



Level 2 Contamination Impact Assessment Report  
**SR 400 (I-4) Project Development and Environment (PD&E) Study**

**Segment 1**

**Ponds 136B, 141A, 141B, and 142B**

Seminole County, Florida

Financial Project No. 432100-1-22-01

GEC Project No. 3492E

Prepared for:

HNTB

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Lake Mary, Florida 32746

and

Florida Department of Transportation

Prepared by:

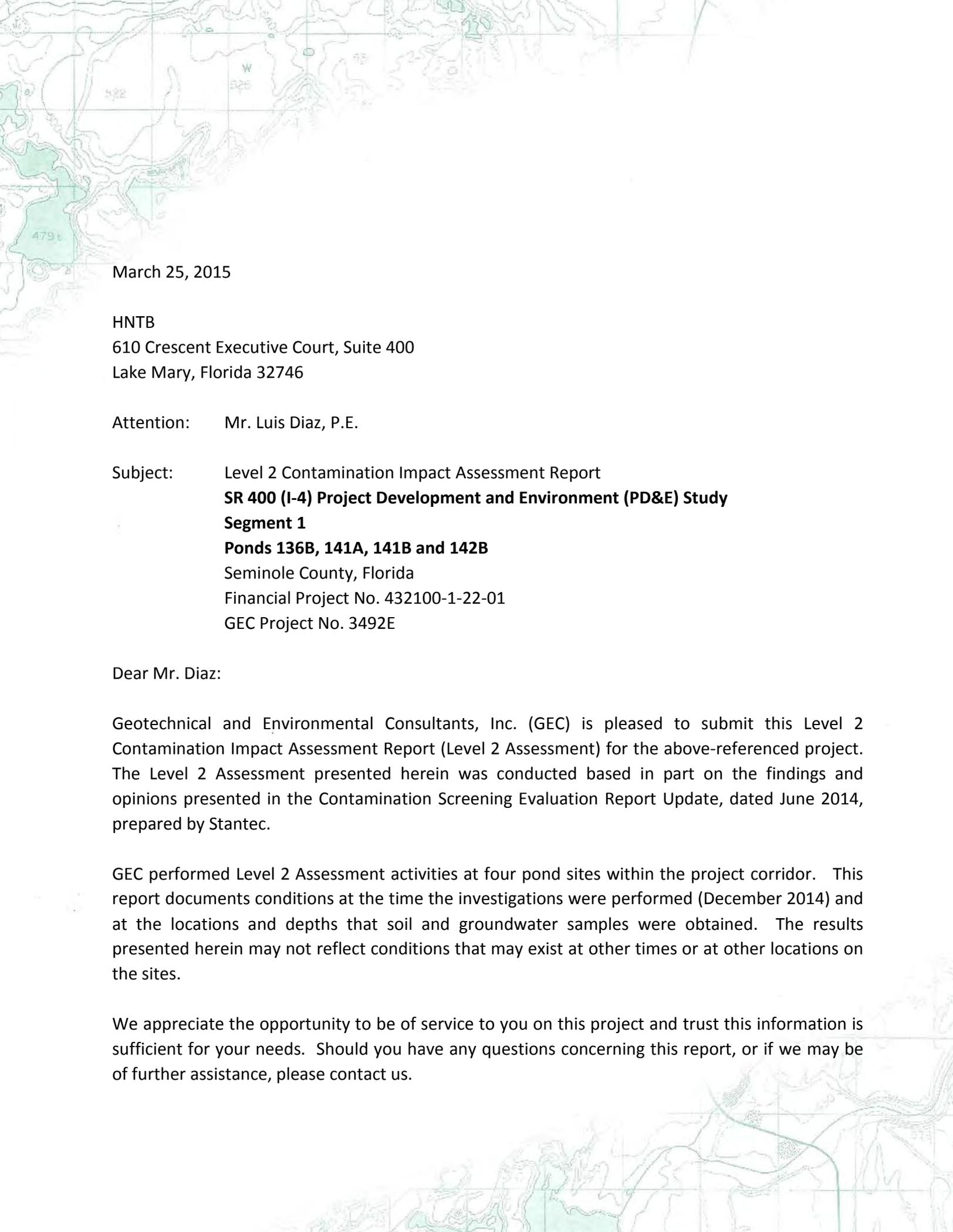
Geotechnical and Environmental Consultants, Inc.

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March 2015

**DRAFT**



March 25, 2015

HNTB  
610 Crescent Executive Court, Suite 400  
Lake Mary, Florida 32746

Attention: Mr. Luis Diaz, P.E.

Subject: Level 2 Contamination Impact Assessment Report  
**SR 400 (I-4) Project Development and Environment (PD&E) Study**  
**Segment 1**  
**Ponds 136B, 141A, 141B and 142B**  
Seminole County, Florida  
Financial Project No. 432100-1-22-01  
GEC Project No. 3492E

Dear Mr. Diaz:

Geotechnical and Environmental Consultants, Inc. (GEC) is pleased to submit this Level 2 Contamination Impact Assessment Report (Level 2 Assessment) for the above-referenced project. The Level 2 Assessment presented herein was conducted based in part on the findings and opinions presented in the Contamination Screening Evaluation Report Update, dated June 2014, prepared by Stantec.

GEC performed Level 2 Assessment activities at four pond sites within the project corridor. This report documents conditions at the time the investigations were performed (December 2014) and at the locations and depths that soil and groundwater samples were obtained. The results presented herein may not reflect conditions that may exist at other times or at other locations on the sites.

We appreciate the opportunity to be of service to you on this project and trust this information is sufficient for your needs. Should you have any questions concerning this report, or if we may be of further assistance, please contact us.

Sincerely,

GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS, INC.

**DRAFT**

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RPM/GLK/cew

cc: Mr. Randy Stafford - FDOT District 5 DCIC

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## TABLE OF CONTENTS

<b>1.0 INTRODUCTION .....</b>	<b>1</b>
1.1 Purpose.....	1
1.2 Objectives .....	1
1.3 Organization of Report .....	2
<b>2.0 PROJECT DESCRIPTION .....</b>	<b>3</b>
<b>3.0 SUMMARY OF POTENTIAL CONTAMINATION RISK SITES.....</b>	<b>3</b>
3.1 Pond Site 136B.....	4
3.2 Pond Site 141A.....	4
3.3 Pond Site 141B.....	4
3.4 Pond Site 142B.....	5
<b>4.0 CONTAMINATION IMPACT ASSESSMENT METHODOLOGY .....</b>	<b>5</b>
4.1 Boring Locations .....	5
4.2 Hand Auger Borings .....	5
4.3 Direct-Push Soil Sampling .....	6
4.4 Organic Vapor Soil Screening.....	6
4.5 Soil Sampling and Analysis.....	7
4.6 Groundwater Sampling and Analysis.....	8
<b>5.0 INVESTIGATION RESULTS.....</b>	<b>8</b>
5.1 Soil OVA Soil Screening.....	9
5.2 Soil Analysis .....	9
5.3 Groundwater Analysis.....	9
<b>6.0 DATA QUALITY .....</b>	<b>10</b>
6.1 Data Quality Control and Validation.....	10
6.2 Field QA/QC .....	10
6.3 Laboratory QA/QC .....	10
<b>7.0 CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>11</b>
7.1 Pond 136B.....	11
7.2 Pond 141A.....	11
7.3 Pond 141B.....	12
7.4 Pond 142B.....	12
7.5 Other General Conclusions and Recommendations .....	13
<b>8.0 REPORT LIMITATIONS.....</b>	<b>14</b>
<b>9.0 USE OF REPORT .....</b>	<b>14</b>

## **FIGURES**

Figure 1:	St. Johns River Water Management District Land Use Map
Figure 2:	USGS Quadrangle Map and NRCS Soil Survey Map
Figure 3:	Sample Location Map – Pond 136B
Figure 4:	Sample Location Map – Ponds 141A, 141B and 142B

## **TABLES**

Table 1:	Site Specific Sampling, Analysis and Rationale
Table 2A:	Summary of Soil Organic Vapor Analysis – Pond 136B
Table 2B:	Summary of Soil Organic Vapor Analysis – Pond 141A
Table 2C:	Summary of Soil Organic Vapor Analysis – Pond 141B
Table 2D:	Summary of Soil Organic Vapor Analysis – Pond 142B
Table 3A:	Soil Analytical Laboratory Results – CS-1 through CS-5 and CS-12
Table 3B:	Soil Analytical Laboratory Results – SS-1 and SB-34
Table 4:	Groundwater Analytical Laboratory Results – TMW-1

## **APPENDICES**

Appendix A:	Field Forms
Appendix A-1:	Soil Boring Logs
Appendix A-2:	Equipment Calibration Logs
Appendix A-3:	Groundwater Sampling Logs and Well Construction Details
Appendix B:	Laboratory Analytical Report

## **1.0 INTRODUCTION**

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Geotechnical and Environmental Consultants, Inc. (GEC) has been retained by HNTB, on behalf of the Florida Department of Transportation (FDOT), to provide a Level 2 Contamination Impact Assessment (Level 2 Assessment) for the SR 400 (I-4) Project Development and Environment (PD&E) Study, Segment 1. The Contamination Screening Evaluation Report (CSER), dated June 2014, was prepared by Stantec for this project. The CSER identified proposed stormwater pond 136B as containing dumped debris and assigned it a Medium risk rating. Ponds 141A, 141B and 142B were identified as being within an area of historical citrus groves with potential for Ethylene DiBromide (EDB) groundwater impacts; these three proposed stormwater ponds were assigned a Medium risk rating. GEC and FDOT determined that proposed pond stormwater pond sites 136B, 141A, 141B and 142B warranted further investigation at this time.

GEC and FDOT determined that proposed pond stormwater pond sites 136B, 141A, 141B and 142B warranted further investigation...

This Level 2 Assessment was conducted in general accordance with the Chapter 22-2.7 of the FDOT Project Development & Environment (PD&E) Manual and the sampling and analysis plan negotiated with Mr. Randy Stafford of FDOT District 5. Discussions regarding potential project implications associated with the proposed stormwater ponds are presented herein.

### **1.1 Purpose**

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The purpose of the Level 2 Assessment was to verify the potential presence of chemical contaminants that could affect ROW acquisition, design and/or construction of the proposed roadway corridor. If the presence of such contaminants is verified, further delineation of the horizontal and vertical extent of the soil and/or groundwater contaminant plumes may be needed to support ROW acquisition and associated liability protections. Such additional data may also be necessary to support stormwater management system design, foundation design, and design of remedial strategies that may be necessary during construction to properly mitigate the impacted media without causing adverse impacts to workers and the environment.

### **1.2 Objectives**

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The objectives of the Level 2 Assessment presented herein were to: (i) assess the potential for soil and groundwater impacts associated with anticipated contaminant source area(s) via soil and groundwater screening techniques; (ii) provide information necessary to evaluate project impacts

associated with ROW acquisition and construction activities; and (iii) provide site-specific recommendations based on the Level 2 Assessment results and the current roadway design plans.

### ***1.3 Organization of Report***

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The remainder of this Level 2 Assessment Report is organized as follows:

Section 2.0: *Project Description* - provides an overview of the SR 400 (I-4) Project Development and Environment (PD&E) Study, Segment 1.

Section 3.0: *Summary of Potential Contamination Risk Sites* - provides a summary of the potential contamination sites that were identified in the environmental contamination screening evaluation.

Section 4.0: *Contamination Impact Assessment Methodology* - summarizes the sampling activities performed for this Level 2 Assessment.

Section 5.0: *Investigation Results* - provides a general summary of the sampling results.

Section 6.0: *Data Quality* - summarizes the data quality objectives, and field and laboratory quality control and quality assurance procedures.

Section 7.0: *Conclusions and Recommendations* - summarizes the sampling results and provides site-specific recommendations for the project.

Section 8.0: *Report Limitations* - presents specific limitations associated with the preliminary assessment activities and results herein.

Section 9.0: *Use of Report* - describes the terms of use of this report.

Figures and tables that provide specific details of the Level 2 Assessment activities are presented in the Appendix. Copies of all field documentation are provided in **Appendix A** and a copy of the analytical laboratory report is provided in **Appendix B**.

## 2.0 PROJECT DESCRIPTION

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The Florida Department of Transportation (FDOT) will reconstruct and widen I-4 as part of the I-4 Beyond the Ultimate project. This involves the build-out of I-4 to its ultimate condition, including segments in Polk, Osceola, Orange, Seminole, and Volusia Counties. Segment 1 of the project is located in southwest Orange County, Florida. The project corridor is located in Sections 27 and 33, Township 25 South, Range 27 East; Sections 28, 32 and 33, Township 24 South, Range 28 East; Sections 11, 14 and 22, Township 24 South, Range 28 East; and Section 22, Township 24 South, Range 28 East in Polk, Osceola and Orange Counties, Florida.

The I-4 Ultimate design incorporates three (3) general use lanes and two (2) tolled express lanes in each direction, for a total of ten (10) dedicated lanes. Segment 1 extends from west of County Road 532 (Osceola and Polk County line) to ½ mile south of SR 528. Stormwater runoff will be directed to several new stormwater ponds along the corridor.

The land use adjacent to I-4 in within Segment 1 consists of commercial, residential, and natural lands. Undeveloped natural areas are located between SR 429 and US 192 (Irlo Bronson Memorial Highway) with a few other small undeveloped sites along the right-of-way. The majority of the

Many of the proposed ponds are located in developed areas or near I-4 roadway/ramps...

project corridor between US 192 and SR 528 is commercial, retail, hotel and restaurants. Many of the proposed ponds are located in developed areas or near I-4 roadway/ramps; therefore, natural drainage patterns have been affected by previous construction.

This Level 2 Assessment includes investigation and analyses at the proposed locations for Ponds 136B, 141A, 141B and 142B. These Pond sites are all located within Orange County.

The project study area is shown on the St. Johns River Water Management District Land Use Map, USGS Quadrangle Map, and the National Resource Conservation Services (NRCS) Soil Survey Map provided on **Figures 1** and **2**.

## 3.0 SUMMARY OF POTENTIAL CONTAMINATION RISK SITES

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The Level 2 Assessments for the potential contamination sites were recommended due to the lack of sufficient contamination assessment information, undocumented groundwater flow direction, and/or the proximity of the sites to planned ROW acquisition. The following descriptions are

excerpts from the June 2014 CSER describing each site addressed in this Level 2 Assessment. **Figures 1 through 4** show the approximate locations of Ponds 136B, 141A, 141B and 142B.

### ***3.1 Pond Site 136B***

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Pond Site 136B is located to the east of the right-of-way, to the north of the SR 536 and I-4 interchange. This is a proposed new pond site. The site is mostly forested with some openings that are dominated by cogon grass. The site is a mix of cabbage palm, laurel oak, water oak, golden raintree, and longleaf pine with unmaintained weedy herbaceous species. This pond site is located on the partially developed Residence Inn by Marriott Parcel (Site #42), which had a registered AST during past construction activities. Although the former location of the AST is unknown, there are no records of any discharges at this site. A small structure was discovered at the north end of the proposed pond site. Old paint cans, fire extinguishers, and discarded household debris were observed near this structure, and several drums containing small amounts of an unknown liquid were found nearby. No staining or stressed vegetation was noted in the vicinity of the potential sources of contamination, but due to the potential for contamination to be present at this site, it was given a **MEDIUM RISK** rating.

### ***3.2 Pond Site 141A***

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Pond Site 141A is located west of I-4, along Palm Parkway, between Fenton Street and the Central Florida Parkway. This is a proposed new pond site. The pond site is mostly comprised of Bahia grass and various weedy herbaceous species with rows of planted citrus and a few young live oaks. No obvious signs of contamination were observed in the field for this site. This site is not located within a delineated area of groundwater contamination from the agricultural pesticide ethylene dibromide (EDB), but the use of the land for citrus production may indicate that EDB contamination is present. Therefore, this pond site was given a **MEDIUM RISK** rating.

### ***3.3 Pond Site 141B***

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Pond Site 141B is located west of I-4, along Palm Parkway, between Fenton Street and the Central Florida Parkway. This is a proposed new pond site. The pond site is comprised of a forested area to the south and an area of planted citrus to the north. The forested part of the pond site is comprised primarily of live oak and longleaf pine that has been densely overgrown with salt bush, winged sumac, and wild grape vine. The northern area of the pond site is mostly Bahia grass and weedy herbaceous species with some rows of planted citrus. No obvious signs of contamination were observed in the field for this site. This site is not located within a delineated area of

groundwater contamination from the agricultural pesticide ethylene dibromide (EDB), but the use of the land in the northern portion of the proposed pond site for citrus production may indicate that EDB contamination is present. Therefore, this pond site was given a **MEDIUM RISK** rating.

### ***3.4 Pond Site 142B***

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Pond Site 142B is located west of I-4, to the southwest of the intersection of Palm Parkway and Central Florida Parkway. This is a proposed new pond site. This pond site is comprised of a forested area to the north, a furrowed planted pine area in the middle, and an area of planted citrus to the south. The forested part of the pond site is mostly sand pine that has been densely overgrown with Brazilian pepper and weedy herbaceous species. The middle area has rows of young planted pines in furrows with heavy growth of weedy herbaceous species. The southern area is mostly planted rows of young citrus. No obvious signs of contamination were observed in the field for this site. This site is not located within a delineated area of groundwater contamination from the agricultural pesticide ethylene dibromide (EDB), but the use of the land in the southern portion of the proposed pond site for citrus production may indicate that EDB contamination is present. Therefore, this pond site was given a **MEDIUM RISK** rating.

## ***4.0 CONTAMINATION IMPACT ASSESSMENT METHODOLOGY***

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The following sections provide detailed descriptions of the Level 2 Assessment activities based on known site conditions and our understanding of the SR 400 PD&E Study project needs. Field logs generated during performance of the Level 2 Assessment activities are provided in **Appendix A**.

### ***4.1 Boring Locations***

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The soil boring locations were based on the limits of Ponds 136B, 141A, 141B and 142B. The soil borings were placed at locations most likely to encounter evidence of subsurface contamination resulting from past or current on-site activities. GEC technicians obtained geographic coordinate information at each soil boring and temporary groundwater monitoring well location. **Table 1** presents the site-specific sampling and analysis rationale for each site. **Figures 3** and **4** show the locations of the soil borings at each of the pond sites investigated.

### ***4.2 Hand Auger Borings***

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GEC technicians performed standard barrel hand auger borings, by manually turning a 3.25-inch diameter, 6-inch long stainless steel sampler into the soil until the barrel was filled. The sampler

was then retrieved and the soil was visually examined and classified. This procedure was repeated until the desired termination depth was achieved. Representative soil samples were collected for further visual examination, organic vapor screening and analytical laboratory testing, where applicable. The hand auger equipment was decontaminated in accordance with Florida Department of Environmental Protection (FDEP) Standard Operating Procedures (SOPs) prior to collecting soil samples for chemical analysis.

### ***4.3 Direct-Push Soil Sampling***

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Soil samples were also obtained by a truck-mounted Simco<sup>7</sup> hydraulic direct-push rig. Continuous soil samples were obtained by hydraulically driving a 3-inch macro-core soil sampler to the desired depth in 5-foot intervals. Upon retrieval of the soil sample, a field technician visually examined and classified the soil sample. The direct-push sampling equipment was decontaminated in accordance with Florida Department of Environmental Protection (FDEP) Standard Operating Procedures (SOPs) between sampling locations.

Following the completion of the subsurface activities, the soil cuttings were returned to their original location as backfill for the boreholes, in order to return the site as close to its original condition as possible.

### ***4.4 Organic Vapor Soil Screening***

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In order to assess the potential for petroleum product or volatile hazardous material contaminated soils that may have resulted from activities conducted on or adjacent to each site, GEC screened soil samples obtained at a total of 76 boring locations. **Figures 3 and 4** show the approximate soil boring locations at each respective site.

Soil samples were collected at approximate 2-foot subsurface sampling intervals beginning one foot below the ground surface to a maximum of 20 feet below land surface (bls). Soil samples that were retrieved from the hand auger and direct push borings were visually inspected for indications of soil contamination, such as soil staining and/or odors, which might be indicative of hazardous material or petroleum product impacts. Samples from each of the borings were screened in the field using a calibrated Thermo Electron Corporation Model TVA-1000B Organic Vapor Analyzer (OVA) equipped with a flame ionization detector (FID) following guidelines for head space analysis set forth in the FDEP document entitled Guidelines for Assessment and Source Removal of Petroleum Contaminated Soil, dated May 1998. Glass sample jars were half-filled with soil, covered with aluminum foil, sealed, and set aside to allow the volatiles to equilibrate throughout

the head space. The organic vapor response for each soil sample was determined by inserting the probe of the OVA-FID into the head space of the sample container and recording the highest sustained reading. The two-jar method was used to obtain total organic vapor readings and carbon filter readings, to account for the presence of naturally occurring methane in site soils. The resultant total non-methane hydrocarbon level is calculated by subtracting the carbon filtered response from the total response. Organic vapor measurements are summarized on **Tables 2A** through **2D**. Soil boring logs are included in **Appendix A-1** and equipment calibration logs are included in **Appendix A-2**.

#### ***4.5 Soil Sampling and Analysis***

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Soil samples for analytical testing were collected from the locations that exhibited the highest OVA readings or locations that were most likely to encounter contaminated media to verify the potential presence of chemical impacts. The samples were transported to Environmental Conservation Laboratories (ENCO) for analysis.

Composite soil samples for pesticides and herbicides were taken from depths of 0 to 2 feet bls at the following location in Ponds 141A, 141B and 142B:

Pond 141A		Pond 141B		Pond 142B	
Sample ID	Soil Boring ID	Sample ID	Soil Boring ID	Sample ID	Soil Boring ID
CS-1	SB-66	CS-5	SB-46	CS-9	SB-32
CS-2	SB-61	CS-6	SB-41	CS-10	SB-34
CS-3	SB-54	CS-7	SB-39	CS-11	SB-26
CS-4	SB-48	CS-8	SB-29	CS-12	SB-25

Grab Soil samples for metals and the waste oil/unknown group were taken from the following locations and depths in Ponds 136B and 142B:

Pond 136B	
Soil Boring ID	Sample Depth
SS-1 (SB-84)	4'
Pond 142B	
Soil Boring ID	Sample Depth
SB-34	7'

**Table 1** summarizes the site-specific sampling rationale and analytical methods used. Soil sample locations are shown for each site on **Figures 3** and **4**.

GEC compared the analytical results of chemical constituents to the Soil Cleanup Target Levels (SCTLs) provided in Chapter 62-777, FAC. **Tables 3A** and **3B** provide a summary of the detected constituent concentrations exhibited within the collected analytical samples. A detailed discussion of the soil analytical results is included in Section 7.0.

#### ***4.6 Groundwater Sampling and Analysis***

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To assess the potential for groundwater contamination impacts that may have resulted from chemical releases, GEC obtained analytical groundwater samples from each site by installing a temporary groundwater monitoring well. The sampling locations were based on the OVA soil screening results and field observations. The wells were installed by GEC utilizing hand auger methods. The well assembly consisted of an approximately 5-foot section of pre-packed 1-inch diameter, 0.01-inch factory slotted polyvinyl chloride (PVC) pipe coupled with a PVC monitoring well point (bottom) and topped with a section of solid PVC riser. The PVC well point, well screen, and riser were transported to the site wrapped in protective plastic. After removing the protective wrap, the assembled groundwater monitoring well was lowered into 3.25-inch steel casing. Following installation of the well assembly, the steel casing was removed. Subsequent to sampling activities, the temporary well was properly abandoned or removed from the ground.

GEC collected the groundwater sample using low-flow sampling techniques and transported the samples to ENCO for analysis. The groundwater samples collected from TMW-1 at Pond 136B was submitted for analysis by EPA methods 8260 for VOAs, 8270 for PAHs, FL-Pro for TRPH, 6010 for arsenic, 8081 for pesticides, and 8082 for PCBs (Table D Waste Oil/Unknown Group). The groundwater samples collected from TMW-2, TMW-3 and TMW-4 at Ponds 141B, 141A and 142B, respectively, were submitted for analysis by EPA methods 601 for arsenic, 8081 for pesticides, and 8151 for herbicides. A detailed discussion of the groundwater analytical results is included in Section 7.0. **Table 1** summarizes the site-specific sampling rationale and analytical methods used. The groundwater sample locations are shown for each site on **Figures 3** and **4**. The groundwater sampling log and well construction detail are provided in **Appendix A-3**.

### **5.0 INVESTIGATION RESULTS**

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The following sections describe the results of the Level 2 Assessment activities. **Figure 3** shows the sample locations at each site. **Table 1** summarizes the site-specific sampling rationale and

analytical methods used. **Tables 2A** through **2D** present the results of the OVA screening. **Tables 3A, 3B** and **4** provide summaries of soil and groundwater chemical detections as compared to applicable FDEP default clean-up target levels. Only chemical detections are listed in the laboratory results summary tables.

### ***5.1 Soil OVA Soil Screening***

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The results of the OVA soil screening conducted at a total of 76 boring locations are included in **Tables 2A** through **2D**. Elevated soil screening values (>10) were detected within the following borings: SB-32, SB-34 and SB-B. Organic odors were observed within the following borings: SB-34, SB-72, SB-74, SB-76 through SB-85 and SB-B through SB-E.

Soil samples were collected for analytical laboratory testing at the locations and depths which exhibited the highest positive OVA soil screening results, or were most likely to encounter contamination due to property use and field observations. Detailed discussions of the soil OVA screening results by site are included in Section 7.0. **Tables 2A** through **2D** also indicate the soil types, groundwater depths, and dates that the borings were performed.

### ***5.2 Soil Analysis***

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Soil samples were collected for analytical laboratory testing based on the results of the OVA soil screening, the roadway alignment, and the proximity to potential chemically impacted soils. GEC compared the analytical results to SCTLs provided in Chapter 62-777, FAC. Detectable concentrations of chemicals were identified in the soil samples, but the concentrations did not exceed the FDEP SCTLs for direct exposure in residential or industrial settings. **Tables 3A** and **3B** provide a summary of the detected constituent concentrations exhibited within the collected analytical samples. A detailed discussion of the soil analytical results is included in Section 7.0.

### ***5.3 Groundwater Analysis***

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To assess the potential for groundwater contamination impacts that may have resulted from chemical releases, one groundwater sample was collected for analytical laboratory testing at each proposed pond site (TMW-1 in Pond 136B, TMW-2 in Pond 141B, TMW-3 in Pond 141A, and TMW-4 in Pond 142B). The sample locations were chosen based on the OVA soil screening results. GEC compared the analytical results of chemical constituents to the Groundwater Cleanup Target Levels (GCTLs) provided in Chapter 62-777, FAC. Detectable concentrations of chemicals were identified in the groundwater sample TMW-1, but contaminant concentrations did not exceed

FDEP GCTLs for direct exposure in residential or commercial settings. **Table 4** provides a summary of the detected constituent concentrations exhibited within the collected analytical samples. A detailed discussion of the groundwater analytical results is included in Section 7.0.

## **6.0 DATA QUALITY**

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### ***6.1 Data Quality Control and Validation***

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In order to achieve the data quality objectives (DQOs), various field and laboratory quality assurance and quality control (QA/QC) procedures were implemented to verify the integrity of the chemical data. The following provides a summary of the QA/QC framework used to obtain the target DQOs.

### ***6.2 Field QA/QC***

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All soil and groundwater sampling activities performed by GEC personnel during this environmental investigation were conducted in accordance with FDEP Standard Operating Procedures for Field Activities (FDEP SOP-001/01), FS-2200 (Groundwater Sampling), and FS-3000 (Soil Sampling) dated March 1, 2014. In addition, laboratory analytical methods and reporting were conducted in accordance with Chapter 62-160, FAC to ensure high data quality. Field instrument calibration forms and groundwater sampling logs are provided in **Appendix A-2** and **A-3**, respectively.

Analytical laboratory reports are included in **Appendix B**. Due to the preliminary screening aspect of this investigation, equipment blanks and field duplicate samples were not collected during the field activities.

### ***6.3 Laboratory QA/QC***

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All soil and groundwater samples were submitted in laboratory-supplied containers for analysis to Environmental Conservation Laboratories, Inc. (NELAP #E83182). The laboratory reports indicated that the laboratory analyzed the samples using the correct analytical methods. In general, control limits were within acceptable ranges for all laboratory quality assurance samples, method blanks, surrogate standards, laboratory control spikes (LCS), and matrix spikes / matrix spike duplicates (MS/MSD). As shown on **Tables 3A, 3B** and **4** chemical constituents that were identified at concentrations at or near the laboratory method detection limits (MDLs) but below the laboratory practical quantitation limits were assigned an "I" qualifier.

## **7.0 CONCLUSIONS AND RECOMMENDATIONS**

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The following subsections describe the site-specific conclusions and recommendations based on supplemental public record review, soil screening activities, analytical laboratory results, and the proposed roadway alignment associated with the I-4 PD&E Study, Segment 1, Ponds 136B, 141A, 141B and 142B project.

### **7.1 Pond 136B**

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GEC performed 23 soil screening borings at this site as shown on **Figure 3**. Soil borings SB-68 through SB-85 were positioned at regular intervals within the limits of the proposed Pond 136B. Soil Borings SB-A through SB-E were performed around a small building and wooden object features outside and adjacent to the pond site. The groundwater table was encountered at approximately 1.5 to 4.5 feet below land surface at the pond site. Only soil boring SB-B (approximately 70 feet north of SB-85) exhibited an elevated organic vapor response. Multiple soil borings exhibited organic odors, potentially due to the wooded nature of the pond site. A soil sample (SS-1) was obtained from SB-84 and TMW-1 was installed along the edge of the pond site, between SB-85 and SB-B. The soil sample from SS-1 and groundwater sample from TMW-1 were analyzed for the Table D Waste Oil/Unknown Group.

Based on the results of the Level 2 Assessment, it appears that the soils and groundwater have not been impacted at this time and would not require special handling, characterization, and disposal provisions. GEC does not recommend any further contamination assessments to be performed at this location.

### **7.2 Pond 141A**

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GEC performed 23 soil screening borings at this site as shown on **Figure 4**. Soil borings SB-48 through SB-67 were positioned at regular intervals within the limits of the proposed Pond 141A. The groundwater table was encountered at 1.0 to 4.5 feet below land surface at the pond site. The soil borings did not exhibit an elevated organic vapor responses or organic odors. Composite soil samples were collected at the locations of borings SB-48, SB-54, SB-61 and SB-66 at depths of 0 to 2 feet below land surface and submitted for analyses for arsenic, pesticides, and herbicides. The groundwater sample was obtained from TMW-3 (SB-58) and submitted for analyses for arsenic, pesticides, and herbicides. The laboratory analytical results indicated detections in the samples at levels below commercial and residential cleanup target levels listed in Chapter 62-777, FAC and Maximum Contaminant Levels listed in Chapter 62-550, FAC.

Based on the results of the Level 2 Assessment, it appears that the soils have not been impacted at this time and would not require special handling, characterization, and disposal provisions. GEC does not recommend any further contamination assessments to be performed at this location.

### **7.3 Pond 141B**

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GEC performed 16 soil screening borings at this site as shown on **Figure 4**. Soil borings SB-27 through SB-30 and SB-36 through SB-47 were positioned at regular intervals within the limits of the proposed Pond 141B. The groundwater table was encountered at approximately 0.5 and 4.5 feet below land surface at the pond site. The soil borings did not exhibit an elevated organic vapor response. Composite soil samples were collected at the locations of borings SB-29, SB-38, SB-41 and SB-46 at depths of 0 to 2 feet below land surface and submitted for analyses for arsenic, pesticides, and herbicides. The groundwater sample was obtained from TMW-2 (SB-42) and submitted for analyses for arsenic, pesticides, and herbicides. The laboratory analytical results indicated detections in the samples at levels below commercial and residential cleanup target levels listed in Chapter 62-777, FAC and Maximum Contaminant Levels listed in Chapter 62-550, FAC.

Please note that boring numbers SB-27 through SB-30 are repeated on Ponds 141B and 142B. These were differentiated by date and pond number.

Based on the results of the Level 2 Assessment, it appears that the soils and groundwater have not been impacted at this time and would not require special handling, characterization, and disposal provisions. GEC does not recommend any further contamination assessments to be performed at this location.

### **7.4 Pond 142B**

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GEC performed 13 soil screening borings at this site, as shown on **Figure 4**. Soil borings SB-23 through SB-35 were located at regular intervals throughout the pond site. The groundwater level was encountered at approximately 9.0 to 15 feet below land surface at the pond site. Soil borings SB-32 and SB-34 exhibited an elevated organic vapor response.

Composite soil samples were collected at the locations of borings SB-25, SB-26, SB-32 and SB-34 at depths of 0 to 2 feet below land surface and submitted for analyses for arsenic, pesticides, and herbicides. Due to elevated OVA levels, an additional soil sample was collected at the location of boring SB-34 (7 feet bls) and submitted for analyses for the Table D Waste Oil/Unknown Group.

Temporary well TMW-4 was installed in boring SB-32. The groundwater sample from TMW-4 was submitted for analyses for arsenic, pesticides, and herbicides. The laboratory analytical results indicated detections in the soil and groundwater samples at levels below commercial and residential cleanup target levels listed in Chapter 62-777, FAC and Maximum Contaminant Levels listed in Chapter 62-550, FAC.

Please note that boring numbers SB-27 through SB-30 are repeated on Ponds 141B and 142B. These were differentiated by date and pond number.

Based on the results of the Level 2 Assessment, it appears that the soils and groundwater have not been impacted at this time and would not require special handling, characterization, and disposal provisions. GEC does not recommend any further contamination assessments to be performed at this location.

### ***7.5 Other General Conclusions and Recommendations***

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The nature and scope of this Level 2 Assessment was not intended to provide a warranty that the project corridor is free of contamination or release contractors from complying with any and all permitting requirements and/or construction specifications that would represent a liability to the FDOT or to the User of this report.

Although contaminant source material may not be present within the proposed project corridor on some sites investigated, exceedances of surface water discharge criteria may be encountered while performing dewatering in the project corridor. Although these exceedances could be due to background conditions only, the FDOT should ensure that FDEP NPDES discharge criteria are met by the contractor during construction.

The data provided in this Level 2 Assessment should be utilized as the ROW acquisition process progresses. FDOT legal representatives should be consulted regarding the statutory and financial responsibility for ownership of contaminated property. GEC also recommends that asbestos and other hazardous building materials survey be conducted at locations in which existing structures will be acquired and demolished as part of this project.

If petroleum-containing or hazardous materials, and/or contaminated soils/groundwater are encountered during performance of construction activities, appropriate activities should be immediately taken to protect site worker safety and (if possible) to prevent the spread of contamination to otherwise non-impacted media. If such materials should be encountered, or if

the proposed roadway alignment or stormwater pond sites are changed, GEC should be contacted immediately for consultation.

## **8.0 REPORT LIMITATIONS**

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The findings, opinions, conclusions, and recommendations presented herein are based on the soil and groundwater samples obtained at specific locations and explored depths below ground surface at the time of this assessment (December 2014). The Level 2 Assessment was conducted based in part on readily available and practically reviewable information contained in the public record. GEC does not warrant or guarantee the accuracy or completeness of this information. Some of this public record information may be dated and not representative of conditions at the time this report was prepared (March 2015), or in the future. Please refer to this report and supporting documentation, including the June 2014 CSER, in its entirety for a complete understanding regarding our evaluation methodology and the age and limitations of the data upon which we have relied in formulating our findings, opinions, conclusions and/or recommendations.

The conclusions and recommendations presented herein are based on the OVA screening on pre-determined locations, public record information review, and analytical laboratory analysis results. Investigation of the full extent of any contamination plumes was not the objective of this Level 2 Assessment. Groundwater samples collected during the Level 2 Assessment activities were obtained by the installation of temporary groundwater monitoring wells.

This report does not contain discussions on asbestos-containing materials surveys, lead-based paint surveys, mold surveys, radon gas surveys, lead in drinking water analysis, wetlands surveys, regulatory compliance audits, cultural and historical analyses, industrial hygiene or health and safety audits, ecological surveys, endangered or threatened species evaluations, indoor air quality surveys, engineering investigations, or building suitability studies.

## **9.0 USE OF REPORT**

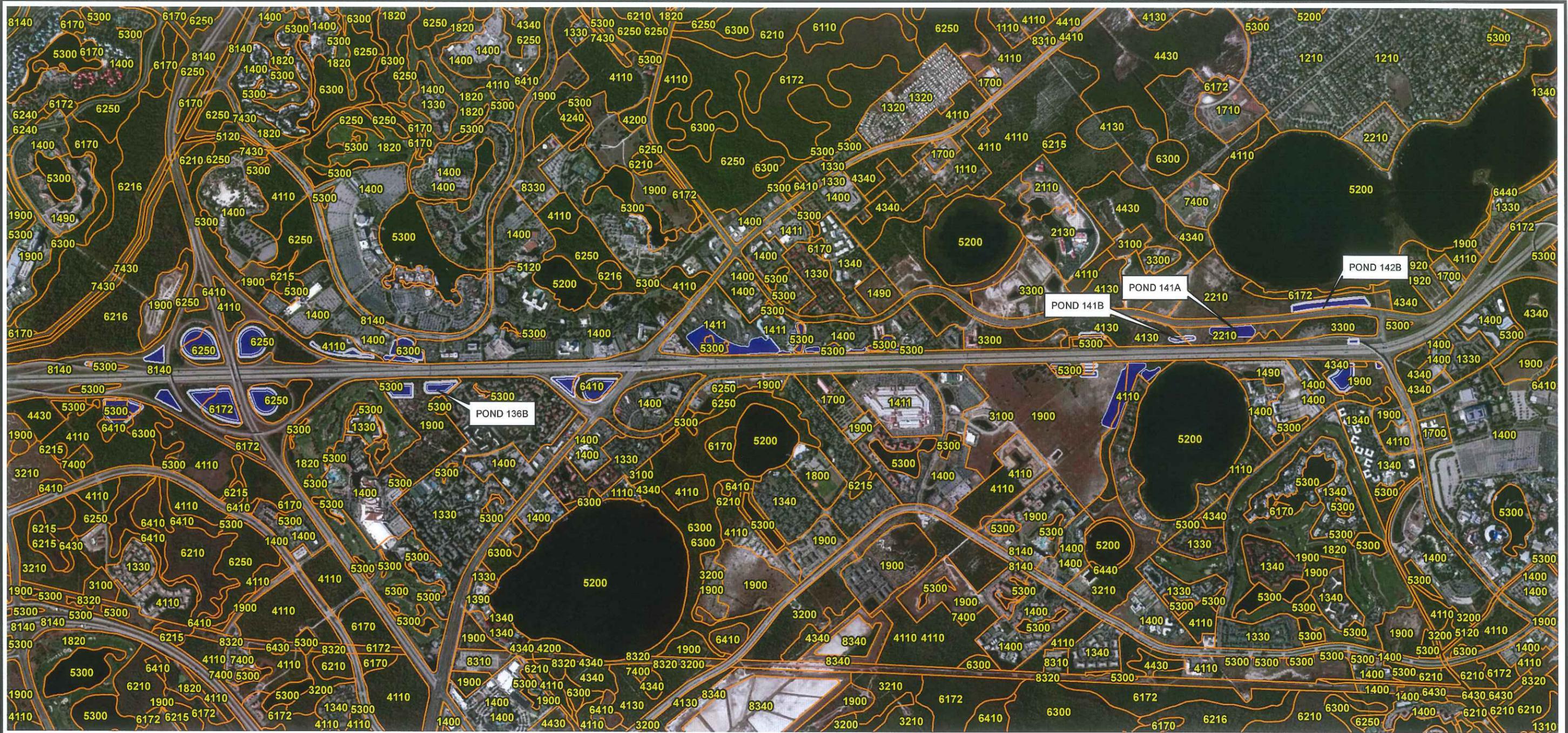
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This report is intended for the exclusive use of our clients, HNTB and FDOT, and for specific application to our clients' project. GEC expressly disclaims any and all liability resulting from reliance on this report by those not authorized, in writing, by GEC.

GEC has strived to provide the services described in this report in a manner consistent with that level of care and skill ordinarily exercised by members of our profession currently practicing in Central Florida. No other representation is expressed or implied in this document.

The conclusions or recommendations of this report should be disregarded if the nature, design or location of the proposed corridor and facilities is changed. If such changes are contemplated, GEC should be retained to review the new plans to assess the applicability of this report in light of proposed changes.

## FIGURES



**SFWM D LAND COVER AND LAND USE LEGEND**

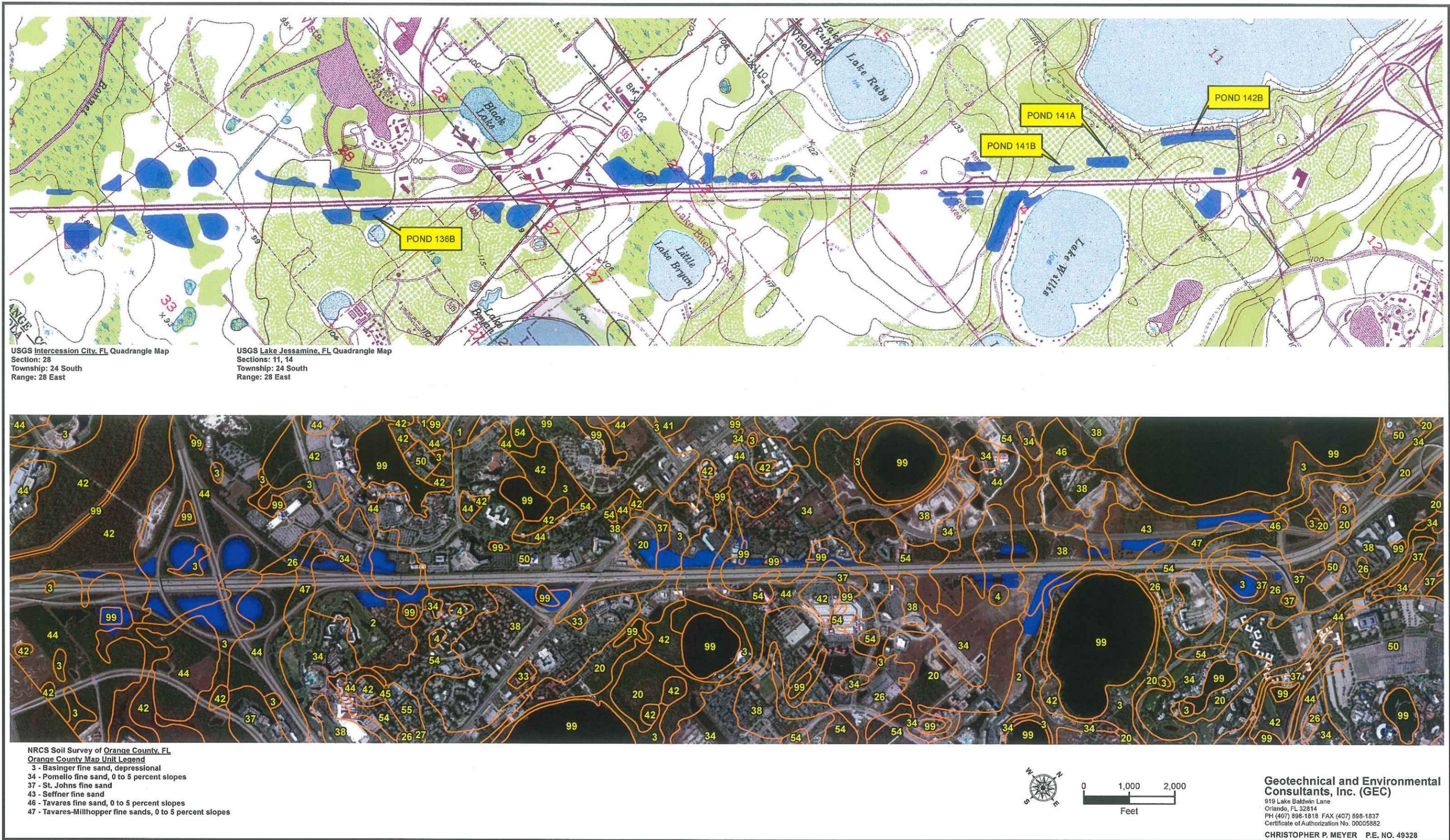
- 1100 - Residential
- 1900 - Open Land
- 2210 - Citrus Groves
- 4110 - Pine Flatwoods
- 4130 - Sand Pine
- 4340 - Upland Mixed Coniferous / Hardwood



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FIGURE 1 - LAND USE MAP



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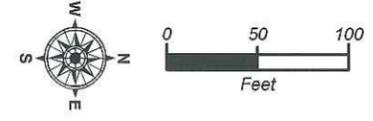
FIGURE 2 - USGS QUADRANGLE AND NRCS SOIL SURVEY MAPS



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FIGURE 3 - BORING LOCATION PLAN

- B Approximate Soil boring location
- ▲ Approximate Temporary Monitoring Well location
- Approximate Soil Sample location



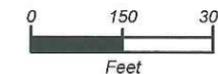
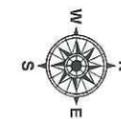
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FIGURE 4 - BORING LOCATION PLAN

- B Approximate Soil boring location
- ▲ Approximate Composite Sample location
- ▲ Approximate Temporary Monitoring Well location
- Approximate Soil Sample location



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## **TABLES**

Table 1  
 Site-Specific Sampling, Analysis and Rationale  
**I-4 PD&E Study Level 2 Contamination Assessment**  
**Ponds 136B, 141A, 141B, and 142B - Segment 1**  
 FPID No. 432100-1-22-01  
 GEC Project No. 3492E

Site Name & Address	Sample ID	Matrix	Designated Analysis	Sampling Rationale
Pond 136B	SS-1	Soil	6010, 7471, 8081, 8082, 8260, 8270, FL-Pro	Area contains dumped debris. Soil sampled for Table D waste oil/unknown group.
	TMW-1	Groundwater	6010, 7471, 8081, 8082, 8260, 8270, FL-Pro	Area contains dumped debris. Groundwater sampled for Table D waste oil/unknown group.
Pond 141A	CS-1 through CS-4	Soil	6010, 8081, 8151	Historical citrus grove area with potential for pesticide and herbicide impacts. Soil sampled for arsenic, pesticides, and herbicides.
	TMW-3	Groundwater	6010, 8081, 8151	Historical citrus grove area with potential for pesticide and herbicide impacts. Groundwater sampled for arsenic, pesticides, and herbicides.
Pond 141B	CS-5 through CS-8	Soil	6010, 8081, 8151	Historical citrus grove area with potential for pesticide and herbicide impacts. Soil sampled for arsenic, pesticides, and herbicides.
	TMW-2	Groundwater	6010, 8081, 8151	Historical citrus grove area with potential for pesticide and herbicide impacts. Groundwater sampled for arsenic, pesticides, and herbicides.
Pond 142B	CS-9 through CS-12	Soil	6010, 8081, 8151	Historical citrus grove area with potential for pesticide and herbicide impacts. Soil sampled for arsenic, pesticides, and herbicides.
	TMW-4	Groundwater	6010, 8081, 8151	Historical citrus grove area with potential for pesticide and herbicide impacts. Groundwater sampled for arsenic, pesticides, and herbicides.

Notes:

1. 6010 = Arsenic.
2. 7471 = Mercury.
3. 8260 = Volatile Organic Compounds.
4. 8270 = Semi-volatile Organic Compounds/Polycyclic Aromatic Hydrocarbons.
5. FL-PRO = Florida Petroleum Range Organics.
6. OVA = Organic Vapor Analyzer.
7. 8082 = Polychlorinated biphenyls.
8. 8141 = Organophosphorous compounds.
9. 8151 = Chlorinated herbicides.
10. 8081 = Organochlorine pesticides.

Table 2A  
 Summary of Soil Organic Vapor Analysis  
 I-4 PD&E Study Level 2 Contamination Assessment  
 Pond 136B - Segment 1  
 FPID No. 432100-1-22-01  
 GEC Project No. 3492E

Boring Data		Soil Sample OVA Data (FID)							
Boring No.	Date Conducted	Depth to Water (ft)	Sample Depth (ft)	FID	Total Reading	Filtered Reading	Net Reading	Odor	Soil Sample Description
SB-68	12/10/14		1		6	-	6	N	SP-SM
		2.5	3		<1	-	<1	N	SP-SM
SB-69	12/10/14		1		<1	-	<1	N	SP-SM
		2.5	3		<1	-	<1	N	SP-SM
SB-70	12/10/14		1		<1	-	<1	N	SP-SM
		2.5	3		<1	-	<1	N	SP-SM
SB-71	12/10/14		1		<1	-	<1	N	SP-SM
		2.5	3		<1	-	<1	N	SP-SM
SB-72	12/10/14		1		<1	-	<1	N	SP-SM
		2.5	3		70	70	<1	Organic	SP-SM
SB-73	12/10/14		1		<1	-	<1	N	SP-SM
		1.5	3		9	-	9	N	SP-SM
SB-74	12/10/14		1		<1	-	<1	N	SP-SM
			3		836	836	<1	Organic	SP-SM
		4.5	5		580	580	<1	Organic	SP-SM
SB-75	12/10/14		1		<1	-	<1	N	SP-SM
		3	3		8	-	8	N	SP-SM
SB-76	12/10/14		1		<1	-	<1	N	SP-SM
		3	3		103	103	<1	Organic	SP-SM
SB-77	12/11/14		1		<1	-	<1	N	SP-SM
		2.5	3		234	234	<1	Organic	SP-SM
SB-78	12/10/14		1		<1	-	<1	N	SP-SM
			3		509	509	<1	Organic	SP-SM
		4.5	5		515	515	<1	Organic	SP-SM
SB-79	12/10/14		1		<1	-	<1	N	SP-SM
		2.5	3		125	125	<1	Organic	SP-SM
SB-80	12/11/14		1		<1	-	<1	N	SP-SM
		1.5	2		47	47	<1	Organic	SP-SM
SB-81	12/11/14		1		38	38	<1	N	SP-SM
			3		68	68	<1	Organic	SP-SM
		3.5	4		80	80	<1	Organic	SP-SM
SB-82	12/10/14		1		<1	-	<1	N	SP-SM
			3		4	-	4	N	SP-SM
		4.5	5		190	190	<1	Organic	SP-SM
SB-83	12/11/14		1		<1	-	<1	N	SP-SM
		1.5	2		78	78	<1	Organic	SP-SM
SB-84	12/10/14		1		2	-	2	N	SP-SM
			3		198	198	<1	Organic	SP-SM
		4.5	5		109	109	<1	Organic	SP-SM
SB-85	12/10/14		1		<1	-	<1	N	SP-SM
		2.5	3		527	527	<1	Organic	SP-SM

Table 2A  
 Summary of Soil Organic Vapor Analysis  
**I-4 PD&E Study Level 2 Contamination Assessment**  
**Pond 136B - Segment 1**  
 FPID No. 432100-1-22-01  
 GEC Project No. 3492E

Boring Data		Soil Sample OVA Data (FID)							
Boring No.	Date Conducted	Depth to Water (ft)	Sample Depth (ft)	FID	Total Reading	Filtered Reading	Net Reading	Odor	Soil Sample Description
SB-A	12/11/14		1		<1	-	<1	N	SP-SM
		1.5	2		2	-	2	N	SP-SM
SB-B	12/11/14		1		<1	-	<1	N	SP-SM
		1.5	2		108	62	46	Organic	SP-SM
SB-C	12/11/14		1		<1	-	<1	N	SP-SM
		2.5	3		62	62	<1	Organic	SP-SM
SB-D	12/11/14		1		2	-	2	N	SP-SM
			3		108	108	<1	Organic	SP-SM
		3.5	4		417	417	<1	Organic	SP-SM
SB-E	12/11/14		1		<1	-	<1	N	SP-SM
			3		<1	-	<1	N	SP-SM
		3.5	4		389	389	<1	Organic	SP-SM

Notes:

1. Soil Screened with a Thermo Electron Corporation OVA Model TVA-1000B and measured in parts per million (ppm).
2. SP = poorly graded fine sand, SM = silty sand, SC = clayey sand, CH = inorganic clay SPSM = fine sand with silt.
3. ft = feet.
4. FID = Flame Ionization Detector.
5. - = Filtered reading data not collected for total readings <10 ppm.
6. Net readings above 10 ppm indicate the potential presence of soil contamination.
7. GNE = Groundwater not encountered.

Table 2B  
 Summary of Soil Organic Vapor Analysis  
**I-4 PD&E Study Level 2 Contamination Assessment**  
**Pond 141A - Segment 1**  
 FPID No. 432100-1-22-01  
 GEC Project No. 3492E

Boring Data		Soil Sample OVA Data (FID)							
Boring No.	Date Conducted	Depth to Water (ft)	Sample Depth (ft)	FID	Total Reading	Filtered Reading	Net Reading	Odor	Soil Sample Description
SB-48	12/15/14		1		2	-	2	N	SP-SM
		1.5	2		2	-	2	N	SP-SM
SB-49	12/15/14	1	1		2	-	2	N	SP-SM
SB-50	12/15/14		1		3	-	3	N	SP-SM
		2.5	3		3	-	3	N	SP-SM
SB-51	12/15/14		1		4	-	4	N	SP-SM
			3		4	-	4	N	SP-SM
		4.5	5		4	-	4	N	SP-SM
SB-52	12/15/14	1	1		2	-	2	N	SP-SM
SB-53	12/15/14		1		2	-	2	N	SP-SM
		1.5	2		2	-	2	N	SP-SM
SB-54	12/15/14		1		2	-	2	N	SP-SM
		2.5	3		2	-	2	N	SP-SM
SB-55	12/15/14		1		2	-	2	N	SP-SM
			3		2	-	2	N	SP-SM
		4.5	5		2	-	2	N	SP-SM
SB-56	12/15/14	1	1		1	-	1	N	SP-SM
SB-57	12/15/14		1		2	-	2	N	SP-SM
		1.5	2		2	-	2	N	SP-SM
SB-58	12/15/14		1		2	-	2	N	SP-SM
		2.5	3		2	-	2	N	SP-SM
SB-59	12/15/14		1		2	-	2	N	SP-SM
			3		2	-	2	N	SP-SM
		4.5	5		2	-	2	N	SP-SM
SB-60	12/15/14		1		1	-	1	N	SP-SM
		1.5	2		<1	-	<1	N	SP-SM
SB-61	12/15/14		1		<1	-	<1	N	SP-SM
		1.5	2		5	-	5	N	SP-SM
SB-62	12/15/14		1		2	-	2	N	SP-SM
		2.5	3		<1	-	<1	N	SP-SM
SB-63	12/15/14		1		<1	-	<1	N	SP-SM
			3		2	-	2	N	SP-SM
		4.5	5		1	-	1	N	SP-SM
SB-64	12/15/14		1		2	-	2	N	SP-SM
		1.5	2		2	-	2	N	SP-SM
SB-65	12/15/14		1		<1	-	<1	N	SP-SM
		2.5	3		2	-	2	N	SP-SM

Table 2B  
 Summary of Soil Organic Vapor Analysis  
**I-4 PD&E Study Level 2 Contamination Assessment**  
**Pond 141A - Segment 1**  
 FPID No. 432100-1-22-01  
 GEC Project No. 3492E

Boring Data		Soil Sample OVA Data (FID)							
Boring No.	Date Conducted	Depth to Water (ft)	Sample Depth (ft)	FID	Total Reading	Filtered Reading	Net Reading	Odor	Soil Sample Description
SB-66	12/15/14		1		<1	-	<1	N	SP-SM
		1.5	3		1	-	1	N	SP-SM

Notes:

1. Soil Screened with a Thermo Electron Corporation OVA Model TVA-1000B and measured in parts per million (ppm).
2. SP = poorly graded fine sand, SM = silty sand, SC = clayey sand, CH = inorganic clay SPSM = fine sand with silt.
3. ft = feet.
4. FID = Flame Ionization Detector.
5. - = Filtered reading data not collected for total readings <10 ppm.
6. Net readings above 10 ppm indicate the potential presence of soil contamination.
7. GNE = Groundwater not encountered.

Table 2C  
 Summary of Soil Organic Vapor Analysis  
**I-4 PD&E Study Level 2 Contamination Assessment**  
**Pond 141B - Segment 1**  
 FPID No. 432100-1-22-01  
 GEC Project No. 3492E

Boring Data		Soil Sample OVA Data (FID)							
Boring No.	Date Conducted	Depth to Water (ft)	Sample Depth (ft)	FID	Total Reading	Filtered Reading	Net Reading	Odor	Soil Sample Description
SB-27	12/12/14		1		<1	-	<1	N	SP-SM
		1.5	2		<1	-	<1	N	SP-SM
SB-28	12/12/14		1		<1	-	<1	N	SP-SM
		1.5	2		<1	-	<1	N	SP-SM
SB-29	12/12/14		1		<1	-	<1	N	SP-SM
		2.5	3		<1	-	<1	N	SP-SM
SB-30	12/12/14		1		<1	-	<1	N	SP-SM
		2.5	3		<1	-	<1	N	SP-SM
SB-36	12/12/14		1		<1	-	<1	N	SP-SM
		1.5	2		<1	-	<1	N	SP-SM
SB-37	12/12/14	0.5	1		<1	-	<1	N	SP-SM
SB-38	12/12/14	1	1		<1	-	<1	N	SP-SM
SB-39	12/12/14		1		<1	-	<1	N	SP-SM
		1.5	2		<1	-	<1	N	SP-SM
SB-40	12/12/14		1		<1	-	<1	N	SP-SM
		1.5	2		<1	-	<1	N	SP-SM
SB-41	12/12/14		1		<1	-	<1	N	SP-SM
		2.5	3		<1	-	<1	N	SP-SM
SB-42	12/12/14		1		<1	-	<1	N	SP-SM
		3	3		<1	-	<1	N	SP-SM
SB-43	12/12/14		1		<1	-	<1	N	SP-SM
			3		<1	-	<1	N	SP-SM
		4.5	5		<1	-	<1	N	SP-SM
SB-44	12/12/14		1		<1	-	<1	N	SP-SM
		2.5	3		<1	-	<1	N	SP-SM
SB-45	12/12/14		1		<1	-	<1	N	SP-SM
		2.5	3		<1	-	<1	N	SP-SM
SB-46	12/12/14		1		<1	-	<1	N	SP-SM
		2.5	3		<1	-	<1	N	SP-SM
SB-47	12/12/14		1		<1	-	<1	N	SP-SM
			3		<1	-	<1	N	SP-SM
		4.5	5		<1	-	<1	N	SP-SM

Notes:

1. Soil Screened with a Thermo Electron Corporation OVA Model TVA-1000B and measured in parts per million (ppm).
2. SP = poorly graded fine sand, SM = silty sand, SC = clayey sand, CH = inorganic clay SPSM = fine sand with silt.
3. ft = feet.
4. FID = Flame Ionization Detector.
5. - = Filtered reading data not collected for total readings <10 ppm.
6. Net readings above 10 ppm indicate the potential presence of soil contamination.
7. GNE = Groundwater not encountered.

Table 2D  
 Summary of Soil Organic Vapor Analysis  
**I-4 PD&E Study Level 2 Contamination Assessment**  
**Pond 142B - Segment 1**  
 FPID No. 432100-1-22-01  
 GEC Project No. 3492E

Boring Data		Soil Sample OVA Data (FID)							
Boring No.	Date Conducted	Depth to Water (ft)	Sample Depth (ft)	FID	Total Reading	Filtered Reading	Net Reading	Odor	Soil Sample Description
SB-23	12/18/14		1		<1	-	<1	N	SP-SM
			3		<1	-	<1	N	SP-SM
			5		4	-	4	N	SP-SM
			7		2	-	2	N	SC
			9		1	-	1	N	SC
			11		1	-	1	N	CH
		15	15		2	-	2	N	CH
SB-24	12/18/14		1		<1	-	<1	N	SP-SM
			3		<1	-	<1	N	SP-SM
			5		<1	-	<1	N	SP-SM
			7		<1	-	<1	N	SM
			9		<1	-	<1	N	CH
		10	10		<1	-	<1	N	SM
SB-25	12/18/14		1		<1	-	<1	N	SP-SM
			3		<1	-	<1	N	SP-SM
			5		<1	-	<1	N	SP-SM
			7		1	-	1	N	SP-SM
			9		<1	-	<1	N	SP-SM
			11		2	-	2	N	CH
		15	15		<1	-	<1	N	CH
SB-26	12/18/14		1		<1	-	<1	N	SM
			3		<1	-	<1	N	SP-SM
			5		<1	-	<1	N	SP-SM
			7		1	-	1	N	SC
			9		<1	-	<1	N	CH
		11	11		2	-	2	N	SM
SB-27	12/18/14		1		<1	-	<1	N	SP-SM
			3		<1	-	<1	N	SP-SM
			5		<1	-	<1	N	SP-SM
			7		1	-	1	N	SP-SM
			9		2	-	2	N	SM
			11		2	-	2	N	SC
		15	15		3	-	3	N	SM
SB-28	12/18/14		1		<1	-	<1	N	SM
			3		<1	-	<1	N	SP-SM
			5		<1	-	<1	N	SP-SM
			7		2	-	2	N	SC
		9	9		<1	-	<1	N	SM

Table 2D  
 Summary of Soil Organic Vapor Analysis  
**I-4 PD&E Study Level 2 Contamination Assessment**  
**Pond 142B - Segment 1**  
 FPID No. 432100-1-22-01  
 GEC Project No. 3492E

Boring Data		Soil Sample OVA Data (FID)							
Boring No.	Date Conducted	Depth to Water (ft)	Sample Depth (ft)	FID	Total Reading	Filtered Reading	Net Reading	Odor	Soil Sample Description
SB-29	12/18/14		1		7	-	7	N	SP-SM
			3		<1	-	<1	N	SP-SM
			5		<1	-	<1	N	SP-SM
			7		2	-	2	N	SP-SM
			9		3	-	3	N	SP-SM
			11		1	-	1	N	SP-SM
		12.5	13		<1	-	<1	N	SP-SM
SB-30	12/18/14		1		2	-	2	N	SP-SM
			3		3	-	3	N	SP-SM
			5		2	-	2	N	SP-SM
			7		12	3	9	N	SM
		9	9		8	-	8	N	SP-SM
SB-31	12/18/14		1		<1	-	<1	N	SP-SM
			3		<1	-	<1	N	SP-SM
			5		1	-	1	N	SP-SM
			7		2	-	2	N	SP-SM
			9		1	-	1	N	SP-SM
		9.5	10		1	-	1	N	SP-SM
SB-32	12/18/14		1		12	4	8	N	SP-SM
			3		2	-	2	N	SP-SM
			5		1	-	1	N	SP-SM
			7		6	-	6	N	SP-SM
			9		4	-	4	N	SP-SM
			11		8	-	8	N	SM
			13		21	3	18	N	SP-SM
15	15		11	3	8	N	SP-SM		
SB-33	12/18/14		1		<1	-	<1	N	SP-SM
			3		<1	-	<1	N	SP-SM
			5		<1	-	<1	N	SP-SM
			7		2	-	2	N	SP-SM
			9		3	-	3	N	SP-SM
		10	10		9	-	9	N	SP-SM
SB-34	12/18/14		1		25	7	18	Organic	SP-SM
			3		10	4	6	Organic	SP-SM
			5		7	-	7	N	SP-SM
			7		48	10	38	N	SP-SM
			9		7	-	7	N	SC
			11		5	-	5	N	SC
			13		5	-	5	N	SM
		15	15		3	-	3	N	SC

Table 2D  
 Summary of Soil Organic Vapor Analysis  
**I-4 PD&E Study Level 2 Contamination Assessment**  
**Pond 142B - Segment 1**  
 FPID No. 432100-1-22-01  
 GEC Project No. 3492E

Boring Data		Soil Sample OVA Data (FID)							
Boring No.	Date Conducted	Depth to Water (ft)	Sample Depth (ft)	FID	Total Reading	Filtered Reading	Net Reading	Odor	Soil Sample Description
SB-35	12/18/14		1		<1	-	<1	N	SP-SM
			3		4	-	4	N	SP-SM
			5		2	-	2	N	SP-SM
			7		9	-	9	N	SP-SM
			9		5	-	5	N	SP-SM
		11	11		4	-	4	N	SP-SM

Notes:

1. Soil Screened with a Thermo Electron Corporation OVA Model TVA-1000B and measured in parts per million (ppm).
2. SP = poorly graded fine sand, SM = silty sand, SC = clayey sand, CH = inorganic clay SPSM = fine sand with silt.
3. ft = feet.
4. FID = Flame Ionization Detector.
5. - = Filtered reading data not collected for total readings <10 ppm.
6. Net readings above 10 ppm indicate the potential presence of soil contamination.
7. GNE = Groundwater not encountered.

Table 3A  
Soil Analytical Laboratory Results  
**I-4 PD&E Study Level 2 Contamination Assessment**  
**Segment 1**  
FPID No. 432100-1-22-01  
GEC Project No. 3492E

Pond No.	141A	141A	141A	FAC 62-777 SCTL		
Sample Name	CS-1	CS-2	CS-3	RSCTL	ISCTL	LSCTL
Sample Interval (ft bls)	0-2	0-2	0-2			
Sample Date	12/15/2014	12/16/2015	12/16/2014			
Arsenic	0.970	-	0.907	2.1	12	*
Dieldrin	-	0.00083 I	0.0011 I	0.06	0.3	0.002

Pond No.	141A	141B	141B	FAC 62-777 SCTL		
Sample Name	CS-4	CS-5	CS-12	RSCTL	ISCTL	LSCTL
Sample Interval (ft bls)	0-2	0-2	0-2			
Sample Date	12/15/2014	12/16/2015	12/18/2014			
Arsenic	0.721 I	0.812	-	2.1	12	*
Dieldrin	-	-	0.0012 I	0.06	0.3	0.002

**Notes:**

1. All measurements are in mg/kg - milligrams per kilogram.
2. RSCTL - Soil Cleanup Target Level (SCTL) for residential land use.
3. ISCTL - SCTL for industrial/commercial land use.
4. LSCTL - SCTL for leachability based upon groundwater criteria.
5. FAC - Florida Administrative Code.
6. "U" - parameter not detected at the method detection limit shown.
7. TCLP - Toxic Characteristic Leachate Procedure.
8. "I" - analyte detected between the method detection limits and the practical quantitation limits.
9. "V" - Indicates that the analytes was detected in both the sample and associated method blank.
10. TPH - Total Petroleum Hydrocarbons.
11. ft bls - feet below land surface.
12. \* - Leachability values may be derived using the SPLP Test to calculate site-specific SCTLs or may be determined using TCLP in the event oily wastes are present.
13. # - Must be converted into Benzo(a)pyrene Equivalents.

Table 3B  
Soil Analytical Laboratory Results  
**I-4 PD&E Study Level 2 Contamination Assessment**  
**Segment 1**  
FPID No. 432100-1-22-01  
GEC Project No. 3492E

Pond No.	136B	142B	FAC 62-777 SCTL		
Sample Name	SS-1	SB-34			
Sample Interval (ft bls)	0-2	7			
Sample Date	12/12/2014	12/18/2014	RSCTL	ISCTL	LSCTL
Acetone	0.025 V	0.012 V	11,000	68,000	25
Barium	0.339 I	5.87	120	130,000	1600
Benzo(g,h,i)perylene	0.021 I	-	2,500	52,000	32,000
Chromium	0.555 I	3.55	210.0	470	38
Dibenzo(a,h)anthracene	0.025 I	-	#	#	0.7
Indeno(1,2,3-cd)pyrene	0.025 I	-	#	#	6.6
Lead	0.322 I	6.55	400.0	1,400	*
Mercury	-	0.0214	3.0	17	2.1
Methylene Chloride	0.0017 IV	-	17.0	26	0.02
1-Pentene	-	0.0093 N	**	**	**

Notes:

1. All measurements are in mg/kg - milligrams per kilogram.
2. RSCTL - Soil Cleanup Target Level (SCTL) for residential land use.
3. ISCTL - SCTL for industrial/commercial land use.
4. LSCTL - SCTL for leachability based upon groundwater criteria.
5. FAC - Florida Administrative Code.
6. "U" - parameter not detected at the method detection limit shown.
7. TCLP - Toxic Characteristic Leachate Procedure.
8. "I" - analyte detected between the method detection limits and the practical quantitation limits.
9. "V" - Indicates that the analytes was detected in both the sample and associated method blank.
10. TPH - Total Petroleum Hydrocarbons.
11. ft bls - feet below land surface.
12. \* - Leachability values may be derived using the SPLP Test to calculate site-specific SCTLs or may be determined using TCLP in the event oily wastes are present.
13. # - Must be converted into Benzo(a)pyrene Equivalents.
14. "N" - Presumptive evidence of presence of material.
15. \*\* - 1-Pentene does not have a cleanup standard. It is a petroleum derivative, often blended into gasoline.

Table 4  
 Groundwater Analytical Laboratory Results  
**I-4 PD&E Study Level 2 Contamination Assessment**  
**Segment 1**  
 FPID No. 432100-1-22-01  
 GEC Project No. 3492E

Pond No.	136B	FAC 62-777
Sample Name	TMW-1	
Screen Interval (ft bls)	13-8	GCTL
Sample Date	12/30/2014	
Barium - Total	5.67 I	2,000
Naphthalene	0.046 I	14

Notes:

1. All concentrations reported in µg/L (micrograms per liter).
2. FAC - Florida Administrative Code.
3. GCTL - Groundwater Cleanup Target Level.
4. ft bls - feet below land surface.
5. "I" - Analyte detected between the detection method limits and the practical quantitation limit.
6. "N" Presumptive evidence of presence of material.

# **APPENDIX A**

## **Field Forms**

## **APPENDIX A-1**

### **Soil Boring Logs**

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SIB-68</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 136B</b>		Borehole Start Date: <b>12/10/14</b> End Date: <b>12/10/14</b>		Borehole Start Time: <b>1105</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM End Time: <b>1115</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor: <b>P-GEC</b>		Geologist's Name: <b>Richard MC Cormick</b>		Environmental Technician's Name: <b>Jerry W. Governack</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>		Borehole Diameter (inches): <b>3"</b>	
Drilling Method(s): <b>HA</b>		Apparent Borehole DTW (in feet from soil moisture content): <b>2.5</b>		Measured Well DTW (in feet after water recharges in well):	
Disposition of Drill Cuttings [check method(s)]:		<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill		<input type="checkbox"/> Stockpile <input type="checkbox"/> Other	
(describe if other or multiple items are checked):		Borehole Completion (check one):		<input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)	

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					6	—	—	①	Gray Fisa, w/silt	SPSM Δ		
					11	—	—	③	Gray Fisa, w/silt	(SPSM) S		
								2				
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-69</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 136B</b>		Borehole Start Date: <b>12/10/14</b>		Borehole Start Time: <b>11:35</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
		End Date: <b>12/10/14</b>		End Time: <b>11:40</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>Rich McCormick</b>		Environmental Technician's Name: <b>Jerry W. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>3.0</b>
Drilling Method(s): <b>HA</b>		Apparent Borehole DTW (in feet from soil moisture content): <b>2.5</b>	Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					11	1		1	Bm Fisa, w/silt	(sp-1) D		
					11	1		3	Bm Fisa, w/silt	(sp-2) S		
								2				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <i>SB-70</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 136B</i>		Borehole Start Date: <i>12/10/14</i>	Borehole Start Time: <i>11:20</i> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM		
		End Date: <i>12/10/14</i>	End Time: <i>11:30</i> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM		
Environmental Contractor: <i>GEC</i>		Geologist's Name: <i>Rich McCormick</i>		Environmental Technician's Name: <i>Jerry W. Governale</i>	
Drilling Company: <i>GEC</i>		Pavement Thickness (inches): <i>N/A</i>	Borehole Diameter (inches): <i>3"</i>		Borehole Depth (feet): <i>3.0</i>
Drilling Method(s): <i>HA</i>		Apparent Borehole DTW (in feet from soil moisture content): <i>2.5</i>	Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<1	-		①	<i>Bm Fisa, w/silt</i>	<i>SPM 1</i>		
					<1	-		②				
					<1	-		③	<i>Bm Fisa, w/silt</i>	<i>SPM 5</i>		
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings  
 Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <i>SB-71</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 130B</i>		Borehole Start Date: <i>12/10/14</i>	Borehole Start Time: <i>11:55</i> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM		
		End Date: <i>12/10/14</i>	End Time: <i>12:05</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM		
Environmental Contractor: <i>GEC</i>		Geologist's Name: <i>Rich McCormick</i>		Environmental Technician's Name: <i>Jerry W. Governale</i>	
Drilling Company: <i>GEC</i>		Pavement Thickness (inches): <i>N/A</i>	Borehole Diameter (inches): <i>3"</i>		Borehole Depth (feet): <i>3.0</i>
Drilling Method(s): <i>HA</i>		Apparent Borehole DTW (in feet from soil moisture content): <i>2.5</i>	Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description <small>(include grain size based on USCS, odors, staining, and other remarks)</small>	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples <small>(list sample number and depth or temporary screen interval)</small>
					7	1		1	<i>Brn Fisa, w/silt</i>	<i>(SP-10)</i>	<i>D</i>	
					11	1		3	<i>Brn Fisa, w/silt</i>	<i>(SP-11)</i>	<i>S</i>	
								2				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings  
 Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated



# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <i>SB-73</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 136B</i>		Borehole Start Date: <i>10/10/14</i>		Borehole Start Time: <i>1233</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <i>10/10/14</i>		End Time: <i>1240</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <i>GEC</i>		Geologist's Name: <i>Rich Mc Cormick</i>		Environmental Technician's Name: <i>Jerry W. Governale</i>	
Drilling Company: <i>GEC</i>		Pavement Thickness (inches): <i>N/A</i>		Borehole Diameter (inches): <i>3"</i>	
				Borehole Depth (feet): <i>3.0'</i>	
Drilling Method(s): <i>HA</i>		Apparent Borehole DTW (in feet from soil moisture content): <i>1.5'</i>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<i>11</i>	<i>-</i>		<i>1</i>	<i>Bm Fisa, w/silt</i>	<i>spc D</i>		
					<i>9</i>	<i>-</i>		<i>2</i>				
								<i>3</i>	<i>Bm Fisa, w/silt</i>	<i>spc S</i>		
								<i>4</i>				
								<i>5</i>				
								<i>6</i>				
								<i>7</i>				
								<i>8</i>				
								<i>9</i>				
								<i>10</i>				
								<i>11</i>				
								<i>12</i>				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings  
 Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <i>SB-74</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 136B</i>		Borehole Start Date: <i>12/10/14</i> End Date: <i>12/10/14</i>		Borehole Start Time: <i>1247</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM End Time: <i>1259</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <i>GEC</i>		Geologist's Name: <i>Rich McCormick</i>		Environmental Technician's Name: <i>Jerry W. Gouemalle</i>	
Drilling Company: <i>GEC</i>		Pavement Thickness (inches): <i>N/A</i>	Borehole Diameter (inches): <i>3"</i>		Borehole Depth (feet): <i>5.0</i>
Drilling Method(s): <i>HA</i>	Apparent Borehole DTW (in feet from soil moisture content): <i>4.5</i>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description <small>(include grain size based on USCS, odors, staining, and other remarks)</small>	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<i>&lt;1</i>	<i>—</i>		<i>①</i>	<i>Bm Fisa, w/silt</i>	<i>(sp-2)</i>	<i>D</i>	
					<i>836</i>	<i>836</i>	<i>&lt;1</i>	<i>③</i>	<i>Bm Fisa, w/silt organic odor</i>	<i>sp-2</i>	<i>M</i>	
					<i>580</i>	<i>580</i>	<i>&lt;1</i>	<i>⑤</i>	<i>Bm Fisa, w/silt organic odor</i>	<i>sp-2</i>	<i>S</i>	
								<i>2</i>				
								<i>4</i>				
								<i>6</i>				
								<i>7</i>				
								<i>8</i>				
								<i>9</i>				
								<i>10</i>				
								<i>11</i>				
								<i>12</i>				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings  
 Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <i>SB-75</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 136B</i>		Borehole Start Date: <i>12/10/14</i>		Borehole Start Time: <i>1105</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <i>12/10/14</i>		End Time: <i>1109</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <i>GEL</i>		Geologist's Name: <i>Rich McConnick</i>		Environmental Technician's Name: <i>Terry W. Governale</i>	
Drilling Company: <i>GEL</i>		Pavement Thickness (inches): <i>N/A</i>	Borehole Diameter (inches): <i>3"</i>		Borehole Depth (feet): <i>30'</i>
Drilling Method(s): <i>HA</i>	Apparent Borehole DTW (in feet from soil moisture content): <i>3.0</i>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<i>2</i>	<i>1</i>		<i>①</i>	<i>Brn Fisa, w/silt</i>	<i>sp-4</i>	<i>D</i>	
					<i>2</i>	<i>1</i>		<i>③</i>	<i>Brn Fisa, w/silt</i>	<i>sp-5</i>	<i>S</i>	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-76</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 136B</b>		Borehole Start Date: <b>12/10/14</b>		Borehole Start Time: <b>1:13</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/10/14</b>		End Time: <b>1:00</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>Rich McCormick</b>		Environmental Technician's Name: <b>Jerry W. Governale</b>	
Drilling Company: <b>GEL</b>		Pavement Thickness (inches): <b>N/A</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>3.0'</b>
Drilling Method(s): <b>GEL</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>3.0</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					7	—		①	Bm Fisa, w/silt	SP-M D		
					103	103	< 1	③	Bm Fisa, w/silt organic odor	SP-M S		
								2				
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings  
 Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-77</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 136B</b>		Borehole Start Date: <b>12/11/14</b>		Borehole Start Time: <b>8:20</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
		End Date: <b>12/11/14</b>		End Time: <b>8:30</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>Rich McCormick</b>		Environmental Technician's Name: <b>Jerry W. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>3.0</b>
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>2.5'</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					3	1	2	①	Bm Fisa, w/silt	SPsm	D	
					234	234	21	③	Bm Fisa, w/silt organic odor	SPsm	S	
								2				
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <i>SB-78</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 136B</i>		Borehole Start Date: <i>12/10/14</i> End Date: <i>12/10/14</i>		Borehole Start Time: <i>2:30</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM End Time: <i>2:40</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <i>GEC</i>		Geologist's Name: <i>Rich McCormick</i>		Environmental Technician's Name: <i>Jerry W. Governale</i>	
Drilling Company: <i>GEC</i>		Pavement Thickness (inches): <i>N/A</i>	Borehole Diameter (inches): <i>3"</i>		Borehole Depth (feet): <i>5.0</i>
Drilling Method(s): <i>HA</i>	Apparent Borehole DTW (in feet from soil moisture content): <i>4.5</i>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input checked="" type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<i>&lt;1</i>	<i>—</i>		<i>①</i>	<i>Bm Fiso, w/silt</i>	<i>sp. 4</i>	<i>D</i>	
					<i>509</i>	<i>509</i>	<i>4</i>	<i>③</i>	<i>Bm Fiso, w/silt organic odor</i>	<i>sp. 4</i>	<i>M</i>	
					<i>515</i>	<i>515</i>	<i>&lt;1</i>	<i>⑤</i>	<i>Bm Fiso, w/silt organic odor</i>	<i>sp. 4</i>	<i>S</i>	
								<i>2</i>				
								<i>3</i>				
								<i>4</i>				
								<i>5</i>				
								<i>6</i>				
								<i>7</i>				
								<i>8</i>				
								<i>9</i>				
								<i>10</i>				
								<i>11</i>				
								<i>12</i>				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings  
 Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <i>5B-79</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 136B</i>		Borehole Start Date: <i>12/10/14</i>		Borehole Start Time: <i>3:00</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <i>12/10/14</i>		End Time: <i>3:11</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <i>GEC</i>		Geologist's Name: <i>Rich Mc Cormick</i>		Environmental Technician's Name:	
Drilling Company: <i>GEC</i>		Pavement Thickness (inches): <i>N/A</i>	Borehole Diameter (inches): <i>3"</i>		Borehole Depth (feet): <i>3.0'</i>
Drilling Method(s): <i>HA</i>	Apparent Borehole DTW (in feet from soil moisture content): <i>2.5</i>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<i>&lt; 1</i>	<i>—</i>		①	<i>Bm Fisa, w/silt</i>	<i>SP-4</i>	<i>A</i>	
					<i>125</i>	<i>125</i>	<i>&lt; 1</i>	③	<i>Bm Fisa, w/silt organic odor</i>	<i>SP-5</i>	<i>S</i>	
								2				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>5B-80</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 136B</b>		Borehole Start Date: <b>12/11/14</b>		Borehole Start Time: <b>8:40</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
		End Date: <b>12/11/14</b>		End Time: <b>8:50</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>Rich McCormick</b>		Environmental Technician's Name: <b>Jerry W. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>210</b>
Drilling Method(s): <b>HA</b>		Apparent Borehole DTW (in feet from soil moisture content): <b>115"</b>	Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description <small>(include grain size based on USCS, odors, staining, and other remarks)</small>	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples <small>(list sample number and depth or temporary screen interval)</small>
					1	-	1	①	13m F150, w/silt	(SP-5) D		
					47	47	<1	②	13m F150, w/silt organic odor	SP-5		
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings  
 Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <i>SB-81</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 13613</i>		Borehole Start Date: <i>12/11/14</i>	Borehole Start Time: <i>9:25</i> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	End Date: <i>12/11/14</i>	
Environmental Contractor: <i>GEC</i>		Geologist's Name: <i>Rich W. McCormick</i>		Environmental Technician's Name: <i>Jerry W. Gouernat</i>	
Drilling Company: <i>GEC</i>		Pavement Thickness (inches): <i>N/A</i>	Borehole Diameter (inches): <i>3"</i>	Borehole Depth (feet): <i>4.0</i>	
Drilling Method(s): <i>HA</i>		Apparent Borehole DTW (in feet from soil moisture content): <i>3.5</i>	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<i>38</i>	<i>38</i>	<i>&lt;1</i>	<i>①</i>	<i>Bm Fisa, w/silt</i>	<i>SP8u</i>	<i>D</i>	
					<i>68</i>	<i>68</i>	<i>&lt;1</i>	<i>③</i>	<i>Bm Fisa, w/silt + organic odor</i>	<i>SP8u</i>	<i>M</i>	
					<i>80</i>	<i>80</i>	<i>&lt;1</i>	<i>④</i>	<i>Bm Fisa, w/silt + organic odor</i>	<i>SP8u</i>	<i>S</i>	
								<i>5</i>				
								<i>6</i>				
								<i>7</i>				
								<i>8</i>				
								<i>9</i>				
								<i>10</i>				
								<i>11</i>				
								<i>12</i>				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings  
 Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

# BORING LOG

Boring/Well Number: <i>SB-22</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 136B</i>		Borehole Start Date: <i>12/10/14</i> End Date: <i>12/16/14</i>		Borehole Start Time: <i>3:22</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM End Time: <i>3:30</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <i>GEC</i>		Geologist's Name: <i>Rich M. McCormick</i>		Environmental Technician's Name: <i>Jerry W. Governale</i>	
Drilling Company: <i>GEC</i>		Pavement Thickness (inches): <i>N/A</i>	Borehole Diameter (inches): <i>3"</i>		Borehole Depth (feet): <i>5.0</i>
Drilling Method(s): <i>HA</i>	Apparent Borehole DTW (in feet from soil moisture content): <i>4.5</i>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input checked="" type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description <small>(include grain size based on USCS, odors, staining, and other remarks)</small>	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples <small>(list sample number and depth or temporary screen interval)</small>
					<1	—		①	<i>Bm Fiso, w/silt</i>	<i>SP-84</i>		
								2				
					4	—		③	<i>Bm Fiso, w/silt</i>	<i>SP-84</i>		
								4				
					190	190	<1	⑤	<i>Bm Fiso, w/silt organic odor</i>	<i>SP-84</i>		
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <i>513-83</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 136B</i>		Borehole Start Date: <i>12/11/14</i>		Borehole Start Time: <i>9:05</i> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
		End Date: <i>12/11/14</i>		End Time: <i>9:13</i> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor: <i>GEL</i>		Geologist's Name: <i>Rich McLarnie</i>		Environmental Technician's Name: <i>Terry W. Goverdel</i>	
Drilling Company: <i>GEL</i>		Pavement Thickness (inches):		Borehole Diameter (inches):	
				Borehole Depth (feet): <i>2.0</i>	
Drilling Method(s): <i>HA</i>		Apparent Borehole DTW (in feet from soil moisture content): <i>1.5</i>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					< 1			①	3m Fisa, w/silt	SPSM	D	
					78	78	< 1	②	3m Fisa, w/silt organic odor	SPSM	S	
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: <i>SB-84</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 136B</i>		Borehole Start Date: <i>12/10/14</i> End Date: <i>12/10/14</i>		Borehole Start Time: <i>3:35</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM End Time: <i>3:45</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <i>GEL</i>		Geologist's Name: <i>Rich McCormick</i>		Environmental Technician's Name: <i>Jerry W. Governale</i>	
Drilling Company: <i>GEL</i>		Pavement Thickness (inches): <i>N/A</i>		Borehole Diameter (inches): <i>3"</i>	
Drilling Method(s): <i>HA</i>		Apparent Borehole DTW (in feet from soil moisture content): <i>4.5</i>		Measured Well DTW (in feet after water recharges in well):	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<i>2</i>	<i>—</i>		<i>①</i>	<i>13m Fisa, w/silt</i>	<i>SP-DR D</i>		
					<i>198</i>	<i>198</i>	<i>&lt;1</i>	<i>③</i>	<i>Bm Fisa, w/silt organic odor</i>	<i>SP-DR M</i>		
					<i>109</i>	<i>109</i>	<i>&lt;1</i>	<i>⑤</i>	<i>Bm Fisa, w/silt organic odor</i>	<i>SP-DR S</i>		
								<i>2</i>				
								<i>3</i>				
								<i>4</i>				
								<i>5</i>				
								<i>6</i>				
								<i>7</i>				
								<i>8</i>				
								<i>9</i>				
								<i>10</i>				
								<i>11</i>				
								<i>12</i>				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <i>SB-85</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 136B</i>		Borehole Start Date: <i>11/10/14</i> End Date: <i>12/16/14</i>		Borehole Start Time: <i>4:00</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM End Time: <i>4:08</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <i>GEC</i>		Geologist's Name: <i>Rich McCormick</i>		Environmental Technician's Name: <i>Jerry W. Governale</i>	
Drilling Company: <i>GEC</i>		Pavement Thickness (inches): <i>N/A</i>	Borehole Diameter (inches): <i>3"</i>		Borehole Depth (feet): <i>3.0</i>
Drilling Method(s): <i>HA</i>	Apparent Borehole DTW (in feet from soil moisture content): <i>2.5</i>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description <small>(include grain size based on USCS, odors, staining, and other remarks)</small>	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples <small>(list sample number and depth or temporary screen interval)</small>
					<i>41</i>	<i>—</i>		<i>①</i>	<i>Bm Fisa, w/silt</i>	<i>SP-4 D</i>		
					<i>527</i>	<i>527</i>	<i>41</i>	<i>③</i>	<i>Bm Fiso, w/silt organic odor</i>	<i>SP-5 S</i>		
								2				
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings  
 Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <i>SB-A</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 136B</i>		Borehole Start Date: <i>12/11/14</i>		Borehole Start Time: <i>10:40</i> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
		End Date: <i>12/11/14</i>		End Time: <i>10:50</i> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor: <i>GEC</i>		Geologist's Name: <i>Richard McCormick</i>		Environmental Technician's Name: <i>Jerry W. Governale</i>	
Drilling Company: <i>GEC</i>		Pavement Thickness (inches): <i>N/A</i>		Borehole Diameter (inches): <i>3"</i>	
				Borehole Depth (feet): <i>2.0'</i>	
Drilling Method(s): <i>HA</i>		Apparent Borehole DTW (in feet from soil moisture content): <i>1.5</i>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description <small>(include grain size based on USCS, odors, staining, and other remarks)</small>	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<i>&lt; 1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i> <i>Bm Fisa, w/silt</i>	<i>SP-SM</i>	<i>D</i>	
					<i>2</i>	<i>1</i>	<i>1</i>	<i>2</i>	<i>2</i> <i>Bm Fisa, w/silt</i>	<i>SP-SM</i>	<i>S</i>	
								<i>3</i>				
								<i>4</i>				
								<i>5</i>				
								<i>6</i>				
								<i>7</i>				
								<i>8</i>				
								<i>9</i>				
								<i>10</i>				
								<i>11</i>				
								<i>12</i>				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings  
 Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-B</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 136B Area</b>		Borehole Start Date: <b>12/11/14</b>		Borehole Start Time: <b>11:00</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
		End Date: <b>12/11/14</b>		End Time: <b>11:10</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor: <b>GEL</b>		Geologist's Name: <b>Rich McCormick</b>		Environmental Technician's Name: <b>Jerry W. Governale</b>	
Drilling Company: <b>GEL</b>		Pavement Thickness (inches): <b>N/A</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>20'</b>
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>1.5</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description <small>(include grain size based on USCS, odors, staining, and other remarks)</small>	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<1			①	Br. Fi. sa w/silt	SPSM	D	
					108 62		46	②	Br. Fi. sa w/silt (organic odor)	SPSM	S	
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: <b>SB-C</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 136B area</b>		Borehole Start Date: <b>12/11/14</b>		Borehole Start Time: <b>11:18</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
		End Date: <b>12/11/14</b>		End Time: <b>11:29</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>Rich McCormick</b>		Environmental Technician's Name: <b>Jerry W. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>30'</b>
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>2.5'</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<1	-	<1	①	Br. F. ss w/silt	SPSM	D	
					62	62	<1	③	Br. F. ss w/silt (organic odor)	SPSM	S	
								2				
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings  
 Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <i>SB-D</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 130B area</i>		Borehole Start Date: <i>12/11/14</i>	Borehole Start Time: <i>1140</i> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	End Date: <i>12/11/14</i>	
Environmental Contractor: <i>GEC</i>		Geologist's Name: <i>Rich McCormick</i>		Environmental Technician's Name: <i>Jerry W. Governale</i>	
Drilling Company: <i>GEC</i>		Pavement Thickness (inches): <i>N/A</i>	Borehole Diameter (inches): <i>3"</i>	Borehole Depth (feet): <i>4.0</i>	
Drilling Method(s): <i>HA</i>		Apparent Borehole DTW (in feet from soil moisture content): <i>3.5</i>	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<i>2</i>	<i>-</i>	<i>2</i>	<i>①</i>	<i>DK. Br. F:sa 1/2 silt</i>	<i>(SPSM)</i>		
					<i>108</i>	<i>108</i>	<i>&lt;1</i>	<i>③</i>	<i>DK. Br. F:sa 1/2 silt (organic odor)</i>	<i>SPSM</i>		
					<i>417</i>	<i>417</i>	<i>&lt;1</i>	<i>④</i>	<i>Br. F:sa w/silt (organic odor)</i>	<i>SPSM</i>		
								<i>5</i>				
								<i>6</i>				
								<i>7</i>				
								<i>8</i>				
								<i>9</i>				
								<i>10</i>				
								<i>11</i>				
								<i>12</i>				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings  
 Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-E</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 136B area</b>		Borehole Start Date: <b>12/11/14</b>		Borehole Start Time: <b>1155</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
		End Date: <b>12/11/14</b>		End Time: <b>1208</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>Rich McCormick</b>		Environmental Technician's Name: <b>Jerry W. Goveral</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>		Borehole Diameter (inches): <b>3"</b>	
				Borehole Depth (feet): <b>4.0</b>	
Drilling Method(s): <b>HA</b>		Apparent Borehole DTW (in feet from soil moisture content): <b>3.5</b>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
<i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description <small>(include grain size based on USCS, odors, staining, and other remarks)</small>	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples <small>(list sample number and depth or temporary screen interval)</small>
					<1	-	<1	①	DK. Br. Fi sa w/silt	SPsm		
								2				
					<1	-	<1	③	DK. Br. Fi sa w/silt	SPsm		
					389	389	<1	④	Br Fi sa w/silt (organic odor)	SPsm		
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-48</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141A</b>		Borehole Start Date: <b>12/15/14</b>		Borehole Start Time: <b>1312</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/15/14</b>		End Time: <b>1315</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. Mc Cormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>2.0</b>
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>1.5</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					2	1	1	①	Brown f.s w/si	(sp-sm) D		CS-4
					2	1	1	②	Brown f.s w/si	(sp-sm) S		0-1.5
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-49</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141A</b>		Borehole Start Date: <b>12/15/14</b>		Borehole Start Time: <b>1308</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/15/14</b>		End Time: <b>1310</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. McCormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>1.0</b>
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>1.0</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					20	—	—	①	Brown f.s. w/si (sp-sm)	W		
								2				
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-50</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141A</b>		Borehole Start Date: <b>12/15/14</b>		Borehole Start Time: <b>1303</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/15/14</b>		End Time: <b>1306</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. McCormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>3.0</b>
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>2.5</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					3			①	Brown f.s w/si (sp-sm) D			
					3			③	Brown f.s w/si (sp-sm) S			
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <i>SB-51</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 141A</i>		Borehole Start Date: <i>12/15/14</i>		Borehole Start Time: <i>1255</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <i>12/15/14</i>		End Time: <i>1258</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <i>GEC</i>		Geologist's Name: <i>R. McCormick</i>		Environmental Technician's Name: <i>J. Governale</i>	
Drilling Company: <i>GEC</i>		Pavement Thickness (inches): <i>N/A</i>	Borehole Diameter (inches): <i>3"</i>		Borehole Depth (feet): <i>5.0</i>
Drilling Method(s): <i>HA</i>	Apparent Borehole DTW (in feet from soil moisture content): <i>4.5</i>		Measured Well DTW (in feet after water recharges in well): <i>—</i>		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <i>(describe if other or multiple items are checked):</i>					
<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
Borehole Completion (check one):					
<input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					4	1	1	①	Brown fs w/si	(sp-sm) D		
					4	1	1	③	Brown fs w/si	(sp-sm) M		
					4	1	1	⑤	Gray fs w/si	(sp-sm) S		
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-52</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141A</b>		Borehole Start Date: <b>12/15/14</b>		Borehole Start Time: <b>1317</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/15/14</b>		End Time: <b>1319</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. Mc Cormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>		Borehole Diameter (inches): <b>3"</b>	
				Borehole Depth (feet): <b>1.0</b>	
Drilling Method(s): <b>HA</b>		Apparent Borehole DTW (in feet from soil moisture content): <b>1.0</b>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
(describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					2	-	-	①	Brown f.s w/si (sp-sm)	w		
								2				
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <i>SB-53</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 141A</i>		Borehole Start Date: <i>12/15/14</i>		Borehole Start Time: <i>1321</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <i>12/15/14</i>		End Time: <i>1325</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <i>GEC</i>		Geologist's Name: <i>R. McCormick</i>		Environmental Technician's Name: <i>J. Governale</i>	
Drilling Company: <i>GEC</i>		Pavement Thickness (inches): <i>N/A</i>	Borehole Diameter (inches): <i>3"</i>		Borehole Depth (feet): <i>2.0</i>
Drilling Method(s): <i>HA</i>	Apparent Borehole DTW (in feet from soil moisture content): <i>1.5</i>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
(describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					2	1	1	①	Brown fs. w/si (sp-sm)	Δ		
					2	1	1	②	Brown fs. w/si (sp-sm)	S		
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <i>SB-54</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 141A</i>		Borehole Start Date: <i>12/15/14</i>		Borehole Start Time: <i>1327</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <i>12/15/14</i>		End Time: <i>1330</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <i>GEC</i>		Geologist's Name: <i>R. McCormick</i>		Environmental Technician's Name: <i>J. Governale</i>	
Drilling Company: <i>GEC</i>		Pavement Thickness (inches): <i>N/A</i>	Borehole Diameter (inches): <i>3"</i>		Borehole Depth (feet): <i>3.0</i>
Drilling Method(s): <i>HA</i>	Apparent Borehole DTW (in feet from soil moisture content): <i>2.5</i>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					2	1	1	1	<i>Brown FS w/s</i>	<i>(sp-sm) D</i>		<i>CS-3 0-2.0</i>
					2	1	1	3	<i>Brown FS w/s</i>	<i>(sp-sm) S</i>		
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-55</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141A</b>		Borehole Start Date: <b>12/15/14</b>		Borehole Start Time: <b>1337</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/15/14</b>		End Time: <b>1337</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. McCormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>		Borehole Diameter (inches): <b>3"</b>	
				Borehole Depth (feet): <b>5.0</b>	
Drilling Method(s): <b>HA</b>		Apparent Borehole DTW (in feet from soil moisture content): <b>4.5</b>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					2	1	1	①	Brown f.s w/si (sp-sm) Δ			
					2	1	1	③	Brown f.s w/si (sp-sm) M			
					2	1	1	⑤	Gray f.s w/si (sp-sm) S			
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <i>SB-56</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 141A</i>		Borehole Start Date: <i>12/15/14</i>		Borehole Start Time: <i>1351</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <i>12/15/14</i>		End Time: <i>1353</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <i>GEC</i>		Geologist's Name: <i>R. McCormick</i>		Environmental Technician's Name: <i>J. Governale</i>	
Drilling Company: <i>GEC</i>		Pavement Thickness (inches): <i>N/A</i>	Borehole Diameter (inches): <i>3"</i>		Borehole Depth (feet): <i>1.0</i>
Drilling Method(s): <i>HA</i>	Apparent Borehole DTW (in feet from soil moisture content): <i>1.0</i>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description <small>(include grain size based on USCS, odors, staining, and other remarks)</small>	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples <small>(list sample number and depth or temporary screen interval)</small>
					-	-	-	①	<i>Brown f.s w/si (sp-sm)</i>	<i>w</i>		
								2				
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB- 57</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141A</b>		Borehole Start Date: <b>12/15/14</b>		Borehole Start Time: <b>1347</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/17/14</b>		End Time: <b>1340</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. MC Cormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>- N/A</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>2.0</b>
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>1.5</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					2	1	1	1	Brown fs w/si (SP-SM)		0	
					2	1	1	2	Brown fs w/si (SP-SM)		5	
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-59</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141A</b>		Borehole Start Date: <b>12/15/14</b>		Borehole Start Time: <b>1342</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/15/14</b>		End Time: <b>1345</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. Mc Cormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>3.0</b>
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>2.5</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					2	—	—	①	Brown f.s w/si (sp-sm)		D	
					2	—	—	③	Brown f.s w/si (sp-sm)		S	
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <i>SB-5a</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 141A</i>		Borehole Start Date: <i>12/15/14</i>		Borehole Start Time: <i>1340</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <i>12/17/14</i>		End Time: <i>1345</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <i>GEC</i>		Geologist's Name: <i>R. McCormick</i>		Environmental Technician's Name: <i>J. Governale</i>	
Drilling Company: <i>GEC</i>		Pavement Thickness (inches): <i>N/A</i>	Borehole Diameter (inches): <i>3"</i>		Borehole Depth (feet): <i>5.0</i>
Drilling Method(s): <i>HA</i>	Apparent Borehole DTW (in feet from soil moisture content): <i>4.5</i>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					2	-	-	①	Brown f.s w/si (sp-sm) D			
					2	-	-	③	Brown f.s w/si (sp-sm) M			
					2	-	-	⑤	Gray f.s w/si (sp-sm) S			
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <i>SB-60</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 141A</i>		Borehole Start Date: <i>12/15/14</i>		Borehole Start Time: <i>1355</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <i>12/15/14</i>		End Time: <i>1359</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <i>GEC</i>		Geologist's Name: <i>R. McCormick</i>		Environmental Technician's Name: <i>J. Governale</i>	
Drilling Company: <i>GEC</i>		Pavement Thickness (inches): <i>N/A</i>	Borehole Diameter (inches): <i>3"</i>		Borehole Depth (feet): <i>2.0</i>
Drilling Method(s): <i>HA</i>	Apparent Borehole DTW (in feet from soil moisture content): <i>1.5</i>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					-	-	-	①	Brown f.s w/si (sp-sm)		0	
					1/2	-	-	②	Brown f.s w/si (sp-sm)		5	
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-61</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141A</b>		Borehole Start Date: <b>12/15/14</b>		Borehole Start Time: <b>1357</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/15/14</b>		End Time: <b>1400</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. Mc Cormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>		Borehole Diameter (inches): <b>3"</b>	
				Borehole Depth (feet): <b>2.0</b>	
Drilling Method(s): <b>HA</b>		Apparent Borehole DTW (in feet from soil moisture content): <b>1.5</b>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
(describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					4	1	1	①	Brown fs w/si (sp-sm)		D	CS-2 0-1.5
					5	1	1	②	Brown fs w/si (sp-sm)		S	
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <i>SB-62</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 141A</i>		Borehole Start Date: <i>12/15/14</i>		Borehole Start Time: <i>1402</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <i>12/17/14</i>		End Time: <i>1405</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <i>GEC</i>		Geologist's Name: <i>R. McCormick</i>		Environmental Technician's Name: <i>J. Governale</i>	
Drilling Company: <i>GEC</i>		Pavement Thickness (inches): <i>N/A</i>		Borehole Diameter (inches): <i>3"</i>	
				Borehole Depth (feet): <i>3.0</i>	
Drilling Method(s): <i>HA</i>		Apparent Borehole DTW (in feet from soil moisture content): <i>2.5</i>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
<i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					2	1	1	①	<i>Brown f.s w/s</i>	<i>(SP-SM)</i>	<i>D</i>	
					1	1	1	③	<i>Brown f.s w/s</i>	<i>(SP-SM)</i>	<i>S</i>	
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-63</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141A</b>		Borehole Start Date: <b>12/15/14</b>		Borehole Start Time: <b>1407</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/15/14</b>		End Time: <b>1411</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. McCormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>		Borehole Diameter (inches): <b>3"</b>	
				Borehole Depth (feet): <b>5.0</b>	
Drilling Method(s): <b>HA</b>		Apparent Borehole DTW (in feet from soil moisture content): <b>4.5</b>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
(describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					1	-	-	1	Brown f.s w/si (sp-sm)	Δ		
					2	-	-	2	Brown f.s w/si (sp-sm)	M		
					1	-	-	5	Brown f.s w/si (sp-sm)	S		
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <i>SB-64</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 141A</i>		Borehole Start Date: <i>12/15/14</i>		Borehole Start Time: <i>1433</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <i>12/15/14</i>		End Time: <i>1438</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <i>GEC</i>		Geologist's Name: <i>R. McCormick</i>		Environmental Technician's Name: <i>J. Governale</i>	
Drilling Company: <i>GEC</i>		Pavement Thickness (inches): <i>-</i>	Borehole Diameter (inches): <i>3"</i>		Borehole Depth (feet): <i>20</i>
Drilling Method(s): <i>HA</i>	Apparent Borehole DTW (in feet from soil moisture content): <i>1.5</i>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					2	1	1	①	<i>Bm Fisc, w/silt</i>	<i>SPSM</i>	<i>D</i>	
					2	1	1	②	<i>Bm Fisc, w/silt</i>	<i>SPSM</i>	<i>S</i>	
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <i>SB-65</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 141A</i>		Borehole Start Date: <i>12/15/14</i>		Borehole Start Time: <i>1424</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <i>12/15/14</i>		End Time: <i>1430</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <i>GEC</i>		Geologist's Name: <i>R. Mc Cormick</i>		Environmental Technician's Name: <i>J. Governale</i>	
Drilling Company: <i>GEC</i>		Pavement Thickness (inches): <i>N/A</i>	Borehole Diameter (inches): <i>3"</i>		Borehole Depth (feet): <i>3.0</i>
Drilling Method(s): <i>HA</i>	Apparent Borehole DTW (in feet from soil moisture content): <i>2.5</i>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					1	-	-	1	<i>Bm Fisa, w/silt</i>	<i>SPM 1</i>		
					2	-	-	3	<i>Coarsy Fisa, w/silt</i>	<i>SPM 5</i>		
					3							
					4							
					5							
					6							
					7							
					8							
					9							
					10							
					11							
					12							

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <i>SB-66</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 141A</i>		Borehole Start Date: <i>12/15/14</i>		Borehole Start Time: <i>1421</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <i>12/15/14</i>		End Time: <i>1425</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <i>GEC</i>		Geologist's Name: <i>R. McCormick</i>		Environmental Technician's Name: <i>J. Governale</i>	
Drilling Company: <i>GEC</i>		Pavement Thickness (inches): <i>N/A</i>	Borehole Diameter (inches): <i>3"</i>		Borehole Depth (feet): <i>2.0</i>
Drilling Method(s): <i>HA</i>	Apparent Borehole DTW (in feet from soil moisture content): <i>1.5</i>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <i>(describe if other or multiple items are checked):</i>					
<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
Borehole Completion (check one):					
<input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					✓			①	<i>Brn Fisa, w/silt</i>	<i>SPSM</i>	<i>D</i>	
								2				
								③	<i>Gray Fisa, w/silt</i>	<i>SPSM</i>	<i>S</i>	
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <i>SB-67</i>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <i>Pond 141A</i>		Borehole Start Date: <i>12/15/14</i>		Borehole Start Time: <i>1415</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <i>12/15/14</i>		End Time: <i>1420</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <i>GEC</i>		Geologist's Name: <i>R. MC Cormick</i>		Environmental Technician's Name: <i>J. Governale</i>	
Drilling Company: <i>GEC</i>		Pavement Thickness (inches): <i>N/A</i>	Borehole Diameter (inches): <i>3"</i>		Borehole Depth (feet): <i>3.0</i>
Drilling Method(s): <i>HA</i>	Apparent Borehole DTW (in feet from soil moisture content): <i>2.5</i>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<i>1</i>	<i>-</i>	<i>-</i>	<i>1</i>	<i>Bm Fisa, w/silt</i>	<i>SPSM</i>	<i>Δ</i>	
					<i>2.0</i>	<i>-</i>	<i>-</i>	<i>3</i>	<i>Gray Fisa, w/silt</i>	<i>SPSM</i>	<i>S</i>	
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-27</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141B</b>		Borehole Start Date: <b>12/12/14</b>		Borehole Start Time: <b>1305</b> <input type="checkbox"/> AM <input type="checkbox"/> PM	
		End Date: <b>12/12/14</b>		End Time: <b>1308</b> <input type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. McCormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches):	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet):
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>115"</b>		Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: (describe if other or multiple items are checked):					
<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
Borehole Completion (check one):					
<input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<1	-	-	①	Bm Fisa, w/silt	SP-20	D	
					<1	-	-	②	Gray Fisa, w/silt	SP-20	S	
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-28</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141B</b>		Borehole Start Date: <b>12/12/14</b>		Borehole Start Time: <b>1310</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/12/14</b>		End Time: <b>1315</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. McCormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>NA</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>2.0</b>
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>1.5'</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<1	-	-	①	Brn Fisa, w/silt	SP6M	D	
					<1	-	-	②	Gray Fisa, w/silt	SP6M	S	
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-29</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141B</b>		Borehole Start Date: <b>12/2/14</b>		Borehole Start Time: <b>1313</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/2/14</b>		End Time: <b>1317</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. Mc Cormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>3.0'</b>
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>2.5</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<	-	-	①	BM Fiso, w/silt	SP-84	W	
					<	-	-	③	Gray Fiso, w/silt	SP-84	S	
								2				
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB- 30</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141B</b>		Borehole Start Date: <b>12/12/14</b>		Borehole Start Time: <b>1325</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/12/14</b>		End Time: <b>1330</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. Mc Cormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>310</b>
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>315</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<1	-	-	①	Bm Fiso, w/silt	SPSM	D	
					<1	-	-	③	Gray Fiso, w/silt	SPSM	S	
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-36</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141B</b>		Borehole Start Date: <b>12/2/14</b>		Borehole Start Time: <b>1340</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/2/14</b>		End Time: <b>1343</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. McCormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>2.0'</b>
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>1.5'</b>		Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<	-	-	①	Bra Fisa, w/silt	SPGM	D	
					<	-	-	②	Gray Fisa, w/silt	SPGM	S	
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-37</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141B</b>		Borehole Start Date: <b>12/12/14</b>		Borehole Start Time: <b>1350</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/12/14</b>		End Time: <b>1354</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. Mc Cormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>11.0</b>
Drilling Method(s): <b>HA</b>		Apparent Borehole DTW (in feet from soil moisture content): <b>0.5</b>	Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<1	-	-	①	BM F150, w/silt	SP15	W	
								2				
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-38</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141B</b>		Borehole Start Date: <b>12/12/14</b>		Borehole Start Time: <b>1401</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/12/14</b>		End Time: <b>1405</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. McCormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>1.0</b>
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>1.0</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					< 1	-	-	①	Bm Fisa, w/silt	SPSM W		
								2				
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-39</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141B</b>		Borehole Start Date: <b>12/12/14</b>		Borehole Start Time: <b>1410</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/12/14</b>		End Time: <b>1415</b> <input type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. Mc Cormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>3.0'</b>
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>115</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					21	-	-	①	Bm Fisa, w/silt	SPB <sub>4</sub> D		
					21	-	-	②	Gray Fisa, w/silt	SPB <sub>4</sub> S		
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-40</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141B</b>		Borehole Start Date: <b>12/2/14</b>		Borehole Start Time: <b>1420</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/14/14</b>		End Time: <b>1425</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. McCormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>2.0</b>
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>1.5</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<1	-	1	①	Bm Fisa, w/silt	SPSM	D	
					<1	-	1	②	gray Fisa, w/silt	SPSM	S	
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-41</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141B</b>		Borehole Start Date: <b>12/12/14</b>		Borehole Start Time: <b>1430</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/24/14</b>		End Time: <b>1435</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. Mc Cormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches):	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet):
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>2.5</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: (describe if other or multiple items are checked):					
<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
Borehole Completion (check one):					
<input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<1	-	-	①	Bm Fisa, w/silt	SPsm	D	
					<1	-	-	③	Gray Fisa, w/silt	SPsm	S	
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

T MW - 2

**BORING LOG**

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-42</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141B</b>		Borehole Start Date: <b>12/12/14</b>		Borehole Start Time: <b>1440</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/14/14</b>		End Time: <b>1443</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. McCormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>3.0</b>
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>3.0</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<1			1	Brn Fisa, w/silt	SPSM	Δ	
					<1			2				
					<1			3	Gray Fisa, w/silt	SPSM	J	
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-43</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141B</b>		Borehole Start Date: <b>12/12/14</b>		Borehole Start Time: <b>1445</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/12/14</b>		End Time: <b>1445</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. McCormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>5.0'</b>
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>4.5'</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: (describe if other or multiple items are checked):					
<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
Borehole Completion (check one):					
<input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (Inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<1	-	-	①	Bm Fiso, w/silt	SPsm	D	
					<1	-	-	③	Coarse Fiso, w/silt	SPsm	M	
					<1	-	-	⑤	Bm Fiso, w/silt	SPsm	S	
								2				
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-44</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141B</b>		Borehole Start Date: <b>12/12/14</b>		Borehole Start Time: <b>1450</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/12/14</b>		End Time: <b>1453</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. Mc Cormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>3.0</b>
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>2.5</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<1	-	-	①	Bm F <sub>150</sub> , w/silt	SPSM	D	
					<1	-	-	③	Gray F <sub>150</sub> , w/silt	SPSM	S	
								2				
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated



# BORING LOG

Boring/Well Number: <b>SB-46</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141B</b>		Borehole Start Date: <b>12/12/14</b>		Borehole Start Time: <b>1500</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/14/14</b>		End Time: <b>1503</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. Mc Cormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>3.0</b>
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>2.5</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: (describe if other or multiple items are checked):					
<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
Borehole Completion (check one):					
<input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					< 1			①	Bm Fisa, w/silt	SASM	D	
					< 1			③	Bm Fisa, w/silt	SASM	S	
								2				
								3				
								4				
								5				
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page \_\_\_\_\_ of \_\_\_\_\_

Boring/Well Number: <b>SB-47</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 141B</b>		Borehole Start Date: <b>12/1/14</b>		Borehole Start Time: <input type="checkbox"/> AM <input type="checkbox"/> PM	
		End Date: <b>12/1/14</b>		End Time: <input type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. McCormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>N/A</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet): <b>5.0</b>
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>4.5</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: (describe if other or multiple items are checked):					
<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
Borehole Completion (check one):					
<input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<1	-	-	①	Bm Fisa, w/silt	SPsm	D	
					<1	-	-	③	Grny Fisa, w/silt	SPsm	M	
					<1	-	-	⑤	Bm Fisa, w/silt	SPsm	S	
								6				
								7				
								8				
								9				
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page 1 of 2

Boring/Well Number: <b>SB- 23</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 14B/B</b>		Borehole Start Date: <b>12/18/14</b>		Borehole Start Time: <b>1215</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/18/14</b>		End Time: <b>1223</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. McCormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>3</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet):
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>15.0'</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: (describe if other or multiple items are checked):					
<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
Borehole Completion (check one):					
<input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					1	-	-	①	R. f. sand w/ silt	SPSM	D	
								2				
					1	-	-	③	R. f. sand w/ silt	SPSM	D	
								4				
					4	-	-	⑤	R. f. sand w/ silt	SPSM	D	
								6				
					2	-	-	⑦	dry clay f. sand	SC	D	
								8				
					1	-	-	⑨	dry clay f. sand	SC	M	
								10				
					1	-	-	⑪	gray sandy bot clay	CH	M	
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: <b>SB-23</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>POND 142 B</b>		Borehole Start Date: <b>12/18/14</b>	Borehole Start Time: <b>12:15</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM		
		End Date: <b>12/18/14</b>	End Time: <b>12:23</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM		
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. McCormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches):	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet):
Drilling Method(s): <b>HA</b>		Apparent Borehole DTW (in feet from soil moisture content): <b>15.8'</b>	Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					2	-	-	13	Gray Sandy Red Clay	CH	W	
					2	-	-	15	Red S.F. SAND	SM	S	
								14				
								16				
								17				
								18				
								19				
								20				
								21				
								22				
								23				
								24				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings  
 Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

# BORING LOG

Page 1 of 1

Boring/Well Number: <u>SB-24</u>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <u>Pond 1421B</u>		Borehole Start Date: <u>12/18/14</u>		Borehole Start Time: <u>1251</u> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <u>12/18/14</u>		End Time: <u>1300</u> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <u>GEC</u>		Geologist's Name: <u>R. MC Cormick</u>		Environmental Technician's Name: <u>J. Governale</u>	
Drilling Company: <u>GEC</u>		Pavement Thickness (inches): -		Borehole Diameter (inches): <u>3"</u>	
				Borehole Depth (feet):	
Drilling Method(s): <u>HA</u>		Apparent Borehole DTW (in feet from soil moisture content): <u>10.0</u>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: (describe if other or multiple items are checked):					
<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
Borehole Completion (check one):					
<input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<1	-	-	①	Ps. f. SAND w/Silt	SPSM	D	
								2				
					<1	-	-	③	Ps. f. SAND w/Silt	SPSM	D	
								4				
					<1	-	-	⑤	Ps. f. SAND w/Silt	SPSM	D	
								6				
					<1	-	-	⑦	Ps. S. SAND	SM	D	
								8				
					<1	-	-	⑨	dry Sandy Red Clay	CH	M	
					<1	-	-	⑩	Ps. S. SAND	SM	S	
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: <b>SB- 25</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 1421B</b>		Borehole Start Date: <b>12/18/14</b>		Borehole Start Time: <b>1153</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
		End Date: <b>12/18/14</b>		End Time: <b>1208</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. McCormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches):	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet):
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>15.0'</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<1	-	-	1	B- sand w/ silt	SPM	D	05-12, 0-20
					<1	-	-	3	B- sand w/ silt	SPM	D	
					<1	-	-	5	B- sand w/ silt	SPM	D	
					1	-	-	7	B- sand w/ silt	SPM	D	
					<1	-	-	9	B- sand w/ silt	SPM	M	
					2	-	-	11	Grey sandy fat clay	CH	M	
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: <u>SB-25</u>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <u>POND 142 B</u>		Borehole Start Date: <u>12/18/14</u>		Borehole Start Time: <u>1153</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
		End Date: <u>12/18/14</u>		End Time: <u>1208</u> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <u>GEC</u>		Geologist's Name: <u>R McCormick</u>		Environmental Technician's Name: <u>J. Governale</u>	
Drilling Company: <u>GEC</u>		Pavement Thickness (inches):	Borehole Diameter (inches): <u>3"</u>		Borehole Depth (feet):
Drilling Method(s): <u>HA</u>	Apparent Borehole DTW (in feet from soil moisture content): <u>15.0</u>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input checked="" type="checkbox"/> Bentonite <input type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					1	-	-	13	Gray Sandy fat CLY	CH	W	
					<1	-	-	15	Red Silty sand	SM	S	
								14				
								16				
								17				
								18				
								19				
								20				
								21				
								22				
								23				
								24				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings  
 Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

# BORING LOG

Page 1 of 1

Boring/Well Number: <b>SB-26</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 1421B</b>		Borehole Start Date: <b>12/18/14</b>		Borehole Start Time: <b>1313</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/18/14</b>		End Time: <b>1323</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. Mc Cormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>-</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet):
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>11.0'</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description <small>(include grain size based on USCS, odors, staining, and other remarks)</small>	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples <small>(list sample number and depth or temporary screen interval)</small>
					LI	-	-	1	B. found w/silt	SP	D	CS-11, 0/2.0'
					LI	-	-	3	B. found w/silt	SP	D	
					LI	-	-	5	B. found w/silt	SP	D	
					1	-	-	7	Grey clayey sand	SC	D	
					LI	-	-	9	Grey sandy lat clay	CH	M	
					2	-	-	11	B. S. found	SM	S	
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page 1 of 2

Boring/Well Number: <b>SB- 27</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 1421B</b>		Borehole Start Date: <b>12/18/14</b>		Borehole Start Time: <b>1135</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
		End Date: <b>12/18/14</b>		End Time: <b>1149</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. McCormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): -	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet):
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>15.0'</b>		Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: (describe if other or multiple items are checked):					
<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
Borehole Completion (check one):					
<input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					LI	-	-	1	B. SAND w/ silt	SPSM	D	
								2				
					LI	-	-	3	B. SAND w/ silt	SPSM	D	
								4				
					LI	-	-	5	B. SAND w/ silt	SPSM	D	
								6				
					1	-	-	7	B. SAND w/ silt			
								8		SPSM	D	
					2	-	-	9	B. SAND w/ silt	SM	M	
								10				
					2	-	-	11	Grey clayey sand	SC	M	
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: <u>SB-27</u>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <u>POWD 142 B</u>		Borehole Start Date: <u>12/18/14</u>	Borehole Start Time: <u>1135</u>	<input checked="" type="checkbox"/> AM	<input type="checkbox"/> PM
		End Date: <u>12/18/14</u>	End Time: <u>1149</u>	<input checked="" type="checkbox"/> AM	<input type="checkbox"/> PM
Environmental Contractor: <u>GEC</u>		Geologist's Name: <u>R. McCormick</u>		Environmental Technician's Name: <u>J. Governale</u>	
Drilling Company: <u>GEC</u>		Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):	
Drilling Method(s): <u>HA</u>		Apparent Borehole DTW (in feet from soil moisture content): <u>15.0</u>	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: (describe if other or multiple items are checked):					
<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					3	-	-	13	B. S. SAND	SM	W	
					2	-	-	15	B. S. SAND	SM	S	
								14				
								16				
								17				
								18				
								19				
								20				
								21				
								22				
								23				
								24				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page 1 of 1

Boring/Well Number: <b>SB- 2B</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 14213</b>		Borehole Start Date: <b>12/10/14</b>		Borehole Start Time: <b>1051</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
		End Date: <b>12/10/14</b>		End Time: <b>1108</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. Mc Cormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>-</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet):
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>9.0</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<1	-	-	1	B. SAND w/SH	SPSM	D	
								2				
					<1	-	-	3	B. SAND w/SH	SPSM	D	
								4				
					<1	-	-	5	B. SAND w/SH	SPSM	D	
								6				
					2	-	-	7	CLAY CLY. SAND	SC	W	
								8				
					<1	-	-	9	B. S. SAND	SM	S	
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page 1 of 2

Boring/Well Number: <b>SB-29</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 142/B</b>		Borehole Start Date: <b>12/18/14</b>		Borehole Start Time: <b>1030</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
		End Date: <b>12/18/14</b>		End Time: <b>1042</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. Mc Cormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches):	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet):
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>125</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: (describe if other or multiple items are checked):					
<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
Borehole Completion (check one):					
<input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					7	-	-	1	Br. SAND w/SH	SPM	D	
					<1	-	-	3	Br. SAND w/SH	SPM	D	
					<1	-	-	5	Br. SAND w/SH	SPM	D	
					2	-	-	7	Br. SAND w/SH	SPM	D	
					3	-	-	9	Br. SAND w/SH	SPM	M	
					1	-	-	11	Br. SAND w/SH	SPM	W	
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: <b>SB-29</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>POND 142 B</b>		Borehole Start Date: <b>12/18/14</b>	Borehole Start Time: <b>1030</b>	<input checked="" type="checkbox"/> AM	<input type="checkbox"/> PM
		End Date: <b>12/18/14</b>	End Time: <b>1042</b>	<input checked="" type="checkbox"/> AM	<input type="checkbox"/> PM
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R McCormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches):	Borehole Diameter (inches): <b>3"</b>	Borehole Depth (feet):	
Drilling Method(s): <b>HA</b>		Apparent Borehole DTW (in feet from soil moisture content): <b>12.5</b>	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description <small>(include grain size based on USCS, odors, staining, and other remarks)</small>	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples <small>(list sample number and depth or temporary screen interval)</small>
					LI	-	-	13	Br. SAND w/ Silt	SM	S	
								14				
								15				
								16				
								17				
								18				
								19				
								20				
								21				
								22				
								23				
								24				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings  
 Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

# BORING LOG

Page 1 of 1

Boring/Well Number: <b>SB-30</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 1421B</b>		Borehole Start Date: <b>12/10/14</b>		Borehole Start Time: <b>1204</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/16/14</b>		End Time: <b>1210</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. McCormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches):		Borehole Diameter (inches): <b>3"</b>	
				Borehole Depth (feet):	
Drilling Method(s): <b>HA</b>		Apparent Borehole DTW (in feet from soil moisture content): <b>9.0</b>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: (describe if other or multiple items are checked):					
<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
Borehole Completion (check one):					
<input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					2	-	-	①	B. fine sand w/ silt	SPSM		
								2				
					3	-	-	③	B. fine sand w/ silt	SPSM		
								4				
					2	-	-	⑤	B. fine sand w/ silt	SPSM		
								6				
					12	3	9	⑦	B. s. sand	SM M		
								8				
					8	-	-	⑨	B. fine sand w/ silt	SPSM		
								10				
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page 1 of 1

Boring/Well Number: <b>SB-31</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 1421B</b>		Borehole Start Date: <b>12/16/14</b>		Borehole Start Time: <b>1235</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/16/14</b>		End Time: <b>1240</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. Mc Cormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): "		Borehole Diameter (inches): <b>3"</b>	
				Borehole Depth (feet):	
Drilling Method(s): <b>HA</b>		Apparent Borehole DTW (in feet from soil moisture content): <b>9.5</b>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: (describe if other or multiple items are checked):					
<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
Borehole Completion (check one):					
<input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<1	-	-	1	R. fine sand w/ silt	SPSM		
								2				
					<1	-	-	3	R. fine sand w/ silt	SPSM		
								4				
					1	-	-	5	R. coarse w/ silt	SPSM		
								6				
					2	-	-	7	R. fine sand w/ silt	SPSM		
								8				
					1	-	-	9	R. fine sand w/ silt	SPSM		
					1	-	-	10	R. fine sand w/ silt	SPSM	S	
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: <b>SB-32</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 1421B</b>		Borehole Start Date: <b>12/16/14</b>		Borehole Start Time: <b>1220</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/16/14</b>		End Time: <b>1226</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. Mc Cormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches):		Borehole Diameter (inches): <b>3"</b>	
				Borehole Depth (feet):	
Drilling Method(s): <b>HA</b>		Apparent Borehole DTW (in feet from soil moisture content): <b>15.0</b>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					12	4	8	1	B- f sand w/silt	SPSM	D	CS-90/0.0'
								2				
					2	-	-	3	B- f sand w/silt	SPSM	D	
								4				
					1	-	-	5	B- f sand w/silt	SPSM	D	
								6				
					6	-	-	7	B- f sand w/silt	SPSM	D	
								8				
					4	-	-	9	B- f sand w/silt	SPSM	D	
								10				
					8	-	-	11	B- s. sand	SM	D	
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

Screen 12.0

# BORING LOG

Boring/Well Number: <b>SR-32</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>POND 1421 B</b>		Borehole Start Date: <b>12/16/14</b>		Borehole Start Time: <b>1220</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/16/14</b>		End Time: <b>1226</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. McCormick</b>		Environmental Technician's Name:	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches):		Borehole Diameter (inches): <b>3"</b>	
				Borehole Depth (feet):	
Drilling Method(s): <b>HA</b>		Apparent Borehole DTW (in feet from soil moisture content): <b>15.0</b>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description <small>(include grain size based on USCS, odors, staining, and other remarks)</small>	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples <small>(list sample number and depth or temporary screen interval)</small>
					21	3	18	13	B. fgsand w/ silt	SPSM	M	
					11	3	8	15	B. fgsand w/ silt	SPSM	W	
								16				
								17				
								18				
								19				
								20				
								21				
								22				
								23				
								24				

Screen 17.0'  
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Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: <b>SB- 33</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 1421B</b>		Borehole Start Date: <b>12/18/14</b>		Borehole Start Time: <b>12 31</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/18/14</b>		End Time: <b>12 43</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. McCormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches):	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet):
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>10.0</b>	Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: (describe if other or multiple items are checked):					
<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
Borehole Completion (check one):					
<input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					<1	-	-	1	B. found w/ soil	SPM	D	
								2				
					<1	-	-	3	B. found w/ soil	SPM	D	
								4				
					<1	-	-	5	B. found w/ soil	SPM	D	
								6				
					2	-	-	7	B. found w/ soil	SPM	D	
								8				
					3	-	-	9	B. found w/ soil	SPM	M	
					9	-	-	10	B. found w/ soil	SPM	S	
								11				
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page 1 of 2

Boring/Well Number: <b>SB- 34</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 14B/B</b>		Borehole Start Date: <b>12/18/14</b>		Borehole Start Time: <b>1333</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>12/18/14</b>		End Time: <b>1346</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. Mc Cormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches): <b>-</b>	Borehole Diameter (inches): <b>3"</b>		Borehole Depth (feet):
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>15.0</b>		Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID
Disposition of Drill Cuttings [check method(s)]: (describe if other or multiple items are checked):					
<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
Borehole Completion (check one):					
<input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					25	7	18	①	Brn fgsand w/silt organic odor	SPsm	D	CS-10 0/2.0'
					10	4	6	③	Brown fgsand w/silt organic odor	SPsm	D	
					7	-	-	⑤	Br. fgsand w/silt	SPsm	D	
					48	10	38	⑦	Br fgsand w/silt	SPsm	D	Table D 7.0'
					7	-	-	⑨	Gray clayey fgsand	SC	D	
					5	-	-	⑪	Gray clayey fgsand	SC	D	
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Boring/Well Number: <b>SB-34</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>POND 142 B</b>		Borehole Start Date: <b>12/18/14</b>	Borehole Start Time: <b>1333</b>	<input type="checkbox"/> AM	<input checked="" type="checkbox"/> PM
		End Date: <b>12/18/14</b>	End Time: <b>1346</b>	<input type="checkbox"/> AM	<input checked="" type="checkbox"/> PM
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. MCCORMICK</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches):	Borehole Diameter (inches): <b>3"</b>	Borehole Depth (feet):	
Drilling Method(s): <b>HA</b>	Apparent Borehole DTW (in feet from soil moisture content): <b>15.0</b>	Measured Well DTW (in feet after water recharges in well):		OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other <i>(describe if other or multiple items are checked):</i>					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description <small>(include grain size based on USCS, odors, staining, and other remarks)</small>	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples <small>(list sample number and depth or temporary screen interval)</small>
					5	-	-	13	<b>Br. S. SAND</b>	SM	M	
					3	-	-	15	<b>Gray Clay SAND</b>	SC	S	
								14				
								16				
								17				
								18				
								19				
								20				
								21				
								22				
								23				
								24				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

# BORING LOG

Page 1 of 1

Boring/Well Number: <b>SB- 35</b>		Permit Number:		FDEP Facility Identification Number:	
Site Name: <b>Pond 1421B</b>		Borehole Start Date: <b>12/18/14</b>		Borehole Start Time: <b>1115</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
		End Date: <b>12/18/14</b>		End Time: <b>1123</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor: <b>GEC</b>		Geologist's Name: <b>R. Mc Cormick</b>		Environmental Technician's Name: <b>J. Governale</b>	
Drilling Company: <b>GEC</b>		Pavement Thickness (inches):		Borehole Diameter (inches): <b>3"</b>	
				Borehole Depth (feet):	
Drilling Method(s): <b>HA</b>		Apparent Borehole DTW (in feet from soil moisture content): <b>11.0</b>		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): <input checked="" type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (Inches)	SPT Blows (per six inches)	PID	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
					4	-	-	1	B. SAND w/ Silt	SPSM	D	
								2				
					4	-	-	3	B. SAND w/ Silt	SPSM	D	
								4				
					2	-	-	5	B. SAND w/ Silt	SPSM	D	
								6				
					9	-	-	7	B. SAND w/ Silt	SPSM	D	
								8				
					5	-	-	9	B. SAND w/ Silt	SPSM	M	
								10				
					4	-	-	11	B. SAND w/ Silt	SPSM	S	
								12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings  
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

## **APPENDIX A-2**

### **Equipment Calibration Logs**

DEP-SOP-001/01  
FT 1000 General Field Testing and Measurement

**Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS**

**INSTRUMENT (MAKE/MODEL#)** TVA-1000 **INSTRUMENT #** 0726424034

**PARAMETER:** [check only one]

- TEMPERATURE     CONDUCTIVITY     SALINITY     pH     ORP  
 TURBIDITY     RESIDUAL CI     DO     OTHER OVA

**STANDARDS:** [Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]

Standard A 95 PPM LTL262-RR-CM

Standard B \_\_\_\_\_

Standard C \_\_\_\_\_

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
12/10/14	0800	A	95PPM	96.13		NO	Init	JWG
12/10/14	1700	A	95PPM	95.74		NO	Cont	JWG
12/11/14	0803	A	95PPM	94.7		NO	Cont	JWG
12/11/14	12:00	A	95PPM	95.93		NO	Cont	JWG
12/12/14	1245	A	95PPM	96.13		NO	Cont	JWG
12/12/14	1608	A	95PPM	95.63		NO	Cont	JWG
12/15/14	1430	A	95PPM	95.71		NO	Cont	JWG
12/15/14	1604	A	95PPM	96.01		NO	Cont	JWG
12/16/14	1606	A	95ppm	94.1		NO	Cont	JWG
12/16/14	1700	A	95ppm	96.0		NO	Cont	JWG
12/17/14	1500	A	95ppm	97.0		NO	Cont	JWG
12/17/14	1558	A	95ppm	96.2		n	Cont	JWG
12/18/14	1300	A	95ppm	96.4		NO	Cont	JWG
12/18/14	1417	A	95ppm	97.0		NO	Cont	JWG
12/22/14	1400	A	95ppm	95.02		NO	Cont	JWG
12/22/14	1408	A	95ppm	95.68		NO	Cont	JWG



Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) Oakton T-100 INSTRUMENT # 452216

PARAMETER: [check only one]

- TEMPERATURE     CONDUCTIVITY     SALINITY     pH     ORP  
 TURBIDITY     RESIDUAL CI     DO     OTHER \_\_\_\_\_

STANDARDS: [Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]

Standard A 0.02

Standard B 20

Standard C \_\_\_\_\_

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
12/12/14	0755	A	0.02	0.00		NO	Init	JWG
12/12/14	0755	B	20.0	19.80		YES	Init	JWG
12/12/14	1640	A	0.02	0.01		NO	Cont	JWG
12/12/14	1640	B	20.0	19.92		NO	Cont	JWG
12/15/14	1030	A	0.02	0.01		NO	Cont	JWG
12/15/14	1030	B	20.0	19.80		NO	Cont	JWG
12/15/14	1100	A	0.02	0.00		NO	Cont	JWG
12/15/14	1100	B	20.0	19.94		NO	Cont	JWG
12/16/14	1030	A	0.02	0.01		NO	Cont	JWG
12/16/14	1030	B	20.0	20.7		NO	Cont	JWG
12/16/14	1140	A	0.02	0.00		NO	Cont	JWG
12/16/14	1140	B	20.0	19.90		NO	Cont	JWG
12/18/16	1519	A	0.02	0.01		no	Cont	JWG
12/18/16	1519	B	20.0	20.02		no	Cont	JWG
12/18/16	1100	A	0.02	0.00		no	Cont	JWG
12/18/16	1700	B	20.0	19.89		no	Cont	JWG

DEP-SOP-001/01  
FT 1000 General Field Testing and Measurement

**Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS**

**INSTRUMENT (MAKE/MODEL#)** Oakton T-100 **INSTRUMENT #** 452216

**PARAMETER:** [check only one]

- TEMPERATURE     CONDUCTIVITY     SALINITY     pH     ORP  
 TURBIDITY     RESIDUAL CI     DO     OTHER \_\_\_\_\_

**STANDARDS:** [Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]

Standard A 0.02

Standard B 20.0

Standard C \_\_\_\_\_

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
12/19/14	0931	A	0.02	0.00		NO	Cont	JWG
12/19/14	0931	B	20.0	20.02		NO	Cont	JWG
12/19/14	1433	A	0.02	0.01		NO	Cont	JWG
12/19/14	1433	B	20.0	19.96		NO	Cont	JWG
12/23/14	1005	A	0.02	0.01		NO	Cont	JWG
12/23/14	1005	B	20.0	21.0		NO	Cont	JWG
12/23/14	1415	A	0.02	0.02		NO	Cont	JWG
12/23/14	1415	B	20.0	19.90		NO	Cont	JWG
12/29/14	1205	A	0.02	0.00		NO	Cont	JWG
12/29/14	1205	B	20.0	20.04		NO	Cont	JWG
12/30/14	1130	A	0.02	0.01		NO	Cont	JWG
12/30/14	1130	B	20.0	19.86		NO	Cont	JWG
12/30/14	1430	A	0.02	0.01		NO	Cont	JWG
12/30/14	1430	B	20.0	20.22		NO	Cont	JWG
1/2/15	0730	A	0.02	0.01		NO	Cont	JWG
1/2/15	0730	B	20.0	19.90		NO	Cont	JWG
1/2/15	1100	A	0.02	0.02		NO	Cont	JWG
1/2/15	1100	B	20.0	21.0		NO	Cont	JWG

DEP-SOP-001/01  
FT 1000 General Field Testing and Measurement

**Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS**

**INSTRUMENT (MAKE/MODEL#)** YSI 556      **INSTRUMENT #** 05423534H

**PARAMETER:** [check only one]

- TEMPERATURE       CONDUCTIVITY       SALINITY       pH       ORP  
 TURBIDITY       RESIDUAL CI       DO       OTHER \_\_\_\_\_

**STANDARDS:** [Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]

Standard A PH 4.01 1/20/16  
 Standard B PH 7.00 12/20/15  
 Standard C PH 10.01 11/20/15

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
12/14/14	0810	A	4.01	3.99		yes	Init	JWG
12/14/14	0810	B	7.00	7.10		yes	Init	JWG
12/14/14	0810	C	10.01	9.99		yes	Init	JWG
12/12/14	1603	A	4.01	4.00		yes	Cont	JWG
12/12/14	1603	B	7.00	7.06		yes	Cont	JWG
12/12/14	1603	C	10.01	9.97		yes	Cont	JWG
12/15/14	1030	A	4.01	4.03			Cont	JWG
12/15/14	1030	B	7.00	7.52			Cont	JWG
12/15/14	1030	C	10.01	10.51			Cont	JWG
12/15/14	1200	A	4.01	4.83			Cont	JWG
12/15/14	1200	B	7.00	7.33			Cont	JWG
12/15/14	1200	C	10.01	10.04			Cont	JWG
12/16/14	1115	A	4.01	4.83			Cont	JWG
12/16/14	1115	B	7.00	7.01			Cont	JWG
12/16/14	1115	C	10.01	10.03			Cont	JWG
12/18/14	1455	A	4.01	4.85			Cont	JWG
12/18/14	1455	B	7.00	7.28			Cont	JWG
12/18/14	1455	C	10.01	10.24			Cont	JWG

12/18/14 1703A      4.01      4.09      Cont      JWG  
 12/18/14 1703 B      7.00      7.44      Cont      JWG  
 12/18/14 1703 C      10.01      9.79      Cont      JWG

DEP-SOP-001/01  
FT 1000 General Field Testing and Measurement

**Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS**

**INSTRUMENT (MAKE/MODEL#)** YSI 556

**INSTRUMENT #** 05H2853AH

**PARAMETER:** [check only one]

- TEMPERATURE     CONDUCTIVITY     SALINITY     pH     ORP  
 TURBIDITY     RESIDUAL CI     DO     OTHER \_\_\_\_\_

**STANDARDS:** [Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]

Standard A PH 4.01 1/20/16

Standard B PH 7.00 12/20/15

Standard C PH 10.01 11/20/15

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
12/19/14	0938	A	4.01	4.00		NO	Cont	JWG
12/19/14	0938	B	7.00	7.01		NO	Cont	JWG
12/19/14	0938	C	10.01	10.00		NO	Cont	JWG
12/19/14	1443	A	4.01	4.02		NO	Cont	JWG
12/19/14	1443	B	7.00	7.00		NO	Cont	JWG
12/19/14	1443	C	10.01	10.00		NO	Cont	JWG
12/23/14	1015	A	4.01	4.48		NO	Cont	JWG
12/23/14	1015	B	7.00	7.00		NO	Cont	JWG
12/23/14	1015	C	10.01	10.09		NO	Cont	JWG
12/23/14	1430	A	4.01	4.01		NO	Cont	JWG
12/23/14	1430	B	7.00	7.12		NO	Cont	JWG
12/23/14	1430	C	10.01	9.97		NO	Cont	JWG
12/29/14	1205	A	4.01	4.01		NO	Cont	JWG
12/29/14	1205	B	7.00	7.00		NO	Cont	JWG
12/29/14	1205	C	10.01	10.01		NO	Cont	JWG
12/30/14	1115	A	4.01	4.13		NO	Cont	JWG
12/30/14	1105	B	7.00	7.16		NO	Cont	JWG
12/30/14	1105	C	10.01	10.18		NO	Cont	JWG
12/30/14	1435	A	4.01	4.00		NO	Cont	JWG
12/30/14	1435	B	7.00	7.03		NO	Cont	JWG
12/30/14	1435	C	10.01	10.98		NO	Cont	JWG
1/2/15	0720	A	4.01	4.01		NO	Cont	JWG
1/2/15	0720	B	7.00	7.02		NO	Cont	JWG
1/2/15	0720	C	10.01	10.01		NO	Cont	JWG
1/2/15	1105	A	4.01	4.01		NO	Cont	JWG
1/2/15	1105	B	7.00	7.00		NO	Cont	JWG
1/2/15	1105	C	10.01	10.01		NO	Cont	JWG

DEP-SOP-001/01  
FT 1000 General Field Testing and Measurement

**Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS**

**INSTRUMENT (MAKE/MODEL#)** YSI 55C      **INSTRUMENT #** 05H2353AH

**PARAMETER:** [check only one]

- TEMPERATURE       CONDUCTIVITY       SALINITY       pH       ORP  
 TURBIDITY       RESIDUAL CI       DO       OTHER \_\_\_\_\_

**STANDARDS:** [Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]

Standard A 84

Standard B 1500

Standard C \_\_\_\_\_

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
12/19/14	0945	A	84	83.0		NO	Cont	JWB
12/19/14	0945	B	1500	1501		NO	Cont	JWB
12/19/14	1500	A	84	84		NO	Cont	JWB
12/19/14	1500	B	1500	1500		NO	Cont	JWB
12/23/14	1500	A	84	84		NO	Cont	JWB
12/23/14	1500	B	1500	1500		NO	Cont	JWB
12/23/14	1440	A	84	84		NO	Cont	JWB
12/23/14	1440	B	1500	1500		NO	Cont	JWB
12/29/14	1213	A	84	84		NO	Cont	JWB
12/29/14	1213	B	1500	1500		NO	Cont	JWB
12/30/14	1740	A	84	84		NO	Cont	JWB
12/30/14	1140	B	1500	1503		NO	Cont	JWB
12/30/14	1440	A	84	84		NO	Cont	JWB
12/30/14	1440	B	1500	1500		NO	Cont	JWB
1/2/15	0715	A	84	84		NO	Cont	JWB
1/2/15	0715	B	1500	1500		NO	Cont	JWB
1/2/15	1135	A	84	84		NO	Cont	JWB
1/2/15	1135	B	1500	1500		NO	Cont	JWB

DEP-SOP-001/01  
 FT 1000 General Field Testing and Measurement

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) YSI 556 INSTRUMENT # 05H2353 AH

PARAMETER: [check only one]

- TEMPERATURE     CONDUCTIVITY     SALINITY     pH     ORP  
 TURBIDITY     RESIDUAL CI     DO     OTHER \_\_\_\_\_

STANDARDS: [Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]

Standard A 100.0 %

Standard B \_\_\_\_\_

Standard C \_\_\_\_\_

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
12/12/14	0905	A	100.0	100.5		yes	Init	HT
12/12/14	1620	A	100.0	100.1		✓	Cont	JWG
12/15/14	1010	A	100.0	99.9		no	Cont	JWG
12/15/14	408	A	100.00	100.7		no	Cont	JWG
12/16/14	1205	A	100.00	100.5		no	Cont	JWG
12/16/14	1638	A	100.0	99.8		no	cont	JWG
12/18/14	0915	A	100	100.0		no	Cont	JWG
12/18/14	1306	A	100	100.6		no	Cont	JWG
12/19/14	1330	A	100	100.1		no	Cont	JWG
12/19/14	1320	A	100	100.0		no	cont	JWG
12/23/14	1118	A	100	99.1		no	Cont	JWG
12/23/14	1430	A	100	100.0		no	Cont	JWG
12/29/14	10915	A	100	100.0		no	Cont	JWG
12/29/14	1400	A	100	100.0		no	Cont	JWG
12/30/14	1130	A	100	100.0		no	Cont	JWG
12/30/14	1440	A	100	100.0		no	Cont	JWG

DEP-SOP-001/01  
FT 1000 General Field Testing and Measurement

**Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS**

**INSTRUMENT (MAKE/MODEL#)** YSI 556      **INSTRUMENT #** 05H2353A #

**PARAMETER:** [check only one]

- TEMPERATURE       CONDUCTIVITY       SALINITY       pH       ORP  
 TURBIDITY       RESIDUAL CI       DO       OTHER \_\_\_\_\_

**STANDARDS:** [Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]

Standard A 84

Standard B 1500

Standard C \_\_\_\_\_

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
12/12/14	0750	A	84	84		yes	Init	JWG
12/12/14	0750	B	1500	1502		yes	INT	JWG
12/12/14	1210	A	84	83.0		no	Cont	JWG
12/12/14	1210	B	1500	1501		no	Cont	JWG
	1210							
12/15/14	1430	A	84	84		no	Cont	JWG
12/15/14	1420	B	1500	1503		no	Cont	JWG
12/15/14	1609	A	84	83.0		no	Cont	JWG
12/15/14	1609	B	1500	1502		no	Cont	JWG
12/16/14	1600	A	84	84		no	Cont	JWG
12/16/14	1600	B	1500	1501		no	Cont	JWG
12/16/14	1705	A	84	83.0		no	Cont	JWG
12/16/14	1705	B	1500	1500		no	Cont	JWG
12/18/14	1515	A	84	83.0		no	Cont	JWG
12/18/14	1515	B	1500	1501		no	Cont	JWG
12/18/14	1655	A	84	84		no	Cont	JWG
12/18/14	1655	B	1500	1500		no	Cont	JWG

## **APPENDIX A-3**

### **Groundwater Sampling Logs and Well Construction Detail**

Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

Riser 3.75  
 1109pm - 2:10pm  
 15gal 12/11/14

SITE NAME: Pond 136 B		SITE LOCATION: SR-400	
WELL NO: TWU-1	SAMPLE ID: TWU-1	DATE: 12/11/14	

**PURGING DATA**

WELL DIAMETER (inches): 1"	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 1.25 feet to 6.25 feet	STATIC DEPTH TO WATER (feet): 2.47	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( 6.25 feet - 2.47 feet ) X 0.04 gallons/foot = 0.15 gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + ( gallons/foot X feet ) + gallons = gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 3.75	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 3.75	PURGING INITIATED AT: 0819	PURGING ENDED AT: 0844	TOTAL VOLUME PURGED (gallons): 1.5							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
0824	.25	.25	.05	2.78	5.94	17.45	452	28.3	16.79	Clear	slight
0829	.25	.50	.05	2.78	5.94	17.60	444	22.2	15.39	Clear	H2S
0834	.25	.75	.05	2.78	5.94	17.52	440	18.3	9.48	Clear	H2S
0839	.25	1.00	.05	2.78	5.94	17.55	439	17.5	6.13	Clear	H2S
0844	.25	1.25	.05	2.78	5.94	17.50	437	15.8	5.07	Clear	H2S
WELL CAPACITY (Gallons Per Foot): 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 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: Jerry W. Governale				SAMPLER(S) SIGNATURE(S):				SAMPLING INITIATED AT: 0844		SAMPLING ENDED AT: 0905	
PUMP OR TUBING DEPTH IN WELL (feet): 6.75				TUBING MATERIAL CODE: PE/S		FIELD-FILTERED: Y (N)		FILTER SIZE: _____ μm			
FIELD DECONTAMINATION: PUMP Y (N)				TUBING Y (N (replaced))				DUPLICATE: Y (N)			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)		
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
TWU-1	2	AG	1L	H2SO4	Lab	2	F10A	APP	.05 GPM		
TWU-1	1	AG	1L	none	---	5.94	8270 TSS, 8270D, 8270 D, 8082A	SM, APP	.05 GPM		
TWU-1	1	AG	250mL	none	---	5.94	8081B	APP	.05 GPM		
TWU-1	1	AG	250mL	none	---	5.94	8270 D, 8081B, 8270D	APP	.05 GPM		
TWU-1	1	PE	250mL	HNO3	Lab	2	8270 D, 8081B, 8270D	APP	.05 GPM		
TWU-1	2	CG	40mL	HCL	Lab	2	8260B	APP	.05 GPM		
REMARKS:											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

Riser  
3.75

SITE NAME: <u>Pond 141A</u>	SITE LOCATION: <u>SR-400</u>
WELL NO: <u>TW-3 / SB-58</u>	DATE: <u>12/16/14</u>
SAMPLE ID: <u>TW-3</u>	

**PURGING DATA**

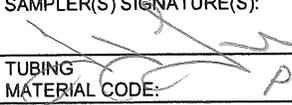
WELL DIAMETER (inches): <u>1</u>	TUBING DIAMETER (inches): <u>3/8</u>	WELL SCREEN INTERVAL DEPTH: <u>1.25</u> feet to <u>6.25</u> feet	STATIC DEPTH TO WATER (feet): <u>3.36</u>	PURGE PUMP TYPE OR BAILER: <u>P/P</u>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <u>6.25</u> feet - <u>3.36</u> feet ) X <u>0.04</u> gallons/foot = <u>0.11</u> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = _____ gallons + ( _____ gallons/foot X _____ feet ) + _____ gallons = _____ gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>5.1</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>5.1</u>	PURGING INITIATED AT: <u>1120</u>	PURGING ENDED AT: <u>1150</u>	TOTAL VOLUME PURGED (gallons): <u>1.75</u>

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1120	.25	.25	.05	3.4	6.13	20.28	118	5.3	5.75	Clear	none
1125	.25	.50	.05	3.4	5.45	20.29	117	6.3	7.49	Cloudy	none
1130	.25	.75	.05	3.4	5.03	20.36	117	8.2	93.3	Cloudy	none
1135	.25	1.00	.05	3.4	4.97	20.37	117	8.4	31.4	Cloudy	none
1140	.25	1.25	.05	3.4	4.95	20.43	117	6.5	4.35	Clear	none
1145	.25	1.50	.05	3.4	4.94	20.47	117	5.7	3.90	Clear	none
1150	.25	1.75	.05	3.4	4.97	20.48	117	5.9	2.73	Clear	none

WELL CAPACITY (Gallons Per Foot): 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  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <u>Jerry W. Governale</u>	SAMPLER(S) SIGNATURE(S): 	SAMPLING INITIATED AT: <u>1150</u>	SAMPLING ENDED AT: <u>1152</u>
PUMP OR TUBING DEPTH IN WELL (feet): <u>6.25</u>	TUBING MATERIAL CODE: <u>PE/S</u>	FIELD-FILTERED: Y <input checked="" type="checkbox"/> (N)	FILTER SIZE: _____ μm
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> (N) TUBING Y <input checked="" type="checkbox"/> (N) (replaced)	DUPLICATE: Y <input checked="" type="checkbox"/> (N)		

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
<u>TW-3</u>	<u>1</u>	<u>AG</u>	<u>250mL</u>	<u>none</u>	<u>none</u>	<u>4.97</u>	<u>8081B</u>	<u>APP</u>	<u>1.05 GPM</u>
<u>TW-3</u>	<u>1</u>	<u>AG</u>	<u>250mL</u>	<u>none</u>	<u>none</u>	<u>4.97</u>	<u>8151A</u>	<u>APP</u>	<u>1.05 GPM</u>

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

*Riser 3.0*

SITE NAME: <i>Pond 142B</i>	SITE LOCATION: <i>SR-400</i>
WELL NO: <i>TMW-4</i>	SAMPLE ID: <i>TMW-4/SB32</i> DATE: <i>12/18/14</i>

**PURGING DATA**

WELL DIAMETER (inches): <i>1"</i>	TUBING DIAMETER (inches): <i>3/8</i>	WELL SCREEN INTERVAL DEPTH: <i>12</i> feet to <i>17</i> feet	STATIC DEPTH TO WATER (feet): <i>9.5'</i>	PURGE PUMP TYPE OR BAILER: <i>PP</i>							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <i>17</i> feet - <i>9.5</i> feet ) X <i>0.04</i> gallons/foot = <i>0.30</i> gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = _____ gallons + ( _____ gallons/foot X _____ feet ) + _____ gallons = _____ gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <i>15.0</i>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <i>15.0</i>	PURGING INITIATED AT: <i>1527</i>	PURGING ENDED AT: <i>1542</i>	TOTAL VOLUME PURGED (gallons): <i>1</i>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
<i>1527</i>	<i>.25</i>	<i>.25</i>	<i>.05</i>	<i>13.3</i>	<i>5.56</i>	<i>24.75</i>	<i>323</i>	<i>6.6</i>	<i>6.04</i>	<i>Clear</i>	<i>None</i>
<i>1532</i>	<i>.25</i>	<i>.50</i>	<i>.05</i>	<i>13.3</i>	<i>4.81</i>	<i>24.84</i>	<i>324</i>	<i>5.3</i>	<i>2.65</i>	<i>Clear</i>	<i>None</i>
<i>1537</i>	<i>.25</i>	<i>.75</i>	<i>.05</i>	<i>13.3</i>	<i>4.75</i>	<i>24.72</i>	<i>323</i>	<i>5.4</i>	<i>1.41</i>	<i>Clear</i>	<i>None</i>
<i>1542</i>	<i>.25</i>	<i>1.00</i>	<i>.05</i>	<i>13.3</i>	<i>4.76</i>	<i>24.68</i>	<i>323</i>	<i>6.0</i>	<i>1.31</i>	<i>Clear</i>	<i>None</i>
WELL CAPACITY (Gallons Per Foot): 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 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <i>Jenny W. Governab</i>				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: <i>1542</i>	SAMPLING ENDED AT: <i>1544</i>	
PUMP OR TUBING DEPTH IN WELL (feet): <i>17.0</i>				TUBING MATERIAL CODE: <i>PE/S</i>		FIELD-FILTERED: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	FILTER SIZE: _____ μm		
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> N <input type="checkbox"/> TUBING Y <input checked="" type="checkbox"/> N (replaced) <input type="checkbox"/>				DUPLICATE: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>					
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
<i>TMW-4</i>	<i>1</i>	<i>AG</i>	<i>250mL</i>	<i>None</i>	<i>None</i>	<i>4.76</i>	<i>8151A</i>	<i>APP</i>	<i>0.15 GPM</i>
<i>TMW-4</i>	<i>1</i>	<i>AG</i>	<i>250mL</i>	<i>None</i>	<i>None</i>	<i>4.76</i>	<i>8081B</i>	<i>APP</i>	<i>0.15 GPM</i>
REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units    Temperature: ± 0.2 °C    Specific Conductance: ± 5%    Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)    Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



**Geotechnical and Environmental Consultants, Inc.**  
 1230 E. HILLCREST ST.  
 ORLANDO, FLORIDA 32803  
 (407) 898-1818  
 FAX (407) 898-1897  
 COA NO. 00005882

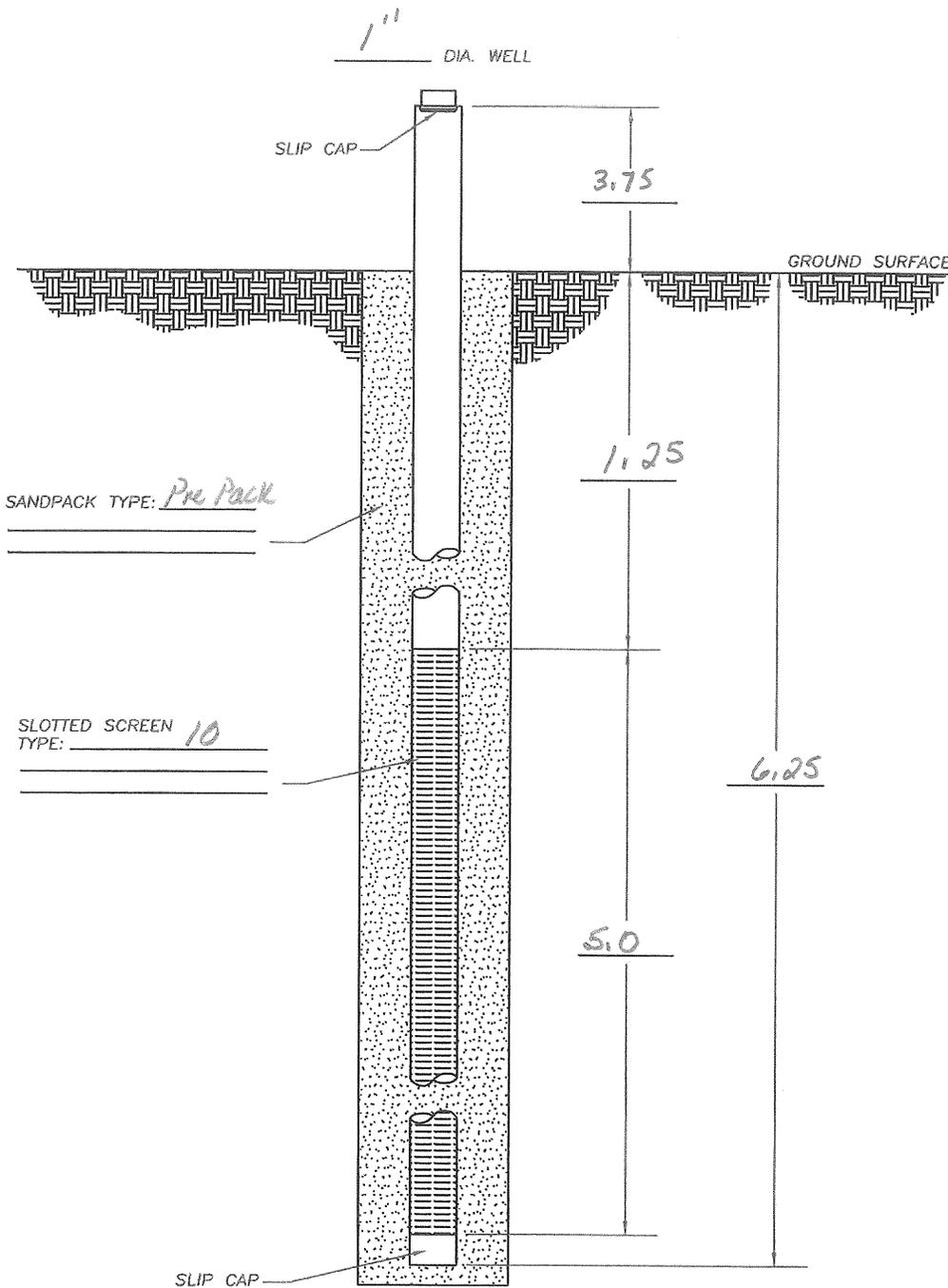
PROJECT NO.:  
 DATE:  
 SENIOR PROFESSIONAL:  
 P.E. NO.  
 PROJECT PROFESSIONAL:  
 P.E. NO.  
 DRAWN BY:  
 REVISION:

*Pond 136B*

TEMPORARY MONITORING  
 WELL NO.     

**WELL CONSTRUCTION  
 DETAIL**

**FIGURE**



SANDPACK TYPE: Pre Pack

SLOTTED SCREEN  
 TYPE: 10

INSTALLATION REPORT

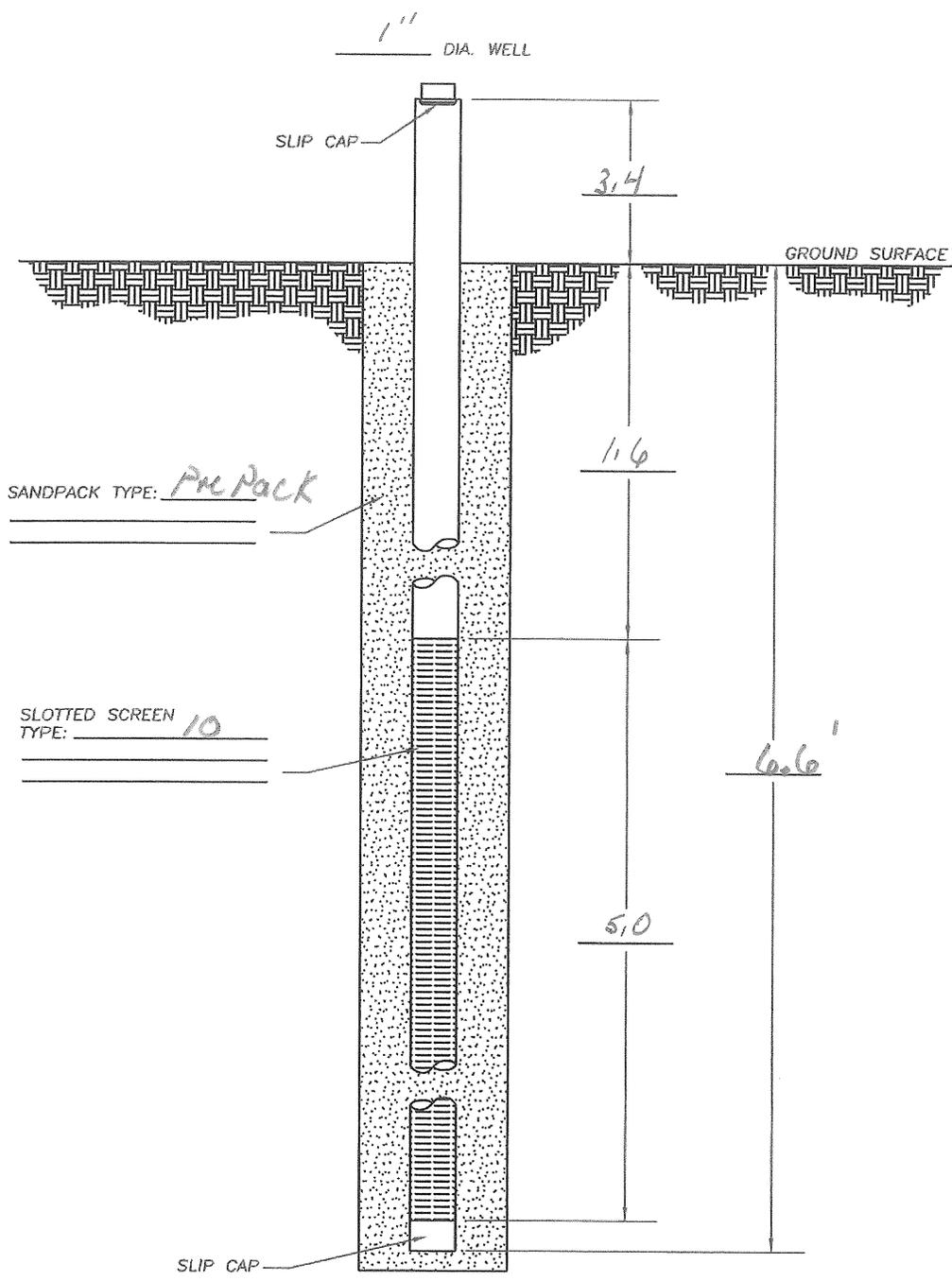
INSTALLATION DATE 12/11/14 INSTALLED BY JWG

DEPTH TO GROUNDWATER \_\_\_\_\_

INSTALLATION METHOD HA

J:\DATA\FORMS\WELL DETAIL 2.dwg 6/6/2008 7:50:52 AM 1:1

Pond 141B



SANDPACK TYPE: PM Pack

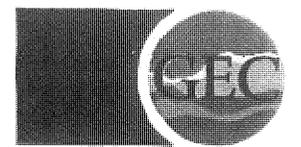
SLOTTED SCREEN TYPE: 10

INSTALLATION REPORT

INSTALLATION DATE 12/10/14 INSTALLED BY JWG

DEPTH TO GROUNDWATER \_\_\_\_\_

INSTALLATION METHOD HA



**Geotechnical and Environmental Consultants, Inc.**  
1230 E. HILLCREST ST.  
ORLANDO, FLORIDA 32803  
(407) 898-1818  
FAX (407) 898-1897  
COA NO. 00005862

PROJECT NO.: 3090E

DATE: 12/12/14

SENIOR PROFESSIONAL:  
P.E. NO.

PROJECT PROFESSIONAL:  
P.E. NO.

DRAWN BY:

REVISION:

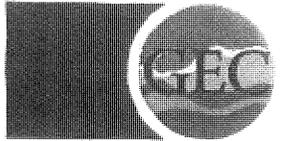
TEMPORARY MONITORING  
WELL NO. 2

SB-42

**WELL CONSTRUCTION  
DETAIL**

**FIGURE**

J:\DATA\FORMS\WELL DETAIL 2.dwg 6/6/2008 7:50:52 AM 1:1



**Geotechnical and Environmental Consultants, Inc.**  
 1230 E. HILLCREST ST.  
 ORLANDO, FLORIDA 32803  
 (407) 898-1818  
 FAX (407) 898-1897  
 COA NO. 00005882

PROJECT NO.: 3692E

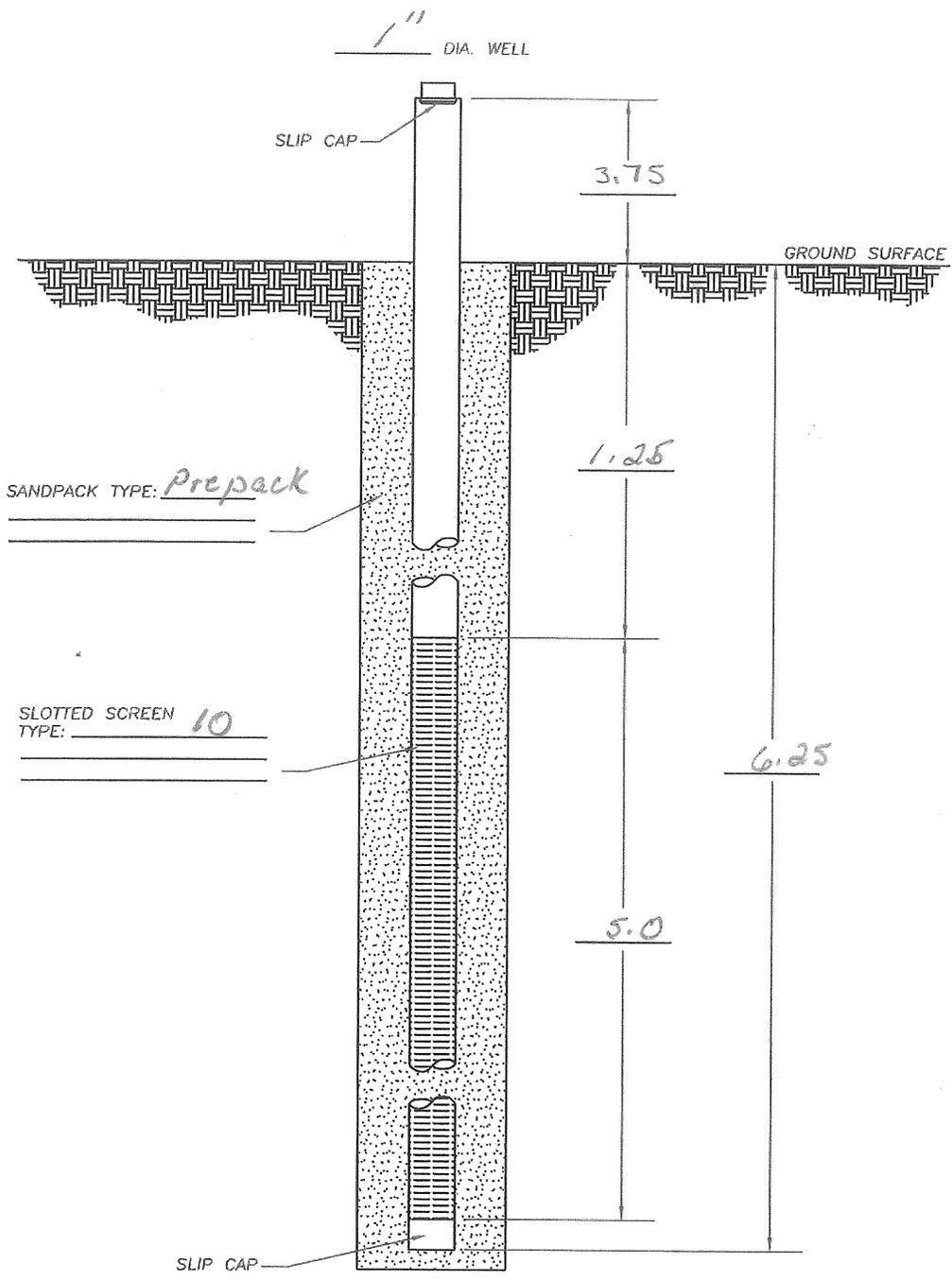
DATE: 12/16/14

SENIOR PROFESSIONAL:  
 P.E. NO.

PROJECT PROFESSIONAL:  
 P.E. NO.

DRAWN BY:

REVISION:



SANDPACK TYPE: Prepack

SLOTTED SCREEN TYPE: 10

TEMPORARY MONITORING  
 WELL NO. THW-3

SB-58  
Pond 141A

INSTALLATION REPORT

INSTALLATION DATE 12/16/14 INSTALLED BY JWG/DBH

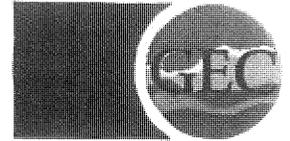
DEPTH TO GROUNDWATER 3.3 G.S.

INSTALLATION METHOD HA

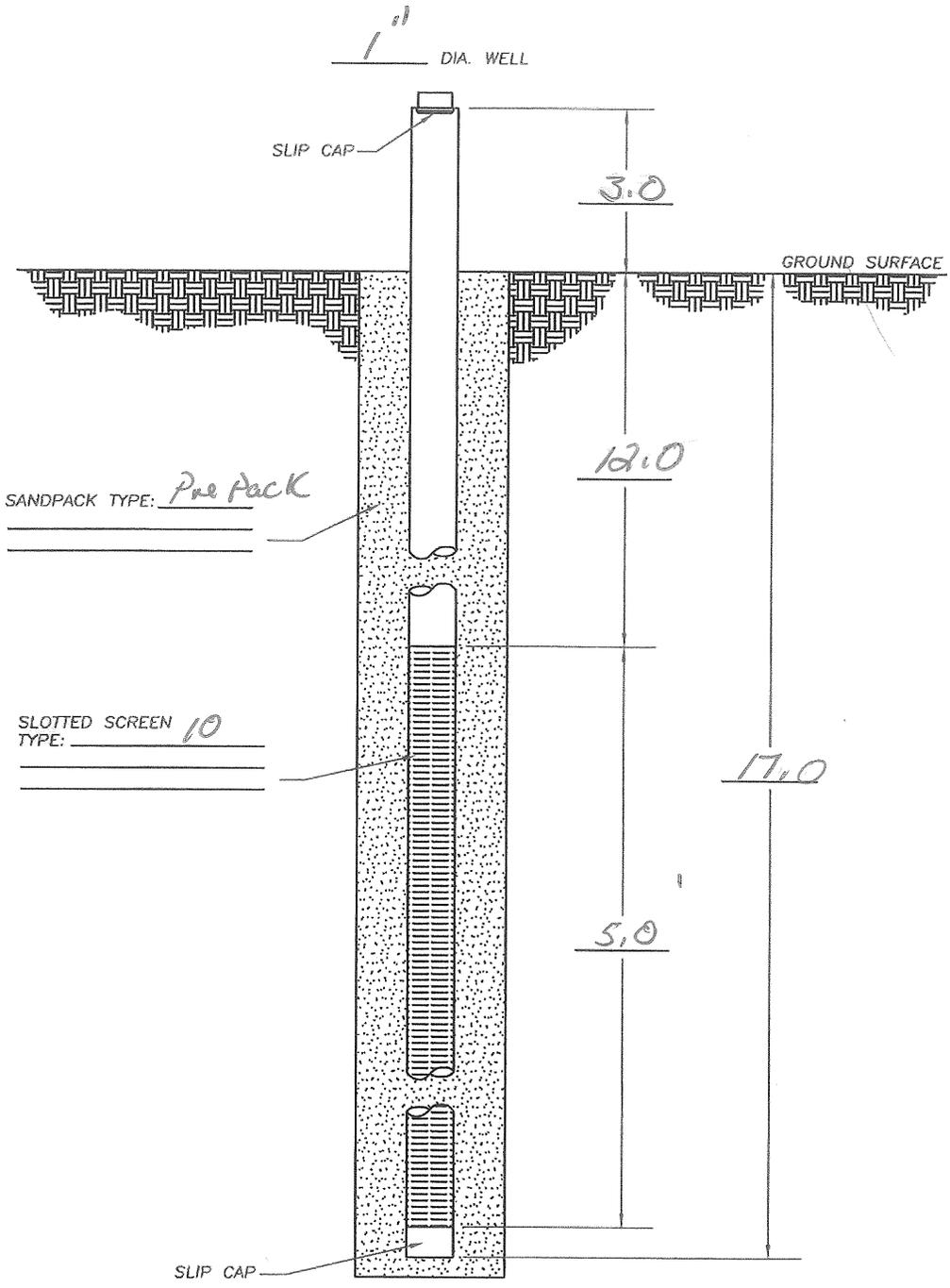
**WELL CONSTRUCTION  
 DETAIL**

**FIGURE**

J:\DATA\FORMS\WELL DETAIL 2.dwg, 6/6/2008 7:50:52 AM, 1:1



**Geotechnical and Environmental Consultants, Inc.**  
 1230 E. HILLCREST ST.  
 ORLANDO, FLORIDA 32803  
 (407) 898-1818  
 FAX (407) 898-1897  
 COA NO. 00005882



PROJECT NO.: 3692E

DATE:

SENIOR PROFESSIONAL:  
P.E. NO.

PROJECT PROFESSIONAL:  
P.E. NO.

DRAWN BY:

REVISION:

TEMPORARY MONITORING  
WELL NO. 4

SB-32  
Pond 14213

INSTALLATION REPORT

INSTALLATION DATE 12/18/14 INSTALLED BY JWG/DBH

DEPTH TO GROUNDWATER 12.5 G5

INSTALLATION METHOD A/B Truck

**WELL CONSTRUCTION  
DETAIL**

**FIGURE**

J:\DATA\FORMS\WELL DETAIL 2.dwg, 6/6/2008 7:50:52 AM, 1:1

## **APPENDIX B**

### **Laboratory Analytical Reports**



# ENCO Laboratories

*Accurate. Timely. Responsive. Innovative.*

10775 Central Port Drive

Orlando FL, 32824

Phone: 407.826.5314 FAX: 407.850.6945

---

Monday, December 29, 2014

Geotechnical and Environmental (GE002)

Attn: Richard McCormick

919 Lake Baldwin Lane

Orlando, FL 32814

**RE: Laboratory Results for**

**Project Number: [none], Project Name/Desc: I-4 Level II**

**ENCO Workorder(s): A407258**

Dear Richard McCormick,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Friday, December 12, 2014.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Orlando. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Ronald Wambles For David Camacho

Project Manager

Enclosure(s)





www.encolabs.com

**SAMPLE DETECTION SUMMARY**

**Client ID: TMW-1**

**Lab ID: A407258-01**

<b>Analyte</b>	<b>Results</b>	<b>Flag</b>	<b>MDL</b>	<b>PQL</b>	<b>Units</b>	<b>Method</b>	<b>Notes</b>
Barium - Total	5.67	I	0.630	10.0	ug/L	EPA 6010C	
Naphthalene	0.046	I	0.035	0.10	ug/L	EPA 8270D	

**Client ID: SS-1**

**Lab ID: A407258-02**

<b>Analyte</b>	<b>Results</b>	<b>Flag</b>	<b>MDL</b>	<b>PQL</b>	<b>Units</b>	<b>Method</b>	<b>Notes</b>
Acetone	0.025	V	0.0020	0.0057	mg/kg dry	EPA 8260B	J-01, O-01
Barium - Total	0.339	I	0.0526	0.821	mg/kg dry	EPA 6010C	
Benzo(g,h,i)perylene	0.021	I	0.017	0.040	mg/kg dry	EPA 8270D	
Chromium - Total	0.555	I	0.0509	0.821	mg/kg dry	EPA 6010C	
Dibenzo(a,h)anthracene	0.025	I	0.018	0.040	mg/kg dry	EPA 8270D	
Indeno(1,2,3-cd)pyrene	0.025	I	0.017	0.040	mg/kg dry	EPA 8270D	
Lead - Total	0.322	I	0.181	0.821	mg/kg dry	EPA 6010C	
Methylene Chloride	0.0017	IV	0.0008	0.0023	mg/kg dry	EPA 8260B	J-01, O-01

**ANALYTICAL RESULTS**

**Description:** TMW-1  
**Matrix:** Ground Water  
**Project:** I-4 Level II

**Lab Sample ID:** A407258-01  
**Sampled:** 12/12/14 08:44  
**Sampled By:** Jerry Governale

**Received:** 12/12/14 15:33  
**Work Order:** A407258

**Volatile Organic Compounds by GCMS**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6]^	0.61	U	ug/L	1	0.61	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
1,1,1-Trichloroethane [71-55-6]^	0.80	U	ug/L	1	0.80	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.54	U	ug/L	1	0.54	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
1,1,2-Trichloroethane [79-00-5]^	0.76	U	ug/L	1	0.76	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
1,1-Dichloroethane [75-34-3]^	0.62	U	ug/L	1	0.62	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
1,1-Dichloroethene [75-35-4]^	0.94	U	ug/L	1	0.94	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
1,1-Dichloropropene [563-58-6]^	0.74	U	ug/L	1	0.74	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
1,2,3-Trichlorobenzene [87-61-6]^	0.86	U	ug/L	1	0.86	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
1,2,3-Trichloropropane [96-18-4]^	0.64	U	ug/L	1	0.64	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
1,2,4-Trichlorobenzene [120-82-1]^	0.70	U	ug/L	1	0.70	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
1,2,4-Trimethylbenzene [95-63-6]^	0.69	U	ug/L	1	0.69	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.96	U	ug/L	1	0.96	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
1,2-Dibromoethane [106-93-4]^	0.78	U	ug/L	1	0.78	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
1,2-Dichlorobenzene [95-50-1]^	0.73	U	ug/L	1	0.73	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
1,2-Dichloroethane [107-06-2]^	0.63	U	ug/L	1	0.63	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
1,2-Dichloropropane [78-87-5]^	0.80	U	ug/L	1	0.80	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
1,3,5-Trimethylbenzene [108-67-8]^	0.58	U	ug/L	1	0.58	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
1,3-Dichlorobenzene [541-73-1]^	0.77	U	ug/L	1	0.77	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
1,3-Dichloropropane [142-28-9]^	0.60	U	ug/L	1	0.60	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
1,4-Dichlorobenzene [106-46-7]^	0.76	U	ug/L	1	0.76	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
2,2-Dichloropropane [594-20-7]^	0.66	U	ug/L	1	0.66	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
2-Butanone [78-93-3]^	4.5	U	ug/L	1	4.5	5.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
2-Chloroethyl Vinyl Ether [110-75-8]^	1.9	U	ug/L	1	1.9	5.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
2-Chlorotoluene [95-49-8]^	0.68	U	ug/L	1	0.68	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
2-Hexanone [591-78-6]^	1.4	U	ug/L	1	1.4	5.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
4-Chlorotoluene [106-43-4]^	0.65	U	ug/L	1	0.65	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
4-Isopropyltoluene [99-87-6]^	0.80	U	ug/L	1	0.80	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
4-Methyl-2-pentanone [108-10-1]^	0.79	U	ug/L	1	0.79	5.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Acetone [67-64-1]^	5.0	U	ug/L	1	5.0	10	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Benzene [71-43-2]^	0.71	U	ug/L	1	0.71	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Bromobenzene [108-86-1]^	0.77	U	ug/L	1	0.77	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Bromochloromethane [74-97-5]^	0.94	U	ug/L	1	0.94	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Bromodichloromethane [75-27-4]^	0.52	U	ug/L	1	0.52	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Bromoform [75-25-2]^	0.75	U	ug/L	1	0.75	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Bromomethane [74-83-9]^	0.95	U	ug/L	1	0.95	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Carbon disulfide [75-15-0]^	2.6	U	ug/L	1	2.6	5.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Carbon tetrachloride [56-23-5]^	0.94	U	ug/L	1	0.94	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Chlorobenzene [108-90-7]^	0.72	U	ug/L	1	0.72	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Chloroethane [75-00-3]^	0.98	U	ug/L	1	0.98	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Chloroform [67-66-3]^	0.80	U	ug/L	1	0.80	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Chloromethane [74-87-3]^	0.82	U	ug/L	1	0.82	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
cis-1,2-Dichloroethene [156-59-2]^	0.53	U	ug/L	1	0.53	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
cis-1,3-Dichloropropene [10061-01-5]^	0.59	U	ug/L	1	0.59	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Dibromochloromethane [124-48-1]^	0.44	U	ug/L	1	0.44	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Dibromomethane [74-95-3]^	0.84	U	ug/L	1	0.84	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Dichlorodifluoromethane [75-71-8]^	0.74	U	ug/L	1	0.74	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Ethylbenzene [100-41-4]^	0.69	U	ug/L	1	0.69	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Hexachlorobutadiene [87-68-3]^	0.70	U	ug/L	1	0.70	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	

**ANALYTICAL RESULTS**

**Description:** TMW-1

**Lab Sample ID:** A407258-01

**Received:** 12/12/14 15:33

**Matrix:** Ground Water

**Sampled:** 12/12/14 08:44

**Work Order:** A407258

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**Volatile Organic Compounds by GCMS**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Isopropylbenzene [98-82-8]^	0.67	U	ug/L	1	0.67	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
m,p-Xylenes [108-38-3/106-42-3]^	1.3	U	ug/L	1	1.3	2.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Methylene chloride [75-09-2]^	2.0	U	ug/L	1	2.0	5.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Methyl-tert-Butyl Ether [1634-04-4]^	0.60	U	ug/L	1	0.60	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Naphthalene [91-20-3]^	0.82	U	ug/L	1	0.82	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
n-Butyl Benzene [104-51-8]^	0.70	U	ug/L	1	0.70	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
n-Propyl Benzene [103-65-1]^	0.70	U	ug/L	1	0.70	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
o-Xylene [95-47-6]^	0.53	U	ug/L	1	0.53	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
sec-Butylbenzene [135-98-8]^	0.74	U	ug/L	1	0.74	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Styrene [100-42-5]^	0.61	U	ug/L	1	0.61	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
tert-Butylbenzene [98-06-6]^	0.64	U	ug/L	1	0.64	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Tetrachloroethene [127-18-4]^	0.76	U	ug/L	1	0.76	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Toluene [108-88-3]^	0.72	U	ug/L	1	0.72	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
trans-1,2-Dichloroethene [156-60-5]^	0.73	U	ug/L	1	0.73	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
trans-1,3-Dichloropropene [10061-02-6]^	0.73	U	ug/L	1	0.73	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Trichloroethene [79-01-6]^	0.89	U	ug/L	1	0.89	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Trichlorofluoromethane [75-69-4]^	0.94	U	ug/L	1	0.94	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Vinyl chloride [75-01-4]^	0.71	U	ug/L	1	0.71	1.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Xylenes (Total) [1330-20-7]^	1.3	U	ug/L	1	1.3	2.0	4L21004	EPA 8260B	12/21/14 13:23	JFL	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
4-Bromofluorobenzene	51	1	50.0	101 %	41-142	4L21004	EPA 8260B	12/21/14 13:23	JFL		
Dibromofluoromethane	54	1	50.0	108 %	53-146	4L21004	EPA 8260B	12/21/14 13:23	JFL		
Toluene-d8	51	1	50.0	103 %	41-146	4L21004	EPA 8260B	12/21/14 13:23	JFL		

**Tentatively Identified Compounds by Volatile GCMS**

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Tentatively Identified Compounds	0.0		ug/L	1			4L21004	EPA 8260B	12/21/14 13:23	JFL	

**Semivolatile Organic Compounds by GCMS**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,2,4-Trichlorobenzene [120-82-1]^	3.3	U	ug/L	1	3.3	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
1,2-Dichlorobenzene [95-50-1]^	3.2	U	ug/L	1	3.2	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
1,3-Dichlorobenzene [541-73-1]^	3.4	U	ug/L	1	3.4	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
1,4-Dichlorobenzene [106-46-7]^	3.2	U	ug/L	1	3.2	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
1-Methylnaphthalene [90-12-0]^	3.1	U	ug/L	1	3.1	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
2,4,5-Trichlorophenol [95-95-4]^	3.9	U	ug/L	1	3.9	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
2,4,6-Trichlorophenol [88-06-2]^	6.4	U	ug/L	1	6.4	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
2,4-Dichlorophenol [120-83-2]^	6.5	U	ug/L	1	6.5	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
2,4-Dimethylphenol [105-67-9]^	6.4	U	ug/L	1	6.4	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
2,4-Dinitrophenol [51-28-5]^	7.7	U	ug/L	1	7.7	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
2,4-Dinitrotoluene [121-14-2]^	3.2	U	ug/L	1	3.2	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
2,6-Dinitrotoluene [606-20-2]^	2.9	U	ug/L	1	2.9	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
2-Chloronaphthalene [91-58-7]^	3.2	U	ug/L	1	3.2	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
2-Chlorophenol [95-57-8]^	7.4	U	ug/L	1	7.4	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
2-Methyl-4,6-dinitrophenol [534-52-1]^	6.0	U	ug/L	1	6.0	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	QL-02, Q

**ANALYTICAL RESULTS**

**Description:** TMW-1  
**Matrix:** Ground Water  
**Project:** I-4 Level II

**Lab Sample ID:** A407258-01  
**Sampled:** 12/12/14 08:44  
**Sampled By:** Jerry Governale

**Received:** 12/12/14 15:33  
**Work Order:** A407258

**Semivolatile Organic Compounds by GCMS**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2-Methylnaphthalene [91-57-6]^	3.8	U	ug/L	1	3.8	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
2-Methylphenol [95-48-7]^	3.5	U	ug/L	1	3.5	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
2-Nitroaniline [88-74-4]^	3.3	U	ug/L	1	3.3	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	QL-02, QV-01, Q
2-Nitrophenol [88-75-5]^	5.2	U	ug/L	1	5.2	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
3 & 4-Methylphenol [108-39-4/106-44-5]^	8.2	U	ug/L	1	8.2	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
3,3'-Dichlorobenzidine [91-94-1]^	3.3	U	ug/L	1	3.3	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
3-Nitroaniline [99-09-2]^	3.3	U	ug/L	1	3.3	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
4-Bromophenyl-phenylether [101-55-3]^	3.3	U	ug/L	1	3.3	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
4-Chloro-3-methylphenol [59-50-7]^	7.3	U	ug/L	1	7.3	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
4-Chloroaniline [106-47-8]^	4.3	U	ug/L	1	4.3	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
4-Chlorophenyl-phenylether [7005-72-3]^	3.2	U	ug/L	1	3.2	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
4-Nitroaniline [100-01-6]^	3.2	U	ug/L	1	3.2	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	QL-02, Q
4-Nitrophenol [100-02-7]^	7.9	U	ug/L	1	7.9	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	QV-01, Q
Acenaphthene [83-32-9]^	3.0	U	ug/L	1	3.0	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Acenaphthylene [208-96-8]^	3.3	U	ug/L	1	3.3	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Anthracene [120-12-7]^	3.0	U	ug/L	1	3.0	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Benzidine [92-87-5]^	7.1	U	ug/L	1	7.1	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	QV-01, Q
Benzo(a)anthracene [56-55-3]^	3.2	U	ug/L	1	3.2	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Benzo(a)pyrene [50-32-8]^	3.1	U	ug/L	1	3.1	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Benzo(b)fluoranthene [205-99-2]^	3.4	U	ug/L	1	3.4	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Benzo(g,h,i)perylene [191-24-2]^	3.7	U	ug/L	1	3.7	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Benzo(k)fluoranthene [207-08-9]^	3.3	U	ug/L	1	3.3	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Benzoic acid [65-85-0]^	15	U	ug/L	1	15	50	4L23015	EPA 8270D	12/24/14 16:41	jfi	J-05, Q
Benzyl alcohol [100-51-6]^	3.9	U	ug/L	1	3.9	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Bis(2-chloroethoxy)methane [111-91-1]^	3.3	U	ug/L	1	3.3	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	QL-02, Q
Bis(2-chloroethyl)ether [111-44-4]^	3.8	U	ug/L	1	3.8	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Bis(2-chloroisopropyl)ether [108-60-1]^	3.5	U	ug/L	1	3.5	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	QL-02, QV-01, Q
Bis(2-ethylhexyl)phthalate [117-81-7]^	3.5	U	ug/L	1	3.5	5.0	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Butylbenzylphthalate [85-68-7]^	5.1	U	ug/L	1	5.1	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Chrysene [218-01-9]^	3.0	U	ug/L	1	3.0	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Dibenzo(a,h)anthracene [53-70-3]^	3.8	U	ug/L	1	3.8	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Dibenzofuran [132-64-9]^	2.8	U	ug/L	1	2.8	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Diethylphthalate [84-66-2]^	3.0	U	ug/L	1	3.0	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Dimethylphthalate [131-11-3]^	3.0	U	ug/L	1	3.0	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Di-n-butylphthalate [84-74-2]^	3.2	U	ug/L	1	3.2	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Di-n-octylphthalate [117-84-0]^	3.6	U	ug/L	1	3.6	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Fluoranthene [206-44-0]^	4.0	U	ug/L	1	4.0	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Fluorene [86-73-7]^	2.9	U	ug/L	1	2.9	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Hexachlorobenzene [118-74-1]^	3.0	U	ug/L	1	3.0	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Hexachlorobutadiene [87-68-3]^	4.1	U	ug/L	1	4.1	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Hexachlorocyclopentadiene [77-47-4]^	3.8	U	ug/L	1	3.8	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	J-05, Q
Hexachloroethane [67-72-1]^	3.0	U	ug/L	1	3.0	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q

**ANALYTICAL RESULTS**

**Description:** TMW-1  
**Matrix:** Ground Water  
**Project:** I-4 Level II

**Lab Sample ID:** A407258-01  
**Sampled:** 12/12/14 08:44  
**Sampled By:** Jerry Governale

**Received:** 12/12/14 15:33  
**Work Order:** A407258

**Semivolatile Organic Compounds by GCMS**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Indeno(1,2,3-cd)pyrene [193-39-5]^	4.1	U	ug/L	1	4.1	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Isophorone [78-59-1]^	4.5	U	ug/L	1	4.5	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	QV-01, Q
Naphthalene [91-20-3]^	3.6	U	ug/L	1	3.6	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Nitrobenzene [98-95-3]^	3.2	U	ug/L	1	3.2	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	QL-02, QV-01, Q
N-Nitrosodimethylamine [62-75-9]^	3.8	U	ug/L	1	3.8	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	QL-02, QV-01, Q
N-Nitroso-di-n-propylamine [621-64-7]^	4.5	U	ug/L	1	4.5	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	5.4	U	ug/L	1	5.4	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Pentachlorophenol [87-86-5]^	8.2	U	ug/L	1	8.2	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Phenanthrene [85-01-8]^	2.8	U	ug/L	1	2.8	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Phenol [108-95-2]^	5.6	U	ug/L	1	5.6	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Pyrene [129-00-0]^	4.1	U	ug/L	1	4.1	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Pyridine [110-86-1]^	3.5	U	ug/L	1	3.5	10	4L23015	EPA 8270D	12/24/14 16:41	jfi	QV-01, Q

**Surrogates**

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
2,4,6-Tribromophenol	40	1	50.0	80 %	47-128	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
2-Fluorobiphenyl	35	1	50.0	70 %	44-102	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
2-Fluorophenol	29	1	50.0	58 %	25-79	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Nitrobenzene-d5	44	1	50.0	88 %	43-112	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Phenol-d5	23	1	50.0	45 %	14-54	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q
Terphenyl-d14	59	1	50.0	117 %	65-122	4L23015	EPA 8270D	12/24/14 16:41	jfi	Q

**Tentatively Identified Compounds by Semivolatile GCMS**

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
<b>Tentatively Identified Compounds</b>	<b>0.0</b>		ug/L	1			4L23015	EPA 8270D	12/24/14 16:41	jfi	Q

**Semivolatile Organic Compounds by GCMS SIM**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1-Methylnaphthalene [90-12-0]^	0.047	U	ug/L	1	0.047	0.10	4L15018	EPA 8270D	12/19/14 17:10	jfi	
2-Methylnaphthalene [91-57-6]^	0.044	U	ug/L	1	0.044	0.10	4L15018	EPA 8270D	12/19/14 17:10	jfi	
Acenaphthene [83-32-9]^	0.037	U	ug/L	1	0.037	0.10	4L15018	EPA 8270D	12/19/14 17:10	jfi	
Acenaphthylene [208-96-8]^	0.036	U	ug/L	1	0.036	0.10	4L15018	EPA 8270D	12/19/14 17:10	jfi	
Anthracene [120-12-7]^	0.036	U	ug/L	1	0.036	0.10	4L15018	EPA 8270D	12/19/14 17:10	jfi	
Benzo(a)anthracene [56-55-3]^	0.037	U	ug/L	1	0.037	0.10	4L15018	EPA 8270D	12/19/14 17:10	jfi	
Benzo(a)pyrene [50-32-8]^	0.043	U	ug/L	1	0.043	0.10	4L15018	EPA 8270D	12/19/14 17:10	jfi	
Benzo(b)fluoranthene [205-99-2]^	0.059	U	ug/L	1	0.059	0.10	4L15018	EPA 8270D	12/19/14 17:10	jfi	
Benzo(g,h,i)perylene [191-24-2]^	0.040	U	ug/L	1	0.040	0.10	4L15018	EPA 8270D	12/19/14 17:10	jfi	
Benzo(k)fluoranthene [207-08-9]^	0.046	U	ug/L	1	0.046	0.10	4L15018	EPA 8270D	12/19/14 17:10	jfi	
Chrysene [218-01-9]^	0.051	U	ug/L	1	0.051	0.10	4L15018	EPA 8270D	12/19/14 17:10	jfi	
Dibenzo(a,h)anthracene [53-70-3]^	0.026	U	ug/L	1	0.026	0.10	4L15018	EPA 8270D	12/19/14 17:10	jfi	
Fluoranthene [206-44-0]^	0.051	U	ug/L	1	0.051	0.10	4L15018	EPA 8270D	12/19/14 17:10	jfi	
Fluorene [86-73-7]^	0.038	U	ug/L	1	0.038	0.10	4L15018	EPA 8270D	12/19/14 17:10	jfi	
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.037	U	ug/L	1	0.037	0.10	4L15018	EPA 8270D	12/19/14 17:10	jfi	

**ANALYTICAL RESULTS**

**Description:** TMW-1  
**Matrix:** Ground Water  
**Project:** I-4 Level II

**Lab Sample ID:** A407258-01  
**Sampled:** 12/12/14 08:44  
**Sampled By:** Jerry Governale

**Received:** 12/12/14 15:33  
**Work Order:** A407258

**Semivolatile Organic Compounds by GCMS SIM**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Naphthalene [91-20-3]^	0.046	I	ug/L	1	0.035	0.10	4L15018	EPA 8270D	12/19/14 17:10	jfi	
Phenanthrene [85-01-8]^	0.039	U	ug/L	1	0.039	0.10	4L15018	EPA 8270D	12/19/14 17:10	jfi	
Pyrene [129-00-0]^	0.048	U	ug/L	1	0.048	0.10	4L15018	EPA 8270D	12/19/14 17:10	jfi	
<b>Surrogates</b>											
<i>p</i> -Terphenyl	4.4	1	5.71	77 %	66-136		4L15018	EPA 8270D	12/19/14 17:10	jfi	

**Organochlorine Pesticides by GC**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.018	U	ug/L	1	0.018	0.050	4L16007	EPA 8081B	12/18/14 20:13	JJB	
4,4'-DDE [72-55-9]^	0.036	U	ug/L	1	0.036	0.050	4L16007	EPA 8081B	12/18/14 20:13	JJB	
4,4'-DDT [50-29-3]^	0.025	U	ug/L	1	0.025	0.050	4L16007	EPA 8081B	12/18/14 20:13	JJB	
Aldrin [309-00-2]^	0.032	U	ug/L	1	0.032	0.050	4L16007	EPA 8081B	12/18/14 20:13	JJB	
alpha-BHC [319-84-6]^	0.026	U	ug/L	1	0.026	0.050	4L16007	EPA 8081B	12/18/14 20:13	JJB	
beta-BHC [319-85-7]^	0.022	U	ug/L	1	0.022	0.050	4L16007	EPA 8081B	12/18/14 20:13	JJB	
Chlordane (tech) [12789-03-6]^	0.32	U	ug/L	1	0.32	0.50	4L16007	EPA 8081B	12/18/14 20:13	JJB	
Chlordane-alpha [5103-71-9]^	0.022	U	ug/L	1	0.022	0.050	4L16007	EPA 8081B	12/18/14 20:13	JJB	
Chlordane-gamma [5566-34-7]^	0.018	U	ug/L	1	0.018	0.050	4L16007	EPA 8081B	12/18/14 20:13	JJB	
delta-BHC [319-86-8]^	0.019	U	ug/L	1	0.019	0.050	4L16007	EPA 8081B	12/18/14 20:13	JJB	
Dieldrin [60-57-1]^	0.017	U	ug/L	1	0.017	0.050	4L16007	EPA 8081B	12/18/14 20:13	JJB	
Endosulfan I [959-98-8]^	0.016	U	ug/L	1	0.016	0.050	4L16007	EPA 8081B	12/18/14 20:13	JJB	
Endosulfan II [33213-65-9]^	0.017	U	ug/L	1	0.017	0.050	4L16007	EPA 8081B	12/18/14 20:13	JJB	
Endosulfan sulfate [1031-07-8]^	0.016	U	ug/L	1	0.016	0.050	4L16007	EPA 8081B	12/18/14 20:13	JJB	
Endrin [72-20-8]^	0.014	U	ug/L	1	0.014	0.050	4L16007	EPA 8081B	12/18/14 20:13	JJB	
Endrin aldehyde [7421-93-4]^	0.020	U	ug/L	1	0.020	0.050	4L16007	EPA 8081B	12/18/14 20:13	JJB	
Endrin ketone [53494-70-5]^	0.017	U	ug/L	1	0.017	0.050	4L16007	EPA 8081B	12/18/14 20:13	JJB	
gamma-BHC [58-89-9]^	0.020	U	ug/L	1	0.020	0.050	4L16007	EPA 8081B	12/18/14 20:13	JJB	
Heptachlor [76-44-8]^	0.018	U	ug/L	1	0.018	0.050	4L16007	EPA 8081B	12/18/14 20:13	JJB	
Heptachlor epoxide [1024-57-3]^	0.018	U	ug/L	1	0.018	0.050	4L16007	EPA 8081B	12/18/14 20:13	JJB	
Isodrin [465-73-6]^	0.030	U	ug/L	1	0.030	0.050	4L16007	EPA 8081B	12/18/14 20:13	JJB	
Methoxychlor [72-43-5]^	0.018	U	ug/L	1	0.018	0.050	4L16007	EPA 8081B	12/18/14 20:13	JJB	
Mirex [2385-85-5]^	0.034	U	ug/L	1	0.034	0.050	4L16007	EPA 8081B	12/18/14 20:13	JJB	
Toxaphene [8001-35-2]^	0.48	U	ug/L	1	0.48	0.50	4L16007	EPA 8081B	12/18/14 20:13	JJB	
<b>Surrogates</b>											
2,4,5,6-TCMX	0.93	1	1.00	93 %	38-142		4L16007	EPA 8081B	12/18/14 20:13	JJB	
Decachlorobiphenyl	1.0	1	1.00	100 %	34-159		4L16007	EPA 8081B	12/18/14 20:13	JJB	

**Polychlorinated Biphenyls by GC**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9]^	0.49	U	ug/L	1	0.49	0.50	4L16008	EPA 8082A	12/22/14 09:57	JJB	
PCB-1221 [11104-28-2]^	0.46	U	ug/L	1	0.46	0.50	4L16008	EPA 8082A	12/22/14 09:57	JJB	
PCB-1232 [11141-16-5]^	0.47	U	ug/L	1	0.47	0.50	4L16008	EPA 8082A	12/22/14 09:57	JJB	
PCB-1248 [12672-29-6]^	0.49	U	ug/L	1	0.49	0.50	4L16008	EPA 8082A	12/22/14 09:57	JJB	
PCB-1254 [11097-69-1]^	0.50	U	ug/L	1	0.50	0.50	4L16008	EPA 8082A	12/22/14 09:57	JJB	
PCB-1260 [11096-82-5]^	0.48	U	ug/L	1	0.48	0.50	4L16008	EPA 8082A	12/22/14 09:57	JJB	

**ANALYTICAL RESULTS**

**Description:** TMW-1  
**Matrix:** Ground Water  
**Project:** I-4 Level II

**Lab Sample ID:** A407258-01  
**Sampled:** 12/12/14 08:44  
**Sampled By:** Jerry Governale

**Received:** 12/12/14 15:33  
**Work Order:** A407258

**Polychlorinated Biphenyls by GC**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
2,4,5,6-TCMX	0.93	1	1.00	93 %	38-142	4L16008	EPA 8082A	12/22/14 09:57	JJB		
Decachlorobiphenyl	0.65	1	1.00	65 %	34-159	4L16008	EPA 8082A	12/22/14 09:57	JJB		

**FL Petroleum Range Organics**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
TPH (C8-C40)^	0.10	U	mg/L	1	0.10	0.17	4L15045	FL-PRO	12/18/14 22:56	JJB	
n-Nonatriacontane	0.098	1	0.103	95 %	36-144	4L15045	FL-PRO	12/18/14 22:56	JJB		
o-Terphenyl	0.056	1	0.0513	109 %	39-156	4L15045	FL-PRO	12/18/14 22:56	JJB		

**Metals by EPA 6000/7000 Series Methods**

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6]^	0.0360	U	ug/L	1	0.0360	0.200	4L18001	EPA 7470A	12/19/14 10:46	ACV	

**Metals (total recoverable) by EPA 6000/7000 Series Methods**

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2]^	7.12	U	ug/L	1	7.12	10.0	4L15003	EPA 6010C	12/16/14 12:17	ACV	
Barium [7440-39-3]^	5.67	I	ug/L	1	0.630	10.0	4L15003	EPA 6010C	12/16/14 12:17	ACV	
Cadmium [7440-43-9]^	0.170	U	ug/L	1	0.170	1.00	4L15003	EPA 6010C	12/16/14 12:17	ACV	
Chromium [7440-47-3]^	1.30	U	ug/L	1	1.30	10.0	4L15003	EPA 6010C	12/16/14 12:17	ACV	
Lead [7439-92-1]^	2.20	U	ug/L	1	2.20	10.0	4L15003	EPA 6010C	12/16/14 12:17	ACV	
Selenium [7782-49-2]^	6.60	U	ug/L	1	6.60	40.0	4L15003	EPA 6010C	12/16/14 12:17	ACV	
Silver [7440-22-4]^	1.20	U	ug/L	1	1.20	10.0	4L15003	EPA 6010C	12/16/14 12:17	ACV	

**ANALYTICAL RESULTS**

**Description:** SS-1

**Lab Sample ID:** A407258-02

**Received:** 12/12/14 15:33

**Matrix:** Soil

**Sampled:** 12/12/14 09:45

**Work Order:** A407258

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 86.97

**Volatile Organic Compounds by GCMS**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
1,1,1-Trichloroethane [71-55-6]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
1,1,2-Trichloroethane [79-00-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
1,1-Dichloroethane [75-34-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
1,1-Dichloroethene [75-35-4]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
1,1-Dichloropropene [563-58-6]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
1,2,3-Trichlorobenzene [87-61-6]^	0.0010	U	mg/kg dry	1	0.0010	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
1,2,3-Trichloropropane [96-18-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
1,2,4-Trichlorobenzene [120-82-1]^	0.0010	U	mg/kg dry	1	0.0010	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
1,2,4-Trimethylbenzene [95-63-6]^	0.0008	U	mg/kg dry	1	0.0008	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
1,2-Dibromoethane [106-93-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
1,2-Dichlorobenzene [95-50-1]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
1,2-Dichloroethane [107-06-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
1,2-Dichloropropane [78-87-5]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
1,3,5-Trimethylbenzene [108-67-8]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
1,3-Dichlorobenzene [541-73-1]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
1,3-Dichloropropane [142-28-9]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
1,4-Dichlorobenzene [106-46-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
2,2-Dichloropropane [594-20-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
2-Butanone [78-93-3]^	0.0021	U	mg/kg dry	1	0.0021	0.0057	4L15015	EPA 8260B	12/15/14 18:14	KKW	
2-Chloroethyl Vinyl Ether [110-75-8]^	0.0020	U	mg/kg dry	1	0.0020	0.0057	4L15015	EPA 8260B	12/15/14 18:14	KKW	
2-Chlorotoluene [95-49-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
2-Hexanone [591-78-6]^	0.0010	U	mg/kg dry	1	0.0010	0.0057	4L15015	EPA 8260B	12/15/14 18:14	KKW	
4-Chlorotoluene [106-43-4]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
4-Isopropyltoluene [99-87-6]^	0.0009	U	mg/kg dry	1	0.0009	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
4-Methyl-2-pentanone [108-10-1]^	0.0016	U	mg/kg dry	1	0.0016	0.0057	4L15015	EPA 8260B	12/15/14 18:14	KKW	
<b>Acetone [67-64-1]^</b>	<b>0.025</b>	<b>V</b>	<b>mg/kg dry</b>	<b>1</b>	<b>0.0020</b>	<b>0.0057</b>	<b>4L15015</b>	<b>EPA 8260B</b>	<b>12/15/14 18:14</b>	<b>KKW</b>	<b>J-01, O-01</b>
Benzene [71-43-2]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Bromobenzene [108-86-1]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Bromochloromethane [74-97-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Bromodichloromethane [75-27-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Bromoform [75-25-2]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Bromomethane [74-83-9]^	0.0010	U	mg/kg dry	1	0.0010	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Carbon disulfide [75-15-0]^	0.0024	U	mg/kg dry	1	0.0024	0.0057	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Carbon Tetrachloride [56-23-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Chlorobenzene [108-90-7]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Chloroethane [75-00-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Chloroform [67-66-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Chloromethane [74-87-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
cis-1,2-Dichloroethene [156-59-2]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
cis-1,3-Dichloropropene [10061-01-5]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Dibromochloromethane [124-48-1]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Dibromomethane [74-95-3]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Dichlorodifluoromethane [75-71-8]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Ethylbenzene [100-41-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	

**ANALYTICAL RESULTS**

**Description:** SS-1

**Lab Sample ID:** A407258-02

**Received:** 12/12/14 15:33

**Matrix:** Soil

**Sampled:** 12/12/14 09:45

**Work Order:** A407258

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 86.97

**Volatile Organic Compounds by GCMS**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexachlorobutadiene [87-68-3]^	0.0010	U	mg/kg dry	1	0.0010	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Isopropylbenzene [98-82-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
m,p-Xylenes [108-38-3/106-42-3]^	0.0011	U	mg/kg dry	1	0.0011	0.0023	4L15015	EPA 8260B	12/15/14 18:14	KKW	
<b>Methylene Chloride [75-09-2]^</b>	<b>0.0017</b>	IV	mg/kg dry	1	0.0008	0.0023	4L15015	EPA 8260B	12/15/14 18:14	KKW	J-01, O-01
Methyl-tert-Butyl Ether [1634-04-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Naphthalene [91-20-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
n-Butyl Benzene [104-51-8]^	0.0010	U	mg/kg dry	1	0.0010	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
n-Propyl Benzene [103-65-1]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
o-Xylene [95-47-6]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
sec-Butylbenzene [135-98-8]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Styrene [100-42-5]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
tert-Butylbenzene [98-06-6]^	0.0007	U	mg/kg dry	1	0.0007	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Tetrachloroethene [127-18-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Toluene [108-88-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
trans-1,2-Dichloroethene [156-60-5]^	0.0008	U	mg/kg dry	1	0.0008	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
trans-1,3-Dichloropropene [10061-02-6]^	0.0004	U	mg/kg dry	1	0.0004	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Trichloroethene [79-01-6]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Trichlorofluoromethane [75-69-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Vinyl chloride [75-01-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0011	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Xylenes (Total) [1330-20-7]^	0.0011	U	mg/kg dry	1	0.0011	0.0023	4L15015	EPA 8260B	12/15/14 18:14	KKW	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	48	1	50.0	97 %	71-126	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Dibromofluoromethane	53	1	50.0	107 %	72-133	4L15015	EPA 8260B	12/15/14 18:14	KKW	
Toluene-d8	54	1	50.0	109 %	80-123	4L15015	EPA 8260B	12/15/14 18:14	KKW	

**Semivolatile Organic Compounds by GCMS**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,2,4-Trichlorobenzene [120-82-1]^	0.13	U	mg/kg dry	1	0.13	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
1,2-Dichlorobenzene [95-50-1]^	0.14	U	mg/kg dry	1	0.14	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
1,3-Dichlorobenzene [541-73-1]^	0.14	U	mg/kg dry	1	0.14	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
1,4-Dichlorobenzene [106-46-7]^	0.11	U	mg/kg dry	1	0.11	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
1-Methylnaphthalene [90-12-0]^	0.11	U	mg/kg dry	1	0.11	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
2,4,5-Trichlorophenol [95-95-4]^	0.077	U	mg/kg dry	1	0.077	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
2,4,6-Trichlorophenol [88-06-2]^	0.17	U	mg/kg dry	1	0.17	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
2,4-Dichlorophenol [120-83-2]^	0.29	U	mg/kg dry	1	0.29	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
2,4-Dimethylphenol [105-67-9]^	0.26	U	mg/kg dry	1	0.26	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
2,4-Dinitrophenol [51-28-5]^	0.10	U	mg/kg dry	1	0.10	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
2,4-Dinitrotoluene [121-14-2]^	0.18	U	mg/kg dry	1	0.18	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
2,6-Dinitrotoluene [606-20-2]^	0.21	U	mg/kg dry	1	0.21	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
2-Chloronaphthalene [91-58-7]^	0.11	U	mg/kg dry	1	0.11	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
2-Chlorophenol [95-57-8]^	0.26	U	mg/kg dry	1	0.26	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
2-Methyl-4,6-dinitrophenol [534-52-1]^	0.32	U	mg/kg dry	1	0.32	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
2-Methylnaphthalene [91-57-6]^	0.14	U	mg/kg dry	1	0.14	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
2-Methylphenol [95-48-7]^	0.13	U	mg/kg dry	1	0.13	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
2-Nitroaniline [88-74-4]^	0.098	U	mg/kg dry	1	0.098	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	QL-02, QV-01

**ANALYTICAL RESULTS**

**Description:** SS-1

**Lab Sample ID:** A407258-02

**Received:** 12/12/14 15:33

**Matrix:** Soil

**Sampled:** 12/12/14 09:45

**Work Order:** A407258

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 86.97

**Semivolatile Organic Compounds by GCMS**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2-Nitrophenol [88-75-5]^	0.30	U	mg/kg dry	1	0.30	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
3 & 4-Methylphenol [108-39-4/106-44-5]^	0.29	U	mg/kg dry	1	0.29	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
3,3'-Dichlorobenzidine [91-94-1]^	0.24	U	mg/kg dry	1	0.24	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
3-Nitroaniline [99-09-2]^	0.092	U	mg/kg dry	1	0.092	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
4-Bromophenyl-phenylether [101-55-3]^	0.15	U	mg/kg dry	1	0.15	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
4-Chloro-3-methylphenol [59-50-7]^	0.32	U	mg/kg dry	1	0.32	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	QL-02
4-Chloroaniline [106-47-8]^	0.075	U	mg/kg dry	1	0.075	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
4-Chlorophenyl-phenylether [7005-72-3]^	0.15	U	mg/kg dry	1	0.15	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
4-Nitroaniline [100-01-6]^	0.30	U	mg/kg dry	1	0.30	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
4-Nitrophenol [100-02-7]^	0.15	U	mg/kg dry	1	0.15	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	QL-02, QV-01
Acenaphthene [83-32-9]^	0.15	U	mg/kg dry	1	0.15	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Acenaphthylene [208-96-8]^	0.14	U	mg/kg dry	1	0.14	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Anthracene [120-12-7]^	0.17	U	mg/kg dry	1	0.17	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Benzidine [92-87-5]^	0.099	U	mg/kg dry	1	0.099	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	J-02, QV-01
Benzo(a)anthracene [56-55-3]^	0.15	U	mg/kg dry	1	0.15	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Benzo(a)pyrene [50-32-8]^	0.090	U	mg/kg dry	1	0.090	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Benzo(b)fluoranthene [205-99-2]^	0.13	U	mg/kg dry	1	0.13	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Benzo(g,h,i)perylene [191-24-2]^	0.18	U	mg/kg dry	1	0.18	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Benzo(k)fluoranthene [207-08-9]^	0.13	U	mg/kg dry	1	0.13	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Benzoic acid [65-85-0]^	0.55	U	mg/kg dry	1	0.55	2.0	4L22002	EPA 8270D	12/24/14 19:30	jfi	J-05
Benzyl alcohol [100-51-6]^	0.18	U	mg/kg dry	1	0.18	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Bis(2-chloroethoxy)methane [111-91-1]^	0.17	U	mg/kg dry	1	0.17	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	QL-02
Bis(2-chloroethyl)ether [111-44-4]^	0.16	U	mg/kg dry	1	0.16	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Bis(2-chloroisopropyl)ether [108-60-1]^	0.11	U	mg/kg dry	1	0.11	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	QL-02, QV-01
Bis(2-ethylhexyl)phthalate [117-81-7]^	0.15	U	mg/kg dry	1	0.15	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Butylbenzylphthalate [85-68-7]^	0.16	U	mg/kg dry	1	0.16	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Chrysene [218-01-9]^	0.15	U	mg/kg dry	1	0.15	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Dibenzo(a,h)anthracene [53-70-3]^	0.16	U	mg/kg dry	1	0.16	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Dibenzofuran [132-64-9]^	0.15	U	mg/kg dry	1	0.15	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Diethylphthalate [84-66-2]^	0.15	U	mg/kg dry	1	0.15	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Dimethylphthalate [131-11-3]^	0.15	U	mg/kg dry	1	0.15	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Di-n-butylphthalate [84-74-2]^	0.15	U	mg/kg dry	1	0.15	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Di-n-octylphthalate [117-84-0]^	0.15	U	mg/kg dry	1	0.15	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Fluoranthene [206-44-0]^	0.13	U	mg/kg dry	1	0.13	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Fluorene [86-73-7]^	0.16	U	mg/kg dry	1	0.16	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Hexachlorobenzene [118-74-1]^	0.14	U	mg/kg dry	1	0.14	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Hexachlorobutadiene [87-68-3]^	0.15	U	mg/kg dry	1	0.15	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Hexachlorocyclopentadiene [77-47-4]^	0.17	U	mg/kg dry	1	0.17	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	J-05
Hexachloroethane [67-72-1]^	0.11	U	mg/kg dry	1	0.11	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.16	U	mg/kg dry	1	0.16	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Isophorone [78-59-1]^	0.20	U	mg/kg dry	1	0.20	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	QL-02, QV-01
Naphthalene [91-20-3]^	0.14	U	mg/kg dry	1	0.14	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Nitrobenzene [98-95-3]^	0.17	U	mg/kg dry	1	0.17	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	QL-02, QV-01
N-Nitrosodimethylamine [62-75-9]^	0.14	U	mg/kg dry	1	0.14	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	QL-02, QV-01

**ANALYTICAL RESULTS**

**Description:** SS-1

**Lab Sample ID:** A407258-02

**Received:** 12/12/14 15:33

**Matrix:** Soil

**Sampled:** 12/12/14 09:45

**Work Order:** A407258

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 86.97

**Semivolatile Organic Compounds by GCMS**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
N-Nitroso-di-n-propylamine [621-64-7]^	0.17	U	mg/kg dry	1	0.17	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	0.26	U	mg/kg dry	1	0.26	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Pentachlorophenol [87-86-5]^	0.24	U	mg/kg dry	1	0.24	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Phenanthrene [85-01-8]^	0.15	U	mg/kg dry	1	0.15	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Phenol [108-95-2]^	0.11	U	mg/kg dry	1	0.11	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Pyrene [129-00-0]^	0.13	U	mg/kg dry	1	0.13	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	QL-02
Pyridine [110-86-1]^	0.17	U	mg/kg dry	1	0.17	0.38	4L22002	EPA 8270D	12/24/14 19:30	jfi	QV-01

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
2,4,6-Tribromophenol	2.3	1	3.82	61 %	23-137	4L22002	EPA 8270D	12/24/14 19:30	jfi	
2-Fluorobiphenyl	2.2	1	3.82	58 %	29-119	4L22002	EPA 8270D	12/24/14 19:30	jfi	
2-Fluorophenol	3.2	1	3.82	84 %	20-124	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Nitrobenzene-d5	2.9	1	3.82	76 %	17-126	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Phenol-d5	3.5	1	3.82	93 %	15-131	4L22002	EPA 8270D	12/24/14 19:30	jfi	
Terphenyl-d14	3.1	1	3.82	81 %	60-120	4L22002	EPA 8270D	12/24/14 19:30	jfi	

**Semivolatile Organic Compounds by GCMS SIM**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1-Methylnaphthalene [90-12-0]^	0.022	U	mg/kg dry	1	0.022	0.040	4L17037	EPA 8270D	12/18/14 17:35	jfi	
2-Methylnaphthalene [91-57-6]^	0.021	U	mg/kg dry	1	0.021	0.040	4L17037	EPA 8270D	12/18/14 17:35	jfi	
Acenaphthene [83-32-9]^	0.017	U	mg/kg dry	1	0.017	0.040	4L17037	EPA 8270D	12/18/14 17:35	jfi	
Acenaphthylene [208-96-8]^	0.021	U	mg/kg dry	1	0.021	0.040	4L17037	EPA 8270D	12/18/14 17:35	jfi	
Anthracene [120-12-7]^	0.016	U	mg/kg dry	1	0.016	0.040	4L17037	EPA 8270D	12/18/14 17:35	jfi	
Benzo(a)anthracene [56-55-3]^	0.016	U	mg/kg dry	1	0.016	0.040	4L17037	EPA 8270D	12/18/14 17:35	jfi	
Benzo(a)pyrene [50-32-8]^	0.017	U	mg/kg dry	1	0.017	0.040	4L17037	EPA 8270D	12/18/14 17:35	jfi	
Benzo(b)fluoranthene [205-99-2]^	0.020	U	mg/kg dry	1	0.020	0.040	4L17037	EPA 8270D	12/18/14 17:35	jfi	
<b>Benzo(g,h,i)perylene [191-24-2]^</b>	<b>0.021</b>	<b>I</b>	mg/kg dry	1	0.017	0.040	4L17037	EPA 8270D	12/18/14 17:35	jfi	
Benzo(k)fluoranthene [207-08-9]^	0.022	U	mg/kg dry	1	0.022	0.040	4L17037	EPA 8270D	12/18/14 17:35	jfi	
Chrysene [218-01-9]^	0.014	U	mg/kg dry	1	0.014	0.040	4L17037	EPA 8270D	12/18/14 17:35	jfi	
<b>Dibenzo(a,h)anthracene [53-70-3]^</b>	<b>0.025</b>	<b>I</b>	mg/kg dry	1	0.018	0.040	4L17037	EPA 8270D	12/18/14 17:35	jfi	
Fluoranthene [206-44-0]^	0.020	U	mg/kg dry	1	0.020	0.040	4L17037	EPA 8270D	12/18/14 17:35	jfi	
Fluorene [86-73-7]^	0.020	U	mg/kg dry	1	0.020	0.040	4L17037	EPA 8270D	12/18/14 17:35	jfi	
<b>Indeno(1,2,3-cd)pyrene [193-39-5]^</b>	<b>0.025</b>	<b>I</b>	mg/kg dry	1	0.017	0.040	4L17037	EPA 8270D	12/18/14 17:35	jfi	
Naphthalene [91-20-3]^	0.021	U	mg/kg dry	1	0.021	0.040	4L17037	EPA 8270D	12/18/14 17:35	jfi	
Phenanthrene [85-01-8]^	0.017	U	mg/kg dry	1	0.017	0.040	4L17037	EPA 8270D	12/18/14 17:35	jfi	
Pyrene [129-00-0]^	0.018	U	mg/kg dry	1	0.018	0.040	4L17037	EPA 8270D	12/18/14 17:35	jfi	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
p-Terphenyl	2.0	1	2.30	85 %	50-150	4L17037	EPA 8270D	12/18/14 17:35	jfi	

**ANALYTICAL RESULTS**

**Description:** SS-1

**Lab Sample ID:** A407258-02

**Received:** 12/12/14 15:33

**Matrix:** Soil

**Sampled:** 12/12/14 09:45

**Work Order:** A407258

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 86.97

**Organochlorine Pesticides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.0011	U	mg/kg dry	2	0.0011	0.0039	4L18025	EPA 8081B	12/19/14 13:34	JJB	
4,4'-DDE [72-55-9]^	0.0012	U	mg/kg dry	2	0.0012	0.0039	4L18025	EPA 8081B	12/19/14 13:34	JJB	QV-01, QL-02
4,4'-DDT [50-29-3]^	0.0015	U	mg/kg dry	2	0.0015	0.0039	4L18025	EPA 8081B	12/19/14 13:34	JJB	QM-11
Aldrin [309-00-2]^	0.0012	U	mg/kg dry	2	0.0012	0.0039	4L18025	EPA 8081B	12/19/14 13:34	JJB	QV-01
alpha-BHC [319-84-6]^	0.0013	U	mg/kg dry	2	0.0013	0.0039	4L18025	EPA 8081B	12/19/14 13:34	JJB	QM-11
beta-BHC [319-85-7]^	0.0023	U	mg/kg dry	2	0.0023	0.0039	4L18025	EPA 8081B	12/19/14 13:34	JJB	
Chlordane (tech) [12789-03-6]^	0.019	U	mg/kg dry	2	0.019	0.076	4L18025	EPA 8081B	12/19/14 13:34	JJB	
Chlordane-alpha [5103-71-9]^	0.0010	U	mg/kg dry	2	0.0010	0.0039	4L18025	EPA 8081B	12/19/14 13:34	JJB	
Chlordane-gamma [5566-34-7]^	0.0010	U	mg/kg dry	2	0.0010	0.0039	4L18025	EPA 8081B	12/19/14 13:34	JJB	
delta-BHC [319-86-8]^	0.0011	U	mg/kg dry	2	0.0011	0.0039	4L18025	EPA 8081B	12/19/14 13:34	JJB	QM-11
Dieldrin [60-57-1]^	0.0010	U	mg/kg dry	2	0.0010	0.0039	4L18025	EPA 8081B	12/19/14 13:34	JJB	
Endosulfan I [959-98-8]^	0.00090	U	mg/kg dry	2	0.00090	0.0039	4L18025	EPA 8081B	12/19/14 13:34	JJB	
Endosulfan II [33213-65-9]^	0.0011	U	mg/kg dry	2	0.0011	0.0039	4L18025	EPA 8081B	12/19/14 13:34	JJB	
Endosulfan sulfate [1031-07-8]^	0.0011	U	mg/kg dry	2	0.0011	0.0039	4L18025	EPA 8081B	12/19/14 13:34	JJB	
Endrin [72-20-8]^	0.0017	U	mg/kg dry	2	0.0017	0.0039	4L18025	EPA 8081B	12/19/14 13:34	JJB	
Endrin aldehyde [7421-93-4]^	0.0019	U	mg/kg dry	2	0.0019	0.0039	4L18025	EPA 8081B	12/19/14 13:34	JJB	
Endrin ketone [53494-70-5]^	0.0011	U	mg/kg dry	2	0.0011	0.0039	4L18025	EPA 8081B	12/19/14 13:34	JJB	
gamma-BHC [58-89-9]^	0.0014	U	mg/kg dry	2	0.0014	0.0039	4L18025	EPA 8081B	12/19/14 13:34	JJB	
Heptachlor [76-44-8]^	0.0014	U	mg/kg dry	2	0.0014	0.0039	4L18025	EPA 8081B	12/19/14 13:34	JJB	
Heptachlor epoxide [1024-57-3]^	0.0011	U	mg/kg dry	2	0.0011	0.0039	4L18025	EPA 8081B	12/19/14 13:34	JJB	
Isodrin [465-73-6]^	0.0014	U	mg/kg dry	2	0.0014	0.0039	4L18025	EPA 8081B	12/19/14 13:34	JJB	QL-02
Methoxychlor [72-43-5]^	0.0020	U	mg/kg dry	2	0.0020	0.0039	4L18025	EPA 8081B	12/19/14 13:34	JJB	
Mirex [2385-85-5]^	0.0025	U	mg/kg dry	2	0.0025	0.0039	4L18025	EPA 8081B	12/19/14 13:34	JJB	
Toxaphene [8001-35-2]^	0.039	U	mg/kg dry	2	0.039	0.076	4L18025	EPA 8081B	12/19/14 13:34	JJB	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
2,4,5,6-TCMX	0.039	2	0.0383	102 %	20-137	4L18025	EPA 8081B	12/19/14 13:34	JJB	
Decachlorobiphenyl	0.037	2	0.0383	96 %	13-183	4L18025	EPA 8081B	12/19/14 13:34	JJB	

**Polychlorinated Biphenyls by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9]^	0.016	U	mg/kg dry	1	0.016	0.020	4L18027	EPA 8082A	12/19/14 09:09	JJB	
PCB-1221 [11104-28-2]^	0.016	U	mg/kg dry	1	0.016	0.020	4L18027	EPA 8082A	12/19/14 09:09	JJB	
PCB-1232 [11141-16-5]^	0.016	U	mg/kg dry	1	0.016	0.020	4L18027	EPA 8082A	12/19/14 09:09	JJB	
PCB-1248 [12672-29-6]^	0.0072	U	mg/kg dry	1	0.0072	0.020	4L18027	EPA 8082A	12/19/14 09:09	JJB	
PCB-1254 [11097-69-1]^	0.018	U	mg/kg dry	1	0.018	0.020	4L18027	EPA 8082A	12/19/14 09:09	JJB	
PCB-1260 [11096-82-5]^	0.013	U	mg/kg dry	1	0.013	0.020	4L18027	EPA 8082A	12/19/14 09:09	JJB	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
2,4,5,6-TCMX	0.049	1	0.0383	128 %	20-137	4L18027	EPA 8082A	12/19/14 09:09	JJB	
Decachlorobiphenyl	0.038	1	0.0383	98 %	13-183	4L18027	EPA 8082A	12/19/14 09:09	JJB	

**ANALYTICAL RESULTS**

<b>Description:</b> SS-1	<b>Lab Sample ID:</b> A407258-02	<b>Received:</b> 12/12/14 15:33
<b>Matrix:</b> Soil	<b>Sampled:</b> 12/12/14 09:45	<b>Work Order:</b> A407258
<b>Project:</b> I-4 Level II	<b>Sampled By:</b> Jerry Governale	<b>% Solids:</b> 86.97

**FL Petroleum Range Organics**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
TPH (C8-C40)^	3.9	U	mg/kg dry	1	3.9	6.6	4L15017	FL-PRO	12/16/14 05:59	JJB	
<b>Surrogates</b>											
<i>n</i> -Nonatriacontane	4.3	1	3.78	113 %	41-129		4L15017	FL-PRO	12/16/14 05:59	JJB	
<i>o</i> -Terphenyl	1.8	1	1.89	97 %	45-135		4L15017	FL-PRO	12/16/14 05:59	JJB	

**Metals by EPA 6000/7000 Series Methods**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6]^	0.00448	U	mg/kg dry	1	0.00448	0.0115	4L17039	EPA 7471B	12/19/14 07:11	JAY	

**Metals by EPA 6000/7000 Series Methods**

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2]^	0.585	U	mg/kg dry	1	0.585	0.821	4L17001	EPA 6010C	12/18/14 13:04	ACV	
Barium [7440-39-3]^	<b>0.339</b>	I	mg/kg dry	1	0.0526	0.821	4L17001	EPA 6010C	12/18/14 13:04	ACV	
Cadmium [7440-43-9]^	0.0148	U	mg/kg dry	1	0.0148	0.0821	4L17001	EPA 6010C	12/18/14 13:04	ACV	
Chromium [7440-47-3]^	<b>0.555</b>	I	mg/kg dry	1	0.0509	0.821	4L17001	EPA 6010C	12/18/14 13:04	ACV	
Lead [7439-92-1]^	<b>0.322</b>	I	mg/kg dry	1	0.181	0.821	4L17001	EPA 6010C	12/18/14 13:04	ACV	
Selenium [7782-49-2]^	0.591	U	mg/kg dry	1	0.591	3.29	4L17001	EPA 6010C	12/18/14 13:04	ACV	
Silver [7440-22-4]^	0.118	U	mg/kg dry	1	0.118	0.821	4L17001	EPA 6010C	12/18/14 13:04	ACV	

**QUALITY CONTROL DATA**

**Volatile Organic Compounds by GCMS - Quality Control**

*Batch 4L15015 - EPA 5030B\_MS*

**Blank (4L15015-BLK1)**

Prepared: 12/15/2014 00:00 Analyzed: 12/15/2014 10:21

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
1,1,1,2-Tetrachloroethane	0.0004	U	0.0010	mg/kg wet							
1,1,1-Trichloroethane	0.0004	U	0.0010	mg/kg wet							
1,1,2,2-Tetrachloroethane	0.0003	U	0.0010	mg/kg wet							
1,1,2-Trichloroethane	0.0006	U	0.0010	mg/kg wet							
1,1-Dichloroethane	0.0006	U	0.0010	mg/kg wet							
1,1-Dichloroethene	0.0006	U	0.0010	mg/kg wet							
1,1-Dichloropropene	0.0005	U	0.0010	mg/kg wet							
1,2,3-Trichlorobenzene	0.0009	U	0.0010	mg/kg wet							
1,2,3-Trichloropropane	0.0003	U	0.0010	mg/kg wet							
1,2,4-Trichlorobenzene	0.0008	U	0.0010	mg/kg wet							
1,2,4-Trimethylbenzene	0.0007	U	0.0010	mg/kg wet							
1,2-Dibromo-3-chloropropane	0.0006	U	0.0010	mg/kg wet							
1,2-Dibromoethane	0.0003	U	0.0010	mg/kg wet							
1,2-Dichlorobenzene	0.0004	U	0.0010	mg/kg wet							
1,2-Dichloroethane	0.0003	U	0.0010	mg/kg wet							
1,2-Dichloropropane	0.0006	U	0.0010	mg/kg wet							
1,3,5-Trimethylbenzene	0.0006	U	0.0010	mg/kg wet							
1,3-Dichlorobenzene	0.0005	U	0.0010	mg/kg wet							
1,3-Dichloropropane	0.0004	U	0.0010	mg/kg wet							
1,4-Dichlorobenzene	0.0004	U	0.0010	mg/kg wet							
2,2-Dichloropropane	0.0004	U	0.0010	mg/kg wet							
2-Butanone	0.0018	U	0.0050	mg/kg wet							
2-Chloroethyl Vinyl Ether	0.0017	U	0.0050	mg/kg wet							
2-Chlorotoluene	0.0005	U	0.0010	mg/kg wet							
2-Hexanone	0.0009	U	0.0050	mg/kg wet							
4-Chlorotoluene	0.0006	U	0.0010	mg/kg wet							
4-Isopropyltoluene	0.0008	U	0.0010	mg/kg wet							
4-Methyl-2-pentanone	0.0014	U	0.0050	mg/kg wet							
<b>Acetone</b>	<b>0.0024</b>	<b>I</b>	0.0050	mg/kg wet							J-01, O-01

**QUALITY CONTROL DATA**

**Volatile Organic Compounds by GCMS - Quality Control**

*Batch 4L15015 - EPA 5030B\_MS - Continued*

**Blank (4L15015-BLK1) Continued**

Prepared: 12/15/2014 00:00 Analyzed: 12/15/2014 10:21

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Benzene	0.0004	U	0.0010	mg/kg wet							
Bromobenzene	0.0004	U	0.0010	mg/kg wet							
Bromochloromethane	0.0004	U	0.0010	mg/kg wet							
Bromodichloromethane	0.0004	U	0.0010	mg/kg wet							
Bromoform	0.0003	U	0.0010	mg/kg wet							
Bromomethane	0.0009	U	0.0010	mg/kg wet							
Carbon disulfide	0.0021	U	0.0050	mg/kg wet							
Carbon Tetrachloride	0.0006	U	0.0010	mg/kg wet							
Chlorobenzene	0.0005	U	0.0010	mg/kg wet							
Chloroethane	0.0005	U	0.0010	mg/kg wet							
Chloroform	0.0004	U	0.0010	mg/kg wet							
Chloromethane	0.0006	U	0.0010	mg/kg wet							
cis-1,2-Dichloroethene	0.0005	U	0.0010	mg/kg wet							
cis-1,3-Dichloropropene	0.0003	U	0.0010	mg/kg wet							
Dibromochloromethane	0.0003	U	0.0010	mg/kg wet							
Dibromomethane	0.0004	U	0.0010	mg/kg wet							
Dichlorodifluoromethane	0.0006	U	0.0010	mg/kg wet							
Ethylbenzene	0.0006	U	0.0010	mg/kg wet							
Hexachlorobutadiene	0.0009	U	0.0010	mg/kg wet							
Isopropylbenzene	0.0005	U	0.0010	mg/kg wet							
m,p-Xylenes	0.0010	U	0.0020	mg/kg wet							
<b>Methylene Chloride</b>	<b>0.0013</b>	<b>I</b>	0.0020	mg/kg wet							J-01, O-01
Methyl-tert-Butyl Ether	0.0003	U	0.0010	mg/kg wet							
Naphthalene	0.0006	U	0.0010	mg/kg wet							
n-Butyl Benzene	0.0009	U	0.0010	mg/kg wet							
n-Propyl Benzene	0.0006	U	0.0010	mg/kg wet							
o-Xylene	0.0005	U	0.0010	mg/kg wet							
sec-Butylbenzene	0.0006	U	0.0010	mg/kg wet							
Styrene	0.0004	U	0.0010	mg/kg wet							

**QUALITY CONTROL DATA**

**Volatile Organic Compounds by GCMS - Quality Control**

**Batch 4L15015 - EPA 5030B\_MS - Continued**

**Blank (4L15015-BLK1) Continued**

Prepared: 12/15/2014 00:00 Analyzed: 12/15/2014 10:21

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
tert-Butylbenzene	0.0006	U	0.0010	mg/kg wet							
Tetrachloroethene	0.0005	U	0.0010	mg/kg wet							
Toluene	0.0005	U	0.0010	mg/kg wet							
trans-1,2-Dichloroethene	0.0007	U	0.0010	mg/kg wet							
trans-1,3-Dichloropropene	0.0003	U	0.0010	mg/kg wet							
Trichloroethene	0.0005	U	0.0010	mg/kg wet							
Trichlorofluoromethane	0.0005	U	0.0010	mg/kg wet							
Vinyl chloride	0.0004	U	0.0010	mg/kg wet							
Xylenes (Total)	0.0010	U	0.0020	mg/kg wet							
<i>4-Bromofluorobenzene</i>	<i>47</i>			<i>ug/L</i>	<i>50.0</i>		<i>95</i>	<i>71-126</i>			
<i>Dibromofluoromethane</i>	<i>50</i>			<i>ug/L</i>	<i>50.0</i>		<i>99</i>	<i>72-133</i>			
<i>Toluene-d8</i>	<i>51</i>			<i>ug/L</i>	<i>50.0</i>		<i>102</i>	<i>80-123</i>			

**LCS (4L15015-BS1)**

Prepared: 12/15/2014 00:00 Analyzed: 12/15/2014 09:26

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
1,1-Dichloroethene	0.020		0.0010	mg/kg wet	0.0200		98	61-124			
Benzene	0.020		0.0010	mg/kg wet	0.0200		100	59-133			
Chlorobenzene	0.018		0.0010	mg/kg wet	0.0200		92	69-121			
Toluene	0.019		0.0010	mg/kg wet	0.0200		97	66-119			
Trichloroethene	0.020		0.0010	mg/kg wet	0.0200		100	71-122			
<i>4-Bromofluorobenzene</i>	<i>44</i>			<i>ug/L</i>	<i>50.0</i>		<i>87</i>	<i>71-126</i>			
<i>Dibromofluoromethane</i>	<i>43</i>			<i>ug/L</i>	<i>50.0</i>		<i>85</i>	<i>72-133</i>			
<i>Toluene-d8</i>	<i>46</i>			<i>ug/L</i>	<i>50.0</i>		<i>92</i>	<i>80-123</i>			

**LCS Dup (4L15015-BSD1)**

Prepared: 12/15/2014 00:00 Analyzed: 12/15/2014 09:54

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
1,1-Dichloroethene	0.019		0.0010	mg/kg wet	0.0200		95	61-124	3	23	
Benzene	0.020		0.0010	mg/kg wet	0.0200		100	59-133	0.1	19	
Chlorobenzene	0.017		0.0010	mg/kg wet	0.0200		84	69-121	9	18	
Toluene	0.019		0.0010	mg/kg wet	0.0200		93	66-119	4	21	
Trichloroethene	0.019		0.0010	mg/kg wet	0.0200		95	71-122	5	26	
<i>4-Bromofluorobenzene</i>	<i>42</i>			<i>ug/L</i>	<i>50.0</i>		<i>84</i>	<i>71-126</i>			
<i>Dibromofluoromethane</i>	<i>41</i>			<i>ug/L</i>	<i>50.0</i>		<i>82</i>	<i>72-133</i>			

**QUALITY CONTROL DATA**

**Volatile Organic Compounds by GCMS - Quality Control**

**Batch 4L15015 - EPA 5030B\_MS - Continued**

**LCS Dup (4L15015-BSD1) Continued**

Prepared: 12/15/2014 00:00 Analyzed: 12/15/2014 09:54

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Toluene-d8	47			ug/L	50.0		94	80-123			

**Matrix Spike (4L15015-MS1)**

Prepared: 12/15/2014 00:00 Analyzed: 12/15/2014 18:42

Source: A407124-07

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	0.021		0.0012	mg/kg dry	0.0233	0.0007 U	89	61-124			
Benzene	0.021		0.0012	mg/kg dry	0.0233	0.0005 U	88	59-133			
Chlorobenzene	0.017		0.0012	mg/kg dry	0.0233	0.0006 U	71	69-121			
Toluene	0.017		0.0012	mg/kg dry	0.0233	0.0005 U	71	66-119			
Trichloroethene	0.019		0.0012	mg/kg dry	0.0233	0.0006 U	83	71-122			
4-Bromofluorobenzene	39			ug/L	50.0		78	71-126			
Dibromofluoromethane	47			ug/L	50.0		94	72-133			
Toluene-d8	47			ug/L	50.0		95	80-123			

**Batch 4L21004 - EPA 5030B\_MS**

**Blank (4L21004-BLK1)**

Prepared: 12/21/2014 00:00 Analyzed: 12/21/2014 09:53

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.61	U	1.0	ug/L							
1,1,1-Trichloroethane	0.80	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.54	U	1.0	ug/L							
1,1,2-Trichloroethane	0.76	U	1.0	ug/L							
1,1-Dichloroethane	0.62	U	1.0	ug/L							
1,1-Dichloroethene	0.94	U	1.0	ug/L							
1,1-Dichloropropene	0.74	U	1.0	ug/L							
1,2,3-Trichlorobenzene	0.86	U	1.0	ug/L							
1,2,3-Trichloropropane	0.64	U	1.0	ug/L							
1,2,4-Trichlorobenzene	0.70	U	1.0	ug/L							
1,2,4-Trimethylbenzene	0.69	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.96	U	1.0	ug/L							
1,2-Dibromoethane	0.78	U	1.0	ug/L							
1,2-Dichlorobenzene	0.73	U	1.0	ug/L							
1,2-Dichloroethane	0.63	U	1.0	ug/L							
1,2-Dichloropropane	0.80	U	1.0	ug/L							
1,3,5-Trimethylbenzene	0.58	U	1.0	ug/L							
1,3-Dichlorobenzene	0.77	U	1.0	ug/L							
1,3-Dichloropropane	0.60	U	1.0	ug/L							
1,4-Dichlorobenzene	0.76	U	1.0	ug/L							
2,2-Dichloropropane	0.66	U	1.0	ug/L							
2-Butanone	4.5	U	5.0	ug/L							
2-Chloroethyl Vinyl Ether	1.9	U	5.0	ug/L							
2-Chlorotoluene	0.68	U	1.0	ug/L							
2-Hexanone	1.4	U	5.0	ug/L							
4-Chlorotoluene	0.65	U	1.0	ug/L							
4-Isopropyltoluene	0.80	U	1.0	ug/L							
4-Methyl-2-pentanone	0.79	U	5.0	ug/L							
Acetone	5.0	U	10	ug/L							
Benzene	0.71	U	1.0	ug/L							

**QUALITY CONTROL DATA**

**Volatile Organic Compounds by GCMS - Quality Control**

*Batch 4L21004 - EPA 5030B\_MS - Continued*

**Blank (4L21004-BLK1) Continued**

Prepared: 12/21/2014 00:00 Analyzed: 12/21/2014 09:53

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Bromobenzene	0.77	U	1.0	ug/L							
Bromochloromethane	0.94	U	1.0	ug/L							
Bromodichloromethane	0.52	U	1.0	ug/L							
Bromoform	0.75	U	1.0	ug/L							
Bromomethane	0.95	U	1.0	ug/L							
Carbon disulfide	2.6	U	5.0	ug/L							
Carbon tetrachloride	0.94	U	1.0	ug/L							
Chlorobenzene	0.72	U	1.0	ug/L							
Chloroethane	0.98	U	1.0	ug/L							
Chloroform	0.80	U	1.0	ug/L							
Chloromethane	0.82	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.53	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.59	U	1.0	ug/L							
Dibromochloromethane	0.44	U	1.0	ug/L							
Dibromomethane	0.84	U	1.0	ug/L							
Dichlorodifluoromethane	0.74	U	1.0	ug/L							
Ethylbenzene	0.69	U	1.0	ug/L							
Hexachlorobutadiene	0.70	U	1.0	ug/L							
Isopropylbenzene	0.67	U	1.0	ug/L							
m,p-Xylenes	1.3	U	2.0	ug/L							
Methylene chloride	2.0	U	5.0	ug/L							
Methyl-tert-Butyl Ether	0.60	U	1.0	ug/L							
Naphthalene	0.82	U	1.0	ug/L							
n-Butyl Benzene	0.70	U	1.0	ug/L							
n-Propyl Benzene	0.70	U	1.0	ug/L							
o-Xylene	0.53	U	1.0	ug/L							
sec-Butylbenzene	0.74	U	1.0	ug/L							
Styrene	0.61	U	1.0	ug/L							
tert-Butylbenzene	0.64	U	1.0	ug/L							
Tetrachloroethene	0.76	U	1.0	ug/L							
Toluene	0.72	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.73	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.73	U	1.0	ug/L							
Trichloroethene	0.89	U	1.0	ug/L							
Trichlorofluoromethane	0.94	U	1.0	ug/L							
Vinyl chloride	0.71	U	1.0	ug/L							
Xylenes (Total)	1.3	U	2.0	ug/L							
<i>4-Bromofluorobenzene</i>	<i>50</i>			<i>ug/L</i>	<i>50.0</i>		<i>101</i>	<i>41-142</i>			
<i>Dibromofluoromethane</i>	<i>54</i>			<i>ug/L</i>	<i>50.0</i>		<i>109</i>	<i>53-146</i>			
<i>Toluene-d8</i>	<i>52</i>			<i>ug/L</i>	<i>50.0</i>		<i>103</i>	<i>41-146</i>			

**LCS (4L21004-BS1)**

Prepared: 12/21/2014 00:00 Analyzed: 12/21/2014 08:54

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
1,1-Dichloroethene	22		1.0	ug/L	20.0		112	47-139			
Benzene	20		1.0	ug/L	20.0		99	56-136			
Chlorobenzene	20		1.0	ug/L	20.0		99	51-139			
Toluene	20		1.0	ug/L	20.0		101	64-131			
Trichloroethene	20		1.0	ug/L	20.0		101	62-135			

**QUALITY CONTROL DATA**

**Volatile Organic Compounds by GCMS - Quality Control**

*Batch 4L21004 - EPA 5030B\_MS - Continued*

**LCS (4L21004-BS1) Continued**

Prepared: 12/21/2014 00:00 Analyzed: 12/21/2014 08:54

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4-Bromofluorobenzene	51			ug/L	50.0		101	41-142			
Dibromofluoromethane	54			ug/L	50.0		108	53-146			
Toluene-d8	51			ug/L	50.0		103	41-146			

**Matrix Spike (4L21004-MS1)**

Prepared: 12/21/2014 00:00 Analyzed: 12/22/2014 08:57

Source: A407062-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	25		1.0	ug/L	20.0	0.94 U	126	47-139			
Benzene	22		1.0	ug/L	20.0	0.71 U	111	56-136			
Chlorobenzene	21		1.0	ug/L	20.0	0.72 U	107	51-139			
Toluene	22		1.0	ug/L	20.0	0.72 U	111	64-131			
Trichloroethene	23		1.0	ug/L	20.0	0.89 U	113	62-135			
4-Bromofluorobenzene	52			ug/L	50.0		104	41-142			
Dibromofluoromethane	53			ug/L	50.0		107	53-146			
Toluene-d8	52			ug/L	50.0		105	41-146			

**Matrix Spike Dup (4L21004-MSD1)**

Prepared: 12/21/2014 00:00 Analyzed: 12/22/2014 09:27

Source: A407062-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	25		1.0	ug/L	20.0	0.94 U	124	47-139	1	16	
Benzene	22		1.0	ug/L	20.0	0.71 U	109	56-136	2	14	
Chlorobenzene	21		1.0	ug/L	20.0	0.72 U	107	51-139	0.1	13	
Toluene	22		1.0	ug/L	20.0	0.72 U	108	64-131	3	16	
Trichloroethene	22		1.0	ug/L	20.0	0.89 U	112	62-135	1	20	
4-Bromofluorobenzene	52			ug/L	50.0		105	41-142			
Dibromofluoromethane	55			ug/L	50.0		111	53-146			
Toluene-d8	52			ug/L	50.0		104	41-146			

**Tentatively Identified Compounds by Volatile GCMS - Quality Control**

*Batch 4L21004 - EPA 5030B\_MS*

**Blank (4L21004-BLK1)**

Prepared: 12/21/2014 00:00 Analyzed: 12/21/2014 09:53

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Tentatively Identified Compounds	0.0			ug/L							

**Semivolatile Organic Compounds by GCMS - Quality Control**

*Batch 4L16020 - EPA 3510C\_MS*

**Blank (4L16020-BLK1)**

Prepared: 12/16/2014 11:30 Analyzed: 12/22/2014 14:17

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2,4-Trichlorobenzene	3.3	U	10	ug/L							
1,2-Dichlorobenzene	3.2	U	10	ug/L							
1,3-Dichlorobenzene	3.4	U	10	ug/L							
1,4-Dichlorobenzene	3.2	U	10	ug/L							
1-Methylnaphthalene	3.1	U	10	ug/L							

**QUALITY CONTROL DATA**

**Semivolatile Organic Compounds by GCMS - Quality Control**

*Batch 4L16020 - EPA 3510C\_MS - Continued*

**Blank (4L16020-BLK1) Continued**

Prepared: 12/16/2014 11:30 Analyzed: 12/22/2014 14:17

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
2,4,5-Trichlorophenol	3.9	U	10	ug/L							
2,4,6-Trichlorophenol	6.4	U	10	ug/L							
2,4-Dichlorophenol	6.5	U	10	ug/L							
2,4-Dimethylphenol	6.4	U	10	ug/L							
2,4-Dinitrophenol	7.7	U	10	ug/L							
2,4-Dinitrotoluene	3.2	U	10	ug/L							
2,6-Dinitrotoluene	2.9	U	10	ug/L							
2-Chloronaphthalene	3.2	U	10	ug/L							
2-Chlorophenol	7.4	U	10	ug/L							
2-Methyl-4,6-dinitrophenol	6.0	U	10	ug/L							
2-Methylnaphthalene	3.8	U	10	ug/L							
2-Methylphenol	3.5	U	10	ug/L							
2-Nitroaniline	3.3	U	10	ug/L							
2-Nitrophenol	5.2	U	10	ug/L							
3 & 4-Methylphenol	8.2	U	10	ug/L							
3,3'-Dichlorobenzidine	3.3	U	10	ug/L							
3-Nitroaniline	3.3	U	10	ug/L							
4-Bromophenyl-phenylether	3.3	U	10	ug/L							
4-Chloro-3-methylphenol	7.3	U	10	ug/L							
4-Chloroaniline	4.3	U	10	ug/L							
4-Chlorophenyl-phenylether	3.2	U	10	ug/L							
4-Nitroaniline	3.2	U	10	ug/L							
4-Nitrophenol	7.9	U	10	ug/L							
Acenaphthene	3.0	U	10	ug/L							
Acenaphthylene	3.3	U	10	ug/L							
Anthracene	3.0	U	10	ug/L							
Benzidine	7.1	U	10	ug/L							
Benzo(a)anthracene	3.2	U	10	ug/L							
Benzo(a)pyrene	3.1	U	10	ug/L							
Benzo(b)fluoranthene	3.4	U	10	ug/L							
Benzo(g,h,i)perylene	3.7	U	10	ug/L							
Benzo(k)fluoranthene	3.3	U	10	ug/L							
Benzoic acid	15	U	50	ug/L							
Benzyl alcohol	3.9	U	10	ug/L							
Bis(2-chloroethoxy)methane	3.3	U	10	ug/L							
Bis(2-chloroethyl)ether	3.8	U	10	ug/L							
Bis(2-chloroisopropyl)ether	3.5	U	10	ug/L							
Bis(2-ethylhexyl)phthalate	3.5	U	5.0	ug/L							
Butylbenzylphthalate	5.1	U	10	ug/L							
Chrysene	3.0	U	10	ug/L							
Dibenzo(a,h)anthracene	3.8	U	10	ug/L							
Dibenzofuran	2.8	U	10	ug/L							
Diethylphthalate	3.0	U	10	ug/L							
Dimethylphthalate	3.0	U	10	ug/L							
Di-n-butylphthalate	3.2	U	10	ug/L							
Di-n-octylphthalate	3.6	U	10	ug/L							
Fluoranthene	4.0	U	10	ug/L							
Fluorene	2.9	U	10	ug/L							
Hexachlorobenzene	3.0	U	10	ug/L							

**QUALITY CONTROL DATA**
**Semivolatile Organic Compounds by GCMS - Quality Control**
**Batch 4L16020 - EPA 3510C\_MS - Continued**
**Blank (4L16020-BLK1) Continued**

Prepared: 12/16/2014 11:30 Analyzed: 12/22/2014 14:17

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexachlorobutadiene	4.1	U	10	ug/L							
Hexachlorocyclopentadiene	3.8	U	10	ug/L							
Hexachloroethane	3.0	U	10	ug/L							
Indeno(1,2,3-cd)pyrene	4.1	U	10	ug/L							
Isophorone	4.5	U	10	ug/L							
Naphthalene	3.6	U	10	ug/L							
Nitrobenzene	3.2	U	10	ug/L							
N-Nitrosodimethylamine	3.8	U	10	ug/L							
N-Nitroso-di-n-propylamine	4.5	U	10	ug/L							
N-nitrosodiphenylamine/Diphenylamine	5.4	U	10	ug/L							
Pentachlorophenol	8.2	U	10	ug/L							
Phenanthrene	2.8	U	10	ug/L							
Phenol	5.6	U	10	ug/L							
Pyrene	4.1	U	10	ug/L							
Pyridine	3.5	U	10	ug/L							
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2,4,6-Tribromophenol	20			ug/L	50.0		41	47-128			QS-03
2-Fluorobiphenyl	20			ug/L	50.0		41	44-102			QS-03
2-Fluorophenol	15			ug/L	50.0		31	25-79			
Nitrobenzene-d5	24			ug/L	50.0		47	43-112			
Phenol-d5	11			ug/L	50.0		23	14-54			
Terphenyl-d14	54			ug/L	50.0		109	65-122			

**LCS (4L16020-BS1)**

Prepared: 12/16/2014 11:30 Analyzed: 12/22/2014 14:46

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2,4-Trichlorobenzene	16		10	ug/L	50.0		31	20-95			
1,4-Dichlorobenzene	12		10	ug/L	50.0		24	17-94			
2,4-Dinitrotoluene	52		10	ug/L	50.0		104	63-120			
2-Chlorophenol	20		10	ug/L	50.0		40	50-97			J-02
4-Chloro-3-methylphenol	41		10	ug/L	50.0		81	54-108			
4-Nitrophenol	43		10	ug/L	50.0		86	10-79			QL-02
Acenaphthene	29		10	ug/L	50.0		57	50-95			
N-Nitroso-di-n-propylamine	30		10	ug/L	50.0		59	53-124			
Pentachlorophenol	36		10	ug/L	50.0		73	27-100			
Phenol	13		10	ug/L	50.0		27	14-54			
Pyrene	62		10	ug/L	50.0		123	61-115			QL-02
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2,4,6-Tribromophenol	44			ug/L	50.0		88	47-128			
2-Fluorobiphenyl	22			ug/L	50.0		43	44-102			QS-03
2-Fluorophenol	16			ug/L	50.0		32	25-79			
Nitrobenzene-d5	24			ug/L	50.0		48	43-112			
Phenol-d5	13			ug/L	50.0		25	14-54			
Terphenyl-d14	57			ug/L	50.0		114	65-122			

**Matrix Spike (4L16020-MS1)**

Prepared: 12/16/2014 11:30 Analyzed: 12/22/2014 15:14

Source: A407375-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2,4-Trichlorobenzene	16		10	ug/L	50.0	3.3 U	32	20-95			
1,4-Dichlorobenzene	14		10	ug/L	50.0	3.2 U	27	17-94			

**QUALITY CONTROL DATA**

**Semivolatile Organic Compounds by GCMS - Quality Control**

**Batch 4L16020 - EPA 3510C\_MS - Continued**

**Matrix Spike (4L16020-MS1) Continued**

Prepared: 12/16/2014 11:30 Analyzed: 12/22/2014 15:14

Source: A407375-02

Analyte	Result	Flaq	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	52		10	ug/L	50.0	3.2 U	103	63-120			
2-Chlorophenol	18		10	ug/L	50.0	7.4 U	36	50-97			QL-03
4-Chloro-3-methylphenol	39		10	ug/L	50.0	7.3 U	78	54-108			
4-Nitrophenol	40		10	ug/L	50.0	7.9 U	79	10-79			
Acenaphthene	28		10	ug/L	50.0	3.0 U	56	50-95			
N-Nitroso-di-n-propylamine	27		10	ug/L	50.0	4.5 U	54	53-124			
Pentachlorophenol	30		10	ug/L	50.0	8.2 U	61	27-100			
Phenol	12		10	ug/L	50.0	5.6 U	24	14-54			
Pyrene	60		10	ug/L	50.0	4.1 U	120	61-115			J-02
<i>2,4,6-Tribromophenol</i>	<i>41</i>			<i>ug/L</i>	<i>50.0</i>		<i>82</i>	<i>47-128</i>			
<i>2-Fluorobiphenyl</i>	<i>19</i>			<i>ug/L</i>	<i>50.0</i>		<i>39</i>	<i>44-102</i>			<i>QS-03</i>
<i>2-Fluorophenol</i>	<i>14</i>			<i>ug/L</i>	<i>50.0</i>		<i>27</i>	<i>25-79</i>			
<i>Nitrobenzene-d5</i>	<i>21</i>			<i>ug/L</i>	<i>50.0</i>		<i>43</i>	<i>43-112</i>			
<i>Phenol-d5</i>	<i>11</i>			<i>ug/L</i>	<i>50.0</i>		<i>22</i>	<i>14-54</i>			
<i>Terphenyl-d14</i>	<i>55</i>			<i>ug/L</i>	<i>50.0</i>		<i>110</i>	<i>65-122</i>			

**Matrix Spike Dup (4L16020-MSD1)**

Prepared: 12/16/2014 11:30 Analyzed: 12/22/2014 15:42

Source: A407375-02

Analyte	Result	Flaq	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2,4-Trichlorobenzene	22		10	ug/L	50.0	3.3 U	43	20-95	30	32	
1,4-Dichlorobenzene	19		10	ug/L	50.0	3.2 U	38	17-94	33	34	
2,4-Dinitrotoluene	65		10	ug/L	50.0	3.2 U	130	63-120	23	23	QM-07
2-Chlorophenol	24		10	ug/L	50.0	7.4 U	47	50-97	27	27	QL-03
4-Chloro-3-methylphenol	47		10	ug/L	50.0	7.3 U	93	54-108	18	28	
4-Nitrophenol	54		10	ug/L	50.0	7.9 U	107	10-79	30	35	J-02
Acenaphthene	34		10	ug/L	50.0	3.0 U	68	50-95	19	27	
N-Nitroso-di-n-propylamine	35		10	ug/L	50.0	4.5 U	69	53-124	25	24	QM-11
Pentachlorophenol	49		10	ug/L	50.0	8.2 U	98	27-100	47	26	QM-11
Phenol	15		10	ug/L	50.0	5.6 U	30	14-54	23	32	
Pyrene	78		10	ug/L	50.0	4.1 U	155	61-115	26	28	J-02
<i>2,4,6-Tribromophenol</i>	<i>52</i>			<i>ug/L</i>	<i>50.0</i>		<i>104</i>	<i>47-128</i>			
<i>2-Fluorobiphenyl</i>	<i>24</i>			<i>ug/L</i>	<i>50.0</i>		<i>48</i>	<i>44-102</i>			
<i>2-Fluorophenol</i>	<i>17</i>			<i>ug/L</i>	<i>50.0</i>		<i>35</i>	<i>25-79</i>			
<i>Nitrobenzene-d5</i>	<i>27</i>			<i>ug/L</i>	<i>50.0</i>		<i>55</i>	<i>43-112</i>			
<i>Phenol-d5</i>	<i>13</i>			<i>ug/L</i>	<i>50.0</i>		<i>27</i>	<i>14-54</i>			
<i>Terphenyl-d14</i>	<i>69</i>			<i>ug/L</i>	<i>50.0</i>		<i>138</i>	<i>65-122</i>			<i>QS-03</i>

**Batch 4L22002 - EPA 3550C\_MS**

**Blank (4L22002-BLK1)**

Prepared: 12/22/2014 08:35 Analyzed: 12/24/2014 17:09

Analyte	Result	Flaq	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2,4-Trichlorobenzene	0.11	U	0.33	mg/kg wet							
1,2-Dichlorobenzene	0.12	U	0.33	mg/kg wet							
1,3-Dichlorobenzene	0.12	U	0.33	mg/kg wet							
1,4-Dichlorobenzene	0.10	U	0.33	mg/kg wet							

**QUALITY CONTROL DATA**

**Semivolatile Organic Compounds by GCMS - Quality Control**

*Batch 4L22002 - EPA 3550C\_MS - Continued*

**Blank (4L22002-BLK1) Continued**

Prepared: 12/22/2014 08:35 Analyzed: 12/24/2014 17:09

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
1-Methylnaphthalene	0.096	U	0.33	mg/kg wet							
2,4,5-Trichlorophenol	0.067	U	0.33	mg/kg wet							
2,4,6-Trichlorophenol	0.15	U	0.33	mg/kg wet							
2,4-Dichlorophenol	0.25	U	0.33	mg/kg wet							
2,4-Dimethylphenol	0.23	U	0.33	mg/kg wet							
2,4-Dinitrophenol	0.089	U	0.33	mg/kg wet							
2,4-Dinitrotoluene	0.16	U	0.33	mg/kg wet							
2,6-Dinitrotoluene	0.18	U	0.33	mg/kg wet							
2-Chloronaphthalene	0.098	U	0.33	mg/kg wet							
2-Chlorophenol	0.23	U	0.33	mg/kg wet							
2-Methyl-4,6-dinitrophenol	0.28	U	0.33	mg/kg wet							
2-Methylnaphthalene	0.12	U	0.33	mg/kg wet							
2-Methylphenol	0.11	U	0.33	mg/kg wet							
2-Nitroaniline	0.085	U	0.33	mg/kg wet							
2-Nitrophenol	0.26	U	0.33	mg/kg wet							
3 & 4-Methylphenol	0.25	U	0.33	mg/kg wet							
3,3'-Dichlorobenzidine	0.21	U	0.33	mg/kg wet							
3-Nitroaniline	0.080	U	0.33	mg/kg wet							
4-Bromophenyl-phenylether	0.13	U	0.33	mg/kg wet							
4-Chloro-3-methylphenol	0.28	U	0.33	mg/kg wet							
4-Chloroaniline	0.065	U	0.33	mg/kg wet							
4-Chlorophenyl-phenylether	0.13	U	0.33	mg/kg wet							
4-Nitroaniline	0.26	U	0.33	mg/kg wet							
4-Nitrophenol	0.13	U	0.33	mg/kg wet							
Acenaphthene	0.13	U	0.33	mg/kg wet							
Acenaphthylene	0.12	U	0.33	mg/kg wet							
Anthracene	0.15	U	0.33	mg/kg wet							
Benzidine	0.086	U	0.33	mg/kg wet							
Benzo(a)anthracene	0.13	U	0.33	mg/kg wet							

**QUALITY CONTROL DATA**

**Semivolatile Organic Compounds by GCMS - Quality Control**

*Batch 4L22002 - EPA 3550C\_MS - Continued*

**Blank (4L22002-BLK1) Continued**

Prepared: 12/22/2014 08:35 Analyzed: 12/24/2014 17:09

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Benzo(a)pyrene	0.078	U	0.33	mg/kg wet							
Benzo(b)fluoranthene	0.11	U	0.33	mg/kg wet							
Benzo(g,h,i)perylene	0.16	U	0.33	mg/kg wet							
Benzo(k)fluoranthene	0.11	U	0.33	mg/kg wet							
Benzoic acid	0.48	U	1.7	mg/kg wet							
Benzyl alcohol	0.16	U	0.33	mg/kg wet							
Bis(2-chloroethoxy)methane	0.15	U	0.33	mg/kg wet							
Bis(2-chloroethyl)ether	0.14	U	0.33	mg/kg wet							
Bis(2-chloroisopropyl)ether	0.099	U	0.33	mg/kg wet							
Bis(2-ethylhexyl)phthalate	0.13	U	0.33	mg/kg wet							
Butylbenzylphthalate	0.14	U	0.33	mg/kg wet							
Chrysene	0.13	U	0.33	mg/kg wet							
Dibenzo(a,h)anthracene	0.14	U	0.33	mg/kg wet							
Dibenzofuran	0.13	U	0.33	mg/kg wet							
Diethylphthalate	0.13	U	0.33	mg/kg wet							
Dimethylphthalate	0.13	U	0.33	mg/kg wet							
Di-n-butylphthalate	0.13	U	0.33	mg/kg wet							
Di-n-octylphthalate	0.13	U	0.33	mg/kg wet							
Fluoranthene	0.11	U	0.33	mg/kg wet							
Fluorene	0.14	U	0.33	mg/kg wet							
Hexachlorobenzene	0.12	U	0.33	mg/kg wet							
Hexachlorobutadiene	0.13	U	0.33	mg/kg wet							
Hexachlorocyclopentadiene	0.15	U	0.33	mg/kg wet							
Hexachloroethane	0.10	U	0.33	mg/kg wet							
Indeno(1,2,3-cd)pyrene	0.14	U	0.33	mg/kg wet							
Isophorone	0.17	U	0.33	mg/kg wet							
Naphthalene	0.12	U	0.33	mg/kg wet							
Nitrobenzene	0.15	U	0.33	mg/kg wet							
N-Nitrosodimethylamine	0.12	U	0.33	mg/kg wet							

**QUALITY CONTROL DATA**

**Semivolatile Organic Compounds by GCMS - Quality Control**

*Batch 4L22002 - EPA 3550C\_MS - Continued*

**Blank (4L22002-BLK1) Continued**

Prepared: 12/22/2014 08:35 Analyzed: 12/24/2014 17:09

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
N-Nitroso-di-n-propylamine	0.15	U	0.33	mg/kg wet							
N-nitrosodiphenylamine/Diphenylamine	0.23	U	0.33	mg/kg wet							
Pentachlorophenol	0.21	U	0.33	mg/kg wet							
Phenanthrene	0.13	U	0.33	mg/kg wet							
Phenol	0.099	U	0.33	mg/kg wet							
Pyrene	0.11	U	0.33	mg/kg wet							
Pyridine	0.15	U	0.33	mg/kg wet							
<i>2,4,6-Tribromophenol</i>	<i>1.1</i>			<i>mg/kg wet</i>	<i>1.67</i>		<i>66</i>	<i>23-137</i>			
<i>2-Fluorobiphenyl</i>	<i>1.5</i>			<i>mg/kg wet</i>	<i>1.67</i>		<i>88</i>	<i>29-119</i>			
<i>2-Fluorophenol</i>	<i>2.2</i>			<i>mg/kg wet</i>	<i>1.67</i>		<i>129</i>	<i>20-124</i>			<i>QS-03</i>
<i>Nitrobenzene-d5</i>	<i>1.9</i>			<i>mg/kg wet</i>	<i>1.67</i>		<i>115</i>	<i>17-126</i>			
<i>Phenol-d5</i>	<i>2.4</i>			<i>mg/kg wet</i>	<i>1.67</i>		<i>145</i>	<i>15-131</i>			<i>QS-03</i>
<i>Terphenyl-d14</i>	<i>2.0</i>			<i>mg/kg wet</i>	<i>1.67</i>		<i>118</i>	<i>60-120</i>			

**LCS (4L22002-BS1)**

Prepared: 12/22/2014 08:35 Analyzed: 12/24/2014 17:38

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
1,2,4-Trichlorobenzene	1.5		0.33	mg/kg wet	1.67		90	36-119			
1,4-Dichlorobenzene	1.5		0.33	mg/kg wet	1.67		87	32-116			
2,4-Dinitrotoluene	1.9		0.33	mg/kg wet	1.67		112	54-125			
2-Chlorophenol	1.7		0.33	mg/kg wet	1.67		102	50-105			
4-Chloro-3-methylphenol	1.9		0.33	mg/kg wet	1.67		113	55-106			QL-02
4-Nitrophenol	2.1		0.33	mg/kg wet	1.67		127	30-124			QL-02
Acenaphthene	1.5		0.33	mg/kg wet	1.67		89	49-111			
N-Nitroso-di-n-propylamine	2.1		0.33	mg/kg wet	1.67		126	52-126			
Pentachlorophenol	1.1		0.33	mg/kg wet	1.67		64	10-101			
Phenol	1.9		0.33	mg/kg wet	1.67		114	28-121			
Pyrene	2.0		0.33	mg/kg wet	1.67		121	66-115			QL-02
<i>2,4,6-Tribromophenol</i>	<i>1.4</i>			<i>mg/kg wet</i>	<i>1.67</i>		<i>86</i>	<i>23-137</i>			
<i>2-Fluorobiphenyl</i>	<i>1.3</i>			<i>mg/kg wet</i>	<i>1.67</i>		<i>78</i>	<i>29-119</i>			

**QUALITY CONTROL DATA**

**Semivolatile Organic Compounds by GCMS - Quality Control**

*Batch 4L22002 - EPA 3550C\_MS - Continued*

**LCS (4L22002-BS1) Continued**

Prepared: 12/22/2014 08:35 Analyzed: 12/24/2014 17:38

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
2-Fluorophenol	1.8			mg/kg wet	1.67		109	20-124			
Nitrobenzene-d5	1.8			mg/kg wet	1.67		110	17-126			
Phenol-d5	1.9			mg/kg wet	1.67		114	15-131			
Terphenyl-d14	1.8			mg/kg wet	1.67		106	60-120			

**Matrix Spike (4L22002-MS1)**

Prepared: 12/22/2014 08:35 Analyzed: 12/24/2014 18:06

**Source: A407258-02**

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
1,2,4-Trichlorobenzene	1.6		0.38	mg/kg dry	1.90	0.13 U	82	36-119			
1,4-Dichlorobenzene	1.4		0.38	mg/kg dry	1.90	0.11 U	74	32-116			
2,4-Dinitrotoluene	2.1		0.38	mg/kg dry	1.90	0.18 U	109	54-125			
2-Chlorophenol	1.8		0.38	mg/kg dry	1.90	0.26 U	97	50-105			
4-Chloro-3-methylphenol	2.1		0.38	mg/kg dry	1.90	0.32 U	111	55-106			QM-07
4-Nitrophenol	2.4		0.38	mg/kg dry	1.90	0.15 U	129	30-124			J-02
Acenaphthene	1.7		0.38	mg/kg dry	1.90	0.15 U	87	49-111			
N-Nitroso-di-n-propylamine	2.2		0.38	mg/kg dry	1.90	0.17 U	118	52-126			
Pentachlorophenol	1.4		0.38	mg/kg dry	1.90	0.24 U	73	10-101			
Phenol	2.1		0.38	mg/kg dry	1.90	0.11 U	110	28-121			
Pyrene	2.2		0.38	mg/kg dry	1.90	0.13 U	116	66-115			J-02
2,4,6-Tribromophenol	1.7			mg/kg dry	1.90		88	23-137			
2-Fluorobiphenyl	1.4			mg/kg dry	1.90		76	29-119			
2-Fluorophenol	1.9			mg/kg dry	1.90		100	20-124			
Nitrobenzene-d5	2.0			mg/kg dry	1.90		104	17-126			
Phenol-d5	2.1			mg/kg dry	1.90		109	15-131			
Terphenyl-d14	1.9			mg/kg dry	1.90		101	60-120			

**Matrix Spike Dup (4L22002-MSD1)**

Prepared: 12/22/2014 08:35 Analyzed: 12/24/2014 18:34

**Source: A407258-02**

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
1,2,4-Trichlorobenzene	1.5		0.38	mg/kg dry	1.92	0.13 U	79	36-119	3	32	
1,4-Dichlorobenzene	1.4		0.38	mg/kg dry	1.92	0.11 U	71	32-116	4	34	
2,4-Dinitrotoluene	2.1		0.38	mg/kg dry	1.92	0.18 U	112	54-125	4	23	
2-Chlorophenol	1.7		0.38	mg/kg dry	1.92	0.26 U	90	50-105	7	27	
4-Chloro-3-methylphenol	2.1		0.38	mg/kg dry	1.92	0.32 U	112	55-106	2	28	QM-07
4-Nitrophenol	2.6		0.38	mg/kg dry	1.92	0.15 U	137	30-124	7	35	J-02
Acenaphthene	1.7		0.38	mg/kg dry	1.92	0.15 U	89	49-111	3	27	
N-Nitroso-di-n-propylamine	2.2		0.38	mg/kg dry	1.92	0.17 U	113	52-126	3	24	
Pentachlorophenol	1.5		0.38	mg/kg dry	1.92	0.24 U	77	10-101	7	26	
Phenol	2.0		0.38	mg/kg dry	1.92	0.11 U	104	28-121	4	32	
Pyrene	2.3		0.38	mg/kg dry	1.92	0.13 U	117	66-115	3	28	J-02
2,4,6-Tribromophenol	1.7			mg/kg dry	1.92		90	23-137			
2-Fluorobiphenyl	1.5			mg/kg dry	1.92		77	29-119			
2-Fluorophenol	1.8			mg/kg dry	1.92		94	20-124			
Nitrobenzene-d5	1.9			mg/kg dry	1.92		101	17-126			
Phenol-d5	2.0			mg/kg dry	1.92		104	15-131			

**QUALITY CONTROL DATA**

**Semivolatile Organic Compounds by GCMS - Quality Control**

**Batch 4L22002 - EPA 3550C\_MS - Continued**

**Matrix Spike Dup (4L22002-MSD1) Continued**

Prepared: 12/22/2014 08:35 Analyzed: 12/24/2014 18:34

Source: A407258-02

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Terphenyl-d14	2.0			mg/kg dry	1.92		104	60-120			

**Batch 4L23015 - EPA 3510C\_MS**

**Blank (4L23015-BLK1)**

Prepared: 12/23/2014 10:30 Analyzed: 12/23/2014 16:26

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2,4-Trichlorobenzene	3.3	U	10	ug/L							
1,2-Dichlorobenzene	3.2	U	10	ug/L							
1,3-Dichlorobenzene	3.4	U	10	ug/L							
1,4-Dichlorobenzene	3.2	U	10	ug/L							
1-Methylnaphthalene	3.1	U	10	ug/L							
2,4,5-Trichlorophenol	3.9	U	10	ug/L							
2,4,6-Trichlorophenol	6.4	U	10	ug/L							
2,4-Dichlorophenol	6.5	U	10	ug/L							
2,4-Dimethylphenol	6.4	U	10	ug/L							
2,4-Dinitrophenol	7.7	U	10	ug/L							
2,4-Dinitrotoluene	3.2	U	10	ug/L							
2,6-Dinitrotoluene	2.9	U	10	ug/L							
2-Chloronaphthalene	3.2	U	10	ug/L							
2-Chlorophenol	7.4	U	10	ug/L							
2-Methyl-4,6-dinitrophenol	6.0	U	10	ug/L							
2-Methylnaphthalene	3.8	U	10	ug/L							
2-Methylphenol	3.5	U	10	ug/L							
2-Nitroaniline	3.3	U	10	ug/L							
2-Nitrophenol	5.2	U	10	ug/L							
3 & 4-Methylphenol	8.2	U	10	ug/L							
3,3'-Dichlorobenzidine	3.3	U	10	ug/L							
3-Nitroaniline	3.3	U	10	ug/L							
4-Bromophenyl-phenylether	3.3	U	10	ug/L							
4-Chloro-3-methylphenol	7.3	U	10	ug/L							
4-Chloroaniline	4.3	U	10	ug/L							
4-Chlorophenyl-phenylether	3.2	U	10	ug/L							
4-Nitroaniline	3.2	U	10	ug/L							
4-Nitrophenol	7.9	U	10	ug/L							
Acenaphthene	3.0	U	10	ug/L							
Acenaphthylene	3.3	U	10	ug/L							
Anthracene	3.0	U	10	ug/L							
Benzidine	7.1	U	10	ug/L							
Benzo(a)anthracene	3.2	U	10	ug/L							
Benzo(a)pyrene	3.1	U	10	ug/L							
Benzo(b)fluoranthene	3.4	U	10	ug/L							
Benzo(g,h,i)perylene	3.7	U	10	ug/L							
Benzo(k)fluoranthene	3.3	U	10	ug/L							
Benzoic acid	15	U	50	ug/L							
Benzyl alcohol	3.9	U	10	ug/L							
Bis(2-chloroethoxy)methane	3.3	U	10	ug/L							
Bis(2-chloroethyl)ether	3.8	U	10	ug/L							
Bis(2-chloroisopropyl)ether	3.5	U	10	ug/L							

**QUALITY CONTROL DATA**

**Semivolatile Organic Compounds by GCMS - Quality Control**

*Batch 4L23015 - EPA 3510C\_MS - Continued*

**Blank (4L23015-BLK1) Continued**

Prepared: 12/23/2014 10:30 Analyzed: 12/23/2014 16:26

<u>Analyte</u>	<u>Result</u>	<u>Flaq</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Bis(2-ethylhexyl)phthalate	3.5	U	5.0	ug/L							
Butylbenzylphthalate	5.1	U	10	ug/L							
Chrysene	3.0	U	10	ug/L							
Dibenzo(a,h)anthracene	3.8	U	10	ug/L							
Dibenzofuran	2.8	U	10	ug/L							
Diethylphthalate	3.0	U	10	ug/L							
Dimethylphthalate	3.0	U	10	ug/L							
Di-n-butylphthalate	3.2	U	10	ug/L							
Di-n-octylphthalate	3.6	U	10	ug/L							
Fluoranthene	4.0	U	10	ug/L							
Fluorene	2.9	U	10	ug/L							
Hexachlorobenzene	3.0	U	10	ug/L							
Hexachlorobutadiene	4.1	U	10	ug/L							
Hexachlorocyclopentadiene	3.8	U	10	ug/L							
Hexachloroethane	3.0	U	10	ug/L							
Indeno(1,2,3-cd)pyrene	4.1	U	10	ug/L							
Isophorone	4.5	U	10	ug/L							
Naphthalene	3.6	U	10	ug/L							
Nitrobenzene	3.2	U	10	ug/L							
N-Nitrosodimethylamine	3.8	U	10	ug/L							
N-Nitroso-di-n-propylamine	4.5	U	10	ug/L							
N-nitrosodiphenylamine/Diphenylamine	5.4	U	10	ug/L							
Pentachlorophenol	8.2	U	10	ug/L							
Phenanthrene	2.8	U	10	ug/L							
Phenol	5.6	U	10	ug/L							
Pyrene	4.1	U	10	ug/L							
Pyridine	3.5	U	10	ug/L							
<hr/>											
<i>2,4,6-Tribromophenol</i>	<i>41</i>			<i>ug/L</i>	<i>50.0</i>		<i>82</i>	<i>47-128</i>			
<i>2-Fluorobiphenyl</i>	<i>39</i>			<i>ug/L</i>	<i>50.0</i>		<i>78</i>	<i>44-102</i>			
<i>2-Fluorophenol</i>	<i>30</i>			<i>ug/L</i>	<i>50.0</i>		<i>61</i>	<i>25-79</i>			
<i>Nitrobenzene-d5</i>	<i>54</i>			<i>ug/L</i>	<i>50.0</i>		<i>109</i>	<i>43-112</i>			
<i>Phenol-d5</i>	<i>24</i>			<i>ug/L</i>	<i>50.0</i>		<i>49</i>	<i>14-54</i>			
<i>Terphenyl-d14</i>	<i>57</i>			<i>ug/L</i>	<i>50.0</i>		<i>115</i>	<i>65-122</i>			

**LCS (4L23015-BS1)**

Prepared: 12/23/2014 10:30 Analyzed: 12/23/2014 18:20

<u>Analyte</u>	<u>Result</u>	<u>Flaq</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
1,2,4-Trichlorobenzene	28		10	ug/L	50.0		56	20-95			
1,4-Dichlorobenzene	25		10	ug/L	50.0		49	17-94			
2,4-Dinitrotoluene	59		10	ug/L	50.0		119	63-120			
2-Chlorophenol	44		10	ug/L	50.0		87	50-97			
4-Chloro-3-methylphenol	53		10	ug/L	50.0		107	54-108			
4-Nitrophenol	42		10	ug/L	50.0		83	10-79			QL-02
Acenaphthene	39		10	ug/L	50.0		78	50-95			
N-Nitroso-di-n-propylamine	58		10	ug/L	50.0		116	53-124			
Pentachlorophenol	44		10	ug/L	50.0		88	27-100			
Phenol	25		10	ug/L	50.0		50	14-54			
Pyrene	57		10	ug/L	50.0		114	61-115			

**QUALITY CONTROL DATA**

**Semivolatile Organic Compounds by GCMS - Quality Control**

*Batch 4L23015 - EPA 3510C\_MS - Continued*

**LCS (4L23015-BS1) Continued**

Prepared: 12/23/2014 10:30 Analyzed: 12/23/2014 18:20

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,6-Tribromophenol	48			ug/L	50.0		96	47-128			
2-Fluorobiphenyl	36			ug/L	50.0		72	44-102			
2-Fluorophenol	30			ug/L	50.0		60	25-79			
Nitrobenzene-d5	50			ug/L	50.0		99	43-112			
Phenol-d5	23			ug/L	50.0		46	14-54			
Terphenyl-d14	51			ug/L	50.0		101	65-122			

**Matrix Spike (4L23015-MS1)**

Prepared: 12/23/2014 10:30 Analyzed: 12/23/2014 18:48

Source: A407522-02

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2,4-Trichlorobenzene	14		10	ug/L	50.0	3.3 U	28	20-95			
1,4-Dichlorobenzene	13		10	ug/L	50.0	3.2 U	26	17-94			
2,4-Dinitrotoluene	55		10	ug/L	50.0	3.2 U	109	63-120			
2-Chlorophenol	23		10	ug/L	50.0	7.4 U	47	50-97			QM-07
4-Chloro-3-methylphenol	43		10	ug/L	50.0	7.3 U	85	54-108			
4-Nitrophenol	45		10	ug/L	50.0	7.9 U	90	10-79			J-02
Acenaphthene	25		10	ug/L	50.0	3.0 U	51	50-95			
N-Nitroso-di-n-propylamine	32		10	ug/L	50.0	4.5 U	63	53-124			
Pentachlorophenol	45		10	ug/L	50.0	8.2 U	90	27-100			
Phenol	16		10	ug/L	50.0	5.6 U	32	14-54			
Pyrene	54		10	ug/L	50.0	4.1 U	109	61-115			
2,4,6-Tribromophenol	47			ug/L	50.0		94	47-128			
2-Fluorobiphenyl	22			ug/L	50.0		43	44-102			QS-03
2-Fluorophenol	17			ug/L	50.0		35	25-79			
Nitrobenzene-d5	26			ug/L	50.0		52	43-112			
Phenol-d5	15			ug/L	50.0		30	14-54			
Terphenyl-d14	49			ug/L	50.0		98	65-122			

**Matrix Spike Dup (4L23015-MSD1)**

Prepared: 12/23/2014 10:30 Analyzed: 12/23/2014 19:16

Source: A407522-02

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2,4-Trichlorobenzene	13		10	ug/L	50.0	3.3 U	25	20-95	11	32	
1,4-Dichlorobenzene	11		10	ug/L	50.0	3.2 U	22	17-94	13	34	
2,4-Dinitrotoluene	48		10	ug/L	50.0	3.2 U	96	63-120	13	23	
2-Chlorophenol	19		10	ug/L	50.0	7.4 U	39	50-97	19	27	QM-07
4-Chloro-3-methylphenol	37		10	ug/L	50.0	7.3 U	73	54-108	15	28	
4-Nitrophenol	38		10	ug/L	50.0	7.9 U	77	10-79	15	35	
Acenaphthene	23		10	ug/L	50.0	3.0 U	46	50-95	10	27	QM-07
N-Nitroso-di-n-propylamine	28		10	ug/L	50.0	4.5 U	56	53-124	12	24	
Pentachlorophenol	38		10	ug/L	50.0	8.2 U	76	27-100	17	26	
Phenol	13		10	ug/L	50.0	5.6 U	26	14-54	20	32	
Pyrene	53		10	ug/L	50.0	4.1 U	107	61-115	2	28	
2,4,6-Tribromophenol	41			ug/L	50.0		81	47-128			
2-Fluorobiphenyl	20			ug/L	50.0		40	44-102			QS-03
2-Fluorophenol	14			ug/L	50.0		29	25-79			
Nitrobenzene-d5	23			ug/L	50.0		45	43-112			
Phenol-d5	12			ug/L	50.0		25	14-54			
Terphenyl-d14	48			ug/L	50.0		96	65-122			

**QUALITY CONTROL DATA**

**Tentatively Identified Compounds by Semivolatile GCMS - Quality Control**

**Batch 4L23015 - EPA 3510C\_MS**

**Blank (4L23015-BLK1)**

Prepared: 12/23/2014 10:30 Analyzed: 12/23/2014 16:26

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Tentatively Identified Compounds	0.0			ug/L							

**Semivolatile Organic Compounds by GCMS SIM - Quality Control**

**Batch 4L15018 - EPA 3511\_MS**

**Blank (4L15018-BLK1)**

Prepared: 12/15/2014 15:00 Analyzed: 12/16/2014 08:48

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1-Methylnaphthalene	0.047	U	0.10	ug/L							
2-Methylnaphthalene	0.044	U	0.10	ug/L							
Acenaphthene	0.037	U	0.10	ug/L							
Acenaphthylene	0.036	U	0.10	ug/L							
Anthracene	0.036	U	0.10	ug/L							
Benzo(a)anthracene	0.037	U	0.10	ug/L							
Benzo(a)pyrene	0.043	U	0.10	ug/L							
Benzo(b)fluoranthene	0.059	U	0.10	ug/L							
Benzo(g,h,i)perylene	0.040	U	0.10	ug/L							
Benzo(k)fluoranthene	0.046	U	0.10	ug/L							
Chrysene	0.051	U	0.10	ug/L							
Dibenzo(a,h)anthracene	0.026	U	0.10	ug/L							
Fluoranthene	0.051	U	0.10	ug/L							
Fluorene	0.038	U	0.10	ug/L							
Indeno(1,2,3-cd)pyrene	0.037	U	0.10	ug/L							
Naphthalene	0.035	U	0.10	ug/L							
Phenanthrene	0.039	U	0.10	ug/L							
Pyrene	0.048	U	0.10	ug/L							
<i>p</i> -Terphenyl	5.4			ug/L	5.71		95	66-136			

**LCS (4L15018-BS1)**

Prepared: 12/15/2014 15:00 Analyzed: 12/16/2014 09:09

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acenaphthene	5.9		0.10	ug/L	5.71		102	80-120			
Benzo(a)pyrene	5.5		0.10	ug/L	5.71		96	73-149			
Benzo(g,h,i)perylene	4.8		0.10	ug/L	5.71		84	57-124			
Naphthalene	5.4		0.10	ug/L	5.71		94	68-120			
<i>p</i> -Terphenyl	5.6			ug/L	5.71		97	66-136			

**Matrix Spike (4L15018-MS1)**

Prepared: 12/15/2014 15:00 Analyzed: 12/16/2014 09:31

**Source: A406771-01**

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acenaphthene	5.2		0.10	ug/L	5.71	0.037 U	92	80-120			
Benzo(a)pyrene	4.3		0.10	ug/L	5.71	0.043 U	75	73-149			
Benzo(g,h,i)perylene	4.0		0.10	ug/L	5.71	0.040 U	71	57-124			
Naphthalene	5.0		0.10	ug/L	5.71	0.035 U	88	68-120			
<i>p</i> -Terphenyl	4.7			ug/L	5.71		83	66-136			

**QUALITY CONTROL DATA**

**Semivolatile Organic Compounds by GCMS SIM - Quality Control**

**Batch 4L15018 - EPA 3511\_MS - Continued**

**Matrix Spike Dup (4L15018-MSD1)**

Prepared: 12/15/2014 15:00 Analyzed: 12/16/2014 10:15

Source: A406771-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acenaphthene	5.6		0.10	ug/L	5.71	0.037 U	99	80-120	7	25	
Benzo(a)pyrene	4.3		0.10	ug/L	5.71	0.043 U	75	73-149	0	25	
Benzo(g,h,i)perylene	3.9		0.10	ug/L	5.71	0.040 U	68	57-124	4	25	
Naphthalene	5.4		0.10	ug/L	5.71	0.035 U	95	68-120	8	25	
<i>p</i> -Terphenyl	4.8			ug/L	5.71		84	66-136			

**Batch 4L17037 - EPA 3550C\_MS**

**Blank (4L17037-BLK1)**

Prepared: 12/17/2014 15:00 Analyzed: 12/18/2014 16:08

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1-Methylnaphthalene	0.019	U	0.035	mg/kg wet							
2-Methylnaphthalene	0.018	U	0.035	mg/kg wet							
Acenaphthene	0.015	U	0.035	mg/kg wet							
Acenaphthylene	0.018	U	0.035	mg/kg wet							
Anthracene	0.014	U	0.035	mg/kg wet							
Benzo(a)anthracene	0.014	U	0.035	mg/kg wet							
Benzo(a)pyrene	0.015	U	0.035	mg/kg wet							
Benzo(b)fluoranthene	0.017	U	0.035	mg/kg wet							
Benzo(g,h,i)perylene	0.015	U	0.035	mg/kg wet							
Benzo(k)fluoranthene	0.019	U	0.035	mg/kg wet							
Chrysene	0.012	U	0.035	mg/kg wet							
Dibenzo(a,h)anthracene	0.016	U	0.035	mg/kg wet							
Fluoranthene	0.017	U	0.035	mg/kg wet							
Fluorene	0.017	U	0.035	mg/kg wet							
Indeno(1,2,3-cd)pyrene	0.015	U	0.035	mg/kg wet							
Naphthalene	0.018	U	0.035	mg/kg wet							
Phenanthrene	0.015	U	0.035	mg/kg wet							
Pyrene	0.016	U	0.035	mg/kg wet							
<i>p</i> -Terphenyl	1.7			mg/kg wet	2.00		85	50-150			

**LCS (4L17037-BS1)**

Prepared: 12/17/2014 15:00 Analyzed: 12/18/2014 16:30

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acenaphthene	1.6		0.035	mg/kg wet	2.00		78	39-106			

**QUALITY CONTROL DATA**

**Semivolatile Organic Compounds by GCMS SIM - Quality Control**

*Batch 4L17037 - EPA 3550C\_MS - Continued*

**LCS (4L17037-BS1) Continued**

Prepared: 12/17/2014 15:00 Analyzed: 12/18/2014 16:30

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Benzo(a)pyrene	1.3		0.035	mg/kg wet	2.00		67	60-118			
Benzo(g,h,i)perylene	1.3		0.035	mg/kg wet	2.00		65	50-117			
Naphthalene	1.5		0.035	mg/kg wet	2.00		75	34-95			
<i>p-Terphenyl</i>	<i>1.7</i>			<i>mg/kg wet</i>	<i>2.00</i>		<i>86</i>	<i>50-150</i>			

**Matrix Spike (4L17037-MS1)**

Prepared: 12/17/2014 15:00 Analyzed: 12/18/2014 16:51

**Source: A407258-02**

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Acenaphthene	1.7		0.040	mg/kg dry	2.30	0.017 U	72	39-106			
Benzo(a)pyrene	1.6		0.040	mg/kg dry	2.30	0.017 U	71	60-118			
Benzo(g,h,i)perylene	1.6		0.040	mg/kg dry	2.30	0.021	67	50-117			
Naphthalene	1.6		0.040	mg/kg dry	2.30	0.021 U	69	34-95			
<i>p-Terphenyl</i>	<i>2.0</i>			<i>mg/kg dry</i>	<i>2.30</i>		<i>86</i>	<i>50-150</i>			

**Matrix Spike Dup (4L17037-MSD1)**

Prepared: 12/17/2014 15:00 Analyzed: 12/18/2014 17:13

**Source: A407258-02**

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Acenaphthene	1.7		0.040	mg/kg dry	2.28	0.017 U	75	39-106	3	30	
Benzo(a)pyrene	1.6		0.040	mg/kg dry	2.28	0.017 U	68	60-118	5	30	
Benzo(g,h,i)perylene	1.5		0.040	mg/kg dry	2.28	0.021	66	50-117	2	30	
Naphthalene	1.6		0.040	mg/kg dry	2.28	0.021 U	71	34-95	3	30	
<i>p-Terphenyl</i>	<i>1.9</i>			<i>mg/kg dry</i>	<i>2.28</i>		<i>84</i>	<i>50-150</i>			

**Organochlorine Pesticides by GC - Quality Control**

*Batch 4L16007 - EPA 3510C*

**Blank (4L16007-BLK1)**

Prepared: 12/16/2014 05:35 Analyzed: 12/18/2014 13:36

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
4,4'-DDD	0.018	U	0.050	ug/L							
4,4'-DDE	0.036	U	0.050	ug/L							
4,4'-DDT	0.025	U	0.050	ug/L							
Aldrin	0.032	U	0.050	ug/L							
alpha-BHC	0.026	U	0.050	ug/L							
beta-BHC	0.022	U	0.050	ug/L							
Chlordane (tech)	0.32	U	0.50	ug/L							
Chlordane-alpha	0.022	U	0.050	ug/L							
Chlordane-gamma	0.018	U	0.050	ug/L							
delta-BHC	0.019	U	0.050	ug/L							
Dieldrin	0.017	U	0.050	ug/L							
Endosulfan I	0.016	U	0.050	ug/L							
Endosulfan II	0.017	U	0.050	ug/L							
Endosulfan sulfate	0.016	U	0.050	ug/L							
Endrin	0.014	U	0.050	ug/L							

**QUALITY CONTROL DATA**

**Organochlorine Pesticides by GC - Quality Control**

**Batch 4L16007 - EPA 3510C - Continued**

**Blank (4L16007-BLK1) Continued**

Prepared: 12/16/2014 05:35 Analyzed: 12/18/2014 13:36

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Endrin aldehyde	0.020	U	0.050	ug/L							
Endrin ketone	0.017	U	0.050	ug/L							
gamma-BHC	0.020	U	0.050	ug/L							
Heptachlor	0.018	U	0.050	ug/L							
Heptachlor epoxide	0.018	U	0.050	ug/L							
Isodrin	0.030	U	0.050	ug/L							
Methoxychlor	0.018	U	0.050	ug/L							
Mirex	0.034	U	0.050	ug/L							
Toxaphene	0.48	U	0.50	ug/L							
2,4,5,6-TCMX	0.74			ug/L	1.00		74	38-142			
Decachlorobiphenyl	0.68			ug/L	1.00		68	34-159			

**LCS (4L16007-BS1)**

Prepared: 12/16/2014 05:35 Analyzed: 12/18/2014 13:48

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	1.2		0.050	ug/L	1.00		117	37-125			
Dieldrin	0.82		0.050	ug/L	1.00		82	46-127			
Endrin	0.80		0.050	ug/L	1.00		80	28-143			
2,4,5,6-TCMX	0.87			ug/L	1.00		87	38-142			
Decachlorobiphenyl	0.90			ug/L	1.00		90	34-159			

**Matrix Spike (4L16007-MS1)**

Prepared: 12/16/2014 05:35 Analyzed: 12/18/2014 13:59

Source: A407375-02

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	1.0		0.050	ug/L	1.00	0.025 U	103	37-125			
Dieldrin	0.73		0.050	ug/L	1.00	0.017 U	73	46-127			
Endrin	0.73		0.050	ug/L	1.00	0.014 U	73	28-143			
2,4,5,6-TCMX	0.80			ug/L	1.00		80	38-142			
Decachlorobiphenyl	0.87			ug/L	1.00		87	34-159			

**Matrix Spike Dup (4L16007-MSD1)**

Prepared: 12/16/2014 05:35 Analyzed: 12/18/2014 14:10

Source: A407375-02

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	1.1		0.050	ug/L	1.00	0.025 U	114	37-125	11	24	
Dieldrin	0.82		0.050	ug/L	1.00	0.017 U	82	46-127	12	21	
Endrin	0.80		0.050	ug/L	1.00	0.014 U	80	28-143	10	22	
2,4,5,6-TCMX	0.96			ug/L	1.00		96	38-142			
Decachlorobiphenyl	0.81			ug/L	1.00		81	34-159			

**Batch 4L18025 - EPA 3550C**

**Blank (4L18025-BLK1)**

Prepared: 12/18/2014 13:00 Analyzed: 12/19/2014 12:49

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDD	0.00048	U	0.0017	mg/kg wet							
4,4'-DDE	0.00052	U	0.0017	mg/kg wet							QV-01

**QUALITY CONTROL DATA**

**Organochlorine Pesticides by GC - Quality Control**

*Batch 4L18025 - EPA 3550C - Continued*

**Blank (4L18025-BLK1) Continued**

Prepared: 12/18/2014 13:00 Analyzed: 12/19/2014 12:49

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
4,4'-DDT	0.00066	U	0.0017	mg/kg wet							
Aldrin	0.00051	U	0.0017	mg/kg wet							QV-01
alpha-BHC	0.00056	U	0.0017	mg/kg wet							
beta-BHC	0.0010	U	0.0017	mg/kg wet							
Chlordane (tech)	0.0084	U	0.033	mg/kg wet							
Chlordane-alpha	0.00045	U	0.0017	mg/kg wet							
Chlordane-gamma	0.00045	U	0.0017	mg/kg wet							
delta-BHC	0.00050	U	0.0017	mg/kg wet							
Dieldrin	0.00045	U	0.0017	mg/kg wet							
Endosulfan I	0.00039	U	0.0017	mg/kg wet							
Endosulfan II	0.00048	U	0.0017	mg/kg wet							
Endosulfan sulfate	0.00049	U	0.0017	mg/kg wet							
Endrin	0.00074	U	0.0017	mg/kg wet							
Endrin aldehyde	0.00083	U	0.0017	mg/kg wet							
Endrin ketone	0.00047	U	0.0017	mg/kg wet							
gamma-BHC	0.00060	U	0.0017	mg/kg wet							
Heptachlor	0.00062	U	0.0017	mg/kg wet							
Heptachlor epoxide	0.00048	U	0.0017	mg/kg wet							
Isodrin	0.00062	U	0.0017	mg/kg wet							
Methoxychlor	0.00086	U	0.0017	mg/kg wet							
Mirex	0.0011	U	0.0017	mg/kg wet							
Toxaphene	0.017	U	0.033	mg/kg wet							
<i>2,4,5,6-TCMX</i>	<i>0.036</i>			<i>mg/kg wet</i>	<i>0.0333</i>		<i>108</i>	<i>20-137</i>			
<i>Decachlorobiphenyl</i>	<i>0.032</i>			<i>mg/kg wet</i>	<i>0.0333</i>		<i>95</i>	<i>13-183</i>			

**LCS (4L18025-BS1)**

Prepared: 12/18/2014 13:00 Analyzed: 12/19/2014 13:00

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
4,4'-DDT	0.033		0.0017	mg/kg wet	0.0333		98	37-125			
Dieldrin	0.035		0.0017	mg/kg wet	0.0333		105	46-127			

**QUALITY CONTROL DATA**

**Organochlorine Pesticides by GC - Quality Control**

**Batch 4L18025 - EPA 3550C - Continued**

**LCS (4L18025-BS1) Continued**

Prepared: 12/18/2014 13:00 Analyzed: 12/19/2014 13:00

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Endrin	0.032		0.0017	mg/kg wet	0.0333		97	28-143			
2,4,5,6-TCMX [2C]	0.046			mg/kg wet	0.0333		137	20-137			
Decachlorobiphenyl	0.044			mg/kg wet	0.0333		133	13-183			

**Matrix Spike (4L18025-MS1)**

Prepared: 12/18/2014 13:00 Analyzed: 12/19/2014 13:11

**Source: A407258-02**

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.026		0.0039	mg/kg dry	0.0381	0.0015 U	69	37-125			
Dieldrin	0.030		0.0039	mg/kg dry	0.0381	0.0010 U	78	46-127			
Endrin	0.028		0.0039	mg/kg dry	0.0381	0.0017 U	74	28-143			
2,4,5,6-TCMX	0.040			mg/kg dry	0.0381		106	20-137			
Decachlorobiphenyl	0.039			mg/kg dry	0.0381		102	13-183			

**Matrix Spike Dup (4L18025-MSD1)**

Prepared: 12/18/2014 13:00 Analyzed: 12/19/2014 13:23

**Source: A407258-02**

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.035		0.0039	mg/kg dry	0.0381	0.0015 U	91	37-125	28	24	QM-11
Dieldrin	0.035		0.0039	mg/kg dry	0.0381	0.0010 U	93	46-127	18	21	
Endrin	0.035		0.0039	mg/kg dry	0.0381	0.0017 U	92	28-143	22	22	
2,4,5,6-TCMX	0.044			mg/kg dry	0.0381		117	20-137			
Decachlorobiphenyl	0.047			mg/kg dry	0.0381		122	13-183			

**Polychlorinated Biphenyls by GC - Quality Control**

**Batch 4L16008 - EPA 3510C**

**Blank (4L16008-BLK1)**

Prepared: 12/16/2014 05:35 Analyzed: 12/22/2014 09:00

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.49	U	0.50	ug/L							
PCB-1221	0.46	U	0.50	ug/L							
PCB-1232	0.47	U	0.50	ug/L							
PCB-1248	0.49	U	0.50	ug/L							
PCB-1254	0.50	U	0.50	ug/L							
PCB-1260	0.48	U	0.50	ug/L							
2,4,5,6-TCMX [2C]	0.77			ug/L	1.00		77	38-142			
Decachlorobiphenyl	0.48			ug/L	1.00		48	34-159			

**LCS (4L16008-BS1)**

Prepared: 12/16/2014 05:35 Analyzed: 12/22/2014 09:11

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	8.8		0.50	ug/L	10.0		88	11-162			
PCB-1260	7.9		0.50	ug/L	10.0		79	10-166			
2,4,5,6-TCMX [2C]	0.89			ug/L	1.00		89	38-142			
Decachlorobiphenyl	0.62			ug/L	1.00		62	34-159			

**QUALITY CONTROL DATA**

**Polychlorinated Biphenyls by GC - Quality Control**

**Batch 4L16008 - EPA 3510C - Continued**

**Matrix Spike (4L16008-MS1)**

Prepared: 12/16/2014 05:35 Analyzed: 12/22/2014 09:22

Source: A407375-02

Analyte	Result	Flaq	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	8.3		0.50	ug/L	10.0	0.49 U	83	11-162			
PCB-1260	7.7		0.50	ug/L	10.0	0.48 U	77	10-166			
2,4,5,6-TCMX [2C]	0.86			ug/L	1.00		86	38-142			
Decachlorobiphenyl	0.59			ug/L	1.00		59	34-159			

**Matrix Spike Dup (4L16008-MSD1)**

Prepared: 12/16/2014 05:35 Analyzed: 12/22/2014 09:34

Source: A407375-02

Analyte	Result	Flaq	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	9.3		0.50	ug/L	10.0	0.49 U	93	11-162	12	23	
PCB-1260	8.9		0.50	ug/L	10.0	0.48 U	89	10-166	15	13	QM-11
2,4,5,6-TCMX [2C]	0.97			ug/L	1.00		97	38-142			
Decachlorobiphenyl	0.69			ug/L	1.00		69	34-159			

**Batch 4L18027 - EPA 3550C**

**Blank (4L18027-BLK1)**

Prepared: 12/18/2014 14:30 Analyzed: 12/19/2014 07:37

Analyte	Result	Flaq	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.014	U	0.017	mg/kg wet							
PCB-1221	0.014	U	0.017	mg/kg wet							
PCB-1232	0.014	U	0.017	mg/kg wet							
PCB-1248	0.0063	U	0.017	mg/kg wet							
PCB-1254	0.016	U	0.017	mg/kg wet							
PCB-1260	0.011	U	0.017	mg/kg wet							
2,4,5,6-TCMX [2C]	0.044			mg/kg wet	0.0333		132	20-137			
Decachlorobiphenyl	0.030			mg/kg wet	0.0333		91	13-183			

**LCS (4L18027-BS1)**

Prepared: 12/18/2014 14:30 Analyzed: 12/19/2014 07:49

Analyte	Result	Flaq	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.44		0.017	mg/kg wet	0.333		133	29-185			
PCB-1260	0.38		0.017	mg/kg wet	0.333		114	66-171			
2,4,5,6-TCMX [2C]	0.046			mg/kg wet	0.0333		137	20-137			
Decachlorobiphenyl	0.035			mg/kg wet	0.0333		105	13-183			

**Matrix Spike (4L18027-MS1)**

Prepared: 12/18/2014 14:30 Analyzed: 12/19/2014 08:00

Source: A407231-01

Analyte	Result	Flaq	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.30		0.018	mg/kg dry	0.360	0.015 U	84	29-185			

**QUALITY CONTROL DATA**

**Polychlorinated Biphenyls by GC - Quality Control**

**Batch 4L18027 - EPA 3550C - Continued**

**Matrix Spike (4L18027-MS1) Continued**

Prepared: 12/18/2014 14:30 Analyzed: 12/19/2014 08:00

Source: A407231-01

Analyte	Result	Flaq	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1260	0.27		0.018	mg/kg dry	0.360	0.012 U	76	66-171			
2,4,5,6-TCMX [2C]	0.039			mg/kg dry	0.0360		110	20-137			
Decachlorobiphenyl	0.033			mg/kg dry	0.0360		92	13-183			

**Matrix Spike Dup (4L18027-MSD1)**

Prepared: 12/18/2014 14:30 Analyzed: 12/19/2014 08:11

Source: A407231-01

Analyte	Result	Flaq	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.29		0.018	mg/kg dry	0.358	0.015 U	81	29-185	3	21	
PCB-1260	0.25		0.018	mg/kg dry	0.358	0.012 U	71	66-171	7	17	
2,4,5,6-TCMX [2C]	0.038			mg/kg dry	0.0358		106	20-137			
Decachlorobiphenyl	0.031			mg/kg dry	0.0358		86	13-183			

**FL Petroleum Range Organics - Quality Control**

**Batch 4L15017 - EPA 3550C**

**Blank (4L15017-BLK1)**

Prepared: 12/15/2014 11:00 Analyzed: 12/15/2014 19:33

Analyte	Result	Flaq	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	3.4	U	5.7	mg/kg wet							
n-Nonatriacontane	3.8			mg/kg wet	3.33		113	41-129			
o-Terphenyl	1.7			mg/kg wet	1.67		103	45-135			

**LCS (4L15017-BS1)**

Prepared: 12/15/2014 11:00 Analyzed: 12/15/2014 20:04

Analyte	Result	Flaq	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	49		5.7	mg/kg wet	56.7		86	42-126			
n-Nonatriacontane	1.8			mg/kg wet	3.33		54	41-129			
o-Terphenyl	1.9			mg/kg wet	1.67		113	45-135			

**Matrix Spike (4L15017-MS1)**

Prepared: 12/15/2014 11:00 Analyzed: 12/15/2014 20:35

Source: A406534-02

Analyte	Result	Flaq	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	57		6.4	mg/kg dry	63.5	3.8 U	91	42-126			
n-Nonatriacontane	4.1			mg/kg dry	3.73		111	41-129			
o-Terphenyl	2.0			mg/kg dry	1.87		107	45-135			

**Matrix Spike Dup (4L15017-MSD1)**

Prepared: 12/15/2014 11:00 Analyzed: 12/15/2014 21:07

Source: A406534-02

Analyte	Result	Flaq	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	56		6.4	mg/kg dry	63.5	3.8 U	88	42-126	2	31	
n-Nonatriacontane	3.9			mg/kg dry	3.73		104	41-129			

**QUALITY CONTROL DATA**

**FL Petroleum Range Organics - Quality Control**

**Batch 4L15017 - EPA 3550C - Continued**

**Matrix Spike Dup (4L15017-MSD1) Continued**

Prepared: 12/15/2014 11:00 Analyzed: 12/15/2014 21:07

Source: A406534-02

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<i>o</i> -Terphenyl	1.9			mg/kg dry	1.87		103	45-135			

**Batch 4L15045 - EPA 3510C**

**Blank (4L15045-BLK1)**

Prepared: 12/15/2014 17:30 Analyzed: 12/18/2014 20:19

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	0.10	U	0.17	mg/L							
<i>n</i> -Nonatriacontane	0.094			mg/L	0.100		94	36-144			
<i>o</i> -Terphenyl	0.054			mg/L	0.0500		109	39-156			

**LCS (4L15045-BS1)**

Prepared: 12/15/2014 17:30 Analyzed: 12/18/2014 21:22

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	1.4		0.17	mg/L	1.70		81	40-140			
<i>n</i> -Nonatriacontane	0.072			mg/L	0.100		72	36-144			
<i>o</i> -Terphenyl	0.055			mg/L	0.0500		110	39-156			

**Matrix Spike (4L15045-MS1)**

Prepared: 12/15/2014 17:30 Analyzed: 12/18/2014 20:50

Source: A407375-02

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	2.1		0.17	mg/L	1.70	0.10 U	121	40-140			
<i>n</i> -Nonatriacontane	0.076			mg/L	0.100		76	36-144			
<i>o</i> -Terphenyl	0.095			mg/L	0.0500		190	39-156			QS-03

**Matrix Spike Dup (4L15045-MSD1)**

Prepared: 12/15/2014 17:30 Analyzed: 12/18/2014 21:53

Source: A407375-02

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	1.5		0.17	mg/L	1.70	0.10 U	86	40-140	34	25	QM-11
<i>n</i> -Nonatriacontane	0.079			mg/L	0.100		79	36-144			
<i>o</i> -Terphenyl	0.056			mg/L	0.0500		112	39-156			

**Metals by EPA 6000/7000 Series Methods - Quality Control**

**Batch 4L17039 - EPA 7471B**

**Blank (4L17039-BLK1)**

Prepared: 12/18/2014 10:01 Analyzed: 12/19/2014 07:04

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.00390	U	0.0100	mg/kg wet							

**LCS (4L17039-BS1)**

Prepared: 12/18/2014 10:01 Analyzed: 12/19/2014 07:07

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.582		0.0100	mg/kg wet	0.600		97	80-120			

**QUALITY CONTROL DATA**

**Metals by EPA 6000/7000 Series Methods - Quality Control**

*Batch 4L17039 - EPA 7471B - Continued*

**Matrix Spike (4L17039-MS1)**

Prepared: 12/18/2014 10:01 Analyzed: 12/19/2014 07:14

Source: A407258-02

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.668		0.0115	mg/kg dry	0.690	0.00448 U	97	75-125			

**Matrix Spike Dup (4L17039-MSD1)**

Prepared: 12/18/2014 10:01 Analyzed: 12/19/2014 07:17

Source: A407258-02

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.701		0.0115	mg/kg dry	0.714	0.00448 U	98	75-125	5	20	

**Metals by EPA 6000/7000 Series Methods - Quality Control**

*Batch 4L17001 - EPA 3050B*

**Blank (4L17001-BLK1)**

Prepared: 12/17/2014 09:21 Analyzed: 12/18/2014 12:39

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.659	U	0.926	mg/kg wet							
Barium	0.0593	U	0.926	mg/kg wet							
Cadmium	0.0167	U	0.0926	mg/kg wet							
Chromium	0.0574	U	0.926	mg/kg wet							
Lead	0.204	U	0.926	mg/kg wet							
Selenium	0.667	U	3.70	mg/kg wet							
Silver	0.133	U	0.926	mg/kg wet							

**LCS (4L17001-BS1)**

Prepared: 12/17/2014 09:21 Analyzed: 12/18/2014 12:42

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	48.4		0.962	mg/kg wet	48.1		101	80-120			
Barium	49.7		0.962	mg/kg wet	48.1		103	80-120			
Cadmium	5.01		0.0962	mg/kg wet	4.81		104	80-120			
Chromium	49.9		0.962	mg/kg wet	48.1		104	80-120			
Lead	49.0		0.962	mg/kg wet	48.1		102	80-120			
Selenium	46.8		3.85	mg/kg wet	48.1		97	80-120			
Silver	9.90		0.962	mg/kg wet	9.62		103	80-120			

**Matrix Spike (4L17001-MS1)**

Prepared: 12/17/2014 09:21 Analyzed: 12/18/2014 12:49

Source: A407258-02

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	36.2		0.710	mg/kg dry	35.5	0.505 U	102	75-125			
Barium	37.7		0.710	mg/kg dry	35.5	0.339	105	75-125			
Cadmium	3.71		0.0710	mg/kg dry	3.55	0.0128 U	104	75-125			

**QUALITY CONTROL DATA**

**Metals by EPA 6000/7000 Series Methods - Quality Control**

*Batch 4L17001 - EPA 3050B - Continued*

**Matrix Spike (4L17001-MS1) Continued**

Prepared: 12/17/2014 09:21 Analyzed: 12/18/2014 12:49

Source: A407258-02

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Chromium	37.6		0.710	mg/kg dry	35.5	0.555	105	75-125			
Lead	36.8		0.710	mg/kg dry	35.5	0.322	103	75-125			
Selenium	34.6		2.84	mg/kg dry	35.5	0.511 U	97	75-125			
Silver	7.29		0.710	mg/kg dry	7.10	0.102 U	103	75-125			

**Matrix Spike Dup (4L17001-MSD1)**

Prepared: 12/17/2014 09:21 Analyzed: 12/18/2014 12:50

Source: A407258-02

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Arsenic	36.0		0.701	mg/kg dry	35.1	0.499 U	103	75-125	0.7	30	
Barium	37.1		0.701	mg/kg dry	35.1	0.339	105	75-125	2	30	
Cadmium	3.68		0.0701	mg/kg dry	3.51	0.0126 U	105	75-125	0.8	30	
Chromium	37.4		0.701	mg/kg dry	35.1	0.555	105	75-125	0.6	30	
Lead	36.4		0.701	mg/kg dry	35.1	0.322	103	75-125	1	30	
Selenium	34.3		2.80	mg/kg dry	35.1	0.505 U	98	75-125	0.8	30	
Silver	7.26		0.701	mg/kg dry	7.01	0.101 U	104	75-125	0.4	30	

*Batch 4L18001 - EPA 7470A*

**Blank (4L18001-BLK1)**

Prepared: 12/18/2014 09:08 Analyzed: 12/19/2014 10:34

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Mercury	0.0360	U	0.200	ug/L							

**Blank (4L18001-BLK2)**

Prepared: 12/18/2014 09:08 Analyzed: 12/19/2014 10:36

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Mercury	0.360	U	2.00	ug/L							

**LCS (4L18001-BS1)**

Prepared: 12/18/2014 09:08 Analyzed: 12/19/2014 10:39

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Mercury	4.97		0.200	ug/L	5.00		99	80-120			

**Matrix Spike (4L18001-MS1)**

Prepared: 12/18/2014 09:08 Analyzed: 12/19/2014 10:41

Source: A407258-01

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Mercury	5.21		0.200	ug/L	5.00	0.0360 U	104	75-125			

**Matrix Spike Dup (4L18001-MSD1)**

Prepared: 12/18/2014 09:08 Analyzed: 12/19/2014 10:43

Source: A407258-01

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Mercury	5.32		0.200	ug/L	5.00	0.0360 U	106	75-125	2	20	

**Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control**

*Batch 4L15003 - EPA 3005A*

**QUALITY CONTROL DATA**

**Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control**

*Batch 4L15003 - EPA 3005A - Continued*

**Blank (4L15003-BLK1)**

Prepared: 12/15/2014 09:19 Analyzed: 12/16/2014 11:35

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Arsenic	7.12	U	10.0	ug/L							
Barium	0.630	U	10.0	ug/L							
Cadmium	0.170	U	1.00	ug/L							
Chromium	1.30	U	10.0	ug/L							
Lead	2.20	U	10.0	ug/L							
Selenium	6.60	U	40.0	ug/L							
Silver	1.20	U	10.0	ug/L							

**LCS (4L15003-BS1)**

Prepared: 12/15/2014 09:19 Analyzed: 12/16/2014 11:38

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Arsenic	501		10.0	ug/L	500		100	80-120			
Barium	490		10.0	ug/L	500		98	80-120			
Cadmium	50.1		1.00	ug/L	50.0		100	80-120			
Chromium	494		10.0	ug/L	500		99	80-120			
Lead	492		10.0	ug/L	500		98	80-120			
Selenium	507		40.0	ug/L	500		101	80-120			
Silver	97.8		10.0	ug/L	100		98	80-120			

**Matrix Spike (4L15003-MS1)**

Prepared: 12/15/2014 09:19 Analyzed: 12/16/2014 11:40

**Source: B405533-01**

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Arsenic	513		10.0	ug/L	500	7.12 U	103	75-125			
Barium	918		10.0	ug/L	500	415	101	75-125			
Cadmium	49.5		1.00	ug/L	50.0	0.170 U	99	75-125			
Chromium	500		10.0	ug/L	500	1.30 U	100	75-125			
Lead	491		10.0	ug/L	500	2.20 U	98	75-125			
Selenium	514		40.0	ug/L	500	6.60 U	103	75-125			
Silver	101		10.0	ug/L	100	1.20 U	101	75-125			

**Matrix Spike Dup (4L15003-MSD1)**

Prepared: 12/15/2014 09:19 Analyzed: 12/16/2014 11:42

**Source: B405533-01**

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Arsenic	502		10.0	ug/L	500	7.12 U	100	75-125	2	20	
Barium	919		10.0	ug/L	500	415	101	75-125	0.2	20	
Cadmium	49.3		1.00	ug/L	50.0	0.170 U	99	75-125	0.5	20	
Chromium	498		10.0	ug/L	500	1.30 U	100	75-125	0.4	20	
Lead	489		10.0	ug/L	500	2.20 U	98	75-125	0.3	20	
Selenium	512		40.0	ug/L	500	6.60 U	102	75-125	0.4	20	
Silver	100		10.0	ug/L	100	1.20 U	100	75-125	0.5	20	

## FLAGS/NOTES AND DEFINITIONS

<b>PQL</b>	PQL: Practical Quantitation Limit.
<b>B</b>	Results are based upon membrane filter colony counts that are outside the method indicated ideal range.
<b>I</b>	The reported value is between the laboratory method detection limit (MDL) and the practical quantitation limit (PQL).
<b>J</b>	Estimated value.
<b>K</b>	Off-scale low; Actual value is known to be less than the value given.
<b>L</b>	Off-scale high; Actual value is known to be greater than value given.
<b>M</b>	Presence of analyte is verified but not quantified; the actual value is less than the MRL but greater than the MDL.
<b>N</b>	Presumptive evidence of presence of material.
<b>O</b>	Sampled, but analysis lost or not performed.
<b>Q</b>	Sample exceeded the accepted holding time.
<b>T</b>	Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only and shall not be used in statistical analysis.
<b>U</b>	Indicates that the compound was analyzed for but not detected.
<b>V</b>	Indicates that the analyte was detected in both the sample and the associated method blank.
<b>Y</b>	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.
<b>Z</b>	Too many colonies were present (TNTC); the numeric value represents the filtration volume.
<b>?</b>	Data are rejected and should not be used. Some or all of the quality control data for the analyte were outside criteria, and the presence or absence of the analyte cannot be determined from the data.
<b>*</b>	Not reported due to interference.
<b>J-01</b>	Result is estimated due to positive results in the associated method blank.
<b>J-02</b>	Result is estimated due to bias in the associated laboratory control sample (LCS).
<b>J-05</b>	Result estimated, calibration verification standard failed with low bias.
<b>O-01</b>	This compound is a common laboratory contaminant.
<b>Q</b>	Analysis performed outside of method - specified holding time.
<b>QL-02</b>	The associated laboratory control sample exhibited high bias; since the result is ND, the impact on data quality is minimal.
<b>QL-03</b>	The associated laboratory control sample exhibited low bias; the reported result should be considered to be a minimum estimate.
<b>QM-07</b>	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
<b>QM-11</b>	Precision between duplicate matrix spikes of the same sample was outside acceptance limits.
<b>QS-03</b>	Surrogate recovery outside acceptance limits
<b>QV-01</b>	The associated continuing calibration verification standard exhibited high bias; since the result is ND, the impact on data quality is minimal.



**ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD**

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Page \_\_\_ of \_\_\_

Client Name <b>Geotechnical and Environmental (GE002)</b>		Project Number <b>[none]</b>		Requested Analyses										Requested Turnaround Times	
Address <b>919 Lake Baldwin Lane</b>		Project Name/Desc <b>I-4 Level II</b>		%Solids,8081B,8082A,8270D,8270E PAH SIM,Ag,As,Ba,Cd,Cr,FLPRO,Hg,Pb,Se  <b>8260B (Full List VOCs)</b>  %Solids,8081B (Pests),8151A (Herbs)  <b>8260B (Full List VOCs),8260B TICs</b>  <b>8081B,8082A,8270D PAH SIM</b>  <b>8270D,8270E TICs</b>  <b>FLPRO</b>  <b>Ag,As,Ba,Cd,Cr,Hg,Pb,Se</b>  <b>8081B (Pesticides)</b>  <b>8151A (Herbicides)</b>	Note: Rush requests subject to acceptance by the facility										
City/ST/Zip <b>Orlando, FL 32814</b>		PO # / Billing Info			___ Standard										
Tel <b>(407) 898-1818</b>	Fax <b>(407) 898-1837</b>	Reporting Contact <b>Richard McCormick</b>			___ Expedited										
Sampler(s) Name, Affiliation (Print) <b>Jerry W. Governale GEC</b>		Billing Contact <b>Accounts Payable</b>			Due ___ / ___ / ___										
Sampler(s) Signature <i>[Signature]</i>		Site Location / Time Zone		Preservation (See Codes) (Combine as necessary)										Lab Workorder <b>A407258</b>	

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	I	OI	I	HI	I	I	SI	N	I	I	Sample Comments
1	TW-1	12/12/14	0844	Grab	GW	9	X	X		X		X	X	X			O - 10mL MeOH + DI WATER
2	SS-1	12/12/14	0945	Grab	SO	6	X	X									← Used Oil Group water ← Used Oil Group Soil
							15 ← Total # of Containers										

Sample Kit Prepared By <i>[Signature]</i>	Date/Time <b>12/12/14</b>	Relinquished By <i>[Signature]</i>	Date/Time <b>12/12/14</b>	Received By <b>Jerry W. Governale</b>	Date/Time <b>12/10/14</b>
Comments/Special Reporting Requirements		Relinquished By <b>Jerry W. Governale</b>	Date/Time <b>12/12/14</b>	Received By <i>[Signature]</i>	Date/Time
		Relinquished By <i>[Signature]</i>	Date/Time <b>12-12-14</b>	Received By <i>[Signature]</i>	Date/Time <b>12-12-14 15:33</b>
Cooler #'s & Temp. on Receipt <b>C-731 30C</b>				Condition Upon Receipt <input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable	



# ENCO Laboratories

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Friday, January 2, 2015

Geotechnical and Environmental (GE002)

Attn: Richard McCormick

919 Lake Baldwin Lane

Orlando, FL 32814

**RE: Laboratory Results for**

**Project Number: [none], Project Name/Desc: I-4 Level II**

**ENCO Workorder(s): A407442**

Dear Richard McCormick,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Tuesday, December 16, 2014.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Orlando. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Ronald Wambles For David Camacho

Project Manager

Enclosure(s)





**ANALYTICAL RESULTS**

**Description:** CS-1

**Lab Sample ID:** A407442-01

**Received:** 12/16/14 08:00

**Matrix:** Soil

**Sampled:** 12/15/14 15:40

**Work Order:** A407442

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 77.59

**Organochlorine Pesticides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.0012	U	mg/kg dry	2	0.0012	0.0044	4L18025	EPA 8081B	12/23/14 15:06	JJB	
4,4'-DDE [72-55-9]^	0.0013	U	mg/kg dry	2	0.0013	0.0044	4L18025	EPA 8081B	12/23/14 15:06	JJB	QV-01
4,4'-DDT [50-29-3]^	0.0017	U	mg/kg dry	2	0.0017	0.0044	4L18025	EPA 8081B	12/23/14 15:06	JJB	
Aldrin [309-00-2]^	0.0013	U	mg/kg dry	2	0.0013	0.0044	4L18025	EPA 8081B	12/23/14 15:06	JJB	
alpha-BHC [319-84-6]^	0.0014	U	mg/kg dry	2	0.0014	0.0044	4L18025	EPA 8081B	12/23/14 15:06	JJB	
beta-BHC [319-85-7]^	0.0026	U	mg/kg dry	2	0.0026	0.0044	4L18025	EPA 8081B	12/23/14 15:06	JJB	
Chlordane (tech) [12789-03-6]^	0.022	U	mg/kg dry	2	0.022	0.085	4L18025	EPA 8081B	12/23/14 15:06	JJB	
Chlordane-alpha [5103-71-9]^	0.0012	U	mg/kg dry	2	0.0012	0.0044	4L18025	EPA 8081B	12/23/14 15:06	JJB	
Chlordane-gamma [5566-34-7]^	0.0012	U	mg/kg dry	2	0.0012	0.0044	4L18025	EPA 8081B	12/23/14 15:06	JJB	
delta-BHC [319-86-8]^	0.0013	U	mg/kg dry	2	0.0013	0.0044	4L18025	EPA 8081B	12/23/14 15:06	JJB	
Dieldrin [60-57-1]^	0.0012	U	mg/kg dry	2	0.0012	0.0044	4L18025	EPA 8081B	12/23/14 15:06	JJB	
Endosulfan I [959-98-8]^	0.0010	U	mg/kg dry	2	0.0010	0.0044	4L18025	EPA 8081B	12/23/14 15:06	JJB	
Endosulfan II [33213-65-9]^	0.0012	U	mg/kg dry	2	0.0012	0.0044	4L18025	EPA 8081B	12/23/14 15:06	JJB	
Endosulfan sulfate [1031-07-8]^	0.0013	U	mg/kg dry	2	0.0013	0.0044	4L18025	EPA 8081B	12/23/14 15:06	JJB	
Endrin [72-20-8]^	0.0019	U	mg/kg dry	2	0.0019	0.0044	4L18025	EPA 8081B	12/23/14 15:06	JJB	
Endrin aldehyde [7421-93-4]^	0.0021	U	mg/kg dry	2	0.0021	0.0044	4L18025	EPA 8081B	12/23/14 15:06	JJB	
Endrin ketone [53494-70-5]^	0.0012	U	mg/kg dry	2	0.0012	0.0044	4L18025	EPA 8081B	12/23/14 15:06	JJB	
gamma-BHC [58-89-9]^	0.0015	U	mg/kg dry	2	0.0015	0.0044	4L18025	EPA 8081B	12/23/14 15:06	JJB	
Heptachlor [76-44-8]^	0.0016	U	mg/kg dry	2	0.0016	0.0044	4L18025	EPA 8081B	12/23/14 15:06	JJB	
Heptachlor epoxide [1024-57-3]^	0.0012	U	mg/kg dry	2	0.0012	0.0044	4L18025	EPA 8081B	12/23/14 15:06	JJB	
Isodrin [465-73-6]^	0.0016	U	mg/kg dry	2	0.0016	0.0044	4L18025	EPA 8081B	12/23/14 15:06	JJB	
Methoxychlor [72-43-5]^	0.0022	U	mg/kg dry	2	0.0022	0.0044	4L18025	EPA 8081B	12/23/14 15:06	JJB	
Mirex [2385-85-5]^	0.0028	U	mg/kg dry	2	0.0028	0.0044	4L18025	EPA 8081B	12/23/14 15:06	JJB	
Toxaphene [8001-35-2]^	0.044	U	mg/kg dry	2	0.044	0.085	4L18025	EPA 8081B	12/23/14 15:06	JJB	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
2,4,5,6-TCMX	0.029	2	0.0425	68 %	20-137	4L18025	EPA 8081B	12/23/14 15:06	JJB		
Decachlorobiphenyl	0.041	2	0.0425	97 %	13-183	4L18025	EPA 8081B	12/23/14 15:06	JJB		

**Chlorinated Herbicides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2,4,5-T [93-76-5]^	0.0032	U	mg/kg dry	1	0.0032	0.013	4L16010	EPA 8151A	12/17/14 19:58	RC	
2,4,5-TP (Silvex) [93-72-1]^	0.0061	U	mg/kg dry	1	0.0061	0.013	4L16010	EPA 8151A	12/17/14 19:58	RC	
2,4-D [94-75-7]^	0.013	U	mg/kg dry	1	0.013	0.013	4L16010	EPA 8151A	12/17/14 19:58	RC	
2,4-DB [94-82-6]^	0.0063	U	mg/kg dry	1	0.0063	0.013	4L16010	EPA 8151A	12/17/14 19:58	RC	
3,5-DCBA [51-365-5]^	0.0028	U	mg/kg dry	1	0.0028	0.013	4L16010	EPA 8151A	12/17/14 19:58	RC	
4-Nitrophenol [100-02-7]^	0.0084	U	mg/kg dry	1	0.0084	0.013	4L16010	EPA 8151A	12/17/14 19:58	RC	
Acifluorfen [50594-66-6]^	0.0021	U	mg/kg dry	1	0.0021	0.013	4L16010	EPA 8151A	12/17/14 19:58	RC	
Bentazon [25057-89-0]^	0.0058	U	mg/kg dry	1	0.0058	0.013	4L16010	EPA 8151A	12/17/14 19:58	RC	
Chloramben [133-90-4]^	0.0050	U	mg/kg dry	1	0.0050	0.013	4L16010	EPA 8151A	12/17/14 19:58	RC	
Dacthal [1861-32-1]^	0.0031	U	mg/kg dry	1	0.0031	0.013	4L16010	EPA 8151A	12/17/14 19:58	RC	
Dalapon [75-99-0]^	0.0064	U	mg/kg dry	1	0.0064	0.013	4L16010	EPA 8151A	12/17/14 19:58	RC	
Dicamba [1918-00-9]^	0.0030	U	mg/kg dry	1	0.0030	0.013	4L16010	EPA 8151A	12/17/14 19:58	RC	
Dichlorprop [120-36-5]^	0.0036	U	mg/kg dry	1	0.0036	0.013	4L16010	EPA 8151A	12/17/14 19:58	RC	
Dinoseb [88-85-7]^	0.0054	U	mg/kg dry	1	0.0054	0.013	4L16010	EPA 8151A	12/17/14 19:58	RC	J-02
MCPA [94-74-6]^	0.67	U	mg/kg dry	1	0.67	1.3	4L16010	EPA 8151A	12/17/14 19:58	RC	
MCPP [93-65-2]^	0.68	U	mg/kg dry	1	0.68	1.3	4L16010	EPA 8151A	12/17/14 19:58	RC	



### ANALYTICAL RESULTS

**Description:** CS-1

**Lab Sample ID:** A407442-01

**Received:** 12/16/14 08:00

**Matrix:** Soil

**Sampled:** 12/15/14 15:40

**Work Order:** A407442

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 77.59

### Chlorinated Herbicides by GC

*^ - ENCO Orlando certified analyte [NELAC E83182]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Pentachlorophenol [87-86-5]^	0.0032	U	mg/kg dry	1	0.0032	0.013	4L16010	EPA 8151A	12/17/14 19:58	RC	
Picloram [1918-02-1]^	0.0023	U	mg/kg dry	1	0.0023	0.013	4L16010	EPA 8151A	12/17/14 19:58	RC	QV-01

<u>Surrogates</u>	<u>Results</u>	<u>DF</u>	<u>Spike Lvl</u>	<u>% Rec</u>	<u>% Rec Limits</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
2,4-DCAA	0.039	1	0.0516	75 %	39-174	4L16010	EPA 8151A	12/17/14 19:58	RC	

### Metals by EPA 6000/7000 Series Methods

*^ - ENCO Jacksonville certified analyte [NELAC E82277]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Arsenic [7440-38-2]^	0.970		mg/kg dry	1	0.516	0.724	4L26003	EPA 6010C	12/30/14 12:56	ACV	

**ANALYTICAL RESULTS**

**Description:** TMW-2  
**Matrix:** Ground Water  
**Project:** I-4 Level II

**Lab Sample ID:** A407442-02  
**Sampled:** 12/15/14 11:40  
**Sampled By:** Jerry Governale

**Received:** 12/16/14 08:00  
**Work Order:** A407442

**Organochlorine Pesticides by GC**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.018	U	ug/L	1	0.018	0.050	4L16021	EPA 8081B	12/19/14 17:21	JJB	
4,4'-DDE [72-55-9]^	0.036	U	ug/L	1	0.036	0.050	4L16021	EPA 8081B	12/19/14 17:21	JJB	
4,4'-DDT [50-29-3]^	0.025	U	ug/L	1	0.025	0.050	4L16021	EPA 8081B	12/19/14 17:21	JJB	
Aldrin [309-00-2]^	0.032	U	ug/L	1	0.032	0.050	4L16021	EPA 8081B	12/19/14 17:21	JJB	
alpha-BHC [319-84-6]^	0.026	U	ug/L	1	0.026	0.050	4L16021	EPA 8081B	12/19/14 17:21	JJB	
beta-BHC [319-85-7]^	0.022	U	ug/L	1	0.022	0.050	4L16021	EPA 8081B	12/19/14 17:21	JJB	
Chlordane (tech) [12789-03-6]^	0.32	U	ug/L	1	0.32	0.50	4L16021	EPA 8081B	12/19/14 17:21	JJB	
Chlordane-alpha [5103-71-9]^	0.022	U	ug/L	1	0.022	0.050	4L16021	EPA 8081B	12/19/14 17:21	JJB	
Chlordane-gamma [5566-34-7]^	0.018	U	ug/L	1	0.018	0.050	4L16021	EPA 8081B	12/19/14 17:21	JJB	
delta-BHC [319-86-8]^	0.019	U	ug/L	1	0.019	0.050	4L16021	EPA 8081B	12/19/14 17:21	JJB	
Dieldrin [60-57-1]^	0.017	U	ug/L	1	0.017	0.050	4L16021	EPA 8081B	12/19/14 17:21	JJB	
Endosulfan I [959-98-8]^	0.016	U	ug/L	1	0.016	0.050	4L16021	EPA 8081B	12/19/14 17:21	JJB	
Endosulfan II [33213-65-9]^	0.017	U	ug/L	1	0.017	0.050	4L16021	EPA 8081B	12/19/14 17:21	JJB	
Endosulfan sulfate [1031-07-8]^	0.016	U	ug/L	1	0.016	0.050	4L16021	EPA 8081B	12/19/14 17:21	JJB	
Endrin [72-20-8]^	0.014	U	ug/L	1	0.014	0.050	4L16021	EPA 8081B	12/19/14 17:21	JJB	
Endrin aldehyde [7421-93-4]^	0.020	U	ug/L	1	0.020	0.050	4L16021	EPA 8081B	12/19/14 17:21	JJB	
Endrin ketone [53494-70-5]^	0.017	U	ug/L	1	0.017	0.050	4L16021	EPA 8081B	12/19/14 17:21	JJB	
gamma-BHC [58-89-9]^	0.020	U	ug/L	1	0.020	0.050	4L16021	EPA 8081B	12/19/14 17:21	JJB	
Heptachlor [76-44-8]^	0.018	U	ug/L	1	0.018	0.050	4L16021	EPA 8081B	12/19/14 17:21	JJB	
Heptachlor epoxide [1024-57-3]^	0.018	U	ug/L	1	0.018	0.050	4L16021	EPA 8081B	12/19/14 17:21	JJB	
Isodrin [465-73-6]^	0.030	U	ug/L	1	0.030	0.050	4L16021	EPA 8081B	12/19/14 17:21	JJB	
Methoxychlor [72-43-5]^	0.018	U	ug/L	1	0.018	0.050	4L16021	EPA 8081B	12/19/14 17:21	JJB	
Mirex [2385-85-5]^	0.034	U	ug/L	1	0.034	0.050	4L16021	EPA 8081B	12/19/14 17:21	JJB	
Toxaphene [8001-35-2]^	0.48	U	ug/L	1	0.48	0.50	4L16021	EPA 8081B	12/19/14 17:21	JJB	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
2,4,5,6-TCMX	1.4	1	1.00	138 %	38-142	4L16021	EPA 8081B	12/19/14 17:21	JJB		
Decachlorobiphenyl	1.2	1	1.00	115 %	34-159	4L16021	EPA 8081B	12/19/14 17:21	JJB		

**Chlorinated Herbicides by GC**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2,4,5-T [93-76-5]^	0.43	U	ug/L	1	0.43	0.77	4L22067	EPA 8151A	12/29/14 17:37	RC	
2,4,5-TP (Silvex) [93-72-1]^	0.68	U	ug/L	1	0.68	0.77	4L22067	EPA 8151A	12/29/14 17:37	RC	
2,4-D [94-75-7]^	0.42	U	ug/L	1	0.42	0.77	4L22067	EPA 8151A	12/29/14 17:37	RC	
2,4-DB [94-82-6]^	0.54	U	ug/L	1	0.54	0.77	4L22067	EPA 8151A	12/29/14 17:37	RC	
3,5-DCBA [51-365-5]^	0.55	U	ug/L	1	0.55	0.77	4L22067	EPA 8151A	12/29/14 17:37	RC	
4-Nitrophenol [100-02-7]^	0.49	U	ug/L	1	0.49	0.77	4L22067	EPA 8151A	12/29/14 17:37	RC	
Acifluorfen [50594-66-6]^	0.69	U	ug/L	1	0.69	0.77	4L22067	EPA 8151A	12/29/14 17:37	RC	
Bentazon [25057-89-0]^	0.34	U	ug/L	1	0.34	0.77	4L22067	EPA 8151A	12/29/14 17:37	RC	J-05
Chloramben [133-90-4]^	0.66	U	ug/L	1	0.66	0.77	4L22067	EPA 8151A	12/29/14 17:37	RC	
Dacthal [1861-32-1]^	0.35	U	ug/L	1	0.35	0.77	4L22067	EPA 8151A	12/29/14 17:37	RC	
Dalapon [75-99-0]^	0.75	U	ug/L	1	0.75	0.77	4L22067	EPA 8151A	12/29/14 17:37	RC	
Dicamba [1918-00-9]^	0.29	U	ug/L	1	0.29	0.77	4L22067	EPA 8151A	12/29/14 17:37	RC	
Dichlorprop [120-36-5]^	0.43	U	ug/L	1	0.43	0.77	4L22067	EPA 8151A	12/29/14 17:37	RC	
Dinoseb [88-85-7]^	0.49	U	ug/L	1	0.49	0.77	4L22067	EPA 8151A	12/29/14 17:37	RC	
MCPA [94-74-6]^	52	U	ug/L	1	52	77	4L22067	EPA 8151A	12/29/14 17:37	RC	
MCPP [93-65-2]^	71	U	ug/L	1	71	77	4L22067	EPA 8151A	12/29/14 17:37	RC	



**ANALYTICAL RESULTS**

**Description:** TMW-2

**Lab Sample ID:** A407442-02

**Received:** 12/16/14 08:00

**Matrix:** Ground Water

**Sampled:** 12/15/14 11:40

**Work Order:** A407442

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**Chlorinated Herbicides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Pentachlorophenol [87-86-5]^	0.29	U	ug/L	1	0.29	0.77	4L22067	EPA 8151A	12/29/14 17:37	RC	
Picloram [1918-02-1]^	0.35	U	ug/L	1	0.35	0.77	4L22067	EPA 8151A	12/29/14 17:37	RC	

<u>Surrogates</u>	<u>Results</u>	<u>DF</u>	<u>Spike Lvl</u>	<u>% Rec</u>	<u>% Rec Limits</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
2,4-DCAA	2.6	1	3.08	85 %	68-139	4L22067	EPA 8151A	12/29/14 17:37	RC	

**Metals (total recoverable) by EPA 6000/7000 Series Methods**

*^ - ENCO Jacksonville certified analyte [NELAC E82277]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Arsenic [7440-38-2]^	7.12	U	ug/L	1	7.12	10.0	4L30003	EPA 6010C	12/31/14 12:42	ACV	

**QUALITY CONTROL DATA**

**Organochlorine Pesticides by GC - Quality Control**

**Batch 4L16021 - EPA 3510C**

**Blank (4L16021-BLK1)**

Prepared: 12/16/2014 17:30 Analyzed: 12/19/2014 11:51

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDD	0.018	U	0.050	ug/L							
4,4'-DDE	0.036	U	0.050	ug/L							QV-01
4,4'-DDT	0.025	U	0.050	ug/L							
Aldrin	0.032	U	0.050	ug/L							QV-01
alpha-BHC	0.026	U	0.050	ug/L							
beta-BHC	0.022	U	0.050	ug/L							
Chlordane (tech)	0.32	U	0.50	ug/L							
Chlordane-alpha	0.022	U	0.050	ug/L							
Chlordane-gamma	0.018	U	0.050	ug/L							
delta-BHC	0.019	U	0.050	ug/L							
Dieldrin	0.017	U	0.050	ug/L							
Endosulfan I	0.016	U	0.050	ug/L							
Endosulfan II	0.017	U	0.050	ug/L							
Endosulfan sulfate	0.016	U	0.050	ug/L							
Endrin	0.014	U	0.050	ug/L							
Endrin aldehyde	0.020	U	0.050	ug/L							
Endrin ketone	0.017	U	0.050	ug/L							
gamma-BHC	0.020	U	0.050	ug/L							
Heptachlor	0.018	U	0.050	ug/L							
Heptachlor epoxide	0.018	U	0.050	ug/L							
Isodrin	0.030	U	0.050	ug/L							
Methoxychlor	0.018	U	0.050	ug/L							
Mirex	0.034	U	0.050	ug/L							
Toxaphene	0.48	U	0.50	ug/L							
<hr/>											
2,4,5,6-TCMX	1.5			ug/L	1.00		146	38-142			
Decachlorobiphenyl	1.1			ug/L	1.00		112	34-159			

**LCS (4L16021-BS1)**

Prepared: 12/16/2014 17:30 Analyzed: 12/19/2014 12:03

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	1.2		0.050	ug/L	1.00		117	37-125			
Dieldrin	0.76		0.050	ug/L	1.00		76	46-127			
Endrin	0.38		0.050	ug/L	1.00		38	28-143			
<hr/>											
2,4,5,6-TCMX	1.2			ug/L	1.00		123	38-142			
Decachlorobiphenyl	0.74			ug/L	1.00		74	34-159			

**Matrix Spike (4L16021-MS1)**

Prepared: 12/16/2014 17:30 Analyzed: 12/19/2014 12:14

**Source: A407375-01**

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	1.1		0.050	ug/L	1.00	0.025 U	111	37-125			
Dieldrin	1.1		0.050	ug/L	1.00	0.017 U	114	46-127			
Endrin	0.70		0.050	ug/L	1.00	0.014 U	70	28-143			
<hr/>											
2,4,5,6-TCMX	1.5			ug/L	1.00		148	38-142			QS-03
Decachlorobiphenyl	0.74			ug/L	1.00		74	34-159			

**QUALITY CONTROL DATA**

**Organochlorine Pesticides by GC - Quality Control**

**Batch 4L16021 - EPA 3510C - Continued**

**Matrix Spike Dup (4L16021-MSD1)**

Prepared: 12/16/2014 17:30 Analyzed: 12/19/2014 12:26

Source: A407375-01

Analyte	Result	Flaq	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	1.1		0.050	ug/L	1.00	0.025 U	111	37-125	0.4	24	
Dieldrin	1.2		0.050	ug/L	1.00	0.017 U	116	46-127	2	21	
Endrin	0.86		0.050	ug/L	1.00	0.014 U	86	28-143	19	22	
2,4,5,6-TCMX	1.3			ug/L	1.00		130	38-142			
Decachlorobiphenyl	0.58			ug/L	1.00		58	34-159			

**Batch 4L18025 - EPA 3550C**

**Blank (4L18025-BLK1)**

Prepared: 12/18/2014 13:00 Analyzed: 12/19/2014 12:49

Analyte	Result	Flaq	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDD	0.00048	U	0.0017	mg/kg wet							
4,4'-DDE	0.00052	U	0.0017	mg/kg wet							QV-01
4,4'-DDT	0.00066	U	0.0017	mg/kg wet							
Aldrin	0.00051	U	0.0017	mg/kg wet							QV-01
alpha-BHC	0.00056	U	0.0017	mg/kg wet							
beta-BHC	0.0010	U	0.0017	mg/kg wet							
Chlordane (tech)	0.0084	U	0.033	mg/kg wet							
Chlordane-alpha	0.00045	U	0.0017	mg/kg wet							
Chlordane-gamma	0.00045	U	0.0017	mg/kg wet							
delta-BHC	0.00050	U	0.0017	mg/kg wet							
Dieldrin	0.00045	U	0.0017	mg/kg wet							
Endosulfan I	0.00039	U	0.0017	mg/kg wet							
Endosulfan II	0.00048	U	0.0017	mg/kg wet							
Endosulfan sulfate	0.00049	U	0.0017	mg/kg wet							
Endrin	0.00074	U	0.0017	mg/kg wet							
Endrin aldehyde	0.00083	U	0.0017	mg/kg wet							
Endrin ketone	0.00047	U	0.0017	mg/kg wet							
gamma-BHC	0.00060	U	0.0017	mg/kg wet							
Heptachlor	0.00062	U	0.0017	mg/kg wet							
Heptachlor epoxide	0.00048	U	0.0017	mg/kg wet							
Isodrin	0.00062	U	0.0017	mg/kg wet							
Methoxychlor	0.00086	U	0.0017	mg/kg wet							

**QUALITY CONTROL DATA**

**Organochlorine Pesticides by GC - Quality Control**

*Batch 4L18025 - EPA 3550C - Continued*

**Blank (4L18025-BLK1) Continued**

Prepared: 12/18/2014 13:00 Analyzed: 12/19/2014 12:49

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Mirex	0.0011	U	0.0017	mg/kg wet							
Toxaphene	0.017	U	0.033	mg/kg wet							
<i>2,4,5,6-TCMX</i>	<i>0.036</i>			<i>mg/kg wet</i>	<i>0.0333</i>		<i>108</i>	<i>20-137</i>			
<i>Decachlorobiphenyl</i>	<i>0.032</i>			<i>mg/kg wet</i>	<i>0.0333</i>		<i>95</i>	<i>13-183</i>			

**LCS (4L18025-BS1)**

Prepared: 12/18/2014 13:00 Analyzed: 12/19/2014 13:00

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
4,4'-DDT	0.033		0.0017	mg/kg wet	0.0333		98	37-125			
Dieldrin	0.035		0.0017	mg/kg wet	0.0333		105	46-127			
Endrin	0.032		0.0017	mg/kg wet	0.0333		97	28-143			
<i>2,4,5,6-TCMX [2C]</i>	<i>0.046</i>			<i>mg/kg wet</i>	<i>0.0333</i>		<i>137</i>	<i>20-137</i>			
<i>Decachlorobiphenyl</i>	<i>0.044</i>			<i>mg/kg wet</i>	<i>0.0333</i>		<i>133</i>	<i>13-183</i>			

**Matrix Spike (4L18025-MS1)**

Prepared: 12/18/2014 13:00 Analyzed: 12/19/2014 13:11

Source: A407258-02

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
4,4'-DDT	0.026		0.0039	mg/kg dry	0.0381	0.0015 U	69	37-125			
Dieldrin	0.030		0.0039	mg/kg dry	0.0381	0.0010 U	78	46-127			
Endrin	0.028		0.0039	mg/kg dry	0.0381	0.0017 U	74	28-143			
<i>2,4,5,6-TCMX</i>	<i>0.040</i>			<i>mg/kg dry</i>	<i>0.0381</i>		<i>106</i>	<i>20-137</i>			
<i>Decachlorobiphenyl</i>	<i>0.039</i>			<i>mg/kg dry</i>	<i>0.0381</i>		<i>102</i>	<i>13-183</i>			

**Matrix Spike Dup (4L18025-MSD1)**

Prepared: 12/18/2014 13:00 Analyzed: 12/19/2014 13:23

Source: A407258-02

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
4,4'-DDT	0.035		0.0039	mg/kg dry	0.0381	0.0015 U	91	37-125	28	24	QM-11
Dieldrin	0.035		0.0039	mg/kg dry	0.0381	0.0010 U	93	46-127	18	21	
Endrin	0.035		0.0039	mg/kg dry	0.0381	0.0017 U	92	28-143	22	22	
<i>2,4,5,6-TCMX</i>	<i>0.044</i>			<i>mg/kg dry</i>	<i>0.0381</i>		<i>117</i>	<i>20-137</i>			
<i>Decachlorobiphenyl</i>	<i>0.047</i>			<i>mg/kg dry</i>	<i>0.0381</i>		<i>122</i>	<i>13-183</i>			

**Chlorinated Herbicides by GC - Quality Control**

*Batch 4L16010 - EPA 3550C*

**Blank (4L16010-BLK1)**

Prepared: 12/16/2014 10:55 Analyzed: 12/17/2014 17:47

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
2,4,5-T	0.0025	U	0.010	mg/kg wet							

**QUALITY CONTROL DATA**

**Chlorinated Herbicides by GC - Quality Control**

*Batch 4L16010 - EPA 3550C - Continued*

**Blank (4L16010-BLK1) Continued**

Prepared: 12/16/2014 10:55 Analyzed: 12/17/2014 17:47

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
2,4,5-TP (Silvex)	0.0047	U	0.010	mg/kg wet							
2,4-D	0.0099	U	0.010	mg/kg wet							
2,4-DB	0.0049	U	0.010	mg/kg wet							
3,5-DCBA	0.0022	U	0.010	mg/kg wet							
4-Nitrophenol	0.0065	U	0.010	mg/kg wet							
Acifluorfen	0.0016	U	0.010	mg/kg wet							
Bentazon	0.0045	U	0.010	mg/kg wet							
Chloramben	0.0039	U	0.010	mg/kg wet							
Dacthal	0.0024	U	0.010	mg/kg wet							
Dalapon	0.0050	U	0.010	mg/kg wet							
Dicamba	0.0023	U	0.010	mg/kg wet							
Dichlorprop	0.0028	U	0.010	mg/kg wet							
Dinoseb	0.0042	U	0.010	mg/kg wet							J-02
MCPA	0.52	U	1.0	mg/kg wet							
MCPP	0.53	U	1.0	mg/kg wet							
Pentachlorophenol	0.0025	U	0.010	mg/kg wet							
Picloram	0.0018	U	0.010	mg/kg wet							QV-01
<i>2,4-DCAA</i>	<i>0.042</i>			<i>mg/kg wet</i>	<i>0.0400</i>		<i>105</i>	<i>39-174</i>			

**LCS (4L16010-BS1)**

Prepared: 12/16/2014 10:55 Analyzed: 12/17/2014 18:13

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
2,4,5-TP (Silvex)	0.041		0.010	mg/kg wet	0.0400		102	45-135			
2,4-D	0.036		0.010	mg/kg wet	0.0400		89	35-121			
2,4-DB	0.035		0.010	mg/kg wet	0.0400		87	34-160			
Bentazon	0.030		0.010	mg/kg wet	0.0400		76	61-100			
Dalapon	0.054		0.010	mg/kg wet	0.0400		135	20-136			
Dicamba	0.045		0.010	mg/kg wet	0.0400		112	47-129			
Picloram	0.027		0.010	mg/kg wet	0.0400		68	33-106			J-04
<i>2,4-DCAA</i>	<i>0.047</i>			<i>mg/kg wet</i>	<i>0.0400</i>		<i>118</i>	<i>39-174</i>			

**QUALITY CONTROL DATA**

**Chlorinated Herbicides by GC - Quality Control**

**Batch 4L16010 - EPA 3550C - Continued**

**Matrix Spike (4L16010-MS1)**

Prepared: 12/16/2014 10:55 Analyzed: 12/17/2014 18:39

Source: A407335-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	0.045		0.013	mg/kg dry	0.0502	0.0059 U	90	45-135			
2,4-D	0.053		0.013	mg/kg dry	0.0502	0.012 U	105	35-121			
2,4-DB	0.044		0.013	mg/kg dry	0.0502	0.0062 U	88	34-160			
Bentazon	0.032		0.013	mg/kg dry	0.0502	0.0057 U	64	61-100			
Dalapon	0.067		0.013	mg/kg dry	0.0502	0.0063 U	133	20-136			
Dicamba	0.055		0.013	mg/kg dry	0.0502	0.0029 U	109	47-129			
Picloram	0.032		0.013	mg/kg dry	0.0502	0.0023 U	64	33-106			J-04
2,4-DCAA	0.058			mg/kg dry	0.0502		115	39-174			

**Matrix Spike Dup (4L16010-MSD1)**

Prepared: 12/16/2014 10:55 Analyzed: 12/17/2014 19:05

Source: A407335-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	0.029		0.013	mg/kg dry	0.0504	0.0059 U	58	45-135	42	23	QM-11
2,4-D	0.035		0.013	mg/kg dry	0.0504	0.012 U	70	35-121	40	43	
2,4-DB	0.033		0.013	mg/kg dry	0.0504	0.0062 U	65	34-160	30	47	
Bentazon	0.023		0.013	mg/kg dry	0.0504	0.0057 U	47	61-100	31	43	QM-07
Dalapon	0.047		0.013	mg/kg dry	0.0504	0.0063 U	93	20-136	35	50	
Dicamba	0.038		0.013	mg/kg dry	0.0504	0.0029 U	76	47-129	36	50	
Picloram	0.026		0.013	mg/kg dry	0.0504	0.0023 U	52	33-106	20	37	J-04
2,4-DCAA	0.040			mg/kg dry	0.0504		80	39-174			

**Batch 4L18006 - EPA 3510C**

**Blank (4L18006-BLK1)**

Prepared: 12/18/2014 12:25 Analyzed: 12/22/2014 20:54

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	0.28	U	0.50	ug/L							QV-01
2,4,5-TP (Silvex)	0.44	U	0.50	ug/L							QV-01
2,4-D	0.27	U	0.50	ug/L							QV-01
2,4-DB	0.35	U	0.50	ug/L							
3,5-DCBA	0.36	U	0.50	ug/L							QV-01
4-Nitrophenol	0.32	U	0.50	ug/L							
Acifluorfen	0.45	U	0.50	ug/L							QV-01
Bentazon	0.22	U	0.50	ug/L							QV-01
Chloramben	0.43	U	0.50	ug/L							
Dacthal	0.23	U	0.50	ug/L							QV-01
Dalapon	0.49	U	0.50	ug/L							
Dicamba	0.19	U	0.50	ug/L							QV-01
Dichlorprop	0.28	U	0.50	ug/L							QV-01
Dinoseb	0.32	U	0.50	ug/L							
MCPA	34	U	50	ug/L							
MCPP	46	U	50	ug/L							QV-01
Pentachlorophenol	0.19	U	0.50	ug/L							QV-01
Picloram	0.23	U	0.50	ug/L							
2,4-DCAA	1.9			ug/L	2.00		94	68-139			

**QUALITY CONTROL DATA**

**Chlorinated Herbicides by GC - Quality Control**

**Batch 4L18006 - EPA 3510C - Continued**

**LCS (4L18006-BS1)**

Prepared: 12/18/2014 12:25 Analyzed: 12/22/2014 21:20

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.6		0.50	ug/L	2.00		78	70-114			J-04
2,4-D	1.4		0.50	ug/L	2.00		68	37-129			J-04
2,4-DB	1.5		0.50	ug/L	2.00		77	49-144			
Bentazon	1.3		0.50	ug/L	2.00		67	37-141			J-04
Dalapon	1.3		0.50	ug/L	2.00		63	18-121			
Dicamba	1.6		0.50	ug/L	2.00		80	36-143			J-04
Picloram	1.1		0.50	ug/L	2.00		53	36-127			
2,4-DCAA	2.0			ug/L	2.00		99	68-139			

**Matrix Spike (4L18006-MS1)**

Prepared: 12/18/2014 12:25 Analyzed: 12/22/2014 21:46

Source: A407375-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.2		0.50	ug/L	2.00	0.44 U	59	70-114			J-04
2,4-D	0.90		0.50	ug/L	2.00	0.27 U	45	37-129			J-04
2,4-DB	1.3		0.50	ug/L	2.00	0.35 U	63	49-144			
Bentazon	1.1		0.50	ug/L	2.00	0.22 U	54	37-141			J-04
Dalapon	0.87		0.50	ug/L	2.00	0.49 U	43	18-121			
Dicamba	1.5		0.50	ug/L	2.00	0.19 U	74	36-143			J-04
Picloram	1.1		0.50	ug/L	2.00	0.23 U	53	36-127			
2,4-DCAA	1.6			ug/L	2.00		81	68-139			

**Matrix Spike Dup (4L18006-MSD1)**

Prepared: 12/18/2014 12:25 Analyzed: 12/22/2014 22:12

Source: A407375-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.4		0.50	ug/L	2.00	0.44 U	70	70-114	16	15	J-04
2,4-D	1.2		0.50	ug/L	2.00	0.27 U	62	37-129	32	33	J-04
2,4-DB	1.5		0.50	ug/L	2.00	0.35 U	74	49-144	16	36	
Bentazon	1.1		0.50	ug/L	2.00	0.22 U	55	37-141	2	22	J-04
Dalapon	0.99		0.50	ug/L	2.00	0.49 U	49	18-121	13	49	
Dicamba	1.5		0.50	ug/L	2.00	0.19 U	77	36-143	3	24	J-04
Picloram	1.1		0.50	ug/L	2.00	0.23 U	53	36-127	0.3	16	
2,4-DCAA	1.9			ug/L	2.00		97	68-139			

**Batch 4L22067 - EPA 3510C**

**Blank (4L22067-BLK1)**

Prepared: 12/22/2014 21:00 Analyzed: 12/29/2014 15:27

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	0.28	U	0.50	ug/L							
2,4,5-TP (Silvex)	0.44	U	0.50	ug/L							
2,4-D	0.27	U	0.50	ug/L							
2,4-DB	0.35	U	0.50	ug/L							
3,5-DCBA	0.36	U	0.50	ug/L							
4-Nitrophenol	0.32	U	0.50	ug/L							
Acifluorfen	0.45	U	0.50	ug/L							
Bentazon	0.22	U	0.50	ug/L							J-05
Chloramben	0.43	U	0.50	ug/L							
Dacthal	0.23	U	0.50	ug/L							

**QUALITY CONTROL DATA**

**Chlorinated Herbicides by GC - Quality Control**

*Batch 4L22067 - EPA 3510C - Continued*

**Blank (4L22067-BLK1) Continued**

Prepared: 12/22/2014 21:00 Analyzed: 12/29/2014 15:27

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Dalapon	0.49	U	0.50	ug/L							
Dicamba	0.19	U	0.50	ug/L							
Dichlorprop	0.28	U	0.50	ug/L							
Dinoseb	0.32	U	0.50	ug/L							
MCPA	34	U	50	ug/L							
MCPP	46	U	50	ug/L							
Pentachlorophenol	0.19	U	0.50	ug/L							
Picloram	0.23	U	0.50	ug/L							
2,4-DCAA	2.4			ug/L	2.00		122	68-139			

**LCS (4L22067-BS1)**

Prepared: 12/22/2014 21:00 Analyzed: 12/29/2014 15:53

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.7		0.50	ug/L	2.00		86	70-114			
2,4-D	1.6		0.50	ug/L	2.00		80	37-129			
2,4-DB	1.6		0.50	ug/L	2.00		82	49-144			
Bentazon	1.1		0.50	ug/L	2.00		53	37-141			
Dalapon	0.70		0.50	ug/L	2.00		35	18-121			
Dicamba	1.7		0.50	ug/L	2.00		86	36-143			
Picloram	1.3		0.50	ug/L	2.00		64	36-127			
2,4-DCAA	2.4			ug/L	2.00		120	68-139			

**Matrix Spike (4L22067-MS1)**

Prepared: 12/22/2014 21:00 Analyzed: 12/29/2014 16:19

Source: A407522-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.4		0.50	ug/L	2.00	0.44 U	69	70-114			QM-07
2,4-D	1.3		0.50	ug/L	2.00	0.27 U	64	37-129			
2,4-DB	1.3		0.50	ug/L	2.00	0.35 U	64	49-144			
Bentazon	0.81		0.50	ug/L	2.00	0.22 U	41	37-141			
Dalapon	1.1		0.50	ug/L	2.00	0.49 U	57	18-121			
Dicamba	1.3		0.50	ug/L	2.00	0.19 U	67	36-143			
Picloram	0.80		0.50	ug/L	2.00	0.23 U	40	36-127			
2,4-DCAA	2.1			ug/L	2.00		106	68-139			

**Matrix Spike Dup (4L22067-MSD1)**

Prepared: 12/22/2014 21:00 Analyzed: 12/29/2014 16:45

Source: A407522-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.2		0.50	ug/L	2.00	0.44 U	59	70-114	15	15	QM-07
2,4-D	1.1		0.50	ug/L	2.00	0.27 U	55	37-129	16	33	
2,4-DB	1.2		0.50	ug/L	2.00	0.35 U	61	49-144	3	36	
Bentazon	0.83		0.50	ug/L	2.00	0.22 U	41	37-141	2	22	
Dalapon	1.3		0.50	ug/L	2.00	0.49 U	67	18-121	16	49	
Dicamba	1.2		0.50	ug/L	2.00	0.19 U	59	36-143	13	24	
Picloram	0.83		0.50	ug/L	2.00	0.23 U	42	36-127	4	16	
2,4-DCAA	1.4			ug/L	2.00		72	68-139			

**Metals by EPA 6000/7000 Series Methods - Quality Control**

**QUALITY CONTROL DATA**

**Metals by EPA 6000/7000 Series Methods - Quality Control**

**Batch 4L26003 - EPA 3050B**

**Blank (4L26003-BLK1)**

Prepared: 12/26/2014 08:57 Analyzed: 12/30/2014 11:53

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.712	U	1.00	mg/kg wet							

**LCS (4L26003-BS1)**

Prepared: 12/26/2014 08:57 Analyzed: 12/30/2014 11:56

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	44.4		0.962	mg/kg wet	48.1		92	80-120			

**Matrix Spike (4L26003-MS1)**

Prepared: 12/26/2014 08:57 Analyzed: 12/30/2014 11:58

Source: B405662-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	49.2		1.09	mg/kg dry	54.3	0.517	91	75-125			

**Matrix Spike Dup (4L26003-MSD1)**

Prepared: 12/26/2014 08:57 Analyzed: 12/30/2014 12:00

Source: B405662-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	46.7		1.02	mg/kg dry	50.8	0.517	92	75-125	5	30	

**Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control**

**Batch 4L30003 - EPA 3005A**

**Blank (4L30003-BLK1)**

Prepared: 12/30/2014 09:00 Analyzed: 12/31/2014 11:27

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	7.12	U	10.0	ug/L							

**LCS (4L30003-BS1)**

Prepared: 12/30/2014 09:00 Analyzed: 12/31/2014 11:30

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	482		10.0	ug/L	500		96	80-120			

**Matrix Spike (4L30003-MS1)**

Prepared: 12/30/2014 09:00 Analyzed: 12/31/2014 11:32

Source: B405675-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	485		10.0	ug/L	500	8.40	95	75-125			

**Matrix Spike Dup (4L30003-MSD1)**

Prepared: 12/30/2014 09:00 Analyzed: 12/31/2014 11:34

Source: B405675-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	490		10.0	ug/L	500	8.40	96	75-125	1	20	

## FLAGS/NOTES AND DEFINITIONS

<b>PQL</b>	PQL: Practical Quantitation Limit.
<b>B</b>	Results are based upon membrane filter colony counts that are outside the method indicated ideal range.
<b>I</b>	The reported value is between the laboratory method detection limit (MDL) and the practical quantitation limit (PQL).
<b>J</b>	Estimated value.
<b>K</b>	Off-scale low; Actual value is known to be less than the value given.
<b>L</b>	Off-scale high; Actual value is known to be greater than value given.
<b>M</b>	Presence of analyte is verified but not quantified; the actual value is less than the MRL but greater than the MDL.
<b>N</b>	Presumptive evidence of presence of material.
<b>O</b>	Sampled, but analysis lost or not performed.
<b>Q</b>	Sample exceeded the accepted holding time.
<b>T</b>	Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only and shall not be used in statistical analysis.
<b>U</b>	Indicates that the compound was analyzed for but not detected.
<b>V</b>	Indicates that the analyte was detected in both the sample and the associated method blank.
<b>Y</b>	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.
<b>Z</b>	Too many colonies were present (TNTC); the numeric value represents the filtration volume.
<b>?</b>	Data are rejected and should not be used. Some or all of the quality control data for the analyte were outside criteria, and the presence or absence of the analyte cannot be determined from the data.
<b>*</b>	Not reported due to interference.
<b>J-02</b>	Result is estimated due to bias in the associated laboratory control sample (LCS).
<b>J-04</b>	Result estimated, calibration verification standard failed with high bias.
<b>J-05</b>	Result estimated, calibration verification standard failed with low bias.
<b>QM-07</b>	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
<b>QM-11</b>	Precision between duplicate matrix spikes of the same sample was outside acceptance limits.
<b>QS-03</b>	Surrogate recovery outside acceptance limits
<b>QV-01</b>	The associated continuing calibration verification standard exhibited high bias; since the result is ND, the impact on data quality is minimal.





# ENCO Laboratories

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10775 Central Port Drive

Orlando FL, 32824

Phone: 407.826.5314 FAX: 407.850.6945

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Friday, January 2, 2015

Geotechnical and Environmental (GE002)

Attn: Richard McCormick

919 Lake Baldwin Lane

Orlando, FL 32814

**RE: Laboratory Results for**

**Project Number: [none], Project Name/Desc: I-4 Level II**

**ENCO Workorder(s): A407493**

Dear Richard McCormick,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Wednesday, December 17, 2014.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Orlando. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Ronald Wambles For David Camacho

Project Manager

Enclosure(s)





www.encolabs.com

**SAMPLE DETECTION SUMMARY**

**Client ID: CS-2** **Lab ID: A407493-01**

<u>Analyte</u>	<u>Results</u>	<u>Flag</u>	<u>MDL</u>	<u>PQL</u>	<u>Units</u>	<u>Method</u>	<u>Notes</u>
Dieldrin	0.00083	I	0.00048	0.0018	mg/kg dry	EPA 8081B	

**Client ID: CS-3** **Lab ID: A407493-02**

<u>Analyte</u>	<u>Results</u>	<u>Flag</u>	<u>MDL</u>	<u>PQL</u>	<u>Units</u>	<u>Method</u>	<u>Notes</u>
Arsenic - Total	0.907		0.560	0.786	mg/kg dry	EPA 6010C	
Dieldrin	0.0011	I	0.00059	0.0022	mg/kg dry	EPA 8081B	

**Client ID: CS-4** **Lab ID: A407493-03**

<u>Analyte</u>	<u>Results</u>	<u>Flag</u>	<u>MDL</u>	<u>PQL</u>	<u>Units</u>	<u>Method</u>	<u>Notes</u>
Arsenic - Total	0.721	I	0.654	0.919	mg/kg dry	EPA 6010C	

**Client ID: CS-5** **Lab ID: A407493-04**

<u>Analyte</u>	<u>Results</u>	<u>Flag</u>	<u>MDL</u>	<u>PQL</u>	<u>Units</u>	<u>Method</u>	<u>Notes</u>
Arsenic - Total	0.812		0.455	0.639	mg/kg dry	EPA 6010C	

**ANALYTICAL RESULTS**

**Description:** CS-2

**Lab Sample ID:** A407493-01

**Received:** 12/17/14 17:08

**Matrix:** Soil

**Sampled:** 12/16/14 10:04

**Work Order:** A407493

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 92.88

**Organochlorine Pesticides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.00052	U	mg/kg dry	1	0.00052	0.0018	4L18025	EPA 8081B	12/23/14 17:34	JJB	
4,4'-DDE [72-55-9]^	0.00056	U	mg/kg dry	1	0.00056	0.0018	4L18025	EPA 8081B	12/23/14 17:34	JJB	QV-01
4,4'-DDT [50-29-3]^	0.00071	U	mg/kg dry	1	0.00071	0.0018	4L18025	EPA 8081B	12/23/14 17:34	JJB	
Aldrin [309-00-2]^	0.00055	U	mg/kg dry	1	0.00055	0.0018	4L18025	EPA 8081B	12/23/14 17:34	JJB	
alpha-BHC [319-84-6]^	0.00060	U	mg/kg dry	1	0.00060	0.0018	4L18025	EPA 8081B	12/23/14 17:34	JJB	
beta-BHC [319-85-7]^	0.0011	U	mg/kg dry	1	0.0011	0.0018	4L18025	EPA 8081B	12/23/14 17:34	JJB	
Chlordane (tech) [12789-03-6]^	0.0090	U	mg/kg dry	1	0.0090	0.036	4L18025	EPA 8081B	12/23/14 17:34	JJB	
Chlordane-alpha [5103-71-9]^	0.00048	U	mg/kg dry	1	0.00048	0.0018	4L18025	EPA 8081B	12/23/14 17:34	JJB	
Chlordane-gamma [5566-34-7]^	0.00048	U	mg/kg dry	1	0.00048	0.0018	4L18025	EPA 8081B	12/23/14 17:34	JJB	
delta-BHC [319-86-8]^	0.00054	U	mg/kg dry	1	0.00054	0.0018	4L18025	EPA 8081B	12/23/14 17:34	JJB	
<b>Dieldrin [60-57-1]^</b>	<b>0.00083</b>	<b>I</b>	mg/kg dry	1	0.00048	0.0018	4L18025	EPA 8081B	12/23/14 17:34	JJB	
Endosulfan I [959-98-8]^	0.00042	U	mg/kg dry	1	0.00042	0.0018	4L18025	EPA 8081B	12/23/14 17:34	JJB	
Endosulfan II [33213-65-9]^	0.00052	U	mg/kg dry	1	0.00052	0.0018	4L18025	EPA 8081B	12/23/14 17:34	JJB	
Endosulfan sulfate [1031-07-8]^	0.00053	U	mg/kg dry	1	0.00053	0.0018	4L18025	EPA 8081B	12/23/14 17:34	JJB	
Endrin [72-20-8]^	0.00080	U	mg/kg dry	1	0.00080	0.0018	4L18025	EPA 8081B	12/23/14 17:34	JJB	
Endrin aldehyde [7421-93-4]^	0.00089	U	mg/kg dry	1	0.00089	0.0018	4L18025	EPA 8081B	12/23/14 17:34	JJB	
Endrin ketone [53494-70-5]^	0.00051	U	mg/kg dry	1	0.00051	0.0018	4L18025	EPA 8081B	12/23/14 17:34	JJB	
gamma-BHC [58-89-9]^	0.00065	U	mg/kg dry	1	0.00065	0.0018	4L18025	EPA 8081B	12/23/14 17:34	JJB	
Heptachlor [76-44-8]^	0.00067	U	mg/kg dry	1	0.00067	0.0018	4L18025	EPA 8081B	12/23/14 17:34	JJB	
Heptachlor epoxide [1024-57-3]^	0.00052	U	mg/kg dry	1	0.00052	0.0018	4L18025	EPA 8081B	12/23/14 17:34	JJB	
Isodrin [465-73-6]^	0.00067	U	mg/kg dry	1	0.00067	0.0018	4L18025	EPA 8081B	12/23/14 17:34	JJB	
Methoxychlor [72-43-5]^	0.00093	U	mg/kg dry	1	0.00093	0.0018	4L18025	EPA 8081B	12/23/14 17:34	JJB	
Mirex [2385-85-5]^	0.0012	U	mg/kg dry	1	0.0012	0.0018	4L18025	EPA 8081B	12/23/14 17:34	JJB	
Toxaphene [8001-35-2]^	0.018	U	mg/kg dry	1	0.018	0.036	4L18025	EPA 8081B	12/23/14 17:34	JJB	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>	
2,4,5,6-TCMX	0.031	1	0.0359	86 %	20-137	4L18025	EPA 8081B	12/23/14 17:34	JJB		
Decachlorobiphenyl	0.037	1	0.0359	103 %	13-183	4L18025	EPA 8081B	12/23/14 17:34	JJB		

**Chlorinated Herbicides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2,4,5-T [93-76-5]^	0.0027	U	mg/kg dry	1	0.0027	0.011	4L24014	EPA 8151A	12/30/14 13:23	RC	
2,4,5-TP (Silvex) [93-72-1]^	0.0051	U	mg/kg dry	1	0.0051	0.011	4L24014	EPA 8151A	12/30/14 13:23	RC	
2,4-D [94-75-7]^	0.011	U	mg/kg dry	1	0.011	0.011	4L24014	EPA 8151A	12/30/14 13:23	RC	
2,4-DB [94-82-6]^	0.0053	U	mg/kg dry	1	0.0053	0.011	4L24014	EPA 8151A	12/30/14 13:23	RC	
3,5-DCBA [51-365-5]^	0.0024	U	mg/kg dry	1	0.0024	0.011	4L24014	EPA 8151A	12/30/14 13:23	RC	
4-Nitrophenol [100-02-7]^	0.0070	U	mg/kg dry	1	0.0070	0.011	4L24014	EPA 8151A	12/30/14 13:23	RC	QV-01
Acifluorfen [50594-66-6]^	0.0017	U	mg/kg dry	1	0.0017	0.011	4L24014	EPA 8151A	12/30/14 13:23	RC	
Bentazon [25057-89-0]^	0.0048	U	mg/kg dry	1	0.0048	0.011	4L24014	EPA 8151A	12/30/14 13:23	RC	J-02, J-05
Chloramben [133-90-4]^	0.0042	U	mg/kg dry	1	0.0042	0.011	4L24014	EPA 8151A	12/30/14 13:23	RC	J-05
Dacthal [1861-32-1]^	0.0026	U	mg/kg dry	1	0.0026	0.011	4L24014	EPA 8151A	12/30/14 13:23	RC	
Dalapon [75-99-0]^	0.0054	U	mg/kg dry	1	0.0054	0.011	4L24014	EPA 8151A	12/30/14 13:23	RC	
Dicamba [1918-00-9]^	0.0025	U	mg/kg dry	1	0.0025	0.011	4L24014	EPA 8151A	12/30/14 13:23	RC	
Dichlorprop [120-36-5]^	0.0030	U	mg/kg dry	1	0.0030	0.011	4L24014	EPA 8151A	12/30/14 13:23	RC	
Dinoseb [88-85-7]^	0.0045	U	mg/kg dry	1	0.0045	0.011	4L24014	EPA 8151A	12/30/14 13:23	RC	
MCPA [94-74-6]^	0.56	U	mg/kg dry	1	0.56	1.1	4L24014	EPA 8151A	12/30/14 13:23	RC	
MCPP [93-65-2]^	0.57	U	mg/kg dry	1	0.57	1.1	4L24014	EPA 8151A	12/30/14 13:23	RC	



**ANALYTICAL RESULTS**

**Description:** CS-2

**Lab Sample ID:** A407493-01

**Received:** 12/17/14 17:08

**Matrix:** Soil

**Sampled:** 12/16/14 10:04

**Work Order:** A407493

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 92.88

**Chlorinated Herbicides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Pentachlorophenol [87-86-5]^	0.0027	U	mg/kg dry	1	0.0027	0.011	4L24014	EPA 8151A	12/30/14 13:23	RC	
Picloram [1918-02-1]^	0.0019	U	mg/kg dry	1	0.0019	0.011	4L24014	EPA 8151A	12/30/14 13:23	RC	

<u>Surrogates</u>	<u>Results</u>	<u>DF</u>	<u>Spike Lvl</u>	<u>% Rec</u>	<u>% Rec Limits</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
2,4-DCAA	0.023	1	0.0432	53 %	39-174	4L24014	EPA 8151A	12/30/14 13:23	RC	

**Metals by EPA 6000/7000 Series Methods**

*^ - ENCO Jacksonville certified analyte [NELAC E82277]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Arsenic [7440-38-2]^	0.383	U	mg/kg dry	1	0.383	0.538	4L26003	EPA 6010C	12/30/14 12:34	ACV	

**ANALYTICAL RESULTS**

**Description:** CS-3

**Lab Sample ID:** A407493-02

**Received:** 12/17/14 17:08

**Matrix:** Soil

**Sampled:** 12/16/14 10:10

**Work Order:** A407493

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 75.73

**Organochlorine Pesticides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.00063	U	mg/kg dry	1	0.00063	0.0022	4L18025	EPA 8081B	12/23/14 17:46	JJB	
4,4'-DDE [72-55-9]^	0.00069	U	mg/kg dry	1	0.00069	0.0022	4L18025	EPA 8081B	12/23/14 17:46	JJB	QV-01
4,4'-DDT [50-29-3]^	0.00087	U	mg/kg dry	1	0.00087	0.0022	4L18025	EPA 8081B	12/23/14 17:46	JJB	
Aldrin [309-00-2]^	0.00067	U	mg/kg dry	1	0.00067	0.0022	4L18025	EPA 8081B	12/23/14 17:46	JJB	
alpha-BHC [319-84-6]^	0.00074	U	mg/kg dry	1	0.00074	0.0022	4L18025	EPA 8081B	12/23/14 17:46	JJB	
beta-BHC [319-85-7]^	0.0013	U	mg/kg dry	1	0.0013	0.0022	4L18025	EPA 8081B	12/23/14 17:46	JJB	
Chlordane (tech) [12789-03-6]^	0.011	U	mg/kg dry	1	0.011	0.044	4L18025	EPA 8081B	12/23/14 17:46	JJB	
Chlordane-alpha [5103-71-9]^	0.00059	U	mg/kg dry	1	0.00059	0.0022	4L18025	EPA 8081B	12/23/14 17:46	JJB	
Chlordane-gamma [5566-34-7]^	0.00059	U	mg/kg dry	1	0.00059	0.0022	4L18025	EPA 8081B	12/23/14 17:46	JJB	
delta-BHC [319-86-8]^	0.00066	U	mg/kg dry	1	0.00066	0.0022	4L18025	EPA 8081B	12/23/14 17:46	JJB	
<b>Dieldrin [60-57-1]^</b>	<b>0.0011</b>	<b>I</b>	mg/kg dry	1	0.00059	0.0022	4L18025	EPA 8081B	12/23/14 17:46	JJB	
Endosulfan I [959-98-8]^	0.00051	U	mg/kg dry	1	0.00051	0.0022	4L18025	EPA 8081B	12/23/14 17:46	JJB	
Endosulfan II [33213-65-9]^	0.00063	U	mg/kg dry	1	0.00063	0.0022	4L18025	EPA 8081B	12/23/14 17:46	JJB	
Endosulfan sulfate [1031-07-8]^	0.00065	U	mg/kg dry	1	0.00065	0.0022	4L18025	EPA 8081B	12/23/14 17:46	JJB	
Endrin [72-20-8]^	0.00098	U	mg/kg dry	1	0.00098	0.0022	4L18025	EPA 8081B	12/23/14 17:46	JJB	
Endrin aldehyde [7421-93-4]^	0.0011	U	mg/kg dry	1	0.0011	0.0022	4L18025	EPA 8081B	12/23/14 17:46	JJB	
Endrin ketone [53494-70-5]^	0.00062	U	mg/kg dry	1	0.00062	0.0022	4L18025	EPA 8081B	12/23/14 17:46	JJB	
gamma-BHC [58-89-9]^	0.00079	U	mg/kg dry	1	0.00079	0.0022	4L18025	EPA 8081B	12/23/14 17:46	JJB	
Heptachlor [76-44-8]^	0.00082	U	mg/kg dry	1	0.00082	0.0022	4L18025	EPA 8081B	12/23/14 17:46	JJB	
Heptachlor epoxide [1024-57-3]^	0.00063	U	mg/kg dry	1	0.00063	0.0022	4L18025	EPA 8081B	12/23/14 17:46	JJB	
Isodrin [465-73-6]^	0.00082	U	mg/kg dry	1	0.00082	0.0022	4L18025	EPA 8081B	12/23/14 17:46	JJB	
Methoxychlor [72-43-5]^	0.0011	U	mg/kg dry	1	0.0011	0.0022	4L18025	EPA 8081B	12/23/14 17:46	JJB	
Mirex [2385-85-5]^	0.0015	U	mg/kg dry	1	0.0015	0.0022	4L18025	EPA 8081B	12/23/14 17:46	JJB	
Toxaphene [8001-35-2]^	0.022	U	mg/kg dry	1	0.022	0.044	4L18025	EPA 8081B	12/23/14 17:46	JJB	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>	
2,4,5,6-TCMX	0.047	1	0.0440	108 %	20-137	4L18025	EPA 8081B	12/23/14 17:46	JJB		
Decachlorobiphenyl	0.049	1	0.0440	112 %	13-183	4L18025	EPA 8081B	12/23/14 17:46	JJB		

**Chlorinated Herbicides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2,4,5-T [93-76-5]^	0.0033	U	mg/kg dry	1	0.0033	0.013	4L24014	EPA 8151A	12/30/14 13:49	RC	
2,4,5-TP (Silvex) [93-72-1]^	0.0062	U	mg/kg dry	1	0.0062	0.013	4L24014	EPA 8151A	12/30/14 13:49	RC	
2,4-D [94-75-7]^	0.013	U	mg/kg dry	1	0.013	0.013	4L24014	EPA 8151A	12/30/14 13:49	RC	
2,4-DB [94-82-6]^	0.0065	U	mg/kg dry	1	0.0065	0.013	4L24014	EPA 8151A	12/30/14 13:49	RC	
3,5-DCBA [51-365-5]^	0.0029	U	mg/kg dry	1	0.0029	0.013	4L24014	EPA 8151A	12/30/14 13:49	RC	
4-Nitrophenol [100-02-7]^	0.0086	U	mg/kg dry	1	0.0086	0.013	4L24014	EPA 8151A	12/30/14 13:49	RC	QV-01
Acifluorfen [50594-66-6]^	0.0021	U	mg/kg dry	1	0.0021	0.013	4L24014	EPA 8151A	12/30/14 13:49	RC	
Bentazon [25057-89-0]^	0.0059	U	mg/kg dry	1	0.0059	0.013	4L24014	EPA 8151A	12/30/14 13:49	RC	J-02, J-05
Chloramben [133-90-4]^	0.0051	U	mg/kg dry	1	0.0051	0.013	4L24014	EPA 8151A	12/30/14 13:49	RC	J-05
Dacthal [1861-32-1]^	0.0032	U	mg/kg dry	1	0.0032	0.013	4L24014	EPA 8151A	12/30/14 13:49	RC	
Dalapon [75-99-0]^	0.0066	U	mg/kg dry	1	0.0066	0.013	4L24014	EPA 8151A	12/30/14 13:49	RC	
Dicamba [1918-00-9]^	0.0030	U	mg/kg dry	1	0.0030	0.013	4L24014	EPA 8151A	12/30/14 13:49	RC	
Dichlorprop [120-36-5]^	0.0037	U	mg/kg dry	1	0.0037	0.013	4L24014	EPA 8151A	12/30/14 13:49	RC	
Dinoseb [88-85-7]^	0.0055	U	mg/kg dry	1	0.0055	0.013	4L24014	EPA 8151A	12/30/14 13:49	RC	
MCPA [94-74-6]^	0.69	U	mg/kg dry	1	0.69	1.3	4L24014	EPA 8151A	12/30/14 13:49	RC	
MCPP [93-65-2]^	0.70	U	mg/kg dry	1	0.70	1.3	4L24014	EPA 8151A	12/30/14 13:49	RC	

FINAL

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.



### ANALYTICAL RESULTS

**Description:** CS-3

**Lab Sample ID:** A407493-02

**Received:** 12/17/14 17:08

**Matrix:** Soil

**Sampled:** 12/16/14 10:10

**Work Order:** A407493

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 75.73

### Chlorinated Herbicides by GC

*^ - ENCO Orlando certified analyte [NELAC E83182]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Pentachlorophenol [87-86-5]^	0.0033	U	mg/kg dry	1	0.0033	0.013	4L24014	EPA 8151A	12/30/14 13:49	RC	
Picloram [1918-02-1]^	0.0024	U	mg/kg dry	1	0.0024	0.013	4L24014	EPA 8151A	12/30/14 13:49	RC	

### Surrogates

<u>Surrogates</u>	<u>Results</u>	<u>DF</u>	<u>Spike Lvl</u>	<u>% Rec</u>	<u>% Rec Limits</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
2,4-DCAA	0.029	1	0.0531	55 %	39-174	4L24014	EPA 8151A	12/30/14 13:49	RC	

### Metals by EPA 6000/7000 Series Methods

*^ - ENCO Jacksonville certified analyte [NELAC E82277]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Arsenic [7440-38-2]^	0.907		mg/kg dry	1	0.560	0.786	4L26003	EPA 6010C	12/30/14 12:41	ACV	

**ANALYTICAL RESULTS**

**Description:** CS-4

**Lab Sample ID:** A407493-03

**Received:** 12/17/14 17:08

**Matrix:** Soil

**Sampled:** 12/16/14 10:15

**Work Order:** A407493

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 87.74

**Organochlorine Pesticides by GC**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.0011	U	mg/kg dry	2	0.0011	0.0039	4L23006	EPA 8081B	12/29/14 12:53	JJB	QM-11
4,4'-DDE [72-55-9]^	0.0012	U	mg/kg dry	2	0.0012	0.0039	4L23006	EPA 8081B	12/29/14 12:53	JJB	QM-07, QM-11
4,4'-DDT [50-29-3]^	0.0015	U	mg/kg dry	2	0.0015	0.0039	4L23006	EPA 8081B	12/29/14 12:53	JJB	QM-07, QM-11
Aldrin [309-00-2]^	0.0012	U	mg/kg dry	2	0.0012	0.0039	4L23006	EPA 8081B	12/29/14 12:53	JJB	QM-11
alpha-BHC [319-84-6]^	0.0013	U	mg/kg dry	2	0.0013	0.0039	4L23006	EPA 8081B	12/29/14 12:53	JJB	QM-11
beta-BHC [319-85-7]^	0.0023	U	mg/kg dry	2	0.0023	0.0039	4L23006	EPA 8081B	12/29/14 12:53	JJB	QM-11
Chlordane (tech) [12789-03-6]^	0.019	U	mg/kg dry	2	0.019	0.075	4L23006	EPA 8081B	12/29/14 12:53	JJB	
Chlordane-alpha [5103-71-9]^	0.0010	U	mg/kg dry	2	0.0010	0.0039	4L23006	EPA 8081B	12/29/14 12:53	JJB	QM-07, QM-11
Chlordane-gamma [5566-34-7]^	0.0010	U	mg/kg dry	2	0.0010	0.0039	4L23006	EPA 8081B	12/29/14 12:53	JJB	QM-11
delta-BHC [319-86-8]^	0.0011	U	mg/kg dry	2	0.0011	0.0039	4L23006	EPA 8081B	12/29/14 12:53	JJB	QM-11
Dieldrin [60-57-1]^	0.0010	U	mg/kg dry	2	0.0010	0.0039	4L23006	EPA 8081B	12/29/14 12:53	JJB	QM-07, QM-11
Endosulfan I [959-98-8]^	0.00089	U	mg/kg dry	2	0.00089	0.0039	4L23006	EPA 8081B	12/29/14 12:53	JJB	QM-11, QM-07
Endosulfan II [33213-65-9]^	0.0011	U	mg/kg dry	2	0.0011	0.0039	4L23006	EPA 8081B	12/29/14 12:53	JJB	QM-11
Endosulfan sulfate [1031-07-8]^	0.0011	U	mg/kg dry	2	0.0011	0.0039	4L23006	EPA 8081B	12/29/14 12:53	JJB	
Endrin [72-20-8]^	0.0017	U	mg/kg dry	2	0.0017	0.0039	4L23006	EPA 8081B	12/29/14 12:53	JJB	QM-11
Endrin aldehyde [7421-93-4]^	0.0019	U	mg/kg dry	2	0.0019	0.0039	4L23006	EPA 8081B	12/29/14 12:53	JJB	QM-11
Endrin ketone [53494-70-5]^	0.0011	U	mg/kg dry	2	0.0011	0.0039	4L23006	EPA 8081B	12/29/14 12:53	JJB	QM-07, QM-11
gamma-BHC [58-89-9]^	0.0014	U	mg/kg dry	2	0.0014	0.0039	4L23006	EPA 8081B	12/29/14 12:53	JJB	QM-11
Heptachlor [76-44-8]^	0.0014	U	mg/kg dry	2	0.0014	0.0039	4L23006	EPA 8081B	12/29/14 12:53	JJB	QM-11
Heptachlor epoxide [1024-57-3]^	0.0011	U	mg/kg dry	2	0.0011	0.0039	4L23006	EPA 8081B	12/29/14 12:53	JJB	QM-11
Isodrin [465-73-6]^	0.0014	U	mg/kg dry	2	0.0014	0.0039	4L23006	EPA 8081B	12/29/14 12:53	JJB	QM-07, QM-11
Methoxychlor [72-43-5]^	0.0020	U	mg/kg dry	2	0.0020	0.0039	4L23006	EPA 8081B	12/29/14 12:53	JJB	QM-07
Mirex [2385-85-5]^	0.0025	U	mg/kg dry	2	0.0025	0.0039	4L23006	EPA 8081B	12/29/14 12:53	JJB	QM-11
Toxaphene [8001-35-2]^	0.039	U	mg/kg dry	2	0.039	0.075	4L23006	EPA 8081B	12/29/14 12:53	JJB	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
2,4,5,6-TCMX	0.015	2	0.0379	40 %	20-137	4L23006	EPA 8081B	12/29/14 12:53	JJB	
Decachlorobiphenyl	0.027	2	0.0379	72 %	13-183	4L23006	EPA 8081B	12/29/14 12:53	JJB	

**Chlorinated Herbicides by GC**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2,4,5-T [93-76-5]^	0.0028	U	mg/kg dry	1	0.0028	0.011	4L24014	EPA 8151A	12/30/14 14:15	RC	
2,4,5-TP (Silvex) [93-72-1]^	0.0054	U	mg/kg dry	1	0.0054	0.011	4L24014	EPA 8151A	12/30/14 14:15	RC	
2,4-D [94-75-7]^	0.011	U	mg/kg dry	1	0.011	0.011	4L24014	EPA 8151A	12/30/14 14:15	RC	
2,4-DB [94-82-6]^	0.0056	U	mg/kg dry	1	0.0056	0.011	4L24014	EPA 8151A	12/30/14 14:15	RC	
3,5-DCBA [51-365-5]^	0.0025	U	mg/kg dry	1	0.0025	0.011	4L24014	EPA 8151A	12/30/14 14:15	RC	
4-Nitrophenol [100-02-7]^	0.0074	U	mg/kg dry	1	0.0074	0.011	4L24014	EPA 8151A	12/30/14 14:15	RC	QV-01
Acifluorfen [50594-66-6]^	0.0018	U	mg/kg dry	1	0.0018	0.011	4L24014	EPA 8151A	12/30/14 14:15	RC	
Bentazon [25057-89-0]^	0.0051	U	mg/kg dry	1	0.0051	0.011	4L24014	EPA 8151A	12/30/14 14:15	RC	J-02, J-05
Chloramben [133-90-4]^	0.0044	U	mg/kg dry	1	0.0044	0.011	4L24014	EPA 8151A	12/30/14 14:15	RC	J-05
Dacthal [1861-32-1]^	0.0027	U	mg/kg dry	1	0.0027	0.011	4L24014	EPA 8151A	12/30/14 14:15	RC	
Dalapon [75-99-0]^	0.0057	U	mg/kg dry	1	0.0057	0.011	4L24014	EPA 8151A	12/30/14 14:15	RC	

**ANALYTICAL RESULTS**

**Description:** CS-4

**Lab Sample ID:** A407493-03

**Received:** 12/17/14 17:08

**Matrix:** Soil

**Sampled:** 12/16/14 10:15

**Work Order:** A407493

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 87.74

**Chlorinated Herbicides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Dicamba [1918-00-9]^	0.0026	U	mg/kg dry	1	0.0026	0.011	4L24014	EPA 8151A	12/30/14 14:15	RC	
Dichlorprop [120-36-5]^	0.0032	U	mg/kg dry	1	0.0032	0.011	4L24014	EPA 8151A	12/30/14 14:15	RC	
Dinoseb [88-85-7]^	0.0048	U	mg/kg dry	1	0.0048	0.011	4L24014	EPA 8151A	12/30/14 14:15	RC	
MCPA [94-74-6]^	0.59	U	mg/kg dry	1	0.59	1.1	4L24014	EPA 8151A	12/30/14 14:15	RC	
MCPP [93-65-2]^	0.60	U	mg/kg dry	1	0.60	1.1	4L24014	EPA 8151A	12/30/14 14:15	RC	
Pentachlorophenol [87-86-5]^	0.0028	U	mg/kg dry	1	0.0028	0.011	4L24014	EPA 8151A	12/30/14 14:15	RC	
Picloram [1918-02-1]^	0.0021	U	mg/kg dry	1	0.0021	0.011	4L24014	EPA 8151A	12/30/14 14:15	RC	
<b><u>Surrogates</u></b>	<b><u>Results</u></b>	<b><u>DF</u></b>	<b><u>Spike Lvl</u></b>	<b><u>% Rec</u></b>	<b><u>% Rec Limits</u></b>	<b><u>Batch</u></b>	<b><u>Method</u></b>	<b><u>Analyzed</u></b>	<b><u>By</u></b>	<b><u>Notes</u></b>	
2,4-DCAA	0.017	1	0.0456	36 %	39-174	4L24014	EPA 8151A	12/30/14 14:15	RC	QS-03	

**Metals by EPA 6000/7000 Series Methods**

*^ - ENCO Jacksonville certified analyte [NELAC E82277]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Arsenic [7440-38-2]^	0.721	I	mg/kg dry	1	0.654	0.919	4L26003	EPA 6010C	12/30/14 12:43	ACV	

**ANALYTICAL RESULTS**

**Description:** CS-5

**Lab Sample ID:** A407493-04

**Received:** 12/17/14 17:08

**Matrix:** Soil

**Sampled:** 12/16/14 10:25

**Work Order:** A407493

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 78.22

**Organochlorine Pesticides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.0012	U	mg/kg dry	2	0.0012	0.0043	4L23006	EPA 8081B	12/29/14 14:47	JJB	
4,4'-DDE [72-55-9]^	0.0013	U	mg/kg dry	2	0.0013	0.0043	4L23006	EPA 8081B	12/29/14 14:47	JJB	
4,4'-DDT [50-29-3]^	0.0017	U	mg/kg dry	2	0.0017	0.0043	4L23006	EPA 8081B	12/29/14 14:47	JJB	
Aldrin [309-00-2]^	0.0013	U	mg/kg dry	2	0.0013	0.0043	4L23006	EPA 8081B	12/29/14 14:47	JJB	
alpha-BHC [319-84-6]^	0.0014	U	mg/kg dry	2	0.0014	0.0043	4L23006	EPA 8081B	12/29/14 14:47	JJB	
beta-BHC [319-85-7]^	0.0026	U	mg/kg dry	2	0.0026	0.0043	4L23006	EPA 8081B	12/29/14 14:47	JJB	
Chlordane (tech) [12789-03-6]^	0.021	U	mg/kg dry	2	0.021	0.084	4L23006	EPA 8081B	12/29/14 14:47	JJB	
Chlordane-alpha [5103-71-9]^	0.0012	U	mg/kg dry	2	0.0012	0.0043	4L23006	EPA 8081B	12/29/14 14:47	JJB	
Chlordane-gamma [5566-34-7]^	0.0012	U	mg/kg dry	2	0.0012	0.0043	4L23006	EPA 8081B	12/29/14 14:47	JJB	
delta-BHC [319-86-8]^	0.0013	U	mg/kg dry	2	0.0013	0.0043	4L23006	EPA 8081B	12/29/14 14:47	JJB	
Dieldrin [60-57-1]^	0.0012	U	mg/kg dry	2	0.0012	0.0043	4L23006	EPA 8081B	12/29/14 14:47	JJB	
Endosulfan I [959-98-8]^	0.0010	U	mg/kg dry	2	0.0010	0.0043	4L23006	EPA 8081B	12/29/14 14:47	JJB	
Endosulfan II [33213-65-9]^	0.0012	U	mg/kg dry	2	0.0012	0.0043	4L23006	EPA 8081B	12/29/14 14:47	JJB	
Endosulfan sulfate [1031-07-8]^	0.0013	U	mg/kg dry	2	0.0013	0.0043	4L23006	EPA 8081B	12/29/14 14:47	JJB	
Endrin [72-20-8]^	0.0019	U	mg/kg dry	2	0.0019	0.0043	4L23006	EPA 8081B	12/29/14 14:47	JJB	
Endrin aldehyde [7421-93-4]^	0.0021	U	mg/kg dry	2	0.0021	0.0043	4L23006	EPA 8081B	12/29/14 14:47	JJB	J-05
Endrin ketone [53494-70-5]^	0.0012	U	mg/kg dry	2	0.0012	0.0043	4L23006	EPA 8081B	12/29/14 14:47	JJB	
gamma-BHC [58-89-9]^	0.0015	U	mg/kg dry	2	0.0015	0.0043	4L23006	EPA 8081B	12/29/14 14:47	JJB	
Heptachlor [76-44-8]^	0.0016	U	mg/kg dry	2	0.0016	0.0043	4L23006	EPA 8081B	12/29/14 14:47	JJB	
Heptachlor epoxide [1024-57-3]^	0.0012	U	mg/kg dry	2	0.0012	0.0043	4L23006	EPA 8081B	12/29/14 14:47	JJB	
Isodrin [465-73-6]^	0.0016	U	mg/kg dry	2	0.0016	0.0043	4L23006	EPA 8081B	12/29/14 14:47	JJB	
Methoxychlor [72-43-5]^	0.0022	U	mg/kg dry	2	0.0022	0.0043	4L23006	EPA 8081B	12/29/14 14:47	JJB	
Mirex [2385-85-5]^	0.0028	U	mg/kg dry	2	0.0028	0.0043	4L23006	EPA 8081B	12/29/14 14:47	JJB	
Toxaphene [8001-35-2]^	0.043	U	mg/kg dry	2	0.043	0.084	4L23006	EPA 8081B	12/29/14 14:47	JJB	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
2,4,5,6-TCMX	0.018	2	0.0422	44 %	20-137	4L23006	EPA 8081B	12/29/14 14:47	JJB		
Decachlorobiphenyl	0.041	2	0.0422	97 %	13-183	4L23006	EPA 8081B	12/29/14 14:47	JJB		

**Chlorinated Herbicides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2,4,5-T [93-76-5]^	0.0032	U	mg/kg dry	1	0.0032	0.013	4L24014	EPA 8151A	12/30/14 14:41	RC	
2,4,5-TP (Silvex) [93-72-1]^	0.0060	U	mg/kg dry	1	0.0060	0.013	4L24014	EPA 8151A	12/30/14 14:41	RC	
2,4-D [94-75-7]^	0.013	U	mg/kg dry	1	0.013	0.013	4L24014	EPA 8151A	12/30/14 14:41	RC	
2,4-DB [94-82-6]^	0.0063	U	mg/kg dry	1	0.0063	0.013	4L24014	EPA 8151A	12/30/14 14:41	RC	
3,5-DCBA [51-365-5]^	0.0028	U	mg/kg dry	1	0.0028	0.013	4L24014	EPA 8151A	12/30/14 14:41	RC	
4-Nitrophenol [100-02-7]^	0.0083	U	mg/kg dry	1	0.0083	0.013	4L24014	EPA 8151A	12/30/14 14:41	RC	QV-01
Acifluorfen [50594-66-6]^	0.0020	U	mg/kg dry	1	0.0020	0.013	4L24014	EPA 8151A	12/30/14 14:41	RC	
Bentazon [25057-89-0]^	0.0058	U	mg/kg dry	1	0.0058	0.013	4L24014	EPA 8151A	12/30/14 14:41	RC	J-02, J-05
Chloramben [133-90-4]^	0.0050	U	mg/kg dry	1	0.0050	0.013	4L24014	EPA 8151A	12/30/14 14:41	RC	J-05
Dacthal [1861-32-1]^	0.0031	U	mg/kg dry	1	0.0031	0.013	4L24014	EPA 8151A	12/30/14 14:41	RC	
Dalapon [75-99-0]^	0.0064	U	mg/kg dry	1	0.0064	0.013	4L24014	EPA 8151A	12/30/14 14:41	RC	
Dicamba [1918-00-9]^	0.0029	U	mg/kg dry	1	0.0029	0.013	4L24014	EPA 8151A	12/30/14 14:41	RC	
Dichlorprop [120-36-5]^	0.0036	U	mg/kg dry	1	0.0036	0.013	4L24014	EPA 8151A	12/30/14 14:41	RC	
Dinoseb [88-85-7]^	0.0054	U	mg/kg dry	1	0.0054	0.013	4L24014	EPA 8151A	12/30/14 14:41	RC	
MCPA [94-74-6]^	0.66	U	mg/kg dry	1	0.66	1.3	4L24014	EPA 8151A	12/30/14 14:41	RC	
MCPP [93-65-2]^	0.68	U	mg/kg dry	1	0.68	1.3	4L24014	EPA 8151A	12/30/14 14:41	RC	



### ANALYTICAL RESULTS

<b>Description:</b> CS-5	<b>Lab Sample ID:</b> A407493-04	<b>Received:</b> 12/17/14 17:08
<b>Matrix:</b> Soil	<b>Sampled:</b> 12/16/14 10:25	<b>Work Order:</b> A407493
<b>Project:</b> I-4 Level II	<b>Sampled By:</b> Jerry Governale	<b>% Solids:</b> 78.22

### Chlorinated Herbicides by GC

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Pentachlorophenol [87-86-5]^	0.0032	U	mg/kg dry	1	0.0032	0.013	4L24014	EPA 8151A	12/30/14 14:41	RC	
Picloram [1918-02-1]^	0.0023	U	mg/kg dry	1	0.0023	0.013	4L24014	EPA 8151A	12/30/14 14:41	RC	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
2,4-DCAA	0.030	1	0.0512	59 %	39-174	4L24014	EPA 8151A	12/30/14 14:41	RC	

### Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2]^	0.812		mg/kg dry	1	0.455	0.639	4L26003	EPA 6010C	12/30/14 12:45	ACV	

**ANALYTICAL RESULTS**

**Description:** CS-6

**Lab Sample ID:** A407493-05

**Received:** 12/17/14 17:08

**Matrix:** Soil

**Sampled:** 12/16/14 10:30

**Work Order:** A407493

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 79.70

**Organochlorine Pesticides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.0012	U	mg/kg dry	2	0.0012	0.0043	4L23006	EPA 8081B	12/29/14 14:58	JJB	
4,4'-DDE [72-55-9]^	0.0013	U	mg/kg dry	2	0.0013	0.0043	4L23006	EPA 8081B	12/29/14 14:58	JJB	
4,4'-DDT [50-29-3]^	0.0017	U	mg/kg dry	2	0.0017	0.0043	4L23006	EPA 8081B	12/29/14 14:58	JJB	
Aldrin [309-00-2]^	0.0013	U	mg/kg dry	2	0.0013	0.0043	4L23006	EPA 8081B	12/29/14 14:58	JJB	
alpha-BHC [319-84-6]^	0.0014	U	mg/kg dry	2	0.0014	0.0043	4L23006	EPA 8081B	12/29/14 14:58	JJB	
beta-BHC [319-85-7]^	0.0025	U	mg/kg dry	2	0.0025	0.0043	4L23006	EPA 8081B	12/29/14 14:58	JJB	
Chlordane (tech) [12789-03-6]^	0.021	U	mg/kg dry	2	0.021	0.083	4L23006	EPA 8081B	12/29/14 14:58	JJB	
Chlordane-alpha [5103-71-9]^	0.0011	U	mg/kg dry	2	0.0011	0.0043	4L23006	EPA 8081B	12/29/14 14:58	JJB	
Chlordane-gamma [5566-34-7]^	0.0011	U	mg/kg dry	2	0.0011	0.0043	4L23006	EPA 8081B	12/29/14 14:58	JJB	
delta-BHC [319-86-8]^	0.0013	U	mg/kg dry	2	0.0013	0.0043	4L23006	EPA 8081B	12/29/14 14:58	JJB	
Dieldrin [60-57-1]^	0.0011	U	mg/kg dry	2	0.0011	0.0043	4L23006	EPA 8081B	12/29/14 14:58	JJB	
Endosulfan I [959-98-8]^	0.00098	U	mg/kg dry	2	0.00098	0.0043	4L23006	EPA 8081B	12/29/14 14:58	JJB	
Endosulfan II [33213-65-9]^	0.0012	U	mg/kg dry	2	0.0012	0.0043	4L23006	EPA 8081B	12/29/14 14:58	JJB	
Endosulfan sulfate [1031-07-8]^	0.0012	U	mg/kg dry	2	0.0012	0.0043	4L23006	EPA 8081B	12/29/14 14:58	JJB	
Endrin [72-20-8]^	0.0019	U	mg/kg dry	2	0.0019	0.0043	4L23006	EPA 8081B	12/29/14 14:58	JJB	
Endrin aldehyde [7421-93-4]^	0.0021	U	mg/kg dry	2	0.0021	0.0043	4L23006	EPA 8081B	12/29/14 14:58	JJB	
Endrin ketone [53494-70-5]^	0.0012	U	mg/kg dry	2	0.0012	0.0043	4L23006	EPA 8081B	12/29/14 14:58	JJB	
gamma-BHC [58-89-9]^	0.0015	U	mg/kg dry	2	0.0015	0.0043	4L23006	EPA 8081B	12/29/14 14:58	JJB	
Heptachlor [76-44-8]^	0.0016	U	mg/kg dry	2	0.0016	0.0043	4L23006	EPA 8081B	12/29/14 14:58	JJB	
Heptachlor epoxide [1024-57-3]^	0.0012	U	mg/kg dry	2	0.0012	0.0043	4L23006	EPA 8081B	12/29/14 14:58	JJB	
Isodrin [465-73-6]^	0.0016	U	mg/kg dry	2	0.0016	0.0043	4L23006	EPA 8081B	12/29/14 14:58	JJB	
Methoxychlor [72-43-5]^	0.0022	U	mg/kg dry	2	0.0022	0.0043	4L23006	EPA 8081B	12/29/14 14:58	JJB	
Mirex [2385-85-5]^	0.0028	U	mg/kg dry	2	0.0028	0.0043	4L23006	EPA 8081B	12/29/14 14:58	JJB	
Toxaphene [8001-35-2]^	0.043	U	mg/kg dry	2	0.043	0.083	4L23006	EPA 8081B	12/29/14 14:58	JJB	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
2,4,5,6-TCMX	0.014	2	0.0420	33 %	20-137	4L23006	EPA 8081B	12/29/14 14:58	JJB		
Decachlorobiphenyl	0.034	2	0.0420	80 %	13-183	4L23006	EPA 8081B	12/29/14 14:58	JJB		

**Chlorinated Herbicides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2,4,5-T [93-76-5]^	0.0031	U	mg/kg dry	1	0.0031	0.013	4L24014	EPA 8151A	12/30/14 15:07	RC	
2,4,5-TP (Silvex) [93-72-1]^	0.0059	U	mg/kg dry	1	0.0059	0.013	4L24014	EPA 8151A	12/30/14 15:07	RC	
2,4-D [94-75-7]^	0.012	U	mg/kg dry	1	0.012	0.013	4L24014	EPA 8151A	12/30/14 15:07	RC	
2,4-DB [94-82-6]^	0.0061	U	mg/kg dry	1	0.0061	0.013	4L24014	EPA 8151A	12/30/14 15:07	RC	
3,5-DCBA [51-365-5]^	0.0028	U	mg/kg dry	1	0.0028	0.013	4L24014	EPA 8151A	12/30/14 15:07	RC	
4-Nitrophenol [100-02-7]^	0.0082	U	mg/kg dry	1	0.0082	0.013	4L24014	EPA 8151A	12/30/14 15:07	RC	QV-01
Acifluorfen [50594-66-6]^	0.0020	U	mg/kg dry	1	0.0020	0.013	4L24014	EPA 8151A	12/30/14 15:07	RC	
Bentazon [25057-89-0]^	0.0056	U	mg/kg dry	1	0.0056	0.013	4L24014	EPA 8151A	12/30/14 15:07	RC	J-02, J-05
Chloramben [133-90-4]^	0.0049	U	mg/kg dry	1	0.0049	0.013	4L24014	EPA 8151A	12/30/14 15:07	RC	J-05
Dacthal [1861-32-1]^	0.0030	U	mg/kg dry	1	0.0030	0.013	4L24014	EPA 8151A	12/30/14 15:07	RC	
Dalapon [75-99-0]^	0.0063	U	mg/kg dry	1	0.0063	0.013	4L24014	EPA 8151A	12/30/14 15:07	RC	
Dicamba [1918-00-9]^	0.0029	U	mg/kg dry	1	0.0029	0.013	4L24014	EPA 8151A	12/30/14 15:07	RC	
Dichlorprop [120-36-5]^	0.0035	U	mg/kg dry	1	0.0035	0.013	4L24014	EPA 8151A	12/30/14 15:07	RC	
Dinoseb [88-85-7]^	0.0053	U	mg/kg dry	1	0.0053	0.013	4L24014	EPA 8151A	12/30/14 15:07	RC	
MCPA [94-74-6]^	0.65	U	mg/kg dry	1	0.65	1.3	4L24014	EPA 8151A	12/30/14 15:07	RC	
MCPP [93-65-2]^	0.66	U	mg/kg dry	1	0.66	1.3	4L24014	EPA 8151A	12/30/14 15:07	RC	



**ANALYTICAL RESULTS**

**Description:** CS-6

**Lab Sample ID:** A407493-05

**Received:** 12/17/14 17:08

**Matrix:** Soil

**Sampled:** 12/16/14 10:30

**Work Order:** A407493

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 79.70

**Chlorinated Herbicides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Pentachlorophenol [87-86-5]^	0.0031	U	mg/kg dry	1	0.0031	0.013	4L24014	EPA 8151A	12/30/14 15:07	RC	
Picloram [1918-02-1]^	0.0023	U	mg/kg dry	1	0.0023	0.013	4L24014	EPA 8151A	12/30/14 15:07	RC	

<u>Surrogates</u>	<u>Results</u>	<u>DF</u>	<u>Spike Lvl</u>	<u>% Rec</u>	<u>% Rec Limits</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
2,4-DCAA	0.038	1	0.0506	76 %	39-174	4L24014	EPA 8151A	12/30/14 15:07	RC	

**Metals by EPA 6000/7000 Series Methods**

*^ - ENCO Jacksonville certified analyte [NELAC E82277]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Arsenic [7440-38-2]^	0.709	U	mg/kg dry	1	0.709	0.996	4L26003	EPA 6010C	12/30/14 12:47	ACV	

**ANALYTICAL RESULTS**

**Description:** CS-7

**Lab Sample ID:** A407493-06

**Received:** 12/17/14 17:08

**Matrix:** Soil

**Sampled:** 12/16/14 10:38

**Work Order:** A407493

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 81.20

**Organochlorine Pesticides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.0012	U	mg/kg dry	2	0.0012	0.0042	4L23006	EPA 8081B	12/29/14 15:09	JJB	
4,4'-DDE [72-55-9]^	0.0013	U	mg/kg dry	2	0.0013	0.0042	4L23006	EPA 8081B	12/29/14 15:09	JJB	
4,4'-DDT [50-29-3]^	0.0016	U	mg/kg dry	2	0.0016	0.0042	4L23006	EPA 8081B	12/29/14 15:09	JJB	
Aldrin [309-00-2]^	0.0013	U	mg/kg dry	2	0.0013	0.0042	4L23006	EPA 8081B	12/29/14 15:09	JJB	
alpha-BHC [319-84-6]^	0.0014	U	mg/kg dry	2	0.0014	0.0042	4L23006	EPA 8081B	12/29/14 15:09	JJB	
beta-BHC [319-85-7]^	0.0025	U	mg/kg dry	2	0.0025	0.0042	4L23006	EPA 8081B	12/29/14 15:09	JJB	
Chlordane (tech) [12789-03-6]^	0.021	U	mg/kg dry	2	0.021	0.081	4L23006	EPA 8081B	12/29/14 15:09	JJB	
Chlordane-alpha [5103-71-9]^	0.0011	U	mg/kg dry	2	0.0011	0.0042	4L23006	EPA 8081B	12/29/14 15:09	JJB	
Chlordane-gamma [5566-34-7]^	0.0011	U	mg/kg dry	2	0.0011	0.0042	4L23006	EPA 8081B	12/29/14 15:09	JJB	
delta-BHC [319-86-8]^	0.0012	U	mg/kg dry	2	0.0012	0.0042	4L23006	EPA 8081B	12/29/14 15:09	JJB	
Dieldrin [60-57-1]^	0.0011	U	mg/kg dry	2	0.0011	0.0042	4L23006	EPA 8081B	12/29/14 15:09	JJB	
Endosulfan I [959-98-8]^	0.00096	U	mg/kg dry	2	0.00096	0.0042	4L23006	EPA 8081B	12/29/14 15:09	JJB	
Endosulfan II [33213-65-9]^	0.0012	U	mg/kg dry	2	0.0012	0.0042	4L23006	EPA 8081B	12/29/14 15:09	JJB	
Endosulfan sulfate [1031-07-8]^	0.0012	U	mg/kg dry	2	0.0012	0.0042	4L23006	EPA 8081B	12/29/14 15:09	JJB	
Endrin [72-20-8]^	0.0018	U	mg/kg dry	2	0.0018	0.0042	4L23006	EPA 8081B	12/29/14 15:09	JJB	
Endrin aldehyde [7421-93-4]^	0.0020	U	mg/kg dry	2	0.0020	0.0042	4L23006	EPA 8081B	12/29/14 15:09	JJB	J-05
Endrin ketone [53494-70-5]^	0.0012	U	mg/kg dry	2	0.0012	0.0042	4L23006	EPA 8081B	12/29/14 15:09	JJB	
gamma-BHC [58-89-9]^	0.0015	U	mg/kg dry	2	0.0015	0.0042	4L23006	EPA 8081B	12/29/14 15:09	JJB	
Heptachlor [76-44-8]^	0.0015	U	mg/kg dry	2	0.0015	0.0042	4L23006	EPA 8081B	12/29/14 15:09	JJB	
Heptachlor epoxide [1024-57-3]^	0.0012	U	mg/kg dry	2	0.0012	0.0042	4L23006	EPA 8081B	12/29/14 15:09	JJB	
Isodrin [465-73-6]^	0.0015	U	mg/kg dry	2	0.0015	0.0042	4L23006	EPA 8081B	12/29/14 15:09	JJB	
Methoxychlor [72-43-5]^	0.0021	U	mg/kg dry	2	0.0021	0.0042	4L23006	EPA 8081B	12/29/14 15:09	JJB	
Mirex [2385-85-5]^	0.0027	U	mg/kg dry	2	0.0027	0.0042	4L23006	EPA 8081B	12/29/14 15:09	JJB	
Toxaphene [8001-35-2]^	0.042	U	mg/kg dry	2	0.042	0.081	4L23006	EPA 8081B	12/29/14 15:09	JJB	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
2,4,5,6-TCMX	0.019	2	0.0411	47 %	20-137	4L23006	EPA 8081B	12/29/14 15:09	JJB		
Decachlorobiphenyl	0.031	2	0.0411	75 %	13-183	4L23006	EPA 8081B	12/29/14 15:09	JJB		

**Chlorinated Herbicides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2,4,5-T [93-76-5]^	0.0031	U	mg/kg dry	1	0.0031	0.012	4L24014	EPA 8151A	12/30/14 15:34	RC	
2,4,5-TP (Silvex) [93-72-1]^	0.0058	U	mg/kg dry	1	0.0058	0.012	4L24014	EPA 8151A	12/30/14 15:34	RC	
2,4-D [94-75-7]^	0.012	U	mg/kg dry	1	0.012	0.012	4L24014	EPA 8151A	12/30/14 15:34	RC	
2,4-DB [94-82-6]^	0.0060	U	mg/kg dry	1	0.0060	0.012	4L24014	EPA 8151A	12/30/14 15:34	RC	
3,5-DCBA [51-365-5]^	0.0027	U	mg/kg dry	1	0.0027	0.012	4L24014	EPA 8151A	12/30/14 15:34	RC	
4-Nitrophenol [100-02-7]^	0.0080	U	mg/kg dry	1	0.0080	0.012	4L24014	EPA 8151A	12/30/14 15:34	RC	QV-01
Acifluorfen [50594-66-6]^	0.0020	U	mg/kg dry	1	0.0020	0.012	4L24014	EPA 8151A	12/30/14 15:34	RC	
Bentazon [25057-89-0]^	0.0055	U	mg/kg dry	1	0.0055	0.012	4L24014	EPA 8151A	12/30/14 15:34	RC	J-02, J-05
Chloramben [133-90-4]^	0.0048	U	mg/kg dry	1	0.0048	0.012	4L24014	EPA 8151A	12/30/14 15:34	RC	J-05
Dacthal [1861-32-1]^	0.0030	U	mg/kg dry	1	0.0030	0.012	4L24014	EPA 8151A	12/30/14 15:34	RC	
Dalapon [75-99-0]^	0.0062	U	mg/kg dry	1	0.0062	0.012	4L24014	EPA 8151A	12/30/14 15:34	RC	
Dicamba [1918-00-9]^	0.0028	U	mg/kg dry	1	0.0028	0.012	4L24014	EPA 8151A	12/30/14 15:34	RC	
Dichlorprop [120-36-5]^	0.0034	U	mg/kg dry	1	0.0034	0.012	4L24014	EPA 8151A	12/30/14 15:34	RC	
Dinoseb [88-85-7]^	0.0052	U	mg/kg dry	1	0.0052	0.012	4L24014	EPA 8151A	12/30/14 15:34	RC	
MCPA [94-74-6]^	0.64	U	mg/kg dry	1	0.64	1.2	4L24014	EPA 8151A	12/30/14 15:34	RC	
MCPP [93-65-2]^	0.65	U	mg/kg dry	1	0.65	1.2	4L24014	EPA 8151A	12/30/14 15:34	RC	



**ANALYTICAL RESULTS**

**Description:** CS-7

**Lab Sample ID:** A407493-06

**Received:** 12/17/14 17:08

**Matrix:** Soil

**Sampled:** 12/16/14 10:38

**Work Order:** A407493

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 81.20

**Chlorinated Herbicides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Pentachlorophenol [87-86-5]^	0.0031	U	mg/kg dry	1	0.0031	0.012	4L24014	EPA 8151A	12/30/14 15:34	RC	
Picloram [1918-02-1]^	0.0022	U	mg/kg dry	1	0.0022	0.012	4L24014	EPA 8151A	12/30/14 15:34	RC	

<u>Surrogates</u>	<u>Results</u>	<u>DF</u>	<u>Spike Lvl</u>	<u>% Rec</u>	<u>% Rec Limits</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
2,4-DCAA	0.033	1	0.0492	67 %	39-174	4L24014	EPA 8151A	12/30/14 15:34	RC	

**Metals by EPA 6000/7000 Series Methods**

*^ - ENCO Jacksonville certified analyte [NELAC E82277]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Arsenic [7440-38-2]^	0.438	U	mg/kg dry	1	0.438	0.616	4L26003	EPA 6010C	12/30/14 12:50	ACV	

**ANALYTICAL RESULTS**

**Description:** CS-8

**Lab Sample ID:** A407493-07

**Received:** 12/17/14 17:08

**Matrix:** Soil

**Sampled:** 12/16/14 10:45

**Work Order:** A407493

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 82.69

**Organochlorine Pesticides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.0012	U	mg/kg dry	2	0.0012	0.0041	4L23006	EPA 8081B	12/29/14 15:21	JJB	
4,4'-DDE [72-55-9]^	0.0013	U	mg/kg dry	2	0.0013	0.0041	4L23006	EPA 8081B	12/29/14 15:21	JJB	
4,4'-DDT [50-29-3]^	0.0016	U	mg/kg dry	2	0.0016	0.0041	4L23006	EPA 8081B	12/29/14 15:21	JJB	
Aldrin [309-00-2]^	0.0012	U	mg/kg dry	2	0.0012	0.0041	4L23006	EPA 8081B	12/29/14 15:21	JJB	
alpha-BHC [319-84-6]^	0.0014	U	mg/kg dry	2	0.0014	0.0041	4L23006	EPA 8081B	12/29/14 15:21	JJB	
beta-BHC [319-85-7]^	0.0024	U	mg/kg dry	2	0.0024	0.0041	4L23006	EPA 8081B	12/29/14 15:21	JJB	
Chlordane (tech) [12789-03-6]^	0.020	U	mg/kg dry	2	0.020	0.080	4L23006	EPA 8081B	12/29/14 15:21	JJB	
Chlordane-alpha [5103-71-9]^	0.0011	U	mg/kg dry	2	0.0011	0.0041	4L23006	EPA 8081B	12/29/14 15:21	JJB	
Chlordane-gamma [5566-34-7]^	0.0011	U	mg/kg dry	2	0.0011	0.0041	4L23006	EPA 8081B	12/29/14 15:21	JJB	
delta-BHC [319-86-8]^	0.0012	U	mg/kg dry	2	0.0012	0.0041	4L23006	EPA 8081B	12/29/14 15:21	JJB	
Dieldrin [60-57-1]^	0.0011	U	mg/kg dry	2	0.0011	0.0041	4L23006	EPA 8081B	12/29/14 15:21	JJB	
Endosulfan I [959-98-8]^	0.00094	U	mg/kg dry	2	0.00094	0.0041	4L23006	EPA 8081B	12/29/14 15:21	JJB	
Endosulfan II [33213-65-9]^	0.0012	U	mg/kg dry	2	0.0012	0.0041	4L23006	EPA 8081B	12/29/14 15:21	JJB	
Endosulfan sulfate [1031-07-8]^	0.0012	U	mg/kg dry	2	0.0012	0.0041	4L23006	EPA 8081B	12/29/14 15:21	JJB	
Endrin [72-20-8]^	0.0018	U	mg/kg dry	2	0.0018	0.0041	4L23006	EPA 8081B	12/29/14 15:21	JJB	
Endrin aldehyde [7421-93-4]^	0.0020	U	mg/kg dry	2	0.0020	0.0041	4L23006	EPA 8081B	12/29/14 15:21	JJB	J-05
Endrin ketone [53494-70-5]^	0.0011	U	mg/kg dry	2	0.0011	0.0041	4L23006	EPA 8081B	12/29/14 15:21	JJB	
gamma-BHC [58-89-9]^	0.0015	U	mg/kg dry	2	0.0015	0.0041	4L23006	EPA 8081B	12/29/14 15:21	JJB	
Heptachlor [76-44-8]^	0.0015	U	mg/kg dry	2	0.0015	0.0041	4L23006	EPA 8081B	12/29/14 15:21	JJB	
Heptachlor epoxide [1024-57-3]^	0.0012	U	mg/kg dry	2	0.0012	0.0041	4L23006	EPA 8081B	12/29/14 15:21	JJB	
Isodrin [465-73-6]^	0.0015	U	mg/kg dry	2	0.0015	0.0041	4L23006	EPA 8081B	12/29/14 15:21	JJB	
Methoxychlor [72-43-5]^	0.0021	U	mg/kg dry	2	0.0021	0.0041	4L23006	EPA 8081B	12/29/14 15:21	JJB	
Mirex [2385-85-5]^	0.0027	U	mg/kg dry	2	0.0027	0.0041	4L23006	EPA 8081B	12/29/14 15:21	JJB	
Toxaphene [8001-35-2]^	0.041	U	mg/kg dry	2	0.041	0.080	4L23006	EPA 8081B	12/29/14 15:21	JJB	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>	
2,4,5,6-TCMX	0.018	2	0.0400	45 %	20-137	4L23006	EPA 8081B	12/29/14 15:21	JJB		
Decachlorobiphenyl	0.033	2	0.0400	82 %	13-183	4L23006	EPA 8081B	12/29/14 15:21	JJB		

**Chlorinated Herbicides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2,4,5-T [93-76-5]^	0.0030	U	mg/kg dry	1	0.0030	0.012	4L24014	EPA 8151A	12/30/14 16:00	RC	
2,4,5-TP (Silvex) [93-72-1]^	0.0057	U	mg/kg dry	1	0.0057	0.012	4L24014	EPA 8151A	12/30/14 16:00	RC	
2,4-D [94-75-7]^	0.012	U	mg/kg dry	1	0.012	0.012	4L24014	EPA 8151A	12/30/14 16:00	RC	
2,4-DB [94-82-6]^	0.0059	U	mg/kg dry	1	0.0059	0.012	4L24014	EPA 8151A	12/30/14 16:00	RC	
3,5-DCBA [51-365-5]^	0.0027	U	mg/kg dry	1	0.0027	0.012	4L24014	EPA 8151A	12/30/14 16:00	RC	
4-Nitrophenol [100-02-7]^	0.0079	U	mg/kg dry	1	0.0079	0.012	4L24014	EPA 8151A	12/30/14 16:00	RC	QV-01
Acifluorfen [50594-66-6]^	0.0019	U	mg/kg dry	1	0.0019	0.012	4L24014	EPA 8151A	12/30/14 16:00	RC	
Bentazon [25057-89-0]^	0.0054	U	mg/kg dry	1	0.0054	0.012	4L24014	EPA 8151A	12/30/14 16:00	RC	J-02, J-05
Chloramben [133-90-4]^	0.0047	U	mg/kg dry	1	0.0047	0.012	4L24014	EPA 8151A	12/30/14 16:00	RC	J-05
Dacthal [1861-32-1]^	0.0029	U	mg/kg dry	1	0.0029	0.012	4L24014	EPA 8151A	12/30/14 16:00	RC	
Dalapon [75-99-0]^	0.0060	U	mg/kg dry	1	0.0060	0.012	4L24014	EPA 8151A	12/30/14 16:00	RC	
Dicamba [1918-00-9]^	0.0028	U	mg/kg dry	1	0.0028	0.012	4L24014	EPA 8151A	12/30/14 16:00	RC	
Dichlorprop [120-36-5]^	0.0034	U	mg/kg dry	1	0.0034	0.012	4L24014	EPA 8151A	12/30/14 16:00	RC	
Dinoseb [88-85-7]^	0.0051	U	mg/kg dry	1	0.0051	0.012	4L24014	EPA 8151A	12/30/14 16:00	RC	
MCPA [94-74-6]^	0.63	U	mg/kg dry	1	0.63	1.2	4L24014	EPA 8151A	12/30/14 16:00	RC	
MCPP [93-65-2]^	0.64	U	mg/kg dry	1	0.64	1.2	4L24014	EPA 8151A	12/30/14 16:00	RC	

**ANALYTICAL RESULTS**

**Description:** CS-8

**Lab Sample ID:** A407493-07

**Received:** 12/17/14 17:08

**Matrix:** Soil

**Sampled:** 12/16/14 10:45

**Work Order:** A407493

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 82.69

**Chlorinated Herbicides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Pentachlorophenol [87-86-5]^	0.0030	U	mg/kg dry	1	0.0030	0.012	4L24014	EPA 8151A	12/30/14 16:00	RC	
Picloram [1918-02-1]^	0.0022	U	mg/kg dry	1	0.0022	0.012	4L24014	EPA 8151A	12/30/14 16:00	RC	

<u>Surrogates</u>	<u>Results</u>	<u>DF</u>	<u>Spike Lvl</u>	<u>% Rec</u>	<u>% Rec Limits</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
2,4-DCAA	0.025	1	0.0486	51 %	39-174	4L24014	EPA 8151A	12/30/14 16:00	RC	

**Metals by EPA 6000/7000 Series Methods**

*^ - ENCO Jacksonville certified analyte [NELAC E82277]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Arsenic [7440-38-2]^	0.478	U	mg/kg dry	1	0.478	0.672	4L26003	EPA 6010C	12/30/14 12:53	ACV	

**ANALYTICAL RESULTS**

**Description:** TMW-3  
**Matrix:** Ground Water  
**Project:** I-4 Level II

**Lab Sample ID:** A407493-08  
**Sampled:** 12/16/14 11:52  
**Sampled By:** Jerry Governale

**Received:** 12/17/14 17:08  
**Work Order:** A407493

**Organochlorine Pesticides by GC**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.018	U	ug/L	1	0.018	0.050	4L22010	EPA 8081B	12/29/14 14:01	JJB	
4,4'-DDE [72-55-9]^	0.036	U	ug/L	1	0.036	0.050	4L22010	EPA 8081B	12/29/14 14:01	JJB	
4,4'-DDT [50-29-3]^	0.025	U	ug/L	1	0.025	0.050	4L22010	EPA 8081B	12/29/14 14:01	JJB	
Aldrin [309-00-2]^	0.032	U	ug/L	1	0.032	0.050	4L22010	EPA 8081B	12/29/14 14:01	JJB	
alpha-BHC [319-84-6]^	0.026	U	ug/L	1	0.026	0.050	4L22010	EPA 8081B	12/29/14 14:01	JJB	
beta-BHC [319-85-7]^	0.022	U	ug/L	1	0.022	0.050	4L22010	EPA 8081B	12/29/14 14:01	JJB	
Chlordane (tech) [12789-03-6]^	0.32	U	ug/L	1	0.32	0.50	4L22010	EPA 8081B	12/29/14 14:01	JJB	
Chlordane-alpha [5103-71-9]^	0.022	U	ug/L	1	0.022	0.050	4L22010	EPA 8081B	12/29/14 14:01	JJB	
Chlordane-gamma [5566-34-7]^	0.018	U	ug/L	1	0.018	0.050	4L22010	EPA 8081B	12/29/14 14:01	JJB	
delta-BHC [319-86-8]^	0.019	U	ug/L	1	0.019	0.050	4L22010	EPA 8081B	12/29/14 14:01	JJB	
Dieldrin [60-57-1]^	0.017	U	ug/L	1	0.017	0.050	4L22010	EPA 8081B	12/29/14 14:01	JJB	
Endosulfan I [959-98-8]^	0.016	U	ug/L	1	0.016	0.050	4L22010	EPA 8081B	12/29/14 14:01	JJB	
Endosulfan II [33213-65-9]^	0.017	U	ug/L	1	0.017	0.050	4L22010	EPA 8081B	12/29/14 14:01	JJB	
Endosulfan sulfate [1031-07-8]^	0.016	U	ug/L	1	0.016	0.050	4L22010	EPA 8081B	12/29/14 14:01	JJB	
Endrin [72-20-8]^	0.014	U	ug/L	1	0.014	0.050	4L22010	EPA 8081B	12/29/14 14:01	JJB	
Endrin aldehyde [7421-93-4]^	0.020	U	ug/L	1	0.020	0.050	4L22010	EPA 8081B	12/29/14 14:01	JJB	
Endrin ketone [53494-70-5]^	0.017	U	ug/L	1	0.017	0.050	4L22010	EPA 8081B	12/29/14 14:01	JJB	
gamma-BHC [58-89-9]^	0.020	U	ug/L	1	0.020	0.050	4L22010	EPA 8081B	12/29/14 14:01	JJB	
Heptachlor [76-44-8]^	0.018	U	ug/L	1	0.018	0.050	4L22010	EPA 8081B	12/29/14 14:01	JJB	
Heptachlor epoxide [1024-57-3]^	0.018	U	ug/L	1	0.018	0.050	4L22010	EPA 8081B	12/29/14 14:01	JJB	
Isodrin [465-73-6]^	0.030	U	ug/L	1	0.030	0.050	4L22010	EPA 8081B	12/29/14 14:01	JJB	
Methoxychlor [72-43-5]^	0.018	U	ug/L	1	0.018	0.050	4L22010	EPA 8081B	12/29/14 14:01	JJB	
Mirex [2385-85-5]^	0.034	U	ug/L	1	0.034	0.050	4L22010	EPA 8081B	12/29/14 14:01	JJB	
Toxaphene [8001-35-2]^	0.48	U	ug/L	1	0.48	0.50	4L22010	EPA 8081B	12/29/14 14:01	JJB	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
2,4,5,6-TCMX	0.43	1	1.00	43 %	38-142	4L22010	EPA 8081B	12/29/14 14:01	JJB	
Decachlorobiphenyl	0.84	1	1.00	84 %	34-159	4L22010	EPA 8081B	12/29/14 14:01	JJB	

**Chlorinated Herbicides by GC**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2,4,5-T [93-76-5]^	0.28	U	ug/L	1	0.28	0.50	4L22067	EPA 8151A	12/30/14 00:09	RC	
2,4,5-TP (Silvex) [93-72-1]^	0.44	U	ug/L	1	0.44	0.50	4L22067	EPA 8151A	12/30/14 00:09	RC	
2,4-D [94-75-7]^	0.27	U	ug/L	1	0.27	0.50	4L22067	EPA 8151A	12/30/14 00:09	RC	
2,4-DB [94-82-6]^	0.35	U	ug/L	1	0.35	0.50	4L22067	EPA 8151A	12/30/14 00:09	RC	
3,5-DCBA [51-365-5]^	0.36	U	ug/L	1	0.36	0.50	4L22067	EPA 8151A	12/30/14 00:09	RC	
4-Nitrophenol [100-02-7]^	0.32	U	ug/L	1	0.32	0.50	4L22067	EPA 8151A	12/30/14 00:09	RC	
Acifluorfen [50594-66-6]^	0.45	U	ug/L	1	0.45	0.50	4L22067	EPA 8151A	12/30/14 00:09	RC	
Bentazon [25057-89-0]^	0.22	U	ug/L	1	0.22	0.50	4L22067	EPA 8151A	12/30/14 00:09	RC	J-05
Chloramben [133-90-4]^	0.43	U	ug/L	1	0.43	0.50	4L22067	EPA 8151A	12/30/14 00:09	RC	
Dacthal [1861-32-1]^	0.23	U	ug/L	1	0.23	0.50	4L22067	EPA 8151A	12/30/14 00:09	RC	
Dalapon [75-99-0]^	0.49	U	ug/L	1	0.49	0.50	4L22067	EPA 8151A	12/30/14 00:09	RC	
Dicamba [1918-00-9]^	0.19	U	ug/L	1	0.19	0.50	4L22067	EPA 8151A	12/30/14 00:09	RC	
Dichlorprop [120-36-5]^	0.28	U	ug/L	1	0.28	0.50	4L22067	EPA 8151A	12/30/14 00:09	RC	
Dinoseb [88-85-7]^	0.32	U	ug/L	1	0.32	0.50	4L22067	EPA 8151A	12/30/14 00:09	RC	
MCPA [94-74-6]^	34	U	ug/L	1	34	50	4L22067	EPA 8151A	12/30/14 00:09	RC	
MCPP [93-65-2]^	46	U	ug/L	1	46	50	4L22067	EPA 8151A	12/30/14 00:09	RC	



### ANALYTICAL RESULTS

**Description:** TMW-3

**Lab Sample ID:** A407493-08

**Received:** 12/17/14 17:08

**Matrix:** Ground Water

**Sampled:** 12/16/14 11:52

**Work Order:** A407493

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

### Chlorinated Herbicides by GC

*^ - ENCO Orlando certified analyte [NELAC E83182]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Pentachlorophenol [87-86-5]^	0.19	U	ug/L	1	0.19	0.50	4L22067	EPA 8151A	12/30/14 00:09	RC	
Picloram [1918-02-1]^	0.23	U	ug/L	1	0.23	0.50	4L22067	EPA 8151A	12/30/14 00:09	RC	

#### Surrogates

<u>Surrogates</u>	<u>Results</u>	<u>DF</u>	<u>Spike Lvl</u>	<u>% Rec</u>	<u>% Rec Limits</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
2,4-DCAA	1.5	1	2.00	73 %	68-139	4L22067	EPA 8151A	12/30/14 00:09	RC	

### Metals (total recoverable) by EPA 6000/7000 Series Methods

*^ - ENCO Jacksonville certified analyte [NELAC E82277]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Arsenic [7440-38-2]^	7.12	U	ug/L	1	7.12	10.0	4L30003	EPA 6010C	12/31/14 12:39	ACV	

**QUALITY CONTROL DATA**

**Organochlorine Pesticides by GC - Quality Control**

*Batch 4L18025 - EPA 3550C*

**Blank (4L18025-BLK1)**

Prepared: 12/18/2014 13:00 Analyzed: 12/19/2014 12:49

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
4,4'-DDD	0.00048	U	0.0017	mg/kg wet							
4,4'-DDE	0.00052	U	0.0017	mg/kg wet							QV-01
4,4'-DDT	0.00066	U	0.0017	mg/kg wet							
Aldrin	0.00051	U	0.0017	mg/kg wet							QV-01
alpha-BHC	0.00056	U	0.0017	mg/kg wet							
beta-BHC	0.0010	U	0.0017	mg/kg wet							
Chlordane (tech)	0.0084	U	0.033	mg/kg wet							
Chlordane-alpha	0.00045	U	0.0017	mg/kg wet							
Chlordane-gamma	0.00045	U	0.0017	mg/kg wet							
delta-BHC	0.00050	U	0.0017	mg/kg wet							
Dieldrin	0.00045	U	0.0017	mg/kg wet							
Endosulfan I	0.00039	U	0.0017	mg/kg wet							
Endosulfan II	0.00048	U	0.0017	mg/kg wet							
Endosulfan sulfate	0.00049	U	0.0017	mg/kg wet							
Endrin	0.00074	U	0.0017	mg/kg wet							
Endrin aldehyde	0.00083	U	0.0017	mg/kg wet							
Endrin ketone	0.00047	U	0.0017	mg/kg wet							
gamma-BHC	0.00060	U	0.0017	mg/kg wet							
Heptachlor	0.00062	U	0.0017	mg/kg wet							
Heptachlor epoxide	0.00048	U	0.0017	mg/kg wet							
Isodrin	0.00062	U	0.0017	mg/kg wet							
Methoxychlor	0.00086	U	0.0017	mg/kg wet							
Mirex	0.0011	U	0.0017	mg/kg wet							
Toxaphene	0.017	U	0.033	mg/kg wet							
<i>2,4,5,6-TCMX</i>	<i>0.036</i>			<i>mg/kg wet</i>	<i>0.0333</i>		<i>108</i>	<i>20-137</i>			
<i>Decachlorobiphenyl</i>	<i>0.032</i>			<i>mg/kg wet</i>	<i>0.0333</i>		<i>95</i>	<i>13-183</i>			

**LCS (4L18025-BS1)**

Prepared: 12/18/2014 13:00 Analyzed: 12/19/2014 13:00

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
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**QUALITY CONTROL DATA**

**Organochlorine Pesticides by GC - Quality Control**

**Batch 4L18025 - EPA 3550C - Continued**

**LCS (4L18025-BS1) Continued**

Prepared: 12/18/2014 13:00 Analyzed: 12/19/2014 13:00

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.033		0.0017	mg/kg wet	0.0333		98	37-125			
Dieldrin	0.035		0.0017	mg/kg wet	0.0333		105	46-127			
Endrin	0.032		0.0017	mg/kg wet	0.0333		97	28-143			
2,4,5,6-TCMX [2C]	0.046			mg/kg wet	0.0333		137	20-137			
Decachlorobiphenyl	0.044			mg/kg wet	0.0333		133	13-183			

**Matrix Spike (4L18025-MS1)**

Prepared: 12/18/2014 13:00 Analyzed: 12/19/2014 13:11

Source: A407258-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.026		0.0039	mg/kg dry	0.0381	0.0015 U	69	37-125			
Dieldrin	0.030		0.0039	mg/kg dry	0.0381	0.0010 U	78	46-127			
Endrin	0.028		0.0039	mg/kg dry	0.0381	0.0017 U	74	28-143			
2,4,5,6-TCMX	0.040			mg/kg dry	0.0381		106	20-137			
Decachlorobiphenyl	0.039			mg/kg dry	0.0381		102	13-183			

**Matrix Spike Dup (4L18025-MSD1)**

Prepared: 12/18/2014 13:00 Analyzed: 12/19/2014 13:23

Source: A407258-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.035		0.0039	mg/kg dry	0.0381	0.0015 U	91	37-125	28	24	QM-11
Dieldrin	0.035		0.0039	mg/kg dry	0.0381	0.0010 U	93	46-127	18	21	
Endrin	0.035		0.0039	mg/kg dry	0.0381	0.0017 U	92	28-143	22	22	
2,4,5,6-TCMX	0.044			mg/kg dry	0.0381		117	20-137			
Decachlorobiphenyl	0.047			mg/kg dry	0.0381		122	13-183			

**Batch 4L22010 - EPA 3510C**

**Blank (4L22010-BLK1)**

Prepared: 12/22/2014 13:48 Analyzed: 12/29/2014 10:58

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDD	0.018	U	0.050	ug/L							
4,4'-DDE	0.036	U	0.050	ug/L							
4,4'-DDT	0.025	U	0.050	ug/L							
Aldrin	0.032	U	0.050	ug/L							
alpha-BHC	0.026	U	0.050	ug/L							
beta-BHC	0.022	U	0.050	ug/L							
Chlordane (tech)	0.32	U	0.50	ug/L							
Chlordane-alpha	0.022	U	0.050	ug/L							
Chlordane-gamma	0.018	U	0.050	ug/L							
delta-BHC	0.019	U	0.050	ug/L							
Dieldrin	0.017	U	0.050	ug/L							
Endosulfan I	0.016	U	0.050	ug/L							
Endosulfan II	0.017	U	0.050	ug/L							
Endosulfan sulfate	0.016	U	0.050	ug/L							
Endrin	0.014	U	0.050	ug/L							

**QUALITY CONTROL DATA**

**Organochlorine Pesticides by GC - Quality Control**

**Batch 4L22010 - EPA 3510C - Continued**

**Blank (4L22010-BLK1) Continued**

Prepared: 12/22/2014 13:48 Analyzed: 12/29/2014 10:58

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Endrin aldehyde	0.020	U	0.050	ug/L							
Endrin ketone	0.017	U	0.050	ug/L							
gamma-BHC	0.020	U	0.050	ug/L							
Heptachlor	0.018	U	0.050	ug/L							
Heptachlor epoxide	0.018	U	0.050	ug/L							
Isodrin	0.030	U	0.050	ug/L							
Methoxychlor	0.018	U	0.050	ug/L							
Mirex	0.034	U	0.050	ug/L							
Toxaphene	0.48	U	0.50	ug/L							
2,4,5,6-TCMX	0.46			ug/L	1.00		46	38-142			
Decachlorobiphenyl	0.67			ug/L	1.00		67	34-159			

**LCS (4L22010-BS1)**

Prepared: 12/22/2014 13:48 Analyzed: 12/29/2014 11:10

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	1.0		0.050	ug/L	1.00		103	37-125			
Dieldrin	0.68		0.050	ug/L	1.00		68	46-127			
Endrin	0.70		0.050	ug/L	1.00		70	28-143			
2,4,5,6-TCMX	0.53			ug/L	1.00		53	38-142			
Decachlorobiphenyl	0.73			ug/L	1.00		73	34-159			

**Matrix Spike (4L22010-MS1)**

Prepared: 12/22/2014 13:48 Analyzed: 12/29/2014 11:22

Source: A407522-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	1.2		0.050	ug/L	1.00	0.025 U	116	37-125			
Dieldrin	0.95		0.050	ug/L	1.00	0.017 U	95	46-127			
Endrin	1.0		0.050	ug/L	1.00	0.014 U	100	28-143			
2,4,5,6-TCMX	0.69			ug/L	1.00		69	38-142			
Decachlorobiphenyl	1.1			ug/L	1.00		110	34-159			

**Matrix Spike Dup (4L22010-MSD1)**

Prepared: 12/22/2014 13:48 Analyzed: 12/29/2014 11:33

Source: A407522-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.86		0.050	ug/L	1.00	0.025 U	86	37-125	30	24	QM-11
Dieldrin	0.49		0.050	ug/L	1.00	0.017 U	49	46-127	63	21	QM-11
Endrin	0.50		0.050	ug/L	1.00	0.014 U	50	28-143	66	22	QM-11
2,4,5,6-TCMX [2C]	0.38			ug/L	1.00		38	38-142			
Decachlorobiphenyl	0.62			ug/L	1.00		62	34-159			

**Batch 4L23006 - EPA 3550C**

**Blank (4L23006-BLK1)**

Prepared: 12/23/2014 08:25 Analyzed: 12/29/2014 12:07

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDD	0.00048	U	0.0017	mg/kg wet							
4,4'-DDE	0.00052	U	0.0017	mg/kg wet							

**QUALITY CONTROL DATA**

**Organochlorine Pesticides by GC - Quality Control**

*Batch 4L23006 - EPA 3550C - Continued*

**Blank (4L23006-BLK1) Continued**

Prepared: 12/23/2014 08:25 Analyzed: 12/29/2014 12:07

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
4,4'-DDT	0.00066	U	0.0017	mg/kg wet							
Aldrin	0.00051	U	0.0017	mg/kg wet							
alpha-BHC	0.00056	U	0.0017	mg/kg wet							
beta-BHC	0.0010	U	0.0017	mg/kg wet							
Chlordane (tech)	0.0084	U	0.033	mg/kg wet							
Chlordane-alpha	0.00045	U	0.0017	mg/kg wet							
Chlordane-gamma	0.00045	U	0.0017	mg/kg wet							
delta-BHC	0.00050	U	0.0017	mg/kg wet							
Dieldrin	0.00045	U	0.0017	mg/kg wet							
Endosulfan I	0.00039	U	0.0017	mg/kg wet							
Endosulfan II	0.00048	U	0.0017	mg/kg wet							
Endosulfan sulfate	0.00049	U	0.0017	mg/kg wet							
Endrin	0.00074	U	0.0017	mg/kg wet							
Endrin aldehyde	0.00083	U	0.0017	mg/kg wet							
Endrin ketone	0.00047	U	0.0017	mg/kg wet							
gamma-BHC	0.00060	U	0.0017	mg/kg wet							
Heptachlor	0.00062	U	0.0017	mg/kg wet							
Heptachlor epoxide	0.00048	U	0.0017	mg/kg wet							
Isodrin	0.00062	U	0.0017	mg/kg wet							
Methoxychlor	0.00086	U	0.0017	mg/kg wet							
Mirex	0.0011	U	0.0017	mg/kg wet							
Toxaphene	0.017	U	0.033	mg/kg wet							
<hr/>											
<i>2,4,5,6-TCMX</i>	<i>0.018</i>			<i>mg/kg wet</i>	<i>0.0333</i>		<i>55</i>	<i>20-137</i>			
<i>Decachlorobiphenyl</i>	<i>0.022</i>			<i>mg/kg wet</i>	<i>0.0333</i>		<i>65</i>	<i>13-183</i>			

**LCS (4L23006-BS1)**

Prepared: 12/23/2014 08:25 Analyzed: 12/29/2014 12:18

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
4,4'-DDT	0.029		0.0017	mg/kg wet	0.0333		86	37-125			
Dieldrin	0.017		0.0017	mg/kg wet	0.0333		52	46-127			

**QUALITY CONTROL DATA**

**Organochlorine Pesticides by GC - Quality Control**

*Batch 4L23006 - EPA 3550C - Continued*

**LCS (4L23006-BS1) Continued**

Prepared: 12/23/2014 08:25 Analyzed: 12/29/2014 12:18

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Endrin	0.017		0.0017	mg/kg wet	0.0333		51	28-143			
2,4,5,6-TCMX	0.022			mg/kg wet	0.0333		65	20-137			
Decachlorobiphenyl	0.022			mg/kg wet	0.0333		65	13-183			

**Matrix Spike (4L23006-MS1)**

Prepared: 12/23/2014 08:25 Analyzed: 12/29/2014 12:30

**Source: A407493-03**

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
4,4'-DDT	0.014		0.0039	mg/kg dry	0.0376	0.0015 U	36	37-125			QM-07
Dieldrin	0.014		0.0039	mg/kg dry	0.0376	0.0010 U	36	46-127			QM-07
Endrin	0.014		0.0039	mg/kg dry	0.0376	0.0017 U	37	28-143			
2,4,5,6-TCMX	0.012			mg/kg dry	0.0376		31	20-137			
Decachlorobiphenyl	0.019			mg/kg dry	0.0376		51	13-183			

**Matrix Spike Dup (4L23006-MSD1)**

Prepared: 12/23/2014 08:25 Analyzed: 12/29/2014 12:41

**Source: A407493-03**

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
4,4'-DDT	0.020		0.0039	mg/kg dry	0.0382	0.0015 U	52	37-125	38	24	QM-11
Dieldrin	0.021		0.0039	mg/kg dry	0.0382	0.0010 U	55	46-127	44	21	QM-11
Endrin	0.021		0.0039	mg/kg dry	0.0382	0.0017 U	54	28-143	41	22	QM-11
2,4,5,6-TCMX	0.017			mg/kg dry	0.0382		46	20-137			
Decachlorobiphenyl	0.027			mg/kg dry	0.0382		70	13-183			

**Chlorinated Herbicides by GC - Quality Control**

*Batch 4L18006 - EPA 3510C*

**Blank (4L18006-BLK1)**

Prepared: 12/18/2014 12:25 Analyzed: 12/22/2014 20:54

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
2,4,5-T	0.28	U	0.50	ug/L							QV-01
2,4,5-TP (Silvex)	0.44	U	0.50	ug/L							QV-01
2,4-D	0.27	U	0.50	ug/L							QV-01
2,4-DB	0.35	U	0.50	ug/L							
3,5-DCBA	0.36	U	0.50	ug/L							QV-01
4-Nitrophenol	0.32	U	0.50	ug/L							
Acifluorfen	0.45	U	0.50	ug/L							QV-01
Bentazon	0.22	U	0.50	ug/L							QV-01
Chloramben	0.43	U	0.50	ug/L							
Dacthal	0.23	U	0.50	ug/L							QV-01
Dalapon	0.49	U	0.50	ug/L							
Dicamba	0.19	U	0.50	ug/L							QV-01
Dichlorprop	0.28	U	0.50	ug/L							QV-01
Dinoseb	0.32	U	0.50	ug/L							
MCPA	34	U	50	ug/L							
MCPP	46	U	50	ug/L							QV-01
Pentachlorophenol	0.19	U	0.50	ug/L							QV-01

**QUALITY CONTROL DATA**

**Chlorinated Herbicides by GC - Quality Control**

**Batch 4L18006 - EPA 3510C - Continued**

**Blank (4L18006-BLK1) Continued**

Prepared: 12/18/2014 12:25 Analyzed: 12/22/2014 20:54

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Picloram	0.23	U	0.50	ug/L							
2,4-DCAA	1.9			ug/L	2.00		94	68-139			

**LCS (4L18006-BS1)**

Prepared: 12/18/2014 12:25 Analyzed: 12/22/2014 21:20

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.6		0.50	ug/L	2.00		78	70-114			J-04
2,4-D	1.4		0.50	ug/L	2.00		68	37-129			J-04
2,4-DB	1.5		0.50	ug/L	2.00		77	49-144			
Bentazon	1.3		0.50	ug/L	2.00		67	37-141			J-04
Dalapon	1.3		0.50	ug/L	2.00		63	18-121			
Dicamba	1.6		0.50	ug/L	2.00		80	36-143			J-04
Picloram	1.1		0.50	ug/L	2.00		53	36-127			
2,4-DCAA	2.0			ug/L	2.00		99	68-139			

**Matrix Spike (4L18006-MS1)**

Prepared: 12/18/2014 12:25 Analyzed: 12/22/2014 21:46

Source: A407375-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.2		0.50	ug/L	2.00	0.44 U	59	70-114			J-04
2,4-D	0.90		0.50	ug/L	2.00	0.27 U	45	37-129			J-04
2,4-DB	1.3		0.50	ug/L	2.00	0.35 U	63	49-144			
Bentazon	1.1		0.50	ug/L	2.00	0.22 U	54	37-141			J-04
Dalapon	0.87		0.50	ug/L	2.00	0.49 U	43	18-121			
Dicamba	1.5		0.50	ug/L	2.00	0.19 U	74	36-143			J-04
Picloram	1.1		0.50	ug/L	2.00	0.23 U	53	36-127			
2,4-DCAA	1.6			ug/L	2.00		81	68-139			

**Matrix Spike Dup (4L18006-MSD1)**

Prepared: 12/18/2014 12:25 Analyzed: 12/22/2014 22:12

Source: A407375-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.4		0.50	ug/L	2.00	0.44 U	70	70-114	16	15	J-04
2,4-D	1.2		0.50	ug/L	2.00	0.27 U	62	37-129	32	33	J-04
2,4-DB	1.5		0.50	ug/L	2.00	0.35 U	74	49-144	16	36	
Bentazon	1.1		0.50	ug/L	2.00	0.22 U	55	37-141	2	22	J-04
Dalapon	0.99		0.50	ug/L	2.00	0.49 U	49	18-121	13	49	
Dicamba	1.5		0.50	ug/L	2.00	0.19 U	77	36-143	3	24	J-04
Picloram	1.1		0.50	ug/L	2.00	0.23 U	53	36-127	0.3	16	
2,4-DCAA	1.9			ug/L	2.00		97	68-139			

**Batch 4L22067 - EPA 3510C**

**Blank (4L22067-BLK1)**

Prepared: 12/22/2014 21:00 Analyzed: 12/29/2014 15:27

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	0.28	U	0.50	ug/L							
2,4,5-TP (Silvex)	0.44	U	0.50	ug/L							
2,4-D	0.27	U	0.50	ug/L							

**QUALITY CONTROL DATA**

**Chlorinated Herbicides by GC - Quality Control**

**Batch 4L22067 - EPA 3510C - Continued**

**Blank (4L22067-BLK1) Continued**

Prepared: 12/22/2014 21:00 Analyzed: 12/29/2014 15:27

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-DB	0.35	U	0.50	ug/L							
3,5-DCBA	0.36	U	0.50	ug/L							
4-Nitrophenol	0.32	U	0.50	ug/L							
Acifluorfen	0.45	U	0.50	ug/L							
Bentazon	0.22	U	0.50	ug/L							J-05
Chloramben	0.43	U	0.50	ug/L							
Dacthal	0.23	U	0.50	ug/L							
Dalapon	0.49	U	0.50	ug/L							
Dicamba	0.19	U	0.50	ug/L							
Dichlorprop	0.28	U	0.50	ug/L							
Dinoseb	0.32	U	0.50	ug/L							
MCPA	34	U	50	ug/L							
MCPP	46	U	50	ug/L							
Pentachlorophenol	0.19	U	0.50	ug/L							
Picloram	0.23	U	0.50	ug/L							
2,4-DCAA	2.4			ug/L	2.00		122	68-139			

**LCS (4L22067-BS1)**

Prepared: 12/22/2014 21:00 Analyzed: 12/29/2014 15:53

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.7		0.50	ug/L	2.00		86	70-114			
2,4-D	1.6		0.50	ug/L	2.00		80	37-129			
2,4-DB	1.6		0.50	ug/L	2.00		82	49-144			
Bentazon	1.1		0.50	ug/L	2.00		53	37-141			
Dalapon	0.70		0.50	ug/L	2.00		35	18-121			
Dicamba	1.7		0.50	ug/L	2.00		86	36-143			
Picloram	1.3		0.50	ug/L	2.00		64	36-127			
2,4-DCAA	2.4			ug/L	2.00		120	68-139			

**Matrix Spike (4L22067-MS1)**

Prepared: 12/22/2014 21:00 Analyzed: 12/29/2014 16:19

Source: A407522-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.4		0.50	ug/L	2.00	0.44 U	69	70-114			QM-07
2,4-D	1.3		0.50	ug/L	2.00	0.27 U	64	37-129			
2,4-DB	1.3		0.50	ug/L	2.00	0.35 U	64	49-144			
Bentazon	0.81		0.50	ug/L	2.00	0.22 U	41	37-141			
Dalapon	1.1		0.50	ug/L	2.00	0.49 U	57	18-121			
Dicamba	1.3		0.50	ug/L	2.00	0.19 U	67	36-143			
Picloram	0.80		0.50	ug/L	2.00	0.23 U	40	36-127			
2,4-DCAA	2.1			ug/L	2.00		106	68-139			

**Matrix Spike Dup (4L22067-MSD1)**

Prepared: 12/22/2014 21:00 Analyzed: 12/29/2014 16:45

Source: A407522-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.2		0.50	ug/L	2.00	0.44 U	59	70-114	15	15	QM-07
2,4-D	1.1		0.50	ug/L	2.00	0.27 U	55	37-129	16	33	
2,4-DB	1.2		0.50	ug/L	2.00	0.35 U	61	49-144	3	36	

**QUALITY CONTROL DATA**

**Chlorinated Herbicides by GC - Quality Control**

**Batch 4L22067 - EPA 3510C - Continued**

**Matrix Spike Dup (4L22067-MSD1) Continued**

Prepared: 12/22/2014 21:00 Analyzed: 12/29/2014 16:45

Source: A407522-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Bentazon	0.83		0.50	ug/L	2.00	0.22 U	41	37-141	2	22	
Dalapon	1.3		0.50	ug/L	2.00	0.49 U	67	18-121	16	49	
Dicamba	1.2		0.50	ug/L	2.00	0.19 U	59	36-143	13	24	
Picloram	0.83		0.50	ug/L	2.00	0.23 U	42	36-127	4	16	
2,4-DCAA	1.4			ug/L	2.00		72	68-139			

**Batch 4L24014 - EPA 3550C**

**Blank (4L24014-BLK1)**

Prepared: 12/24/2014 11:01 Analyzed: 12/29/2014 18:56

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	0.0025	U	0.010	mg/kg wet							
2,4,5-TP (Silvex)	0.0047	U	0.010	mg/kg wet							
2,4-D	0.0099	U	0.010	mg/kg wet							
2,4-DB	0.0049	U	0.010	mg/kg wet							
3,5-DCBA	0.0022	U	0.010	mg/kg wet							
4-Nitrophenol	0.0065	U	0.010	mg/kg wet							
Acifluorfen	0.0016	U	0.010	mg/kg wet							
Bentazon	0.0045	U	0.010	mg/kg wet							J-05
Chloramben	0.0039	U	0.010	mg/kg wet							
Dacthal	0.0024	U	0.010	mg/kg wet							
Dalapon	0.0050	U	0.010	mg/kg wet							
Dicamba	0.0023	U	0.010	mg/kg wet							
Dichlorprop	0.0028	U	0.010	mg/kg wet							
Dinoseb	0.0042	U	0.010	mg/kg wet							
MCPA	0.52	U	1.0	mg/kg wet							
MCPP	0.53	U	1.0	mg/kg wet							
Pentachlorophenol	0.0025	U	0.010	mg/kg wet							
Picloram	0.0018	U	0.010	mg/kg wet							
2,4-DCAA	0.031			mg/kg wet	0.0400		77	39-174			

**LCS (4L24014-BS1)**

Prepared: 12/24/2014 11:01 Analyzed: 12/29/2014 19:22

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	0.032		0.010	mg/kg wet	0.0400		79	45-135			

**QUALITY CONTROL DATA**

**Chlorinated Herbicides by GC - Quality Control**

*Batch 4L24014 - EPA 3550C - Continued*

**LCS (4L24014-BS1) Continued**

Prepared: 12/24/2014 11:01 Analyzed: 12/29/2014 19:22

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
2,4-D	0.028		0.010	mg/kg wet	0.0400		71	35-121			
2,4-DB	0.034		0.010	mg/kg wet	0.0400		85	34-160			
Bentazon	0.022		0.010	mg/kg wet	0.0400		56	61-100			J-02
Dalapon	0.042		0.010	mg/kg wet	0.0400		106	20-136			
Dicamba	0.034		0.010	mg/kg wet	0.0400		85	47-129			
Picloram	0.018		0.010	mg/kg wet	0.0400		44	33-106			
2,4-DCAA	0.034			mg/kg wet	0.0400		85	39-174			

**Matrix Spike (4L24014-MS1)**

Prepared: 12/24/2014 11:01 Analyzed: 12/29/2014 19:48

**Source: A407428-01**

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
2,4,5-TP (Silvex)	0.036		0.010	mg/kg dry	0.0417	0.0049 U	85	45-135			
2,4-D	0.031		0.010	mg/kg dry	0.0417	0.010 U	75	35-121			
2,4-DB	0.037		0.010	mg/kg dry	0.0417	0.0051 U	88	34-160			
Bentazon	0.024		0.010	mg/kg dry	0.0417	0.0046 U	58	61-100			
Dalapon	0.047		0.010	mg/kg dry	0.0417	0.0052 U	113	20-136			
Dicamba	0.039		0.010	mg/kg dry	0.0417	0.0024 U	94	47-129			
Picloram	0.021		0.010	mg/kg dry	0.0417	0.0019 U	50	33-106			
2,4-DCAA	0.040			mg/kg dry	0.0417		96	39-174			

**Matrix Spike Dup (4L24014-MSD1)**

Prepared: 12/24/2014 11:01 Analyzed: 12/29/2014 20:14

**Source: A407428-01**

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
2,4,5-TP (Silvex)	0.031		0.010	mg/kg dry	0.0415	0.0049 U	76	45-135	12	23	
2,4-D	0.029		0.010	mg/kg dry	0.0415	0.010 U	71	35-121	6	43	
2,4-DB	0.043		0.010	mg/kg dry	0.0415	0.0051 U	104	34-160	15	47	
Bentazon	0.022		0.010	mg/kg dry	0.0415	0.0046 U	52	61-100	11	43	
Dalapon	0.041		0.010	mg/kg dry	0.0415	0.0052 U	98	20-136	15	50	
Dicamba	0.034		0.010	mg/kg dry	0.0415	0.0024 U	82	47-129	15	50	
Picloram	0.019		0.010	mg/kg dry	0.0415	0.0019 U	45	33-106	9	37	
2,4-DCAA	0.035			mg/kg dry	0.0415		85	39-174			

**Metals by EPA 6000/7000 Series Methods - Quality Control**

*Batch 4L26003 - EPA 3050B*

**Blank (4L26003-BLK1)**

Prepared: 12/26/2014 08:57 Analyzed: 12/30/2014 11:53

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Arsenic	0.712	U	1.00	mg/kg wet							

**QUALITY CONTROL DATA**

**Metals by EPA 6000/7000 Series Methods - Quality Control**

*Batch 4L26003 - EPA 3050B - Continued*

**LCS (4L26003-BS1)**

Prepared: 12/26/2014 08:57 Analyzed: 12/30/2014 11:56

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Arsenic	44.4		0.962	mg/kg wet	48.1		92	80-120			

**Matrix Spike (4L26003-MS1)**

Prepared: 12/26/2014 08:57 Analyzed: 12/30/2014 11:58

Source: B405662-01

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Arsenic	49.2		1.09	mg/kg dry	54.3	0.517	91	75-125			

**Matrix Spike Dup (4L26003-MSD1)**

Prepared: 12/26/2014 08:57 Analyzed: 12/30/2014 12:00

Source: B405662-01

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Arsenic	46.7		1.02	mg/kg dry	50.8	0.517	92	75-125	5	30	

**Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control**

*Batch 4L30003 - EPA 3005A*

**Blank (4L30003-BLK1)**

Prepared: 12/30/2014 09:00 Analyzed: 12/31/2014 11:27

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Arsenic	7.12	U	10.0	ug/L							

**LCS (4L30003-BS1)**

Prepared: 12/30/2014 09:00 Analyzed: 12/31/2014 11:30

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Arsenic	482		10.0	ug/L	500		96	80-120			

**Matrix Spike (4L30003-MS1)**

Prepared: 12/30/2014 09:00 Analyzed: 12/31/2014 11:32

Source: B405675-01

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Arsenic	485		10.0	ug/L	500	8.40	95	75-125			

**Matrix Spike Dup (4L30003-MSD1)**

Prepared: 12/30/2014 09:00 Analyzed: 12/31/2014 11:34

Source: B405675-01

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Arsenic	490		10.0	ug/L	500	8.40	96	75-125	1	20	

## FLAGS/NOTES AND DEFINITIONS

<b>PQL</b>	PQL: Practical Quantitation Limit.
<b>B</b>	Results are based upon membrane filter colony counts that are outside the method indicated ideal range.
<b>I</b>	The reported value is between the laboratory method detection limit (MDL) and the practical quantitation limit (PQL).
<b>J</b>	Estimated value.
<b>K</b>	Off-scale low; Actual value is known to be less than the value given.
<b>L</b>	Off-scale high; Actual value is known to be greater than value given.
<b>M</b>	Presence of analyte is verified but not quantified; the actual value is less than the MRL but greater than the MDL.
<b>N</b>	Presumptive evidence of presence of material.
<b>O</b>	Sampled, but analysis lost or not performed.
<b>Q</b>	Sample exceeded the accepted holding time.
<b>T</b>	Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only and shall not be used in statistical analysis.
<b>U</b>	Indicates that the compound was analyzed for but not detected.
<b>V</b>	Indicates that the analyte was detected in both the sample and the associated method blank.
<b>Y</b>	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.
<b>Z</b>	Too many colonies were present (TNTC); the numeric value represents the filtration volume.
<b>?</b>	Data are rejected and should not be used. Some or all of the quality control data for the analyte were outside criteria, and the presence or absence of the analyte cannot be determined from the data.
<b>*</b>	Not reported due to interference.
<b>J-02</b>	Result is estimated due to bias in the associated laboratory control sample (LCS).
<b>J-04</b>	Result estimated, calibration verification standard failed with high bias.
<b>J-05</b>	Result estimated, calibration verification standard failed with low bias.
<b>QM-07</b>	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
<b>QM-11</b>	Precision between duplicate matrix spikes of the same sample was outside acceptance limits.
<b>QS-03</b>	Surrogate recovery outside acceptance limits
<b>QV-01</b>	The associated continuing calibration verification standard exhibited high bias; since the result is ND, the impact on data quality is minimal.



**ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD**

10775 Central Port Dr.  
Orlando, FL 32824  
(407) 826-5314 Fax (407) 850-6945

4810 Executive Park Court, Suite 111  
Jacksonville, FL 32216-6069  
(904) 296-3007 Fax (904) 296-6210

102-A Woodwinds Industrial Ct.  
Cary, NC 27511  
(919) 467-3090 Fax (919) 467-3515

Client Name <b>Geotechnical and Environmental (GE002)</b>		Project Number <b>[none]</b>		Requested Analyses										Requested Turnaround Times	
Address <b>919 Lake Baldwin Lane</b>		Project Name/Desc <b>I-4 Level II</b>		%Solids,8081B,8082A,8270D,8270D PAH SIM,Ag,As,Ba,Cd,Cr,F,FLPRO,Hg,Pb,Se  <b>8260B (Full List VOCs)</b>  %Solids,8081B (Pests),8151A (Herbs)  <b>8260B (Full List VOCs),8260B TICs</b>  <b>8081B,8082A,8270D PAH SIM</b>  <b>8270D,8270D TICs</b>  <b>FLPRO</b>  <b>Ag,As,Ba,Cd,Cr,Hg,Pb,Se</b>  <b>8081B (Pesticides)</b>  <b>8151A (Herbicides)</b>	Note: Rush requests subject to acceptance by the facility										
City/ST/Zip <b>Orlando, FL 32814</b>		PO # / Billing Info			Standard										
Tel <b>(407) 898-1818</b>	Fax <b>(407) 898-1837</b>	Reporting Contact <b>Richard McCormick</b>			Expedited										
Sampler(s) Name, Affiliation (Print)		Billing Contact <b>Accounts Payable</b>			Due ___/___/___										
Sampler(s) Signature		Site Location / Time Zone			Lab Workorder <b>A407493</b> <b>A407258</b>										

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	Preservation (See Codes) (Combine as necessary)										Sample Comments		
							I	OI	I	HI	I	I	SI	N	I	I			
1	CS-2	12/16/14	1004	Comp	SO	1				✓									
2	CS-3	12/16/14	1610	Comp	SO	1				✓									
3	CS-4	12/16/14	1015	Comp	SO	1				✓									
4	CS-5	12/16/14	1025	Comp	SO	1				✓									
5	CS-6	12/16/14	1030	Comp	SO	1				✓									
6	CS-7	12/16/14	1038	Comp	SO	1				✓									
7	CS-8	12/16/14	1045	Comp	SO	1				✓									
8	TWW-3	12/16/14	1152	Grab	GW	1				✓									
9	TWW-3	12/16/14	1152	Grab	GW	1				✓									

Sample Kit Prepared By <i>JGC</i>	Date/Time <i>12/8/2014 12:30</i>	Relinquished By <i>R. Cole</i>	Date/Time <i>12/8/2014 12:30</i>	Received By <i>Jerry W. Governale</i>	Date/Time <i>12/10/16</i>
Comments/Special Reporting Requirements	Relinquished By <i>Jerry W. Governale</i>	Date/Time <i>12/17/14</i>	Received By <i>[Signature]</i>	Date/Time <i>12/17/14 1708</i>	
	Relinquished By <i>[Signature]</i>	Date/Time <i>12/17/14</i>	Received By <i>[Signature]</i>	Date/Time <i>12/17/14 1708</i>	
Cooler # & Temps on Receipt <i>Med-02 10c</i>		Condition Upon Receipt <i>Brandy Hee [Signature]</i>		<input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable	

Matrix : GW-Groundwater SO-Soil DW-Drinking Water SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments) Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)  
 Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist



# ENCO Laboratories

*Accurate. Timely. Responsive. Innovative.*

10775 Central Port Drive

Orlando FL, 32824

Phone: 407.826.5314 FAX: 407.850.6945

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Friday, January 2, 2015

Geotechnical and Environmental (GE002)

Attn: Richard McCormick

919 Lake Baldwin Lane

Orlando, FL 32814

**RE: Laboratory Results for**

**Project Number: [none], Project Name/Desc: I-4 Level II**

**ENCO Workorder(s): A407528**

Dear Richard McCormick,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Thursday, December 18, 2014.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Orlando. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Ronald Wambles For David Camacho

Project Manager

Enclosure(s)



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**SAMPLE SUMMARY/LABORATORY CHRONICLE**

<b>Client ID:</b>	<b>Lab ID:</b>	<b>Sampled:</b>	<b>Received:</b>
<b>TMW-4</b>	<b>A407528-01</b>	<b>12/18/14 15:42</b>	<b>12/18/14 17:07</b>
<u>Parameter</u>	<u>Hold Date/Time(s)</u>	<u>Prep Date/Time(s)</u>	<u>Analysis Date/Time(s)</u>
EPA 6010C	06/16/15	12/30/14 09:00	12/31/14 11:57
EPA 8081B	12/25/14 01/31/15	12/22/14 13:48	12/29/14 11:56
EPA 8151A	12/25/14 01/31/15	12/22/14 21:00	12/29/14 18:03
<b>CS-9</b>	<b>A407528-02</b>	<b>12/18/14 15:50</b>	<b>12/18/14 17:07</b>
<u>Parameter</u>	<u>Hold Date/Time(s)</u>	<u>Prep Date/Time(s)</u>	<u>Analysis Date/Time(s)</u>
EPA 6010C	06/16/15	12/22/14 09:13	12/26/14 10:33
EPA 8081B	01/01/15 02/01/15	12/23/14 08:25	12/29/14 13:04
EPA 8151A	01/01/15 02/02/15	12/24/14 11:01	12/29/14 22:24
<b>CS-10</b>	<b>A407528-03</b>	<b>12/18/14 16:14</b>	<b>12/18/14 17:07</b>
<u>Parameter</u>	<u>Hold Date/Time(s)</u>	<u>Prep Date/Time(s)</u>	<u>Analysis Date/Time(s)</u>
EPA 6010C	06/16/15	12/22/14 09:13	12/26/14 10:36
EPA 8081B	01/01/15 02/01/15	12/23/14 08:25	12/29/14 13:15
EPA 8151A	01/01/15 02/02/15	12/24/14 11:01	12/29/14 22:51
<b>CS-11</b>	<b>A407528-04</b>	<b>12/18/14 16:20</b>	<b>12/18/14 17:07</b>
<u>Parameter</u>	<u>Hold Date/Time(s)</u>	<u>Prep Date/Time(s)</u>	<u>Analysis Date/Time(s)</u>
EPA 6010C	06/16/15	12/22/14 09:13	12/26/14 10:43
EPA 8081B	01/01/15 02/01/15	12/23/14 08:25	12/29/14 13:27
EPA 8151A	01/01/15 02/02/15	12/24/14 11:01	12/29/14 23:17
<b>CS-12</b>	<b>A407528-05</b>	<b>12/18/14 16:23</b>	<b>12/18/14 17:07</b>
<u>Parameter</u>	<u>Hold Date/Time(s)</u>	<u>Prep Date/Time(s)</u>	<u>Analysis Date/Time(s)</u>
EPA 6010C	06/16/15	12/22/14 09:13	12/26/14 10:46
EPA 8081B	01/01/15 02/01/15	12/23/14 08:25	12/29/14 13:38
EPA 8151A	01/01/15 02/02/15	12/24/14 11:01	12/29/14 23:43
<b>SB-34 7.0'</b>	<b>A407528-06</b>	<b>12/18/14 15:56</b>	<b>12/18/14 17:07</b>
<u>Parameter</u>	<u>Hold Date/Time(s)</u>	<u>Prep Date/Time(s)</u>	<u>Analysis Date/Time(s)</u>
EPA 6010C	06/16/15	12/22/14 09:13	12/26/14 10:49
EPA 7471B	01/15/15	12/26/14 14:15	12/29/14 07:48
EPA 8081B	01/01/15 02/01/15	12/23/14 08:25	12/29/14 13:50
EPA 8082A	12/18/15 12/18/15	12/23/14 11:31	12/26/14 15:26
EPA 8270D	01/01/15 01/31/15	12/22/14 08:35	12/29/14 18:35
EPA 8270D	01/01/15 01/31/15	12/22/14 14:30	12/24/14 20:49
FL-PRO	01/01/15 02/04/15	12/26/14 05:30	12/29/14 13:50
<b>SB-34</b>	<b>A407528-07</b>	<b>12/18/14 16:05</b>	<b>12/18/14 17:07</b>
<u>Parameter</u>	<u>Hold Date/Time(s)</u>	<u>Prep Date/Time(s)</u>	<u>Analysis Date/Time(s)</u>
EPA 8260B	01/01/15	12/24/14 00:00	12/24/14 13:34



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**SAMPLE DETECTION SUMMARY**

**Client ID: CS-12** **Lab ID: A407528-05**

<u>Analyte</u>	<u>Results</u>	<u>Flag</u>	<u>MDL</u>	<u>PQL</u>	<u>Units</u>	<u>Method</u>	<u>Notes</u>
Dieldrin	0.0012	I	0.0011	0.0043	mg/kg dry	EPA 8081B	

**Client ID: SB-34 7.0'** **Lab ID: A407528-06**

<u>Analyte</u>	<u>Results</u>	<u>Flag</u>	<u>MDL</u>	<u>PQL</u>	<u>Units</u>	<u>Method</u>	<u>Notes</u>
Barium - Total	5.87		0.0484	0.756	mg/kg dry	EPA 6010C	
Chromium - Total	3.55		0.0469	0.756	mg/kg dry	EPA 6010C	
Lead - Total	6.55		0.166	0.756	mg/kg dry	EPA 6010C	
Mercury - Total	0.0214		0.00370	0.00949	mg/kg dry	EPA 7471B	

**Client ID: SB-34** **Lab ID: A407528-07**

<u>Analyte</u>	<u>Results</u>	<u>Flag</u>	<u>MDL</u>	<u>PQL</u>	<u>Units</u>	<u>Method</u>	<u>Notes</u>
1-Pentene	0.0093	N			mg/kg dry	EPA 8260B	
Acetone	0.012	V	0.0022	0.0064	mg/kg dry	EPA 8260B	J-01, O-01

**ANALYTICAL RESULTS**

**Description:** TMW-4  
**Matrix:** Ground Water  
**Project:** I-4 Level II

**Lab Sample ID:** A407528-01  
**Sampled:** 12/18/14 15:42  
**Sampled By:** Jerry Governale

**Received:** 12/18/14 17:07  
**Work Order:** A407528

**Organochlorine Pesticides by GC**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.018	U	ug/L	1	0.018	0.050	4L22010	EPA 8081B	12/29/14 11:56	JJB	
4,4'-DDE [72-55-9]^	0.036	U	ug/L	1	0.036	0.050	4L22010	EPA 8081B	12/29/14 11:56	JJB	
4,4'-DDT [50-29-3]^	0.025	U	ug/L	1	0.025	0.050	4L22010	EPA 8081B	12/29/14 11:56	JJB	
Aldrin [309-00-2]^	0.032	U	ug/L	1	0.032	0.050	4L22010	EPA 8081B	12/29/14 11:56	JJB	
alpha-BHC [319-84-6]^	0.026	U	ug/L	1	0.026	0.050	4L22010	EPA 8081B	12/29/14 11:56	JJB	
beta-BHC [319-85-7]^	0.022	U	ug/L	1	0.022	0.050	4L22010	EPA 8081B	12/29/14 11:56	JJB	
Chlordane (tech) [12789-03-6]^	0.32	U	ug/L	1	0.32	0.50	4L22010	EPA 8081B	12/29/14 11:56	JJB	
Chlordane-alpha [5103-71-9]^	0.022	U	ug/L	1	0.022	0.050	4L22010	EPA 8081B	12/29/14 11:56	JJB	
Chlordane-gamma [5566-34-7]^	0.018	U	ug/L	1	0.018	0.050	4L22010	EPA 8081B	12/29/14 11:56	JJB	
delta-BHC [319-86-8]^	0.019	U	ug/L	1	0.019	0.050	4L22010	EPA 8081B	12/29/14 11:56	JJB	
Dieldrin [60-57-1]^	0.017	U	ug/L	1	0.017	0.050	4L22010	EPA 8081B	12/29/14 11:56	JJB	
Endosulfan I [959-98-8]^	0.016	U	ug/L	1	0.016	0.050	4L22010	EPA 8081B	12/29/14 11:56	JJB	
Endosulfan II [33213-65-9]^	0.017	U	ug/L	1	0.017	0.050	4L22010	EPA 8081B	12/29/14 11:56	JJB	
Endosulfan sulfate [1031-07-8]^	0.016	U	ug/L	1	0.016	0.050	4L22010	EPA 8081B	12/29/14 11:56	JJB	
Endrin [72-20-8]^	0.014	U	ug/L	1	0.014	0.050	4L22010	EPA 8081B	12/29/14 11:56	JJB	
Endrin aldehyde [7421-93-4]^	0.020	U	ug/L	1	0.020	0.050	4L22010	EPA 8081B	12/29/14 11:56	JJB	
Endrin ketone [53494-70-5]^	0.017	U	ug/L	1	0.017	0.050	4L22010	EPA 8081B	12/29/14 11:56	JJB	
gamma-BHC [58-89-9]^	0.020	U	ug/L	1	0.020	0.050	4L22010	EPA 8081B	12/29/14 11:56	JJB	
Heptachlor [76-44-8]^	0.018	U	ug/L	1	0.018	0.050	4L22010	EPA 8081B	12/29/14 11:56	JJB	
Heptachlor epoxide [1024-57-3]^	0.018	U	ug/L	1	0.018	0.050	4L22010	EPA 8081B	12/29/14 11:56	JJB	
Isodrin [465-73-6]^	0.030	U	ug/L	1	0.030	0.050	4L22010	EPA 8081B	12/29/14 11:56	JJB	
Methoxychlor [72-43-5]^	0.018	U	ug/L	1	0.018	0.050	4L22010	EPA 8081B	12/29/14 11:56	JJB	
Mirex [2385-85-5]^	0.034	U	ug/L	1	0.034	0.050	4L22010	EPA 8081B	12/29/14 11:56	JJB	
Toxaphene [8001-35-2]^	0.48	U	ug/L	1	0.48	0.50	4L22010	EPA 8081B	12/29/14 11:56	JJB	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
2,4,5,6-TCMX	0.65	1	1.00	65 %	38-142	4L22010	EPA 8081B	12/29/14 11:56	JJB		
Decachlorobiphenyl	0.71	1	1.00	71 %	34-159	4L22010	EPA 8081B	12/29/14 11:56	JJB		

**Chlorinated Herbicides by GC**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2,4,5-T [93-76-5]^	0.28	U	ug/L	1	0.28	0.50	4L22067	EPA 8151A	12/29/14 18:03	RC	
2,4,5-TP (Silvex) [93-72-1]^	0.44	U	ug/L	1	0.44	0.50	4L22067	EPA 8151A	12/29/14 18:03	RC	
2,4-D [94-75-7]^	0.27	U	ug/L	1	0.27	0.50	4L22067	EPA 8151A	12/29/14 18:03	RC	
2,4-DB [94-82-6]^	0.35	U	ug/L	1	0.35	0.50	4L22067	EPA 8151A	12/29/14 18:03	RC	
3,5-DCBA [51-365-5]^	0.36	U	ug/L	1	0.36	0.50	4L22067	EPA 8151A	12/29/14 18:03	RC	
4-Nitrophenol [100-02-7]^	0.32	U	ug/L	1	0.32	0.50	4L22067	EPA 8151A	12/29/14 18:03	RC	
Acifluorfen [50594-66-6]^	0.45	U	ug/L	1	0.45	0.50	4L22067	EPA 8151A	12/29/14 18:03	RC	
Bentazon [25057-89-0]^	0.22	U	ug/L	1	0.22	0.50	4L22067	EPA 8151A	12/29/14 18:03	RC	J-02, J-05
Chloramben [133-90-4]^	0.43	U	ug/L	1	0.43	0.50	4L22067	EPA 8151A	12/29/14 18:03	RC	
Dacthal [1861-32-1]^	0.23	U	ug/L	1	0.23	0.50	4L22067	EPA 8151A	12/29/14 18:03	RC	
Dalapon [75-99-0]^	0.49	U	ug/L	1	0.49	0.50	4L22067	EPA 8151A	12/29/14 18:03	RC	
Dicamba [1918-00-9]^	0.19	U	ug/L	1	0.19	0.50	4L22067	EPA 8151A	12/29/14 18:03	RC	
Dichlorprop [120-36-5]^	0.28	U	ug/L	1	0.28	0.50	4L22067	EPA 8151A	12/29/14 18:03	RC	
Dinoseb [88-85-7]^	0.32	U	ug/L	1	0.32	0.50	4L22067	EPA 8151A	12/29/14 18:03	RC	
MCPA [94-74-6]^	34	U	ug/L	1	34	50	4L22067	EPA 8151A	12/29/14 18:03	RC	
MCPP [93-65-2]^	46	U	ug/L	1	46	50	4L22067	EPA 8151A	12/29/14 18:03	RC	



**ANALYTICAL RESULTS**

**Description:** TMW-4

**Lab Sample ID:** A407528-01

**Received:** 12/18/14 17:07

**Matrix:** Ground Water

**Sampled:** 12/18/14 15:42

**Work Order:** A407528

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**Chlorinated Herbicides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Pentachlorophenol [87-86-5]^	0.19	U	ug/L	1	0.19	0.50	4L22067	EPA 8151A	12/29/14 18:03	RC	
Picloram [1918-02-1]^	0.23	U	ug/L	1	0.23	0.50	4L22067	EPA 8151A	12/29/14 18:03	RC	

<u>Surrogates</u>	<u>Results</u>	<u>DF</u>	<u>Spike Lvl</u>	<u>% Rec</u>	<u>% Rec Limits</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
2,4-DCAA	2.0	1	2.00	98 %	68-139	4L22067	EPA 8151A	12/29/14 18:03	RC	

**Metals (total recoverable) by EPA 6000/7000 Series Methods**

*^ - ENCO Jacksonville certified analyte [NELAC E82277]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Arsenic [7440-38-2]^	7.12	U	ug/L	1	7.12	10.0	4L30003	EPA 6010C	12/31/14 11:57	ACV	

**ANALYTICAL RESULTS**

**Description:** CS-9

**Lab Sample ID:** A407528-02

**Received:** 12/18/14 17:07

**Matrix:** Soil

**Sampled:** 12/18/14 15:50

**Work Order:** A407528

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 80.68

**Organochlorine Pesticides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.0012	U	mg/kg dry	2	0.0012	0.0042	4L23006	EPA 8081B	12/29/14 13:04	JJB	
4,4'-DDE [72-55-9]^	0.0013	U	mg/kg dry	2	0.0013	0.0042	4L23006	EPA 8081B	12/29/14 13:04	JJB	
4,4'-DDT [50-29-3]^	0.0016	U	mg/kg dry	2	0.0016	0.0042	4L23006	EPA 8081B	12/29/14 13:04	JJB	
Aldrin [309-00-2]^	0.0013	U	mg/kg dry	2	0.0013	0.0042	4L23006	EPA 8081B	12/29/14 13:04	JJB	
alpha-BHC [319-84-6]^	0.0014	U	mg/kg dry	2	0.0014	0.0042	4L23006	EPA 8081B	12/29/14 13:04	JJB	
beta-BHC [319-85-7]^	0.0025	U	mg/kg dry	2	0.0025	0.0042	4L23006	EPA 8081B	12/29/14 13:04	JJB	
Chlordane (tech) [12789-03-6]^	0.021	U	mg/kg dry	2	0.021	0.082	4L23006	EPA 8081B	12/29/14 13:04	JJB	
Chlordane-alpha [5103-71-9]^	0.0011	U	mg/kg dry	2	0.0011	0.0042	4L23006	EPA 8081B	12/29/14 13:04	JJB	
Chlordane-gamma [5566-34-7]^	0.0011	U	mg/kg dry	2	0.0011	0.0042	4L23006	EPA 8081B	12/29/14 13:04	JJB	
delta-BHC [319-86-8]^	0.0012	U	mg/kg dry	2	0.0012	0.0042	4L23006	EPA 8081B	12/29/14 13:04	JJB	
Dieldrin [60-57-1]^	0.0011	U	mg/kg dry	2	0.0011	0.0042	4L23006	EPA 8081B	12/29/14 13:04	JJB	
Endosulfan I [959-98-8]^	0.00097	U	mg/kg dry	2	0.00097	0.0042	4L23006	EPA 8081B	12/29/14 13:04	JJB	
Endosulfan II [33213-65-9]^	0.0012	U	mg/kg dry	2	0.0012	0.0042	4L23006	EPA 8081B	12/29/14 13:04	JJB	
Endosulfan sulfate [1031-07-8]^	0.0012	U	mg/kg dry	2	0.0012	0.0042	4L23006	EPA 8081B	12/29/14 13:04	JJB	
Endrin [72-20-8]^	0.0018	U	mg/kg dry	2	0.0018	0.0042	4L23006	EPA 8081B	12/29/14 13:04	JJB	
Endrin aldehyde [7421-93-4]^	0.0021	U	mg/kg dry	2	0.0021	0.0042	4L23006	EPA 8081B	12/29/14 13:04	JJB	
Endrin ketone [53494-70-5]^	0.0012	U	mg/kg dry	2	0.0012	0.0042	4L23006	EPA 8081B	12/29/14 13:04	JJB	
gamma-BHC [58-89-9]^	0.0015	U	mg/kg dry	2	0.0015	0.0042	4L23006	EPA 8081B	12/29/14 13:04	JJB	
Heptachlor [76-44-8]^	0.0015	U	mg/kg dry	2	0.0015	0.0042	4L23006	EPA 8081B	12/29/14 13:04	JJB	
Heptachlor epoxide [1024-57-3]^	0.0012	U	mg/kg dry	2	0.0012	0.0042	4L23006	EPA 8081B	12/29/14 13:04	JJB	
Isodrin [465-73-6]^	0.0015	U	mg/kg dry	2	0.0015	0.0042	4L23006	EPA 8081B	12/29/14 13:04	JJB	
Methoxychlor [72-43-5]^	0.0021	U	mg/kg dry	2	0.0021	0.0042	4L23006	EPA 8081B	12/29/14 13:04	JJB	
Mirex [2385-85-5]^	0.0027	U	mg/kg dry	2	0.0027	0.0042	4L23006	EPA 8081B	12/29/14 13:04	JJB	
Toxaphene [8001-35-2]^	0.042	U	mg/kg dry	2	0.042	0.082	4L23006	EPA 8081B	12/29/14 13:04	JJB	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
2,4,5,6-TCMX	0.022	2	0.0413	53 %	20-137	4L23006	EPA 8081B	12/29/14 13:04	JJB		
Decachlorobiphenyl	0.041	2	0.0413	98 %	13-183	4L23006	EPA 8081B	12/29/14 13:04	JJB		

**Chlorinated Herbicides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2,4,5-T [93-76-5]^	0.0031	U	mg/kg dry	1	0.0031	0.012	4L24014	EPA 8151A	12/29/14 22:24	RC	
2,4,5-TP (Silvex) [93-72-1]^	0.0058	U	mg/kg dry	1	0.0058	0.012	4L24014	EPA 8151A	12/29/14 22:24	RC	
2,4-D [94-75-7]^	0.012	U	mg/kg dry	1	0.012	0.012	4L24014	EPA 8151A	12/29/14 22:24	RC	
2,4-DB [94-82-6]^	0.0061	U	mg/kg dry	1	0.0061	0.012	4L24014	EPA 8151A	12/29/14 22:24	RC	
3,5-DCBA [51-365-5]^	0.0027	U	mg/kg dry	1	0.0027	0.012	4L24014	EPA 8151A	12/29/14 22:24	RC	
4-Nitrophenol [100-02-7]^	0.0081	U	mg/kg dry	1	0.0081	0.012	4L24014	EPA 8151A	12/29/14 22:24	RC	QV-01
Acifluorfen [50594-66-6]^	0.0020	U	mg/kg dry	1	0.0020	0.012	4L24014	EPA 8151A	12/29/14 22:24	RC	
Bentazon [25057-89-0]^	0.0056	U	mg/kg dry	1	0.0056	0.012	4L24014	EPA 8151A	12/29/14 22:24	RC	J-02, J-05
Chloramben [133-90-4]^	0.0048	U	mg/kg dry	1	0.0048	0.012	4L24014	EPA 8151A	12/29/14 22:24	RC	J-05
Dacthal [1861-32-1]^	0.0030	U	mg/kg dry	1	0.0030	0.012	4L24014	EPA 8151A	12/29/14 22:24	RC	
Dalapon [75-99-0]^	0.0062	U	mg/kg dry	1	0.0062	0.012	4L24014	EPA 8151A	12/29/14 22:24	RC	
Dicamba [1918-00-9]^	0.0029	U	mg/kg dry	1	0.0029	0.012	4L24014	EPA 8151A	12/29/14 22:24	RC	
Dichlorprop [120-36-5]^	0.0035	U	mg/kg dry	1	0.0035	0.012	4L24014	EPA 8151A	12/29/14 22:24	RC	
Dinoseb [88-85-7]^	0.0052	U	mg/kg dry	1	0.0052	0.012	4L24014	EPA 8151A	12/29/14 22:24	RC	
MCPA [94-74-6]^	0.64	U	mg/kg dry	1	0.64	1.2	4L24014	EPA 8151A	12/29/14 22:24	RC	
MCPP [93-65-2]^	0.66	U	mg/kg dry	1	0.66	1.2	4L24014	EPA 8151A	12/29/14 22:24	RC	



**ANALYTICAL RESULTS**

**Description:** CS-9

**Lab Sample ID:** A407528-02

**Received:** 12/18/14 17:07

**Matrix:** Soil

**Sampled:** 12/18/14 15:50

**Work Order:** A407528

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 80.68

**Chlorinated Herbicides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Pentachlorophenol [87-86-5]^	0.0031	U	mg/kg dry	1	0.0031	0.012	4L24014	EPA 8151A	12/29/14 22:24	RC	
Picloram [1918-02-1]^	0.0022	U	mg/kg dry	1	0.0022	0.012	4L24014	EPA 8151A	12/29/14 22:24	RC	

<u>Surrogates</u>	<u>Results</u>	<u>DF</u>	<u>Spike Lvl</u>	<u>% Rec</u>	<u>% Rec Limits</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
2,4-DCAA	0.030	1	0.0495	61 %	39-174	4L24014	EPA 8151A	12/29/14 22:24	RC	

**Metals by EPA 6000/7000 Series Methods**

*^ - ENCO Jacksonville certified analyte [NELAC E82277]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Arsenic [7440-38-2]^	0.496	U	mg/kg dry	1	0.496	0.696	4L22003	EPA 6010C	12/26/14 10:33	ACV	

**ANALYTICAL RESULTS**

**Description:** CS-10

**Lab Sample ID:** A407528-03

**Received:** 12/18/14 17:07

**Matrix:** Soil

**Sampled:** 12/18/14 16:14

**Work Order:** A407528

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 77.94

**Organochlorine Pesticides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.0012	U	mg/kg dry	2	0.0012	0.0044	4L23006	EPA 8081B	12/29/14 13:15	JJB	
4,4'-DDE [72-55-9]^	0.0013	U	mg/kg dry	2	0.0013	0.0044	4L23006	EPA 8081B	12/29/14 13:15	JJB	
4,4'-DDT [50-29-3]^	0.0017	U	mg/kg dry	2	0.0017	0.0044	4L23006	EPA 8081B	12/29/14 13:15	JJB	
Aldrin [309-00-2]^	0.0013	U	mg/kg dry	2	0.0013	0.0044	4L23006	EPA 8081B	12/29/14 13:15	JJB	
alpha-BHC [319-84-6]^	0.0014	U	mg/kg dry	2	0.0014	0.0044	4L23006	EPA 8081B	12/29/14 13:15	JJB	
beta-BHC [319-85-7]^	0.0026	U	mg/kg dry	2	0.0026	0.0044	4L23006	EPA 8081B	12/29/14 13:15	JJB	
Chlordane (tech) [12789-03-6]^	0.022	U	mg/kg dry	2	0.022	0.085	4L23006	EPA 8081B	12/29/14 13:15	JJB	
Chlordane-alpha [5103-71-9]^	0.0012	U	mg/kg dry	2	0.0012	0.0044	4L23006	EPA 8081B	12/29/14 13:15	JJB	
Chlordane-gamma [5566-34-7]^	0.0012	U	mg/kg dry	2	0.0012	0.0044	4L23006	EPA 8081B	12/29/14 13:15	JJB	
delta-BHC [319-86-8]^	0.0013	U	mg/kg dry	2	0.0013	0.0044	4L23006	EPA 8081B	12/29/14 13:15	JJB	
Dieldrin [60-57-1]^	0.0012	U	mg/kg dry	2	0.0012	0.0044	4L23006	EPA 8081B	12/29/14 13:15	JJB	
Endosulfan I [959-98-8]^	0.0010	U	mg/kg dry	2	0.0010	0.0044	4L23006	EPA 8081B	12/29/14 13:15	JJB	
Endosulfan II [33213-65-9]^	0.0012	U	mg/kg dry	2	0.0012	0.0044	4L23006	EPA 8081B	12/29/14 13:15	JJB	
Endosulfan sulfate [1031-07-8]^	0.0013	U	mg/kg dry	2	0.0013	0.0044	4L23006	EPA 8081B	12/29/14 13:15	JJB	
Endrin [72-20-8]^	0.0019	U	mg/kg dry	2	0.0019	0.0044	4L23006	EPA 8081B	12/29/14 13:15	JJB	
Endrin aldehyde [7421-93-4]^	0.0021	U	mg/kg dry	2	0.0021	0.0044	4L23006	EPA 8081B	12/29/14 13:15	JJB	
Endrin ketone [53494-70-5]^	0.0012	U	mg/kg dry	2	0.0012	0.0044	4L23006	EPA 8081B	12/29/14 13:15	JJB	
gamma-BHC [58-89-9]^	0.0015	U	mg/kg dry	2	0.0015	0.0044	4L23006	EPA 8081B	12/29/14 13:15	JJB	
Heptachlor [76-44-8]^	0.0016	U	mg/kg dry	2	0.0016	0.0044	4L23006	EPA 8081B	12/29/14 13:15	JJB	
Heptachlor epoxide [1024-57-3]^	0.0012	U	mg/kg dry	2	0.0012	0.0044	4L23006	EPA 8081B	12/29/14 13:15	JJB	
Isodrin [465-73-6]^	0.0016	U	mg/kg dry	2	0.0016	0.0044	4L23006	EPA 8081B	12/29/14 13:15	JJB	
Methoxychlor [72-43-5]^	0.0022	U	mg/kg dry	2	0.0022	0.0044	4L23006	EPA 8081B	12/29/14 13:15	JJB	
Mirex [2385-85-5]^	0.0028	U	mg/kg dry	2	0.0028	0.0044	4L23006	EPA 8081B	12/29/14 13:15	JJB	
Toxaphene [8001-35-2]^	0.044	U	mg/kg dry	2	0.044	0.085	4L23006	EPA 8081B	12/29/14 13:15	JJB	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
2,4,5,6-TCMX	0.015	2	0.0428	35 %	20-137	4L23006	EPA 8081B	12/29/14 13:15	JJB		
Decachlorobiphenyl	0.030	2	0.0428	70 %	13-183	4L23006	EPA 8081B	12/29/14 13:15	JJB		

**Chlorinated Herbicides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2,4,5-T [93-76-5]^	0.0032	U	mg/kg dry	1	0.0032	0.013	4L24014	EPA 8151A	12/29/14 22:51	RC	
2,4,5-TP (Silvex) [93-72-1]^	0.0060	U	mg/kg dry	1	0.0060	0.013	4L24014	EPA 8151A	12/29/14 22:51	RC	
2,4-D [94-75-7]^	0.013	U	mg/kg dry	1	0.013	0.013	4L24014	EPA 8151A	12/29/14 22:51	RC	
2,4-DB [94-82-6]^	0.0063	U	mg/kg dry	1	0.0063	0.013	4L24014	EPA 8151A	12/29/14 22:51	RC	
3,5-DCBA [51-365-5]^	0.0028	U	mg/kg dry	1	0.0028	0.013	4L24014	EPA 8151A	12/29/14 22:51	RC	
4-Nitrophenol [100-02-7]^	0.0083	U	mg/kg dry	1	0.0083	0.013	4L24014	EPA 8151A	12/29/14 22:51	RC	QV-01
Acifluorfen [50594-66-6]^	0.0021	U	mg/kg dry	1	0.0021	0.013	4L24014	EPA 8151A	12/29/14 22:51	RC	
Bentazon [25057-89-0]^	0.0058	U	mg/kg dry	1	0.0058	0.013	4L24014	EPA 8151A	12/29/14 22:51	RC	J-02, J-05
Chloramben [133-90-4]^	0.0050	U	mg/kg dry	1	0.0050	0.013	4L24014	EPA 8151A	12/29/14 22:51	RC	J-05
Dacthal [1861-32-1]^	0.0031	U	mg/kg dry	1	0.0031	0.013	4L24014	EPA 8151A	12/29/14 22:51	RC	
Dalapon [75-99-0]^	0.0064	U	mg/kg dry	1	0.0064	0.013	4L24014	EPA 8151A	12/29/14 22:51	RC	
Dicamba [1918-00-9]^	0.0030	U	mg/kg dry	1	0.0030	0.013	4L24014	EPA 8151A	12/29/14 22:51	RC	
Dichlorprop [120-36-5]^	0.0036	U	mg/kg dry	1	0.0036	0.013	4L24014	EPA 8151A	12/29/14 22:51	RC	
Dinoseb [88-85-7]^	0.0054	U	mg/kg dry	1	0.0054	0.013	4L24014	EPA 8151A	12/29/14 22:51	RC	
MCPA [94-74-6]^	0.67	U	mg/kg dry	1	0.67	1.3	4L24014	EPA 8151A	12/29/14 22:51	RC	
MCPP [93-65-2]^	0.68	U	mg/kg dry	1	0.68	1.3	4L24014	EPA 8151A	12/29/14 22:51	RC	

FINAL

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

**ANALYTICAL RESULTS**

**Description:** CS-10

**Lab Sample ID:** A407528-03

**Received:** 12/18/14 17:07

**Matrix:** Soil

**Sampled:** 12/18/14 16:14

**Work Order:** A407528

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 77.94

**Chlorinated Herbicides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Pentachlorophenol [87-86-5]^	0.0032	U	mg/kg dry	1	0.0032	0.013	4L24014	EPA 8151A	12/29/14 22:51	RC	
Picloram [1918-02-1]^	0.0023	U	mg/kg dry	1	0.0023	0.013	4L24014	EPA 8151A	12/29/14 22:51	RC	

**Surrogates**

<u>Surrogates</u>	<u>Results</u>	<u>DF</u>	<u>Spike Lvl</u>	<u>% Rec</u>	<u>% Rec Limits</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
2,4-DCAA	0.015	1	0.0512	30 %	39-174	4L24014	EPA 8151A	12/29/14 22:51	RC	QM-13

**Metals by EPA 6000/7000 Series Methods**

*^ - ENCO Jacksonville certified analyte [NELAC E82277]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Arsenic [7440-38-2]^	0.457	U	mg/kg dry	1	0.457	0.642	4L22003	EPA 6010C	12/26/14 10:36	ACV	

**ANALYTICAL RESULTS**

**Description:** CS-11

**Lab Sample ID:** A407528-04

**Received:** 12/18/14 17:07

**Matrix:** Soil

**Sampled:** 12/18/14 16:20

**Work Order:** A407528

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 81.06

**Organochlorine Pesticides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.0012	U	mg/kg dry	2	0.0012	0.0042	4L23006	EPA 8081B	12/29/14 13:27	JJB	
4,4'-DDE [72-55-9]^	0.0013	U	mg/kg dry	2	0.0013	0.0042	4L23006	EPA 8081B	12/29/14 13:27	JJB	
4,4'-DDT [50-29-3]^	0.0016	U	mg/kg dry	2	0.0016	0.0042	4L23006	EPA 8081B	12/29/14 13:27	JJB	
Aldrin [309-00-2]^	0.0013	U	mg/kg dry	2	0.0013	0.0042	4L23006	EPA 8081B	12/29/14 13:27	JJB	
alpha-BHC [319-84-6]^	0.0014	U	mg/kg dry	2	0.0014	0.0042	4L23006	EPA 8081B	12/29/14 13:27	JJB	
beta-BHC [319-85-7]^	0.0025	U	mg/kg dry	2	0.0025	0.0042	4L23006	EPA 8081B	12/29/14 13:27	JJB	
Chlordane (tech) [12789-03-6]^	0.021	U	mg/kg dry	2	0.021	0.081	4L23006	EPA 8081B	12/29/14 13:27	JJB	
Chlordane-alpha [5103-71-9]^	0.0011	U	mg/kg dry	2	0.0011	0.0042	4L23006	EPA 8081B	12/29/14 13:27	JJB	
Chlordane-gamma [5566-34-7]^	0.0011	U	mg/kg dry	2	0.0011	0.0042	4L23006	EPA 8081B	12/29/14 13:27	JJB	
delta-BHC [319-86-8]^	0.0012	U	mg/kg dry	2	0.0012	0.0042	4L23006	EPA 8081B	12/29/14 13:27	JJB	
Dieldrin [60-57-1]^	0.0011	U	mg/kg dry	2	0.0011	0.0042	4L23006	EPA 8081B	12/29/14 13:27	JJB	
Endosulfan I [959-98-8]^	0.00096	U	mg/kg dry	2	0.00096	0.0042	4L23006	EPA 8081B	12/29/14 13:27	JJB	
Endosulfan II [33213-65-9]^	0.0012	U	mg/kg dry	2	0.0012	0.0042	4L23006	EPA 8081B	12/29/14 13:27	JJB	
Endosulfan sulfate [1031-07-8]^	0.0012	U	mg/kg dry	2	0.0012	0.0042	4L23006	EPA 8081B	12/29/14 13:27	JJB	
Endrin [72-20-8]^	0.0018	U	mg/kg dry	2	0.0018	0.0042	4L23006	EPA 8081B	12/29/14 13:27	JJB	
Endrin aldehyde [7421-93-4]^	0.0020	U	mg/kg dry	2	0.0020	0.0042	4L23006	EPA 8081B	12/29/14 13:27	JJB	
Endrin ketone [53494-70-5]^	0.0012	U	mg/kg dry	2	0.0012	0.0042	4L23006	EPA 8081B	12/29/14 13:27	JJB	
gamma-BHC [58-89-9]^	0.0015	U	mg/kg dry	2	0.0015	0.0042	4L23006	EPA 8081B	12/29/14 13:27	JJB	
Heptachlor [76-44-8]^	0.0015	U	mg/kg dry	2	0.0015	0.0042	4L23006	EPA 8081B	12/29/14 13:27	JJB	
Heptachlor epoxide [1024-57-3]^	0.0012	U	mg/kg dry	2	0.0012	0.0042	4L23006	EPA 8081B	12/29/14 13:27	JJB	
Isodrin [465-73-6]^	0.0015	U	mg/kg dry	2	0.0015	0.0042	4L23006	EPA 8081B	12/29/14 13:27	JJB	
Methoxychlor [72-43-5]^	0.0021	U	mg/kg dry	2	0.0021	0.0042	4L23006	EPA 8081B	12/29/14 13:27	JJB	
Mirex [2385-85-5]^	0.0027	U	mg/kg dry	2	0.0027	0.0042	4L23006	EPA 8081B	12/29/14 13:27	JJB	
Toxaphene [8001-35-2]^	0.042	U	mg/kg dry	2	0.042	0.081	4L23006	EPA 8081B	12/29/14 13:27	JJB	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
2,4,5,6-TCMX	0.015	2	0.0407	37 %	20-137	4L23006	EPA 8081B	12/29/14 13:27	JJB		
Decachlorobiphenyl	0.029	2	0.0407	71 %	13-183	4L23006	EPA 8081B	12/29/14 13:27	JJB		

**Chlorinated Herbicides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2,4,5-T [93-76-5]^	0.0031	U	mg/kg dry	1	0.0031	0.012	4L24014	EPA 8151A	12/29/14 23:17	RC	
2,4,5-TP (Silvex) [93-72-1]^	0.0058	U	mg/kg dry	1	0.0058	0.012	4L24014	EPA 8151A	12/29/14 23:17	RC	
2,4-D [94-75-7]^	0.012	U	mg/kg dry	1	0.012	0.012	4L24014	EPA 8151A	12/29/14 23:17	RC	
2,4-DB [94-82-6]^	0.0060	U	mg/kg dry	1	0.0060	0.012	4L24014	EPA 8151A	12/29/14 23:17	RC	
3,5-DCBA [51-365-5]^	0.0027	U	mg/kg dry	1	0.0027	0.012	4L24014	EPA 8151A	12/29/14 23:17	RC	
4-Nitrophenol [100-02-7]^	0.0080	U	mg/kg dry	1	0.0080	0.012	4L24014	EPA 8151A	12/29/14 23:17	RC	QV-01
Acifluorfen [50594-66-6]^	0.0020	U	mg/kg dry	1	0.0020	0.012	4L24014	EPA 8151A	12/29/14 23:17	RC	
Bentazon [25057-89-0]^	0.0056	U	mg/kg dry	1	0.0056	0.012	4L24014	EPA 8151A	12/29/14 23:17	RC	J-02, J-05
Chloramben [133-90-4]^	0.0048	U	mg/kg dry	1	0.0048	0.012	4L24014	EPA 8151A	12/29/14 23:17	RC	J-05
Dacthal [1861-32-1]^	0.0030	U	mg/kg dry	1	0.0030	0.012	4L24014	EPA 8151A	12/29/14 23:17	RC	
Dalapon [75-99-0]^	0.0062	U	mg/kg dry	1	0.0062	0.012	4L24014	EPA 8151A	12/29/14 23:17	RC	
Dicamba [1918-00-9]^	0.0028	U	mg/kg dry	1	0.0028	0.012	4L24014	EPA 8151A	12/29/14 23:17	RC	
Dichlorprop [120-36-5]^	0.0035	U	mg/kg dry	1	0.0035	0.012	4L24014	EPA 8151A	12/29/14 23:17	RC	
Dinoseb [88-85-7]^	0.0052	U	mg/kg dry	1	0.0052	0.012	4L24014	EPA 8151A	12/29/14 23:17	RC	
MCPA [94-74-6]^	0.64	U	mg/kg dry	1	0.64	1.2	4L24014	EPA 8151A	12/29/14 23:17	RC	
MCPP [93-65-2]^	0.65	U	mg/kg dry	1	0.65	1.2	4L24014	EPA 8151A	12/29/14 23:17	RC	

FINAL

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

Page 10 of 40



**ANALYTICAL RESULTS**

**Description:** CS-11

**Lab Sample ID:** A407528-04

**Received:** 12/18/14 17:07

**Matrix:** Soil

**Sampled:** 12/18/14 16:20

**Work Order:** A407528

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 81.06

**Chlorinated Herbicides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Pentachlorophenol [87-86-5]^	0.0031	U	mg/kg dry	1	0.0031	0.012	4L24014	EPA 8151A	12/29/14 23:17	RC	
Picloram [1918-02-1]^	0.0022	U	mg/kg dry	1	0.0022	0.012	4L24014	EPA 8151A	12/29/14 23:17	RC	

<u>Surrogates</u>	<u>Results</u>	<u>DF</u>	<u>Spike Lvl</u>	<u>% Rec</u>	<u>% Rec Limits</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
2,4-DCAA	0.047	1	0.0494	94 %	39-174	4L24014	EPA 8151A	12/29/14 23:17	RC	

**Metals by EPA 6000/7000 Series Methods**

*^ - ENCO Jacksonville certified analyte [NELAC E82277]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Arsenic [7440-38-2]^	0.665	U	mg/kg dry	1	0.665	0.935	4L22003	EPA 6010C	12/26/14 10:43	ACV	

**ANALYTICAL RESULTS**

**Description:** CS-12

**Lab Sample ID:** A407528-05

**Received:** 12/18/14 17:07

**Matrix:** Soil

**Sampled:** 12/18/14 16:23

**Work Order:** A407528

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 79.29

**Organochlorine Pesticides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.0012	U	mg/kg dry	2	0.0012	0.0043	4L23006	EPA 8081B	12/29/14 13:38	JJB	
4,4'-DDE [72-55-9]^	0.0013	U	mg/kg dry	2	0.0013	0.0043	4L23006	EPA 8081B	12/29/14 13:38	JJB	
4,4'-DDT [50-29-3]^	0.0017	U	mg/kg dry	2	0.0017	0.0043	4L23006	EPA 8081B	12/29/14 13:38	JJB	
Aldrin [309-00-2]^	0.0013	U	mg/kg dry	2	0.0013	0.0043	4L23006	EPA 8081B	12/29/14 13:38	JJB	
alpha-BHC [319-84-6]^	0.0014	U	mg/kg dry	2	0.0014	0.0043	4L23006	EPA 8081B	12/29/14 13:38	JJB	
beta-BHC [319-85-7]^	0.0025	U	mg/kg dry	2	0.0025	0.0043	4L23006	EPA 8081B	12/29/14 13:38	JJB	
Chlordane (tech) [12789-03-6]^	0.021	U	mg/kg dry	2	0.021	0.083	4L23006	EPA 8081B	12/29/14 13:38	JJB	
Chlordane-alpha [5103-71-9]^	0.0011	U	mg/kg dry	2	0.0011	0.0043	4L23006	EPA 8081B	12/29/14 13:38	JJB	
Chlordane-gamma [5566-34-7]^	0.0011	U	mg/kg dry	2	0.0011	0.0043	4L23006	EPA 8081B	12/29/14 13:38	JJB	
delta-BHC [319-86-8]^	0.0013	U	mg/kg dry	2	0.0013	0.0043	4L23006	EPA 8081B	12/29/14 13:38	JJB	
<b>Dieldrin [60-57-1]^</b>	<b>0.0012</b>	<b>I</b>	mg/kg dry	2	0.0011	0.0043	4L23006	EPA 8081B	12/29/14 13:38	JJB	
Endosulfan I [959-98-8]^	0.00098	U	mg/kg dry	2	0.00098	0.0043	4L23006	EPA 8081B	12/29/14 13:38	JJB	
Endosulfan II [33213-65-9]^	0.0012	U	mg/kg dry	2	0.0012	0.0043	4L23006	EPA 8081B	12/29/14 13:38	JJB	
Endosulfan sulfate [1031-07-8]^	0.0012	U	mg/kg dry	2	0.0012	0.0043	4L23006	EPA 8081B	12/29/14 13:38	JJB	
Endrin [72-20-8]^	0.0019	U	mg/kg dry	2	0.0019	0.0043	4L23006	EPA 8081B	12/29/14 13:38	JJB	
Endrin aldehyde [7421-93-4]^	0.0021	U	mg/kg dry	2	0.0021	0.0043	4L23006	EPA 8081B	12/29/14 13:38	JJB	
Endrin ketone [53494-70-5]^	0.0012	U	mg/kg dry	2	0.0012	0.0043	4L23006	EPA 8081B	12/29/14 13:38	JJB	
gamma-BHC [58-89-9]^	0.0015	U	mg/kg dry	2	0.0015	0.0043	4L23006	EPA 8081B	12/29/14 13:38	JJB	
Heptachlor [76-44-8]^	0.0016	U	mg/kg dry	2	0.0016	0.0043	4L23006	EPA 8081B	12/29/14 13:38	JJB	
Heptachlor epoxide [1024-57-3]^	0.0012	U	mg/kg dry	2	0.0012	0.0043	4L23006	EPA 8081B	12/29/14 13:38	JJB	
Isodrin [465-73-6]^	0.0016	U	mg/kg dry	2	0.0016	0.0043	4L23006	EPA 8081B	12/29/14 13:38	JJB	
Methoxychlor [72-43-5]^	0.0022	U	mg/kg dry	2	0.0022	0.0043	4L23006	EPA 8081B	12/29/14 13:38	JJB	
Mirex [2385-85-5]^	0.0028	U	mg/kg dry	2	0.0028	0.0043	4L23006	EPA 8081B	12/29/14 13:38	JJB	
Toxaphene [8001-35-2]^	0.043	U	mg/kg dry	2	0.043	0.083	4L23006	EPA 8081B	12/29/14 13:38	JJB	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>	
2,4,5,6-TCMX	0.014	2	0.0420	34 %	20-137	4L23006	EPA 8081B	12/29/14 13:38	JJB		
Decachlorobiphenyl	0.029	2	0.0420	68 %	13-183	4L23006	EPA 8081B	12/29/14 13:38	JJB		

**Chlorinated Herbicides by GC**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2,4,5-T [93-76-5]^	0.0032	U	mg/kg dry	1	0.0032	0.013	4L24014	EPA 8151A	12/29/14 23:43	RC	
2,4,5-TP (Silvex) [93-72-1]^	0.0059	U	mg/kg dry	1	0.0059	0.013	4L24014	EPA 8151A	12/29/14 23:43	RC	
2,4-D [94-75-7]^	0.012	U	mg/kg dry	1	0.012	0.013	4L24014	EPA 8151A	12/29/14 23:43	RC	
2,4-DB [94-82-6]^	0.0062	U	mg/kg dry	1	0.0062	0.013	4L24014	EPA 8151A	12/29/14 23:43	RC	
3,5-DCBA [51-365-5]^	0.0028	U	mg/kg dry	1	0.0028	0.013	4L24014	EPA 8151A	12/29/14 23:43	RC	
4-Nitrophenol [100-02-7]^	0.0082	U	mg/kg dry	1	0.0082	0.013	4L24014	EPA 8151A	12/29/14 23:43	RC	QV-01
Acifluorfen [50594-66-6]^	0.0020	U	mg/kg dry	1	0.0020	0.013	4L24014	EPA 8151A	12/29/14 23:43	RC	
Bentazon [25057-89-0]^	0.0057	U	mg/kg dry	1	0.0057	0.013	4L24014	EPA 8151A	12/29/14 23:43	RC	J-02, J-05
Chloramben [133-90-4]^	0.0049	U	mg/kg dry	1	0.0049	0.013	4L24014	EPA 8151A	12/29/14 23:43	RC	J-05
Dacthal [1861-32-1]^	0.0030	U	mg/kg dry	1	0.0030	0.013	4L24014	EPA 8151A	12/29/14 23:43	RC	
Dalapon [75-99-0]^	0.0063	U	mg/kg dry	1	0.0063	0.013	4L24014	EPA 8151A	12/29/14 23:43	RC	
Dicamba [1918-00-9]^	0.0029	U	mg/kg dry	1	0.0029	0.013	4L24014	EPA 8151A	12/29/14 23:43	RC	
Dichlorprop [120-36-5]^	0.0035	U	mg/kg dry	1	0.0035	0.013	4L24014	EPA 8151A	12/29/14 23:43	RC	
Dinoseb [88-85-7]^	0.0053	U	mg/kg dry	1	0.0053	0.013	4L24014	EPA 8151A	12/29/14 23:43	RC	
MCPA [94-74-6]^	0.66	U	mg/kg dry	1	0.66	1.3	4L24014	EPA 8151A	12/29/14 23:43	RC	
MCPP [93-65-2]^	0.67	U	mg/kg dry	1	0.67	1.3	4L24014	EPA 8151A	12/29/14 23:43	RC	



### ANALYTICAL RESULTS

**Description:** CS-12

**Lab Sample ID:** A407528-05

**Received:** 12/18/14 17:07

**Matrix:** Soil

**Sampled:** 12/18/14 16:23

**Work Order:** A407528

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 79.29

### Chlorinated Herbicides by GC

*^ - ENCO Orlando certified analyte [NELAC E83182]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Pentachlorophenol [87-86-5]^	0.0032	U	mg/kg dry	1	0.0032	0.013	4L24014	EPA 8151A	12/29/14 23:43	RC	
Picloram [1918-02-1]^	0.0023	U	mg/kg dry	1	0.0023	0.013	4L24014	EPA 8151A	12/29/14 23:43	RC	

<u>Surrogates</u>	<u>Results</u>	<u>DF</u>	<u>Spike Lvl</u>	<u>% Rec</u>	<u>% Rec Limits</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
2,4-DCAA	0.049	1	0.0509	96 %	39-174	4L24014	EPA 8151A	12/29/14 23:43	RC	

### Metals by EPA 6000/7000 Series Methods

*^ - ENCO Jacksonville certified analyte [NELAC E82277]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Arsenic [7440-38-2]^	0.561	U	mg/kg dry	1	0.561	0.788	4L22003	EPA 6010C	12/26/14 10:46	ACV	

**ANALYTICAL RESULTS**

**Description:** SB-34 7.0'

**Lab Sample ID:** A407528-06

**Received:** 12/18/14 17:07

**Matrix:** Soil

**Sampled:** 12/18/14 15:56

**Work Order:** A407528

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 95.84

**Semivolatile Organic Compounds by GCMS**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,2,4-Trichlorobenzene [120-82-1]^	0.11	U	mg/kg dry	1	0.11	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
1,2-Dichlorobenzene [95-50-1]^	0.13	U	mg/kg dry	1	0.13	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
1,3-Dichlorobenzene [541-73-1]^	0.13	U	mg/kg dry	1	0.13	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
1,4-Dichlorobenzene [106-46-7]^	0.10	U	mg/kg dry	1	0.10	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
1-Methylnaphthalene [90-12-0]^	0.10	U	mg/kg dry	1	0.10	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
2,4,5-Trichlorophenol [95-95-4]^	0.070	U	mg/kg dry	1	0.070	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
2,4,6-Trichlorophenol [88-06-2]^	0.16	U	mg/kg dry	1	0.16	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
2,4-Dichlorophenol [120-83-2]^	0.26	U	mg/kg dry	1	0.26	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
2,4-Dimethylphenol [105-67-9]^	0.24	U	mg/kg dry	1	0.24	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
2,4-Dinitrophenol [51-28-5]^	0.093	U	mg/kg dry	1	0.093	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	J-05
2,4-Dinitrotoluene [121-14-2]^	0.17	U	mg/kg dry	1	0.17	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
2,6-Dinitrotoluene [606-20-2]^	0.19	U	mg/kg dry	1	0.19	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
2-Chloronaphthalene [91-58-7]^	0.10	U	mg/kg dry	1	0.10	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
2-Chlorophenol [95-57-8]^	0.24	U	mg/kg dry	1	0.24	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
2-Methyl-4,6-dinitrophenol [534-52-1]^	0.29	U	mg/kg dry	1	0.29	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
2-Methylnaphthalene [91-57-6]^	0.13	U	mg/kg dry	1	0.13	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
2-Methylphenol [95-48-7]^	0.11	U	mg/kg dry	1	0.11	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	QL-02
2-Nitroaniline [88-74-4]^	0.089	U	mg/kg dry	1	0.089	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	QL-02, QV-01
2-Nitrophenol [88-75-5]^	0.27	U	mg/kg dry	1	0.27	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
3 & 4-Methylphenol [108-39-4/106-44-5]^	0.26	U	mg/kg dry	1	0.26	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
3,3'-Dichlorobenzidine [91-94-1]^	0.22	U	mg/kg dry	1	0.22	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
3-Nitroaniline [99-09-2]^	0.083	U	mg/kg dry	1	0.083	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
4-Bromophenyl-phenylether [101-55-3]^	0.14	U	mg/kg dry	1	0.14	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
4-Chloro-3-methylphenol [59-50-7]^	0.29	U	mg/kg dry	1	0.29	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	QL-02
4-Chloroaniline [106-47-8]^	0.068	U	mg/kg dry	1	0.068	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
4-Chlorophenyl-phenylether [7005-72-3]^	0.14	U	mg/kg dry	1	0.14	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
4-Nitroaniline [100-01-6]^	0.27	U	mg/kg dry	1	0.27	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
4-Nitrophenol [100-02-7]^	0.14	U	mg/kg dry	1	0.14	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	QL-02, QV-01
Acenaphthene [83-32-9]^	0.14	U	mg/kg dry	1	0.14	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Acenaphthylene [208-96-8]^	0.13	U	mg/kg dry	1	0.13	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Anthracene [120-12-7]^	0.16	U	mg/kg dry	1	0.16	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Benzidine [92-87-5]^	0.090	U	mg/kg dry	1	0.090	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	J-02, QV-01
Benzo(a)anthracene [56-55-3]^	0.14	U	mg/kg dry	1	0.14	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Benzo(a)pyrene [50-32-8]^	0.081	U	mg/kg dry	1	0.081	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Benzo(b)fluoranthene [205-99-2]^	0.11	U	mg/kg dry	1	0.11	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Benzo(g,h,i)perylene [191-24-2]^	0.17	U	mg/kg dry	1	0.17	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	J-05
Benzo(k)fluoranthene [207-08-9]^	0.11	U	mg/kg dry	1	0.11	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Benzoic acid [65-85-0]^	0.50	U	mg/kg dry	1	0.50	1.8	4L22002	EPA 8270D	12/29/14 18:35	jfi	J-05
Benzyl alcohol [100-51-6]^	0.17	U	mg/kg dry	1	0.17	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Bis(2-chloroethoxy)methane [111-91-1]^	0.16	U	mg/kg dry	1	0.16	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	QL-02
Bis(2-chloroethyl)ether [111-44-4]^	0.15	U	mg/kg dry	1	0.15	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Bis(2-chloroisopropyl)ether [108-60-1]^	0.10	U	mg/kg dry	1	0.10	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	QL-02
Bis(2-ethylhexyl)phthalate [117-81-7]^	0.14	U	mg/kg dry	1	0.14	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Butylbenzylphthalate [85-68-7]^	0.15	U	mg/kg dry	1	0.15	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	QV-01
Chrysene [128-01-9]^	0.14	U	mg/kg dry	1	0.14	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Dibenzo(a,h)anthracene [53-70-3]^	0.15	U	mg/kg dry	1	0.15	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	

**ANALYTICAL RESULTS**

**Description:** SB-34 7.0'

**Lab Sample ID:** A407528-06

**Received:** 12/18/14 17:07

**Matrix:** Soil

**Sampled:** 12/18/14 15:56

**Work Order:** A407528

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 95.84

**Semivolatile Organic Compounds by GCMS**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Dibenzofuran [132-64-9]^	0.14	U	mg/kg dry	1	0.14	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Diethylphthalate [84-66-2]^	0.14	U	mg/kg dry	1	0.14	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Dimethylphthalate [131-11-3]^	0.14	U	mg/kg dry	1	0.14	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Di-n-butylphthalate [84-74-2]^	0.14	U	mg/kg dry	1	0.14	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Di-n-octylphthalate [117-84-0]^	0.14	U	mg/kg dry	1	0.14	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Fluoranthene [206-44-0]^	0.11	U	mg/kg dry	1	0.11	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Fluorene [86-73-7]^	0.15	U	mg/kg dry	1	0.15	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Hexachlorobenzene [118-74-1]^	0.13	U	mg/kg dry	1	0.13	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Hexachlorobutadiene [87-68-3]^	0.14	U	mg/kg dry	1	0.14	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Hexachlorocyclopentadiene [77-47-4]^	0.16	U	mg/kg dry	1	0.16	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	J-05
Hexachloroethane [67-72-1]^	0.10	U	mg/kg dry	1	0.10	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.15	U	mg/kg dry	1	0.15	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	J-05
Isophorone [78-59-1]^	0.18	U	mg/kg dry	1	0.18	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	QL-02, QV-01
Naphthalene [91-20-3]^	0.13	U	mg/kg dry	1	0.13	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Nitrobenzene [98-95-3]^	0.16	U	mg/kg dry	1	0.16	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	QL-02, QV-01
N-Nitrosodimethylamine [62-75-9]^	0.13	U	mg/kg dry	1	0.13	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	QL-02, QV-01
N-Nitroso-di-n-propylamine [621-64-7]^	0.16	U	mg/kg dry	1	0.16	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]^	0.24	U	mg/kg dry	1	0.24	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Pentachlorophenol [87-86-5]^	0.22	U	mg/kg dry	1	0.22	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	J-05
Phenanthrene [85-01-8]^	0.14	U	mg/kg dry	1	0.14	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Phenol [108-95-2]^	0.10	U	mg/kg dry	1	0.10	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Pyrene [129-00-0]^	0.11	U	mg/kg dry	1	0.11	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	QL-02
Pyridine [110-86-1]^	0.16	U	mg/kg dry	1	0.16	0.34	4L22002	EPA 8270D	12/29/14 18:35	jfi	QV-01

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
2,4,6-Tribromophenol	1.3	1	1.73	77 %	23-137	4L22002	EPA 8270D	12/29/14 18:35	jfi	
2-Fluorobiphenyl	1.5	1	1.73	84 %	29-119	4L22002	EPA 8270D	12/29/14 18:35	jfi	
2-Fluorophenol	1.7	1	1.73	98 %	20-124	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Nitrobenzene-d5	1.8	1	1.73	103 %	17-126	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Phenol-d5	1.9	1	1.73	112 %	15-131	4L22002	EPA 8270D	12/29/14 18:35	jfi	
Terphenyl-d14	1.6	1	1.73	92 %	60-120	4L22002	EPA 8270D	12/29/14 18:35	jfi	

**Semivolatile Organic Compounds by GCMS SIM**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1-Methylnaphthalene [90-12-0]^	0.020	U	mg/kg dry	1	0.020	0.037	4L22040	EPA 8270D	12/24/14 20:49	jfi	
2-Methylnaphthalene [91-57-6]^	0.019	U	mg/kg dry	1	0.019	0.037	4L22040	EPA 8270D	12/24/14 20:49	jfi	
Acenaphthene [83-32-9]^	0.016	U	mg/kg dry	1	0.016	0.037	4L22040	EPA 8270D	12/24/14 20:49	jfi	
Acenaphthylene [208-96-8]^	0.019	U	mg/kg dry	1	0.019	0.037	4L22040	EPA 8270D	12/24/14 20:49	jfi	
Anthracene [120-12-7]^	0.015	U	mg/kg dry	1	0.015	0.037	4L22040	EPA 8270D	12/24/14 20:49	jfi	
Benzo(a)anthracene [56-55-3]^	0.015	U	mg/kg dry	1	0.015	0.037	4L22040	EPA 8270D	12/24/14 20:49	jfi	
Benzo(a)pyrene [50-32-8]^	0.016	U	mg/kg dry	1	0.016	0.037	4L22040	EPA 8270D	12/24/14 20:49	jfi	
Benzo(b)fluoranthene [205-99-2]^	0.018	U	mg/kg dry	1	0.018	0.037	4L22040	EPA 8270D	12/24/14 20:49	jfi	
Benzo(g,h,i)perylene [191-24-2]^	0.016	U	mg/kg dry	1	0.016	0.037	4L22040	EPA 8270D	12/24/14 20:49	jfi	
Benzo(k)fluoranthene [207-08-9]^	0.020	U	mg/kg dry	1	0.020	0.037	4L22040	EPA 8270D	12/24/14 20:49	jfi	
Chrysene [218-01-9]^	0.013	U	mg/kg dry	1	0.013	0.037	4L22040	EPA 8270D	12/24/14 20:49	jfi	

**ANALYTICAL RESULTS**

**Description:** SB-34 7.0'

**Lab Sample ID:** A407528-06

**Received:** 12/18/14 17:07

**Matrix:** Soil

**Sampled:** 12/18/14 15:56

**Work Order:** A407528

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 95.84

**Semivolatile Organic Compounds by GCMS SIM**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Dibenzo(a,h)anthracene [53-70-3]^	0.017	U	mg/kg dry	1	0.017	0.037	4L22040	EPA 8270D	12/24/14 20:49	jfi	
Fluoranthene [206-44-0]^	0.018	U	mg/kg dry	1	0.018	0.037	4L22040	EPA 8270D	12/24/14 20:49	jfi	
Fluorene [86-73-7]^	0.018	U	mg/kg dry	1	0.018	0.037	4L22040	EPA 8270D	12/24/14 20:49	jfi	
Indeno(1,2,3-cd)pyrene [193-39-5]^	0.016	U	mg/kg dry	1	0.016	0.037	4L22040	EPA 8270D	12/24/14 20:49	jfi	
Naphthalene [91-20-3]^	0.019	U	mg/kg dry	1	0.019	0.037	4L22040	EPA 8270D	12/24/14 20:49	jfi	
Phenanthrene [85-01-8]^	0.016	U	mg/kg dry	1	0.016	0.037	4L22040	EPA 8270D	12/24/14 20:49	jfi	
Pyrene [129-00-0]^	0.017	U	mg/kg dry	1	0.017	0.037	4L22040	EPA 8270D	12/24/14 20:49	jfi	
<b>Surrogates</b>											
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
p-Terphenyl	2.1	1	2.09	102 %	50-150	4L22040	EPA 8270D	12/24/14 20:49	jfi		

**Organochlorine Pesticides by GC**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8]^	0.0010	U	mg/kg dry	2	0.0010	0.0035	4L23006	EPA 8081B	12/29/14 13:50	JJB	
4,4'-DDE [72-55-9]^	0.0011	U	mg/kg dry	2	0.0011	0.0035	4L23006	EPA 8081B	12/29/14 13:50	JJB	
4,4'-DDT [50-29-3]^	0.0014	U	mg/kg dry	2	0.0014	0.0035	4L23006	EPA 8081B	12/29/14 13:50	JJB	
Aldrin [309-00-2]^	0.0011	U	mg/kg dry	2	0.0011	0.0035	4L23006	EPA 8081B	12/29/14 13:50	JJB	
alpha-BHC [319-84-6]^	0.0012	U	mg/kg dry	2	0.0012	0.0035	4L23006	EPA 8081B	12/29/14 13:50	JJB	
beta-BHC [319-85-7]^	0.0021	U	mg/kg dry	2	0.0021	0.0035	4L23006	EPA 8081B	12/29/14 13:50	JJB	
Chlordane (tech) [12789-03-6]^	0.018	U	mg/kg dry	2	0.018	0.069	4L23006	EPA 8081B	12/29/14 13:50	JJB	
Chlordane-alpha [5103-71-9]^	0.00094	U	mg/kg dry	2	0.00094	0.0035	4L23006	EPA 8081B	12/29/14 13:50	JJB	
Chlordane-gamma [5566-34-7]^	0.00094	U	mg/kg dry	2	0.00094	0.0035	4L23006	EPA 8081B	12/29/14 13:50	JJB	
delta-BHC [319-86-8]^	0.0010	U	mg/kg dry	2	0.0010	0.0035	4L23006	EPA 8081B	12/29/14 13:50	JJB	
Dieldrin [60-57-1]^	0.00094	U	mg/kg dry	2	0.00094	0.0035	4L23006	EPA 8081B	12/29/14 13:50	JJB	
Endosulfan I [959-98-8]^	0.00081	U	mg/kg dry	2	0.00081	0.0035	4L23006	EPA 8081B	12/29/14 13:50	JJB	
Endosulfan II [33213-65-9]^	0.0010	U	mg/kg dry	2	0.0010	0.0035	4L23006	EPA 8081B	12/29/14 13:50	JJB	
Endosulfan sulfate [1031-07-8]^	0.0010	U	mg/kg dry	2	0.0010	0.0035	4L23006	EPA 8081B	12/29/14 13:50	JJB	
Endrin [72-20-8]^	0.0015	U	mg/kg dry	2	0.0015	0.0035	4L23006	EPA 8081B	12/29/14 13:50	JJB	
Endrin aldehyde [7421-93-4]^	0.0017	U	mg/kg dry	2	0.0017	0.0035	4L23006	EPA 8081B	12/29/14 13:50	JJB	
Endrin ketone [53494-70-5]^	0.00098	U	mg/kg dry	2	0.00098	0.0035	4L23006	EPA 8081B	12/29/14 13:50	JJB	
gamma-BHC [58-89-9]^	0.0013	U	mg/kg dry	2	0.0013	0.0035	4L23006	EPA 8081B	12/29/14 13:50	JJB	
Heptachlor [76-44-8]^	0.0013	U	mg/kg dry	2	0.0013	0.0035	4L23006	EPA 8081B	12/29/14 13:50	JJB	
Heptachlor epoxide [1024-57-3]^	0.0010	U	mg/kg dry	2	0.0010	0.0035	4L23006	EPA 8081B	12/29/14 13:50	JJB	
Isodrin [465-73-6]^	0.0013	U	mg/kg dry	2	0.0013	0.0035	4L23006	EPA 8081B	12/29/14 13:50	JJB	
Methoxychlor [72-43-5]^	0.0018	U	mg/kg dry	2	0.0018	0.0035	4L23006	EPA 8081B	12/29/14 13:50	JJB	
Mirex [2385-85-5]^	0.0023	U	mg/kg dry	2	0.0023	0.0035	4L23006	EPA 8081B	12/29/14 13:50	JJB	
Toxaphene [8001-35-2]^	0.035	U	mg/kg dry	2	0.035	0.069	4L23006	EPA 8081B	12/29/14 13:50	JJB	
<b>Surrogates</b>											
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
2,4,5,6-TCMX	0.015	2	0.0350	43 %	20-137	4L23006	EPA 8081B	12/29/14 13:50	JJB		
Decachlorobiphenyl	0.026	2	0.0350	74 %	13-183	4L23006	EPA 8081B	12/29/14 13:50	JJB		

**ANALYTICAL RESULTS**

**Description:** SB-34 7.0'

**Lab Sample ID:** A407528-06

**Received:** 12/18/14 17:07

**Matrix:** Soil

**Sampled:** 12/18/14 15:56

**Work Order:** A407528

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 95.84

**Polychlorinated Biphenyls by GC**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9]^	0.015	U	mg/kg dry	1	0.015	0.018	4L23023	EPA 8082A	12/26/14 15:26	JJB	
PCB-1221 [11104-28-2]^	0.015	U	mg/kg dry	1	0.015	0.018	4L23023	EPA 8082A	12/26/14 15:26	JJB	
PCB-1232 [11141-16-5]^	0.015	U	mg/kg dry	1	0.015	0.018	4L23023	EPA 8082A	12/26/14 15:26	JJB	
PCB-1248 [12672-29-6]^	0.0066	U	mg/kg dry	1	0.0066	0.018	4L23023	EPA 8082A	12/26/14 15:26	JJB	
PCB-1254 [11097-69-1]^	0.017	U	mg/kg dry	1	0.017	0.018	4L23023	EPA 8082A	12/26/14 15:26	JJB	
PCB-1260 [11096-82-5]^	0.011	U	mg/kg dry	1	0.011	0.018	4L23023	EPA 8082A	12/26/14 15:26	JJB	
<b>Surrogates</b>											
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
2,4,5,6-TCMX	0.029	1	0.0350	83 %	20-137	4L23023	EPA 8082A	12/26/14 15:26	JJB		
Decachlorobiphenyl	0.055	1	0.0350	158 %	13-183	4L23023	EPA 8082A	12/26/14 15:26	JJB		

**FL Petroleum Range Organics**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
TPH (C8-C40)^	3.5	U	mg/kg dry	1	3.5	5.9	4L26001	FL-PRO	12/29/14 13:50	JJB	
<b>Surrogates</b>											
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
n-Nonatriacontane	2.9	1	3.42	84 %	41-129	4L26001	FL-PRO	12/29/14 13:50	JJB		
o-Terphenyl	1.3	1	1.71	78 %	45-135	4L26001	FL-PRO	12/29/14 13:50	JJB		

**Metals by EPA 6000/7000 Series Methods**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6]^	0.0214		mg/kg dry	1	0.00370	0.00949	4L22014	EPA 7471B	12/29/14 07:48	IR	

**Metals by EPA 6000/7000 Series Methods**

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2]^	0.538	U	mg/kg dry	1	0.538	0.756	4L22003	EPA 6010C	12/26/14 10:49	ACV	
Barium [7440-39-3]^	5.87		mg/kg dry	1	0.0484	0.756	4L22003	EPA 6010C	12/26/14 10:49	ACV	
Cadmium [7440-43-9]^	0.0136	U	mg/kg dry	1	0.0136	0.0756	4L22003	EPA 6010C	12/26/14 10:49	ACV	
Chromium [7440-47-3]^	3.55		mg/kg dry	1	0.0469	0.756	4L22003	EPA 6010C	12/26/14 10:49	ACV	
Lead [7439-92-1]^	6.55		mg/kg dry	1	0.166	0.756	4L22003	EPA 6010C	12/26/14 10:49	ACV	
Selenium [7782-49-2]^	0.544	U	mg/kg dry	1	0.544	3.02	4L22003	EPA 6010C	12/26/14 10:49	ACV	
Silver [7440-22-4]^	0.109	U	mg/kg dry	1	0.109	0.756	4L22003	EPA 6010C	12/26/14 10:49	ACV	

**ANALYTICAL RESULTS**

**Description:** SB-34

**Lab Sample ID:** A407528-07

**Received:** 12/18/14 17:07

**Matrix:** Soil

**Sampled:** 12/18/14 16:05

**Work Order:** A407528

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 95.84

**Volatile Organic Compounds by GCMS**

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
1,1,1-Trichloroethane [71-55-6]^	0.0005	U	mg/kg dry	1	0.0005	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
1,1,2,2-Tetrachloroethane [79-34-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
1,1,2-Trichloroethane [79-00-5]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
1,1-Dichloroethane [75-34-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
1,1-Dichloroethene [75-35-4]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
1,1-Dichloropropene [563-58-6]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
1,2,3-Trichlorobenzene [87-61-6]^	0.0012	U	mg/kg dry	1	0.0012	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
1,2,3-Trichloropropane [96-18-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
1,2,4-Trichlorobenzene [120-82-1]^	0.0011	U	mg/kg dry	1	0.0011	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
1,2,4-Trimethylbenzene [95-63-6]^	0.0009	U	mg/kg dry	1	0.0009	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
1,2-Dibromo-3-chloropropane [96-12-8]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
1,2-Dibromoethane [106-93-4]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
1,2-Dichlorobenzene [95-50-1]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
1,2-Dichloroethane [107-06-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
1,2-Dichloropropane [78-87-5]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
1,3,5-Trimethylbenzene [108-67-8]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
1,3-Dichlorobenzene [541-73-1]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
1,3-Dichloropropane [142-28-9]^	0.0005	U	mg/kg dry	1	0.0005	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
1,4-Dichlorobenzene [106-46-7]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
2,2-Dichloropropane [594-20-7]^	0.0005	U	mg/kg dry	1	0.0005	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
2-Butanone [78-93-3]^	0.0023	U	mg/kg dry	1	0.0023	0.0064	4L24010	EPA 8260B	12/24/14 13:34	KKW	
2-Chloroethyl Vinyl Ether [110-75-8]^	0.0022	U	mg/kg dry	1	0.0022	0.0064	4L24010	EPA 8260B	12/24/14 13:34	KKW	
2-Chlorotoluene [95-49-8]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
2-Hexanone [591-78-6]^	0.0012	U	mg/kg dry	1	0.0012	0.0064	4L24010	EPA 8260B	12/24/14 13:34	KKW	
4-Chlorotoluene [106-43-4]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
4-Isopropyltoluene [99-87-6]^	0.0010	U	mg/kg dry	1	0.0010	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
4-Methyl-2-pentanone [108-10-1]^	0.0018	U	mg/kg dry	1	0.0018	0.0064	4L24010	EPA 8260B	12/24/14 13:34	KKW	
<b>Acetone [67-64-1]^</b>	<b>0.012</b>	<b>V</b>	mg/kg dry	1	0.0022	0.0064	4L24010	EPA 8260B	12/24/14 13:34	KKW	J-01, O-01
Benzene [71-43-2]^	0.0005	U	mg/kg dry	1	0.0005	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Bromobenzene [108-86-1]^	0.0005	U	mg/kg dry	1	0.0005	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Bromochloromethane [74-97-5]^	0.0005	U	mg/kg dry	1	0.0005	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Bromodichloromethane [75-27-4]^	0.0005	U	mg/kg dry	1	0.0005	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Bromoform [75-25-2]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Bromomethane [74-83-9]^	0.0012	U	mg/kg dry	1	0.0012	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Carbon disulfide [75-15-0]^	0.0027	U	mg/kg dry	1	0.0027	0.0064	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Carbon Tetrachloride [56-23-5]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Chlorobenzene [108-90-7]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Chloroethane [75-00-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Chloroform [67-66-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Chloromethane [74-87-3]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
cis-1,2-Dichloroethene [156-59-2]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
cis-1,3-Dichloropropene [10061-01-5]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Dibromochloromethane [124-48-1]^	0.0003	U	mg/kg dry	1	0.0003	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Dibromomethane [74-95-3]^	0.0005	U	mg/kg dry	1	0.0005	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Dichlorodifluoromethane [75-71-8]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Ethylbenzene [100-41-4]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	

**ANALYTICAL RESULTS**

**Description:** SB-34

**Lab Sample ID:** A407528-07

**Received:** 12/18/14 17:07

**Matrix:** Soil

**Sampled:** 12/18/14 16:05

**Work Order:** A407528

**Project:** I-4 Level II

**Sampled By:** Jerry Governale

**% Solids:** 95.84

**Volatile Organic Compounds by GCMS**

*^ - ENCO Orlando certified analyte [NELAC E83182]*

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Hexachlorobutadiene [87-68-3]^	0.0012	U	mg/kg dry	1	0.0012	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Isopropylbenzene [98-82-8]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
m,p-Xylenes [108-38-3/106-42-3]^	0.0013	U	mg/kg dry	1	0.0013	0.0026	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Methylene Chloride [75-09-2]^	0.0009	U	mg/kg dry	1	0.0009	0.0026	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Methyl-tert-Butyl Ether [1634-04-4]^	0.0003	U	mg/kg dry	1	0.0003	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Naphthalene [91-20-3]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
n-Butyl Benzene [104-51-8]^	0.0012	U	mg/kg dry	1	0.0012	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
n-Propyl Benzene [103-65-1]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
o-Xylene [95-47-6]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
sec-Butylbenzene [135-98-8]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Styrene [100-42-5]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
tert-Butylbenzene [98-06-6]^	0.0008	U	mg/kg dry	1	0.0008	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Tetrachloroethene [127-18-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Toluene [108-88-3]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
trans-1,2-Dichloroethene [156-60-5]^	0.0009	U	mg/kg dry	1	0.0009	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
trans-1,3-Dichloropropene [10061-02-6]^	0.0004	U	mg/kg dry	1	0.0004	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Trichloroethene [79-01-6]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Trichlorofluoromethane [75-69-4]^	0.0007	U	mg/kg dry	1	0.0007	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Vinyl chloride [75-01-4]^	0.0006	U	mg/kg dry	1	0.0006	0.0013	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Xylenes (Total) [1330-20-7]^	0.0013	U	mg/kg dry	1	0.0013	0.0026	4L24010	EPA 8260B	12/24/14 13:34	KKW	

**Surrogates**

<u>Surrogates</u>	<u>Results</u>	<u>DF</u>	<u>Spike Lvl</u>	<u>% Rec</u>	<u>% Rec Limits</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
4-Bromofluorobenzene	48	1	50.0	96 %	71-126	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Dibromofluoromethane	47	1	50.0	95 %	72-133	4L24010	EPA 8260B	12/24/14 13:34	KKW	
Toluene-d8	47	1	50.0	93 %	80-123	4L24010	EPA 8260B	12/24/14 13:34	KKW	

**Tentatively Identified Compounds by Volatile GCMS**

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
1-Pentene [000109-67-1]	0.0093	N	mg/kg dry	1			4L24010	EPA 8260B	12/24/14 13:34	KKW	
Tentatively Identified Compounds	0.0		mg/kg dry	1			4L24010	EPA 8260B	12/24/14 13:34	KKW	

**QUALITY CONTROL DATA**

**Volatile Organic Compounds by GCMS - Quality Control**

*Batch 4L24010 - EPA 5030B\_MS*

**Blank (4L24010-BLK1)**

Prepared: 12/24/2014 00:00 Analyzed: 12/24/2014 09:21

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
1,1,1,2-Tetrachloroethane	0.0004	U	0.0010	mg/kg wet							
1,1,1-Trichloroethane	0.0004	U	0.0010	mg/kg wet							
1,1,2,2-Tetrachloroethane	0.0003	U	0.0010	mg/kg wet							
1,1,2-Trichloroethane	0.0006	U	0.0010	mg/kg wet							
1,1-Dichloroethane	0.0006	U	0.0010	mg/kg wet							
1,1-Dichloroethene	0.0006	U	0.0010	mg/kg wet							
1,1-Dichloropropene	0.0005	U	0.0010	mg/kg wet							
1,2,3-Trichlorobenzene	0.0009	U	0.0010	mg/kg wet							
1,2,3-Trichloropropane	0.0003	U	0.0010	mg/kg wet							
1,2,4-Trichlorobenzene	0.0008	U	0.0010	mg/kg wet							
1,2,4-Trimethylbenzene	0.0007	U	0.0010	mg/kg wet							
1,2-Dibromo-3-chloropropane	0.0006	U	0.0010	mg/kg wet							
1,2-Dibromoethane	0.0003	U	0.0010	mg/kg wet							
1,2-Dichlorobenzene	0.0004	U	0.0010	mg/kg wet							
1,2-Dichloroethane	0.0003	U	0.0010	mg/kg wet							
1,2-Dichloropropane	0.0006	U	0.0010	mg/kg wet							
1,3,5-Trimethylbenzene	0.0006	U	0.0010	mg/kg wet							
1,3-Dichlorobenzene	0.0005	U	0.0010	mg/kg wet							
1,3-Dichloropropane	0.0004	U	0.0010	mg/kg wet							
1,4-Dichlorobenzene	0.0004	U	0.0010	mg/kg wet							
2,2-Dichloropropane	0.0004	U	0.0010	mg/kg wet							
2-Butanone	0.0018	U	0.0050	mg/kg wet							
2-Chloroethyl Vinyl Ether	0.0017	U	0.0050	mg/kg wet							
2-Chlorotoluene	0.0005	U	0.0010	mg/kg wet							
2-Hexanone	0.0009	U	0.0050	mg/kg wet							
4-Chlorotoluene	0.0006	U	0.0010	mg/kg wet							
4-Isopropyltoluene	0.0008	U	0.0010	mg/kg wet							
4-Methyl-2-pentanone	0.0014	U	0.0050	mg/kg wet							
<b>Acetone</b>	<b>0.0046</b>	<b>I</b>	0.0050	mg/kg wet							J-01, O-01

**QUALITY CONTROL DATA**

**Volatile Organic Compounds by GCMS - Quality Control**

*Batch 4L24010 - EPA 5030B\_MS - Continued*

**Blank (4L24010-BLK1) Continued**

Prepared: 12/24/2014 00:00 Analyzed: 12/24/2014 09:21

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Benzene	0.0004	U	0.0010	mg/kg wet							
Bromobenzene	0.0004	U	0.0010	mg/kg wet							
Bromochloromethane	0.0004	U	0.0010	mg/kg wet							
Bromodichloromethane	0.0004	U	0.0010	mg/kg wet							
Bromoform	0.0003	U	0.0010	mg/kg wet							
Bromomethane	0.0009	U	0.0010	mg/kg wet							
Carbon disulfide	0.0021	U	0.0050	mg/kg wet							
Carbon Tetrachloride	0.0006	U	0.0010	mg/kg wet							
Chlorobenzene	0.0005	U	0.0010	mg/kg wet							
Chloroethane	0.0005	U	0.0010	mg/kg wet							
Chloroform	0.0004	U	0.0010	mg/kg wet							
Chloromethane	0.0006	U	0.0010	mg/kg wet							
cis-1,2-Dichloroethene	0.0005	U	0.0010	mg/kg wet							
cis-1,3-Dichloropropene	0.0003	U	0.0010	mg/kg wet							
Dibromochloromethane	0.0003	U	0.0010	mg/kg wet							
Dibromomethane	0.0004	U	0.0010	mg/kg wet							
Dichlorodifluoromethane	0.0006	U	0.0010	mg/kg wet							
Ethylbenzene	0.0006	U	0.0010	mg/kg wet							
Hexachlorobutadiene	0.0009	U	0.0010	mg/kg wet							
Isopropylbenzene	0.0005	U	0.0010	mg/kg wet							
m,p-Xylenes	0.0010	U	0.0020	mg/kg wet							
Methylene Chloride	0.0007	U	0.0020	mg/kg wet							
Methyl-tert-Butyl Ether	0.0003	U	0.0010	mg/kg wet							
Naphthalene	0.0006	U	0.0010	mg/kg wet							
n-Butyl Benzene	0.0009	U	0.0010	mg/kg wet							
n-Propyl Benzene	0.0006	U	0.0010	mg/kg wet							
o-Xylene	0.0005	U	0.0010	mg/kg wet							
sec-Butylbenzene	0.0006	U	0.0010	mg/kg wet							
Styrene	0.0004	U	0.0010	mg/kg wet							

**QUALITY CONTROL DATA**

**Volatile Organic Compounds by GCMS - Quality Control**

**Batch 4L24010 - EPA 5030B\_MS - Continued**

**Blank (4L24010-BLK1) Continued**

Prepared: 12/24/2014 00:00 Analyzed: 12/24/2014 09:21

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
tert-Butylbenzene	0.0006	U	0.0010	mg/kg wet							
Tetrachloroethene	0.0005	U	0.0010	mg/kg wet							
Toluene	0.0005	U	0.0010	mg/kg wet							
trans-1,2-Dichloroethene	0.0007	U	0.0010	mg/kg wet							
trans-1,3-Dichloropropene	0.0003	U	0.0010	mg/kg wet							
Trichloroethene	0.0005	U	0.0010	mg/kg wet							
Trichlorofluoromethane	0.0005	U	0.0010	mg/kg wet							
Vinyl chloride	0.0004	U	0.0010	mg/kg wet							
Xylenes (Total)	0.0010	U	0.0020	mg/kg wet							
<i>4-Bromofluorobenzene</i>	<i>51</i>			<i>ug/L</i>	<i>50.0</i>		<i>102</i>	<i>71-126</i>			
<i>Dibromofluoromethane</i>	<i>47</i>			<i>ug/L</i>	<i>50.0</i>		<i>95</i>	<i>72-133</i>			
<i>Toluene-d8</i>	<i>51</i>			<i>ug/L</i>	<i>50.0</i>		<i>103</i>	<i>80-123</i>			

**LCS (4L24010-BS1)**

Prepared: 12/24/2014 00:00 Analyzed: 12/24/2014 07:57

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
1,1-Dichloroethene	0.020		0.0010	mg/kg wet	0.0200		102	61-124			
Benzene	0.020		0.0010	mg/kg wet	0.0200		98	59-133			
Chlorobenzene	0.018		0.0010	mg/kg wet	0.0200		92	69-121			
Toluene	0.020		0.0010	mg/kg wet	0.0200		100	66-119			
Trichloroethene	0.020		0.0010	mg/kg wet	0.0200		101	71-122			
<i>4-Bromofluorobenzene</i>	<i>46</i>			<i>ug/L</i>	<i>50.0</i>		<i>91</i>	<i>71-126</i>			
<i>Dibromofluoromethane</i>	<i>43</i>			<i>ug/L</i>	<i>50.0</i>		<i>87</i>	<i>72-133</i>			
<i>Toluene-d8</i>	<i>49</i>			<i>ug/L</i>	<i>50.0</i>		<i>98</i>	<i>80-123</i>			

**LCS Dup (4L24010-BSD1)**

Prepared: 12/24/2014 00:00 Analyzed: 12/24/2014 08:25

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
1,1-Dichloroethene	0.020		0.0010	mg/kg wet	0.0200		99	61-124	3	23	
Benzene	0.019		0.0010	mg/kg wet	0.0200		93	59-133	6	19	
Chlorobenzene	0.018		0.0010	mg/kg wet	0.0200		91	69-121	1	18	
Toluene	0.019		0.0010	mg/kg wet	0.0200		96	66-119	3	21	
Trichloroethene	0.019		0.0010	mg/kg wet	0.0200		95	71-122	6	26	
<i>4-Bromofluorobenzene</i>	<i>44</i>			<i>ug/L</i>	<i>50.0</i>		<i>88</i>	<i>71-126</i>			
<i>Dibromofluoromethane</i>	<i>40</i>			<i>ug/L</i>	<i>50.0</i>		<i>80</i>	<i>72-133</i>			

**QUALITY CONTROL DATA**

**Volatile Organic Compounds by GCMS - Quality Control**

*Batch 4L24010 - EPA 5030B\_MS - Continued*

**LCS Dup (4L24010-BSD1) Continued**

Prepared: 12/24/2014 00:00 Analyzed: 12/24/2014 08:25

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Toluene-d8	45			ug/L	50.0		89	80-123			

**Matrix Spike (4L24010-MS1)**

Prepared: 12/24/2014 00:00 Analyzed: 12/24/2014 15:55

Source: A407269-01

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
1,1-Dichloroethene	0.022		0.0012	mg/kg dry	0.0231	0.0007 U	96	61-124			
Benzene	0.020		0.0012	mg/kg dry	0.0231	0.0005 U	89	59-133			
Chlorobenzene	0.019		0.0012	mg/kg dry	0.0231	0.0006 U	84	69-121			
Toluene	0.022		0.0012	mg/kg dry	0.0231	0.0005 U	94	66-119			
Trichloroethene	0.023		0.0012	mg/kg dry	0.0231	0.0006 U	99	71-122			
4-Bromofluorobenzene	47			ug/L	50.0		94	71-126			
Dibromofluoromethane	40			ug/L	50.0		79	72-133			
Toluene-d8	50			ug/L	50.0		100	80-123			

**Tentatively Identified Compounds by Volatile GCMS - Quality Control**

*Batch 4L24010 - EPA 5030B\_MS*

**Blank (4L24010-BLK1)**

Prepared: 12/24/2014 00:00 Analyzed: 12/24/2014 09:21

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Tentatively Identified Compounds	0.0			mg/kg wet							

**Semivolatile Organic Compounds by GCMS - Quality Control**

*Batch 4L22002 - EPA 3550C\_MS*

**Blank (4L22002-BLK1)**

Prepared: 12/22/2014 08:35 Analyzed: 12/24/2014 17:09

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
1,2,4-Trichlorobenzene	0.11	U	0.33	mg/kg wet							
1,2-Dichlorobenzene	0.12	U	0.33	mg/kg wet							
1,3-Dichlorobenzene	0.12	U	0.33	mg/kg wet							
1,4-Dichlorobenzene	0.10	U	0.33	mg/kg wet							
1-Methylnaphthalene	0.096	U	0.33	mg/kg wet							
2,4,5-Trichlorophenol	0.067	U	0.33	mg/kg wet							
2,4,6-Trichlorophenol	0.15	U	0.33	mg/kg wet							
2,4-Dichlorophenol	0.25	U	0.33	mg/kg wet							
2,4-Dimethylphenol	0.23	U	0.33	mg/kg wet							
2,4-Dinitrophenol	0.089	U	0.33	mg/kg wet							
2,4-Dinitrotoluene	0.16	U	0.33	mg/kg wet							

**QUALITY CONTROL DATA**

**Semivolatile Organic Compounds by GCMS - Quality Control**

*Batch 4L22002 - EPA 3550C\_MS - Continued*

**Blank (4L22002-BLK1) Continued**

Prepared: 12/22/2014 08:35 Analyzed: 12/24/2014 17:09

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
2,6-Dinitrotoluene	0.18	U	0.33	mg/kg wet							
2-Chloronaphthalene	0.098	U	0.33	mg/kg wet							
2-Chlorophenol	0.23	U	0.33	mg/kg wet							
2-Methyl-4,6-dinitrophenol	0.28	U	0.33	mg/kg wet							
2-Methylnaphthalene	0.12	U	0.33	mg/kg wet							
2-Methylphenol	0.11	U	0.33	mg/kg wet							
2-Nitroaniline	0.085	U	0.33	mg/kg wet							
2-Nitrophenol	0.26	U	0.33	mg/kg wet							
3 & 4-Methylphenol	0.25	U	0.33	mg/kg wet							
3,3'-Dichlorobenzidine	0.21	U	0.33	mg/kg wet							
3-Nitroaniline	0.080	U	0.33	mg/kg wet							
4-Bromophenyl-phenylether	0.13	U	0.33	mg/kg wet							
4-Chloro-3-methylphenol	0.28	U	0.33	mg/kg wet							
4-Chloroaniline	0.065	U	0.33	mg/kg wet							
4-Chlorophenyl-phenylether	0.13	U	0.33	mg/kg wet							
4-Nitroaniline	0.26	U	0.33	mg/kg wet							
4-Nitrophenol	0.13	U	0.33	mg/kg wet							
Acenaphthene	0.13	U	0.33	mg/kg wet							
Acenaphthylene	0.12	U	0.33	mg/kg wet							
Anthracene	0.15	U	0.33	mg/kg wet							
Benzidine	0.086	U	0.33	mg/kg wet							
Benzo(a)anthracene	0.13	U	0.33	mg/kg wet							
Benzo(a)pyrene	0.078	U	0.33	mg/kg wet							
Benzo(b)fluoranthene	0.11	U	0.33	mg/kg wet							
Benzo(g,h,i)perylene	0.16	U	0.33	mg/kg wet							
Benzo(k)fluoranthene	0.11	U	0.33	mg/kg wet							
Benzoic acid	0.48	U	1.7	mg/kg wet							
Benzyl alcohol	0.16	U	0.33	mg/kg wet							
Bis(2-chloroethoxy)methane	0.15	U	0.33	mg/kg wet							

**QUALITY CONTROL DATA**

**Semivolatile Organic Compounds by GCMS - Quality Control**

*Batch 4L22002 - EPA 3550C\_MS - Continued*

**Blank (4L22002-BLK1) Continued**

Prepared: 12/22/2014 08:35 Analyzed: 12/24/2014 17:09

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Bis(2-chloroethyl)ether	0.14	U	0.33	mg/kg wet							
Bis(2-chloroisopropyl)ether	0.099	U	0.33	mg/kg wet							
Bis(2-ethylhexyl)phthalate	0.13	U	0.33	mg/kg wet							
Butylbenzylphthalate	0.14	U	0.33	mg/kg wet							
Chrysene	0.13	U	0.33	mg/kg wet							
Dibenzo(a,h)anthracene	0.14	U	0.33	mg/kg wet							
Dibenzofuran	0.13	U	0.33	mg/kg wet							
Diethylphthalate	0.13	U	0.33	mg/kg wet							
Dimethylphthalate	0.13	U	0.33	mg/kg wet							
Di-n-butylphthalate	0.13	U	0.33	mg/kg wet							
Di-n-octylphthalate	0.13	U	0.33	mg/kg wet							
Fluoranthene	0.11	U	0.33	mg/kg wet							
Fluorene	0.14	U	0.33	mg/kg wet							
Hexachlorobenzene	0.12	U	0.33	mg/kg wet							
Hexachlorobutadiene	0.13	U	0.33	mg/kg wet							
Hexachlorocyclopentadiene	0.15	U	0.33	mg/kg wet							
Hexachloroethane	0.10	U	0.33	mg/kg wet							
Indeno(1,2,3-cd)pyrene	0.14	U	0.33	mg/kg wet							
Isophorone	0.17	U	0.33	mg/kg wet							
Naphthalene	0.12	U	0.33	mg/kg wet							
Nitrobenzene	0.15	U	0.33	mg/kg wet							
N-Nitrosodimethylamine	0.12	U	0.33	mg/kg wet							
N-Nitroso-di-n-propylamine	0.15	U	0.33	mg/kg wet							
N-nitrosodiphenylamine/Diphenylamine	0.23	U	0.33	mg/kg wet							
Pentachlorophenol	0.21	U	0.33	mg/kg wet							
Phenanthrene	0.13	U	0.33	mg/kg wet							
Phenol	0.099	U	0.33	mg/kg wet							
Pyrene	0.11	U	0.33	mg/kg wet							
Pyridine	0.15	U	0.33	mg/kg wet							

**QUALITY CONTROL DATA**

**Semivolatile Organic Compounds by GCMS - Quality Control**

*Batch 4L22002 - EPA 3550C\_MS - Continued*

**Blank (4L22002-BLK1) Continued**

Prepared: 12/22/2014 08:35 Analyzed: 12/24/2014 17:09

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
2,4,6-Tribromophenol	1.1			mg/kg wet	1.67		66	23-137			
2-Fluorobiphenyl	1.5			mg/kg wet	1.67		88	29-119			
2-Fluorophenol	2.2			mg/kg wet	1.67		129	20-124			QS-03
Nitrobenzene-d5	1.9			mg/kg wet	1.67		115	17-126			
Phenol-d5	2.4			mg/kg wet	1.67		145	15-131			QS-03
Terphenyl-d14	2.0			mg/kg wet	1.67		118	60-120			

**LCS (4L22002-BS1)**

Prepared: 12/22/2014 08:35 Analyzed: 12/24/2014 17:38

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
1,2,4-Trichlorobenzene	1.5		0.33	mg/kg wet	1.67		90	36-119			
1,4-Dichlorobenzene	1.5		0.33	mg/kg wet	1.67		87	32-116			
2,4-Dinitrotoluene	1.9		0.33	mg/kg wet	1.67		112	54-125			
2-Chlorophenol	1.7		0.33	mg/kg wet	1.67		102	50-105			
4-Chloro-3-methylphenol	1.9		0.33	mg/kg wet	1.67		113	55-106			QL-02
4-Nitrophenol	2.1		0.33	mg/kg wet	1.67		127	30-124			QL-02
Acenaphthene	1.5		0.33	mg/kg wet	1.67		89	49-111			
N-Nitroso-di-n-propylamine	2.1		0.33	mg/kg wet	1.67		126	52-126			
Pentachlorophenol	1.1		0.33	mg/kg wet	1.67		64	10-101			
Phenol	1.9		0.33	mg/kg wet	1.67		114	28-121			
Pyrene	2.0		0.33	mg/kg wet	1.67		121	66-115			QL-02
2,4,6-Tribromophenol	1.4			mg/kg wet	1.67		86	23-137			
2-Fluorobiphenyl	1.3			mg/kg wet	1.67		78	29-119			
2-Fluorophenol	1.8			mg/kg wet	1.67		109	20-124			
Nitrobenzene-d5	1.8			mg/kg wet	1.67		110	17-126			
Phenol-d5	1.9			mg/kg wet	1.67		114	15-131			
Terphenyl-d14	1.8			mg/kg wet	1.67		106	60-120			

**Matrix Spike (4L22002-MS1)**

Prepared: 12/22/2014 08:35 Analyzed: 12/24/2014 18:06

**Source: A407258-02**

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
1,2,4-Trichlorobenzene	1.6		0.38	mg/kg dry	1.90	0.13 U	82	36-119			
1,4-Dichlorobenzene	1.4		0.38	mg/kg dry	1.90	0.11 U	74	32-116			

**QUALITY CONTROL DATA**

**Semivolatile Organic Compounds by GCMS - Quality Control**

**Batch 4L22002 - EPA 3550C\_MS - Continued**

**Matrix Spike (4L22002-MS1) Continued**

Prepared: 12/22/2014 08:35 Analyzed: 12/24/2014 18:06

Source: A407258-02

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	2.1		0.38	mg/kg dry	1.90	0.18 U	109	54-125			
2-Chlorophenol	1.8		0.38	mg/kg dry	1.90	0.26 U	97	50-105			
4-Chloro-3-methylphenol	2.1		0.38	mg/kg dry	1.90	0.32 U	111	55-106			QM-07
4-Nitrophenol	2.4		0.38	mg/kg dry	1.90	0.15 U	129	30-124			J-02
Acenaphthene	1.7		0.38	mg/kg dry	1.90	0.15 U	87	49-111			
N-Nitroso-di-n-propylamine	2.2		0.38	mg/kg dry	1.90	0.17 U	118	52-126			
Pentachlorophenol	1.4		0.38	mg/kg dry	1.90	0.24 U	73	10-101			
Phenol	2.1		0.38	mg/kg dry	1.90	0.11 U	110	28-121			
Pyrene	2.2		0.38	mg/kg dry	1.90	0.13 U	116	66-115			J-02
<i>2,4,6-Tribromophenol</i>	<i>1.7</i>			<i>mg/kg dry</i>	<i>1.90</i>		<i>88</i>	<i>23-137</i>			
<i>2-Fluorobiphenyl</i>	<i>1.4</i>			<i>mg/kg dry</i>	<i>1.90</i>		<i>76</i>	<i>29-119</i>			
<i>2-Fluorophenol</i>	<i>1.9</i>			<i>mg/kg dry</i>	<i>1.90</i>		<i>100</i>	<i>20-124</i>			
<i>Nitrobenzene-d5</i>	<i>2.0</i>			<i>mg/kg dry</i>	<i>1.90</i>		<i>104</i>	<i>17-126</i>			
<i>Phenol-d5</i>	<i>2.1</i>			<i>mg/kg dry</i>	<i>1.90</i>		<i>109</i>	<i>15-131</i>			
<i>Terphenyl-d14</i>	<i>1.9</i>			<i>mg/kg dry</i>	<i>1.90</i>		<i>101</i>	<i>60-120</i>			

**Matrix Spike Dup (4L22002-MSD1)**

Prepared: 12/22/2014 08:35 Analyzed: 12/24/2014 18:34

Source: A407258-02

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2,4-Trichlorobenzene	1.5		0.38	mg/kg dry	1.92	0.13 U	79	36-119	3	32	
1,4-Dichlorobenzene	1.4		0.38	mg/kg dry	1.92	0.11 U	71	32-116	4	34	
2,4-Dinitrotoluene	2.1		0.38	mg/kg dry	1.92	0.18 U	112	54-125	4	23	
2-Chlorophenol	1.7		0.38	mg/kg dry	1.92	0.26 U	90	50-105	7	27	
4-Chloro-3-methylphenol	2.1		0.38	mg/kg dry	1.92	0.32 U	112	55-106	2	28	QM-07
4-Nitrophenol	2.6		0.38	mg/kg dry	1.92	0.15 U	137	30-124	7	35	J-02
Acenaphthene	1.7		0.38	mg/kg dry	1.92	0.15 U	89	49-111	3	27	
N-Nitroso-di-n-propylamine	2.2		0.38	mg/kg dry	1.92	0.17 U	113	52-126	3	24	
Pentachlorophenol	1.5		0.38	mg/kg dry	1.92	0.24 U	77	10-101	7	26	
Phenol	2.0		0.38	mg/kg dry	1.92	0.11 U	104	28-121	4	32	
Pyrene	2.3		0.38	mg/kg dry	1.92	0.13 U	117	66-115	3	28	J-02
<i>2,4,6-Tribromophenol</i>	<i>1.7</i>			<i>mg/kg dry</i>	<i>1.92</i>		<i>90</i>	<i>23-137</i>			
<i>2-Fluorobiphenyl</i>	<i>1.5</i>			<i>mg/kg dry</i>	<i>1.92</i>		<i>77</i>	<i>29-119</i>			
<i>2-Fluorophenol</i>	<i>1.8</i>			<i>mg/kg dry</i>	<i>1.92</i>		<i>94</i>	<i>20-124</i>			
<i>Nitrobenzene-d5</i>	<i>1.9</i>			<i>mg/kg dry</i>	<i>1.92</i>		<i>101</i>	<i>17-126</i>			
<i>Phenol-d5</i>	<i>2.0</i>			<i>mg/kg dry</i>	<i>1.92</i>		<i>104</i>	<i>15-131</i>			
<i>Terphenyl-d14</i>	<i>2.0</i>			<i>mg/kg dry</i>	<i>1.92</i>		<i>104</i>	<i>60-120</i>			

**Semivolatile Organic Compounds by GCMS SIM - Quality Control**

**Batch 4L22040 - EPA 3550C\_MS**

**Blank (4L22040-BLK2)**

Prepared: 12/22/2014 14:30 Analyzed: 12/26/2014 16:07

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1-Methylnaphthalene	0.019	U	0.035	mg/kg wet							
2-Methylnaphthalene	0.018	U	0.035	mg/kg wet							
Acenaphthene	0.015	U	0.035	mg/kg wet							

**QUALITY CONTROL DATA**
**Semivolatile Organic Compounds by GCMS SIM - Quality Control**
**Batch 4L22040 - EPA 3550C\_MS - Continued**
**Blank (4L22040-BLK2) Continued**

Prepared: 12/22/2014 14:30 Analyzed: 12/26/2014 16:07

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Acenaphthylene	0.018	U	0.035	mg/kg wet							
Anthracene	0.014	U	0.035	mg/kg wet							
Benzo(a)anthracene	0.014	U	0.035	mg/kg wet							
Benzo(a)pyrene	0.015	U	0.035	mg/kg wet							
Benzo(b)fluoranthene	0.017	U	0.035	mg/kg wet							
Benzo(g,h,i)perylene	0.015	U	0.035	mg/kg wet							
Benzo(k)fluoranthene	0.019	U	0.035	mg/kg wet							
Chrysene	0.012	U	0.035	mg/kg wet							
Dibenzo(a,h)anthracene	0.016	U	0.035	mg/kg wet							
Fluoranthene	0.017	U	0.035	mg/kg wet							
Fluorene	0.017	U	0.035	mg/kg wet							
Indeno(1,2,3-cd)pyrene	0.015	U	0.035	mg/kg wet							
Naphthalene	0.018	U	0.035	mg/kg wet							
Phenanthrene	0.015	U	0.035	mg/kg wet							
Pyrene	0.016	U	0.035	mg/kg wet							
<i>p</i> -Terphenyl	2.7			mg/kg wet	2.00		137	50-150			

**LCS (4L22040-BS1)**

Prepared: 12/22/2014 14:30 Analyzed: 12/24/2014 15:25

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Acenaphthene	1.5		0.035	mg/kg wet	2.00		77	39-106			
Benzo(a)pyrene	1.6		0.035	mg/kg wet	2.00		79	60-118			
Benzo(g,h,i)perylene	1.8		0.035	mg/kg wet	2.00		90	50-117			
Naphthalene	1.7		0.035	mg/kg wet	2.00		84	34-95			
<i>p</i> -Terphenyl	2.2			mg/kg wet	2.00		109	50-150			

**Matrix Spike (4L22040-MS1)**

Prepared: 12/22/2014 14:30 Analyzed: 12/24/2014 15:47

**Source: A407146-01**

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Acenaphthene	4.1		0.047	mg/kg dry	2.68	1.3	104	39-106			
Benzo(a)pyrene	2.4		0.047	mg/kg dry	2.68	0.020 U	89	60-118			
Benzo(g,h,i)perylene	2.4		0.047	mg/kg dry	2.68	0.020 U	91	50-117			
Naphthalene	2.2		0.047	mg/kg dry	2.68	0.20	74	34-95			

**QUALITY CONTROL DATA**

**Semivolatile Organic Compounds by GCMS SIM - Quality Control**

*Batch 4L22040 - EPA 3550C\_MS - Continued*

**Matrix Spike (4L22040-MS1) Continued**

Prepared: 12/22/2014 14:30 Analyzed: 12/24/2014 15:47

Source: A407146-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<i>p-Terphenyl</i>	2.7			mg/kg dry	2.68		99	50-150			

**Matrix Spike Dup (4L22040-MSD1)**

Prepared: 12/22/2014 14:30 Analyzed: 12/24/2014 16:08

Source: A407146-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acenaphthene	3.0		0.047	mg/kg dry	2.70	1.3	61	39-106	32	30	QM-07
Benzo(a)pyrene	2.2		0.047	mg/kg dry	2.70	0.020 U	82	60-118	7	30	
Benzo(g,h,i)perylene	2.3		0.047	mg/kg dry	2.70	0.020 U	84	50-117	8	30	
Naphthalene	2.1		0.047	mg/kg dry	2.70	0.20	72	34-95	2	30	
<i>p-Terphenyl</i>	2.6			mg/kg dry	2.70		95	50-150			

**Organochlorine Pesticides by GC - Quality Control**

*Batch 4L22010 - EPA 3510C*

**Blank (4L22010-BLK1)**

Prepared: 12/22/2014 13:48 Analyzed: 12/29/2014 10:58

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDD	0.018	U	0.050	ug/L							
4,4'-DDE	0.036	U	0.050	ug/L							
4,4'-DDT	0.025	U	0.050	ug/L							
Aldrin	0.032	U	0.050	ug/L							
alpha-BHC	0.026	U	0.050	ug/L							
beta-BHC	0.022	U	0.050	ug/L							
Chlordane (tech)	0.32	U	0.50	ug/L							
Chlordane-alpha	0.022	U	0.050	ug/L							
Chlordane-gamma	0.018	U	0.050	ug/L							
delta-BHC	0.019	U	0.050	ug/L							
Dieldrin	0.017	U	0.050	ug/L							
Endosulfan I	0.016	U	0.050	ug/L							
Endosulfan II	0.017	U	0.050	ug/L							
Endosulfan sulfate	0.016	U	0.050	ug/L							
Endrin	0.014	U	0.050	ug/L							
Endrin aldehyde	0.020	U	0.050	ug/L							
Endrin ketone	0.017	U	0.050	ug/L							
gamma-BHC	0.020	U	0.050	ug/L							
Heptachlor	0.018	U	0.050	ug/L							
Heptachlor epoxide	0.018	U	0.050	ug/L							
Isodrin	0.030	U	0.050	ug/L							
Methoxychlor	0.018	U	0.050	ug/L							
Mirex	0.034	U	0.050	ug/L							
Toxaphene	0.48	U	0.50	ug/L							
2,4,5,6-TCMX	0.46			ug/L	1.00		46	38-142			
Decachlorobiphenyl	0.67			ug/L	1.00		67	34-159			

**LCS (4L22010-BS1)**

Prepared: 12/22/2014 13:48 Analyzed: 12/29/2014 11:10

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**QUALITY CONTROL DATA**

**Organochlorine Pesticides by GC - Quality Control**

**Batch 4L22010 - EPA 3510C - Continued**

**LCS (4L22010-BS1) Continued**

Prepared: 12/22/2014 13:48 Analyzed: 12/29/2014 11:10

Analyte	Result	Flaq	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	1.0		0.050	ug/L	1.00		103	37-125			
Dieldrin	0.68		0.050	ug/L	1.00		68	46-127			
Endrin	0.70		0.050	ug/L	1.00		70	28-143			
2,4,5,6-TCMX	0.53			ug/L	1.00		53	38-142			
Decachlorobiphenyl	0.73			ug/L	1.00		73	34-159			

**Matrix Spike (4L22010-MS1)**

Prepared: 12/22/2014 13:48 Analyzed: 12/29/2014 11:22

Source: A407522-01

Analyte	Result	Flaq	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	1.2		0.050	ug/L	1.00	0.025 U	116	37-125			
Dieldrin	0.95		0.050	ug/L	1.00	0.017 U	95	46-127			
Endrin	1.0		0.050	ug/L	1.00	0.014 U	100	28-143			
2,4,5,6-TCMX	0.69			ug/L	1.00		69	38-142			
Decachlorobiphenyl	1.1			ug/L	1.00		110	34-159			

**Matrix Spike Dup (4L22010-MSD1)**

Prepared: 12/22/2014 13:48 Analyzed: 12/29/2014 11:33

Source: A407522-01

Analyte	Result	Flaq	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.86		0.050	ug/L	1.00	0.025 U	86	37-125	30	24	QM-11
Dieldrin	0.49		0.050	ug/L	1.00	0.017 U	49	46-127	63	21	QM-11
Endrin	0.50		0.050	ug/L	1.00	0.014 U	50	28-143	66	22	QM-11
2,4,5,6-TCMX [2C]	0.38			ug/L	1.00		38	38-142			
Decachlorobiphenyl	0.62			ug/L	1.00		62	34-159			

**Batch 4L23006 - EPA 3550C**

**Blank (4L23006-BLK1)**

Prepared: 12/23/2014 08:25 Analyzed: 12/29/2014 12:07

Analyte	Result	Flaq	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDD	0.00048	U	0.0017	mg/kg wet							
4,4'-DDE	0.00052	U	0.0017	mg/kg wet							
4,4'-DDT	0.00066	U	0.0017	mg/kg wet							
Aldrin	0.00051	U	0.0017	mg/kg wet							
alpha-BHC	0.00056	U	0.0017	mg/kg wet							
beta-BHC	0.0010	U	0.0017	mg/kg wet							
Chlordane (tech)	0.0084	U	0.033	mg/kg wet							
Chlordane-alpha	0.00045	U	0.0017	mg/kg wet							
Chlordane-gamma	0.00045	U	0.0017	mg/kg wet							
delta-BHC	0.00050	U	0.0017	mg/kg wet							
Dieldrin	0.00045	U	0.0017	mg/kg wet							

**QUALITY CONTROL DATA**

**Organochlorine Pesticides by GC - Quality Control**

*Batch 4L23006 - EPA 3550C - Continued*

**Blank (4L23006-BLK1) Continued**

Prepared: 12/23/2014 08:25 Analyzed: 12/29/2014 12:07

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Endosulfan I	0.00039	U	0.0017	mg/kg wet							
Endosulfan II	0.00048	U	0.0017	mg/kg wet							
Endosulfan sulfate	0.00049	U	0.0017	mg/kg wet							
Endrin	0.00074	U	0.0017	mg/kg wet							
Endrin aldehyde	0.00083	U	0.0017	mg/kg wet							
Endrin ketone	0.00047	U	0.0017	mg/kg wet							
gamma-BHC	0.00060	U	0.0017	mg/kg wet							
Heptachlor	0.00062	U	0.0017	mg/kg wet							
Heptachlor epoxide	0.00048	U	0.0017	mg/kg wet							
Isodrin	0.00062	U	0.0017	mg/kg wet							
Methoxychlor	0.00086	U	0.0017	mg/kg wet							
Mirex	0.0011	U	0.0017	mg/kg wet							
Toxaphene	0.017	U	0.033	mg/kg wet							
<i>2,4,5,6-TCMX</i>	<i>0.018</i>			<i>mg/kg wet</i>	<i>0.0333</i>		<i>55</i>	<i>20-137</i>			
<i>Decachlorobiphenyl</i>	<i>0.022</i>			<i>mg/kg wet</i>	<i>0.0333</i>		<i>65</i>	<i>13-183</i>			

**LCS (4L23006-BS1)**

Prepared: 12/23/2014 08:25 Analyzed: 12/29/2014 12:18

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
4,4'-DDT	0.029		0.0017	mg/kg wet	0.0333		86	37-125			
Dieldrin	0.017		0.0017	mg/kg wet	0.0333		52	46-127			
Endrin	0.017		0.0017	mg/kg wet	0.0333		51	28-143			
<i>2,4,5,6-TCMX</i>	<i>0.022</i>			<i>mg/kg wet</i>	<i>0.0333</i>		<i>65</i>	<i>20-137</i>			
<i>Decachlorobiphenyl</i>	<i>0.022</i>			<i>mg/kg wet</i>	<i>0.0333</i>		<i>65</i>	<i>13-183</i>			

**Matrix Spike (4L23006-MS1)**

Prepared: 12/23/2014 08:25 Analyzed: 12/29/2014 12:30

**Source: A407493-03**

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
4,4'-DDT	0.014		0.0039	mg/kg dry	0.0376	0.0015 U	36	37-125			QM-07
Dieldrin	0.014		0.0039	mg/kg dry	0.0376	0.0010 U	36	46-127			QM-07
Endrin	0.014		0.0039	mg/kg dry	0.0376	0.0017 U	37	28-143			
<i>2,4,5,6-TCMX</i>	<i>0.012</i>			<i>mg/kg dry</i>	<i>0.0376</i>		<i>31</i>	<i>20-137</i>			
<i>Decachlorobiphenyl</i>	<i>0.019</i>			<i>mg/kg dry</i>	<i>0.0376</i>		<i>51</i>	<i>13-183</i>			

**QUALITY CONTROL DATA**

**Organochlorine Pesticides by GC - Quality Control**

*Batch 4L23006 - EPA 3550C - Continued*

**Matrix Spike Dup (4L23006-MSD1)**

Prepared: 12/23/2014 08:25 Analyzed: 12/29/2014 12:41

Source: A407493-03

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	0.020		0.0039	mg/kg dry	0.0382	0.0015 U	52	37-125	38	24	QM-11
Dieldrin	0.021		0.0039	mg/kg dry	0.0382	0.0010 U	55	46-127	44	21	QM-11
Endrin	0.021		0.0039	mg/kg dry	0.0382	0.0017 U	54	28-143	41	22	QM-11
<i>2,4,5,6-TCMX</i>	<i>0.017</i>			<i>mg/kg dry</i>	<i>0.0382</i>		<i>46</i>	<i>20-137</i>			
<i>Decachlorobiphenyl</i>	<i>0.027</i>			<i>mg/kg dry</i>	<i>0.0382</i>		<i>70</i>	<i>13-183</i>			

**Polychlorinated Biphenyls by GC - Quality Control**

*Batch 4L23023 - EPA 3550C*

**Blank (4L23023-BLK1)**

Prepared: 12/23/2014 11:31 Analyzed: 12/26/2014 14:06

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.014	U	0.017	mg/kg wet							
PCB-1221	0.014	U	0.017	mg/kg wet							
PCB-1232	0.014	U	0.017	mg/kg wet							
PCB-1248	0.0063	U	0.017	mg/kg wet							
PCB-1254	0.016	U	0.017	mg/kg wet							
PCB-1260	0.011	U	0.017	mg/kg wet							
<i>2,4,5,6-TCMX [2C]</i>	<i>0.034</i>			<i>mg/kg wet</i>	<i>0.0333</i>		<i>101</i>	<i>20-137</i>			
<i>Decachlorobiphenyl</i>	<i>0.044</i>			<i>mg/kg wet</i>	<i>0.0333</i>		<i>133</i>	<i>13-183</i>			

**LCS (4L23023-BS1)**

Prepared: 12/23/2014 11:31 Analyzed: 12/26/2014 14:18

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.37		0.017	mg/kg wet	0.333		111	29-185			
PCB-1260	0.38		0.017	mg/kg wet	0.333		113	66-171			
<i>2,4,5,6-TCMX [2C]</i>	<i>0.040</i>			<i>mg/kg wet</i>	<i>0.0333</i>		<i>119</i>	<i>20-137</i>			
<i>Decachlorobiphenyl</i>	<i>0.044</i>			<i>mg/kg wet</i>	<i>0.0333</i>		<i>133</i>	<i>13-183</i>			

**Matrix Spike (4L23023-MS1)**

Prepared: 12/23/2014 11:31 Analyzed: 12/26/2014 14:29

Source: A407577-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.32		0.018	mg/kg dry	0.351	0.015 U	91	29-185			
PCB-1260	0.35		0.018	mg/kg dry	0.351	0.012	96	66-171			
<i>2,4,5,6-TCMX [2C]</i>	<i>0.031</i>			<i>mg/kg dry</i>	<i>0.0351</i>		<i>90</i>	<i>20-137</i>			
<i>Decachlorobiphenyl</i>	<i>0.046</i>			<i>mg/kg dry</i>	<i>0.0351</i>		<i>132</i>	<i>13-183</i>			

**QUALITY CONTROL DATA**

**Polychlorinated Biphenyls by GC - Quality Control**

*Batch 4L23023 - EPA 3550C - Continued*

**Matrix Spike Dup (4L23023-MSD1)**

Prepared: 12/23/2014 11:31 Analyzed: 12/26/2014 14:41

Source: A407577-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.33		0.018	mg/kg dry	0.358	0.015 U	93	29-185	4	21	
PCB-1260	0.36		0.018	mg/kg dry	0.358	0.012	97	66-171	3	17	
<i>2,4,5,6-TCMX [2C]</i>	<i>0.035</i>			<i>mg/kg dry</i>	<i>0.0358</i>		<i>98</i>	<i>20-137</i>			
<i>Decachlorobiphenyl</i>	<i>0.051</i>			<i>mg/kg dry</i>	<i>0.0358</i>		<i>142</i>	<i>13-183</i>			

**Chlorinated Herbicides by GC - Quality Control**

*Batch 4L22067 - EPA 3510C*

**Blank (4L22067-BLK1)**

Prepared: 12/22/2014 21:00 Analyzed: 12/29/2014 15:27

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	0.28	U	0.50	ug/L							
2,4,5-TP (Silvex)	0.44	U	0.50	ug/L							
2,4-D	0.27	U	0.50	ug/L							
2,4-DB	0.35	U	0.50	ug/L							
3,5-DCBA	0.36	U	0.50	ug/L							
4-Nitrophenol	0.32	U	0.50	ug/L							
Acifluorfen	0.45	U	0.50	ug/L							
Bentazon	0.22	U	0.50	ug/L							J-05
Chloramben	0.43	U	0.50	ug/L							
Dacthal	0.23	U	0.50	ug/L							
Dalapon	0.49	U	0.50	ug/L							
Dicamba	0.19	U	0.50	ug/L							
Dichlorprop	0.28	U	0.50	ug/L							
Dinoseb	0.32	U	0.50	ug/L							
MCPA	34	U	50	ug/L							
MCPP	46	U	50	ug/L							
Pentachlorophenol	0.19	U	0.50	ug/L							
Picloram	0.23	U	0.50	ug/L							
<i>2,4-DCAA</i>	<i>2.4</i>			<i>ug/L</i>	<i>2.00</i>		<i>122</i>	<i>68-139</i>			

**LCS (4L22067-BS1)**

Prepared: 12/22/2014 21:00 Analyzed: 12/29/2014 15:53

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.7		0.50	ug/L	2.00		86	70-114			
2,4-D	1.6		0.50	ug/L	2.00		80	37-129			
2,4-DB	1.6		0.50	ug/L	2.00		82	49-144			
Bentazon	1.1		0.50	ug/L	2.00		53	37-141			
Dalapon	0.70		0.50	ug/L	2.00		35	18-121			
Dicamba	1.7		0.50	ug/L	2.00		86	36-143			
Picloram	1.3		0.50	ug/L	2.00		64	36-127			
<i>2,4-DCAA</i>	<i>2.4</i>			<i>ug/L</i>	<i>2.00</i>		<i>120</i>	<i>68-139</i>			

**Matrix Spike (4L22067-MS1)**

Prepared: 12/22/2014 21:00 Analyzed: 12/29/2014 16:19

Source: A407522-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.4		0.50	ug/L	2.00	0.44 U	69	70-114			QM-07

**QUALITY CONTROL DATA**

**Chlorinated Herbicides by GC - Quality Control**

**Batch 4L22067 - EPA 3510C - Continued**

**Matrix Spike (4L22067-MS1) Continued**

Prepared: 12/22/2014 21:00 Analyzed: 12/29/2014 16:19

Source: A407522-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-D	1.3		0.50	ug/L	2.00	0.27 U	64	37-129			
2,4-DB	1.3		0.50	ug/L	2.00	0.35 U	64	49-144			
Bentazon	0.81		0.50	ug/L	2.00	0.22 U	41	37-141			
Dalapon	1.1		0.50	ug/L	2.00	0.49 U	57	18-121			
Dicamba	1.3		0.50	ug/L	2.00	0.19 U	67	36-143			
Picloram	0.80		0.50	ug/L	2.00	0.23 U	40	36-127			
2,4-DCAA	2.1			ug/L	2.00		106	68-139			

**Matrix Spike Dup (4L22067-MSD1)**

Prepared: 12/22/2014 21:00 Analyzed: 12/29/2014 16:45

Source: A407522-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.2		0.50	ug/L	2.00	0.44 U	59	70-114	15	15	QM-07
2,4-D	1.1		0.50	ug/L	2.00	0.27 U	55	37-129	16	33	
2,4-DB	1.2		0.50	ug/L	2.00	0.35 U	61	49-144	3	36	
Bentazon	0.83		0.50	ug/L	2.00	0.22 U	41	37-141	2	22	
Dalapon	1.3		0.50	ug/L	2.00	0.49 U	67	18-121	16	49	
Dicamba	1.2		0.50	ug/L	2.00	0.19 U	59	36-143	13	24	
Picloram	0.83		0.50	ug/L	2.00	0.23 U	42	36-127	4	16	
2,4-DCAA	1.4			ug/L	2.00		72	68-139			

**Batch 4L24014 - EPA 3550C**

**Blank (4L24014-BLK1)**

Prepared: 12/24/2014 11:01 Analyzed: 12/29/2014 18:56

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	0.0025	U	0.010	mg/kg wet							
2,4,5-TP (Silvex)	0.0047	U	0.010	mg/kg wet							
2,4-D	0.0099	U	0.010	mg/kg wet							
2,4-DB	0.0049	U	0.010	mg/kg wet							
3,5-DCBA	0.0022	U	0.010	mg/kg wet							
4-Nitrophenol	0.0065	U	0.010	mg/kg wet							
Acifluorfen	0.0016	U	0.010	mg/kg wet							
Bentazon	0.0045	U	0.010	mg/kg wet							J-05
Chloramben	0.0039	U	0.010	mg/kg wet							
Dacthal	0.0024	U	0.010	mg/kg wet							
Dalapon	0.0050	U	0.010	mg/kg wet							
Dicamba	0.0023	U	0.010	mg/kg wet							
Dichlorprop	0.0028	U	0.010	mg/kg wet							
Dinoseb	0.0042	U	0.010	mg/kg wet							

**QUALITY CONTROL DATA**

**Chlorinated Herbicides by GC - Quality Control**

**Batch 4L24014 - EPA 3550C - Continued**

**Blank (4L24014-BLK1) Continued**

Prepared: 12/24/2014 11:01 Analyzed: 12/29/2014 18:56

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
MCPA	0.52	U	1.0	mg/kg wet							
MCPP	0.53	U	1.0	mg/kg wet							
Pentachlorophenol	0.0025	U	0.010	mg/kg wet							
Picloram	0.0018	U	0.010	mg/kg wet							
<i>2,4-DCAA</i>	<i>0.031</i>			<i>mg/kg wet</i>	<i>0.0400</i>		<i>77</i>	<i>39-174</i>			

**LCS (4L24014-BS1)**

Prepared: 12/24/2014 11:01 Analyzed: 12/29/2014 19:22

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
2,4,5-TP (Silvex)	0.032		0.010	mg/kg wet	0.0400		79	45-135			
2,4-D	0.028		0.010	mg/kg wet	0.0400		71	35-121			
2,4-DB	0.034		0.010	mg/kg wet	0.0400		85	34-160			
Bentazon	0.022		0.010	mg/kg wet	0.0400		56	61-100			J-02
Dalapon	0.042		0.010	mg/kg wet	0.0400		106	20-136			
Dicamba	0.034		0.010	mg/kg wet	0.0400		85	47-129			
Picloram	0.018		0.010	mg/kg wet	0.0400		44	33-106			
<i>2,4-DCAA</i>	<i>0.034</i>			<i>mg/kg wet</i>	<i>0.0400</i>		<i>85</i>	<i>39-174</i>			

**Matrix Spike (4L24014-MS1)**

Prepared: 12/24/2014 11:01 Analyzed: 12/29/2014 19:48

Source: A407428-01

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
2,4,5-TP (Silvex)	0.036		0.010	mg/kg dry	0.0417	0.0049 U	85	45-135			
2,4-D	0.031		0.010	mg/kg dry	0.0417	0.010 U	75	35-121			
2,4-DB	0.037		0.010	mg/kg dry	0.0417	0.0051 U	88	34-160			
Bentazon	0.024		0.010	mg/kg dry	0.0417	0.0046 U	58	61-100			
Dalapon	0.047		0.010	mg/kg dry	0.0417	0.0052 U	113	20-136			
Dicamba	0.039		0.010	mg/kg dry	0.0417	0.0024 U	94	47-129			
Picloram	0.021		0.010	mg/kg dry	0.0417	0.0019 U	50	33-106			
<i>2,4-DCAA</i>	<i>0.040</i>			<i>mg/kg dry</i>	<i>0.0417</i>		<i>96</i>	<i>39-174</i>			

**Matrix Spike Dup (4L24014-MSD1)**

Prepared: 12/24/2014 11:01 Analyzed: 12/29/2014 20:14

Source: A407428-01

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>POL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
2,4,5-TP (Silvex)	0.031		0.010	mg/kg dry	0.0415	0.0049 U	76	45-135	12	23	
2,4-D	0.029		0.010	mg/kg dry	0.0415	0.010 U	71	35-121	6	43	
2,4-DB	0.043		0.010	mg/kg dry	0.0415	0.0051 U	104	34-160	15	47	
Bentazon	0.022		0.010	mg/kg dry	0.0415	0.0046 U	52	61-100	11	43	
Dalapon	0.041		0.010	mg/kg dry	0.0415	0.0052 U	98	20-136	15	50	
Dicamba	0.034		0.010	mg/kg dry	0.0415	0.0024 U	82	47-129	15	50	

**QUALITY CONTROL DATA**

**Chlorinated Herbicides by GC - Quality Control**

**Batch 4L24014 - EPA 3550C - Continued**

**Matrix Spike Dup (4L24014-MSD1) Continued**

Prepared: 12/24/2014 11:01 Analyzed: 12/29/2014 20:14

Source: A407428-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Picloram	0.019		0.010	mg/kg dry	0.0415	0.0019 U	45	33-106	9	37	
2,4-DCAA	0.035			mg/kg dry	0.0415		85	39-174			

**FL Petroleum Range Organics - Quality Control**

**Batch 4L26001 - EPA 3550C**

**Blank (4L26001-BLK1)**

Prepared: 12/26/2014 05:30 Analyzed: 12/29/2014 09:37

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	3.4	U	5.7	mg/kg wet							
n-Nonatriacontane	2.4			mg/kg wet	3.33		72	41-129			
o-Terphenyl	1.5			mg/kg wet	1.67		87	45-135			

**LCS (4L26001-BS1)**

Prepared: 12/26/2014 05:30 Analyzed: 12/29/2014 10:08

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	51		5.7	mg/kg wet	56.7		90	42-126			
n-Nonatriacontane	1.8			mg/kg wet	3.33		54	41-129			
o-Terphenyl	1.7			mg/kg wet	1.67		103	45-135			

**Matrix Spike (4L26001-MS1)**

Prepared: 12/26/2014 05:30 Analyzed: 12/29/2014 10:40

Source: A407379-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	70		6.9	mg/kg dry	68.3	25	66	42-126			
n-Nonatriacontane	3.9			mg/kg dry	4.02		97	41-129			
o-Terphenyl	2.0			mg/kg dry	2.01		99	45-135			

**Matrix Spike Dup (4L26001-MSD1)**

Prepared: 12/26/2014 05:30 Analyzed: 12/29/2014 11:11

Source: A407379-01

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	70		6.9	mg/kg dry	69.0	25	65	42-126	0.5	31	
n-Nonatriacontane	3.7			mg/kg dry	4.06		90	41-129			
o-Terphenyl	1.8			mg/kg dry	2.03		90	45-135			

**Metals by EPA 6000/7000 Series Methods - Quality Control**

**Batch 4L22014 - EPA 7471B**

**Blank (4L22014-BLK1)**

Prepared: 12/26/2014 14:15 Analyzed: 12/29/2014 07:35

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.00390	U	0.0100	mg/kg wet							

**QUALITY CONTROL DATA**

**Metals by EPA 6000/7000 Series Methods - Quality Control**

*Batch 4L22014 - EPA 7471B - Continued*

**LCS (4L22014-BS1)**

Prepared: 12/26/2014 14:15 Analyzed: 12/29/2014 07:38

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Mercury	0.582		0.0100	mg/kg wet	0.600		97	80-120			

**Matrix Spike (4L22014-MS1)**

Prepared: 12/26/2014 14:15 Analyzed: 12/29/2014 07:52

Source: A407528-06

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Mercury	0.548		0.00894	mg/kg dry	0.537	0.0214	98	75-125			

**Matrix Spike Dup (4L22014-MSD1)**

Prepared: 12/26/2014 14:15 Analyzed: 12/29/2014 07:55

Source: A407528-06

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Mercury	0.550		0.00894	mg/kg dry	0.537	0.0214	98	75-125	0.4	20	

**Metals by EPA 6000/7000 Series Methods - Quality Control**

*Batch 4L22003 - EPA 3050B*

**Blank (4L22003-BLK1)**

Prepared: 12/22/2014 09:13 Analyzed: 12/26/2014 10:22

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Arsenic	0.672	U	0.943	mg/kg wet							
Barium	0.0604	U	0.943	mg/kg wet							
Cadmium	0.0170	U	0.0943	mg/kg wet							
Chromium	0.0585	U	0.943	mg/kg wet							
Lead	0.208	U	0.943	mg/kg wet							
Selenium	0.679	U	3.77	mg/kg wet							
Silver	0.136	U	0.943	mg/kg wet							

**LCS (4L22003-BS1)**

Prepared: 12/22/2014 09:13 Analyzed: 12/26/2014 10:24

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Arsenic	48.2		0.980	mg/kg wet	49.0		98	80-120			
Barium	49.2		0.980	mg/kg wet	49.0		100	80-120			
Cadmium	4.90		0.0980	mg/kg wet	4.90		100	80-120			
Chromium	49.0		0.980	mg/kg wet	49.0		100	80-120			
Lead	48.3		0.980	mg/kg wet	49.0		99	80-120			
Selenium	46.3		3.92	mg/kg wet	49.0		94	80-120			
Silver	9.65		0.980	mg/kg wet	9.80		98	80-120			

**QUALITY CONTROL DATA**

**Metals by EPA 6000/7000 Series Methods - Quality Control**

*Batch 4L22003 - EPA 3050B - Continued*

**Matrix Spike (4L22003-MS1)**

Prepared: 12/22/2014 09:13 Analyzed: 12/26/2014 10:26

Source: A407528-02

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Arsenic	31.0		0.620	mg/kg dry	32.3	0.441 U	96	75-125			
Barium	37.6		0.620	mg/kg dry	32.3	5.24	100	75-125			
Cadmium	3.24		0.0620	mg/kg dry	3.23	0.0480	99	75-125			
Chromium	35.7		0.620	mg/kg dry	32.3	3.77	99	75-125			
Lead	34.7		0.620	mg/kg dry	32.3	2.90	99	75-125			
Selenium	29.2		2.48	mg/kg dry	32.3	0.446 U	91	75-125			
Silver	6.39		0.620	mg/kg dry	6.46	0.0892 U	99	75-125			

**Matrix Spike Dup (4L22003-MSD1)**

Prepared: 12/22/2014 09:13 Analyzed: 12/26/2014 10:28

Source: A407528-02

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Arsenic	29.2		0.620	mg/kg dry	30.7	0.441 U	95	75-125	6	30	
Barium	36.1		0.620	mg/kg dry	30.7	5.24	101	75-125	4	30	
Cadmium	3.08		0.0620	mg/kg dry	3.07	0.0480	99	75-125	5	30	
Chromium	34.1		0.620	mg/kg dry	30.7	3.77	99	75-125	5	30	
Lead	33.4		0.620	mg/kg dry	30.7	2.90	99	75-125	4	30	
Selenium	27.7		2.48	mg/kg dry	30.7	0.446 U	90	75-125	5	30	
Silver	6.09		0.620	mg/kg dry	6.14	0.0892 U	99	75-125	5	30	

**Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control**

*Batch 4L30003 - EPA 3005A*

**Blank (4L30003-BLK1)**

Prepared: 12/30/2014 09:00 Analyzed: 12/31/2014 11:27

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Arsenic	7.12	U	10.0	ug/L							

**LCS (4L30003-BS1)**

Prepared: 12/30/2014 09:00 Analyzed: 12/31/2014 11:30

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Arsenic	482		10.0	ug/L	500		96	80-120			

**Matrix Spike (4L30003-MS1)**

Prepared: 12/30/2014 09:00 Analyzed: 12/31/2014 11:32

Source: B405675-01

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Arsenic	485		10.0	ug/L	500	8.40	95	75-125			

**Matrix Spike Dup (4L30003-MSD1)**

Prepared: 12/30/2014 09:00 Analyzed: 12/31/2014 11:34

Source: B405675-01

<u>Analyte</u>	<u>Result</u>	<u>Flag</u>	<u>PQL</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>	<u>Notes</u>
Arsenic	490		10.0	ug/L	500	8.40	96	75-125	1	20	

## FLAGS/NOTES AND DEFINITIONS

<b>PQL</b>	PQL: Practical Quantitation Limit.
<b>B</b>	Results are based upon membrane filter colony counts that are outside the method indicated ideal range.
<b>I</b>	The reported value is between the laboratory method detection limit (MDL) and the practical quantitation limit (PQL).
<b>J</b>	Estimated value.
<b>K</b>	Off-scale low; Actual value is known to be less than the value given.
<b>L</b>	Off-scale high; Actual value is known to be greater than value given.
<b>M</b>	Presence of analyte is verified but not quantified; the actual value is less than the MRL but greater than the MDL.
<b>N</b>	Presumptive evidence of presence of material.
<b>O</b>	Sampled, but analysis lost or not performed.
<b>Q</b>	Sample exceeded the accepted holding time.
<b>T</b>	Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only and shall not be used in statistical analysis.
<b>U</b>	Indicates that the compound was analyzed for but not detected.
<b>V</b>	Indicates that the analyte was detected in both the sample and the associated method blank.
<b>Y</b>	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.
<b>Z</b>	Too many colonies were present (TNTC); the numeric value represents the filtration volume.
<b>?</b>	Data are rejected and should not be used. Some or all of the quality control data for the analyte were outside criteria, and the presence or absence of the analyte cannot be determined from the data.
<b>*</b>	Not reported due to interference.
<b>J-01</b>	Result is estimated due to positive results in the associated method blank.
<b>J-02</b>	Result is estimated due to bias in the associated laboratory control sample (LCS).
<b>J-05</b>	Result estimated, calibration verification standard failed with low bias.
<b>O-01</b>	This compound is a common laboratory contaminant.
<b>QL-02</b>	The associated laboratory control sample exhibited high bias; since the result is ND, the impact on data quality is minimal.
<b>QM-07</b>	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
<b>QM-11</b>	Precision between duplicate matrix spikes of the same sample was outside acceptance limits.
<b>QM-13</b>	Suspected matrix effects
<b>QS-03</b>	Surrogate recovery outside acceptance limits
<b>QV-01</b>	The associated continuing calibration verification standard exhibited high bias; since the result is ND, the impact on data quality is minimal.



ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

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Page \_\_\_ of \_\_\_

Client Name <b>Geotechnical and Environmental (GE002)</b>		Project Number <b>[none]</b>		Requested Analyses										Requested Turnaround Times		
Address <b>919 Lake Baldwin Lane</b>		Project Name/Desc <b>I-4 Level II</b>		%Solids, 8081B, 8082A, 8270D, 8270D PAH SIM, Ag, As, Ba, Cd, Cr, FLPRO, Hg, Pb, Se  <b>8260B (Full List VOCs)</b>  %Solids, 8081B (Pests), 8151A (Herbs)  <b>8260B (Full List VOCs), 8260B TICs</b>  <b>8081B, 8082A, 8270D PAH SIM</b>  <b>8270D, 8270D TICs</b>  <b>FLPRO</b>  <b>Ag, As, Ba, Cd, Cr, Hg, Pb, Se</b>  <b>8081B (Pesticides)</b>  <b>8151A (Herbicides)</b>											Note: Rush requests subject to acceptance by the facility  <input type="checkbox"/> Standard <input type="checkbox"/> Expedited Due ___/___/___	
City/ST/Zip <b>Orlando, FL 32814</b>		PO # / Billing Info													Lab Workorder <b>A407258</b>	
Tel <b>(407) 898-1818</b>	Fax <b>(407) 898-1837</b>	Reporting Contact <b>Richard McCormick</b>														
Sampler(s) Name, Affiliation (Print) <b>Jerry W. Governale GEC</b>		Billing Contact <b>Accounts Payable</b>														
Sampler(s) Signature 		Site Location / Time Zone														

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	Preservation (See Codes) (Combine as necessary)										Sample Comments			
							I	OI	I	HI	I	I	SI	N	I	I				
1	TMW-4	12/18/14	1542	Grab	GW	1														
2	TMW-4	12/18/14	1548	Grab	GW	1														
3	CS-9	12/18/14	1550	Comp	SO	1	✓													
4	CS-10	12/18/14	1614	Comp	SO	1	✓													
5	CS-11	12/18/14	162	Comp	SO	1	✓													
6	CS-12	12/18/14	1623	Comp	SO	1	✓													
7	SB-34 7.0'	12/18/14	1556	Grab	SO	1	✓													
8	SB-34 7.0'	12/18/14	1556	Grab	SO	1	✓													
9	SB-34 7.0'	12/18/14	1556	Grab	SO	1	✓													
10	SB-34	12/18/14	1605	Grab	SO	3														

Sample Kit Prepared By <b>JGC</b>	Date/Time <b>12/18/2014 1730</b>	Relinquished By <b>R. Cell</b>	Date/Time <b>12/18/2014 1730</b>	Received By <b>Jerry W. Governale</b>	Date/Time <b>12/10/14 1600</b>
Comments/Special Reporting Requirements		Relinquished By <b>Jerry W. Governale</b>	Date/Time <b>12/18/14 1707</b>	Received By 	Date/Time <b>12/10/14 1600</b>
		Relinquished By 	Date/Time <b>12/18/14 1707</b>	Received By 	Date/Time <b>12/10/14 1707</b>
Cooler # & Temps on Receipt <b>Lg-255 30C</b>				Condition Upon Receipt <input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable	

Matrix : GW-Groundwater SO-Soil DW-Drinking Water SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments) Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)  
 Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist