Acceptable

**Comments:** \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-17A  
**Lab Code:** J0705603-002  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/26/07	JWG0703870	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/26/07	JWG0703870	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	125	77-150	11/26/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-19A  
**Lab Code:** J0705603-003  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/26/07	JWG0703870	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/26/07	JWG0703870	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	111	77-150	11/26/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-19B  
**Lab Code:** J0705603-004  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/26/07	JWG0703870	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/26/07	JWG0703870	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	112	77-150	11/26/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-19C  
**Lab Code:** J0705603-005  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/26/07	JWG0703870	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/26/07	JWG0703870	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	111	77-150	11/26/07	Acceptable

Comments: \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-20A  
**Lab Code:** J0705603-006  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/26/07	JWG0703870	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/26/07	JWG0703870	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	111	77-150	11/26/07	Acceptable

**Comments:**

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-20B  
**Lab Code:** J0705603-007  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703870	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703870	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	110	77-150	11/27/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-20C  
**Lab Code:** J0705603-008

**Units:** ug/L  
**Basis:** NA

**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703870	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703870	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	108	77-150	11/27/07	Acceptable

**Comments:** \_\_\_\_\_



## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-21A  
**Lab Code:** J0705603-009  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703870	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703870	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	114	77-150	11/27/07	Acceptable

Comments: \_\_\_\_\_

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Sample Name:** MW-21B  
**Lab Code:** J0705603-010  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703870	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703870	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	109	77-150	11/27/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-21C  
**Lab Code:** J0705603-011  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703870	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703870	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	140	77-150	11/27/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-22A  
**Lab Code:** J0705603-012  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/27/07	JWG0703870	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/27/07	JWG0703870	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	110	77-150	11/27/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Collected:** NA  
**Date Received:** NA

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** Method Blank  
**Lab Code:** JWG0703870-3  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/21/07	11/26/07	JWG0703870	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/21/07	11/26/07	JWG0703870	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	111	77-150	11/26/07	Acceptable

**Comments:** \_\_\_\_\_

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

### Total Metals

**Sample Name:** MW-16A  
**Lab Code:** J0705603-001

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	11/30/2007	0.31	i
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	11/30/2007	0.62	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	11/30/2007	24	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	11/30/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	11/30/2007	0.14	i
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	11/30/2007	2.1	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	11/30/2007	0.20	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	11/30/2007	0.79	i
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	657	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	11/30/2007	1.8	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	11/30/2007	1.1	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	11/30/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	11/30/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	11/30/2007	0.10	i
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	11/30/2007	7.9	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	11/30/2007	2.0	i

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Total Metals

**Sample Name:** MW-17A  
**Lab Code:** J0705603-002

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	11/30/2007	0.21	i
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	11/30/2007	0.88	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	11/30/2007	15	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	11/30/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	11/30/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	11/30/2007	2.5	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	11/30/2007	0.25	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	11/30/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	1260	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	11/30/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	11/30/2007	0.78	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	11/30/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	11/30/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	11/30/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	11/30/2007	2.9	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	11/30/2007	U	

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

### Total Metals

**Sample Name:** MW-19A  
**Lab Code:** J0705603-003

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	11/30/2007	0.14	i
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	11/30/2007	0.67	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	11/30/2007	26	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	11/30/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	11/30/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	11/30/2007	3.5	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	11/30/2007	0.13	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	11/30/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	1020	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	11/30/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	11/30/2007	1.3	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	11/30/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	11/30/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	11/30/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	11/30/2007	2.8	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	11/30/2007	2.0	i



## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Total Metals

**Sample Name:** MW-19B  
**Lab Code:** J0705603-004

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	11/30/2007	0.15	i
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	11/30/2007	0.48	i
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	11/30/2007	38	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	11/30/2007	0.10	i
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	11/30/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	11/30/2007	2.4	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	11/30/2007	0.21	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	11/30/2007	1.3	i
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	904	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	11/30/2007	2.2	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	11/30/2007	U	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	11/30/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	11/30/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	11/30/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	11/30/2007	2.6	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	11/30/2007	1.8	i

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705603  
 Date Collected: 11/20/2007  
 Date Received: 11/21/2007

## Total Metals

Sample Name: MW-19C  
 Lab Code: J0705603-005

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	11/30/2007	0.19	i
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	11/30/2007	1.4	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	11/30/2007	267	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	11/30/2007	2.1	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	11/30/2007	0.87	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	11/30/2007	32	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	11/30/2007	1.1	
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	11/30/2007	11	
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	5050	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	11/30/2007	6.5	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	11/30/2007	4.6	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	11/30/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	11/30/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	11/30/2007	0.099	i
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	11/30/2007	37	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	11/30/2007	12	

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

### Total Metals

**Sample Name:** MW-20A  
**Lab Code:** J0705603-006

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	11/30/2007	0.51	i
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	11/30/2007	0.30	i
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	11/30/2007	13	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	11/30/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	11/30/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	11/30/2007	2.9	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	11/30/2007	0.39	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	11/30/2007	0.71	i
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	527	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	11/30/2007	0.97	i
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	11/30/2007	1.6	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	11/30/2007	2.4	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	11/30/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	11/30/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	11/30/2007	7.1	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	11/30/2007	U	

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Total Metals

**Sample Name:** MW-20B  
**Lab Code:** J0705603-007

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	11/30/2007	0.25	i
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	11/30/2007	0.62	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	11/30/2007	234	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	11/30/2007	0.57	i
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	11/30/2007	0.21	i
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	11/30/2007	15	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	11/30/2007	0.36	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	11/30/2007	2.0	i
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	2830	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	11/30/2007	19	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	11/30/2007	2.1	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	11/30/2007	2.2	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	11/30/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	11/30/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	11/30/2007	17	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	11/30/2007	3.0	i

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Total Metals

**Sample Name:** MW-20C  
**Lab Code:** J0705603-008

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	11/30/2007	0.12	i
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	11/30/2007	0.99	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	11/30/2007	112	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	11/30/2007	0.38	i
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	11/30/2007	0.24	i
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	11/30/2007	8.2	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	11/30/2007	0.30	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	11/30/2007	1.6	i
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	2880	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	11/30/2007	2.5	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	11/30/2007	1.1	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	11/30/2007	0.82	i
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	11/30/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	11/30/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	11/30/2007	8.1	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	11/30/2007	5.3	i

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Total Metals

**Sample Name:** MW-21A  
**Lab Code:** J0705603-009

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	11/30/2007	0.38	i
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	11/30/2007	0.35	i
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	11/30/2007	50	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	11/30/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	11/30/2007	0.72	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	11/30/2007	1.3	i
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	11/30/2007	0.12	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	11/30/2007	0.29	i
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	204	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	11/30/2007	0.42	i
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	11/30/2007	1.1	i
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	11/30/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	11/30/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	11/30/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	11/30/2007	U	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	11/30/2007	1.7	i

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Total Metals

**Sample Name:** MW-21B  
**Lab Code:** J0705603-010

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	11/30/2007	0.35	i
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	11/30/2007	0.88	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	11/30/2007	92	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	11/30/2007	0.21	i
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	11/30/2007	0.19	i
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	11/30/2007	8.8	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	11/30/2007	0.36	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	11/30/2007	4.0	
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	3100	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	11/30/2007	7.8	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	11/30/2007	2.0	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	11/30/2007	3.1	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	11/30/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	11/30/2007	0.14	i
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	11/30/2007	12	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	11/30/2007	2.6	i

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

### Total Metals

**Sample Name:** MW-21C  
**Lab Code:** J0705603-011

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	11/30/2007	0.10	i
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	11/30/2007	0.97	
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	11/30/2007	87	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	11/30/2007	0.38	i
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	11/30/2007	0.15	i
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	11/30/2007	14	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	11/30/2007	0.19	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	11/30/2007	1.8	i
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	2520	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	11/30/2007	1.3	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	11/30/2007	3.4	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	11/30/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	11/30/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	11/30/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	11/30/2007	5.5	
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	11/30/2007	4.1	i



# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

### Total Metals

**Sample Name:** MW-22A  
**Lab Code:** J0705603-012

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	11/28/2007	11/30/2007	0.13	i
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	11/30/2007	0.43	i
Barium	EPA 3020A	6020	2.0	0.14	1.0	11/28/2007	11/30/2007	17	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	11/28/2007	11/30/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	11/30/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	11/28/2007	11/30/2007	2.3	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	11/28/2007	11/30/2007	0.29	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	11/28/2007	11/30/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/27/2007	11/28/2007	1830	
Lead	EPA 3020A	6020	1.0	0.30	1.0	11/28/2007	11/30/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	11/28/2007	11/30/2007	U	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	11/28/2007	11/30/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	11/28/2007	11/30/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	11/28/2007	11/30/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	11/28/2007	11/30/2007	0.38	i
Zinc	EPA 3020A	6020	10	1.7	1.0	11/28/2007	11/30/2007	U	

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** N/A  
**Date Received:** N/A

## Total Metals

**Sample Name:** MB3-1128  
**Lab Code:** Method Blank

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.00	0.09	1.0	11/28/2007	11/30/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	11/28/2007	11/30/2007	U	
Barium	EPA 3020A	6020	2.00	0.14	1.0	11/28/2007	11/30/2007	U	
Beryllium	EPA 3020A	6020	1.00	0.08	1.0	11/28/2007	11/30/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	11/28/2007	11/30/2007	U	
Chromium	EPA 3020A	6020	2.00	0.12	1.0	11/28/2007	11/30/2007	0.31	i
Cobalt	EPA 3020A	6020	1.00	0.04	1.0	11/28/2007	11/30/2007	U	
Copper	EPA 3020A	6020	2.00	0.29	1.0	11/28/2007	11/30/2007	U	
Lead	EPA 3020A	6020	1.00	0.30	1.0	11/28/2007	11/30/2007	U	
Nickel	EPA 3020A	6020	2.00	0.69	1.0	11/28/2007	11/30/2007	U	
Selenium	EPA 3020A	6020	2.00	0.79	1.0	11/28/2007	11/30/2007	U	
Silver	EPA 3020A	6020	0.500	0.039	1.0	11/28/2007	11/30/2007	U	
Thallium	EPA 3020A	6020	1.00	0.08	1.0	11/28/2007	11/30/2007	U	
Vanadium	EPA 3020A	6020	2.00	0.18	1.0	11/28/2007	11/30/2007	U	
Zinc	EPA 3020A	6020	10.0	1.7	1.0	11/28/2007	11/30/2007	U	

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** N/A  
**Date Received:** N/A

## Total Metals

**Sample Name:** MB3-1129  
**Lab Code:** Method Blank

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Mercury	METHOD	7470A	0.50	0.14	1.0	11/29/2007	11/29/2007	U	

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** N/A  
**Date Received:** N/A

### Total Metals

**Sample Name:** MB3-1127  
**Lab Code:** Method Blank

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Iron	EPA 3010A	6010B	50.0	17.0	1.0	11/27/2007	11/28/2007	U	

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** N/A  
**Date Received:** N/A

## Total Metals

**Sample Name:** MB4-1127  
**Lab Code:** Method Blank

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Iron	EPA 3010A	6010B	50.0	17.0	1.0	11/27/2007	11/28/2007	U	

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

### Total Metals Sodium

**Prep Method:** EPA 3010A  
**Analysis Method:** 6010B  
**Test Notes:**

**Units:** mg/L  
**Basis:** N/A

Sample Name:	Lab Code:	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
MW-16A	J0705603-001	0.50	0.15	1.0	11/27/2007	11/28/2007	10	
MW-17A	J0705603-002	0.50	0.15	1.0	11/27/2007	11/28/2007	11	
MW-19A	J0705603-003	0.50	0.15	1.0	11/27/2007	11/28/2007	14	
MW-19B	J0705603-004	0.50	0.15	1.0	11/27/2007	11/28/2007	17	
MW-19C	J0705603-005	0.50	0.15	1.0	11/27/2007	11/28/2007	9.5	
MW-20A	J0705603-006	0.50	0.15	1.0	11/27/2007	11/28/2007	20	
MW-20B	J0705603-007	0.50	0.15	1.0	11/27/2007	11/28/2007	17	
MW-20C	J0705603-008	0.50	0.15	1.0	11/27/2007	11/28/2007	9.5	
MW-21A	J0705603-009	0.50	0.15	1.0	11/27/2007	11/28/2007	26	
MW-21B	J0705603-010	0.50	0.15	1.0	11/27/2007	11/28/2007	16	
MW-21C	J0705603-011	0.50	0.15	1.0	11/27/2007	11/28/2007	10	
MW-22A	J0705603-012	0.50	0.15	1.0	11/27/2007	11/28/2007	25	
Method Blank	MB3-1127	0.50	0.15	1.0	11/27/2007	11/28/2007	U	
Method Blank	MB4-1127	0.50	0.15	1.0	11/27/2007	11/28/2007	U	

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Dissolved Metals

**Sample Name:** MW-19C  
**Lab Code:** J0705603-005

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3005A	6020	2.0	0.088	1.0	11/28/2007	11/29/2007	0.30	i
Arsenic	EPA 3005A	6020	0.50	0.28	1.0	11/28/2007	11/29/2007	U	
Barium	EPA 3005A	6020	2.0	0.14	1.0	11/28/2007	11/29/2007	39	
Beryllium	EPA 3005A	6020	1.0	0.084	1.0	11/28/2007	11/29/2007	0.093	i
Cadmium	EPA 3005A	6020	0.50	0.12	1.0	11/28/2007	11/29/2007	U	
Chromium	EPA 3005A	6020	2.0	0.12	1.0	11/28/2007	11/29/2007	1.0	i
Cobalt	EPA 3005A	6020	1.0	0.041	1.0	11/28/2007	11/29/2007	U	
Copper	EPA 3005A	6020	2.0	0.29	1.0	11/28/2007	11/29/2007	1.0	i
Iron	EPA 3005A	6010B	50	17	1.0	11/28/2007	11/29/2007	1230	
Lead	EPA 3005A	6020	1.0	0.30	1.0	11/28/2007	11/29/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/27/2007	11/27/2007	U	
Nickel	EPA 3005A	6020	2.0	0.69	1.0	11/28/2007	11/29/2007	U	
Selenium	EPA 3005A	6020	2.0	0.79	1.0	11/28/2007	11/29/2007	U	
Silver	EPA 3005A	6020	0.50	0.039	1.0	11/28/2007	11/29/2007	U	
Thallium	EPA 3005A	6020	1.00	0.077	1.0	11/28/2007	11/29/2007	U	
Vanadium	EPA 3005A	6020	2.0	0.18	1.0	11/28/2007	11/29/2007	1.6	i
Zinc	EPA 3005A	6020	10	1.7	1.0	11/28/2007	11/29/2007	3.5	i

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

### Dissolved Metals

**Sample Name:** MW-20B  
**Lab Code:** J0705603-007

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3005A	6020	2.0	0.088	1.0	11/28/2007	11/29/2007	U	
Arsenic	EPA 3005A	6020	0.50	0.28	1.0	11/28/2007	11/29/2007	0.32	i
Barium	EPA 3005A	6020	2.0	0.14	1.0	11/28/2007	11/29/2007	20	
Beryllium	EPA 3005A	6020	1.0	0.084	1.0	11/28/2007	11/29/2007	U	
Cadmium	EPA 3005A	6020	0.50	0.12	1.0	11/28/2007	11/29/2007	U	
Chromium	EPA 3005A	6020	2.0	0.12	1.0	11/28/2007	11/29/2007	1.2	i
Cobalt	EPA 3005A	6020	1.0	0.041	1.0	11/28/2007	11/29/2007	0.17	i
Copper	EPA 3005A	6020	2.0	0.29	1.0	11/28/2007	11/29/2007	U	
Iron	EPA 3005A	6010B	50	17	1.0	11/28/2007	11/29/2007	1690	
Lead	EPA 3005A	6020	1.0	0.30	1.0	11/28/2007	11/29/2007	0.83	i
Mercury	METHOD	7470A	0.50	0.14	1.0	11/27/2007	11/27/2007	U	
Nickel	EPA 3005A	6020	2.0	0.69	1.0	11/28/2007	11/29/2007	U	
Selenium	EPA 3005A	6020	2.0	0.79	1.0	11/28/2007	11/29/2007	U	
Silver	EPA 3005A	6020	0.50	0.039	1.0	11/28/2007	11/29/2007	U	
Thallium	EPA 3005A	6020	1.00	0.077	1.0	11/28/2007	11/29/2007	0.13	i
Vanadium	EPA 3005A	6020	2.0	0.18	1.0	11/28/2007	11/29/2007	2.5	
Zinc	EPA 3005A	6020	10	1.7	1.0	11/28/2007	11/29/2007	2.2	i



## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Dissolved Metals

**Sample Name:** MW-20C  
**Lab Code:** J0705603-008

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3005A	6020	2.0	0.088	1.0	11/28/2007	11/29/2007	U	
Arsenic	EPA 3005A	6020	0.50	0.28	1.0	11/28/2007	11/29/2007	U	
Barium	EPA 3005A	6020	2.0	0.14	1.0	11/28/2007	11/29/2007	37	
Beryllium	EPA 3005A	6020	1.0	0.084	1.0	11/28/2007	11/29/2007	U	
Cadmium	EPA 3005A	6020	0.50	0.12	1.0	11/28/2007	11/29/2007	U	
Chromium	EPA 3005A	6020	2.0	0.12	1.0	11/28/2007	11/29/2007	1.0	i
Cobalt	EPA 3005A	6020	1.0	0.041	1.0	11/28/2007	11/29/2007	U	
Copper	EPA 3005A	6020	2.0	0.29	1.0	11/28/2007	11/29/2007	U	
Iron	EPA 3005A	6010B	50	17	1.0	11/28/2007	11/29/2007	1370	
Lead	EPA 3005A	6020	1.0	0.30	1.0	11/28/2007	11/29/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/27/2007	11/27/2007	U	
Nickel	EPA 3005A	6020	2.0	0.69	1.0	11/28/2007	11/29/2007	U	
Selenium	EPA 3005A	6020	2.0	0.79	1.0	11/28/2007	11/29/2007	U	
Silver	EPA 3005A	6020	0.50	0.039	1.0	11/28/2007	11/29/2007	U	
Thallium	EPA 3005A	6020	1.00	0.077	1.0	11/28/2007	11/29/2007	U	
Vanadium	EPA 3005A	6020	2.0	0.18	1.0	11/28/2007	11/29/2007	1.6	i
Zinc	EPA 3005A	6020	10	1.7	1.0	11/28/2007	11/29/2007	U	

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

## Dissolved Metals

**Sample Name:** MW-21B  
**Lab Code:** J0705603-010

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3005A	6020	2.0	0.088	1.0	11/28/2007	11/29/2007	U	
Arsenic	EPA 3005A	6020	0.50	0.28	1.0	11/28/2007	11/29/2007	0.42	i
Barium	EPA 3005A	6020	2.0	0.14	1.0	11/28/2007	11/29/2007	12	
Beryllium	EPA 3005A	6020	1.0	0.084	1.0	11/28/2007	11/29/2007	U	
Cadmium	EPA 3005A	6020	0.50	0.12	1.0	11/28/2007	11/29/2007	U	
Chromium	EPA 3005A	6020	2.0	0.12	1.0	11/28/2007	11/29/2007	1.1	i
Cobalt	EPA 3005A	6020	1.0	0.041	1.0	11/28/2007	11/29/2007	0.24	i
Copper	EPA 3005A	6020	2.0	0.29	1.0	11/28/2007	11/29/2007	U	
Iron	EPA 3005A	6010B	50	17	1.0	11/28/2007	11/29/2007	2440	
Lead	EPA 3005A	6020	1.0	0.30	1.0	11/28/2007	11/29/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/27/2007	11/27/2007	U	
Nickel	EPA 3005A	6020	2.0	0.69	1.0	11/28/2007	11/29/2007	U	
Selenium	EPA 3005A	6020	2.0	0.79	1.0	11/28/2007	11/29/2007	U	
Silver	EPA 3005A	6020	0.50	0.039	1.0	11/28/2007	11/29/2007	U	
Thallium	EPA 3005A	6020	1.00	0.077	1.0	11/28/2007	11/29/2007	U	
Vanadium	EPA 3005A	6020	2.0	0.18	1.0	11/28/2007	11/29/2007	0.64	i
Zinc	EPA 3005A	6020	10	1.7	1.0	11/28/2007	11/29/2007	3.0	i

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705603  
 Date Collected: 11/20/2007  
 Date Received: 11/21/2007

## Dissolved Metals

Sample Name: MW-21C  
 Lab Code: J0705603-011

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3005A	6020	2.0	0.088	1.0	11/28/2007	11/29/2007	U	
Arsenic	EPA 3005A	6020	0.50	0.28	1.0	11/28/2007	11/29/2007	U	
Barium	EPA 3005A	6020	2.0	0.14	1.0	11/28/2007	11/29/2007	30	
Beryllium	EPA 3005A	6020	1.0	0.084	1.0	11/28/2007	11/29/2007	U	
Cadmium	EPA 3005A	6020	0.50	0.12	1.0	11/28/2007	11/29/2007	U	
Chromium	EPA 3005A	6020	2.0	0.12	1.0	11/28/2007	11/29/2007	2.0	i
Cobalt	EPA 3005A	6020	1.0	0.041	1.0	11/28/2007	11/29/2007	0.17	i
Copper	EPA 3005A	6020	2.0	0.29	1.0	11/28/2007	11/29/2007	0.30	i
Iron	EPA 3005A	6010B	50	17	1.0	11/28/2007	11/29/2007	1330	
Lead	EPA 3005A	6020	1.0	0.30	1.0	11/28/2007	11/29/2007	0.30	i
Mercury	METHOD	7470A	0.50	0.14	1.0	11/27/2007	11/27/2007	U	
Nickel	EPA 3005A	6020	2.0	0.69	1.0	11/28/2007	11/29/2007	7.2	
Selenium	EPA 3005A	6020	2.0	0.79	1.0	11/28/2007	11/29/2007	U	
Silver	EPA 3005A	6020	0.50	0.039	1.0	11/28/2007	11/29/2007	U	
Thallium	EPA 3005A	6020	1.00	0.077	1.0	11/28/2007	11/29/2007	U	
Vanadium	EPA 3005A	6020	2.0	0.18	1.0	11/28/2007	11/29/2007	1.0	i
Zinc	EPA 3005A	6020	10	1.7	1.0	11/28/2007	11/29/2007	4.3	i

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** N/A  
**Date Received:** N/A

## Dissolved Metals

**Sample Name:** Method Blank  
**Lab Code:** MB7-1128

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3005A	6020	2.00	0.09	1.0	11/28/2007	11/29/2007	U	
Arsenic	EPA 3005A	6020	0.50	0.28	1.0	11/28/2007	11/29/2007	U	
Barium	EPA 3005A	6020	2.00	0.14	1.0	11/28/2007	11/29/2007	U	
Beryllium	EPA 3005A	6020	1.00	0.08	1.0	11/28/2007	11/29/2007	U	
Cadmium	EPA 3005A	6020	0.50	0.12	1.0	11/28/2007	11/29/2007	U	
Chromium	EPA 3005A	6020	2.00	0.12	1.0	11/28/2007	11/29/2007	U	
Cobalt	EPA 3005A	6020	1.00	0.04	1.0	11/28/2007	11/29/2007	U	
Copper	EPA 3005A	6020	2.00	0.29	1.0	11/28/2007	11/29/2007	U	
Iron	EPA 3005A	6010B	50.0	17.0	1.0	11/28/2007	11/29/2007	U	
Lead	EPA 3005A	6020	1.00	0.30	1.0	11/28/2007	11/29/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/27/2007	11/27/2007	U	
Nickel	EPA 3005A	6020	2.00	0.69	1.0	11/28/2007	11/29/2007	U	
Selenium	EPA 3005A	6020	2.00	0.79	1.0	11/28/2007	11/29/2007	U	
Silver	EPA 3005A	6020	0.500	0.039	1.0	11/28/2007	11/29/2007	U	
Thallium	EPA 3005A	6020	1.00	0.08	1.0	11/28/2007	11/29/2007	U	
Vanadium	EPA 3005A	6020	2.00	0.18	1.0	11/28/2007	11/29/2007	U	
Zinc	EPA 3005A	6020	10.0	1.7	1.0	11/28/2007	11/29/2007	U	

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007

### Dissolved Metals Sodium

**Prep Method:** EPA 3005A  
**Analysis Method:** 6010B  
**Test Notes:**

**Units:** mg/L

**Basis:** N/A

Sample Name:	Lab Code:	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
MW-19C	J0705603-005	0.50	0.15	1.0	11/28/2007	11/29/2007	9.6	
MW-20B	J0705603-007	0.50	0.15	1.0	11/28/2007	11/29/2007	17	
MW-20C	J0705603-008	0.50	0.15	1.0	11/28/2007	11/29/2007	9.4	
MW-21B	J0705603-010	0.50	0.15	1.0	11/28/2007	11/29/2007	16	
MW-21C	J0705603-011	0.50	0.15	1.0	11/28/2007	11/29/2007	9.4	
Method Blank	MB6-1128	0.50	0.15	1.0	11/28/2007	11/29/2007	U	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705603  
**Date Collected :** 11/20/07  
**Date Received :** 11/21/07

## Inorganic Parameters

**Sample Name :** MW-16A  
**Lab Code :** J0705603-001  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 15:59	1.3	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/21/07 15:45	16	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/21/07 19:33	0.29	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/27/07 16:00	110	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705603  
**Date Collected :** 11/20/07  
**Date Received :** 11/21/07

## Inorganic Parameters

**Sample Name :** MW-17A  
**Lab Code :** J0705603-002  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 15:59	1.8	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/21/07 15:45	15	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/21/07 19:52	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/27/07 16:00	99	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705603  
**Date Collected :** 11/20/07  
**Date Received :** 11/21/07

## Inorganic Parameters

**Sample Name :** MW-19A  
**Lab Code :** J0705603-003  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 15:59	0.93	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/21/07 15:45	15	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/21/07 20:11	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/27/07 16:00	100	



## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705603  
**Date Collected :** 11/20/07  
**Date Received :** 11/21/07

## Inorganic Parameters

**Sample Name :** MW-19B  
**Lab Code :** J0705603-004  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 15:59	0.16	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/21/07 15:45	25	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/21/07 20:30	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/27/07 16:00	87	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705603  
**Date Collected :** 11/20/07  
**Date Received :** 11/21/07

## Inorganic Parameters

**Sample Name :** MW-19C  
**Lab Code :** J0705603-005  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 15:59	0.77	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/21/07 15:45	17	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/21/07 20:49	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/27/07 16:00	120	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705603  
**Date Collected :** 11/20/07  
**Date Received :** 11/21/07

## Inorganic Parameters

**Sample Name :** MW-20A  
**Lab Code :** J0705603-006  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date/Time Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 16:54	0.13	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/21/07 15:45	25	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/21/07 22:05	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/27/07 16:00	170	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705603  
**Date Collected :** 11/20/07  
**Date Received :** 11/21/07

## Inorganic Parameters

**Sample Name :** MW-20B  
**Lab Code :** J0705603-007  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 16:54	0.54	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/21/07 15:45	25	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/21/07 22:24	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/27/07 16:00	210	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705603  
**Date Collected :** 11/20/07  
**Date Received :** 11/21/07

## Inorganic Parameters

**Sample Name :** MW-20C  
**Lab Code :** J0705603-008  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 16:54	0.36	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/21/07 15:45	19	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/21/07 22:43	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/27/07 16:00	93	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705603  
**Date Collected :** 11/20/07  
**Date Received :** 11/21/07

## Inorganic Parameters

**Sample Name :** MW-21A  
**Lab Code :** J0705603-009  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 16:54	0.18	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/21/07 15:45	42	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/21/07 23:41	0.12	i
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/27/07 16:00	110	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705603  
**Date Collected :** 11/20/07  
**Date Received :** 11/21/07

## Inorganic Parameters

**Sample Name :** MW-21B  
**Lab Code :** J0705603-010  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 16:54	0.43	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/21/07 15:45	23	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/22/07 00:00	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/27/07 16:00	120	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705603  
**Date Collected :** 11/20/07  
**Date Received :** 11/21/07

## Inorganic Parameters

**Sample Name :** MW-21C  
**Lab Code :** J0705603-011  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 16:54	0.34	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/21/07 15:45	18	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/22/07 00:19	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/27/07 16:00	83	



# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705603  
**Date Collected :** 11/20/07  
**Date Received :** 11/21/07

## Inorganic Parameters

**Sample Name :** MW-22A  
**Lab Code :** J0705603-012  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 16:54	0.40	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/21/07 15:45	36	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/22/07 00:38	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/27/07 16:00	100	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705603  
**Date Collected :** NA  
**Date Received :** NA

## Inorganic Parameters

**Sample Name :** Method Blank  
**Lab Code :** J0705603-MB  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 15:59	U	
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	11/29/07 16:54	U	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/21/07 15:45	U	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/21/07 15:45	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/27/07 16:00	U	

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705603

**Surrogate Recovery Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: PERCENT  
 Level: Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>	<u>Sur2</u>	<u>Sur3</u>	<u>Sur4</u>
MW-16A	J0705603-001	97	103	99	116
MW-17A	J0705603-002	97	102	99	115
MW-19A	J0705603-003	98	102	100	115
MW-19B	J0705603-004	97	101	99	115
MW-19C	J0705603-005	100	102	99	117
MW-20A	J0705603-006	97	102	99	116
MW-20B	J0705603-007	97	101	99	115
MW-20C	J0705603-008	99	102	100	116
MW-21A	J0705603-009	97	101	99	115
MW-21B	J0705603-010	98	102	99	116
MW-21C	J0705603-011	98	102	101	116
MW-22A	J0705603-012	97	102	101	115
Trip Blank	J0705603-013	98	102	100	115
Method Blank	JWG0703939-4	98	102	100	116
MW-16AMS	JWG0703939-1	101	98	102	114
MW-16ADMS	JWG0703939-2	100	100	101	115
Lab Control Sample	JWG0703939-3	100	99	100	116

**Surrogate Recovery Control Limits (%)**


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Sur1 = 1,2-Dichloroethane-d4	71-122
Sur2 = 4-Bromofluorobenzene	75-120
Sur3 = Dibromofluoromethane	82-116
Sur4 = Toluene-d8	88-117

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Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Extracted:** 11/28/2007  
**Date Analyzed:** 11/28/2007

**Matrix Spike/Duplicate Matrix Spike Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

**Sample Name:** MW-16A  
**Lab Code:** J0705603-001  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703939

Analyte Name	Sample Result	MW-16AMS JWG0703939-1 Matrix Spike			MW-16ADMS JWG0703939-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
Chloromethane	ND	20.9	20.0	105	20.9	20.0	104	73-139	0	30
Vinyl Chloride	ND	23.0	20.0	115	22.2	20.0	111	78-141	4	30
Bromomethane	ND	20.1	20.0	100	20.0	20.0	100	78-129	0	30
Chloroethane	ND	21.1	20.0	106	20.5	20.0	103	76-129	3	30
Trichlorofluoromethane	ND	21.6	20.0	108	21.3	20.0	107	81-133	1	30
1,1-Dichloroethene	ND	22.8	20.0	114	21.3	20.0	106	79-133	7	30
Acetone	32	138	100	106	136	100	104	56-139	1	30
Iodomethane (Methyl Iodide)	ND	107	100	107	103	100	103	74-134	4	30
Carbon Disulfide	ND	103	100	103	98.7	100	99	71-146	4	30
Methylene Chloride	ND	19.7	20.0	98	19.4	20.0	97	75-123	1	30
trans-1,2-Dichloroethene	ND	19.4	20.0	97	18.9	20.0	94	76-125	2	30
Acrylonitrile	ND	96.6	100	97	95.5	100	95	68-131	1	30
1,1-Dichloroethane	ND	19.8	20.0	99	19.5	20.0	97	78-125	2	30
Vinyl Acetate	ND	80.4	100	80	78.7	100	79	43-163	2	30
cis-1,2-Dichloroethene	ND	21.4	20.0	107	20.6	20.0	103	75-127	4	30
2-Butanone (MEK)	ND	92.1	100	92	92.2	100	92	63-134	0	30
Bromochloromethane	ND	19.9	20.0	100	20.1	20.0	100	80-124	1	30
Chloroform	ND	19.5	20.0	98	19.2	20.0	96	81-124	2	30
1,1,1-Trichloroethane (TCA)	ND	20.3	20.0	101	19.7	20.0	99	76-130	3	30
Carbon Tetrachloride	ND	19.5	20.0	98	19.3	20.0	97	76-131	1	30
Benzene	ND	20.0	20.0	100	19.6	20.0	98	78-123	2	30
1,2-Dichloroethane (EDC)	ND	18.6	20.0	93	20.2	20.0	101	74-126	8	30
Trichloroethene (TCE)	ND	21.9	20.0	109	21.2	20.0	106	77-128	3	30
1,2-Dichloropropane	ND	20.0	20.0	100	19.6	20.0	98	77-122	2	30
Dibromomethane	ND	19.6	20.0	98	19.5	20.0	97	78-124	0	30
Bromodichloromethane	ND	18.6	20.0	93	18.2	20.0	91	79-125	2	30
cis-1,3-Dichloropropene	ND	18.1	20.0	90	17.7	20.0	88	77-117	2	30
4-Methyl-2-pentanone (MIBK)	ND	104	100	104	105	100	105	65-138	0	30
Toluene	8.6	29.1	20.0	103	27.7	20.0	96	86-119	5	30
trans-1,3-Dichloropropene	ND	16.5	20.0	82	16.2	20.0	81	75-120	2	30
1,1,2-Trichloroethane	ND	21.0	20.0	105	20.7	20.0	104	77-124	1	30
Tetrachloroethene (PCE)	ND	23.9	20.0	120	23.8	20.0	119	79-123	1	30
2-Hexanone	ND	103	100	103	103	100	103	63-142	0	30
Dibromochloromethane	ND	19.8	20.0	99	19.7	20.0	98	78-124	1	30

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705603  
 Date Extracted: 11/28/2007  
 Date Analyzed: 11/28/2007

**Matrix Spike/Duplicate Matrix Spike Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

Sample Name: MW-16A  
 Lab Code: J0705603-001  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low  
 Extraction Lot: JWG0703939

Analyte Name	Sample Result	MW-16AMS JWG0703939-1 Matrix Spike			MW-16ADMS JWG0703939-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
1,2-Dibromoethane (EDB)	ND	20.5	20.0	102	20.2	20.0	101	81-119	1	30
Chlorobenzene	ND	21.9	20.0	109	21.5	20.0	108	81-120	2	30
1,1,1,2-Tetrachloroethane	ND	20.4	20.0	102	20.0	20.0	100	82-118	2	30
Ethylbenzene	ND	21.9	20.0	109	21.7	20.0	108	87-122	1	30
m,p-Xylenes	ND	45.4	40.0	113	44.7	40.0	112	82-120	2	30
o-Xylene	ND	21.8	20.0	109	21.4	20.0	107	85-119	2	30
Styrene	ND	19.9	20.0	100	19.6	20.0	98	84-126	2	30
Bromoform	ND	19.7	20.0	99	19.6	20.0	98	70-129	0	30
1,1,2,2-Tetrachloroethane	ND	21.0	20.0	105	20.7	20.0	103	72-127	1	30
1,2,3-Trichloropropane	ND	20.9	20.0	104	19.6	20.0	98	76-123	6	30
1,4-Dichlorobenzene	ND	19.9	20.0	100	20.1	20.0	100	75-115	1	30
trans-1,4-Dichloro-2-butene	ND	8.00	20.0	40	5.28	20.0	26	22-135	41 *	30
1,2-Dichlorobenzene	ND	19.7	20.0	98	19.7	20.0	98	77-116	0	30
1,2-Dibromo-3-chloropropane (DBCP)	ND	17.9	20.0	89	18.3	20.0	92	54-120	3	30

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705603  
 Date Extracted: 11/28/2007  
 Date Analyzed: 11/28/2007

**Lab Control Spike Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low  
 Extraction Lot: JWG0703939

Analyte Name	Lab Control Sample JWG0703939-3 Lab Control Spike			%Rec Limits
	Result	Expected	%Rec	
Chloromethane	21.8	20.0	109	67-135
Vinyl Chloride	21.5	20.0	108	78-132
Bromomethane	21.5	20.0	108	79-130
Chloroethane	20.8	20.0	104	74-126
Trichlorofluoromethane	21.7	20.0	109	74-134
1,1-Dichloroethene	22.3	20.0	111	78-130
Acetone	121	100	121	67-133
Iodomethane (Methyl Iodide)	106	100	106	68-134
Carbon Disulfide	99.6	100	100	76-138
Methylene Chloride	19.9	20.0	99	72-124
trans-1,2-Dichloroethene	19.3	20.0	97	77-124
Acrylonitrile	98.2	100	98	77-127
1,1-Dichloroethane	19.5	20.0	97	80-128
Vinyl Acetate	108	100	108	61-148
cis-1,2-Dichloroethene	20.9	20.0	105	80-126
2-Butanone (MEK)	98.0	100	98	73-127
Bromochloromethane	20.3	20.0	102	79-129
Chloroform	19.4	20.0	97	83-124
1,1,1-Trichloroethane (TCA)	20.2	20.0	101	79-124
Carbon Tetrachloride	19.9	20.0	100	81-125
Benzene	20.0	20.0	100	79-119
1,2-Dichloroethane (EDC)	18.8	20.0	94	80-124
Trichloroethene (TCE)	21.1	20.0	106	76-124
1,2-Dichloropropane	20.0	20.0	100	79-123
Dibromomethane	20.0	20.0	100	83-123
Bromodichloromethane	19.5	20.0	97	81-123
cis-1,3-Dichloropropene	20.1	20.0	100	86-123
4-Methyl-2-pentanone (MIBK)	106	100	106	72-136
Toluene	22.4	20.0	112	86-117
trans-1,3-Dichloropropene	19.1	20.0	96	83-124
1,1,2-Trichloroethane	21.5	20.0	107	86-114
Tetrachloroethene (PCE)	24.9	20.0	125 *	80-121
2-Hexanone	104	100	104	71-138
Dibromochloromethane	21.4	20.0	107	82-121
1,2-Dibromoethane (EDB)	20.7	20.0	104	88-117
Chlorobenzene	22.4	20.0	112	86-113

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Extracted:** 11/28/2007  
**Date Analyzed:** 11/28/2007

**Lab Control Spike Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703939

Analyte Name	Lab Control Sample JWG0703939-3 Lab Control Spike			%Rec Limits
	Result	Expected	%Rec	
1,1,1,2-Tetrachloroethane	21.5	20.0	107	85-117
Ethylbenzene	22.4	20.0	112	90-118
m,p-Xylenes	46.3	40.0	116	86-121
o-Xylene	22.0	20.0	110	89-119
Styrene	21.3	20.0	106	89-122
Bromoform	22.2	20.0	111	68-129
1,1,2,2-Tetrachloroethane	21.6	20.0	108	83-120
1,2,3-Trichloropropane	21.3	20.0	107	83-123
1,4-Dichlorobenzene	20.8	20.0	104	83-113
trans-1,4-Dichloro-2-butene	22.6	20.0	113	53-143
1,2-Dichlorobenzene	20.6	20.0	103	84-115
1,2-Dibromo-3-chloropropane (DBCP)	20.5	20.0	103	62-123

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: GeoSyntec Consultants  
Project: Oak Hammock/FQ1144  
Sample Matrix: Water

Service Request: J0705603

**Surrogate Recovery Summary**  
**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

Extraction Method: METHOD  
Analysis Method: 8011

Units: PERCENT  
Level: Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>
MW-16A	J0705603-001	108
MW-17A	J0705603-002	125
MW-19A	J0705603-003	111
MW-19B	J0705603-004	112
MW-19C	J0705603-005	111
MW-20A	J0705603-006	111
MW-20B	J0705603-007	110
MW-20C	J0705603-008	108
MW-21A	J0705603-009	114
MW-21B	J0705603-010	109
MW-21C	J0705603-011	140
MW-22A	J0705603-012	110
Method Blank	JWG0703870-3	111
Lab Control Sample	JWG0703870-1	111
Duplicate Lab Control Sample	JWG0703870-2	109

**Surrogate Recovery Control Limits (%)**

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Sur1 = 1,1,1,2-Tetrachloroethane 77-150

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Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.



**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705603  
**Date Extracted:** 11/21/2007  
**Date Analyzed:** 11/26/2007

**Lab Control Spike/Duplicate Lab Control Spike Summary**  
**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703870

Analyte Name	Lab Control Sample JWG0703870-1 Lab Control Spike			Duplicate Lab Control Sample JWG0703870-2 Duplicate Lab Control Spike			%Rec Limits	RPD	RPD Limit
	Result	Expected	%Rec	Result	Expected	%Rec			
1,2-Dibromoethane (EDB)	0.270	0.250	108	0.264	0.250	106	70-130	2	20
1,2-Dibromo-3-chloropropane (DBCP)	0.274	0.250	110	0.269	0.250	108	70-130	2	20

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007  
**Date Extracted:** 11/28/2007  
**Date Analyzed:** 11/30/2007

### Matrix Spike/Matrix Spike Duplicate Summary Total Metals

**Sample Name:** MW-16A  
**Lab Code:** J0705603-001

J0705603-001S

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	Spike Level		Sample Result	Spike Result		Percent Recovery			% Rec	Result Notes
				MS	DMS		MS	DMS	MS	DMS	RPD	Acceptance Limits	
Antimony	EPA 3020	6020	2.0	50.0	50.0	0.3	52.5	52.8	104	105	1	75 - 125	
Arsenic	EPA 3020	6020	0.5	50.0	50.0	0.6	50.9	49.2	101	97	3	75 - 125	
Barium	EPA 3020	6020	2.0	50.0	50.0	23.9	77.4	74.9	107	102	3	75 - 125	
Beryllium	EPA 3020	6020	1.0	50.0	50.0	U	48.6	45.9	97	92	6	75 - 125	
Cadmium	EPA 3020	6020	0.5	50.0	50.0	0.1	49.8	50.2	99	100	1	75 - 125	
Chromium	EPA 3020	6020	2.0	50.0	50.0	2.1	53.9	50.8	104	97	6	75 - 125	
Cobalt	EPA 3020	6020	1.0	50.0	50.0	0.2	50.2	47.5	100	95	6	75 - 125	
Copper	EPA 3020	6020	2.0	50.0	50.0	0.8	50.8	47.9	100	94	6	75 - 125	
Lead	EPA 3020	6020	1.0	50.0	50.0	1.8	55.3	53.5	107	103	3	75 - 125	
Nickel	EPA 3020	6020	2.0	50.0	50.0	1.1	50.7	48.3	99	94	5	75 - 125	
Selenium	EPA 3020	6020	2.0	50.0	50.0	U	54.0	52.6	108	105	3	75 - 125	
Silver	EPA 3020	6020	0.5	50.0	50.0	U	51.1	50.2	102	100	2	75 - 125	
Thallium	EPA 3020	6020	1.0	50.0	50.0	0.1	53.1	51.8	106	103	2	75 - 125	
Vanadium	EPA 3020	6020	2.0	50.0	50.0	7.9	60.1	58.1	104	100	3	75 - 125	
Zinc	EPA 3020	6020	10.0	100	100	2.0	107.0	103.0	105	101	4	75 - 125	

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007  
**Date Extracted:** 11/29/2007  
**Date Analyzed:** 11/29/2007

### Matrix Spike/Matrix Spike Duplicate Summary Total Metals

**Sample Name:** MW-17A  
**Lab Code:** J0705603-002

J0705603-002S

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	Spike Level		Sample Result	Spike Result		Percent Recovery			% Rec	Result Notes
				MS	DMS		MS	DMS	MS	DMS	RPD	Acceptance Limits	
Mercury	METHOD	7470A	0.50	5.00	5.00	U	4.73	4.74	95	95	<1	75 - 125	

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007  
**Date Extracted:** 11/28/2007  
**Date Analyzed:** 11/30/2007

### Matrix Spike/Matrix Spike Duplicate Summary Total Metals

**Sample Name:** MW-21A  
**Lab Code:** J0705603-009

J0705603-009S

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	Spike Level		Sample Result	Spike Result		Percent Recovery		% Rec Acceptance		Result Notes
				MS	DMS		MS	DMS	MS	DMS	RPD	Limits	
Antimony	EPA 3020	6020	2.0	50.0	50.0	0.4	53.1	53.1	105	105	<1	75 - 125	
Arsenic	EPA 3020	6020	0.5	50.0	50.0	0.3	49.0	49.2	97	98	<1	75 - 125	
Barium	EPA 3020	6020	2.0	50.0	50.0	49.8	103.0	102.0	106	104	1	75 - 125	
Beryllium	EPA 3020	6020	1.0	50.0	50.0	U	47.8	48.1	95	96	1	75 - 125	
Cadmium	EPA 3020	6020	0.5	50.0	50.0	0.7	51.7	52.0	102	103	1	75 - 125	
Chromium	EPA 3020	6020	2.0	50.0	50.0	1.3	50.6	52.8	99	103	4	75 - 125	
Cobalt	EPA 3020	6020	1.0	50.0	50.0	0.1	48.5	50.5	97	101	4	75 - 125	
Copper	EPA 3020	6020	2.0	50.0	50.0	0.3	48.0	48.8	95	97	2	75 - 125	
Lead	EPA 3020	6020	1.0	50.0	50.0	0.4	52.7	53.5	105	106	2	75 - 125	
Nickel	EPA 3020	6020	2.0	50.0	50.0	1.1	49.3	49.2	96	96	<1	75 - 125	
Selenium	EPA 3020	6020	2.0	50.0	50.0	U	51.7	52.3	103	105	1	75 - 125	
Silver	EPA 3020	6020	0.5	50.0	50.0	U	50.3	49.6	101	99	1	75 - 125	
Thallium	EPA 3020	6020	1.0	50.0	50.0	U	51.5	52.7	103	105	2	75 - 125	
Vanadium	EPA 3020	6020	2.0	50.0	50.0	U	51.4	52.5	103	105	2	75 - 125	
Zinc	EPA 3020	6020	10.0	100	100	1.7	101.0	104.0	99	102	3	75 - 125	

## QA/QC Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705603  
 Date Collected: N/A  
 Date Received: N/A  
 Date Extracted: 11/28/2007  
 Date Analyzed: 11/30/2007

Laboratory Control Sample Summary  
 Total Metals

Sample Name: Lab Control Sample  
 Lab Code: LCS3-1128

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	True Value	Results	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Antimony	EPA 3020A	6020	50.0	51.4	103	80 - 120	
Arsenic	EPA 3020A	6020	50.0	49.5	99	80 - 120	
Barium	EPA 3020A	6020	50.0	51.0	102	80 - 120	
Beryllium	EPA 3020A	6020	50.0	46.7	93	80 - 120	
Cadmium	EPA 3020A	6020	50.0	49.8	100	80 - 120	
Chromium	EPA 3020A	6020	50.0	50.8	102	80 - 120	
Cobalt	EPA 3020A	6020	50.0	48.9	98	80 - 120	
Copper	EPA 3020A	6020	50.0	49.2	98	80 - 120	
Iron	EPA 3010A	6010B	2000	2080	104	80 - 120	
Iron	EPA 3010A	6010B	2000	1950	98	80 - 120	
Lead	EPA 3020A	6020	50.0	53.0	106	80 - 120	
Mercury	METHOD	7470A	5.00	4.70	94	80 - 120	
Nickel	EPA 3020A	6020	50.0	48.6	97	80 - 120	
Selenium	EPA 3020A	6020	50.0	52.6	105	80 - 120	
Silver	EPA 3020A	6020	50.0	50.3	101	80 - 120	
Thallium	EPA 3020A	6020	50.0	51.7	103	80 - 120	
Vanadium	EPA 3020A	6020	50.0	51.0	102	80 - 120	
Zinc	EPA 3020A	6020	100	102.0	102	80 - 120	

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date Extracted:** 11/27/2007  
**Date Analyzed:** 11/28/2007

### Laboratory Control Sample Summary Total Metals

**Sample Name:** Lab Control Sample  
**Lab Code:** LCS3-1127

**Units:** mg/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	True Value	Results	Percent Recovery	CAS Percent	Result Notes
						Recovery Acceptance Limits	
Sodium	EPA 3010A	6010B	10.00	9.1	91	80 - 120	
Sodium	EPA 3010A	6010B	10.00	10.2	102	80 - 120	

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007  
**Date Extracted:** 11/28/2007  
**Date Analyzed:** 11/29/2007

### Matrix Spike/Matrix Spike Duplicate Summary Dissolved Metals

**Sample Name:** MW-19C  
**Lab Code:** J0705603-005

J0705603-005S

**Units:** mg/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	Spike Level		Sample Result	Spike Result		Percent Recovery			% Rec Acceptance		Result Notes
				MS	DMS		MS	DMS	MS	DMS	RPD	Limits		
Sodium	EPA 3005	6010B	0.5	10.0	10.0	9.6	20.5	19.7	109	101	4	75 - 125		

## COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007  
**Date Extracted:** 11/28/2007  
**Date Analyzed:** 11/29/2007

Matrix Spike/Matrix Spike Duplicate Summary  
Dissolved Metals

**Sample Name:** MW-19C  
**Lab Code:** J0705603-005

J0705603-005S

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	Spike Level		Sample Result	Spike Result		Percent Recovery		% Rec		Result Notes
				MS	DMS		MS	DMS	MS	DMS	RPD	Acceptance Limits	
Iron	EPA 3005	6010B	50	2000	2000	1230	3160	3150	96	96	<1	75 - 125	



## COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** 11/20/2007  
**Date Received:** 11/21/2007  
**Date Extracted:** 11/28/2007  
**Date Analyzed:** 11/29/2007

Matrix Spike/Matrix Spike Duplicate Summary  
Dissolved Metals

**Sample Name:** MW-20B  
**Lab Code:** J0705603-007

J0705603-007S

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	Spike Level		Sample Result	Spike Result		% Rec			Acceptance Limits	Result Notes
				MS	DMS		MS	DMS	MS	DMS	RPD		
Antimony	EPA 3005	6020	2.0	50.0	50.0	0.1	57.2	56.8	114	113	1	75 - 125	
Arsenic	EPA 3005	6020	0.5	50.0	50.0	0.3	56.1	55.8	112	111	1	75 - 125	
Barium	EPA 3005	6020	2.0	50.0	50.0	19.9	73.7	74.7	108	110	1	75 - 125	
Beryllium	EPA 3005	6020	1.0	50.0	50.0	0.1	53.6	53.7	107	107	<1	75 - 125	
Cadmium	EPA 3005	6020	0.5	50.0	50.0	U	58.1	57.5	116	115	1	75 - 125	
Chromium	EPA 3005	6020	2.0	50.0	50.0	1.2	55.0	55.5	108	109	1	75 - 125	
Cobalt	EPA 3005	6020	1.0	50.0	50.0	0.2	52.0	51.4	104	102	1	75 - 125	
Copper	EPA 3005	6020	2.0	50.0	50.0	U	52.6	52.7	105	105	<1	75 - 125	
Lead	EPA 3005	6020	1.0	50.0	50.0	0.8	56.8	56.9	112	112	<1	75 - 125	
Nickel	EPA 3005	6020	2.0	50.0	50.0	U	57.6	57.5	115	115	<1	75 - 125	
Selenium	EPA 3005	6020	2.0	50.0	50.0	U	58.7	55.6	117	111	5	75 - 125	
Silver	EPA 3005	6020	0.5	50.0	50.0	U	62.1	57.1	124	114	8	75 - 125	
Thallium	EPA 3005	6020	1.0	50.0	50.0	0.1	53.1	53.5	106	107	1	75 - 125	
Vanadium	EPA 3005	6020	2.0	50.0	50.0	2.5	59.2	59.6	113	114	1	75 - 125	
Zinc	EPA 3005	6020	10.0	100	100	2.2	112.0	114.0	110	112	2	75 - 125	

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date Extracted:** 11/28/2007  
**Date Analyzed:** 11/29/2007

### Laboratory Control Sample Summary Dissolved Metals

**Sample Name:** Lab Control Sample  
**Lab Code:** LCS7-1128

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	True Value	Results	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Antimony	EPA 3005A	6020	50.0	57.1	114	80 - 120	
Arsenic	EPA 3005A	6020	50.0	56.0	112	80 - 120	
Barium	EPA 3005A	6020	50.0	55.6	111	80 - 120	
Beryllium	EPA 3005A	6020	50.0	52.2	104	80 - 120	
Cadmium	EPA 3005A	6020	50.0	56.4	113	80 - 120	
Chromium	EPA 3005A	6020	50.0	53.9	108	80 - 120	
Cobalt	EPA 3005A	6020	50.0	51.4	103	80 - 120	
Copper	EPA 3005A	6020	50.0	51.9	104	80 - 120	
Iron	EPA 3005A	6010B	2000	1970	98	80 - 120	
Lead	EPA 3005A	6020	50.0	55.5	111	80 - 120	
Mercury	METHOD	7470A	5.00	4.85	97	80 - 120	
Nickel	EPA 3005A	6020	50.0	55.7	111	80 - 120	
Selenium	EPA 3005A	6020	50.0	56.5	113	80 - 120	
Silver	EPA 3005A	6020	50.0	59.8	120	80 - 120	
Thallium	EPA 3005A	6020	50.0	52.9	106	80 - 120	
Vanadium	EPA 3005A	6020	50.0	54.8	110	80 - 120	
Zinc	EPA 3005A	6020	100	108.0	108	80 - 120	

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705603  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date Extracted:** 11/28/2007  
**Date Analyzed:** 11/29/2007

### Laboratory Control Sample Summary Dissolved Metals

**Sample Name:** Lab Control Sample  
**Lab Code:** LCS6-1128

**Units:** mg/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	True Value	Results	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sodium	EPA 3005A	6010B	10.00	10.1	101	80 - 120	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705603  
**Date Collected :** 11/20/07  
**Date Received :** 11/21/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/27/07

### Duplicate Summary Inorganic Parameters

**Sample Name :** MW-19A  
**Lab Code :** J0705603-003DUP  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	100	110	105	10	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705603  
**Date Collected :** 11/20/07  
**Date Received :** 11/21/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/29/07

### Duplicate Summary Inorganic Parameters

**Sample Name :** MW-20A  
**Lab Code :** J0705603-006DUP  
**Test Notes :**

Basis : NA

Analyte	Units	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.13	0.12	0.125	8	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705603  
**Date Collected :** 11/20/07  
**Date Received :** 11/21/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/29/07

### Matrix Spike Summary Inorganic Parameters

**Sample Name :** MW-20A  
**Lab Code :** J0705603-006MS  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery	Result Notes
								Acceptance Limits	
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	5.00	0.13	5.25	102	90-110	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705603  
**Date Collected :** 11/20/07  
**Date Received :** 11/21/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/21/07

### Duplicate Summary Inorganic Parameters

**Sample Name :** MW-20C  
**Lab Code :** J0705603-008DUP  
**Test Notes :**

Basis : NA

Analyte	Units	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Chloride	mg/L (ppm)	300.0	0.2	19	20	19.5	5	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	U	U	U	-	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705603  
**Date Collected :** 11/20/07  
**Date Received :** 11/21/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/21/07

### Matrix Spike Summary Inorganic Parameters

**Sample Name :** MW-20C  
**Lab Code :** J0705603-008MS  
**Test Notes :**

Basis : NA

Analyte	Units	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS	Result Notes
								Percent Recovery Acceptance Limits	
Chloride	mg/L (ppm)	300.0	0.2	100	19	110	91	90-110	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	10	U	9.5	95	90-110	



# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705603  
**Date Collected :** NA  
**Date Received :** NA  
**Date Extracted :** NA  
**Date Analyzed :** 11/21-29/07

### Laboratory Control Sample Summary Inorganic Parameters

**Sample Name :** Laboratory Control Sample  
**Lab Code :** J0705603-LCS  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	5.00	5.39	108	90-110	
Ammonia as Nitrogen	mg/L (ppm)	350.1	5.00	5.06	101	90-110	
Chloride	mg/L (ppm)	300.0	250	236	94	90-110	
Nitrate as Nitrogen	mg/L (ppm)	300.0	10	9.41	94	90-110	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	300	301	100	85-115	

**Columbia Analytical Services, Inc.  
Cooler Receipt and Preservation Form**

Client: Geosyntec

Service Request # 70205603

Project: \_\_\_\_\_

Cooler received on 11-21-07

and opened on 11-21-07 by DMC

COURIER: CAS

UPS

FEDEX

DHL

CLIENT

Tracking #

81860736115

- |    |  |            |    |     |
|----|--|------------|----|-----|
| 1  | Were custody seals on outside of cooler?   | <u>Yes</u> | No | N/A |
| 2  | Were seals intact, signed and dated?   | <u>Yes</u> | No | N/A |
| 3  | Were custody papers properly filled out?   | <u>Yes</u> | No | N/A |
| 4  | Temperature of cooler(s) upon receipt (Should be 4 +/- 2 degrees C)              | <u>1.6</u> |    |     |
| 5  | Correct Temperature?   | <u>Yes</u> | No | N/A |
| 6  | Were Ice or Ice Packs present  | <u>Yes</u> | No | N/A |
| 7  | Did all bottles arrive in good condition (unbroken, etc....)?                    | <u>Yes</u> | No | N/A |
| 8  | Were all bottle labels complete (sample ID, preservation, etc....)?              | <u>Yes</u> | No | N/A |
| 9  | Did all bottle labels and tags agree with custody papers?                        | <u>Yes</u> | No | N/A |
| 10 | Were the correct bottles used for the tests indicated?                           | <u>Yes</u> | No | N/A |
| 11 | Were all of the preserved bottles received with the appropriate preservative?    | <u>Yes</u> | No | N/A |
|    | <u>HNO3 pH&lt;2</u> <u>H2SO4 pH&lt;2</u> ZnAc2/NaOH pH>9   NaOH pH>12   HCl pH<2 |            |    |     |
|    | Preservative additions noted below   |            |    |     |

- |    |   |            |        |     |
|----|---|------------|--------|-----|
| 12 | Were all samples received within analysis holding times?                  | <u>Yes</u> | No     | N/A |
| 13 | Were VOA vials checked for absence of air bubbles? If present, note below | <u>Yes</u> | No     | N/A |
| 14 | Where did the bottles originate?  | <u>CAS</u> | Client |     |

Sample ID	Reagent	Manuf. Lot # or CAS Chem ID	ml added	Initials

Additional comments and/or explanation of all discrepancies noted above:

Client approval to run samples if discrepancies noted:

Date:

10/11/19

**Initials:**

meets the required pH criterion listed in the column heading unless otherwise noted on cooler receipt form.

[illegible]

## CAS Contact

JSCOC-08/28/06



December 13, 2007

Service Request No: J0705660

Kirk Wills  
GeoSyntec Consultants  
14055 Riveredge Drive  
Suite 300  
Tampa, FL 33637

**RE: Oak Hammock/FQ1144**

Dear Kirk:

Enclosed are the results of the sample(s) submitted to our laboratory on November 27, 2007. For your reference, these analyses have been assigned our service request number **J0705660**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. In accordance to the NELAC 2003 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please call if you have any questions. My extension is 224. You may also contact me via email at [CMyers@caslab.com](mailto:CMyers@caslab.com).

Respectfully submitted,

**Columbia Analytical Services, Inc.**



Craig Myers  
Project Chemist

Page 1 of 129

*Laboratory Manager: Greg Jordan  
Quality Assurance Officer: Kathy Brungard*

*CAS Jacksonville is NELAC-accredited by the State of Florida, #E82502 valid through 6/30/08. Other state accreditations include: Arkansas, #88-0600 valid through 1/12/06; Georgia, #958 valid through 6/30/08; Louisiana, #02086 valid through 6/30/08; Texas, #T104704197-06-TX valid through 5/31/08; North Carolina, #527 valid through 12/31/07; South Carolina, #96021001 valid through 6/30/07.*

## COLUMBIA ANALYTICAL SERVICES, INC.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock  
**Sample Matrix:** Water

**Service Request No.:** J0705660  
**Date Received:** 11/27/07

### CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables, including results of QC samples analyzed from this delivery group. When appropriate to the procedure, method blank results have been reported with each analytical test. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Parameters that are included in the NELAC Fields of Testing but are not included in the lab's NELAC accreditation are identified in the discussion of each analytical procedure.

#### Sample Receipt

Six water samples and one trip blank were received for analysis at Columbia Analytical Services on 11/27/07. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at  $4\pm 2^{\circ}\text{C}$  upon receipt at the lab except for aqueous samples designated for metals analyses, which were stored at room temperature.

#### Volatile Organic Compounds by GC-MS

The samples were analyzed for Volatile Organics using EPA Method 8260. The following observations were made regarding this delivery group.

#### Second Source Exceptions

The upper control criterion was exceeded for the following analyte in Second Source Verification (SSV) CAL 1287: trans-1,4-Dichloro-2-butene. The field samples analyzed in this sequence did not contain the analyte in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

#### Method Blank Exceptions

Method Blank JWG0703966-4 contained a low level of 1,4-Dichlorobenzene above the Method Detection Limit (MDL), but less than the Method Reporting Limit (MRL). The analyte in question was not detected in the associated field sample. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

#### Lab Control Sample Exceptions

The spike recoveries of Tetrachloroethene (PCE) and Chlorobenzene for Laboratory Control Sample (LCS) JWG0703956-3 were outside the upper control criterion. The spike recoveries of several analytes for Laboratory Control Sample (LCS) JWG0703966-3 were outside the upper control criterion. The analytes in question were not detected in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

Approved by



Date

12/13/07

#### Elevated Method Reporting Limits

The reporting limits are elevated for all analytes in samples L1, L-2, L-3 and L-4. The samples were diluted prior to instrumental analysis due to the foaming nature of the matrix. The reporting limits are adjusted to reflect the dilution.

#### Batch QC Notes and Discussion

Quality control samples for MS/DMS were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

#### EDB and DBCP by GC-ECD

The samples were analyzed for EDB and DBCP using EPA Method 8011. No problems were observed.

#### Organochlorine Pesticides by GC-ECD

The samples were analyzed for Organochlorine Pesticides using EPA Method 8081. The following observations were made regarding this delivery group.

#### Continuing Calibration Verification Exceptions

The primary evaluation criterion was exceeded for the following analytes in Continuing Calibration Verification (CCV) JWG0703976-2: Dieldrin and Endosulfan II. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the average percent recovery of all analytes in the verification standard. The standard meets the alternative evaluation criteria. The analytes in question were not detected in the associated field samples. No further corrective action was appropriate.

#### Surrogate Exceptions

The control criteria were exceeded for the following surrogate in sample L-3 due to suspected matrix interferences: Tetrachloro-m-xylene. Sample formed a large emulsion during the extraction procedure, preventing adequate recovery of the surrogate. No further corrective action was appropriate.

The control criteria were exceeded for the following surrogate in sample L-4 due to suspected matrix interferences: Decachlorobiphenyl. Sample formed a large emulsion during the extraction procedure, preventing adequate recovery of the surrogate. No further corrective action was appropriate.

#### Batch QC Notes and Discussion

Quality control samples for MS/DMS were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

#### PCB Aroclors by GC-ECD

The samples were analyzed for PCB Aroclors using EPA Method 8082. The following observations were made regarding this delivery group.

Approved by \_\_\_\_\_



Date \_\_\_\_\_

12/13/07



#### Surrogate Exceptions

The control criteria were exceeded for the following surrogate in sample L-4 due to suspected matrix interferences: Decachlorobiphenyl. Sample formed a large emulsion during the extraction procedure, preventing adequate recovery of the surrogate. No further corrective action was appropriate.

#### Batch QC Notes and Discussion

Quality control samples for MS/DMS were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

#### Semivolatile Organics by GC-MS

The samples were analyzed for Semivolatile Organics using EPA Method 8270. The following observations were made regarding this delivery group.

#### Surrogate Exceptions

The control criteria were exceeded for several surrogates in sample L-2 due to suspected matrix interferences. A large emulsion formed during the extraction procedure affecting recovery of the surrogate. No further corrective action was appropriate.

#### Reporting Limits

Sample L-3 required dilution due to the presence of elevated levels of target and non-target analytes. The reporting limits are adjusted to reflect the dilution.

#### Batch QC Notes and Discussion

Quality control samples for MS/DMS were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

#### Metals by ICP-MS/ICP-OES/CVAA

The samples were analyzed for Total and Dissolved Metals using EPA Methods 6020/6010B/7470A. The following observations were made regarding this delivery group.

#### Elevated Method Reporting Limits

Sample(s) L-1, L-2, and L-4 required dilution due matrix interference and internal standard failure. The reporting limits are adjusted to reflect the dilution.

#### Sample Notes and Discussion

Quality control samples for some parameters (i.e., Dup/Spike or MS/DMS samples) were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was

Approved by Craig R. Meyer Date 12/13/07

consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

#### **General Chemistry Parameters**

The samples were analyzed for Inorganic Parameters using various EPA and Standard Methods. No problems were observed.

#### **Batch QC Notes and Discussion**

Quality control samples for some parameters (i.e., Dup/Spike or MS/DMS samples) were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

#### **Subcontracted Analytical Parameters**

The samples were delivered to Sun Labs in Tampa, FL on 11/28/07 for EPA Method 8151 determination. The certified analytical report has been included in its entirety in Appendix A: Subcontracted Analytical Results.

Approved by Craig R. Meyer Date 12/13/07

## Florida DEP Data Qualifiers

- B Results based upon colony counts outside the acceptable range.
- D Measurement was made in the field.
- H Value based on field kit determination; results may not be accurate.
- i The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J Estimated value (one of the following reasons is discussed in the project case narrative).
1. The result may be inaccurate because the surrogate recovery limits have been exceeded.
  2. No known quality control criteria exists for the component.
  3. The reported value failed to meet the established quality control criteria for either precision or accuracy.
  4. The sample matrix interfered with the ability to make any accurate determination (e.g., primary and confirmation results show greater than 40% RPD).
  5. The data is questionable because of improper laboratory or field protocols (e.g., GC/MS Tune did not meet method criteria).
- K Off scale low. The value is less than the lowest calibration standard but greater than the method reporting limit (MRL).
- L Off scale high. The analyte is above the upper limit of the linear calibration range.
- M The MDL/MRL has been elevated because the analyte could not be accurately quantified due to matrix interference.
- N Presumptive evidence of the analyte. Confirmation was not performed.
- Q Sample held beyond the accepted holding time.
- T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only.
- U Indicates that the compound was analyzed for but not detected.
- V Indicates that the analyte was detected in both the sample and the associated method blank.
- Y The laboratory analysis was from an improperly preserved sample.
- Z Too many colonies were present (TNTC). The numeric value represents the filtration volume.

## Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: GeoSyntec Consultants  
Project: Oak Hammock/FQ1144

Service Request: J0705660

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
J0705660-001	MW-22B	11/26/07	09:30
J0705660-002	MW-22C	11/26/07	09:05
J0705660-003	L-1	11/26/07	11:00
J0705660-004	L-2	11/26/07	13:15
J0705660-005	L-3	11/26/07	12:10
J0705660-006	L-4	11/26/07	14:15
J0705660-007	Trip Blank	11/26/07	00:00

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-22B  
**Lab Code:** J0705660-001  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/29/07	11/29/07	JWG0703956	
Vinyl Chloride	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
Bromomethane	ND	U	1.0	0.15	1	11/29/07	11/29/07	JWG0703956	
Chloroethane	ND	U	1.0	0.19	1	11/29/07	11/29/07	JWG0703956	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/29/07	11/29/07	JWG0703956	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/29/07	11/29/07	JWG0703956	
Acetone	ND	U	50	1.9	1	11/29/07	11/29/07	JWG0703956	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/29/07	11/29/07	JWG0703956	
Carbon Disulfide	ND	U	10	1.1	1	11/29/07	11/29/07	JWG0703956	
Methylene Chloride	ND	U	5.0	0.29	1	11/29/07	11/29/07	JWG0703956	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/29/07	11/29/07	JWG0703956	
Acrylonitrile	ND	U	10	6.7	1	11/29/07	11/29/07	JWG0703956	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/29/07	11/29/07	JWG0703956	
Vinyl Acetate	ND	U	10	1.1	1	11/29/07	11/29/07	JWG0703956	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
2-Butanone (MEK)	ND	U	10	0.97	1	11/29/07	11/29/07	JWG0703956	
Bromochloromethane	ND	U	1.0	0.28	1	11/29/07	11/29/07	JWG0703956	
Chloroform	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/29/07	11/29/07	JWG0703956	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/29/07	11/29/07	JWG0703956	
Benzene	ND	U	1.0	0.088	1	11/29/07	11/29/07	JWG0703956	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/29/07	11/29/07	JWG0703956	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/29/07	11/29/07	JWG0703956	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/29/07	11/29/07	JWG0703956	
Dibromomethane	ND	U	1.0	0.22	1	11/29/07	11/29/07	JWG0703956	
Bromodichloromethane	ND	U	1.0	0.099	1	11/29/07	11/29/07	JWG0703956	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/29/07	11/29/07	JWG0703956	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/29/07	11/29/07	JWG0703956	
<b>Toluene</b>	<b>3.7</b>		1.0	0.13	1	11/29/07	11/29/07	JWG0703956	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/29/07	11/29/07	JWG0703956	
Tetrachloroethene (PCE)	ND	UJ	1.0	0.16	1	11/29/07	11/29/07	JWG0703956	J(3)
2-Hexanone	ND	U	25	1.4	1	11/29/07	11/29/07	JWG0703956	
Dibromochloromethane	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	

**Comments:** \_\_\_\_\_

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705660  
 Date Collected: 11/26/2007  
 Date Received: 11/27/2007

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: MW-22B  
 Lab Code: J0705660-001  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
Chlorobenzene	ND	UJ	1.0	0.10	1	11/29/07	11/29/07	JWG0703956	J(3)
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
Ethylbenzene	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
m,p-Xylenes	ND	U	2.0	0.19	1	11/29/07	11/29/07	JWG0703956	
o-Xylene	ND	U	1.0	0.083	1	11/29/07	11/29/07	JWG0703956	
Styrene	ND	U	1.0	0.062	1	11/29/07	11/29/07	JWG0703956	
Bromoform	ND	U	1.0	0.28	1	11/29/07	11/29/07	JWG0703956	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/29/07	11/29/07	JWG0703956	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/29/07	11/29/07	JWG0703956	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/29/07	11/29/07	JWG0703956	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/29/07	11/29/07	JWG0703956	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/29/07	11/29/07	JWG0703956	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/29/07	11/29/07	JWG0703956	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	99	71-122	11/29/07	Acceptable
4-Bromofluorobenzene	104	75-120	11/29/07	Acceptable
Dibromofluoromethane	103	82-116	11/29/07	Acceptable
Toluene-d8	112	88-117	11/29/07	Acceptable

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-22C  
**Lab Code:** J0705660-002  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/29/07	11/29/07	JWG0703956	
Vinyl Chloride	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
Bromomethane	ND	U	1.0	0.15	1	11/29/07	11/29/07	JWG0703956	
Chloroethane	ND	U	1.0	0.19	1	11/29/07	11/29/07	JWG0703956	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/29/07	11/29/07	JWG0703956	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/29/07	11/29/07	JWG0703956	
Acetone	ND	U	50	1.9	1	11/29/07	11/29/07	JWG0703956	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/29/07	11/29/07	JWG0703956	
Carbon Disulfide	ND	U	10	1.1	1	11/29/07	11/29/07	JWG0703956	
Methylene Chloride	ND	U	5.0	0.29	1	11/29/07	11/29/07	JWG0703956	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/29/07	11/29/07	JWG0703956	
Acrylonitrile	ND	U	10	6.7	1	11/29/07	11/29/07	JWG0703956	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/29/07	11/29/07	JWG0703956	
Vinyl Acetate	ND	U	10	1.1	1	11/29/07	11/29/07	JWG0703956	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
2-Butanone (MEK)	ND	U	10	0.97	1	11/29/07	11/29/07	JWG0703956	
Bromochloromethane	ND	U	1.0	0.28	1	11/29/07	11/29/07	JWG0703956	
Chloroform	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/29/07	11/29/07	JWG0703956	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/29/07	11/29/07	JWG0703956	
Benzene	ND	U	1.0	0.088	1	11/29/07	11/29/07	JWG0703956	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/29/07	11/29/07	JWG0703956	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/29/07	11/29/07	JWG0703956	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/29/07	11/29/07	JWG0703956	
Dibromomethane	ND	U	1.0	0.22	1	11/29/07	11/29/07	JWG0703956	
Bromodichloromethane	ND	U	1.0	0.099	1	11/29/07	11/29/07	JWG0703956	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/29/07	11/29/07	JWG0703956	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/29/07	11/29/07	JWG0703956	
<b>Toluene</b>	<b>1.3</b>		1.0	0.13	1	11/29/07	11/29/07	JWG0703956	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/29/07	11/29/07	JWG0703956	
Tetrachloroethene (PCE)	ND	UJ	1.0	0.16	1	11/29/07	11/29/07	JWG0703956	J(3)
2-Hexanone	ND	U	25	1.4	1	11/29/07	11/29/07	JWG0703956	
Dibromochloromethane	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	

Comments:



## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Appendix I Volatile Organic Compounds by GC/MS

**Sample Name:** MW-22C  
**Lab Code:** J0705660-002  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
Chlorobenzene	ND	UJ	1.0	0.10	1	11/29/07	11/29/07	JWG0703956	J(3)
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
Ethylbenzene	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
m,p-Xylenes	ND	U	2.0	0.19	1	11/29/07	11/29/07	JWG0703956	
o-Xylene	ND	U	1.0	0.083	1	11/29/07	11/29/07	JWG0703956	
Styrene	ND	U	1.0	0.062	1	11/29/07	11/29/07	JWG0703956	
Bromoform	ND	U	1.0	0.28	1	11/29/07	11/29/07	JWG0703956	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/29/07	11/29/07	JWG0703956	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/29/07	11/29/07	JWG0703956	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/29/07	11/29/07	JWG0703956	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/29/07	11/29/07	JWG0703956	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/29/07	11/29/07	JWG0703956	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/29/07	11/29/07	JWG0703956	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	100	71-122	11/29/07	Acceptable
4-Bromofluorobenzene	103	75-120	11/29/07	Acceptable
Dibromofluoromethane	102	82-116	11/29/07	Acceptable
Toluene-d8	114	88-117	11/29/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** L-1  
**Lab Code:** J0705660-003  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	50	1.5	10	11/29/07	11/29/07	JWG0703956	
Chloromethane	ND	U	10	1.1	10	11/29/07	11/29/07	JWG0703956	
Vinyl Chloride	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
Bromomethane	ND	U	10	1.5	10	11/29/07	11/29/07	JWG0703956	
Chloroethane	ND	U	10	1.9	10	11/29/07	11/29/07	JWG0703956	
Trichlorofluoromethane	ND	U	10	2.1	10	11/29/07	11/29/07	JWG0703956	
Acrolein	ND	U	500	96	10	11/29/07	11/29/07	JWG0703956	
1,1-Dichloroethene	ND	U	10	1.6	10	11/29/07	11/29/07	JWG0703956	
Acetone	ND	U	500	19	10	11/29/07	11/29/07	JWG0703956	
Iodomethane (Methyl Iodide)	ND	U	50	11	10	11/29/07	11/29/07	JWG0703956	
Carbon Disulfide	ND	U	100	11	10	11/29/07	11/29/07	JWG0703956	
Acetonitrile	ND	U	250	100	10	11/29/07	11/29/07	JWG0703956	
Allyl Chloride	ND	U	50	19	10	11/29/07	11/29/07	JWG0703956	
Methylene Chloride	ND	U	50	2.9	10	11/29/07	11/29/07	JWG0703956	
Acrylonitrile	ND	U	100	67	10	11/29/07	11/29/07	JWG0703956	
trans-1,2-Dichloroethene	ND	U	10	1.1	10	11/29/07	11/29/07	JWG0703956	
1,1-Dichloroethane	ND	U	10	0.80	10	11/29/07	11/29/07	JWG0703956	
Vinyl Acetate	ND	U	100	11	10	11/29/07	11/29/07	JWG0703956	
Chloroprene	ND	U	10	1.1	10	11/29/07	11/29/07	JWG0703956	
cis-1,2-Dichloroethene	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
2,2-Dichloropropane	ND	U	10	1.6	10	11/29/07	11/29/07	JWG0703956	
1,1-Dichloropropene	ND	U	10	1.1	10	11/29/07	11/29/07	JWG0703956	
2-Butanone (MEK)	ND	U	100	9.7	10	11/29/07	11/29/07	JWG0703956	
Propionitrile	ND	U	100	76	10	11/29/07	11/29/07	JWG0703956	
Bromochloromethane	ND	U	10	2.8	10	11/29/07	11/29/07	JWG0703956	
Methacrylonitrile	ND	U	20	12	10	11/29/07	11/29/07	JWG0703956	
Chloroform	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
1,1,1-Trichloroethane (TCA)	ND	U	10	1.7	10	11/29/07	11/29/07	JWG0703956	
Carbon Tetrachloride	ND	U	10	1.4	10	11/29/07	11/29/07	JWG0703956	
<b>Benzene</b>	<b>5.1</b>	<b>I</b>	10	0.88	10	11/29/07	11/29/07	JWG0703956	
1,2-Dichloroethane (EDC)	ND	U	10	1.1	10	11/29/07	11/29/07	JWG0703956	
Isobutyl Alcohol	ND	U	500	230	10	11/29/07	11/29/07	JWG0703956	
Trichloroethene (TCE)	ND	U	10	2.0	10	11/29/07	11/29/07	JWG0703956	
1,2-Dichloropropane	ND	U	10	1.0	10	11/29/07	11/29/07	JWG0703956	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705660  
 Date Collected: 11/26/2007  
 Date Received: 11/27/2007

## Volatile Organic Compounds by GC/MS (Appendix II)

Sample Name: L-1  
 Lab Code: J0705660-003  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dibromomethane	ND	U	10	2.2	10	11/29/07	11/29/07	JWG0703956	
Methyl Methacrylate	ND	U	10	10	10	11/29/07	11/29/07	JWG0703956	
Bromodichloromethane	ND	U	10	0.99	10	11/29/07	11/29/07	JWG0703956	
cis-1,3-Dichloropropene	ND	U	10	1.4	10	11/29/07	11/29/07	JWG0703956	
4-Methyl-2-pentanone (MIBK)	ND	U	250	9.4	10	11/29/07	11/29/07	JWG0703956	
Toluene	ND	U	10	1.3	10	11/29/07	11/29/07	JWG0703956	
trans-1,3-Dichloropropene	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
Ethyl Methacrylate	ND	U	10	10	10	11/29/07	11/29/07	JWG0703956	
1,1,2-Trichloroethane	ND	U	10	1.4	10	11/29/07	11/29/07	JWG0703956	
Tetrachloroethene (PCE)	ND	UJ	10	1.6	10	11/29/07	11/29/07	JWG0703956	J(3)
1,3-Dichloropropane	ND	U	10	1.7	10	11/29/07	11/29/07	JWG0703956	
2-Hexanone	ND	U	250	14	10	11/29/07	11/29/07	JWG0703956	
Dibromochloromethane	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
1,2-Dibromoethane (EDB)	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
Chlorobenzene	ND	UJ	10	1.0	10	11/29/07	11/29/07	JWG0703956	J(3)
1,1,1,2-Tetrachloroethane	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
Ethylbenzene	16		10	1.2	10	11/29/07	11/29/07	JWG0703956	
m,p-Xylenes	6.5	I	20	1.9	10	11/29/07	11/29/07	JWG0703956	
o-Xylene	ND	U	10	0.83	10	11/29/07	11/29/07	JWG0703956	
Styrene	ND	U	10	0.62	10	11/29/07	11/29/07	JWG0703956	
Bromoform	ND	U	10	2.8	10	11/29/07	11/29/07	JWG0703956	
1,1,2,2-Tetrachloroethane	ND	U	10	1.6	10	11/29/07	11/29/07	JWG0703956	
1,2,3-Trichloropropane	ND	U	10	2.4	10	11/29/07	11/29/07	JWG0703956	
trans-1,4-Dichloro-2-butene	ND	UJ	200	32	10	11/29/07	11/29/07	JWG0703956	J(3)
1,3-Dichlorobenzene	ND	U	10	1.4	10	11/29/07	11/29/07	JWG0703956	
1,4-Dichlorobenzene	3.0	I	10	0.85	10	11/29/07	11/29/07	JWG0703956	
1,2-Dichlorobenzene	ND	U	10	0.80	10	11/29/07	11/29/07	JWG0703956	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	20	8.5	10	11/29/07	11/29/07	JWG0703956	
1,2,4-Trichlorobenzene	ND	U	100	2.0	10	11/29/07	11/29/07	JWG0703956	
Hexachlorobutadiene	ND	U	100	2.5	10	11/29/07	11/29/07	JWG0703956	
Naphthalene	ND	U	100	1.1	10	11/29/07	11/29/07	JWG0703956	

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** L-1  
**Lab Code:** J0705660-003

**Units:** ug/L  
**Basis:** NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	98	71-122	11/29/07	Acceptable
4-Bromofluorobenzene	104	75-120	11/29/07	Acceptable
Dibromofluoromethane	102	82-116	11/29/07	Acceptable
Toluene-d8	114	88-117	11/29/07	Acceptable

**Comments:** \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** L-2  
**Lab Code:** J0705660-004  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	50	1.5	10	11/29/07	11/29/07	JWG0703956	
Chloromethane	ND	U	10	1.1	10	11/29/07	11/29/07	JWG0703956	
Vinyl Chloride	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
Bromomethane	ND	U	10	1.5	10	11/29/07	11/29/07	JWG0703956	
Chloroethane	ND	U	10	1.9	10	11/29/07	11/29/07	JWG0703956	
Trichlorofluoromethane	ND	U	10	2.1	10	11/29/07	11/29/07	JWG0703956	
Acrolein	ND	U	500	96	10	11/29/07	11/29/07	JWG0703956	
1,1-Dichloroethene	ND	U	10	1.6	10	11/29/07	11/29/07	JWG0703956	
Acetone	ND	U	500	19	10	11/29/07	11/29/07	JWG0703956	
Iodomethane (Methyl Iodide)	ND	U	50	11	10	11/29/07	11/29/07	JWG0703956	
Carbon Disulfide	ND	U	100	11	10	11/29/07	11/29/07	JWG0703956	
Acetonitrile	ND	U	250	100	10	11/29/07	11/29/07	JWG0703956	
Allyl Chloride	ND	U	50	19	10	11/29/07	11/29/07	JWG0703956	
Methylene Chloride	ND	U	50	2.9	10	11/29/07	11/29/07	JWG0703956	
Acrylonitrile	ND	U	100	67	10	11/29/07	11/29/07	JWG0703956	
trans-1,2-Dichloroethene	ND	U	10	1.1	10	11/29/07	11/29/07	JWG0703956	
1,1-Dichloroethane	ND	U	10	0.80	10	11/29/07	11/29/07	JWG0703956	
Vinyl Acetate	ND	U	100	11	10	11/29/07	11/29/07	JWG0703956	
Chloroprene	ND	U	10	1.1	10	11/29/07	11/29/07	JWG0703956	
cis-1,2-Dichloroethene	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
2,2-Dichloropropane	ND	U	10	1.6	10	11/29/07	11/29/07	JWG0703956	
1,1-Dichloropropene	ND	U	10	1.1	10	11/29/07	11/29/07	JWG0703956	
2-Butanone (MEK)	ND	U	100	9.7	10	11/29/07	11/29/07	JWG0703956	
Propionitrile	ND	U	100	76	10	11/29/07	11/29/07	JWG0703956	
Bromochloromethane	ND	U	10	2.8	10	11/29/07	11/29/07	JWG0703956	
Methacrylonitrile	ND	U	20	12	10	11/29/07	11/29/07	JWG0703956	
Chloroform	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
1,1,1-Trichloroethane (TCA)	ND	U	10	1.7	10	11/29/07	11/29/07	JWG0703956	
Carbon Tetrachloride	ND	U	10	1.4	10	11/29/07	11/29/07	JWG0703956	
<b>Benzene</b>	<b>11</b>		10	0.88	10	11/29/07	11/29/07	JWG0703956	
1,2-Dichloroethane (EDC)	ND	U	10	1.1	10	11/29/07	11/29/07	JWG0703956	
Isobutyl Alcohol	ND	U	500	230	10	11/29/07	11/29/07	JWG0703956	
Trichloroethene (TCE)	ND	U	10	2.0	10	11/29/07	11/29/07	JWG0703956	
1,2-Dichloropropane	ND	U	10	1.0	10	11/29/07	11/29/07	JWG0703956	

**Comments:** \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** L-2  
**Lab Code:** J0705660-004  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dibromomethane	ND	U	10	2.2	10	11/29/07	11/29/07	JWG0703956	
Methyl Methacrylate	ND	U	10	10	10	11/29/07	11/29/07	JWG0703956	
Bromodichloromethane	ND	U	10	0.99	10	11/29/07	11/29/07	JWG0703956	
cis-1,3-Dichloropropene	ND	U	10	1.4	10	11/29/07	11/29/07	JWG0703956	
4-Methyl-2-pentanone (MIBK)	ND	U	250	9.4	10	11/29/07	11/29/07	JWG0703956	
<b>Toluene</b>	<b>51</b>		10	1.3	10	11/29/07	11/29/07	JWG0703956	
trans-1,3-Dichloropropene	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
Ethyl Methacrylate	ND	U	10	10	10	11/29/07	11/29/07	JWG0703956	
1,1,2-Trichloroethane	ND	U	10	1.4	10	11/29/07	11/29/07	JWG0703956	
Tetrachloroethene (PCE)	ND	UJ	10	1.6	10	11/29/07	11/29/07	JWG0703956	J(3)
1,3-Dichloropropane	ND	U	10	1.7	10	11/29/07	11/29/07	JWG0703956	
2-Hexanone	ND	U	250	14	10	11/29/07	11/29/07	JWG0703956	
Dibromochloromethane	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
1,2-Dibromoethane (EDB)	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
Chlorobenzene	ND	UJ	10	1.0	10	11/29/07	11/29/07	JWG0703956	J(3)
1,1,1,2-Tetrachloroethane	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
<b>Ethylbenzene</b>	<b>44</b>		10	1.2	10	11/29/07	11/29/07	JWG0703956	
<b>m,p-Xylenes</b>	<b>55</b>		20	1.9	10	11/29/07	11/29/07	JWG0703956	
<b>o-Xylene</b>	<b>26</b>		10	0.83	10	11/29/07	11/29/07	JWG0703956	
Styrene	ND	U	10	0.62	10	11/29/07	11/29/07	JWG0703956	
Bromoform	ND	U	10	2.8	10	11/29/07	11/29/07	JWG0703956	
1,1,2,2-Tetrachloroethane	ND	U	10	1.6	10	11/29/07	11/29/07	JWG0703956	
1,2,3-Trichloropropane	ND	U	10	2.4	10	11/29/07	11/29/07	JWG0703956	
trans-1,4-Dichloro-2-butene	ND	UJ	200	32	10	11/29/07	11/29/07	JWG0703956	J(3)
1,3-Dichlorobenzene	ND	U	10	1.4	10	11/29/07	11/29/07	JWG0703956	
<b>1,4-Dichlorobenzene</b>	<b>5.2</b>	<b>I</b>	10	0.85	10	11/29/07	11/29/07	JWG0703956	
1,2-Dichlorobenzene	ND	U	10	0.80	10	11/29/07	11/29/07	JWG0703956	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	20	8.5	10	11/29/07	11/29/07	JWG0703956	
1,2,4-Trichlorobenzene	ND	U	100	2.0	10	11/29/07	11/29/07	JWG0703956	
Hexachlorobutadiene	ND	U	100	2.5	10	11/29/07	11/29/07	JWG0703956	
Naphthalene	ND	U	100	1.1	10	11/29/07	11/29/07	JWG0703956	

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** L-2  
**Lab Code:** J0705660-004

**Units:** ug/L  
**Basis:** NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	99	71-122	11/29/07	Acceptable
4-Bromofluorobenzene	103	75-120	11/29/07	Acceptable
Dibromofluoromethane	102	82-116	11/29/07	Acceptable
Toluene-d8	114	88-117	11/29/07	Acceptable

Comments: \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** L-3  
**Lab Code:** J0705660-005  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	50	1.5	10	11/29/07	11/29/07	JWG0703956	
Chloromethane	ND	U	10	1.1	10	11/29/07	11/29/07	JWG0703956	
<b>Vinyl Chloride</b>	<b>7.6</b>	<b>I</b>	10	1.2	10	11/29/07	11/29/07	JWG0703956	
Bromomethane	ND	U	10	1.5	10	11/29/07	11/29/07	JWG0703956	
Chloroethane	ND	U	10	1.9	10	11/29/07	11/29/07	JWG0703956	
Trichlorofluoromethane	ND	U	10	2.1	10	11/29/07	11/29/07	JWG0703956	
Acrolein	ND	U	500	96	10	11/29/07	11/29/07	JWG0703956	
<b>1,1-Dichloroethene</b>	<b>12</b>		10	1.6	10	11/29/07	11/29/07	JWG0703956	
<b>Acetone</b>	<b>12000</b>		5000	190	100	11/30/07	11/30/07	JWG0703966	
Iodomethane (Methyl Iodide)	ND	U	50	11	10	11/29/07	11/29/07	JWG0703956	
Carbon Disulfide	ND	U	100	11	10	11/29/07	11/29/07	JWG0703956	
Acetonitrile	ND	U	250	100	10	11/29/07	11/29/07	JWG0703956	
Allyl Chloride	ND	U	50	19	10	11/29/07	11/29/07	JWG0703956	
<b>Methylene Chloride</b>	<b>5.2</b>	<b>I</b>	50	2.9	10	11/29/07	11/29/07	JWG0703956	
Acrylonitrile	ND	U	100	67	10	11/29/07	11/29/07	JWG0703956	
trans-1,2-Dichloroethene	ND	U	10	1.1	10	11/29/07	11/29/07	JWG0703956	
1,1-Dichloroethane	ND	U	10	0.80	10	11/29/07	11/29/07	JWG0703956	
Vinyl Acetate	ND	U	100	11	10	11/29/07	11/29/07	JWG0703956	
Chloroprene	ND	U	10	1.1	10	11/29/07	11/29/07	JWG0703956	
<b>cis-1,2-Dichloroethene</b>	<b>9.9</b>	<b>I</b>	10	1.2	10	11/29/07	11/29/07	JWG0703956	
2,2-Dichloropropane	ND	U	10	1.6	10	11/29/07	11/29/07	JWG0703956	
1,1-Dichloropropene	ND	U	10	1.1	10	11/29/07	11/29/07	JWG0703956	
<b>2-Butanone (MEK)</b>	<b>25000</b>		1000	97	100	11/30/07	11/30/07	JWG0703966	
Propionitrile	ND	U	100	76	10	11/29/07	11/29/07	JWG0703956	
Bromochloromethane	ND	U	10	2.8	10	11/29/07	11/29/07	JWG0703956	
Methacrylonitrile	ND	U	20	12	10	11/29/07	11/29/07	JWG0703956	
Chloroform	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
1,1,1-Trichloroethane (TCA)	ND	U	10	1.7	10	11/29/07	11/29/07	JWG0703956	
Carbon Tetrachloride	ND	U	10	1.4	10	11/29/07	11/29/07	JWG0703956	
<b>Benzene</b>	<b>20</b>		10	0.88	10	11/29/07	11/29/07	JWG0703956	
<b>1,2-Dichloroethane (EDC)</b>	<b>22</b>		10	1.1	10	11/29/07	11/29/07	JWG0703956	
Isobutyl Alcohol	ND	U	500	230	10	11/29/07	11/29/07	JWG0703956	
Trichloroethene (TCE)	ND	U	10	2.0	10	11/29/07	11/29/07	JWG0703956	
1,2-Dichloropropane	ND	U	10	1.0	10	11/29/07	11/29/07	JWG0703956	

Comments:



## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** L-3  
**Lab Code:** J0705660-005  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dibromomethane	ND	U	10	2.2	10	11/29/07	11/29/07	JWG0703956	
Methyl Methacrylate	ND	U	10	10	10	11/29/07	11/29/07	JWG0703956	
Bromodichloromethane	ND	U	10	0.99	10	11/29/07	11/29/07	JWG0703956	
cis-1,3-Dichloropropene	ND	U	10	1.4	10	11/29/07	11/29/07	JWG0703956	
4-Methyl-2-pentanone (MIBK)	420		250	9.4	10	11/29/07	11/29/07	JWG0703956	
Toluene	930		10	1.3	10	11/29/07	11/29/07	JWG0703956	
trans-1,3-Dichloropropene	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
Ethyl Methacrylate	ND	U	10	10	10	11/29/07	11/29/07	JWG0703956	
1,1,2-Trichloroethane	ND	U	10	1.4	10	11/29/07	11/29/07	JWG0703956	
Tetrachloroethene (PCE)	ND	UJ	10	1.6	10	11/29/07	11/29/07	JWG0703956	J(3)
1,3-Dichloropropane	ND	U	10	1.7	10	11/29/07	11/29/07	JWG0703956	
2-Hexanone	45	I	250	14	10	11/29/07	11/29/07	JWG0703956	
Dibromochloromethane	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
1,2-Dibromoethane (EDB)	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
Chlorobenzene	ND	UJ	10	1.0	10	11/29/07	11/29/07	JWG0703956	J(3)
1,1,1,2-Tetrachloroethane	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
Ethylbenzene	48		10	1.2	10	11/29/07	11/29/07	JWG0703956	
m,p-Xylenes	56		20	1.9	10	11/29/07	11/29/07	JWG0703956	
o-Xylene	22		10	0.83	10	11/29/07	11/29/07	JWG0703956	
Styrene	ND	U	10	0.62	10	11/29/07	11/29/07	JWG0703956	
Bromoform	ND	U	10	2.8	10	11/29/07	11/29/07	JWG0703956	
1,1,2,2-Tetrachloroethane	ND	U	10	1.6	10	11/29/07	11/29/07	JWG0703956	
1,2,3-Trichloropropane	ND	U	10	2.4	10	11/29/07	11/29/07	JWG0703956	
trans-1,4-Dichloro-2-butene	ND	UJ	200	32	10	11/29/07	11/29/07	JWG0703956	J(3)
1,3-Dichlorobenzene	ND	U	10	1.4	10	11/29/07	11/29/07	JWG0703956	
1,4-Dichlorobenzene	3.2	I	10	0.85	10	11/29/07	11/29/07	JWG0703956	
1,2-Dichlorobenzene	ND	U	10	0.80	10	11/29/07	11/29/07	JWG0703956	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	20	8.5	10	11/29/07	11/29/07	JWG0703956	
1,2,4-Trichlorobenzene	ND	U	100	2.0	10	11/29/07	11/29/07	JWG0703956	
Hexachlorobutadiene	ND	U	100	2.5	10	11/29/07	11/29/07	JWG0703956	
Naphthalene	ND	U	100	1.1	10	11/29/07	11/29/07	JWG0703956	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** L-3  
**Lab Code:** J0705660-005

**Units:** ug/L  
**Basis:** NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	101	71-122	11/29/07	Acceptable
4-Bromofluorobenzene	103	75-120	11/29/07	Acceptable
Dibromofluoromethane	103	82-116	11/29/07	Acceptable
Toluene-d8	116	88-117	11/29/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** L-4  
**Lab Code:** J0705660-006  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	50	1.5	10	11/29/07	11/29/07	JWG0703956	
Chloromethane	ND	U	10	1.1	10	11/29/07	11/29/07	JWG0703956	
Vinyl Chloride	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
Bromomethane	ND	U	10	1.5	10	11/29/07	11/29/07	JWG0703956	
Chloroethane	ND	U	10	1.9	10	11/29/07	11/29/07	JWG0703956	
Trichlorofluoromethane	ND	U	10	2.1	10	11/29/07	11/29/07	JWG0703956	
Acrolein	ND	U	500	96	10	11/29/07	11/29/07	JWG0703956	
1,1-Dichloroethene	ND	U	10	1.6	10	11/29/07	11/29/07	JWG0703956	
<b>Acetone</b>	<b>63</b>	<b>I</b>	500	19	10	11/29/07	11/29/07	JWG0703956	
Iodomethane (Methyl Iodide)	ND	U	50	11	10	11/29/07	11/29/07	JWG0703956	
Carbon Disulfide	ND	U	100	11	10	11/29/07	11/29/07	JWG0703956	
Acetonitrile	ND	U	250	100	10	11/29/07	11/29/07	JWG0703956	
Allyl Chloride	ND	U	50	19	10	11/29/07	11/29/07	JWG0703956	
Methylene Chloride	ND	U	50	2.9	10	11/29/07	11/29/07	JWG0703956	
Acrylonitrile	ND	U	100	67	10	11/29/07	11/29/07	JWG0703956	
trans-1,2-Dichloroethene	ND	U	10	1.1	10	11/29/07	11/29/07	JWG0703956	
1,1-Dichloroethane	ND	U	10	0.80	10	11/29/07	11/29/07	JWG0703956	
Vinyl Acetate	ND	U	100	11	10	11/29/07	11/29/07	JWG0703956	
Chloroprene	ND	U	10	1.1	10	11/29/07	11/29/07	JWG0703956	
cis-1,2-Dichloroethene	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
2,2-Dichloropropane	ND	U	10	1.6	10	11/29/07	11/29/07	JWG0703956	
1,1-Dichloropropene	ND	U	10	1.1	10	11/29/07	11/29/07	JWG0703956	
2-Butanone (MEK)	ND	U	100	9.7	10	11/29/07	11/29/07	JWG0703956	
Propionitrile	ND	U	100	76	10	11/29/07	11/29/07	JWG0703956	
Bromochloromethane	ND	U	10	2.8	10	11/29/07	11/29/07	JWG0703956	
Methacrylonitrile	ND	U	20	12	10	11/29/07	11/29/07	JWG0703956	
Chloroform	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
1,1,1-Trichloroethane (TCA)	ND	U	10	1.7	10	11/29/07	11/29/07	JWG0703956	
Carbon Tetrachloride	ND	U	10	1.4	10	11/29/07	11/29/07	JWG0703956	
<b>Benzene</b>	<b>5.4</b>	<b>I</b>	10	0.88	10	11/29/07	11/29/07	JWG0703956	
1,2-Dichloroethane (EDC)	ND	U	10	1.1	10	11/29/07	11/29/07	JWG0703956	
Isobutyl Alcohol	ND	U	500	230	10	11/29/07	11/29/07	JWG0703956	
Trichloroethene (TCE)	ND	U	10	2.0	10	11/29/07	11/29/07	JWG0703956	
1,2-Dichloropropane	ND	U	10	1.0	10	11/29/07	11/29/07	JWG0703956	

Comments: \_\_\_\_\_

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705660  
 Date Collected: 11/26/2007  
 Date Received: 11/27/2007

## Volatile Organic Compounds by GC/MS (Appendix II)

Sample Name: L-4  
 Lab Code: J0705660-006  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dibromomethane	ND	U	10	2.2	10	11/29/07	11/29/07	JWG0703956	
Methyl Methacrylate	ND	U	10	10	10	11/29/07	11/29/07	JWG0703956	
Bromodichloromethane	ND	U	10	0.99	10	11/29/07	11/29/07	JWG0703956	
cis-1,3-Dichloropropene	ND	U	10	1.4	10	11/29/07	11/29/07	JWG0703956	
4-Methyl-2-pentanone (MIBK)	ND	U	250	9.4	10	11/29/07	11/29/07	JWG0703956	
<b>Toluene</b>	<b>44</b>		10	1.3	10	11/29/07	11/29/07	JWG0703956	
trans-1,3-Dichloropropene	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
Ethyl Methacrylate	ND	U	10	10	10	11/29/07	11/29/07	JWG0703956	
1,1,2-Trichloroethane	ND	U	10	1.4	10	11/29/07	11/29/07	JWG0703956	
Tetrachloroethene (PCE)	ND	UJ	10	1.6	10	11/29/07	11/29/07	JWG0703956	J(3)
1,3-Dichloropropane	ND	U	10	1.7	10	11/29/07	11/29/07	JWG0703956	
2-Hexanone	ND	U	250	14	10	11/29/07	11/29/07	JWG0703956	
Dibromochloromethane	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
1,2-Dibromoethane (EDB)	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
Chlorobenzene	ND	UJ	10	1.0	10	11/29/07	11/29/07	JWG0703956	J(3)
1,1,1,2-Tetrachloroethane	ND	U	10	1.2	10	11/29/07	11/29/07	JWG0703956	
<b>Ethylbenzene</b>	<b>23</b>		10	1.2	10	11/29/07	11/29/07	JWG0703956	
<b>m,p-Xylenes</b>	<b>40</b>		20	1.9	10	11/29/07	11/29/07	JWG0703956	
<b>o-Xylene</b>	<b>19</b>		10	0.83	10	11/29/07	11/29/07	JWG0703956	
Styrene	ND	U	10	0.62	10	11/29/07	11/29/07	JWG0703956	
Bromoform	ND	U	10	2.8	10	11/29/07	11/29/07	JWG0703956	
1,1,2,2-Tetrachloroethane	ND	U	10	1.6	10	11/29/07	11/29/07	JWG0703956	
1,2,3-Trichloropropane	ND	U	10	2.4	10	11/29/07	11/29/07	JWG0703956	
trans-1,4-Dichloro-2-butene	ND	UJ	200	32	10	11/29/07	11/29/07	JWG0703956	J(3)
1,3-Dichlorobenzene	ND	U	10	1.4	10	11/29/07	11/29/07	JWG0703956	
<b>1,4-Dichlorobenzene</b>	<b>6.8</b>	I	10	0.85	10	11/29/07	11/29/07	JWG0703956	
1,2-Dichlorobenzene	ND	U	10	0.80	10	11/29/07	11/29/07	JWG0703956	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	20	8.5	10	11/29/07	11/29/07	JWG0703956	
1,2,4-Trichlorobenzene	ND	U	100	2.0	10	11/29/07	11/29/07	JWG0703956	
Hexachlorobutadiene	ND	U	100	2.5	10	11/29/07	11/29/07	JWG0703956	
<b>Naphthalene</b>	<b>5.8</b>	I	100	1.1	10	11/29/07	11/29/07	JWG0703956	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** L-4  
**Lab Code:** J0705660-006

**Units:** ug/L  
**Basis:** NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	99	71-122	11/29/07	Acceptable
4-Bromofluorobenzene	102	75-120	11/29/07	Acceptable
Dibromofluoromethane	102	82-116	11/29/07	Acceptable
Toluene-d8	114	88-117	11/29/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705660  
 Date Collected: 11/26/2007  
 Date Received: 11/27/2007

## Volatile Organic Compounds by GC/MS (Appendix II)

Sample Name: Trip Blank  
 Lab Code: J0705660-007  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	5.0	0.15	1	11/29/07	11/29/07	JWG0703956	
Chloromethane	ND	U	1.0	0.11	1	11/29/07	11/29/07	JWG0703956	
Vinyl Chloride	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
Bromomethane	ND	U	1.0	0.15	1	11/29/07	11/29/07	JWG0703956	
Chloroethane	ND	U	1.0	0.19	1	11/29/07	11/29/07	JWG0703956	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/29/07	11/29/07	JWG0703956	
Acrolein	ND	U	50	9.6	1	11/29/07	11/29/07	JWG0703956	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/29/07	11/29/07	JWG0703956	
Acetone	ND	U	50	1.9	1	11/29/07	11/29/07	JWG0703956	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/29/07	11/29/07	JWG0703956	
Carbon Disulfide	ND	U	10	1.1	1	11/29/07	11/29/07	JWG0703956	
Acetonitrile	ND	U	25	10	1	11/29/07	11/29/07	JWG0703956	
Allyl Chloride	ND	U	5.0	1.9	1	11/29/07	11/29/07	JWG0703956	
Methylene Chloride	ND	U	5.0	0.29	1	11/29/07	11/29/07	JWG0703956	
Acrylonitrile	ND	U	10	6.7	1	11/29/07	11/29/07	JWG0703956	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/29/07	11/29/07	JWG0703956	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/29/07	11/29/07	JWG0703956	
Vinyl Acetate	ND	U	10	1.1	1	11/29/07	11/29/07	JWG0703956	
Chloroprene	ND	U	1.0	0.11	1	11/29/07	11/29/07	JWG0703956	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
2,2-Dichloropropane	ND	U	1.0	0.16	1	11/29/07	11/29/07	JWG0703956	
1,1-Dichloropropene	ND	U	1.0	0.11	1	11/29/07	11/29/07	JWG0703956	
2-Butanone (MEK)	ND	U	10	0.97	1	11/29/07	11/29/07	JWG0703956	
Propionitrile	ND	U	10	7.6	1	11/29/07	11/29/07	JWG0703956	
Bromochloromethane	ND	U	1.0	0.28	1	11/29/07	11/29/07	JWG0703956	
Methacrylonitrile	ND	U	2.0	1.2	1	11/29/07	11/29/07	JWG0703956	
Chloroform	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/29/07	11/29/07	JWG0703956	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/29/07	11/29/07	JWG0703956	
Benzene	ND	U	1.0	0.088	1	11/29/07	11/29/07	JWG0703956	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/29/07	11/29/07	JWG0703956	
Isobutyl Alcohol	ND	U	50	23	1	11/29/07	11/29/07	JWG0703956	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/29/07	11/29/07	JWG0703956	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/29/07	11/29/07	JWG0703956	

Comments:

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705660  
 Date Collected: 11/26/2007  
 Date Received: 11/27/2007

## Volatile Organic Compounds by GC/MS (Appendix II)

Sample Name: Trip Blank  
 Lab Code: J0705660-007  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dibromomethane	ND	U	1.0	0.22	1	11/29/07	11/29/07	JWG0703956	
Methyl Methacrylate	ND	U	1.0	1.0	1	11/29/07	11/29/07	JWG0703956	
Bromodichloromethane	ND	U	1.0	0.099	1	11/29/07	11/29/07	JWG0703956	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/29/07	11/29/07	JWG0703956	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/29/07	11/29/07	JWG0703956	
Toluene	ND	U	1.0	0.13	1	11/29/07	11/29/07	JWG0703956	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
Ethyl Methacrylate	ND	U	1.0	1.0	1	11/29/07	11/29/07	JWG0703956	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/29/07	11/29/07	JWG0703956	
Tetrachloroethene (PCE)	ND	UJ	1.0	0.16	1	11/29/07	11/29/07	JWG0703956	J(3)
1,3-Dichloropropane	ND	U	1.0	0.17	1	11/29/07	11/29/07	JWG0703956	
2-Hexanone	ND	U	25	1.4	1	11/29/07	11/29/07	JWG0703956	
Dibromochloromethane	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
Chlorobenzene	ND	UJ	1.0	0.10	1	11/29/07	11/29/07	JWG0703956	J(3)
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
Ethylbenzene	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
m,p-Xylenes	ND	U	2.0	0.19	1	11/29/07	11/29/07	JWG0703956	
o-Xylene	ND	U	1.0	0.083	1	11/29/07	11/29/07	JWG0703956	
Styrene	ND	U	1.0	0.062	1	11/29/07	11/29/07	JWG0703956	
Bromoform	ND	U	1.0	0.28	1	11/29/07	11/29/07	JWG0703956	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/29/07	11/29/07	JWG0703956	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/29/07	11/29/07	JWG0703956	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/29/07	11/29/07	JWG0703956	J(3)
1,3-Dichlorobenzene	ND	U	1.0	0.14	1	11/29/07	11/29/07	JWG0703956	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/29/07	11/29/07	JWG0703956	
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/29/07	11/29/07	JWG0703956	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/29/07	11/29/07	JWG0703956	
1,2,4-Trichlorobenzene	ND	U	10	0.20	1	11/29/07	11/29/07	JWG0703956	
Hexachlorobutadiene	ND	U	10	0.25	1	11/29/07	11/29/07	JWG0703956	
Naphthalene	ND	U	10	0.11	1	11/29/07	11/29/07	JWG0703956	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** Trip Blank  
**Lab Code:** J0705660-007

**Units:** ug/L  
**Basis:** NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	100	71-122	11/29/07	Acceptable
4-Bromofluorobenzene	104	75-120	11/29/07	Acceptable
Dibromofluoromethane	101	82-116	11/29/07	Acceptable
Toluene-d8	114	88-117	11/29/07	Acceptable

**Comments:** \_\_\_\_\_



## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705660  
 Date Collected: NA  
 Date Received: NA

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: Method Blank  
 Lab Code: JWG0703956-4  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	0.11	1	11/29/07	11/29/07	JWG0703956	
Vinyl Chloride	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
Bromomethane	ND	U	1.0	0.15	1	11/29/07	11/29/07	JWG0703956	
Chloroethane	ND	U	1.0	0.19	1	11/29/07	11/29/07	JWG0703956	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/29/07	11/29/07	JWG0703956	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/29/07	11/29/07	JWG0703956	
Acetone	ND	U	50	1.9	1	11/29/07	11/29/07	JWG0703956	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/29/07	11/29/07	JWG0703956	
Carbon Disulfide	ND	U	10	1.1	1	11/29/07	11/29/07	JWG0703956	
Methylene Chloride	ND	U	5.0	0.29	1	11/29/07	11/29/07	JWG0703956	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/29/07	11/29/07	JWG0703956	
Acrylonitrile	ND	U	10	6.7	1	11/29/07	11/29/07	JWG0703956	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/29/07	11/29/07	JWG0703956	
Vinyl Acetate	ND	U	10	1.1	1	11/29/07	11/29/07	JWG0703956	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
2-Butanone (MEK)	ND	U	10	0.97	1	11/29/07	11/29/07	JWG0703956	
Bromochloromethane	ND	U	1.0	0.28	1	11/29/07	11/29/07	JWG0703956	
Chloroform	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/29/07	11/29/07	JWG0703956	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/29/07	11/29/07	JWG0703956	
Benzene	ND	U	1.0	0.088	1	11/29/07	11/29/07	JWG0703956	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/29/07	11/29/07	JWG0703956	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/29/07	11/29/07	JWG0703956	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/29/07	11/29/07	JWG0703956	
Dibromomethane	ND	U	1.0	0.22	1	11/29/07	11/29/07	JWG0703956	
Bromodichloromethane	ND	U	1.0	0.099	1	11/29/07	11/29/07	JWG0703956	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/29/07	11/29/07	JWG0703956	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/29/07	11/29/07	JWG0703956	
Toluene	ND	U	1.0	0.13	1	11/29/07	11/29/07	JWG0703956	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/29/07	11/29/07	JWG0703956	
Tetrachloroethene (PCE)	ND	UJ	1.0	0.16	1	11/29/07	11/29/07	JWG0703956	J(3)
2-Hexanone	ND	U	25	1.4	1	11/29/07	11/29/07	JWG0703956	
Dibromochloromethane	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705660  
 Date Collected: NA  
 Date Received: NA

## Appendix I Volatile Organic Compounds by GC/MS

Sample Name: Method Blank  
 Lab Code: JWG0703956-4  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
Chlorobenzene	ND	UJ	1.0	0.10	1	11/29/07	11/29/07	JWG0703956	J(3)
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
Ethylbenzene	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
m,p-Xylenes	ND	U	2.0	0.19	1	11/29/07	11/29/07	JWG0703956	
o-Xylene	ND	U	1.0	0.083	1	11/29/07	11/29/07	JWG0703956	
Styrene	ND	U	1.0	0.062	1	11/29/07	11/29/07	JWG0703956	
Bromoform	ND	U	1.0	0.28	1	11/29/07	11/29/07	JWG0703956	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/29/07	11/29/07	JWG0703956	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/29/07	11/29/07	JWG0703956	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/29/07	11/29/07	JWG0703956	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/29/07	11/29/07	JWG0703956	J(3)
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/29/07	11/29/07	JWG0703956	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/29/07	11/29/07	JWG0703956	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	99	71-122	11/29/07	Acceptable
4-Bromofluorobenzene	103	75-120	11/29/07	Acceptable
Dibromofluoromethane	102	82-116	11/29/07	Acceptable
Toluene-d8	115	88-117	11/29/07	Acceptable

Comments: \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** NA  
**Date Received:** NA

## Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** Method Blank  
**Lab Code:** JWG0703956-4  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	5.0	0.15	1	11/29/07	11/29/07	JWG0703956	
Chloromethane	ND	U	1.0	0.11	1	11/29/07	11/29/07	JWG0703956	
Vinyl Chloride	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
Bromomethane	ND	U	1.0	0.15	1	11/29/07	11/29/07	JWG0703956	
Chloroethane	ND	U	1.0	0.19	1	11/29/07	11/29/07	JWG0703956	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/29/07	11/29/07	JWG0703956	
Acrolein	ND	U	50	9.6	1	11/29/07	11/29/07	JWG0703956	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/29/07	11/29/07	JWG0703956	
Acetone	ND	U	50	1.9	1	11/29/07	11/29/07	JWG0703956	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/29/07	11/29/07	JWG0703956	
Carbon Disulfide	ND	U	10	1.1	1	11/29/07	11/29/07	JWG0703956	
Acetonitrile	ND	U	25	10	1	11/29/07	11/29/07	JWG0703956	
Allyl Chloride	ND	U	5.0	1.9	1	11/29/07	11/29/07	JWG0703956	
Methylene Chloride	ND	U	5.0	0.29	1	11/29/07	11/29/07	JWG0703956	
Acrylonitrile	ND	U	10	6.7	1	11/29/07	11/29/07	JWG0703956	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/29/07	11/29/07	JWG0703956	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/29/07	11/29/07	JWG0703956	
Vinyl Acetate	ND	U	10	1.1	1	11/29/07	11/29/07	JWG0703956	
Chloroprene	ND	U	1.0	0.11	1	11/29/07	11/29/07	JWG0703956	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
2,2-Dichloropropane	ND	U	1.0	0.16	1	11/29/07	11/29/07	JWG0703956	
1,1-Dichloropropene	ND	U	1.0	0.11	1	11/29/07	11/29/07	JWG0703956	
2-Butanone (MEK)	ND	U	10	0.97	1	11/29/07	11/29/07	JWG0703956	
Propionitrile	ND	U	10	7.6	1	11/29/07	11/29/07	JWG0703956	
Bromochloromethane	ND	U	1.0	0.28	1	11/29/07	11/29/07	JWG0703956	
Methacrylonitrile	ND	U	2.0	1.2	1	11/29/07	11/29/07	JWG0703956	
Chloroform	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/29/07	11/29/07	JWG0703956	
Carbon Tetrachloride	ND	U	1.0	0.14	1	11/29/07	11/29/07	JWG0703956	
Benzene	ND	U	1.0	0.088	1	11/29/07	11/29/07	JWG0703956	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/29/07	11/29/07	JWG0703956	
Isobutyl Alcohol	ND	U	50	23	1	11/29/07	11/29/07	JWG0703956	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/29/07	11/29/07	JWG0703956	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/29/07	11/29/07	JWG0703956	

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** NA  
**Date Received:** NA

## Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** Method Blank  
**Lab Code:** JWG0703956-4  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dibromomethane	ND	U	1.0	0.22	1	11/29/07	11/29/07	JWG0703956	
Methyl Methacrylate	ND	U	1.0	1.0	1	11/29/07	11/29/07	JWG0703956	
Bromodichloromethane	ND	U	1.0	0.099	1	11/29/07	11/29/07	JWG0703956	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/29/07	11/29/07	JWG0703956	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/29/07	11/29/07	JWG0703956	
Toluene	ND	U	1.0	0.13	1	11/29/07	11/29/07	JWG0703956	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
Ethyl Methacrylate	ND	U	1.0	1.0	1	11/29/07	11/29/07	JWG0703956	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/29/07	11/29/07	JWG0703956	
Tetrachloroethene (PCE)	ND	UJ	1.0	0.16	1	11/29/07	11/29/07	JWG0703956	J(3)
1,3-Dichloropropane	ND	U	1.0	0.17	1	11/29/07	11/29/07	JWG0703956	
2-Hexanone	ND	U	25	1.4	1	11/29/07	11/29/07	JWG0703956	
Dibromochloromethane	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
Chlorobenzene	ND	UJ	1.0	0.10	1	11/29/07	11/29/07	JWG0703956	J(3)
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
Ethylbenzene	ND	U	1.0	0.12	1	11/29/07	11/29/07	JWG0703956	
m,p-Xylenes	ND	U	2.0	0.19	1	11/29/07	11/29/07	JWG0703956	
o-Xylene	ND	U	1.0	0.083	1	11/29/07	11/29/07	JWG0703956	
Styrene	ND	U	1.0	0.062	1	11/29/07	11/29/07	JWG0703956	
Bromoform	ND	U	1.0	0.28	1	11/29/07	11/29/07	JWG0703956	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/29/07	11/29/07	JWG0703956	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/29/07	11/29/07	JWG0703956	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/29/07	11/29/07	JWG0703956	J(3)
1,3-Dichlorobenzene	ND	U	1.0	0.14	1	11/29/07	11/29/07	JWG0703956	
1,4-Dichlorobenzene	ND	U	1.0	0.085	1	11/29/07	11/29/07	JWG0703956	
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/29/07	11/29/07	JWG0703956	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/29/07	11/29/07	JWG0703956	
1,2,4-Trichlorobenzene	ND	U	10	0.20	1	11/29/07	11/29/07	JWG0703956	
Hexachlorobutadiene	ND	U	10	0.25	1	11/29/07	11/29/07	JWG0703956	
Naphthalene	ND	U	10	0.11	1	11/29/07	11/29/07	JWG0703956	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** NA  
**Date Received:** NA

## Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** Method Blank  
**Lab Code:** JWG0703956-4

**Units:** ug/L  
**Basis:** NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	99	71-122	11/29/07	Acceptable
4-Bromofluorobenzene	103	75-120	11/29/07	Acceptable
Dibromofluoromethane	102	82-116	11/29/07	Acceptable
Toluene-d8	115	88-117	11/29/07	Acceptable

**Comments:** \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** NA  
**Date Received:** NA

## Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** Method Blank  
**Lab Code:** JWG0703966-4  
**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	5.0	0.15	1	11/30/07	11/30/07	JWG0703966	
Chloromethane	ND	U	1.0	0.11	1	11/30/07	11/30/07	JWG0703966	
Vinyl Chloride	ND	U	1.0	0.12	1	11/30/07	11/30/07	JWG0703966	
Bromomethane	ND	UJ	1.0	0.15	1	11/30/07	11/30/07	JWG0703966	J(3)
Chloroethane	ND	U	1.0	0.19	1	11/30/07	11/30/07	JWG0703966	
Trichlorofluoromethane	ND	U	1.0	0.21	1	11/30/07	11/30/07	JWG0703966	
Acrolein	ND	U	50	9.6	1	11/30/07	11/30/07	JWG0703966	
1,1-Dichloroethene	ND	U	1.0	0.16	1	11/30/07	11/30/07	JWG0703966	
Acetone	ND	U	50	1.9	1	11/30/07	11/30/07	JWG0703966	
Iodomethane (Methyl Iodide)	ND	U	5.0	1.1	1	11/30/07	11/30/07	JWG0703966	
Carbon Disulfide	ND	U	10	1.1	1	11/30/07	11/30/07	JWG0703966	
Acetonitrile	ND	U	25	10	1	11/30/07	11/30/07	JWG0703966	
Allyl Chloride	ND	U	5.0	1.9	1	11/30/07	11/30/07	JWG0703966	
Methylene Chloride	ND	U	5.0	0.29	1	11/30/07	11/30/07	JWG0703966	
Acrylonitrile	ND	U	10	6.7	1	11/30/07	11/30/07	JWG0703966	
trans-1,2-Dichloroethene	ND	U	1.0	0.11	1	11/30/07	11/30/07	JWG0703966	
1,1-Dichloroethane	ND	U	1.0	0.080	1	11/30/07	11/30/07	JWG0703966	
Vinyl Acetate	ND	U	10	1.1	1	11/30/07	11/30/07	JWG0703966	
Chloroprene	ND	U	1.0	0.11	1	11/30/07	11/30/07	JWG0703966	
cis-1,2-Dichloroethene	ND	U	1.0	0.12	1	11/30/07	11/30/07	JWG0703966	
2,2-Dichloropropane	ND	U	1.0	0.16	1	11/30/07	11/30/07	JWG0703966	
1,1-Dichloropropene	ND	U	1.0	0.11	1	11/30/07	11/30/07	JWG0703966	
2-Butanone (MEK)	ND	U	10	0.97	1	11/30/07	11/30/07	JWG0703966	
Propionitrile	ND	U	10	7.6	1	11/30/07	11/30/07	JWG0703966	
Bromochloromethane	ND	U	1.0	0.28	1	11/30/07	11/30/07	JWG0703966	
Methacrylonitrile	ND	U	2.0	1.2	1	11/30/07	11/30/07	JWG0703966	
Chloroform	ND	U	1.0	0.12	1	11/30/07	11/30/07	JWG0703966	
1,1,1-Trichloroethane (TCA)	ND	U	1.0	0.17	1	11/30/07	11/30/07	JWG0703966	
Carbon Tetrachloride	ND	UJ	1.0	0.14	1	11/30/07	11/30/07	JWG0703966	J(3)
Benzene	ND	U	1.0	0.088	1	11/30/07	11/30/07	JWG0703966	
1,2-Dichloroethane (EDC)	ND	U	1.0	0.11	1	11/30/07	11/30/07	JWG0703966	
Isobutyl Alcohol	ND	U	50	23	1	11/30/07	11/30/07	JWG0703966	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	11/30/07	11/30/07	JWG0703966	
1,2-Dichloropropane	ND	U	1.0	0.10	1	11/30/07	11/30/07	JWG0703966	

**Comments:** \_\_\_\_\_

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705660  
 Date Collected: NA  
 Date Received: NA

## Volatile Organic Compounds by GC/MS (Appendix II)

Sample Name: Method Blank  
 Lab Code: JWG0703966-4  
 Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dibromomethane	ND	U	1.0	0.22	1	11/30/07	11/30/07	JWG0703966	
Methyl Methacrylate	ND	U	1.0	1.0	1	11/30/07	11/30/07	JWG0703966	
Bromodichloromethane	ND	U	1.0	0.099	1	11/30/07	11/30/07	JWG0703966	
cis-1,3-Dichloropropene	ND	U	1.0	0.14	1	11/30/07	11/30/07	JWG0703966	
4-Methyl-2-pentanone (MIBK)	ND	U	25	0.94	1	11/30/07	11/30/07	JWG0703966	
Toluene	ND	U	1.0	0.13	1	11/30/07	11/30/07	JWG0703966	
trans-1,3-Dichloropropene	ND	U	1.0	0.12	1	11/30/07	11/30/07	JWG0703966	
Ethyl Methacrylate	ND	U	1.0	1.0	1	11/30/07	11/30/07	JWG0703966	
1,1,2-Trichloroethane	ND	U	1.0	0.14	1	11/30/07	11/30/07	JWG0703966	
Tetrachloroethene (PCE)	ND	U	1.0	0.16	1	11/30/07	11/30/07	JWG0703966	
1,3-Dichloropropane	ND	U	1.0	0.17	1	11/30/07	11/30/07	JWG0703966	
2-Hexanone	ND	U	25	1.4	1	11/30/07	11/30/07	JWG0703966	
Dibromochloromethane	ND	U	1.0	0.12	1	11/30/07	11/30/07	JWG0703966	
1,2-Dibromoethane (EDB)	ND	U	1.0	0.12	1	11/30/07	11/30/07	JWG0703966	
Chlorobenzene	ND	U	1.0	0.10	1	11/30/07	11/30/07	JWG0703966	
1,1,1,2-Tetrachloroethane	ND	U	1.0	0.12	1	11/30/07	11/30/07	JWG0703966	
Ethylbenzene	ND	U	1.0	0.12	1	11/30/07	11/30/07	JWG0703966	
m,p-Xylenes	ND	U	2.0	0.19	1	11/30/07	11/30/07	JWG0703966	
o-Xylene	ND	U	1.0	0.083	1	11/30/07	11/30/07	JWG0703966	
Styrene	ND	U	1.0	0.062	1	11/30/07	11/30/07	JWG0703966	
Bromoform	ND	U	1.0	0.28	1	11/30/07	11/30/07	JWG0703966	
1,1,2,2-Tetrachloroethane	ND	U	1.0	0.16	1	11/30/07	11/30/07	JWG0703966	
1,2,3-Trichloropropane	ND	U	1.0	0.24	1	11/30/07	11/30/07	JWG0703966	
trans-1,4-Dichloro-2-butene	ND	UJ	20	3.2	1	11/30/07	11/30/07	JWG0703966	J(3)
1,3-Dichlorobenzene	ND	U	1.0	0.14	1	11/30/07	11/30/07	JWG0703966	
<b>1,4-Dichlorobenzene</b>	<b>0.087</b>	<b>I</b>	1.0	0.085	1	11/30/07	11/30/07	JWG0703966	
1,2-Dichlorobenzene	ND	U	1.0	0.080	1	11/30/07	11/30/07	JWG0703966	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2.0	0.85	1	11/30/07	11/30/07	JWG0703966	
1,2,4-Trichlorobenzene	ND	UJ	10	0.20	1	11/30/07	11/30/07	JWG0703966	J(3)
Hexachlorobutadiene	ND	U	10	0.25	1	11/30/07	11/30/07	JWG0703966	
Naphthalene	ND	UJ	10	0.11	1	11/30/07	11/30/07	JWG0703966	J(3)

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** NA  
**Date Received:** NA

## Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** Method Blank  
**Lab Code:** JWG0703966-4

**Units:** ug/L  
**Basis:** NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	80	71-122	11/30/07	Acceptable
4-Bromofluorobenzene	90	75-120	11/30/07	Acceptable
Dibromofluoromethane	91	82-116	11/30/07	Acceptable
Toluene-d8	89	88-117	11/30/07	Acceptable

**Comments:** \_\_\_\_\_



## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-22B  
**Lab Code:** J0705660-001  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/29/07	11/30/07	JWG0703950	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/29/07	11/30/07	JWG0703950	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	144	77-150	11/30/07	Acceptable

**Comments:** \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** MW-22C  
**Lab Code:** J0705660-002  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/29/07	11/30/07	JWG0703950	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/29/07	11/30/07	JWG0703950	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	122	77-150	11/30/07	Acceptable

Comments: \_\_\_\_\_

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Sample Name:** L-1  
**Lab Code:** J0705660-003  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/29/07	11/30/07	JWG0703950	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/29/07	11/30/07	JWG0703950	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	117	77-150	11/30/07	Acceptable

**Comments:** \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** L-2  
**Lab Code:** J0705660-004  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/29/07	11/30/07	JWG0703950	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/29/07	11/30/07	JWG0703950	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	93	77-150	11/30/07	Acceptable

**Comments:** \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** L-3  
**Lab Code:** J0705660-005  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/29/07	11/30/07	JWG0703950	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/29/07	11/30/07	JWG0703950	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	92	77-150	11/30/07	Acceptable

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** L-4  
**Lab Code:** J0705660-006  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/29/07	11/30/07	JWG0703950	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/29/07	11/30/07	JWG0703950	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	108	77-150	11/30/07	Acceptable

Comments: \_\_\_\_\_

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** NA  
**Date Received:** NA

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

**Sample Name:** Method Blank  
**Lab Code:** JWG0703950-3  
**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.020	0.0070	1	11/29/07	11/30/07	JWG0703950	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	0.020	0.0057	1	11/29/07	11/30/07	JWG0703950	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,1,1,2-Tetrachloroethane	115	77-150	11/30/07	Acceptable

Comments: \_\_\_\_\_

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705660  
 Date Collected: 11/26/2007  
 Date Received: 11/27/2007

## Semi-Volatile Organic Compounds by GC/MS (Appendix II)

Sample Name: L-1  
 Lab Code: J0705660-003  
 Extraction Method: EPA 3510C  
 Analysis Method: 8270C

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	5.5	0.55	1	11/27/07	11/29/07	JWG0703934	
N-Nitrosomethylethylamine	ND	U	5.5	0.65	1	11/27/07	11/29/07	JWG0703934	
Methyl Methanesulfonate	ND	U	5.5	0.65	1	11/27/07	11/29/07	JWG0703934	
N-Nitrosodiethylamine	ND	U	5.5	1.1	1	11/27/07	11/29/07	JWG0703934	
Ethyl Methanesulfonate	ND	U	5.5	0.92	1	11/27/07	11/29/07	JWG0703934	
Phenol	ND	U	5.5	1.9	1	11/27/07	11/29/07	JWG0703934	
Bis(2-chloroethyl) Ether	ND	U	5.5	0.48	1	11/27/07	11/29/07	JWG0703934	
2-Chlorophenol	ND	U	5.5	0.53	1	11/27/07	11/29/07	JWG0703934	
1,3-Dichlorobenzene	ND	U	5.5	0.47	1	11/27/07	11/29/07	JWG0703934	
1,4-Dichlorobenzene	ND	U	5.5	0.60	1	11/27/07	11/29/07	JWG0703934	
1,2-Dichlorobenzene	ND	U	5.5	0.57	1	11/27/07	11/29/07	JWG0703934	
Bis(2-chloroisopropyl) Ether	ND	U	5.5	0.63	1	11/27/07	11/29/07	JWG0703934	
Benzyl alcohol	ND	U	5.5	0.47	1	11/27/07	11/29/07	JWG0703934	
2-Methylphenol	ND	U	5.5	0.49	1	11/27/07	11/29/07	JWG0703934	
Acetophenone	ND	U	11	6.2	1	11/27/07	11/29/07	JWG0703934	
N-Nitrosopyrrolidine	ND	U	5.5	0.87	1	11/27/07	11/29/07	JWG0703934	
Hexachloroethane	ND	U	5.5	0.58	1	11/27/07	11/29/07	JWG0703934	
N-Nitrosodi-n-propylamine	ND	U	5.5	0.57	1	11/27/07	11/29/07	JWG0703934	
o-Toluidine	ND	U	5.5	0.80	1	11/27/07	11/29/07	JWG0703934	
4-Methylphenol†	ND	U	5.5	0.81	1	11/27/07	11/29/07	JWG0703934	
Nitrobenzene	ND	U	5.5	0.64	1	11/27/07	11/29/07	JWG0703934	
N-Nitrosopiperidine	ND	U	5.5	1.3	1	11/27/07	11/29/07	JWG0703934	
Isophorone	ND	U	5.5	0.71	1	11/27/07	11/29/07	JWG0703934	
2-Nitrophenol	ND	U	22	0.52	1	11/27/07	11/29/07	JWG0703934	
2,4-Dimethylphenol	ND	U	5.5	0.59	1	11/27/07	11/29/07	JWG0703934	
O,O,O-Triethyl Phosphorothioate	ND	U	22	5.4	1	11/27/07	11/29/07	JWG0703934	
bis(2-Chloroethoxy)methane	ND	U	5.5	0.50	1	11/27/07	11/29/07	JWG0703934	
2,4-Dichlorophenol	ND	U	5.5	0.46	1	11/27/07	11/29/07	JWG0703934	
1,2,4-Trichlorobenzene	ND	U	5.5	0.46	1	11/27/07	11/29/07	JWG0703934	
Naphthalene	ND	U	5.5	0.46	1	11/27/07	11/29/07	JWG0703934	
2,6-Dichlorophenol	ND	U	11	1.4	1	11/27/07	11/29/07	JWG0703934	
Hexachloropropene	ND	U	5.5	1.5	1	11/27/07	11/29/07	JWG0703934	
4-Chloroaniline	ND	U	5.5	0.41	1	11/27/07	11/29/07	JWG0703934	
Hexachlorobutadiene	ND	U	5.5	0.49	1	11/27/07	11/29/07	JWG0703934	

Comments:



## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Semi-Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** L-1  
**Lab Code:** J0705660-003  
**Extraction Method:** EPA 3510C  
**Analysis Method:** 8270C

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodi-n-butylamine	ND	U	5.5	1.8	1	11/27/07	11/29/07	JWG0703934	
p-Phenylenediamine	ND	U	22	22	1	11/27/07	11/29/07	JWG0703934	
4-Chloro-3-methylphenol	ND	U	5.5	0.57	1	11/27/07	11/29/07	JWG0703934	
2-Methylnaphthalene	ND	U	5.5	0.47	1	11/27/07	11/29/07	JWG0703934	
Hexachlorocyclopentadiene	ND	U	5.5	0.38	1	11/27/07	11/29/07	JWG0703934	
1,2,4,5-Tetrachlorobenzene	ND	U	5.5	1.6	1	11/27/07	11/29/07	JWG0703934	
Safrole	ND	U	5.5	1.6	1	11/27/07	11/29/07	JWG0703934	
2,4,6-Trichlorophenol	ND	U	5.5	0.44	1	11/27/07	11/29/07	JWG0703934	
2,4,5-Trichlorophenol	ND	U	5.5	0.46	1	11/27/07	11/29/07	JWG0703934	
Isosafrole	ND	U	5.5	1.6	1	11/27/07	11/29/07	JWG0703934	
2-Chloronaphthalene	ND	U	5.5	0.49	1	11/27/07	11/29/07	JWG0703934	
2-Nitroaniline	ND	U	5.5	0.33	1	11/27/07	11/29/07	JWG0703934	
1,4-Naphthoquinone	ND	U	11	8.0	1	11/27/07	11/29/07	JWG0703934	
1,3-Dinitrobenzene	ND	U	11	6.1	1	11/27/07	11/29/07	JWG0703934	
Acenaphthylene	ND	U	5.5	0.38	1	11/27/07	11/29/07	JWG0703934	
Dimethyl Phthalate	ND	U	5.5	0.47	1	11/27/07	11/29/07	JWG0703934	
2,6-Dinitrotoluene	ND	U	5.5	0.55	1	11/27/07	11/29/07	JWG0703934	
Acenaphthene	ND	U	5.5	0.36	1	11/27/07	11/29/07	JWG0703934	
3-Nitroaniline	ND	U	5.5	0.29	1	11/27/07	11/29/07	JWG0703934	
2,4-Dinitrophenol	ND	U	22	0.80	1	11/27/07	11/29/07	JWG0703934	
Pentachlorobenzene	ND	U	5.5	1.7	1	11/27/07	11/29/07	JWG0703934	
Dibenzofuran	ND	U	5.5	0.49	1	11/27/07	11/29/07	JWG0703934	
4-Nitrophenol	ND	U	22	0.63	1	11/27/07	11/29/07	JWG0703934	
2,4-Dinitrotoluene	ND	U	5.5	0.43	1	11/27/07	11/29/07	JWG0703934	
2-Naphthylamine	ND	U	5.5	1.1	1	11/27/07	11/29/07	JWG0703934	
2,3,4,6-Tetrachlorophenol	ND	U	5.5	0.51	1	11/27/07	11/29/07	JWG0703934	
1-Naphthylamine	ND	U	5.5	1.1	1	11/27/07	11/29/07	JWG0703934	
Fluorene	ND	U	5.5	0.40	1	11/27/07	11/29/07	JWG0703934	
4-Chlorophenyl Phenyl Ether	ND	U	5.5	0.40	1	11/27/07	11/29/07	JWG0703934	
Thionazin	ND	U	11	6.1	1	11/27/07	11/29/07	JWG0703934	
Diethyl Phthalate	ND	U	5.5	0.99	1	11/27/07	11/29/07	JWG0703934	
5-Nitro-o-toluidine	ND	U	5.5	1.6	1	11/27/07	11/29/07	JWG0703934	
4-Nitroaniline	ND	U	5.5	0.29	1	11/27/07	11/29/07	JWG0703934	
2-Methyl-4,6-dinitrophenol	ND	U	22	0.36	1	11/27/07	11/29/07	JWG0703934	

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Semi-Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** L-1  
**Lab Code:** J0705660-003  
**Extraction Method:** EPA 3510C  
**Analysis Method:** 8270C

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodiphenylamine†	ND	U	5.5	0.38	1	11/27/07	11/29/07	JWG0703934	
Diallate	ND	U	5.5	5.5	1	11/27/07	11/29/07	JWG0703934	
Phorate	ND	U	5.5	5.1	1	11/27/07	11/29/07	JWG0703934	
1,3,5-Trinitrobenzene	ND	U	5.5	3.3	1	11/27/07	11/29/07	JWG0703934	
4-Bromophenyl Phenyl Ether	ND	U	5.5	0.29	1	11/27/07	11/29/07	JWG0703934	
Phenacetin	ND	U	5.5	1.4	1	11/27/07	11/29/07	JWG0703934	
Hexachlorobenzene	ND	U	5.5	0.37	1	11/27/07	11/29/07	JWG0703934	
Dimethoate	ND	U	5.5	4.6	1	11/27/07	11/29/07	JWG0703934	
4-Aminobiphenyl	ND	U	5.5	1.4	1	11/27/07	11/29/07	JWG0703934	
Pentachlorophenol	ND	U	22	0.43	1	11/27/07	11/29/07	JWG0703934	
Pentachloronitrobenzene	ND	U	5.5	1.7	1	11/27/07	11/29/07	JWG0703934	
Pronamide	ND	U	22	21	1	11/27/07	11/29/07	JWG0703934	
Phenanthrene	ND	U	5.5	0.29	1	11/27/07	11/29/07	JWG0703934	
Disulfoton	ND	U	5.5	5.5	1	11/27/07	11/29/07	JWG0703934	
Dinoseb	ND	U	5.5	1.4	1	11/27/07	11/29/07	JWG0703934	
Anthracene	ND	U	5.5	0.29	1	11/27/07	11/29/07	JWG0703934	
Methyl Parathion	ND	U	11	6.6	1	11/27/07	11/29/07	JWG0703934	
Di-n-butyl Phthalate	ND	U	5.5	1.0	1	11/27/07	11/29/07	JWG0703934	
Parathion	ND	U	22	6.0	1	11/27/07	11/29/07	JWG0703934	
Methapyrilene	ND	U	5.5	4.0	1	11/27/07	11/29/07	JWG0703934	
Isodrin	ND	U	11	6.2	1	11/27/07	11/29/07	JWG0703934	
Fluoranthene	ND	U	5.5	0.29	1	11/27/07	11/29/07	JWG0703934	
Pyrene	ND	U	5.5	0.48	1	11/27/07	11/29/07	JWG0703934	
Chlorobenzilate	ND	U	11	6.5	1	11/27/07	11/29/07	JWG0703934	
Famphur	ND	U	11	7.0	1	11/27/07	11/29/07	JWG0703934	
3,3'-Dimethylbenzidine	ND	U	22	0.66	1	11/27/07	11/29/07	JWG0703934	
p-Dimethylaminoazobenzene	ND	U	5.5	1.9	1	11/27/07	11/29/07	JWG0703934	
Butyl Benzyl Phthalate	ND	U	11	0.62	1	11/27/07	11/29/07	JWG0703934	
2-Acetylaminofluorene	ND	U	5.5	2.1	1	11/27/07	11/29/07	JWG0703934	
Kepone	ND	U	55	26	1	11/27/07	11/29/07	JWG0703934	
3,3'-Dichlorobenzidine	ND	U	22	0.68	1	11/27/07	11/29/07	JWG0703934	
Benz(a)anthracene	ND	U	5.5	0.62	1	11/27/07	11/29/07	JWG0703934	
Chrysene	ND	U	5.5	0.57	1	11/27/07	11/29/07	JWG0703934	
Bis(2-ethylhexyl) Phthalate	ND	U	5.5	1.3	1	11/27/07	11/29/07	JWG0703934	

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Semi-Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** L-1  
**Lab Code:** J0705660-003  
**Extraction Method:** EPA 3510C  
**Analysis Method:** 8270C

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Di-n-octyl Phthalate	ND	U	5.5	0.75	1	11/27/07	11/29/07	JWG0703934	
Benzo(b)fluoranthene	ND	U	5.5	0.64	1	11/27/07	11/29/07	JWG0703934	
Benzo(k)fluoranthene	ND	U	5.5	0.63	1	11/27/07	11/29/07	JWG0703934	
7,12-Dimethylbenz(a)anthracene	ND	U	5.5	1.6	1	11/27/07	11/29/07	JWG0703934	
Benzo(a)pyrene	ND	U	5.5	0.61	1	11/27/07	11/29/07	JWG0703934	
3-Methylcholanthrene	ND	U	5.5	1.7	1	11/27/07	11/29/07	JWG0703934	
Indeno(1,2,3-cd)pyrene	ND	U	5.5	0.59	1	11/27/07	11/29/07	JWG0703934	
Dibenz(a,h)anthracene	ND	U	5.5	0.62	1	11/27/07	11/29/07	JWG0703934	
Benzo(g,h,i)perylene	ND	U	5.5	0.54	1	11/27/07	11/29/07	JWG0703934	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	15	10-77	11/29/07	Acceptable
Phenol-d6	13	10-51	11/29/07	Acceptable
Nitrobenzene-d5	46	42-106	11/29/07	Acceptable
2-Fluorobiphenyl	45	43-99	11/29/07	Acceptable
2,4,6-Tribromophenol	63	30-141	11/29/07	Acceptable
Terphenyl-d14	43	23-165	11/29/07	Acceptable

## † Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.  
N-Nitrosodiphenylamine This analyte can not be separated from Diphenylamine.

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Semi-Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** L-2  
**Lab Code:** J0705660-004  
**Extraction Method:** EPA 3510C  
**Analysis Method:** 8270C

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	5.6	0.56	1	11/27/07	11/29/07	JWG0703934	
N-Nitrosomethylethylamine	ND	U	5.6	0.66	1	11/27/07	11/29/07	JWG0703934	
Methyl Methanesulfonate	ND	U	5.6	0.66	1	11/27/07	11/29/07	JWG0703934	
N-Nitrosodiethylamine	ND	U	5.6	1.1	1	11/27/07	11/29/07	JWG0703934	
Ethyl Methanesulfonate	ND	U	5.6	0.93	1	11/27/07	11/29/07	JWG0703934	
Phenol	ND	U	5.6	1.9	1	11/27/07	11/29/07	JWG0703934	
Bis(2-chloroethyl) Ether	ND	U	5.6	0.48	1	11/27/07	11/29/07	JWG0703934	
2-Chlorophenol	ND	U	5.6	0.54	1	11/27/07	11/29/07	JWG0703934	
1,3-Dichlorobenzene	ND	U	5.6	0.47	1	11/27/07	11/29/07	JWG0703934	
1,4-Dichlorobenzene	ND	U	5.6	0.60	1	11/27/07	11/29/07	JWG0703934	
1,2-Dichlorobenzene	ND	U	5.6	0.57	1	11/27/07	11/29/07	JWG0703934	
Bis(2-chloroisopropyl) Ether	ND	U	5.6	0.64	1	11/27/07	11/29/07	JWG0703934	
Benzyl alcohol	ND	U	5.6	0.47	1	11/27/07	11/29/07	JWG0703934	
<b>2-Methylphenol</b>	<b>3.4</b>	<b>I</b>	5.6	0.49	1	11/27/07	11/29/07	JWG0703934	
Acetophenone	ND	U	12	6.3	1	11/27/07	11/29/07	JWG0703934	
N-Nitrosopyrrolidine	ND	U	5.6	0.88	1	11/27/07	11/29/07	JWG0703934	
Hexachloroethane	ND	U	5.6	0.58	1	11/27/07	11/29/07	JWG0703934	
N-Nitrosodi-n-propylamine	ND	U	5.6	0.57	1	11/27/07	11/29/07	JWG0703934	
o-Toluidine	ND	U	5.6	0.80	1	11/27/07	11/29/07	JWG0703934	
<b>4-Methylphenol†</b>	<b>16</b>		5.6	0.82	1	11/27/07	11/29/07	JWG0703934	
Nitrobenzene	ND	U	5.6	0.65	1	11/27/07	11/29/07	JWG0703934	
N-Nitrosopiperidine	ND	U	5.6	1.3	1	11/27/07	11/29/07	JWG0703934	
Isophorone	ND	U	5.6	0.72	1	11/27/07	11/29/07	JWG0703934	
2-Nitrophenol	ND	U	23	0.53	1	11/27/07	11/29/07	JWG0703934	
2,4-Dimethylphenol	ND	U	5.6	0.59	1	11/27/07	11/29/07	JWG0703934	
O,O,O-Triethyl Phosphorothioate	ND	U	23	5.5	1	11/27/07	11/29/07	JWG0703934	
bis(2-Chloroethoxy)methane	ND	U	5.6	0.50	1	11/27/07	11/29/07	JWG0703934	
2,4-Dichlorophenol	ND	U	5.6	0.46	1	11/27/07	11/29/07	JWG0703934	
1,2,4-Trichlorobenzene	ND	U	5.6	0.46	1	11/27/07	11/29/07	JWG0703934	
<b>Naphthalene</b>	<b>1.2</b>	<b>I</b>	5.6	0.46	1	11/27/07	11/29/07	JWG0703934	
2,6-Dichlorophenol	ND	U	12	1.4	1	11/27/07	11/29/07	JWG0703934	
Hexachloropropene	ND	U	5.6	1.5	1	11/27/07	11/29/07	JWG0703934	
4-Chloroaniline	ND	U	5.6	0.42	1	11/27/07	11/29/07	JWG0703934	
Hexachlorobutadiene	ND	U	5.6	0.49	1	11/27/07	11/29/07	JWG0703934	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Semi-Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** L-2  
**Lab Code:** J0705660-004  
**Extraction Method:** EPA 3510C  
**Analysis Method:** 8270C

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodi-n-butylamine	ND	U	5.6	1.8	1	11/27/07	11/29/07	JWG0703934	
p-Phenylenediamine	ND	U	23	23	1	11/27/07	11/29/07	JWG0703934	
4-Chloro-3-methylphenol	ND	U	5.6	0.57	1	11/27/07	11/29/07	JWG0703934	
2-Methylnaphthalene	ND	U	5.6	0.47	1	11/27/07	11/29/07	JWG0703934	
Hexachlorocyclopentadiene	ND	U	5.6	0.38	1	11/27/07	11/29/07	JWG0703934	
1,2,4,5-Tetrachlorobenzene	ND	U	5.6	1.6	1	11/27/07	11/29/07	JWG0703934	
Safrole	ND	U	5.6	1.6	1	11/27/07	11/29/07	JWG0703934	
2,4,6-Trichlorophenol	ND	U	5.6	0.45	1	11/27/07	11/29/07	JWG0703934	
2,4,5-Trichlorophenol	ND	U	5.6	0.46	1	11/27/07	11/29/07	JWG0703934	
Isosafrole	ND	U	5.6	1.6	1	11/27/07	11/29/07	JWG0703934	
2-Chloronaphthalene	ND	U	5.6	0.49	1	11/27/07	11/29/07	JWG0703934	
2-Nitroaniline	ND	U	5.6	0.34	1	11/27/07	11/29/07	JWG0703934	
1,4-Naphthoquinone	ND	U	12	8.0	1	11/27/07	11/29/07	JWG0703934	
1,3-Dinitrobenzene	ND	U	12	6.2	1	11/27/07	11/29/07	JWG0703934	
Acenaphthylene	ND	U	5.6	0.38	1	11/27/07	11/29/07	JWG0703934	
Dimethyl Phthalate	ND	U	5.6	0.47	1	11/27/07	11/29/07	JWG0703934	
2,6-Dinitrotoluene	ND	U	5.6	0.56	1	11/27/07	11/29/07	JWG0703934	
Acenaphthene	ND	U	5.6	0.36	1	11/27/07	11/29/07	JWG0703934	
3-Nitroaniline	ND	U	5.6	0.29	1	11/27/07	11/29/07	JWG0703934	
2,4-Dinitrophenol	ND	U	23	0.80	1	11/27/07	11/29/07	JWG0703934	
Pentachlorobenzene	ND	U	5.6	1.7	1	11/27/07	11/29/07	JWG0703934	
Dibenzofuran	ND	U	5.6	0.49	1	11/27/07	11/29/07	JWG0703934	
4-Nitrophenol	ND	U	23	0.64	1	11/27/07	11/29/07	JWG0703934	
2,4-Dinitrotoluene	ND	U	5.6	0.44	1	11/27/07	11/29/07	JWG0703934	
2-Naphthylamine	ND	U	5.6	1.2	1	11/27/07	11/29/07	JWG0703934	
2,3,4,6-Tetrachlorophenol	ND	U	5.6	0.52	1	11/27/07	11/29/07	JWG0703934	
1-Naphthylamine	ND	U	5.6	1.1	1	11/27/07	11/29/07	JWG0703934	
Fluorene	ND	U	5.6	0.40	1	11/27/07	11/29/07	JWG0703934	
4-Chlorophenyl Phenyl Ether	ND	U	5.6	0.40	1	11/27/07	11/29/07	JWG0703934	
Thionazin	ND	U	12	6.2	1	11/27/07	11/29/07	JWG0703934	
Diethyl Phthalate	2.2	I	5.6	1.0	1	11/27/07	11/29/07	JWG0703934	
5-Nitro-o-toluidine	ND	U	5.6	1.6	1	11/27/07	11/29/07	JWG0703934	
4-Nitroaniline	ND	U	5.6	0.29	1	11/27/07	11/29/07	JWG0703934	
2-Methyl-4,6-dinitrophenol	ND	U	23	0.36	1	11/27/07	11/29/07	JWG0703934	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705660  
 Date Collected: 11/26/2007  
 Date Received: 11/27/2007

## Semi-Volatile Organic Compounds by GC/MS (Appendix II)

Sample Name: L-2  
 Lab Code: J0705660-004  
 Extraction Method: EPA 3510C  
 Analysis Method: 8270C

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodiphenylamine†	ND	U	5.6	0.38	1	11/27/07	11/29/07	JWG0703934	
Diallate	ND	U	5.6	5.6	1	11/27/07	11/29/07	JWG0703934	
Phorate	ND	U	5.6	5.2	1	11/27/07	11/29/07	JWG0703934	
1,3,5-Trinitrobenzene	ND	U	5.6	3.4	1	11/27/07	11/29/07	JWG0703934	
4-Bromophenyl Phenyl Ether	ND	U	5.6	0.29	1	11/27/07	11/29/07	JWG0703934	
Phenacetin	ND	U	5.6	1.4	1	11/27/07	11/29/07	JWG0703934	
Hexachlorobenzene	ND	U	5.6	0.37	1	11/27/07	11/29/07	JWG0703934	
Dimethoate	ND	U	5.6	4.6	1	11/27/07	11/29/07	JWG0703934	
4-Aminobiphenyl	ND	U	5.6	1.4	1	11/27/07	11/29/07	JWG0703934	
Pentachlorophenol	ND	U	23	0.44	1	11/27/07	11/29/07	JWG0703934	
Pentachloronitrobenzene	ND	U	5.6	1.7	1	11/27/07	11/29/07	JWG0703934	
Pronamide	ND	U	23	22	1	11/27/07	11/29/07	JWG0703934	
Phenanthrene	ND	U	5.6	0.29	1	11/27/07	11/29/07	JWG0703934	
Disulfoton	ND	U	5.6	5.6	1	11/27/07	11/29/07	JWG0703934	
Dinoseb	ND	U	5.6	1.4	1	11/27/07	11/29/07	JWG0703934	
Anthracene	ND	U	5.6	0.29	1	11/27/07	11/29/07	JWG0703934	
Methyl Parathion	ND	U	12	6.7	1	11/27/07	11/29/07	JWG0703934	
Di-n-butyl Phthalate	ND	U	5.6	1.1	1	11/27/07	11/29/07	JWG0703934	
Parathion	ND	U	23	6.0	1	11/27/07	11/29/07	JWG0703934	
Methapyrilene	ND	U	5.6	4.0	1	11/27/07	11/29/07	JWG0703934	
Isodrin	ND	U	12	6.3	1	11/27/07	11/29/07	JWG0703934	
Fluoranthene	ND	U	5.6	0.29	1	11/27/07	11/29/07	JWG0703934	
Pyrene	ND	U	5.6	0.48	1	11/27/07	11/29/07	JWG0703934	
Chlorobenzilate	ND	U	12	6.6	1	11/27/07	11/29/07	JWG0703934	
Famphur	ND	U	12	7.0	1	11/27/07	11/29/07	JWG0703934	
3,3'-Dimethylbenzidine	ND	U	23	0.67	1	11/27/07	11/29/07	JWG0703934	
p-Dimethylaminoazobenzene	ND	U	5.6	1.9	1	11/27/07	11/29/07	JWG0703934	
Butyl Benzyl Phthalate	ND	U	12	0.63	1	11/27/07	11/29/07	JWG0703934	
2-Acetylaminofluorene	ND	U	5.6	2.2	1	11/27/07	11/29/07	JWG0703934	
Kepone	ND	U	56	26	1	11/27/07	11/29/07	JWG0703934	
3,3'-Dichlorobenzidine	ND	U	23	0.68	1	11/27/07	11/29/07	JWG0703934	
Benz(a)anthracene	ND	U	5.6	0.63	1	11/27/07	11/29/07	JWG0703934	
Chrysene	ND	U	5.6	0.57	1	11/27/07	11/29/07	JWG0703934	
Bis(2-ethylhexyl) Phthalate	ND	U	5.6	1.3	1	11/27/07	11/29/07	JWG0703934	

Comments:

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Semi-Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** L-2  
**Lab Code:** J0705660-004  
**Extraction Method:** EPA 3510C  
**Analysis Method:** 8270C

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Di-n-octyl Phthalate	ND	U	5.6	0.76	1	11/27/07	11/29/07	JWG0703934	
Benzo(b)fluoranthene	ND	U	5.6	0.65	1	11/27/07	11/29/07	JWG0703934	
Benzo(k)fluoranthene	ND	U	5.6	0.64	1	11/27/07	11/29/07	JWG0703934	
7,12-Dimethylbenz(a)anthracene	ND	U	5.6	1.6	1	11/27/07	11/29/07	JWG0703934	
Benzo(a)pyrene	ND	U	5.6	0.62	1	11/27/07	11/29/07	JWG0703934	
3-Methylcholanthrene	ND	U	5.6	1.7	1	11/27/07	11/29/07	JWG0703934	
Indeno(1,2,3-cd)pyrene	ND	U	5.6	0.59	1	11/27/07	11/29/07	JWG0703934	
Dibenz(a,h)anthracene	ND	U	5.6	0.63	1	11/27/07	11/29/07	JWG0703934	
Benzo(g,h,i)perylene	ND	U	5.6	0.55	1	11/27/07	11/29/07	JWG0703934	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	8	10-77	11/29/07	Outside Control Limits
Phenol-d6	12	10-51	11/29/07	Acceptable
Nitrobenzene-d5	23	42-106	11/29/07	Outside Control Limits
2-Fluorobiphenyl	34	43-99	11/29/07	Outside Control Limits
2,4,6-Tribromophenol	54	30-141	11/29/07	Acceptable
Terphenyl-d14	36	23-165	11/29/07	Acceptable

## † Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.  
N-Nitrosodiphenylamine This analyte can not be separated from Diphenylamine.

**Comments:** \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Semi-Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** L-3  
**Lab Code:** J0705660-005  
**Extraction Method:** EPA 3510C  
**Analysis Method:** 8270C

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	UJ	120	12	20	11/27/07	12/10/07	JWG0703934	J(3)
N-Nitrosomethylethylamine	ND	U	120	14	20	11/27/07	12/10/07	JWG0703934	
Methyl Methanesulfonate	ND	U	120	14	20	11/27/07	12/10/07	JWG0703934	
N-Nitrosodiethylamine	ND	U	120	22	20	11/27/07	12/10/07	JWG0703934	
Ethyl Methanesulfonate	ND	U	120	19	20	11/27/07	12/10/07	JWG0703934	
<b>Phenol</b>	<b>300</b>		120	38	20	11/27/07	12/10/07	JWG0703934	
Bis(2-chloroethyl) Ether	ND	U	120	9.6	20	11/27/07	12/10/07	JWG0703934	
2-Chlorophenol	ND	U	120	11	20	11/27/07	12/10/07	JWG0703934	
1,3-Dichlorobenzene	ND	U	120	9.4	20	11/27/07	12/10/07	JWG0703934	
1,4-Dichlorobenzene	ND	U	120	12	20	11/27/07	12/10/07	JWG0703934	
1,2-Dichlorobenzene	ND	U	120	12	20	11/27/07	12/10/07	JWG0703934	
Bis(2-chloroisopropyl) Ether	ND	U	120	13	20	11/27/07	12/10/07	JWG0703934	
Benzyl alcohol	ND	U	120	9.4	20	11/27/07	12/10/07	JWG0703934	
<b>2-Methylphenol</b>	<b>13</b>	<b>I</b>	120	9.8	20	11/27/07	12/10/07	JWG0703934	
Acetophenone	ND	U	230	130	20	11/27/07	12/10/07	JWG0703934	
N-Nitrosopyrrolidine	ND	U	120	18	20	11/27/07	12/10/07	JWG0703934	
Hexachloroethane	ND	U	120	12	20	11/27/07	12/10/07	JWG0703934	
N-Nitrosodi-n-propylamine	ND	U	120	12	20	11/27/07	12/10/07	JWG0703934	
o-Toluidine	ND	U	120	16	20	11/27/07	12/10/07	JWG0703934	
<b>4-Methylphenol†</b>	<b>2500</b>		120	17	20	11/27/07	12/10/07	JWG0703934	
Nitrobenzene	ND	U	120	13	20	11/27/07	12/10/07	JWG0703934	
N-Nitrosopiperidine	ND	U	120	25	20	11/27/07	12/10/07	JWG0703934	
Isophorone	ND	U	120	15	20	11/27/07	12/10/07	JWG0703934	
2-Nitrophenol	ND	U	450	11	20	11/27/07	12/10/07	JWG0703934	
2,4-Dimethylphenol	ND	U	120	12	20	11/27/07	12/10/07	JWG0703934	
O,O,O-Triethyl Phosphorothioate	ND	U	450	110	20	11/27/07	12/10/07	JWG0703934	
bis(2-Chloroethoxy)methane	ND	U	120	10	20	11/27/07	12/10/07	JWG0703934	
2,4-Dichlorophenol	ND	U	120	9.2	20	11/27/07	12/10/07	JWG0703934	
1,2,4-Trichlorobenzene	ND	U	120	9.2	20	11/27/07	12/10/07	JWG0703934	
Naphthalene	ND	U	120	9.2	20	11/27/07	12/10/07	JWG0703934	
2,6-Dichlorophenol	ND	U	230	27	20	11/27/07	12/10/07	JWG0703934	
Hexachloropropene	ND	U	120	29	20	11/27/07	12/10/07	JWG0703934	
4-Chloroaniline	ND	U	120	8.3	20	11/27/07	12/10/07	JWG0703934	
Hexachlorobutadiene	ND	U	120	9.8	20	11/27/07	12/10/07	JWG0703934	

Comments: \_\_\_\_\_



Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705660  
 Date Collected: 11/26/2007  
 Date Received: 11/27/2007

## Semi-Volatile Organic Compounds by GC/MS (Appendix II)

Sample Name: L-3  
 Lab Code: J0705660-005  
 Extraction Method: EPA 3510C  
 Analysis Method: 8270C

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodi-n-butylamine	ND	U	120	36	20	11/27/07	12/10/07	JWG0703934	
p-Phenylenediamine	ND	U	450	450	20	11/27/07	12/10/07	JWG0703934	
4-Chloro-3-methylphenol	ND	U	120	12	20	11/27/07	12/10/07	JWG0703934	
2-Methylnaphthalene	ND	U	120	9.4	20	11/27/07	12/10/07	JWG0703934	
Hexachlorocyclopentadiene	ND	U	120	7.6	20	11/27/07	12/10/07	JWG0703934	
1,2,4,5-Tetrachlorobenzene	ND	U	120	32	20	11/27/07	12/10/07	JWG0703934	
Safrole	ND	U	120	32	20	11/27/07	12/10/07	JWG0703934	
2,4,6-Trichlorophenol	ND	U	120	8.9	20	11/27/07	12/10/07	JWG0703934	
2,4,5-Trichlorophenol	ND	U	120	9.2	20	11/27/07	12/10/07	JWG0703934	
Isosafrole	ND	U	120	32	20	11/27/07	12/10/07	JWG0703934	
2-Chloronaphthalene	ND	U	120	9.8	20	11/27/07	12/10/07	JWG0703934	
2-Nitroaniline	ND	U	120	6.7	20	11/27/07	12/10/07	JWG0703934	
1,4-Naphthoquinone	ND	U	230	160	20	11/27/07	12/10/07	JWG0703934	
1,3-Dinitrobenzene	ND	U	230	130	20	11/27/07	12/10/07	JWG0703934	
Acenaphthylene	ND	U	120	7.6	20	11/27/07	12/10/07	JWG0703934	
Dimethyl Phthalate	ND	U	120	9.4	20	11/27/07	12/10/07	JWG0703934	
2,6-Dinitrotoluene	ND	U	120	12	20	11/27/07	12/10/07	JWG0703934	
Acenaphthene	ND	U	120	7.2	20	11/27/07	12/10/07	JWG0703934	
3-Nitroaniline	ND	U	120	5.8	20	11/27/07	12/10/07	JWG0703934	
2,4-Dinitrophenol	ND	U	450	16	20	11/27/07	12/10/07	JWG0703934	
Pentachlorobenzene	ND	U	120	34	20	11/27/07	12/10/07	JWG0703934	
Dibenzofuran	ND	U	120	9.8	20	11/27/07	12/10/07	JWG0703934	
4-Nitrophenol	ND	U	450	13	20	11/27/07	12/10/07	JWG0703934	
2,4-Dinitrotoluene	ND	U	120	8.7	20	11/27/07	12/10/07	JWG0703934	
2-Naphthylamine	ND	U	120	23	20	11/27/07	12/10/07	JWG0703934	
2,3,4,6-Tetrachlorophenol	ND	U	120	11	20	11/27/07	12/10/07	JWG0703934	
1-Naphthylamine	ND	U	120	21	20	11/27/07	12/10/07	JWG0703934	
Fluorene	ND	U	120	8.0	20	11/27/07	12/10/07	JWG0703934	
4-Chlorophenyl Phenyl Ether	ND	U	120	8.0	20	11/27/07	12/10/07	JWG0703934	
Thionazin	ND	U	230	130	20	11/27/07	12/10/07	JWG0703934	
Diethyl Phthalate	ND	U	120	20	20	11/27/07	12/10/07	JWG0703934	
5-Nitro-o-toluidine	ND	U	120	32	20	11/27/07	12/10/07	JWG0703934	
4-Nitroaniline	ND	U	120	5.8	20	11/27/07	12/10/07	JWG0703934	
2-Methyl-4,6-dinitrophenol	ND	U	450	7.2	20	11/27/07	12/10/07	JWG0703934	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705660  
 Date Collected: 11/26/2007  
 Date Received: 11/27/2007

## Semi-Volatile Organic Compounds by GC/MS (Appendix II)

Sample Name: L-3  
 Lab Code: J0705660-005  
 Extraction Method: EPA 3510C  
 Analysis Method: 8270C

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodiphenylamine†	ND	U	120	7.6	20	11/27/07	12/10/07	JWG0703934	
Diallate	ND	U	120	120	20	11/27/07	12/10/07	JWG0703934	
Phorate	ND	U	120	110	20	11/27/07	12/10/07	JWG0703934	
1,3,5-Trinitrobenzene	ND	U	120	67	20	11/27/07	12/10/07	JWG0703934	
4-Bromophenyl Phenyl Ether	ND	U	120	5.8	20	11/27/07	12/10/07	JWG0703934	
Phenacetin	ND	U	120	27	20	11/27/07	12/10/07	JWG0703934	
Hexachlorobenzene	ND	U	120	7.4	20	11/27/07	12/10/07	JWG0703934	
Dimethoate	ND	U	120	92	20	11/27/07	12/10/07	JWG0703934	
4-Aminobiphenyl	ND	U	120	27	20	11/27/07	12/10/07	JWG0703934	
Pentachlorophenol	ND	U	450	8.7	20	11/27/07	12/10/07	JWG0703934	
Pentachloronitrobenzene	ND	U	120	34	20	11/27/07	12/10/07	JWG0703934	
Pronamide	ND	U	450	430	20	11/27/07	12/10/07	JWG0703934	
Phenanthrene	ND	U	120	5.8	20	11/27/07	12/10/07	JWG0703934	
Disulfoton	ND	U	120	120	20	11/27/07	12/10/07	JWG0703934	
Dinoseb	ND	U	120	27	20	11/27/07	12/10/07	JWG0703934	
Anthracene	ND	U	120	5.8	20	11/27/07	12/10/07	JWG0703934	
Methyl Parathion	ND	U	230	140	20	11/27/07	12/10/07	JWG0703934	
Di-n-butyl Phthalate	ND	U	120	21	20	11/27/07	12/10/07	JWG0703934	
Parathion	ND	U	450	120	20	11/27/07	12/10/07	JWG0703934	
Methapyrilene	ND	U	120	80	20	11/27/07	12/10/07	JWG0703934	
Isodrin	ND	U	230	130	20	11/27/07	12/10/07	JWG0703934	
Fluoranthene	ND	U	120	5.8	20	11/27/07	12/10/07	JWG0703934	
Pyrene	ND	U	120	9.6	20	11/27/07	12/10/07	JWG0703934	
Chlorobenzilate	ND	U	230	140	20	11/27/07	12/10/07	JWG0703934	
3,3'-Dimethylbenzidine	ND	UJ	450	14	20	11/27/07	12/10/07	JWG0703934	J(3)
Famphur	ND	U	230	140	20	11/27/07	12/10/07	JWG0703934	
p-Dimethylaminoazobenzene	ND	U	120	38	20	11/27/07	12/10/07	JWG0703934	
Butyl Benzyl Phthalate	ND	U	230	13	20	11/27/07	12/10/07	JWG0703934	
2-Acetylaminofluorene	ND	U	120	43	20	11/27/07	12/10/07	JWG0703934	
Kepone	ND	U	1200	520	20	11/27/07	12/10/07	JWG0703934	
3,3'-Dichlorobenzidine	ND	U	450	14	20	11/27/07	12/10/07	JWG0703934	
Benz(a)anthracene	ND	U	120	13	20	11/27/07	12/10/07	JWG0703934	
Chrysene	ND	U	120	12	20	11/27/07	12/10/07	JWG0703934	
Bis(2-ethylhexyl) Phthalate	ND	U	120	25	20	11/27/07	12/10/07	JWG0703934	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705660  
 Date Collected: 11/26/2007  
 Date Received: 11/27/2007

## Semi-Volatile Organic Compounds by GC/MS (Appendix II)

Sample Name: L-3  
 Lab Code: J0705660-005  
 Extraction Method: EPA 3510C  
 Analysis Method: 8270C

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Di-n-octyl Phthalate	ND	U	120	16	20	11/27/07	12/10/07	JWG0703934	
Benzo(b)fluoranthene	ND	U	120	13	20	11/27/07	12/10/07	JWG0703934	
Benzo(k)fluoranthene	ND	U	120	13	20	11/27/07	12/10/07	JWG0703934	
7,12-Dimethylbenz(a)anthracene	ND	U	120	32	20	11/27/07	12/10/07	JWG0703934	
Benzo(a)pyrene	ND	U	120	13	20	11/27/07	12/10/07	JWG0703934	
3-Methylcholanthrene	ND	U	120	34	20	11/27/07	12/10/07	JWG0703934	
Indeno(1,2,3-cd)pyrene	ND	U	120	12	20	11/27/07	12/10/07	JWG0703934	
Dibenz(a,h)anthracene	ND	U	120	13	20	11/27/07	12/10/07	JWG0703934	
Benzo(g,h,i)perylene	ND	U	120	11	20	11/27/07	12/10/07	JWG0703934	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	34	10-77	12/10/07	Acceptable
Phenol-d6	45	10-51	12/10/07	Acceptable
Nitrobenzene-d5	87	42-106	12/10/07	Acceptable
2-Fluorobiphenyl	70	43-99	12/10/07	Acceptable
2,4,6-Tribromophenol	66	30-141	12/10/07	Acceptable
Terphenyl-d14	72	23-165	12/10/07	Acceptable

## † Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.  
 N-Nitrosodiphenylamine This analyte can not be separated from Diphenylamine.

Comments: \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705660  
 Date Collected: 11/26/2007  
 Date Received: 11/27/2007

## Semi-Volatile Organic Compounds by GC/MS (Appendix II)

Sample Name: L-4  
 Lab Code: J0705660-006  
 Extraction Method: EPA 3510C  
 Analysis Method: 8270C

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	5.9	0.59	1	11/27/07	11/29/07	JWG0703934	
N-Nitrosomethylethylamine	ND	U	5.9	0.69	1	11/27/07	11/29/07	JWG0703934	
Methyl Methanesulfonate	ND	U	5.9	0.69	1	11/27/07	11/29/07	JWG0703934	
N-Nitrosodiethylamine	ND	U	5.9	1.2	1	11/27/07	11/29/07	JWG0703934	
Ethyl Methanesulfonate	ND	U	5.9	0.97	1	11/27/07	11/29/07	JWG0703934	
Phenol	ND	U	5.9	2.0	1	11/27/07	11/29/07	JWG0703934	
Bis(2-chloroethyl) Ether	ND	U	5.9	0.50	1	11/27/07	11/29/07	JWG0703934	
2-Chlorophenol	ND	U	5.9	0.56	1	11/27/07	11/29/07	JWG0703934	
1,3-Dichlorobenzene	ND	U	5.9	0.49	1	11/27/07	11/29/07	JWG0703934	
<b>1,4-Dichlorobenzene</b>	<b>3.7</b>	<b>I</b>	5.9	0.63	1	11/27/07	11/29/07	JWG0703934	
1,2-Dichlorobenzene	ND	U	5.9	0.60	1	11/27/07	11/29/07	JWG0703934	
Bis(2-chloroisopropyl) Ether	ND	U	5.9	0.67	1	11/27/07	11/29/07	JWG0703934	
Benzyl alcohol	ND	U	5.9	0.49	1	11/27/07	11/29/07	JWG0703934	
<b>2-Methylphenol</b>	<b>3.3</b>	<b>I</b>	5.9	0.52	1	11/27/07	11/29/07	JWG0703934	
Acetophenone	ND	U	12	6.6	1	11/27/07	11/29/07	JWG0703934	
N-Nitrosopyrrolidine	ND	U	5.9	0.92	1	11/27/07	11/29/07	JWG0703934	
Hexachloroethane	ND	U	5.9	0.61	1	11/27/07	11/29/07	JWG0703934	
N-Nitrosodi-n-propylamine	ND	U	5.9	0.60	1	11/27/07	11/29/07	JWG0703934	
o-Toluidine	ND	U	5.9	0.84	1	11/27/07	11/29/07	JWG0703934	
<b>4-Methylphenol†</b>	<b>1.6</b>	<b>I</b>	5.9	0.85	1	11/27/07	11/29/07	JWG0703934	
Nitrobenzene	ND	U	5.9	0.68	1	11/27/07	11/29/07	JWG0703934	
N-Nitrosopiperidine	ND	U	5.9	1.3	1	11/27/07	11/29/07	JWG0703934	
Isophorone	ND	U	5.9	0.75	1	11/27/07	11/29/07	JWG0703934	
2-Nitrophenol	ND	U	24	0.55	1	11/27/07	11/29/07	JWG0703934	
<b>2,4-Dimethylphenol</b>	<b>5.6</b>	<b>I</b>	5.9	0.62	1	11/27/07	11/29/07	JWG0703934	
O,O,O-Triethyl Phosphorothioate	ND	U	24	5.7	1	11/27/07	11/29/07	JWG0703934	
bis(2-Chloroethoxy)methane	ND	U	5.9	0.53	1	11/27/07	11/29/07	JWG0703934	
2,4-Dichlorophenol	ND	U	5.9	0.48	1	11/27/07	11/29/07	JWG0703934	
1,2,4-Trichlorobenzene	ND	U	5.9	0.48	1	11/27/07	11/29/07	JWG0703934	
<b>Naphthalene</b>	<b>4.4</b>	<b>I</b>	5.9	0.48	1	11/27/07	11/29/07	JWG0703934	
2,6-Dichlorophenol	ND	U	12	1.4	1	11/27/07	11/29/07	JWG0703934	
Hexachloropropene	ND	U	5.9	1.6	1	11/27/07	11/29/07	JWG0703934	
4-Chloroaniline	ND	U	5.9	0.44	1	11/27/07	11/29/07	JWG0703934	
Hexachlorobutadiene	ND	U	5.9	0.52	1	11/27/07	11/29/07	JWG0703934	

Comments: \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Semi-Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** L-4  
**Lab Code:** J0705660-006  
**Extraction Method:** EPA 3510C  
**Analysis Method:** 8270C

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodi-n-butylamine	ND	U	5.9	1.9	1	11/27/07	11/29/07	JWG0703934	
p-Phenylenediamine	ND	U	24	24	1	11/27/07	11/29/07	JWG0703934	
4-Chloro-3-methylphenol	ND	U	5.9	0.60	1	11/27/07	11/29/07	JWG0703934	
<b>2-Methylnaphthalene</b>	<b>2.2</b>	<b>I</b>	5.9	0.49	1	11/27/07	11/29/07	JWG0703934	
Hexachlorocyclopentadiene	ND	U	5.9	0.40	1	11/27/07	11/29/07	JWG0703934	
1,2,4,5-Tetrachlorobenzene	ND	U	5.9	1.7	1	11/27/07	11/29/07	JWG0703934	
Safrole	ND	U	5.9	1.7	1	11/27/07	11/29/07	JWG0703934	
2,4,6-Trichlorophenol	ND	U	5.9	0.47	1	11/27/07	11/29/07	JWG0703934	
2,4,5-Trichlorophenol	ND	U	5.9	0.48	1	11/27/07	11/29/07	JWG0703934	
Isosafrole	ND	U	5.9	1.7	1	11/27/07	11/29/07	JWG0703934	
2-Chloronaphthalene	ND	U	5.9	0.52	1	11/27/07	11/29/07	JWG0703934	
2-Nitroaniline	ND	U	5.9	0.35	1	11/27/07	11/29/07	JWG0703934	
1,4-Naphthoquinone	ND	U	12	8.4	1	11/27/07	11/29/07	JWG0703934	
1,3-Dinitrobenzene	ND	U	12	6.4	1	11/27/07	11/29/07	JWG0703934	
Acenaphthylene	ND	U	5.9	0.40	1	11/27/07	11/29/07	JWG0703934	
Dimethyl Phthalate	ND	U	5.9	0.49	1	11/27/07	11/29/07	JWG0703934	
2,6-Dinitrotoluene	ND	U	5.9	0.59	1	11/27/07	11/29/07	JWG0703934	
Acenaphthene	ND	U	5.9	0.38	1	11/27/07	11/29/07	JWG0703934	
3-Nitroaniline	ND	U	5.9	0.31	1	11/27/07	11/29/07	JWG0703934	
2,4-Dinitrophenol	ND	U	24	0.84	1	11/27/07	11/29/07	JWG0703934	
Pentachlorobenzene	ND	U	5.9	1.8	1	11/27/07	11/29/07	JWG0703934	
Dibenzofuran	ND	U	5.9	0.52	1	11/27/07	11/29/07	JWG0703934	
4-Nitrophenol	ND	U	24	0.67	1	11/27/07	11/29/07	JWG0703934	
2,4-Dinitrotoluene	ND	U	5.9	0.46	1	11/27/07	11/29/07	JWG0703934	
2-Naphthylamine	ND	U	5.9	1.2	1	11/27/07	11/29/07	JWG0703934	
2,3,4,6-Tetrachlorophenol	ND	U	5.9	0.54	1	11/27/07	11/29/07	JWG0703934	
1-Naphthylamine	ND	U	5.9	1.1	1	11/27/07	11/29/07	JWG0703934	
Fluorene	ND	U	5.9	0.42	1	11/27/07	11/29/07	JWG0703934	
4-Chlorophenyl Phenyl Ether	ND	U	5.9	0.42	1	11/27/07	11/29/07	JWG0703934	
Thionazin	ND	U	12	6.4	1	11/27/07	11/29/07	JWG0703934	
Diethyl Phthalate	ND	U	5.9	1.1	1	11/27/07	11/29/07	JWG0703934	
5-Nitro-o-toluidine	ND	U	5.9	1.7	1	11/27/07	11/29/07	JWG0703934	
4-Nitroaniline	ND	U	5.9	0.31	1	11/27/07	11/29/07	JWG0703934	
2-Methyl-4,6-dinitrophenol	ND	U	24	0.38	1	11/27/07	11/29/07	JWG0703934	

Comments: \_\_\_\_\_

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705660  
 Date Collected: 11/26/2007  
 Date Received: 11/27/2007

## Semi-Volatile Organic Compounds by GC/MS (Appendix II)

Sample Name: L-4  
 Lab Code: J0705660-006  
 Extraction Method: EPA 3510C  
 Analysis Method: 8270C

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodiphenylamine†	ND	U	5.9	0.40	1	11/27/07	11/29/07	JWG0703934	
Diallate	ND	U	5.9	5.9	1	11/27/07	11/29/07	JWG0703934	
Phorate	ND	U	5.9	5.4	1	11/27/07	11/29/07	JWG0703934	
1,3,5-Trinitrobenzene	ND	U	5.9	3.5	1	11/27/07	11/29/07	JWG0703934	
4-Bromophenyl Phenyl Ether	ND	U	5.9	0.31	1	11/27/07	11/29/07	JWG0703934	
Phenacetin	ND	U	5.9	1.4	1	11/27/07	11/29/07	JWG0703934	
Hexachlorobenzene	ND	U	5.9	0.39	1	11/27/07	11/29/07	JWG0703934	
Dimethoate	ND	U	5.9	4.8	1	11/27/07	11/29/07	JWG0703934	
4-Aminobiphenyl	ND	U	5.9	1.4	1	11/27/07	11/29/07	JWG0703934	
Pentachlorophenol	ND	U	24	0.46	1	11/27/07	11/29/07	JWG0703934	
Pentachloronitrobenzene	ND	U	5.9	1.8	1	11/27/07	11/29/07	JWG0703934	
Pronamide	ND	U	24	23	1	11/27/07	11/29/07	JWG0703934	
Phenanthrene	ND	U	5.9	0.31	1	11/27/07	11/29/07	JWG0703934	
Disulfoton	ND	U	5.9	5.9	1	11/27/07	11/29/07	JWG0703934	
Dinoseb	ND	U	5.9	1.4	1	11/27/07	11/29/07	JWG0703934	
Anthracene	ND	U	5.9	0.31	1	11/27/07	11/29/07	JWG0703934	
Methyl Parathion	ND	U	12	7.0	1	11/27/07	11/29/07	JWG0703934	
Di-n-butyl Phthalate	ND	U	5.9	1.1	1	11/27/07	11/29/07	JWG0703934	
Parathion	ND	U	24	6.3	1	11/27/07	11/29/07	JWG0703934	
Methapyrilene	ND	U	5.9	4.2	1	11/27/07	11/29/07	JWG0703934	
Isodrin	ND	U	12	6.6	1	11/27/07	11/29/07	JWG0703934	
Fluoranthene	ND	U	5.9	0.31	1	11/27/07	11/29/07	JWG0703934	
Pyrene	ND	U	5.9	0.50	1	11/27/07	11/29/07	JWG0703934	
Chlorobenzilate	ND	U	12	6.9	1	11/27/07	11/29/07	JWG0703934	
Famphur	ND	U	12	7.4	1	11/27/07	11/29/07	JWG0703934	
3,3'-Dimethylbenzidine	ND	U	24	0.70	1	11/27/07	11/29/07	JWG0703934	
p-Dimethylaminoazobenzene	ND	U	5.9	2.0	1	11/27/07	11/29/07	JWG0703934	
Butyl Benzyl Phthalate	ND	U	12	0.66	1	11/27/07	11/29/07	JWG0703934	
2-Acetylaminofluorene	ND	U	5.9	2.3	1	11/27/07	11/29/07	JWG0703934	
Kepone	ND	U	59	27	1	11/27/07	11/29/07	JWG0703934	
3,3'-Dichlorobenzidine	ND	U	24	0.71	1	11/27/07	11/29/07	JWG0703934	
Benz(a)anthracene	ND	U	5.9	0.66	1	11/27/07	11/29/07	JWG0703934	
Chrysene	ND	U	5.9	0.60	1	11/27/07	11/29/07	JWG0703934	
Bis(2-ethylhexyl) Phthalate	ND	U	5.9	1.3	1	11/27/07	11/29/07	JWG0703934	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Semi-Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** L-4  
**Lab Code:** J0705660-006  
**Extraction Method:** EPA 3510C  
**Analysis Method:** 8270C

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Di-n-octyl Phthalate	ND	U	5.9	0.80	1	11/27/07	11/29/07	JWG0703934	
Benzo(b)fluoranthene	ND	U	5.9	0.68	1	11/27/07	11/29/07	JWG0703934	
Benzo(k)fluoranthene	ND	U	5.9	0.67	1	11/27/07	11/29/07	JWG0703934	
7,12-Dimethylbenz(a)anthracene	ND	U	5.9	1.7	1	11/27/07	11/29/07	JWG0703934	
Benzo(a)pyrene	ND	U	5.9	0.64	1	11/27/07	11/29/07	JWG0703934	
3-Methylcholanthrene	ND	U	5.9	1.8	1	11/27/07	11/29/07	JWG0703934	
Indeno(1,2,3-cd)pyrene	ND	U	5.9	0.62	1	11/27/07	11/29/07	JWG0703934	
Dibenz(a,h)anthracene	ND	U	5.9	0.66	1	11/27/07	11/29/07	JWG0703934	
Benzo(g,h,i)perylene	ND	U	5.9	0.57	1	11/27/07	11/29/07	JWG0703934	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	18	10-77	11/29/07	Acceptable
Phenol-d6	18	10-51	11/29/07	Acceptable
Nitrobenzene-d5	57	42-106	11/29/07	Acceptable
2-Fluorobiphenyl	48	43-99	11/29/07	Acceptable
2,4,6-Tribromophenol	63	30-141	11/29/07	Acceptable
Terphenyl-d14	33	23-165	11/29/07	Acceptable

## † Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.  
N-Nitrosodiphenylamine This analyte can not be separated from Diphenylamine.

Comments:

## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705660  
 Date Collected: NA  
 Date Received: NA

## Semi-Volatile Organic Compounds by GC/MS (Appendix II)

Sample Name: Method Blank  
 Lab Code: JWG0703934-4  
 Extraction Method: EPA 3510C  
 Analysis Method: 8270C

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	5.0	0.50	1	11/26/07	11/29/07	JWG0703934	
N-Nitrosomethylethylamine	ND	U	5.0	0.59	1	11/26/07	11/29/07	JWG0703934	
Methyl Methanesulfonate	ND	U	5.0	0.59	1	11/26/07	11/29/07	JWG0703934	
N-Nitrosodiethylamine	ND	U	5.0	0.95	1	11/26/07	11/29/07	JWG0703934	
Ethyl Methanesulfonate	ND	U	5.0	0.83	1	11/26/07	11/29/07	JWG0703934	
Phenol	ND	U	5.0	1.7	1	11/26/07	11/29/07	JWG0703934	
Bis(2-chloroethyl) Ether	ND	U	5.0	0.43	1	11/26/07	11/29/07	JWG0703934	
2-Chlorophenol	ND	U	5.0	0.48	1	11/26/07	11/29/07	JWG0703934	
1,3-Dichlorobenzene	ND	U	5.0	0.42	1	11/26/07	11/29/07	JWG0703934	
1,4-Dichlorobenzene	ND	U	5.0	0.54	1	11/26/07	11/29/07	JWG0703934	
1,2-Dichlorobenzene	ND	U	5.0	0.51	1	11/26/07	11/29/07	JWG0703934	
Bis(2-chloroisopropyl) Ether	ND	U	5.0	0.57	1	11/26/07	11/29/07	JWG0703934	
Benzyl alcohol	ND	U	5.0	0.42	1	11/26/07	11/29/07	JWG0703934	
2-Methylphenol	ND	U	5.0	0.44	1	11/26/07	11/29/07	JWG0703934	
Acetophenone	ND	U	10	5.6	1	11/26/07	11/29/07	JWG0703934	
N-Nitrosopyrrolidine	ND	U	5.0	0.79	1	11/26/07	11/29/07	JWG0703934	
Hexachloroethane	ND	U	5.0	0.52	1	11/26/07	11/29/07	JWG0703934	
N-Nitrosodi-n-propylamine	ND	U	5.0	0.51	1	11/26/07	11/29/07	JWG0703934	
o-Toluidine	ND	U	5.0	0.72	1	11/26/07	11/29/07	JWG0703934	
4-Methylphenol†	ND	U	5.0	0.73	1	11/26/07	11/29/07	JWG0703934	
Nitrobenzene	ND	U	5.0	0.58	1	11/26/07	11/29/07	JWG0703934	
N-Nitrosopiperidine	ND	U	5.0	1.1	1	11/26/07	11/29/07	JWG0703934	
Isophorone	ND	U	5.0	0.64	1	11/26/07	11/29/07	JWG0703934	
2-Nitrophenol	ND	U	20	0.47	1	11/26/07	11/29/07	JWG0703934	
2,4-Dimethylphenol	ND	U	5.0	0.53	1	11/26/07	11/29/07	JWG0703934	
O,O,O-Triethyl Phosphorothioate	ND	U	20	4.9	1	11/26/07	11/29/07	JWG0703934	
bis(2-Chloroethoxy)methane	ND	U	5.0	0.45	1	11/26/07	11/29/07	JWG0703934	
2,4-Dichlorophenol	ND	U	5.0	0.41	1	11/26/07	11/29/07	JWG0703934	
1,2,4-Trichlorobenzene	ND	U	5.0	0.41	1	11/26/07	11/29/07	JWG0703934	
Naphthalene	ND	U	5.0	0.41	1	11/26/07	11/29/07	JWG0703934	
2,6-Dichlorophenol	ND	U	10	1.2	1	11/26/07	11/29/07	JWG0703934	
Hexachloropropene	ND	U	5.0	1.3	1	11/26/07	11/29/07	JWG0703934	
4-Chloroaniline	ND	U	5.0	0.37	1	11/26/07	11/29/07	JWG0703934	
Hexachlorobutadiene	ND	U	5.0	0.44	1	11/26/07	11/29/07	JWG0703934	

Comments:



## Analytical Results

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705660  
 Date Collected: NA  
 Date Received: NA

## Semi-Volatile Organic Compounds by GC/MS (Appendix II)

Sample Name: Method Blank  
 Lab Code: JWG0703934-4  
 Extraction Method: EPA 3510C  
 Analysis Method: 8270C

Units: ug/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodi-n-butylamine	ND	U	5.0	1.6	1	11/26/07	11/29/07	JWG0703934	
p-Phenylenediamine	ND	U	20	20	1	11/26/07	11/29/07	JWG0703934	
4-Chloro-3-methylphenol	ND	U	5.0	0.51	1	11/26/07	11/29/07	JWG0703934	
2-Methylnaphthalene	ND	U	5.0	0.42	1	11/26/07	11/29/07	JWG0703934	
Hexachlorocyclopentadiene	ND	U	5.0	0.34	1	11/26/07	11/29/07	JWG0703934	
1,2,4,5-Tetrachlorobenzene	ND	U	5.0	1.4	1	11/26/07	11/29/07	JWG0703934	
Safrole	ND	U	5.0	1.4	1	11/26/07	11/29/07	JWG0703934	
2,4,6-Trichlorophenol	ND	U	5.0	0.40	1	11/26/07	11/29/07	JWG0703934	
2,4,5-Trichlorophenol	ND	U	5.0	0.41	1	11/26/07	11/29/07	JWG0703934	
Isosafrole	ND	U	5.0	1.4	1	11/26/07	11/29/07	JWG0703934	
2-Chloronaphthalene	ND	U	5.0	0.44	1	11/26/07	11/29/07	JWG0703934	
2-Nitroaniline	ND	U	5.0	0.30	1	11/26/07	11/29/07	JWG0703934	
1,4-Naphthoquinone	ND	U	10	7.2	1	11/26/07	11/29/07	JWG0703934	
1,3-Dinitrobenzene	ND	U	10	5.5	1	11/26/07	11/29/07	JWG0703934	
Acenaphthylene	ND	U	5.0	0.34	1	11/26/07	11/29/07	JWG0703934	
Dimethyl Phthalate	ND	U	5.0	0.42	1	11/26/07	11/29/07	JWG0703934	
2,6-Dinitrotoluene	ND	U	5.0	0.50	1	11/26/07	11/29/07	JWG0703934	
Acenaphthene	ND	U	5.0	0.32	1	11/26/07	11/29/07	JWG0703934	
3-Nitroaniline	ND	U	5.0	0.26	1	11/26/07	11/29/07	JWG0703934	
2,4-Dinitrophenol	ND	U	20	0.72	1	11/26/07	11/29/07	JWG0703934	
Pentachlorobenzene	ND	U	5.0	1.5	1	11/26/07	11/29/07	JWG0703934	
Dibenzofuran	ND	U	5.0	0.44	1	11/26/07	11/29/07	JWG0703934	
4-Nitrophenol	ND	U	20	0.57	1	11/26/07	11/29/07	JWG0703934	
2,4-Dinitrotoluene	ND	U	5.0	0.39	1	11/26/07	11/29/07	JWG0703934	
2-Naphthylamine	ND	U	5.0	1.0	1	11/26/07	11/29/07	JWG0703934	
2,3,4,6-Tetrachlorophenol	ND	U	5.0	0.46	1	11/26/07	11/29/07	JWG0703934	
1-Naphthylamine	ND	U	5.0	0.93	1	11/26/07	11/29/07	JWG0703934	
Fluorene	ND	U	5.0	0.36	1	11/26/07	11/29/07	JWG0703934	
4-Chlorophenyl Phenyl Ether	ND	U	5.0	0.36	1	11/26/07	11/29/07	JWG0703934	
Thionazin	ND	U	10	5.5	1	11/26/07	11/29/07	JWG0703934	
Diethyl Phthalate	ND	U	5.0	0.90	1	11/26/07	11/29/07	JWG0703934	
5-Nitro-o-toluidine	ND	U	5.0	1.4	1	11/26/07	11/29/07	JWG0703934	
4-Nitroaniline	ND	U	5.0	0.26	1	11/26/07	11/29/07	JWG0703934	
2-Methyl-4,6-dinitrophenol	ND	U	20	0.32	1	11/26/07	11/29/07	JWG0703934	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** NA  
**Date Received:** NA

## Semi-Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** Method Blank  
**Lab Code:** JWG0703934-4  
**Extraction Method:** EPA 3510C  
**Analysis Method:** 8270C

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodiphenylamine†	ND	U	5.0	0.34	1	11/26/07	11/29/07	JWG0703934	
Diallate	ND	U	5.0	5.0	1	11/26/07	11/29/07	JWG0703934	
Phorate	ND	U	5.0	4.6	1	11/26/07	11/29/07	JWG0703934	
1,3,5-Trinitrobenzene	ND	U	5.0	3.0	1	11/26/07	11/29/07	JWG0703934	
4-Bromophenyl Phenyl Ether	ND	U	5.0	0.26	1	11/26/07	11/29/07	JWG0703934	
Phenacetin	ND	U	5.0	1.2	1	11/26/07	11/29/07	JWG0703934	
Hexachlorobenzene	ND	U	5.0	0.33	1	11/26/07	11/29/07	JWG0703934	
Dimethoate	ND	U	5.0	4.1	1	11/26/07	11/29/07	JWG0703934	
4-Aminobiphenyl	ND	U	5.0	1.2	1	11/26/07	11/29/07	JWG0703934	
Pentachlorophenol	ND	U	20	0.39	1	11/26/07	11/29/07	JWG0703934	
Pentachloronitrobenzene	ND	U	5.0	1.5	1	11/26/07	11/29/07	JWG0703934	
Pronamide	ND	U	20	19	1	11/26/07	11/29/07	JWG0703934	
Phenanthrene	ND	U	5.0	0.26	1	11/26/07	11/29/07	JWG0703934	
Disulfoton	ND	U	5.0	5.0	1	11/26/07	11/29/07	JWG0703934	
Dinoseb	ND	U	5.0	1.2	1	11/26/07	11/29/07	JWG0703934	
Anthracene	ND	U	5.0	0.26	1	11/26/07	11/29/07	JWG0703934	
Methyl Parathion	ND	U	10	6.0	1	11/26/07	11/29/07	JWG0703934	
Di-n-butyl Phthalate	ND	U	5.0	0.91	1	11/26/07	11/29/07	JWG0703934	
Parathion	ND	U	20	5.4	1	11/26/07	11/29/07	JWG0703934	
Methapyrilene	ND	U	5.0	3.6	1	11/26/07	11/29/07	JWG0703934	
Isodrin	ND	U	10	5.6	1	11/26/07	11/29/07	JWG0703934	
Fluoranthene	ND	U	5.0	0.26	1	11/26/07	11/29/07	JWG0703934	
Pyrene	ND	U	5.0	0.43	1	11/26/07	11/29/07	JWG0703934	
Chlorobenzilate	ND	U	10	5.9	1	11/26/07	11/29/07	JWG0703934	
Famphur	ND	U	10	6.3	1	11/26/07	11/29/07	JWG0703934	
3,3'-Dimethylbenzidine	ND	U	20	0.60	1	11/26/07	11/29/07	JWG0703934	
p-Dimethylaminoazobenzene	ND	U	5.0	1.7	1	11/26/07	11/29/07	JWG0703934	
Butyl Benzyl Phthalate	ND	U	10	0.56	1	11/26/07	11/29/07	JWG0703934	
2-Acetylaminofluorene	ND	U	5.0	1.9	1	11/26/07	11/29/07	JWG0703934	
Kepone	ND	U	50	23	1	11/26/07	11/29/07	JWG0703934	
3,3'-Dichlorobenzidine	ND	U	20	0.61	1	11/26/07	11/29/07	JWG0703934	
Benz(a)anthracene	ND	U	5.0	0.56	1	11/26/07	11/29/07	JWG0703934	
Chrysene	ND	U	5.0	0.51	1	11/26/07	11/29/07	JWG0703934	
Bis(2-ethylhexyl) Phthalate	ND	U	5.0	1.1	1	11/26/07	11/29/07	JWG0703934	

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** NA  
**Date Received:** NA

## Semi-Volatile Organic Compounds by GC/MS (Appendix II)

**Sample Name:** Method Blank  
**Lab Code:** JWG0703934-4  
**Extraction Method:** EPA 3510C  
**Analysis Method:** 8270C

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Di-n-octyl Phthalate	ND	U	5.0	0.68	1	11/26/07	11/29/07	JWG0703934	
Benzo(b)fluoranthene	ND	U	5.0	0.58	1	11/26/07	11/29/07	JWG0703934	
Benzo(k)fluoranthene	ND	U	5.0	0.57	1	11/26/07	11/29/07	JWG0703934	
7,12-Dimethylbenz(a)anthracene	ND	U	5.0	1.4	1	11/26/07	11/29/07	JWG0703934	
Benzo(a)pyrene	ND	U	5.0	0.55	1	11/26/07	11/29/07	JWG0703934	
3-Methylcholanthrene	ND	U	5.0	1.5	1	11/26/07	11/29/07	JWG0703934	
Indeno(1,2,3-cd)pyrene	ND	U	5.0	0.53	1	11/26/07	11/29/07	JWG0703934	
Dibenz(a,h)anthracene	ND	U	5.0	0.56	1	11/26/07	11/29/07	JWG0703934	
Benzo(g,h,i)perylene	ND	U	5.0	0.49	1	11/26/07	11/29/07	JWG0703934	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	27	10-77	11/29/07	Acceptable
Phenol-d6	21	10-51	11/29/07	Acceptable
Nitrobenzene-d5	83	42-106	11/29/07	Acceptable
2-Fluorobiphenyl	79	43-99	11/29/07	Acceptable
2,4,6-Tribromophenol	99	30-141	11/29/07	Acceptable
Terphenyl-d14	85	23-165	11/29/07	Acceptable

## † Analyte Comments

4-Methylphenol This analyte cannot be separated from 3-Methylphenol.  
N-Nitrosodiphenylamine This analyte can not be separated from Diphenylamine.

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Organochlorine Pesticides by GC-ECD

**Sample Name:** L-1  
**Lab Code:** J0705660-003  
**Extraction Method:** EPA 3510C  
**Analysis Method:** 8081A

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	ND	U	0.022	0.0087	1	11/27/07	12/03/07	JWG0703960	
gamma-BHC (Lindane)	ND	U	0.022	0.0091	1	11/27/07	12/03/07	JWG0703960	
beta-BHC	ND	U	0.022	0.0094	1	11/27/07	12/03/07	JWG0703960	
delta-BHC	ND	U	0.022	0.013	1	11/27/07	12/03/07	JWG0703960	
Heptachlor	ND	U	0.022	0.011	1	11/27/07	12/03/07	JWG0703960	
Aldrin	ND	U	0.022	0.0075	1	11/27/07	12/03/07	JWG0703960	
Heptachlor Epoxide	ND	U	0.022	0.0087	1	11/27/07	12/03/07	JWG0703960	
gamma-Chlordane	ND	U	0.022	0.0083	1	11/27/07	12/03/07	JWG0703960	
alpha-Chlordane	ND	U	0.022	0.0073	1	11/27/07	12/03/07	JWG0703960	
4,4'-DDE	ND	U	0.022	0.0093	1	11/27/07	12/03/07	JWG0703960	
Endosulfan I	ND	U	0.022	0.0098	1	11/27/07	12/03/07	JWG0703960	
Dieldrin	ND	UJ	0.022	0.0081	1	11/27/07	12/03/07	JWG0703960	J(3)
Endrin	ND	U	0.022	0.0099	1	11/27/07	12/03/07	JWG0703960	
4,4'-DDD	ND	U	0.022	0.0087	1	11/27/07	12/03/07	JWG0703960	
Endosulfan II	ND	UJ	0.022	0.0071	1	11/27/07	12/03/07	JWG0703960	J(3)
4,4'-DDT	ND	U	0.022	0.015	1	11/27/07	12/03/07	JWG0703960	
Endrin Aldehyde	ND	U	0.022	0.0094	1	11/27/07	12/03/07	JWG0703960	
Methoxychlor	ND	U	0.044	0.013	1	11/27/07	12/03/07	JWG0703960	
Endosulfan Sulfate	ND	U	0.022	0.011	1	11/27/07	12/03/07	JWG0703960	
Endrin Ketone	ND	U	0.022	0.0059	1	11/27/07	12/03/07	JWG0703960	
Toxaphene	ND	U	0.55	0.55	1	11/27/07	12/03/07	JWG0703960	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	46	32-92	12/03/07	Acceptable
Decachlorobiphenyl	32	13-104	12/03/07	Acceptable

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Organochlorine Pesticides by GC-ECD

**Sample Name:** L-2  
**Lab Code:** J0705660-004  
**Extraction Method:** EPA 3510C  
**Analysis Method:** 8081A

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	ND	U	0.023	0.0088	1	11/27/07	12/03/07	JWG0703960	
gamma-BHC (Lindane)	ND	U	0.023	0.0092	1	11/27/07	12/03/07	JWG0703960	
beta-BHC	ND	U	0.023	0.0095	1	11/27/07	12/03/07	JWG0703960	
delta-BHC	ND	U	0.023	0.013	1	11/27/07	12/03/07	JWG0703960	
Heptachlor	ND	U	0.023	0.011	1	11/27/07	12/03/07	JWG0703960	
Aldrin	ND	U	0.023	0.0076	1	11/27/07	12/03/07	JWG0703960	
Heptachlor Epoxide	ND	U	0.023	0.0088	1	11/27/07	12/03/07	JWG0703960	
gamma-Chlordane	ND	U	0.023	0.0084	1	11/27/07	12/03/07	JWG0703960	
alpha-Chlordane	ND	U	0.023	0.0074	1	11/27/07	12/03/07	JWG0703960	
4,4'-DDE	ND	U	0.023	0.0094	1	11/27/07	12/03/07	JWG0703960	
Endosulfan I	ND	U	0.023	0.0099	1	11/27/07	12/03/07	JWG0703960	
Dieldrin	ND	UJ	0.023	0.0082	1	11/27/07	12/03/07	JWG0703960	J(3)
Endrin	ND	U	0.023	0.010	1	11/27/07	12/03/07	JWG0703960	
4,4'-DDD	ND	U	0.023	0.0088	1	11/27/07	12/03/07	JWG0703960	
Endosulfan II	ND	UJ	0.023	0.0072	1	11/27/07	12/03/07	JWG0703960	J(3)
4,4'-DDT	ND	U	0.023	0.015	1	11/27/07	12/03/07	JWG0703960	
Endrin Aldehyde	ND	U	0.023	0.0095	1	11/27/07	12/03/07	JWG0703960	
Methoxychlor	ND	U	0.045	0.013	1	11/27/07	12/03/07	JWG0703960	
Endosulfan Sulfate	ND	U	0.023	0.011	1	11/27/07	12/03/07	JWG0703960	
Endrin Ketone	ND	U	0.023	0.0059	1	11/27/07	12/03/07	JWG0703960	
Toxaphene	ND	U	0.56	0.56	1	11/27/07	12/03/07	JWG0703960	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	39	32-92	12/03/07	Acceptable
Decachlorobiphenyl	24	13-104	12/03/07	Acceptable

**Comments:**

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Organochlorine Pesticides by GC-ECD

**Sample Name:** L-3  
**Lab Code:** J0705660-005  
**Extraction Method:** EPA 3510C  
**Analysis Method:** 8081A

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	ND	U	0.023	0.0088	1	11/27/07	12/03/07	JWG0703960	
gamma-BHC (Lindane)	ND	U	0.023	0.0092	1	11/27/07	12/03/07	JWG0703960	
beta-BHC	ND	U	0.023	0.0095	1	11/27/07	12/03/07	JWG0703960	
delta-BHC	ND	U	0.023	0.013	1	11/27/07	12/03/07	JWG0703960	
Heptachlor	ND	U	0.023	0.011	1	11/27/07	12/03/07	JWG0703960	
Aldrin	ND	U	0.023	0.0076	1	11/27/07	12/03/07	JWG0703960	
Heptachlor Epoxide	ND	U	0.023	0.0088	1	11/27/07	12/03/07	JWG0703960	
gamma-Chlordane	ND	U	0.023	0.0084	1	11/27/07	12/03/07	JWG0703960	
alpha-Chlordane	ND	U	0.023	0.0074	1	11/27/07	12/03/07	JWG0703960	
4,4'-DDE	ND	U	0.023	0.0094	1	11/27/07	12/03/07	JWG0703960	
Endosulfan I	ND	U	0.023	0.0099	1	11/27/07	12/03/07	JWG0703960	
Dieldrin	ND	UJ	0.023	0.0082	1	11/27/07	12/03/07	JWG0703960	J(3)
Endrin	ND	U	0.023	0.010	1	11/27/07	12/03/07	JWG0703960	
4,4'-DDD	ND	U	0.023	0.0088	1	11/27/07	12/03/07	JWG0703960	
Endosulfan II	ND	UJ	0.023	0.0072	1	11/27/07	12/03/07	JWG0703960	J(3)
4,4'-DDT	ND	U	0.023	0.015	1	11/27/07	12/03/07	JWG0703960	
Endrin Aldehyde	ND	U	0.023	0.0095	1	11/27/07	12/03/07	JWG0703960	
Methoxychlor	ND	U	0.045	0.013	1	11/27/07	12/03/07	JWG0703960	
Endosulfan Sulfate	ND	U	0.023	0.011	1	11/27/07	12/03/07	JWG0703960	
Endrin Ketone	ND	U	0.023	0.0059	1	11/27/07	12/03/07	JWG0703960	
Toxaphene	ND	U	0.56	0.56	1	11/27/07	12/03/07	JWG0703960	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	31	32-92	12/03/07	Outside Control Limits
Decachlorobiphenyl	49	13-104	12/03/07	Acceptable

**Comments:**

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Organochlorine Pesticides by GC-ECD

**Sample Name:** L-4  
**Lab Code:** J0705660-006  
**Extraction Method:** EPA 3510C  
**Analysis Method:** 8081A

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	ND	U	0.024	0.0092	1	11/27/07	12/03/07	JWG0703960	
gamma-BHC (Lindane)	ND	U	0.024	0.0096	1	11/27/07	12/03/07	JWG0703960	
beta-BHC	ND	U	0.024	0.0099	1	11/27/07	12/03/07	JWG0703960	
delta-BHC	ND	U	0.024	0.013	1	11/27/07	12/03/07	JWG0703960	
Heptachlor	ND	U	0.024	0.012	1	11/27/07	12/03/07	JWG0703960	
Aldrin	ND	U	0.024	0.0080	1	11/27/07	12/03/07	JWG0703960	
Heptachlor Epoxide	ND	U	0.024	0.0092	1	11/27/07	12/03/07	JWG0703960	
gamma-Chlordane	ND	U	0.024	0.0088	1	11/27/07	12/03/07	JWG0703960	
alpha-Chlordane	ND	U	0.024	0.0077	1	11/27/07	12/03/07	JWG0703960	
4,4'-DDE	ND	U	0.024	0.0098	1	11/27/07	12/03/07	JWG0703960	
Endosulfan I	ND	U	0.024	0.011	1	11/27/07	12/03/07	JWG0703960	
Dieldrin	ND	UJ	0.024	0.0085	1	11/27/07	12/03/07	JWG0703960	J(3)
Endrin	ND	U	0.024	0.011	1	11/27/07	12/03/07	JWG0703960	
4,4'-DDD	ND	U	0.024	0.0092	1	11/27/07	12/03/07	JWG0703960	
Endosulfan II	ND	UJ	0.024	0.0075	1	11/27/07	12/03/07	JWG0703960	J(3)
4,4'-DDT	ND	U	0.024	0.016	1	11/27/07	12/03/07	JWG0703960	
Endrin Aldehyde	ND	U	0.024	0.0099	1	11/27/07	12/03/07	JWG0703960	
Methoxychlor	ND	U	0.047	0.013	1	11/27/07	12/03/07	JWG0703960	
Endosulfan Sulfate	ND	U	0.024	0.011	1	11/27/07	12/03/07	JWG0703960	
Endrin Ketone	ND	U	0.024	0.0062	1	11/27/07	12/03/07	JWG0703960	
Toxaphene	ND	U	0.59	0.59	1	11/27/07	12/03/07	JWG0703960	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	41	32-92	12/03/07	Acceptable
Decachlorobiphenyl	11	13-104	12/03/07	Outside Control Limits

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** NA  
**Date Received:** NA

## Organochlorine Pesticides by GC-ECD

**Sample Name:** Method Blank  
**Lab Code:** JWG0703960-4  
**Extraction Method:** EPA 3510C  
**Analysis Method:** 8081A

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	ND	U	0.020	0.0079	1	11/27/07	12/03/07	JWG0703960	
gamma-BHC (Lindane)	ND	U	0.020	0.0082	1	11/27/07	12/03/07	JWG0703960	
beta-BHC	ND	U	0.020	0.0085	1	11/27/07	12/03/07	JWG0703960	
delta-BHC	ND	U	0.020	0.011	1	11/27/07	12/03/07	JWG0703960	
Heptachlor	ND	U	0.020	0.0096	1	11/27/07	12/03/07	JWG0703960	
Aldrin	ND	U	0.020	0.0068	1	11/27/07	12/03/07	JWG0703960	
Heptachlor Epoxide	ND	U	0.020	0.0079	1	11/27/07	12/03/07	JWG0703960	
gamma-Chlordane	ND	U	0.020	0.0075	1	11/27/07	12/03/07	JWG0703960	
alpha-Chlordane	ND	U	0.020	0.0066	1	11/27/07	12/03/07	JWG0703960	
4,4'-DDE	ND	U	0.020	0.0084	1	11/27/07	12/03/07	JWG0703960	
Endosulfan I	ND	U	0.020	0.0089	1	11/27/07	12/03/07	JWG0703960	
Dieldrin	ND	UJ	0.020	0.0073	1	11/27/07	12/03/07	JWG0703960	J(3)
Endrin	ND	U	0.020	0.0090	1	11/27/07	12/03/07	JWG0703960	
4,4'-DDD	ND	U	0.020	0.0079	1	11/27/07	12/03/07	JWG0703960	
Endosulfan II	ND	UJ	0.020	0.0064	1	11/27/07	12/03/07	JWG0703960	J(3)
4,4'-DDT	ND	U	0.020	0.013	1	11/27/07	12/03/07	JWG0703960	
Endrin Aldehyde	ND	U	0.020	0.0085	1	11/27/07	12/03/07	JWG0703960	
Methoxychlor	ND	U	0.040	0.011	1	11/27/07	12/03/07	JWG0703960	
Endosulfan Sulfate	ND	U	0.020	0.0092	1	11/27/07	12/03/07	JWG0703960	
Endrin Ketone	ND	U	0.020	0.0053	1	11/27/07	12/03/07	JWG0703960	
Toxaphene	ND	U	0.50	0.50	1	11/27/07	12/03/07	JWG0703960	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	66	32-92	12/03/07	Acceptable
Decachlorobiphenyl	77	13-104	12/03/07	Acceptable

**Comments:** \_\_\_\_\_



## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Polychlorinated Biphenyls (PCB Aroclors) by GC-ECD

**Sample Name:** L-1  
**Lab Code:** J0705660-003  
**Extraction Method:** EPA 3510C  
**Analysis Method:** 8082

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	0.55	0.15	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1221	ND	U	0.55	0.37	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1232	ND	U	0.55	0.21	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1242	ND	U	0.55	0.14	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1248	ND	U	0.55	0.14	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1254	ND	U	0.55	0.16	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1260	ND	U	0.55	0.19	1	11/27/07	12/03/07	JWG0703961	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	32	24-120	12/03/07	Acceptable

Comments:

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Polychlorinated Biphenyls (PCB Aroclors) by GC-ECD

**Sample Name:** L-2  
**Lab Code:** J0705660-004  
**Extraction Method:** EPA 3510C  
**Analysis Method:** 8082

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	0.56	0.15	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1221	ND	U	0.56	0.37	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1232	ND	U	0.56	0.22	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1242	ND	U	0.56	0.14	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1248	ND	U	0.56	0.14	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1254	ND	U	0.56	0.16	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1260	ND	U	0.56	0.19	1	11/27/07	12/03/07	JWG0703961	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	24	24-120	12/03/07	Acceptable

**Comments:** \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Polychlorinated Biphenyls (PCB Aroclors) by GC-ECD

**Sample Name:** L-3  
**Lab Code:** J0705660-005  
**Extraction Method:** EPA 3510C  
**Analysis Method:** 8082

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	0.56	0.15	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1221	ND	U	0.56	0.37	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1232	ND	U	0.56	0.22	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1242	ND	U	0.56	0.14	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1248	ND	U	0.56	0.14	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1254	ND	U	0.56	0.16	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1260	ND	U	0.56	0.19	1	11/27/07	12/03/07	JWG0703961	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	49	24-120	12/03/07	Acceptable

**Comments:** \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Polychlorinated Biphenyls (PCB Aroclors) by GC-ECD

**Sample Name:** L-4  
**Lab Code:** J0705660-006  
**Extraction Method:** EPA 3510C  
**Analysis Method:** 8082

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	0.59	0.16	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1221	ND	U	0.59	0.39	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1232	ND	U	0.59	0.23	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1242	ND	U	0.59	0.14	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1248	ND	U	0.59	0.14	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1254	ND	U	0.59	0.17	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1260	ND	U	0.59	0.20	1	11/27/07	12/03/07	JWG0703961	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	11	24-120	12/03/07	Outside Control Limits

Comments: \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Results

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Collected:** NA  
**Date Received:** NA

## Polychlorinated Biphenyls (PCB Aroclors) by GC-ECD

**Sample Name:** Method Blank  
**Lab Code:** JWG0703961-2  
**Extraction Method:** EPA 3510C  
**Analysis Method:** 8082

**Units:** ug/L  
**Basis:** NA  
**Level:** Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	0.50	0.13	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1221	ND	U	0.50	0.33	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1232	ND	U	0.50	0.19	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1242	ND	U	0.50	0.12	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1248	ND	U	0.50	0.12	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1254	ND	U	0.50	0.14	1	11/27/07	12/03/07	JWG0703961	
Aroclor 1260	ND	U	0.50	0.17	1	11/27/07	12/03/07	JWG0703961	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	77	24-120	12/03/07	Acceptable

Comments: \_\_\_\_\_

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

### Total Metals

**Sample Name:** MW-22B  
**Lab Code:** J0705660-001

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	12/03/2007	12/10/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	12/03/2007	12/10/2007	0.72	
Barium	EPA 3020A	6020	2.0	0.14	1.0	12/03/2007	12/10/2007	13	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	12/03/2007	12/10/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	12/03/2007	12/10/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	12/03/2007	12/10/2007	1.8	i
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	12/03/2007	12/10/2007	0.25	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	12/03/2007	12/10/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/28/2007	11/29/2007	2500	
Lead	EPA 3020A	6020	1.0	0.30	1.0	12/03/2007	12/10/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/30/2007	11/30/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	12/03/2007	12/10/2007	U	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	12/03/2007	12/10/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	12/03/2007	12/10/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	12/03/2007	12/10/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	12/03/2007	12/10/2007	0.85	i
Zinc	EPA 3020A	6020	10	1.7	1.0	12/03/2007	12/10/2007	3.6	i

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

### Total Metals

**Sample Name:** MW-22C  
**Lab Code:** J0705660-002

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	12/03/2007	12/10/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	12/03/2007	12/10/2007	0.56	
Barium	EPA 3020A	6020	2.0	0.14	1.0	12/03/2007	12/10/2007	22	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	12/03/2007	12/10/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	12/03/2007	12/10/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	12/03/2007	12/10/2007	5.8	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	12/03/2007	12/10/2007	0.16	i
Copper	EPA 3020A	6020	2.0	0.29	1.0	12/03/2007	12/10/2007	U	
Iron	EPA 3010A	6010B	50	17	1.0	11/28/2007	11/28/2007	752	
Lead	EPA 3020A	6020	1.0	0.30	1.0	12/03/2007	12/10/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/30/2007	11/30/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	12/03/2007	12/10/2007	2.5	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	12/03/2007	12/10/2007	U	
Silver	EPA 3020A	6020	0.50	0.039	1.0	12/03/2007	12/10/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	12/03/2007	12/10/2007	U	
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	12/03/2007	12/10/2007	0.64	i
Zinc	EPA 3020A	6020	10	1.7	1.0	12/03/2007	12/10/2007	2.6	i

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Total Metals

**Sample Name:** L-1  
**Lab Code:** J0705660-003

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	10	0.44	5.0	12/03/2007	12/10/2007	0.97	i
Arsenic	EPA 3020A	6020	2.5	1.4	5.0	12/03/2007	12/10/2007	21	
Barium	EPA 3020A	6020	10	0.70	5.0	12/03/2007	12/10/2007	817	
Beryllium	EPA 3020A	6020	5.0	0.42	5.0	12/03/2007	12/10/2007	0.56	i
Cadmium	EPA 3020A	6020	2.5	0.60	5.0	12/03/2007	12/10/2007	U	
Chromium	EPA 3020A	6020	10	0.60	5.0	12/03/2007	12/10/2007	50	
Cobalt	EPA 3020A	6020	5.0	0.20	5.0	12/03/2007	12/10/2007	12	
Copper	EPA 3020A	6020	10	1.4	5.0	12/03/2007	12/10/2007	3.0	i
Iron	EPA 3010A	6010B	50	17	1.0	11/28/2007	11/28/2007	12700	
Lead	EPA 3020A	6020	5.0	1.5	5.0	12/03/2007	12/10/2007	1.8	i
Mercury	METHOD	7470A	0.50	0.14	1.0	11/30/2007	11/30/2007	U	
Nickel	EPA 3020A	6020	10	3.5	5.0	12/03/2007	12/10/2007	59	
Selenium	EPA 3020A	6020	10	4.0	5.0	12/03/2007	12/10/2007	12	
Silver	EPA 3020A	6020	2.5	0.20	5.0	12/03/2007	12/10/2007	U	
Thallium	EPA 3020A	6020	5.00	0.39	5.0	12/03/2007	12/10/2007	U	
Tin	EPA 3020A	6020	25	1.0	5.0	12/03/2007	12/10/2007	1.6	i
Vanadium	EPA 3020A	6020	10	0.90	5.0	12/03/2007	12/10/2007	44	
Zinc	EPA 3020A	6020	50	8.5	5.0	12/03/2007	12/10/2007	25	i



## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705660  
 Date Collected: 11/26/2007  
 Date Received: 11/27/2007

## Total Metals

Sample Name: L-2  
 Lab Code: J0705660-004

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	10	0.44	5.0	12/03/2007	12/10/2007	7.0	i
Arsenic	EPA 3020A	6020	2.5	1.4	5.0	12/03/2007	12/10/2007	27	
Barium	EPA 3020A	6020	10	0.70	5.0	12/03/2007	12/10/2007	234	
Beryllium	EPA 3020A	6020	5.0	0.42	5.0	12/03/2007	12/10/2007	U	
Cadmium	EPA 3020A	6020	2.5	0.60	5.0	12/03/2007	12/10/2007	U	
Chromium	EPA 3020A	6020	10	0.60	5.0	12/03/2007	12/10/2007	41	
Cobalt	EPA 3020A	6020	5.0	0.20	5.0	12/03/2007	12/10/2007	3.2	i
Copper	EPA 3020A	6020	10	1.4	5.0	12/03/2007	12/10/2007	2.5	i
Iron	EPA 3010A	6010B	50	17	1.0	11/28/2007	11/28/2007	2940	
Lead	EPA 3020A	6020	5.0	1.5	5.0	12/03/2007	12/10/2007	2.1	i
Mercury	METHOD	7470A	0.50	0.14	1.0	11/30/2007	11/30/2007	U	
Nickel	EPA 3020A	6020	10	3.5	5.0	12/03/2007	12/10/2007	41	
Selenium	EPA 3020A	6020	10	4.0	5.0	12/03/2007	12/10/2007	12	
Silver	EPA 3020A	6020	2.5	0.20	5.0	12/03/2007	12/10/2007	U	
Thallium	EPA 3020A	6020	5.00	0.39	5.0	12/03/2007	12/10/2007	U	
Tin	EPA 3020A	6020	25	1.0	5.0	12/03/2007	12/10/2007	U	
Vanadium	EPA 3020A	6020	10	0.90	5.0	12/03/2007	12/10/2007	102	
Zinc	EPA 3020A	6020	50	8.5	5.0	12/03/2007	12/10/2007	U	

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Total Metals

**Sample Name:** L-3  
**Lab Code:** J0705660-005

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.0	0.088	1.0	12/03/2007	12/07/2007	3.4	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	12/03/2007	12/07/2007	13	
Barium	EPA 3020A	6020	2.0	0.14	1.0	12/03/2007	12/07/2007	281	
Beryllium	EPA 3020A	6020	1.0	0.084	1.0	12/03/2007	12/07/2007	0.21	i
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	12/03/2007	12/07/2007	U	
Chromium	EPA 3020A	6020	2.0	0.12	1.0	12/03/2007	12/07/2007	14	
Cobalt	EPA 3020A	6020	1.0	0.041	1.0	12/03/2007	12/07/2007	1.5	
Copper	EPA 3020A	6020	2.0	0.29	1.0	12/03/2007	12/07/2007	1.7	i
Iron	EPA 3010A	6010B	50	17	1.0	11/28/2007	11/28/2007	16500	
Lead	EPA 3020A	6020	1.0	0.30	1.0	12/03/2007	12/07/2007	0.35	i
Mercury	METHOD	7470A	0.50	0.14	1.0	11/30/2007	11/30/2007	U	
Nickel	EPA 3020A	6020	2.0	0.69	1.0	12/03/2007	12/07/2007	27	
Selenium	EPA 3020A	6020	2.0	0.79	1.0	12/03/2007	12/07/2007	3.8	
Silver	EPA 3020A	6020	0.50	0.039	1.0	12/03/2007	12/07/2007	U	
Thallium	EPA 3020A	6020	1.00	0.077	1.0	12/03/2007	12/07/2007	U	
Tin	EPA 3020A	6020	5.0	0.20	1.0	12/03/2007	12/07/2007	0.66	i
Vanadium	EPA 3020A	6020	2.0	0.18	1.0	12/03/2007	12/07/2007	55	
Zinc	EPA 3020A	6020	10	1.7	1.0	12/03/2007	12/07/2007	6.3	i

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

### Total Metals

**Sample Name:** L-4  
**Lab Code:** J0705660-006

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	10	0.44	5.0	12/03/2007	12/07/2007	56	
Arsenic	EPA 3020A	6020	2.5	1.4	5.0	12/03/2007	12/07/2007	97	
Barium	EPA 3020A	6020	10	0.70	5.0	12/03/2007	12/07/2007	281	
Beryllium	EPA 3020A	6020	5.0	0.42	5.0	12/03/2007	12/07/2007	1.4	i
Cadmium	EPA 3020A	6020	2.5	0.60	5.0	12/03/2007	12/07/2007	3.6	
Chromium	EPA 3020A	6020	10	0.60	5.0	12/03/2007	12/07/2007	534	
Cobalt	EPA 3020A	6020	5.0	0.20	5.0	12/03/2007	12/07/2007	28	
Copper	EPA 3020A	6020	10	1.4	5.0	12/03/2007	12/07/2007	27	
Iron	EPA 3010A	6010B	50	17	1.0	11/28/2007	11/28/2007	346	
Lead	EPA 3020A	6020	5.0	1.5	5.0	12/03/2007	12/07/2007	14	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/30/2007	11/30/2007	U	
Nickel	EPA 3020A	6020	10	3.5	5.0	12/03/2007	12/07/2007	168	
Selenium	EPA 3020A	6020	10	4.0	5.0	12/03/2007	12/07/2007	162	
Silver	EPA 3020A	6020	2.5	0.20	5.0	12/03/2007	12/07/2007	0.25	i
Thallium	EPA 3020A	6020	5.00	0.39	5.0	12/03/2007	12/07/2007	U	
Tin	EPA 3020A	6020	25	1.0	5.0	12/03/2007	12/07/2007	8.2	i
Vanadium	EPA 3020A	6020	10	0.90	5.0	12/03/2007	12/07/2007	712	
Zinc	EPA 3020A	6020	50	8.5	5.0	12/03/2007	12/07/2007	46	i

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705660  
 Date Collected: N/A  
 Date Received: N/A

## Total Metals

Sample Name: Method Blank  
 Lab Code: MB4-1203

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3020A	6020	2.00	0.09	1.0	12/03/2007	12/06/2007	U	
Arsenic	EPA 3020A	6020	0.50	0.28	1.0	12/03/2007	12/06/2007	U	
Barium	EPA 3020A	6020	2.00	0.14	1.0	12/03/2007	12/06/2007	U	
Beryllium	EPA 3020A	6020	1.00	0.08	1.0	12/03/2007	12/06/2007	U	
Cadmium	EPA 3020A	6020	0.50	0.12	1.0	12/03/2007	12/06/2007	U	
Chromium	EPA 3020A	6020	2.00	0.12	1.0	12/03/2007	12/06/2007	0.28	i
Cobalt	EPA 3020A	6020	1.00	0.04	1.0	12/03/2007	12/06/2007	U	
Copper	EPA 3020A	6020	2.00	0.29	1.0	12/03/2007	12/06/2007	U	
Iron	EPA 3010A	6010B	50.0	17.0	1.0	11/28/2007	11/28/2007	U	
Lead	EPA 3020A	6020	1.00	0.30	1.0	12/03/2007	12/06/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/30/2007	11/30/2007	U	
Nickel	EPA 3020A	6020	2.00	0.69	1.0	12/03/2007	12/06/2007	U	
Selenium	EPA 3020A	6020	2.00	0.79	1.0	12/03/2007	12/06/2007	U	
Silver	EPA 3020A	6020	0.500	0.039	1.0	12/03/2007	12/06/2007	U	
Thallium	EPA 3020A	6020	1.00	0.08	1.0	12/03/2007	12/06/2007	U	
Tin	EPA 3020A	6020	5.00	0.20	1.0	12/03/2007	12/06/2007	U	
Vanadium	EPA 3020A	6020	2.00	0.18	1.0	12/03/2007	12/06/2007	U	
Zinc	EPA 3020A	6020	10.0	1.7	1.0	12/03/2007	12/06/2007	U	

**COLUMBIA ANALYTICAL SERVICES, INC**

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

**Total Metals  
Sodium**

**Prep Method:** EPA 3010A  
**Analysis Method:** 6010B  
**Test Notes:**

**Units:** mg/L  
**Basis:** N/A

<b>Sample Name:</b>	<b>Lab Code:</b>	<b>MRL</b>	<b>MDL</b>	<b>Dilution Factor</b>	<b>Date Extracted</b>	<b>Date Analyzed</b>	<b>Result</b>	<b>Result Notes</b>
MW-22B	J0705660-001	0.50	0.15	1.0	11/28/2007	11/29/2007	9.2	
MW-22C	J0705660-002	0.50	0.15	1.0	11/28/2007	11/28/2007	6.6	
L-1	J0705660-003	5.0	1.5	10.0	11/28/2007	12/10/2007	1300	
L-2	J0705660-004	0.50	0.15	1.0	11/28/2007	11/28/2007	829	
L-3	J0705660-005	0.50	0.15	1.0	11/28/2007	11/28/2007	447	
L-4	J0705660-006	0.50	0.15	1.0	11/28/2007	11/28/2007	237	
Method Blank	MB5-1128	0.50	0.15	1.0	11/28/2007	11/28/2007	U	

## COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

## Dissolved Metals

**Sample Name:** MW-22B  
**Lab Code:** J0705660-001

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3005A	6020	2.0	0.088	1.0	11/28/2007	11/29/2007	U	
Arsenic	EPA 3005A	6020	0.50	0.28	1.0	11/28/2007	11/29/2007	0.40	i
Barium	EPA 3005A	6020	2.0	0.14	1.0	11/28/2007	11/29/2007	14	
Beryllium	EPA 3005A	6020	1.0	0.084	1.0	11/28/2007	11/29/2007	U	
Cadmium	EPA 3005A	6020	0.50	0.12	1.0	11/28/2007	11/29/2007	U	
Chromium	EPA 3005A	6020	2.0	0.12	1.0	11/28/2007	11/29/2007	0.69	i
Cobalt	EPA 3005A	6020	1.0	0.041	1.0	11/28/2007	11/29/2007	0.22	i
Copper	EPA 3005A	6020	2.0	0.29	1.0	11/28/2007	11/29/2007	U	
Iron	EPA 3005A	6010B	50	17	1.0	11/28/2007	11/29/2007	1540	
Lead	EPA 3005A	6020	1.0	0.30	1.0	11/28/2007	11/29/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/30/2007	11/30/2007	U	
Nickel	EPA 3005A	6020	2.0	0.69	1.0	11/28/2007	11/29/2007	U	
Selenium	EPA 3005A	6020	2.0	0.79	1.0	11/28/2007	11/29/2007	U	
Silver	EPA 3005A	6020	0.50	0.039	1.0	11/28/2007	11/29/2007	U	
Thallium	EPA 3005A	6020	1.00	0.077	1.0	11/28/2007	11/29/2007	U	
Vanadium	EPA 3005A	6020	2.0	0.18	1.0	11/28/2007	11/29/2007	0.91	i
Zinc	EPA 3005A	6020	10	1.7	1.0	11/28/2007	11/29/2007	U	

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705660  
**Date Collected:** N/A  
**Date Received:** N/A

### Dissolved Metals

**Sample Name:** Method Blank  
**Lab Code:** MB7-1128

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Antimony	EPA 3005A	6020	2.00	0.09	1.0	11/28/2007	11/29/2007	U	
Arsenic	EPA 3005A	6020	0.50	0.28	1.0	11/28/2007	11/29/2007	U	
Barium	EPA 3005A	6020	2.00	0.14	1.0	11/28/2007	11/29/2007	U	
Beryllium	EPA 3005A	6020	1.00	0.08	1.0	11/28/2007	11/29/2007	U	
Cadmium	EPA 3005A	6020	0.50	0.12	1.0	11/28/2007	11/29/2007	U	
Chromium	EPA 3005A	6020	2.00	0.12	1.0	11/28/2007	11/29/2007	U	
Cobalt	EPA 3005A	6020	1.00	0.04	1.0	11/28/2007	11/29/2007	U	
Copper	EPA 3005A	6020	2.00	0.29	1.0	11/28/2007	11/29/2007	U	
Iron	EPA 3005A	6010B	50.0	17.0	1.0	11/28/2007	11/29/2007	U	
Lead	EPA 3005A	6020	1.00	0.30	1.0	11/28/2007	11/29/2007	U	
Mercury	METHOD	7470A	0.50	0.14	1.0	11/30/2007	11/30/2007	U	
Nickel	EPA 3005A	6020	2.00	0.69	1.0	11/28/2007	11/29/2007	U	
Selenium	EPA 3005A	6020	2.00	0.79	1.0	11/28/2007	11/29/2007	U	
Silver	EPA 3005A	6020	0.500	0.039	1.0	11/28/2007	11/29/2007	U	
Thallium	EPA 3005A	6020	1.00	0.08	1.0	11/28/2007	11/29/2007	U	
Vanadium	EPA 3005A	6020	2.00	0.18	1.0	11/28/2007	11/29/2007	U	
Zinc	EPA 3005A	6020	10.0	1.7	1.0	11/28/2007	11/29/2007	U	

# COLUMBIA ANALYTICAL SERVICES, INC

## Analytical Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007

### Dissolved Metals Sodium

**Prep Method:** EPA 3005A  
**Analysis Method:** 6010B  
**Test Notes:**

**Units:** mg/L  
**Basis:** N/A

Sample Name:	Lab Code:	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
MW-22B	J0705660-001	0.50	0.15	1.0	11/28/2007	11/29/2007	9.1	
Method Blank	MB6-1128	0.50	0.15	1.0	11/28/2007	11/29/2007	U	



# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705660  
**Date Collected :** 11/26/07  
**Date Received :** 11/27/07

## Inorganic Parameters

**Sample Name :** MW-22B  
**Lab Code :** J0705660-001  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	12/03/07 13:16	0.27	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/27/07 10:18	11	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/27/07 15:50	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/28/07 13:00	67	

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705660  
**Date Collected :** 11/26/07  
**Date Received :** 11/27/07

## Inorganic Parameters

**Sample Name :** MW-22C  
**Lab Code :** J0705660-002  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	12/03/07 13:16	0.14	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/27/07 10:18	7.9	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/27/07 16:09	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/28/07 13:00	330	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705660  
**Date Collected :** 11/26/07  
**Date Received :** 11/27/07

## Inorganic Parameters

**Sample Name :** L-1  
**Lab Code :** J0705660-003  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Alkalinity as CaCO <sub>3</sub> , Total	mg/L (ppm)	SM2320 B	25	8	5	12/06/07 16:00	1200	
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.5	0.37	10	12/03/07 13:16	57	
Chloride	mg/L (ppm)	300.0	2	0.68	10	11/27/07 10:18	1100	
Cyanide, Total	mg/L (ppm)	335.4	0.01	0.005	1	12/13/07 08:59	U	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/27/07 16:28	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	40	18.8	4	11/28/07 13:00	4400	
Sulfide	mg/L (ppm)	376.1	2	0.38	1	11/27/07 18:30	50	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705660  
**Date Collected :** 11/26/07  
**Date Received :** 11/27/07

## Inorganic Parameters

**Sample Name :** L-2  
**Lab Code :** J0705660-004  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Alkalinity as CaCO <sub>3</sub> , Total	mg/L (ppm)	SM2320 B	10	3.2	2	12/06/07 16:00	570	
Ammonia as Nitrogen	mg/L (ppm)	350.1	1	0.74	20	12/03/07 13:16	200	
Chloride	mg/L (ppm)	300.0	2	0.68	10	11/27/07 10:18	1800	
Cyanide, Total	mg/L (ppm)	335.4	0.01	0.005	1	12/13/07 08:59	U	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/27/07 16:47	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	40	18.8	4	11/28/07 13:00	4100	
Sulfide	mg/L (ppm)	376.1	2	0.38	1	11/27/07 18:30	11	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705660  
**Date Collected :** 11/26/07  
**Date Received :** 11/27/07

## Inorganic Parameters

**Sample Name :** L-3  
**Lab Code :** J0705660-005  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Alkalinity as CaCO <sub>3</sub> , Total	mg/L (ppm)	SM2320 B	5	1.6	1	12/06/07 16:00	420	
Ammonia as Nitrogen	mg/L (ppm)	350.1	1	0.74	20	12/03/07 13:16	190	
Chloride	mg/L (ppm)	300.0	2	0.68	10	11/27/07 10:18	720	
Cyanide, Total	mg/L (ppm)	335.4	0.01	0.005	1	12/13/07 08:59	U	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/27/07 19:30	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	40	18.8	4	11/28/07 13:00	2600	
Sulfide	mg/L (ppm)	376.1	2	0.38	1	11/27/07 18:30	29	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705660  
**Date Collected :** 11/26/07  
**Date Received :** 11/27/07

## Inorganic Parameters

**Sample Name :** L-4  
**Lab Code :** J0705660-006  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Alkalinity as CaCO <sub>3</sub> , Total	mg/L (ppm)	SM2320 B	25	8	5	12/06/07 16:00	2200	
Ammonia as Nitrogen	mg/L (ppm)	350.1	5	3.7	100	12/03/07 13:16	760	
Chloride	mg/L (ppm)	300.0	2	0.68	10	11/27/07 10:18	2200	
Cyanide, Total	mg/L (ppm)	335.4	0.01	0.005	1	12/13/07 08:59	U	
Nitrate as Nitrogen	mg/L (ppm)	300.0	2	0.64	10	11/27/07 17:17	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	100	47	10	11/28/07 13:00	10000	
Sulfide	mg/L (ppm)	376.1	2	0.38	1	11/27/07 18:30	16	

# COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705660  
**Date Collected :** NA  
**Date Received :** NA

## Inorganic Parameters

**Sample Name :** Method Blank  
**Lab Code :** J0705660-MB  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Alkalinity as CaCO <sub>3</sub> , Total	mg/L (ppm)	SM2320 B	5	1.6	1	12/06/07 16:00	U	
Ammonia as Nitrogen	mg/L (ppm)	350.1	0.05	0.037	1	12/03/07 13:16	U	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/27/07 10:18	U	
Chloride	mg/L (ppm)	300.0	0.2	0.068	1	11/27/07 10:18	U	
Cyanide, Total	mg/L (ppm)	335.4	0.01	0.005	1	12/13/07 08:59	U	
Nitrate as Nitrogen	mg/L (ppm)	300.0	0.2	0.064	1	11/27/07 10:18	U	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	10	4.7	1	11/28/07 13:00	U	
Sulfide	mg/L (ppm)	376.1	2	0.38	1	11/27/07 18:30	U	

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660

**Surrogate Recovery Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** PERCENT  
**Level:** Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>	<u>Sur2</u>	<u>Sur3</u>	<u>Sur4</u>
MW-22B	J0705660-001	99	104	103	112
MW-22C	J0705660-002	100	103	102	114
L-1	J0705660-003	98	104	102	114
L-2	J0705660-004	99	103	102	114
L-3	J0705660-005	101	103	103	116
L-4	J0705660-006	99	102	102	114
Trip Blank	J0705660-007	100	104	101	114
Method Blank	JWG0703956-4	99	103	102	115
Method Blank	JWG0703966-4	80	90	91	89
Lab Control Sample	JWG0703956-3	98	101	101	115
Lab Control Sample	JWG0703966-3	78	86	84	89

**Surrogate Recovery Control Limits (%)**

Sur1 = 1,2-Dichloroethane-d4	71-122
Sur2 = 4-Bromofluorobenzene	75-120
Sur3 = Dibromofluoromethane	82-116
Sur4 = Toluene-d8	88-117

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.



Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705660  
 Date Extracted: 11/29/2007  
 Date Analyzed: 11/29/2007

**Lab Control Spike Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low  
 Extraction Lot: JWG0703956

Analyte Name	Lab Control Sample JWG0703956-3 Lab Control Spike			%Rec Limits
	Result	Expected	%Rec	
Chloromethane	20.8	20.0	104	67-135
Vinyl Chloride	22.0	20.0	110	78-132
Bromomethane	22.3	20.0	111	79-130
Chloroethane	21.5	20.0	108	74-126
Trichlorofluoromethane	21.3	20.0	107	74-134
1,1-Dichloroethene	22.9	20.0	114	78-130
Acetone	97.3	100	97	67-133
Iodomethane (Methyl Iodide)	110	100	110	68-134
Carbon Disulfide	102	100	102	76-138
Methylene Chloride	20.9	20.0	104	72-124
trans-1,2-Dichloroethene	19.8	20.0	99	77-124
Acrylonitrile	96.6	100	97	77-127
1,1-Dichloroethane	20.3	20.0	101	80-128
Vinyl Acetate	108	100	108	61-148
cis-1,2-Dichloroethene	21.4	20.0	107	80-126
2-Butanone (MEK)	92.1	100	92	73-127
Bromochloromethane	21.2	20.0	106	79-129
Chloroform	20.2	20.0	101	83-124
1,1,1-Trichloroethane (TCA)	20.8	20.0	104	79-124
Carbon Tetrachloride	20.3	20.0	101	81-125
Benzene	20.8	20.0	104	79-119
1,2-Dichloroethane (EDC)	20.9	20.0	104	80-124
Trichloroethene (TCE)	22.3	20.0	111	76-124
1,2-Dichloropropane	20.6	20.0	103	79-123
Dibromomethane	20.3	20.0	101	83-123
Bromodichloromethane	19.9	20.0	100	81-123
cis-1,3-Dichloropropene	20.2	20.0	101	86-123
4-Methyl-2-pentanone (MIBK)	102	100	102	72-136
Toluene	22.8	20.0	114	86-117
trans-1,3-Dichloropropene	19.3	20.0	97	83-124
1,1,2-Trichloroethane	21.9	20.0	109	86-114
Tetrachloroethene (PCE)	25.0	20.0	125 *	80-121
2-Hexanone	99.9	100	100	71-138
Dibromochloromethane	21.7	20.0	109	82-121
1,2-Dibromoethane (EDB)	21.1	20.0	106	88-117
Chlorobenzene	22.8	20.0	114 *	86-113

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Extracted:** 11/29/2007  
**Date Analyzed:** 11/29/2007

**Lab Control Spike Summary**  
**Appendix I Volatile Organic Compounds by GC/MS**

**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703956

Analyte Name	Lab Control Sample JWG0703956-3 Lab Control Spike			%Rec Limits
	Result	Expected	%Rec	
1,1,1,2-Tetrachloroethane	22.2	20.0	111	85-117
Ethylbenzene	22.5	20.0	113	90-118
m,p-Xylenes	47.3	40.0	118	86-121
o-Xylene	22.3	20.0	112	89-119
Styrene	21.7	20.0	109	89-122
Bromoform	22.3	20.0	111	68-129
1,1,2,2-Tetrachloroethane	21.2	20.0	106	83-120
1,2,3-Trichloropropane	20.8	20.0	104	83-123
1,4-Dichlorobenzene	21.4	20.0	107	83-113
trans-1,4-Dichloro-2-butene	15.1	20.0	76	53-143
1,2-Dichlorobenzene	20.9	20.0	104	84-115
1,2-Dibromo-3-chloropropane (DBCP)	19.6	20.0	98	62-123

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705660  
 Date Extracted: 11/29/2007  
 Date Analyzed: 11/29/2007

Lab Control Spike Summary  
 Volatile Organic Compounds by GC/MS (Appendix II)

Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low  
 Extraction Lot: JWG0703956

Analyte Name	Lab Control Sample JWG0703956-3 Lab Control Spike			%Rec Limits
	Result	Expected	%Rec	
Dichlorodifluoromethane	22.2	20.0	111	69-138
Chloromethane	20.8	20.0	104	67-135
Vinyl Chloride	22.0	20.0	110	78-132
Bromomethane	22.3	20.0	111	79-130
Chloroethane	21.5	20.0	108	74-126
Trichlorofluoromethane	21.3	20.0	107	74-134
Acrolein	100	100	100	61-137
1,1-Dichloroethene	22.9	20.0	114	78-130
Acetone	97.3	100	97	67-133
Iodomethane (Methyl Iodide)	110	100	110	68-134
Carbon Disulfide	102	100	102	76-138
Acetonitrile	92.3	100	92	67-132
Allyl Chloride	19.3	20.0	96	68-128
Methylene Chloride	20.9	20.0	104	72-124
Acrylonitrile	96.6	100	97	77-127
trans-1,2-Dichloroethene	19.8	20.0	99	77-124
1,1-Dichloroethane	20.3	20.0	101	80-128
Vinyl Acetate	108	100	108	61-148
Chloroprene	20.4	20.0	102	81-132
cis-1,2-Dichloroethene	21.4	20.0	107	80-126
2,2-Dichloropropane	21.4	20.0	107	72-136
1,1-Dichloropropene	21.4	20.0	107	85-124
2-Butanone (MEK)	92.1	100	92	73-127
Propionitrile	98.6	100	99	77-131
Bromochloromethane	21.2	20.0	106	79-129
Methacrylonitrile	19.1	20.0	95	77-129
Chloroform	20.2	20.0	101	83-124
1,1,1-Trichloroethane (TCA)	20.8	20.0	104	79-124
Carbon Tetrachloride	20.3	20.0	101	81-125
Benzene	20.8	20.0	104	79-119
1,2-Dichloroethane (EDC)	20.9	20.0	104	80-124
Isobutyl Alcohol	398	400	99	62-139
Trichloroethene (TCE)	22.3	20.0	111	76-124
1,2-Dichloropropane	20.6	20.0	103	79-123
Dibromomethane	20.3	20.0	101	83-123
Methyl Methacrylate	20.5	20.0	103	79-128

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705660  
 Date Extracted: 11/29/2007  
 Date Analyzed: 11/29/2007

**Lab Control Spike Summary**  
**Volatile Organic Compounds by GC/MS (Appendix II)**

Extraction Method: EPA 5030B  
 Analysis Method: 8260B

Units: ug/L  
 Basis: NA  
 Level: Low  
 Extraction Lot: JWG0703956

Analyte Name	Lab Control Sample JWG0703956-3 Lab Control Spike			%Rec Limits
	Result	Expected	%Rec	
Bromodichloromethane	19.9	20.0	100	81-123
cis-1,3-Dichloropropene	20.2	20.0	101	86-123
4-Methyl-2-pentanone (MIBK)	102	100	102	72-136
Toluene	22.8	20.0	114	86-117
trans-1,3-Dichloropropene	19.3	20.0	97	83-124
Ethyl Methacrylate	20.7	20.0	104	78-127
1,1,2-Trichloroethane	21.9	20.0	109	86-114
Tetrachloroethene (PCE)	25.0	20.0	125 *	80-121
1,3-Dichloropropane	20.8	20.0	104	88-117
2-Hexanone	99.9	100	100	71-138
Dibromochloromethane	21.7	20.0	109	82-121
1,2-Dibromoethane (EDB)	21.1	20.0	106	88-117
Chlorobenzene	22.8	20.0	114 *	86-113
1,1,1,2-Tetrachloroethane	22.2	20.0	111	85-117
Ethylbenzene	22.5	20.0	113	90-118
m,p-Xylenes	47.3	40.0	118	86-121
o-Xylene	22.3	20.0	112	89-119
Styrene	21.7	20.0	109	89-122
Bromoform	22.3	20.0	111	68-129
1,1,2,2-Tetrachloroethane	21.2	20.0	106	83-120
1,2,3-Trichloropropane	20.8	20.0	104	83-123
trans-1,4-Dichloro-2-butene	15.1	20.0	76	53-143
1,3-Dichlorobenzene	21.0	20.0	105	83-112
1,4-Dichlorobenzene	21.4	20.0	107	83-113
1,2-Dichlorobenzene	20.9	20.0	104	84-115
1,2-Dibromo-3-chloropropane (DBCP)	19.6	20.0	98	62-123
1,2,4-Trichlorobenzene	22.4	20.0	112	72-123
Hexachlorobutadiene	23.2	20.0	116	73-140
Naphthalene	20.9	20.0	104	59-135

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Extracted:** 11/30/2007  
**Date Analyzed:** 11/30/2007

**Lab Control Spike Summary**  
**Volatile Organic Compounds by GC/MS (Appendix II)**

**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703966

Lab Control Sample JWG0703966-3 Lab Control Spike				%Rec Limits
Analyte Name	Result	Expected	%Rec	
Dichlorodifluoromethane	23.3	20.0	117	69-138
Chloromethane	18.3	20.0	91	67-135
Vinyl Chloride	20.5	20.0	103	78-132
Bromomethane	27.5	20.0	138 *	79-130
Chloroethane	19.1	20.0	96	74-126
Trichlorofluoromethane	22.2	20.0	111	74-134
Acrolein	112	100	112	61-137
1,1-Dichloroethene	23.5	20.0	117	78-130
Acetone	90.3	100	90	67-133
Iodomethane (Methyl Iodide)	80.3	100	80	68-134
Carbon Disulfide	97.8	100	98	76-138
Acetonitrile	99.2	100	99	67-132
Allyl Chloride	20.1	20.0	101	68-128
Methylene Chloride	22.6	20.0	113	72-124
Acrylonitrile	103	100	103	77-127
trans-1,2-Dichloroethene	21.4	20.0	107	77-124
1,1-Dichloroethane	21.4	20.0	107	80-128
Vinyl Acetate	120	100	120	61-148
Chloroprene	20.9	20.0	105	81-132
cis-1,2-Dichloroethene	21.1	20.0	106	80-126
2,2-Dichloropropane	20.7	20.0	103	72-136
1,1-Dichloropropene	22.4	20.0	112	85-124
2-Butanone (MEK)	97.9	100	98	73-127
Propionitrile	104	100	104	77-131
Bromochloromethane	20.6	20.0	103	79-129
Methacrylonitrile	18.9	20.0	94	77-129
Chloroform	21.0	20.0	105	83-124
1,1,1-Trichloroethane (TCA)	21.6	20.0	108	79-124
Carbon Tetrachloride	25.6	20.0	128 *	81-125
Benzene	20.6	20.0	103	79-119
1,2-Dichloroethane (EDC)	20.2	20.0	101	80-124
Isobutyl Alcohol	422	400	105	62-139
Trichloroethene (TCE)	21.7	20.0	109	76-124
1,2-Dichloropropane	21.1	20.0	106	79-123
Dibromomethane	19.5	20.0	98	83-123
Methyl Methacrylate	19.4	20.0	97	79-128

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Extracted:** 11/30/2007  
**Date Analyzed:** 11/30/2007

**Lab Control Spike Summary**  
**Volatile Organic Compounds by GC/MS (Appendix II)**

**Extraction Method:** EPA 5030B  
**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703966

Analyte Name	Lab Control Sample JWG0703966-3 Lab Control Spike			%Rec Limits
	Result	Expected	%Rec	
Bromodichloromethane	21.0	20.0	105	81-123
cis-1,3-Dichloropropene	18.2	20.0	91	86-123
4-Methyl-2-pentanone (MIBK)	103	100	103	72-136
Toluene	21.4	20.0	107	86-117
trans-1,3-Dichloropropene	19.2	20.0	96	83-124
Ethyl Methacrylate	22.4	20.0	112	78-127
1,1,2-Trichloroethane	20.5	20.0	102	86-114
Tetrachloroethene (PCE)	20.8	20.0	104	80-121
1,3-Dichloropropane	19.7	20.0	98	88-117
2-Hexanone	90.4	100	90	71-138
Dibromochloromethane	21.0	20.0	105	82-121
1,2-Dibromoethane (EDB)	19.9	20.0	100	88-117
Chlorobenzene	21.8	20.0	109	86-113
1,1,1,2-Tetrachloroethane	21.1	20.0	106	85-117
Ethylbenzene	22.0	20.0	110	90-118
m,p-Xylenes	43.4	40.0	108	86-121
o-Xylene	21.6	20.0	108	89-119
Styrene	20.9	20.0	104	89-122
Bromoform	21.3	20.0	107	68-129
1,1,2,2-Tetrachloroethane	20.7	20.0	104	83-120
1,2,3-Trichloropropane	20.6	20.0	103	83-123
trans-1,4-Dichloro-2-butene	24.7	20.0	124	53-143
1,3-Dichlorobenzene	20.5	20.0	103	83-112
1,4-Dichlorobenzene	20.2	20.0	101	83-113
1,2-Dichlorobenzene	21.6	20.0	108	84-115
1,2-Dibromo-3-chloropropane (DBCP)	21.6	20.0	108	62-123
1,2,4-Trichlorobenzene	24.1	20.0	121	72-123
Hexachlorobutadiene	22.9	20.0	115	73-140
Naphthalene	33.0	20.0	165 *	59-135

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: GeoSyntec Consultants  
Project: Oak Hammock/FQ1144  
Sample Matrix: Water

Service Request: J0705660

Surrogate Recovery Summary  
1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

Extraction Method: METHOD  
Analysis Method: 8011

Units: PERCENT  
Level: Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>
MW-22B	J0705660-001	144
MW-22C	J0705660-002	122
L-1	J0705660-003	117
L-2	J0705660-004	93
L-3	J0705660-005	92
L-4	J0705660-006	108
Method Blank	JWG0703950-3	115
Lab Control Sample	JWG0703950-1	114
Duplicate Lab Control Sample	JWG0703950-2	115

## Surrogate Recovery Control Limits (%)

---

Sur1 = 1,1,1,2-Tetrachloroethane 77-150

---

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Extracted:** 11/29/2007  
**Date Analyzed:** 11/30/2007

**Lab Control Spike/Duplicate Lab Control Spike Summary**  
**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD**

**Extraction Method:** METHOD  
**Analysis Method:** 8011

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703950

Analyte Name	Lab Control Sample JWG0703950-1 Lab Control Spike			Duplicate Lab Control Sample JWG0703950-2 Duplicate Lab Control Spike			%Rec Limits	RPD	RPD Limit
	Result	Expected	%Rec	Result	Expected	%Rec			
1,2-Dibromoethane (EDB)	0.290	0.250	116	0.295	0.250	118	70-130	2	20
1,2-Dibromo-3-chloropropane (DBCP)	0.269	0.250	108	0.269	0.250	108	70-130	0	20

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.



Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705660

**Surrogate Recovery Summary**  
**Semi-Volatile Organic Compounds by GC/MS (Appendix II)**

Extraction Method: EPA 3510C

Analysis Method: 8270C

Units: PERCENT

Level: Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>	<u>Sur2</u>	<u>Sur3</u>	<u>Sur4</u>	<u>Sur5</u>	<u>Sur6</u>
L-1	J0705660-003	15	13	46	45	63	43
L-2	J0705660-004	8 #	12	23 #	34 #	54	36
L-3	J0705660-005	34 D #	45 D #	87 D #	70 D #	66 D #	72 D #
L-4	J0705660-006	18	18	57	48	63	33
Method Blank	JWG0703934-4	27	21	83	79	99	85
Lab Control Sample	JWG0703934-3	29	20	82	80	97	81

**Surrogate Recovery Control Limits (%)**

Sur1 = 2-Fluorophenol	10-77	Sur5 = 2,4,6-Tribromophenol	30-141
Sur2 = Phenol-d6	10-51	Sur6 = Terphenyl-d14	23-165
Sur3 = Nitrobenzene-d5	42-106		
Sur4 = 2-Fluorobiphenyl	43-99		

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

## COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705660  
 Date Extracted: 11/26/2007  
 Date Analyzed: 11/29/2007

Lab Control Spike Summary  
 Semi-Volatile Organic Compounds by GC/MS (Appendix II)

Extraction Method: EPA 3510C  
 Analysis Method: 8270C

Units: ug/L  
 Basis: NA  
 Level: Low  
 Extraction Lot: JWG0703934

Analyte Name	Lab Control Sample JWG0703934-3 Lab Control Spike			%Rec Limits
	Result	Expected	%Rec	
Phenol	13.6	50.0	27	12-54
Bis(2-chloroethyl) Ether	34.4	50.0	69	41-99
2-Chlorophenol	31.2	50.0	62	35-101
1,3-Dichlorobenzene	29.7	50.0	59	30-119
1,4-Dichlorobenzene	30.0	50.0	60	31-119
1,2-Dichlorobenzene	33.9	50.0	68	32-123
Bis(2-chloroisopropyl) Ether	39.0	50.0	78	41-94
Benzyl alcohol	25.0	50.0	50	32-110
2-Methylphenol	27.5	50.0	55	21-100
Hexachloroethane	35.6	50.0	71	19-113
N-Nitrosodi-n-propylamine	40.4	50.0	81	43-103
4-Methylphenol	48.4	75.0	65	15-93
Nitrobenzene	36.1	50.0	72	36-116
Isophorone	35.4	50.0	71	46-106
2-Nitrophenol	36.6	50.0	73	40-120
2,4-Dimethylphenol	30.0	50.0	60	38-110
bis(2-Chloroethoxy)methane	36.6	50.0	73	47-100
2,4-Dichlorophenol	36.6	50.0	73	36-117
Naphthalene	35.8	50.0	72	44-97
4-Chloroaniline	31.4	50.0	63	39-110
Hexachlorobutadiene	33.8	50.0	68	20-110
4-Chloro-3-methylphenol	41.3	50.0	83	36-117
2-Methylnaphthalene	38.3	50.0	77	46-110
Hexachlorocyclopentadiene	28.6	50.0	57	23-115
2,4,6-Trichlorophenol	35.1	50.0	70	41-115
2,4,5-Trichlorophenol	37.6	50.0	75	47-113
2-Chloronaphthalene	38.4	50.0	77	47-106
2-Nitroaniline	40.7	50.0	81	46-94
Acenaphthylene	37.7	50.0	75	45-99
Dimethyl Phthalate	37.4	50.0	75	32-119
2,6-Dinitrotoluene	41.3	50.0	83	55-121
Acenaphthene	38.7	50.0	77	42-106
3-Nitroaniline	37.5	50.0	75	25-91
2,4-Dinitrophenol	26.9	50.0	54	27-128
Dibenzofuran	38.9	50.0	78	49-103
4-Nitrophenol	13.1	50.0	26	10-86

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Extracted:** 11/26/2007  
**Date Analyzed:** 11/29/2007

**Lab Control Spike Summary**  
**Semi-Volatile Organic Compounds by GC/MS (Appendix II)**

**Extraction Method:** EPA 3510C  
**Analysis Method:** 8270C

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703934

Analyte Name	Lab Control Sample JWG0703934-3 Lab Control Spike			%Rec Limits
	Result	Expected	%Rec	
2,4-Dinitrotoluene	40.9	50.0	82	54-121
2,3,4,6-Tetrachlorophenol	43.8	50.0	88	50-150
Fluorene	40.3	50.0	81	54-97
4-Chlorophenyl Phenyl Ether	40.6	50.0	81	53-108
Diethyl Phthalate	42.8	50.0	86	56-108
4-Nitroaniline	39.8	50.0	80	44-102
2-Methyl-4,6-dinitrophenol	42.0	50.0	84	46-117
N-Nitrosodiphenylamine	41.7	50.0	83	52-122
4-Bromophenyl Phenyl Ether	47.3	50.0	95	63-123
Hexachlorobenzene	41.8	50.0	84	55-110
Pentachlorophenol	27.2	50.0	54	44-120
Phenanthrene	41.5	50.0	83	52-110
Anthracene	43.0	50.0	86	52-104
Di-n-butyl Phthalate	43.7	50.0	87	57-118
Fluoranthene	44.6	50.0	89	52-110
Pyrene	38.1	50.0	76	53-110
Butyl Benzyl Phthalate	36.6	50.0	73	47-117
3,3'-Dichlorobenzidine	34.6	50.0	69	32-112
Benz(a)anthracene	40.8	50.0	82	49-114
Chrysene	40.1	50.0	80	50-113
Bis(2-ethylhexyl) Phthalate	37.7	50.0	75	48-127
Di-n-octyl Phthalate	39.9	50.0	80	35-139
Benzo(b)fluoranthene	42.6	50.0	85	56-110
Benzo(k)fluoranthene	47.5	50.0	95	48-110
Benzo(a)pyrene	46.9	50.0	94	56-110
Indeno(1,2,3-cd)pyrene	45.7	50.0	91	54-115
Dibenz(a,h)anthracene	47.8	50.0	96	51-125
Benzo(g,h,i)perylene	44.7	50.0	89	53-116

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660

**Surrogate Recovery Summary**  
**Organochlorine Pesticides by GC-ECD**

**Extraction Method:** EPA 3510C  
**Analysis Method:** 8081A

**Units:** PERCENT  
**Level:** Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>	<u>Sur2</u>
L-1	J0705660-003	46	32
L-2	J0705660-004	39	24
L-3	J0705660-005	31 #	49
L-4	J0705660-006	41	11 #
Method Blank	JWG0703960-4	66	77
Lab Control Sample	JWG0703960-3	64	74

**Surrogate Recovery Control Limits (%)**

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Sur1 = Tetrachloro-m-xylene	32-92
Sur2 = Decachlorobiphenyl	13-104

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Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: GeoSyntec Consultants  
 Project: Oak Hammock/FQ1144  
 Sample Matrix: Water

Service Request: J0705660  
 Date Extracted: 11/27/2007  
 Date Analyzed: 12/03/2007

Lab Control Spike Summary  
 Organochlorine Pesticides by GC-ECD

Extraction Method: EPA 3510C  
 Analysis Method: 8081A

Units: ug/L  
 Basis: NA  
 Level: Low  
 Extraction Lot: JWG0703960

Analyte Name	Lab Control Sample JWG0703960-3 Lab Control Spike			%Rec Limits
	Result	Expected	%Rec	
alpha-BHC	0.272	0.400	68	56-104
gamma-BHC (Lindane)	0.261	0.400	65	57-101
beta-BHC	0.321	0.400	80	55-97
delta-BHC	0.247	0.400	62	31-105
Heptachlor	0.314	0.400	79	52-100
Aldrin	0.262	0.400	66	45-108
Heptachlor Epoxide	0.243	0.400	61	59-103
gamma-Chlordane	0.263	0.400	66	53-107
alpha-Chlordane	0.262	0.400	66	54-104
4,4'-DDE	0.299	0.400	75	58-114
Endosulfan I	0.262	0.400	66	61-104
Dieldrin	0.254	0.400	64	57-111
Endrin	0.272	0.400	68	57-117
4,4'-DDD	0.264	0.400	66	56-116
Endosulfan II	0.267	0.400	67	50-106
4,4'-DDT	0.294	0.400	74	41-115
Endrin Aldehyde	0.258	0.400	65	51-108
Methoxychlor	0.286	0.400	72	43-123
Endosulfan Sulfate	0.255	0.400	64	56-107
Endrin Ketone	0.322	0.400	81	46-101

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660

**Surrogate Recovery Summary**  
**Polychlorinated Biphenyls (PCB Aroclors) by GC-ECD**

**Extraction Method:** EPA 3510C  
**Analysis Method:** 8082

**Units:** PERCENT  
**Level:** Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>
L-1	J0705660-003	32
L-2	J0705660-004	24
L-3	J0705660-005	49
L-4	J0705660-006	11 #
Method Blank	JWG0703961-2	77
Lab Control Sample	JWG0703961-1	66

**Surrogate Recovery Control Limits (%)**

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Sur1 = Decachlorobiphenyl	24-120
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Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

**Client:** GeoSyntec Consultants  
**Project:** Oak Hammock/FQ1144  
**Sample Matrix:** Water

**Service Request:** J0705660  
**Date Extracted:** 11/27/2007  
**Date Analyzed:** 12/03/2007

**Lab Control Spike Summary**  
**Polychlorinated Biphenyls (PCB Aroclors) by GC-ECD**

**Extraction Method:** EPA 3510C  
**Analysis Method:** 8082

**Units:** ug/L  
**Basis:** NA  
**Level:** Low  
**Extraction Lot:** JWG0703961

Analyte Name	Lab Control Sample JWG0703961-1 Lab Control Spike			%Rec Limits
	Result	Expected	%Rec	
Aroclor 1016	3.14	4.00	78	39-116
Aroclor 1260	2.77	4.00	69	41-118

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

Client: GeoSyntec Consultants  
 Project Name: Oak Hammock  
 Project Number: FQ1144  
 Matrix: WATER

Service Request: J0705660  
 Date Collected: 11/26/2007  
 Date Received: 11/27/2007  
 Date Extracted: 11/28/2007  
 Date Analyzed: 11/29/2007

### Matrix Spike/Matrix Spike Duplicate Summary Total Metals

Sample Name: MW-22B  
 Lab Code: J0705660-001

J0705660-001S

Units: ug/L  
 Basis: N/A

Analyte	Prep Method	Analysis Method	MRL	Spike Level		Sample Result	Spike Result		Percent Recovery			% Rec Acceptance Limits	Result Notes
				MS	DMS		MS	DMS	MS	DMS	RPD		
Iron	EPA 3010	6010B	50	2000	2000	2500	4610	4640	106	107	1	75 - 125	



# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705660  
**Date Collected:** 11/26/2007  
**Date Received:** 11/27/2007  
**Date Extracted:** 11/28/2007  
**Date Analyzed:** 11/29/2007

### Matrix Spike/Matrix Spike Duplicate Summary Total Metals

**Sample Name:** MW-22B  
**Lab Code:** J0705660-001

J0705660-001S

**Units:** mg/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	MRL	Spike Level		Sample Result	Spike Result		Percent Recovery			% Rec	Result
				MS	DMS		MS	DMS	MS	DMS	RPD	Acceptance Limits	
Sodium	EPA 3010	6010B	0.5	10.0	10.0	9.2	18.9	18.5	97	93	2	75 - 125	

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705660  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date Extracted:** 12/03/2007  
**Date Analyzed:** 12/06/2007

### Laboratory Control Sample Summary Total Metals

**Sample Name:** Lab Control Sample  
**Lab Code:** LCS4-1203

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	True Value	Results	Percent Recovery	CAS Percent	Result Notes
						Recovery Acceptance Limits	
Antimony	EPA 3020A	6020	50.0	50.2	100	80 - 120	
Arsenic	EPA 3020A	6020	50.0	53.2	106	80 - 120	
Barium	EPA 3020A	6020	50.0	48.1	96	80 - 120	
Beryllium	EPA 3020A	6020	50.0	48.0	96	80 - 120	
Cadmium	EPA 3020A	6020	50.0	46.9	94	80 - 120	
Chromium	EPA 3020A	6020	50.0	53.2	106	80 - 120	
Cobalt	EPA 3020A	6020	50.0	52.4	105	80 - 120	
Copper	EPA 3020A	6020	50.0	51.0	102	80 - 120	
Iron	EPA 3010A	6010B	2000	2050	102	80 - 120	
Lead	EPA 3020A	6020	50.0	50.4	101	80 - 120	
Mercury	METHOD	7470A	5.00	5.35	107	80 - 120	
Nickel	EPA 3020A	6020	50.0	50.7	101	80 - 120	
Selenium	EPA 3020A	6020	50.0	50.8	102	80 - 120	
Silver	EPA 3020A	6020	50.0	47.1	94	80 - 120	
Thallium	EPA 3020A	6020	50.0	50.5	101	80 - 120	
Tin	EPA 3020A	6020	50.0	46.9	94	80 - 120	
Vanadium	EPA 3020A	6020	50.0	51.8	104	80 - 120	
Zinc	EPA 3020A	6020	100	104.0	104	80 - 120	

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705660  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date Extracted:** 11/28/2007  
**Date Analyzed:** 11/28/2007

### Laboratory Control Sample Summary Total Metals

**Sample Name:** Lab Control Sample  
**Lab Code:** LCS5-1128

**Units:** mg/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	True Value	Results	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sodium	EPA 3010A	6010B	10.00	9.7	97	80 - 120	

## COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705660  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date Extracted:** 11/28/2007  
**Date Analyzed:** 11/29/2007

Laboratory Control Sample Summary  
Dissolved Metals

**Sample Name:** Lab Control Sample  
**Lab Code:** LCS7-1128

**Units:** ug/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	True Value	Results	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Antimony	EPA 3005A	6020	50.0	57.1	114	80 - 120	
Arsenic	EPA 3005A	6020	50.0	56.0	112	80 - 120	
Barium	EPA 3005A	6020	50.0	55.6	111	80 - 120	
Beryllium	EPA 3005A	6020	50.0	52.2	104	80 - 120	
Cadmium	EPA 3005A	6020	50.0	56.4	113	80 - 120	
Chromium	EPA 3005A	6020	50.0	53.9	108	80 - 120	
Cobalt	EPA 3005A	6020	50.0	51.4	103	80 - 120	
Copper	EPA 3005A	6020	50.0	51.9	104	80 - 120	
Iron	EPA 3005A	6010B	2000	1970	98	80 - 120	
Lead	EPA 3005A	6020	50.0	55.5	111	80 - 120	
Mercury	METHOD	7470A	5.00	5.35	107	80 - 120	
Nickel	EPA 3005A	6020	50.0	55.7	111	80 - 120	
Selenium	EPA 3005A	6020	50.0	56.5	113	80 - 120	
Silver	EPA 3005A	6020	50.0	59.8	120	80 - 120	
Thallium	EPA 3005A	6020	50.0	52.9	106	80 - 120	
Vanadium	EPA 3005A	6020	50.0	54.8	110	80 - 120	
Zinc	EPA 3005A	6020	100	108.0	108	80 - 120	

# COLUMBIA ANALYTICAL SERVICES, INC

## QA/QC Report

**Client:** GeoSyntec Consultants  
**Project Name:** Oak Hammock  
**Project Number:** FQ1144  
**Matrix:** WATER

**Service Request:** J0705660  
**Date Collected:** N/A  
**Date Received:** N/A  
**Date Extracted:** 11/28/2007  
**Date Analyzed:** 11/29/2007

### Laboratory Control Sample Summary Dissolved Metals

**Sample Name:** Lab Control Sample  
**Lab Code:** LCS6-1128

**Units:** mg/L  
**Basis:** N/A

Analyte	Prep Method	Analysis Method	True Value	Results	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sodium	EPA 3005A	6010B	10.00	10.1	101	80 - 120	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705660  
**Date Collected :** 11/26/07  
**Date Received :** 11/27/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/28/07

### Duplicate Summary Inorganic Parameters

**Sample Name :** L-1  
**Lab Code :** J0705660-003DUP  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	40	4400	4400	4400	<1	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705660  
**Date Collected :** 11/26/07  
**Date Received :** 11/27/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/27/07

### Duplicate Summary Inorganic Parameters

**Sample Name :** L-2  
**Lab Code :** J0705660-004DUP  
**Test Notes :**

**Basis :** NA

<b>Analyte</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>Sample Result</b>	<b>Duplicate Sample Result</b>	<b>Average</b>	<b>Relative Percent Difference</b>	<b>Result Notes</b>
Chloride	mg/L (ppm)	300.0	2	1800	1800	1800	<1	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705660  
**Date Collected :** 11/26/07  
**Date Received :** 11/27/07  
**Date Extracted :** NA  
**Date Analyzed :** 11/27/07

### Matrix Spike Summary Inorganic Parameters

**Sample Name :** L-2  
**Lab Code :** J0705660-004MS  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS	Result Notes
								Percent Recovery Acceptance Limits	
Chloride	mg/L (ppm)	300.0	2	1000	1800	2800	100	90-110	



# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705660  
**Date Collected :** NA  
**Date Received :** NA  
**Date Extracted :** NA  
**Date Analyzed :** 11/27-12/13/07

### Laboratory Control Sample Summary Inorganic Parameters

**Sample Name :** Laboratory Control Sample  
**Lab Code :** J0705660-LCS  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS	Result Notes
						Percent Recovery Acceptance Limits	
Alkalinity as CaCO <sub>3</sub> , Total	mg/L (ppm)	SM2320 B	250	249	100	85-115	
Ammonia as Nitrogen	mg/L (ppm)	350.1	5.00	5.08	102	90-110	
Chloride	mg/L (ppm)	300.0	10	9.84	98	90-110	
Chloride	mg/L (ppm)	300.0	250	242	97	90-110	
Cyanide, Total	mg/L (ppm)	335.4	0.100	0.0983	98	90-110	
Nitrate as Nitrogen	mg/L (ppm)	300.0	10	9.92	99	90-110	
Solids, Total Dissolved (TDS)	mg/L (ppm)	160.1	300	302	101	85-115	
Sulfide	mg/L (ppm)	376.1	10.3	10.3	100	85-115	

# COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

**Client :** GeoSyntec Consultants  
**Project Name :** Oak Hammock  
**Project Number :** FQ1144  
**Sample Matrix :** WATER

**Service Request :** J0705660  
**Date Collected :** NA  
**Date Received :** NA  
**Date Extracted :** NA  
**Date Analyzed :** 11/27/07

### Laboratory Control Sample Summary Inorganic Parameters

**Sample Name :** Laboratory Control Sample Duplicate  
**Lab Code :** J0705660-LCSD  
**Test Notes :**

**Basis :** NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide	mg/L (ppm)	376.1	10.3	10.3	100	85-115	

**Columbia Analytical Services, Inc.**  
Cooler Receipt and Preservation Form

Client: Geosyntec Service Request # 50705660  
 Project: Oak Hammock  
 Cooler received on 11-27-07 and opened on 11-27-07 by DMR  
 COURIER: CAS UPS FEDEX DHL CLIENT Tracking # J2081505160

- |    |   |            |            |                       |
|----|---|------------|------------|-----------------------|
| 1  | Were custody seals on outside of cooler?                                      | <u>Yes</u> | No         | N/A                   |
| 2  | Were seals intact, signed and dated?  | <u>Yes</u> | No         | N/A                   |
| 3  | Were custody papers properly filled out?                                      | <u>Yes</u> | No         | N/A                   |
| 4  | Temperature of cooler(s) upon receipt (Should be 4 +/- 2 degrees C)           | <u>1.9</u> | <u>1.5</u> | <u>1.5</u> <u>1.7</u> |
| 5  | Correct Temperature?  | <u>Yes</u> | No         | N/A                   |
| 6  | Were Ice or Ice Packs present   | <u>Yes</u> | No         | N/A                   |
| 7  | Did all bottles arrive in good condition (unbroken, etc....)?                 | <u>Yes</u> | No         | N/A                   |
| 8  | Were all bottle labels complete (sample ID, preservation, etc....)?           | <u>Yes</u> | No         | N/A                   |
| 9  | Did all bottle labels and tags agree with custody papers?                     | <u>Yes</u> | No         | N/A                   |
| 10 | Were the correct bottles used for the tests indicated?                        | <u>Yes</u> | No         | N/A                   |
| 11 | Were all of the preserved bottles received with the appropriate preservative? | <u>Yes</u> | No         | N/A                   |

HNO3 pH<2

H2SO4 pH<2

ZnAc2/NaOH pH>9

NaOH pH>12

HCl pH<2

Preservative additions noted below

- |    |   |            |        |     |
|----|---|------------|--------|-----|
| 12 | Were all samples received within analysis holding times?                  | <u>Yes</u> | No     | N/A |
| 13 | Were VOA vials checked for absence of air bubbles? If present, note below | <u>Yes</u> | No     | N/A |
| 14 | Where did the bottles originate?  | <u>CAS</u> | Client |     |

Sample ID	Reagent	Manuf. Lot # or CAS Chem ID	ml added	Initials
<u>L-4</u>	<u>HNO3</u>	<u>46265</u>	<u>1.0</u>	<u>DMR</u>

Additional comments and/or explanation of all discrepancies noted above:

Sample L-4 HNO3 - added more preservative

Client approval to run samples if discrepancies noted:

Date:

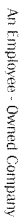
SR #: 10705660

Date: 1-27-07

Initials: DME

Note that pH is checked and meets the required pH criterion listed in the column heading unless otherwise noted on cooler receipt form.

Sample #	Req. pH	Bottle Code																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
-001	N/A	40mL	40mL	40mL	40mL	125mL	125mL	125mL	125mL	250mL	250mL	250mL	250mL	250mL	250mL	500mL	500mL	500mL	500mL	1L	1L	1L	1L	1L	202	402	602	1602	50	100mL	Misc.
-002	3	G	G	G	G	P	P	P	P	P	P	P	P	P	G	P	P	P	P	P	G	G	G	G	G	G	G	G	ENC	P	Misc.
-003	6																														
-004	3																														
-005	3																														
-006	3																														
-007	3																														
-008																															
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PAGE 1 OF 1

CAS Contact

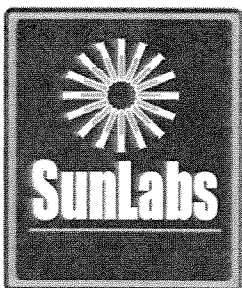
70705660

# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

[illegible]

# **Appendix A**

## **Subcontracted Analytical Results**



December 10, 2007

Craig Myers  
Columbia Analytical Services, Inc.  
8540 Baycenter Rd.  
Jacksonville, FL 32256

Re: SunLabs Project Number: **071128.03**  
Client Project Description: **J0705660**

Dear Mr. Myers:

Enclosed is the report of laboratory analysis for the following samples:

Sample Number	Sample Description	Date Collected
58450	J0705660-003 L-1	11/26/2007
58451	J0705660-004 L-2	11/26/2007
58452	J0705660-005 L-3	11/26/2007
58453	J0705660-006 L-4	11/26/2007

Copies of the Chain(s)-of-Custody, if received, are attached to this report.

If you have any questions or comments concerning this report, please do not hesitate to contact us.

Michael W. Palmer  
Vice President, Laboratory Operations

Enclosures

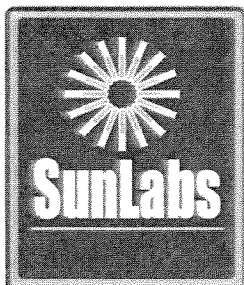
SunLabs, Inc.  
5460 Beaumont Center Blvd., Suite 520  
Tampa, FL 33634

Cover Page 1 of 1

Unless Otherwise Noted and Where Applicable:

Phone: (813) 881-9401  
Email: [Info@SunLabsInc.com](mailto:Info@SunLabsInc.com)  
Website: [www.SunLabsInc.com](http://www.SunLabsInc.com)

These samples were received at the proper temperature and were analyzed as received. The results herein relate only to the items tested or to the samples as received by the laboratory. This report shall not be reproduced except in full, without the written approval of the laboratory. Results for all solid matrices are reported on a dry weight basis. All samples will be disposed of within 45 days of the date of receipt of the samples. All samples in the body of the report are environmental samples. All results in the Quality Control (QC) section are labeled appropriately. All results meet the requirements of the NELAP standards. Footnotes are given at the end of the report. Uncertainty values are available upon request.



## Report of Laboratory Analysis

SunLabs Project Number	Columbia Analytical Services, Inc.
071128.03	Project Description
	J0705660

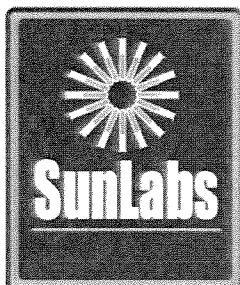
December 10, 2007

SunLabs Sample Number **58450**  
Sample Designation **J0705660-003 L-1**

Matrix Water  
Date Collected 11/26/2007 11:00  
Date Received 11/28/2007 09:45

Parameters	Method	Units	Results	Dil Factor	MDL	RL	CAS Number	Date/Time Analyzed	Date/Time Prep
<b>Chlorinated Herbicides by EPA Method 8151</b>									
Date Extracted	8151		12/03/07					12/07/07 21:36	12/03/07 15:00
Date Analyzed	8151		12/7/07	1				12/07/07 21:36	12/03/07 15:00
Surrogate (D-131)	8151	%	6.1	1		1		12/07/07 21:36	12/03/07 15:00
Dalapon	8151	ug/L	0.12 U	1	0.12	0.48	75-99-0	12/07/07 21:36	12/03/07 15:00
Dicamba	8151	ug/L	0.34 U	1	0.34	1.4	1918-00-9	12/07/07 21:36	12/03/07 15:00
MCP	8151	ug/L	0.4 U	1	0.4	1.6	93-65-2	12/07/07 21:36	12/03/07 15:00
MCPA	8151	ug/L	0.35 U	1	0.35	1.4	94-76-6	12/07/07 21:36	12/03/07 15:00
Dichloroprop	8151	ug/L	0.4 U	1	0.4	1.6	120-36-5	12/07/07 21:36	12/03/07 15:00
2,4-D	8151	ug/L	0.45 U	1	0.45	1.8	94-75-7	12/07/07 21:36	12/03/07 15:00
Silvex	8151	ug/L	0.44 U	1	0.44	1.8	93-72-1	12/07/07 21:36	12/03/07 15:00
2,4,5-T	8151	ug/L	0.14 U	1	0.14	0.56	93-76-5	12/07/07 21:36	12/03/07 15:00
2,4-DB	8151	ug/L	0.2 U	1	0.2	0.8	94-82-6	12/07/07 21:36	12/03/07 15:00
Dinoseb	8151	ug/L	0.16 U	1	0.16	0.64	88-85-7	12/07/07 21:36	12/03/07 15:00
Picloram	8151	ug/L	0.51 U	1	0.51	2	1918-02-1	12/07/07 21:36	12/03/07 15:00





## Report of Laboratory Analysis

SunLabs  
Project Number

**071128.03**

Columbia Analytical Services,  
Inc.

Project Description

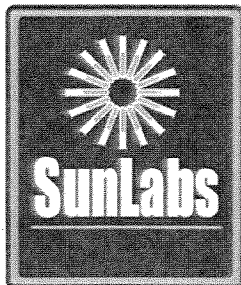
**J0705660**

December 10, 2007

SunLabs Sample Number **58451**  
Sample Designation **J0705660-004 L-2**

Matrix Water  
Date Collected 11/26/2007 13:15  
Date Received 11/28/2007 09:45

Parameters	Method	Units	Results	Dil Factor	MDL	RL	CAS Number	Date/Time Analyzed	Date/Time Prep
<b>Chlorinated Herbicides by EPA Method 8151</b>									
Date Extracted	8151		12/03/07						12/03/07 15:00
Date Analyzed	8151		12/7/07	1				12/07/07 21:57	
Surrogate (D-131)	8151	%	22	1		1		12/07/07 21:57	12/03/07 15:00
Dalapon	8151	ug/L	0.12 U	1	0.12	0.48	75-99-0	12/07/07 21:57	12/03/07 15:00
Dicamba	8151	ug/L	0.34 U	1	0.34	1.4	1918-00-9	12/07/07 21:57	12/03/07 15:00
MCP	8151	ug/L	0.4 U	1	0.4	1.6	93-65-2	12/07/07 21:57	12/03/07 15:00
MCPA	8151	ug/L	0.35 U	1	0.35	1.4	94-76-6	12/07/07 21:57	12/03/07 15:00
Dichloroprop	8151	ug/L	0.4 U	1	0.4	1.6	120-36-5	12/07/07 21:57	12/03/07 15:00
2,4-D	8151	ug/L	0.45 U	1	0.45	1.8	94-75-7	12/07/07 21:57	12/03/07 15:00
Silvex	8151	ug/L	0.44 U	1	0.44	1.8	93-72-1	12/07/07 21:57	12/03/07 15:00
2,4,5-T	8151	ug/L	0.14 U	1	0.14	0.56	93-76-5	12/07/07 21:57	12/03/07 15:00
2,4-DB	8151	ug/L	0.2 U	1	0.2	0.8	94-82-6	12/07/07 21:57	12/03/07 15:00
Dinoseb	8151	ug/L	0.16 U	1	0.16	0.64	88-85-7	12/07/07 21:57	12/03/07 15:00
Picloram	8151	ug/L	0.51 U	1	0.51	2	1918-02-1	12/07/07 21:57	12/03/07 15:00



## Report of Laboratory Analysis

SunLabs  
Project Number

**071128.03**

Columbia Analytical Services,  
Inc.

Project Description

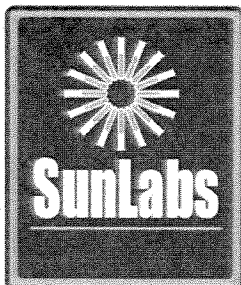
**J0705660**

December 10, 2007

SunLabs Sample Number **58452**  
Sample Designation **J0705660-005 L-3**

Matrix Water  
Date Collected 11/26/2007 12:10  
Date Received 11/28/2007 09:45

Parameters	Method	Units	Results	Dil Factor	MDL	RL	CAS Number	Date/Time Analyzed	Date/Time Prep
<b>Chlorinated Herbicides by EPA Method 8151</b>									
Date Extracted	8151		12/03/07					12/03/07 15:00	
Date Analyzed	8151		12/7/07	1				12/07/07 22:17	
Surrogate (D-131)	8151	%	56	1		1		12/07/07 22:17	12/03/07 15:00
Dalapon	8151	ug/L	0.12 U	1	0.12	0.48	75-99-0	12/07/07 22:17	12/03/07 15:00
Dicamba	8151	ug/L	0.34 U	1	0.34	1.4	1918-00-9	12/07/07 22:17	12/03/07 15:00
MCPP	8151	ug/L	0.4 U	1	0.4	1.6	93-65-2	12/07/07 22:17	12/03/07 15:00
MCPA	8151	ug/L	0.35 U	1	0.35	1.4	94-76-6	12/07/07 22:17	12/03/07 15:00
Dichloroprop	8151	ug/L	0.4 U	1	0.4	1.6	120-36-5	12/07/07 22:17	12/03/07 15:00
2,4-D	8151	ug/L	0.45 U	1	0.45	1.8	94-75-7	12/07/07 22:17	12/03/07 15:00
Silvex	8151	ug/L	0.44 U	1	0.44	1.8	93-72-1	12/07/07 22:17	12/03/07 15:00
2,4,5-T	8151	ug/L	0.14 U	1	0.14	0.56	93-76-5	12/07/07 22:17	12/03/07 15:00
2,4-DB	8151	ug/L	0.2 U	1	0.2	0.8	94-82-6	12/07/07 22:17	12/03/07 15:00
Dinoseb	8151	ug/L	0.16 U	1	0.16	0.64	88-85-7	12/07/07 22:17	12/03/07 15:00
Picloram	8151	ug/L	0.51 U	1	0.51	2	1918-02-1	12/07/07 22:17	12/03/07 15:00



## Report of Laboratory Analysis

SunLabs  
Project Number

**071128.03**

Columbia Analytical Services,  
Inc.

Project Description

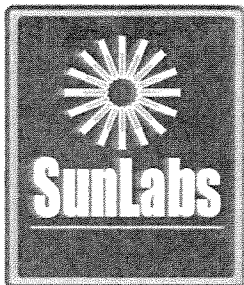
**J0705660**

December 10, 2007

SunLabs Sample Number **58453**  
Sample Designation **J0705660-006 L-4**

Matrix Water  
Date Collected 11/26/2007 14:15  
Date Received 11/28/2007 09:45

Parameters	Method	Units	Results	Dil Factor	MDL	RL	CAS Number	Date/Time Analyzed	Date/Time Prep
<b>Chlorinated Herbicides by EPA Method 8151</b>									
Date Extracted	8151		12/03/07						12/03/07 15:00
Date Analyzed	8151		12/8/07	1				12/08/07 01:24	
Surrogate (D-131)	8151	%	8	1		1		12/08/07 01:24	12/03/07 15:00
Dalapon	8151	ug/L	0.12 U	1	0.12	0.48	75-99-0	12/08/07 01:24	12/03/07 15:00
Dicamba	8151	ug/L	0.34 U	1	0.34	1.4	1918-00-9	12/08/07 01:24	12/03/07 15:00
MCPP	8151	ug/L	0.4 U	1	0.4	1.6	93-65-2	12/08/07 01:24	12/03/07 15:00
MCPA	8151	ug/L	0.35 U	1	0.35	1.4	94-76-6	12/08/07 01:24	12/03/07 15:00
Dichloroprop	8151	ug/L	0.4 U	1	0.4	1.6	120-36-5	12/08/07 01:24	12/03/07 15:00
2,4-D	8151	ug/L	0.45 U	1	0.45	1.8	94-75-7	12/08/07 01:24	12/03/07 15:00
Silvex	8151	ug/L	0.44 U	1	0.44	1.8	93-72-1	12/08/07 01:24	12/03/07 15:00
2,4,5-T	8151	ug/L	0.14 U	1	0.14	0.56	93-76-5	12/08/07 01:24	12/03/07 15:00
2,4-DB	8151	ug/L	0.2 U	1	0.2	0.8	94-82-6	12/08/07 01:24	12/03/07 15:00
Dinoseb	8151	ug/L	0.16 U	1	0.16	0.64	88-85-7	12/08/07 01:24	12/03/07 15:00
Picloram	8151	ug/L	0.51 U	1	0.51	2	1918-02-1	12/08/07 01:24	12/03/07 15:00



## Report of Laboratory Analysis

SunLabs  
Project Number

**071128.03**

Columbia Analytical Services,  
Inc.

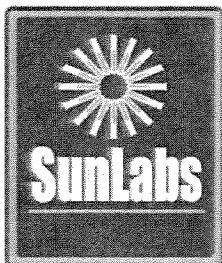
Project Description

**J0705660**

December 10, 2007

### Footnotes

- \* *SunLabs is not currently NELAC certified for this analyte.*
- I *The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.*
- LCS *Laboratory Control Sample*
- LCSD *Laboratory Control Sample Duplicate*
- MB *Method Blank*
- MS *Matrix Spike*
- MSD *Matrix Spike Duplicate*
- NA *Sample not analyzed at client's request.*
- RL *RL(reporting limit) = PQL(practical quantitation limit).*
- RPD *Relative Percent Difference*
- U *The analyte was not detected at or above the reported detection limit.*
- V *Indicates that the analyte was detected in both the sample and the associated method blank.*



## Quality Control Data

Project Number

071128.03

Columbia Analytical Services, Inc.

Project Description

J0705660

December 10, 2007

Batch No: C3156

Test: Chlorinated Herbicides by EPA Method 8151

Associated Samples

58450, 58451, 58452, 58453

TestCode: 8151-w

Compound	Blank	LCS Spike	LCS %Rec	LCSD %Rec	RPD %	---QC Limits--- RPD LCS	MS Spike	MS %Rec	MSD %Rec	RPD %	---QC Limits--- RPD MS	Dup RPD	Qualifiers
Parent Sample Number													
Surrogate (D-131)	75												
Dalapon	0.12 U												
Dicamba	0.34 U	1000	65	87	29*	18 37-137							
MCP	0.40 U												
MCPA	0.35 U												
Dichloroprop	0.40 U	1000	60	71	17	34 22-121							
2,4-D	0.45 U	1000	60	75	22	25 34-125							
Silvex	0.44 U	1000	72	82	13	21 34-131							
2,4,5-T	0.14 U	1000	87	77	12	18 18-120							
2,4-DB	0.20 U												
Dinoseb	0.16 U												
Picloram	0.51 U												

\* indicates value is outside control limits for %Recovery or greater than acceptance criteria for RP

### Footnotes

- I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- Q1 The result for the spike(s) were not within acceptable control limits. However, the LCS data was within acceptable control limits. Therefore the poor spike results can be attributed to matrix.
- U The analyte was not detected at or above the reported detection limit.

# Columbia Analytical Services, Inc. Chain of Custody

8540 Baycenter Rd. • Jacksonville, FL 32256 • 904-739-2277 • FAX 904-739-2011

CAS Contact: Craig Myers

671128.03

Project Number: 10705660  
Project Manager: Craig Myers

Lab Code	Sample ID	# of Cont.	Matrix	Sample		Lab ID
				Date	Time	
10705660-003	L-1	58450	Water	11/26/07	1100	SunLabs
10705660-004	L-2	58451	Water	11/26/07	1315	SunLabs
10705660-005	L-3	58452	Water	11/26/07	1210	SunLabs
10705660-006	L-4	58453	Water	11/26/07	1415	SunLabs

HERB  
8151A

Test Comments  
HERB- 8151A

10705660-003,4,5,6

Report Appendix II List  
Send to Sun Labs

Special Instructions/Comments

PLEASE SEND  
RESULTS TO  
MANDY SULLIVAN

Turnaround Requirements

☐ RUSH (Surcharges Apply)

PLEASE CIRCLE WORK DAYS

1 2 3 4 5

☐ STANDARD

Requested F-A-X Date:

Requested Report Date:

~~12/08/07~~  
12/10/07

Report Requirements

☒ Results Only

☒ II. Results + QC Summaries

☐ III. Results + QC and Calibration Summaries

☐ IV. Data Validation Report with Raw Data

POLMDL/J ☒ Y

EDD

Invoice Information

PO#  
10705660

Bill to

Relinquished By:

Received By:

Acct# Number