Shaw® Shaw Environmental, Inc.

LEVEL II ASSESSMENT OF POTENTIAL SOIL AND GROUNDWATER CONTAMINATION

State Road 679 (Pinellas Bayway) Over Boca Ciega Bay, from Yacht Club Lane to Bahia Del Mar Boulevard, Pinellas County, Florida

Financial Project Number: 410755-1-C2-01
Shaw Project Number: 135581

December 2, 2009

Submitted to:
Mr. Chris Wilson
Florida Department of Transportation
District 7, ISD
11201 North McKinley Drive, M.S. 7-500
Tampa, Florida 33612-6456

Submitted by:
Shaw Environmental, Inc.
725 U.S. Highway 301 South
Tampa, Florida 33619-4349

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Tampa, Florida 33619

Prepared by:_____ Date: 12-2-09
Jim Cheze
Project Manager

Approved by:_____ Date: 12-2-09
Mike Gonsalves, PG
Contract Manager

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List of Acronyms and Abbreviations

µg/L	micrograms per liter
ASTs	aboveground storage tanks
EDB	1,2-dibromoethane
EPA	US Environmental Protection Agency
FAC	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FDOT	Florida Department of Transportation
FID	flame-ionization detector
FID No.	Facility Identification Number
ft bls	feet below land surface
GCTLs	Groundwater Cleanup Target Levels
NPDES	National Pollutant Discharge Elimination System
OVA	organic vapor analyzer
PAHs	polynuclear aromatic hydrocarbons
PCBs	polychlorinated biphenyls
PEL	PEL Laboratories
ppm	parts per million
ROW	right-of-way
SCTLs	Soil Cleanup Target Levels
Shaw	Shaw Environmental, Inc.
SR	State Road
SVOAs	Semi-volatile organic aromatics
TRPH	total recoverable petroleum hydrocarbons
USTs	underground storage tanks
VOAs	volatile organic aromatics

1.0 Introduction

Shaw Environmental, Inc. (Shaw) was retained by the Florida Department of Transportation (FDOT), District 7, to conduct a Level II investigation of potential contamination at two sites along State Road (SR) 679 (Pinellas Bayway) from Yacht Club Lane to Bahia Del Mar Boulevard in Pinellas County, Florida. The Financial Project Number for this SR 679 corridor is 41075 5-1-C2-01.

SR 679 is located in the extreme southwestern portion of Pinellas County, and is a north-south two- and four-lane suburban highway. The FDOT is proposing improvements to a portion of the roadway between Yacht Club Lane, to the south, and Bahia Del Mar Boulevard, to the north. As this is a design/build project, specific details regarding the roadway construction were unavailable at the time of this investigation. The anticipated project corridor is illustrated on **Figure 1**. The SR 679 corridor consists of retail commercial, multi-family residential, and vacation rental properties. These include marine waterways, resorts, condominiums, marinas, dry dock storage, a golf course, boat sales, rental and repair facilities, gasoline stations, dry cleaners, restaurants, a bait shop, a beauty salon, real estate offices, a dentist office, and a hardware store. The FDOT provided Shaw with the December 2006 Draft Contamination Screening Evaluation Report, prepared by Nodarse and Associates, Inc. in association with PBS&J, for Shaw's review.

The following report documents the investigation, which examined existing or proposed right-of-way (ROW) adjacent to each site to determine if contaminant impact to soils or groundwater within the proposed construction area exists. Where it exists, contaminant impact to construction is described and recommendations for additional assessment or remedial action are provided.

1.1 Scope of Services

As discussed with the FDOT and provided in the Scope of Services dated April 10, 2009 (**Appendix A**), Shaw conducted a Level II assessment at two sites along the referenced SR 679 corridor in Pinellas County, Florida. The approximate locations of these sites are shown on **Figure 2**. The investigated sites are as follows:

- Site 2: 7-Eleven Food Store # 29301
- Site 4: Tierra Verde-BP

To assist the FDOT with planning for the project, Shaw performed a Level II investigation including, but not limited to, the following tasks:

- Prepared a site-specific health and safety plan to ensure a safe working environment.

- Arrange with a utility locator service to identify and adequately mark all underground utilities in the areas where subsurface investigation occurred.

- Properly decontaminated the auger tools before use and between boring locations in accordance with Florida Department of Environmental Protection (FDEP) Standard Operating Procedures DEP-SOP-01/001, February 1, 2004.

- As required, advance soil borings at the field determined locations at the sites outlined above. These boring locations may be at or adjacent to proposed structure, pipe, or utility locations; along proposed ROW lines; at suspect onsite locations; adjacent to stormwater management facilities; or in other locations as determined by the onsite geologist. Utilizing direct-push technology, each boring was advanced to at least 1 foot below the water table surface.

- Conducted soil screening and obtained and analyzed soil and groundwater samples from each potentially contaminated site. The work areas are in a suburban setting, therefore it is expected that some impervious surface, e.g. concrete and asphalt will be present at the boring locations. Also, due to right of way constraints and common above ground and below ground obstructions, mechanical sampling equipment might not be appropriate. In all locations, installation of the soil borings and wells will be completed by hand if possible.

- Identify all monitoring wells, recovery wells, and contamination related potential obstructions to construction, etc. with or adjacent to the right of way that the proposed construction project will adversely impact.

- At each boring, location, collect duplicate soil samples at each boring location at 12-inch depth intervals, to the water table surface and placed them into glass sample jars for screening with an organic vapor analyzer equipped with a flame-ionization detector in accordance with Rule 62-770.200(12), Florida Administrative Code (FAC). Screened one sample without a carbon filter, then screening the other sample with a filter to determine the fraction of methane in each sample. Record the net resultant vapor measurement as the hydrocarbon vapor concentration. Note lithology and depth to groundwater for each boring.

- As necessary, submit soil samples from each site for laboratory analyses for the Used Oil Group or consistent with the known or suspected contaminants of concern for each site. Laboratory soil sample depth and locations were field-determined and representative of soils exhibiting elevated hydrocarbon vapor concentration based on field-screening results, soil staining or odor, contact with buried solid waste, suspect spills, or other surface soil impacts.

- Construct temporary wells in the same borings from which the laboratory soil samples were collected. Purge the wells in accordance with DEP-SOP-01/001 and collected groundwater samples for laboratory analyses. Collect samples by low-flow sampling techniques and submit for analyses consistent with known or suspected COCs for each site.

- Prepared a technically concise report documenting data collected and make recommendations as a result of these tasks. This report included graphics, tables, and appendices to completely illustrate the assessment effort. The report also provides recommendations for additional evaluations, investigations, or remediation activities to be completed prior to or during construction, should they be necessary.

1.2 Previous Investigations

This Level II investigation is based on findings documented in the following report for the SR 679 corridor:

- Shaw, "Updated Level I Hazardous Material and Contamination Investigation for State Road 679 (Pinellas Bayway) Over Boca Ciega Bay, from Yacht Club Lane to Bahia Del Mar Boulevard, Pinellas County, Florida." FPN 410755-1-C2-01, August 19, 2009.

The Updated Level I investigation conducted by Shaw in 2009 evaluated potential impacts to construction and contamination sources at six locations along the corridor for SR 679 as described in the information provided by the FDOT. Of the six corridor locations investigated, one received a "**No**" risk rating, and three received a "**Low**" risk rating. Further environmental assessment was not recommended at these locations. Based on observed conditions during the site inspections, and/or information obtained from file searches, two sites received a "**Medium**" risk rating. These sites have possible contamination impacts to construction, or have confirmed contamination and impacts to construction are strongly suspected. No sites received a "**High**" risk rating. Based on the findings documented in the Updated Level I report; soil and groundwater contamination assessments were recommended prior to drainage, signalization, and utility construction at the two "**Medium**" risk rated sites. Those sites are the subjects of this investigation.

2.0 Investigation Methodology

Based on review of previous reports, two sites were determined to warrant further investigation. Level II soil and groundwater assessment for petroleum and hazardous material contamination was performed at these sites. The following sections describe the assessment methodology. At the time of this investigation, FDOT roadway construction plans were unavailable.

2.1 Soil Investigation

Soil sample collection tasks were conducted at the two sites using direct-push equipment. Soil borings were installed to between 10 and 12 feet below land surface (bls) within the right-of-way (ROW) at locations of suspected contamination at each site. Soil samples were collected at 1-foot depth intervals to the total depth of the boring. Samples were placed into 16-ounce glass jars, covered with aluminum foil, and allowed to equilibrate prior to screening the headspace with an organic vapor analyzer (OVA) equipped with a flame-ionization detector (FID) in accordance with the procedures of Rule 62-770.200(12), Florida Administrative Code (FAC). An onsite geologist logged descriptions, organic vapor concentrations, and estimated depths to water.

Confirmatory soil samples were collected at the two sites for laboratory analyses consistent with the known or suspected contaminants onsite. The laboratory samples were collected from the soil borings and sample depths at each site that reported the highest net hydrocarbon concentrations above the water table during field screening. The soil samples were labeled, manifested, packed on ice, and submitted to PEL Laboratories in Tampa, Florida (PEL), for laboratory analyses. Upon completion of the soil boring, unless a groundwater sample was being collected from the bore hole, the direct-push sample tooling was removed and the borings were backfilled and compacted with native soils. Soil analytical results are summarized in **Table 1**. Copies of the laboratory analytical reports, and chain-of-custody records are in **Appendix B**.

2.2 Groundwater Investigation

Groundwater samples were also collected from select borings at the investigated sites. The samples were collected by advancing the direct-push tooling to the specified sample depth, then the outer casing was slightly retracted exposing the stainless-steel screened tooling to the groundwater. The groundwater sample was then collected after purging the groundwater until visibly clear of fine-grained materials.

The groundwater samples were labeled, manifested, packed on ice, and submitted to PEL for laboratory analyses consistent with documented or suspected contaminates on site. Upon completion of groundwater sampling, the direct-push sample tooling was removed and the borings were backfilled and compacted with native soils. Groundwater analytical results are summarized in **Table 2**. Copies of the laboratory analytical reports and chain-of-custody records are in **Appendix B**.

3.0 Investigation Results

From July to September 2009, Shaw conducted Level II soil and groundwater investigations at two sites along the SR 679 project corridor. This section discusses results of that investigation and provides recommendations for additional assessment and/or remedial action, as necessary, based on perceived contaminant impacts to construction at each site. The findings, impacts to construction, and recommendations for each site are summarized in **Table 3**.

3.1 Site 2: 7-Eleven Food Store #29301

150 Pinellas Bayway
Tierra Verde, Florida
Impacts: None

The 7-Eleven Food Store # 29301 (Site 2) is located on the southwest corner of Madonna Boulevard and SR 679. The site operates as an active retail gasoline station and convenience store. Currently, two 10,000-gallon capacity underground storage tanks (USTs) containing unleaded gasoline are in use on the property. There is one Facility Identification Number (FID No.) (528736151) and two releases associated with the site. The Florida Department of Environmental Protection (FDEP) records indicate discharges were reported for the facility on November 29, 1988, and on February 22, 1993. Both discharges remain open with the work status listed as inactive. No data was available on OCULUS to determine the current quantity and distribution of hydrocarbon impacts. The site currently has a site priority ranking score of 11. The FDEP is currently providing funds for sites scored 56 and above. The approximate site location is shown on **Figure 2**.

3.1.1 Soil Investigation

To evaluate possible impacts in the anticipated area of work, Shaw installed three soil borings (SB-1 to SB-3) in the FDOT ROWs of Pinellas Bayway and Madonna Boulevard. The borings were advanced to approximately 10 feet below land surface (ft bls). The water table was observed at approximately 3 ft bls at the time of the assessment. The approximate soil borings and sample locations are shown on **Figure 3**.

The field organic vapor screening did not detect net hydrocarbon concentrations above 25 parts per million (ppm) in any of the borings. A mild to very strong organic odor was noted in the soil samples collected below the water table. Soil boring logs and OVA/FID data are provided in **Table 4**.

One confirmatory soil sample was collected in SB-3 at 3 ft bls. The sample was submitted to PEL and analyzed for the presence of arsenic, cadmium, chromium, lead by US Environmental Protection Agency (EPA) Method 6010; polychlorinated biphenyls (PCBs) by EPA

Method 8082; volatile organic aromatics (VOAs) by EPA Method 8260; semi-volatile organic aromatics (SVOAs) by EPA Method 8270; polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8310; and total recoverable petroleum hydrocarbons (TRPH) by FDEP Method FL-PRO.

The analytical results indicated that no analyzed constituent exceeded the applicable Soil Cleanup Target Levels (SCTLs). Acetone, cadmium, chromium, lead, benzo(g,h,i)perylene, fluoranthene, phenanthrene, pyrene, benzo(a)pyrene equivalent, benzo(a)pyrene constituent, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene were detected at concentrations below the SCTLs.

Results for detected constituents in the soil are summarized in **Table 1**. A copy of the laboratory analytical report and chain-of-custody record is in **Appendix B**.

3.1.2 Groundwater Investigation

One groundwater sample, SB-3, was collected for laboratory analyses from a temporary well installed in soil boring SB-3, the same boring from which the soil sample was collected. The direct-push sample screen was located at approximately 8 to 12 ft bls at the time of sampling. The sample was submitted to PEL and analyzed for the presence of arsenic, cadmium, chromium, lead by EPA Method 6010; 1,2-dibromoethane (EDB) by EPA Method 8011; PCBs by EPA Method 8082; VOAs by EPA Method 8260; SVOAs by EPA Method 8270; PAHs by EPA Method 8270 SIM; and TRPH by FDEP Method FL-PRO. The approximate sample location is shown on **Figure 3**.

The analytical results indicated that no analyzed constituent exceeded the Groundwater Cleanup Target Levels (GCTLs) or National Pollutant Discharge Elimination System (NPDES) permit limits. Methyl tert butyl ether (MTBE), naphthalene, 2-methylnaphthalene, and chromium were detected at concentrations below the applicable standards. Results for detected constituents in the groundwater are summarized in **Table 2**. A copy of the laboratory analytical report and chain-of-custody record is in **Appendix B**.

3.1.3 Impacts to Construction

This Level II investigation found no soil or groundwater contaminant impacts to construction. No further assessment or remedial action is recommended. If drainage alignments and/or utility adjustments occur in the construction plans, additional assessment and/or remedial action may be required. All findings and impacts to construction are summarized in **Table 3**.

3.2 Site 4: Tierra Verde-BP

128 Pinellas Bayway
Tierra Verde, Florida
Impacts: None

The Tierra Verde-BP (Site 4) is located on the northwestern corner of the intersection of SR 679 and Madonna Boulevard. The Pinellas County Property Appraiser lists the street address as 128 Pinellas Bayway, while the FDEP references the site as BP-Tierra Verde Marina at 100 Pinellas Bayway South. The site operates as a retail commercial strip center, dry storage marina, and gas station. Current tenants include the BP gas and convenience store with Subway sandwich shop, a drop-off dry cleaner, a boat sales and storage facility, a hardware store, a dentist office, a real estate office, a post office, a bait shop, a jet ski rental, a salon, and a sandwich shop. Currently the site has two storage tank fields. The northern storage field, associated with marine fueling operations, consists of two, out of service, 6,000-gallon capacity USTs that reportedly contained unleaded gasoline and vehicular diesel. The southern storage tank field, associated with vehicle fueling, consists of the one, 16,000-gallon UST containing unleaded gasoline. Three additional 500-gallon capacity unregistered aboveground storage tanks (ASTs) were also noted in the northern portion of the site during the Level I investigation. With the marina currently undergoing renovation, the tanks are believed to be used to maintain marina operations and fuel the on-site construction equipment. The AST contained off-road diesel and premium unleaded gasoline. There is one FID No. (528630856) and two petroleum discharges associated with the northern (marine) storage tank area. A July 13, 1990, release was associated with a delivery overfill and a July 21, 1993, release was associated with impacted soil discovered during a fill port upgrade. Both releases were awarded No Further Action on November 19, 1993. The approximate site location is shown on **Figure 2**.

3.2.1 Soil Investigation

To evaluate possible impacts in the anticipated area of work, Shaw installed a total of nine soil borings (SB-1 to SB-4, SB-4R, and SB-5 to SB-8) in the FDOT ROW of Pinellas Bayway. Soil borings SB-1 and SB-2 were installed near the southern UST and dispenser area, while soil borings SB-3 through SB-8 were installed near the northern UST area. The borings were advanced to between approximately 10 and 12 ft bls. The water table was observed between approximately 4 and 8 ft bls at the time of the investigation. The approximate soil borings and sample locations are shown on **Figures 3** and **4**.

The field organic vapor screening did not detect net hydrocarbon concentrations above 400 ppm in any of the borings. A slight to very strong organic odor was noted below the water table in all soil borings except SB-6, SB-7, and SB-8. Soil borings SB-6, SB-7, and SB-8 were installed in what was assumed to be non-native bridge ramp fill material. During the installation of soil boring SB-4R, a slight organic odor was also observed above the water table and a strong sulfur

odor was observed at approximately 11 to 12 ft bls. Soil boring logs and OVA/FID data are provided in **Table 5**.

Confirmatory soil samples were collected from soil boring SB-2 in the southern portion of the site at approximately 3 ft bls, and from soil borings SB-3, SB-4, and SB-5 in the northern portion of the site at approximately 5 ft bls. The samples were submitted to PEL and analyzed for the presence of arsenic, cadmium, chromium and lead by EPA Method 6010; PCBs by EPA Method 8082; VOAs by EPA Method 8260; SVOAs by EPA Method 8270; PAHs by EPA Method 8310; and TRPH by FDEP Method FL-PRO.

Analytical results indicated that no analyzed constituent exceeded the applicable SCTLs. Cadmium, chromium, benzo(g,h,i)perylene, fluoranthene, pyrene, benzo(a)pyrene equivalent, benzo(a)pyrene constituent, benzo(a)anthracene, chrysene, and indeno(1,2,3-cd)pyrene were detected at concentrations below the SCTLs in the sample from SB-2. Cadmium, chromium, and lead were detected at concentrations below the SCTLs in the sample from SB-3. Cadmium, chromium, lead, benzo(g,h,i)perylene, fluoranthene, phenanthrene, pyrene, benzo(a)pyrene equivalent, benzo(a)pyrene constituent, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene were detected in the sample from SB-4. Cadmium, chromium, lead, anthracene, benzo(g,h,i)perylene, fluoranthene, fluorene, phenanthrene, pyrene, benzo(a)pyrene equivalent, benzo(a)pyrene constituent, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene were detected in the sample from SB-5.

Results for detected constituents in the soil are summarized in **Table 1**. A copy of the laboratory analytical reports and chain-of-custody records are in **Appendix B**.

3.2.2 Groundwater Investigation

To evaluate the potential for encountering contaminated groundwater during construction, groundwater samples, SB-2, SB-3, SB-4, SB-4R, and SB-5, were collected for laboratory analyses from soil borings SB-2, SB-3, SB-4, SB-4R, and SB-5. The direct-push samples were collected with screened intervals between approximately 8 to 12 ft bls, and between approximately 10 to 14 ft bls. All samples, except the sample collected from soil boring SB-4R, were analyzed for the presence of arsenic, cadmium, chromium, lead by EPA Method 6010, for EDB by EPA Method 8011, for PCBs by EPA Method 8082, for VOAs by EPA Method 8260, for SVOAs by EPA Method 8270, for PAHs by EPA Method 8270 SIMn and for TRPH by FDEP Method FL-PRO. The sample collected from soil boring SB-4R was only analyzed for the presence of arsenic by EPA Method 6010. The approximate sample locations are shown on **Figures 3** and **4**.

Analytical results indicated that arsenic was detected at 14.8 micrograms per liter (µg/L), exceeding the 10 µg/L GCTL in the sample collected from soil boring SB-4. The sample collected from soil boring SB-4R on September 23, 2009, confirmed that arsenic was detected at 17.8 µg/L, exceeding the 10 µg/L GCTL in this area. Naphthalene, 1-methylnaphthalene, 2-methylnaphthalene, acenaphthylene, fluorene, arsenic, cadmium, and chromium were detected at concentrations below the applicable standards in the sample from SB-2. Naphthalene, cadmium, and chromium were detected at concentrations below the applicable standards in the sample from SB-3. Naphthalene, cadmium, and chromium were detected at concentrations below the applicable standards in the sample from SB-4. Naphthalene, cadmium, and chromium were detected at concentrations below the applicable standards in the sample from SB-5. Results for detected constituents in the groundwater are summarized in **Table 2**. Copies of the laboratory analytical reports and chain-of-custody records are in **Appendix B**.

3.2.3 Impacts to Construction

Because arsenic exceeded the GCTL in the area of soil borings SB-4/SB-4R, groundwater treatment may be necessary at the time of construction depending on the depth-to-water at the time of construction and construction plans. If dewatering is deemed necessary, the recovered groundwater will have to be treated prior to disposal. Prior to construction, Shaw recommends obtaining a Generic Permit to allow the discharge of treated groundwater under NPDES guidance at this location. If drainage alignments and/or utility adjustments occur in the construction plans, additional assessment and/or remedial action may be required. All findings and impacts to construction are summarized in **Table 3**.

4.0 Summary of Findings

A Level II investigation was performed between July and September 2009 at 7-Eleven Food Store # 29301 (Site 2) and Tierra Verde-BP (Site 4). The two sites were believed to present a "**Medium**" risk of potentially impacting construction activities as determined in the 2009 Updated Level I Report. This Level II investigation indicated no analyzed constituent exceeded SCTLs at the two sites. In groundwater, no analyzed constituent exceeded the GCTLs at Site 2, and in the southern portion of Site 4. In the northern portion of Site 4, arsenic exceeded the GCTL in the area of soil borings SB-4/SB-4R near the northern UST area. All findings and impacts to construction are summarized by site in **Table 3**.

If dewatering is deemed necessary during construction, the recovered groundwater should be treated prior to disposal at Site 4. Shaw recommends obtaining a Generic Permit to allow the discharge of treated water under NPDES guidance at this location. Preconstruction tasks and Level III remedial action support recommendations are provided in **Table 3**.

During this investigation, no monitoring or recovery wells were identified in the corridor ROW as potential obstructions to construction.

Shaw recommends reviewing the construction plans, once completed, for proposed drainage alignments and/or utility adjustments as additional assessment and/or remedial action may be required.

5.0 Disclaimer

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client, unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, timeframes, and project parameters indicated. Shaw is not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. Shaw does not warrant the accuracy of information supplied by others, nor the use of segregated portions of this report.

Tables

Florida Department of Transportation

TABLE 1: SOIL ANALYTICAL SUMMARY (Detected Constituents)

Level II Assessment of Potential Soil and Groundwater Contamination
SR 679 (Pinellas Bayway) Over Boca Ciega Bay, from Yacht Club Lane to Bahia Del Mar Boulevard,
Pinellas County, Florida
FPN 410755-1-C2-01 Shaw Project No. 135581

Site ID Number	Sample					VOAs by EPA 8260 (mg/kg)	Metals by EPA 6010 (mg/kg)			SVOAs by EPA 8270/8310 (mg/kg)													
	Location	Laboratory ID	Date	Depth (ft bls)	Requested Analysis	Acetone	Cadmium	Chromium	Lead	Anthracene	Benzo(g,h,i) perylene	Fluoranthene	Fluorene	Phenanthrene	Pyrene	Benzo(a)pyrene Equivalent**	Benzo(a) pyrene	Benzo(a) anthracene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene
Toxic Equivalency Factor						**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**1**	**0.1**	**0.1**	**0.01**	**0.001**	**1**	**0.1**
SCTLs - Direct Exposure Residential						**11,000**	**82**	**210**	**400**	**21,000**	**2,500**	**3,200**	**2,600**	**2,200**	**2,400**	**0.1**	**0.1**	*	*	*	*	*	*
SCTLs - Direct Exposure Commercial/Industrial						**68,000**	**1,700**	**470**	**1,400**	**300,000**	**52,000**	**59,000**	**33,000**	**36,000**	**45,000**	**0.7**	**0.7**	*	*	*	*	*	*
SCTLs - Leachability Based on Groundwater Criteria						**25**	**7.5**	**38**	**L**	**2,500**	**32,000**	**1,200**	**160**	**250**	**880**	**8**	**8**	**0.8**	**2.4**	**24**	**77**	**0.7**	**6.6**
2	SB-3	SB3@3'	07/17/09	3	Used Oil Group	0.0058	0.166	1.63	6.08	U	0.0454	0.0816	U	0.0126	0.0463	0.0464	0.0309	0.0277	0.0377	0.0136	0.0387	0.0063	0.0251
4	SB-2	SB2@3'	07/17/09	3	Used Oil Group	U	0.152	1.74	U	U	0.0052	0.0038	U	U	0.0043	0.0046	0.0035	0.0032	*0.0010*	*0.0006*	0.0056	*0.0004*	0.0027
	SB-3	SB3@5'	07/17/09	5	Used Oil Group	U	0.0786	2.81	0.538	U	U	U	U	U	U		U	U	U	U	U	U	U
	SB-4	SB4@5'	07/17/09	5	Used Oil Group	U	0.0616	1.63	4.18	U	0.0619	0.0902	U	0.0158	0.0648	0.0589	0.0394	0.0312	0.0505	0.0193	0.0466	0.0074	0.0374
	SB-5	SB5@5'	07/17/09	5	Used Oil Group	U	0.13	2.11	0.542	0.0063	0.0178	0.0488	0.0044	0.0279	0.0358	0.0206	0.0151	0.0227	0.0157	0.008	0.0234	*0.0004*	0.0114

Notes: SCTLs = Soil Cleanup Target Levels per Chapter 62-777, Table II, Florida Administrative Code
ft bls = feet below land surface
mg/kg = milligrams per kilogram
NA = not applicable
L = SCTL leachability value determined through leachate analysis
VOAs = volatile organic aromatics
SVOAs = semi-volatile organic aromatics
U = not detected above MDL
Bold values indicate Leachability SCTLs exceeded
Bold and shaded values indicate Direct Exposure SCTLs exceeded
Blank = No data or not analyzed for that specific parameter.
** = Equivalent concentration was calculated as the sum of each Polycyclic Aromatic Hydrocarbon concentration times its Toxicity Equivalency Factor. For Undetected constituents, 1/2 the reporting limit is the assumed concentration. (The Minimum Detection Limit was used.)
Italics Font: Undetected constituent. Value reported is half of the reporting limit to calculate Benzo(a)pyrene equivalent concentration.
* = denotes SCTL obtained using Benzo(a)pyrene Conversion Table

TABLE 2: GROUNDWATER ANALYTICAL SUMMARY (Detected Constituents)

Level II Assessment of Potential Soil and Groundwater Contamination
SR 679 (Pinellas Bayway) Over Boca Ciega Bay, from Yacht Club Lane to Bahia Del Mar Boulevard,
Pinellas County, Florida
FPN 410755-1-C2-01 Shaw Project No. 135581

Site ID Number	Sample					VOAs by EPA 8260 (ug/L)	SVOAs by EPA 8260/8310 (ug/L)					Metals by EPA 6010 (ug/L)		
	Location	Laboratory ID	Date	Approximate Screen Depth (ft bls)	Requested Analysis	MTBE	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthylene	Fluorene	Arsenic	Cadmium	Chromium
GCTLs						**20**	**14**	**28**	**28**	**210**	**280**	**10**	**5**	**100**
NPDES - Fresh						**NS**	**100**	**NS**	**NS**	**NS**	**NS**	**NS**	**9.3**	**11.0**
2	SB-3	SB3@8'	07/17/09	8 - 12	Used Oil Group	1.4	0.043	U	0.027	U	U	U	U	6.53
4	SB-2	SB2@8'	07/17/09	8 - 12	Used Oil Group	U	0.14	0.044	0.086	0.036	0.029	5.73	0.906	10.9
	SB-3	SB3@10'	07/17/09	10 - 14	Used Oil Group	U	0.028	U	U	U	U	U	1.11	5.1
	SB-4	SB4@10'	07/17/09	10 - 14	Used Oil Group	U	0.025	U	U	U	U	**14.8**	1.04	3.49
	SB-4R	SB-4R	09/23/09	8 - 12	Arsenic	NR	NR	NR	NR	NR	NR	**17.8**	NR	NR
	SB-5	SB5@10'	07/17/09	10 - 14	Used Oil Group	U	0.022	U	U	U	U	U	0.788	5.19

Notes: GCTLs = Groundwater Cleanup Target Levels per Chapter 62-777, Table I, Florida Administrative Code (FAC)
NPDES = National Pollutant Discharge Elimination System, Generic Permit, Table 4 Screening Values
NS = No Standard
NR = not requested
µg/L = micrograms per liter
U = Analyte not detected above MDL
Bold values indicate GCTLs exceeded
Bold and shaded values indicate NASADCs exceeded
* = GCTL represents Chapter 62-550, FAC, Maximum Contaminant Level

TABLE 3: ESSENTIAL FINDINGS SUMMARY FOR SOIL AND GROUNDWATER CONTAMINATION

Level II Assessment of Potential Soil and Groundwater Contamination
SR 679 (Pinellas Bayway) Over Boca Ciega Bay, from Yacht Club Lane to Bahia Del Mar Boulevard
Pinellas County, Florida
FPN 410755-1-C2-01 Shaw Project No. 135581

Site Identification	Field and Laboratory Results		Construction		Recommended Corrective Action
	Soil	Groundwater	Proposed	Anticipated Impacts	
Site 2: 7-Eleven Food Store No. 29301 150 Pinellas Bayway	Three soil borings were advanced to approximately 10 ft bls. Net hydrocarbon field screening results did not exceed 25 ppm in any of the soil borings. One soil sample was collected, SB-3@3 ft, and analyzed for Used Oil Group parameters. **SB-3@3 ft** compounds EXCEEDING limits: None Detected: acetone, cadmium, chromium, lead, benzo(g,h,i)perylene, fluoranthene, phenanthrene, pyrene, benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranththene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene	Groundwater was encoutnered at approximately 3 ft bls. One groundwater sample was collected, SB-3@8 to 12 ft, and analyzed for Used Oil Group. **SB-3** Compounds EXCEEDING limits: None Dected: MTBE, naphthalene, 2-methylnaphthalene, and chromium	Proposed construction activities were unknown at the time of this investigation.	No soil or groundwater impacts are expected in the construction area.	No further assessment or remedial action is recommended.
Site 4: Tierra Verde-BP 128 Pinellas Bayway	Nine soil borings were advanced to between approximately 10 and 12 ft bls. Soil borings SB-1 and SB-2 were installed in the vicinity of the southern underground storage tank area and soil borings SB-3 through SB-8 were installed in the vicinity of the northern UST area. Net hydrocarbon field screening results did not exceed 400 ppm in any of the soil borings. Soil samples were collected from SB-2**@3** ft, SB-3@ 5ft, SB-4@5 ft, and SB-5@5 ft, and analyzed for Used Oil Group parameters. **SB-2@3 ft** compounds EXCEEDING limits: None Detected: cadmium, chromium, benzo(g,h,i)perylene, fluoranthene, pyrene, benzo(a)pyrene, benzo(a)anthracene, chrysene, and indeno(1,2,3-cd)pyrene **SB-3@5 ft** Compounds EXCEEDING limits: None Detected: cadmium, chromium, and lead **SB-4@5 ft** Compounds EXCEEDING limits: None Detected: cadmium, chromium, lead, benzo(g,h,i)perylene, fluoranthene, phenanthrene, pyrene, benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene **SB-5@5 ft C**ompounds EXCEEDING limits: None Dected: cadmium, chromium, lead, anthracene, benzo(g,h,i)perylene, fluoranthene, fluorene, phenanthrene, pyrene, benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene	Groundwater was encoutered between approximately 4 and 8 ft bls. Groundwater samples were collected from SB-2 (southern UST area), and from SB-3, SB-4, SB-4R, and SB-5 (northern UST area). Sample screen intervals varied from approximately 8 to 14 ft bls. All samples were analyzed for the Used Oil Group, except SB-4R which was only analyzed for arsenic. **SB-2** Compounds EXCEEDING limits: None Detected: naphthalene, 1-methylnaphthalene, 2-methylnaphthalene, acenaphthylene, fluorene, arsenic, cadmium, and chromium **SB-3** Compounds EXCEEDING limits: None Detected: naphthalene, cadmium, and chromium **SB-4** compounds EXCEEDING limits: Arsenic 14.8 µg/L (10 µg/L GCTL) Detected: naphthalene, cadmium, and chromium **SB-4R** compounds EXCEEDING limits: Arsenic 17.8 µg/L (10 µg/L GCTL) **SB-5** compounds EXCEEDING limits: None Detected: naphthalene, cadmium, and chromium	Proposed construction activities were unknown at the time of this investigation.	No soil impacts are expected in the construction area. Arsenic impacted groundwater is expected in the area immediately adjacent to the southern USTs.	**Prior to Construction**: Prepare NOI for groundwater treatment disposal. **During Construction**: Based upon depth to water at time of construction, if dewatering is deemed necessary, then treat and dispose of impacted groundwater.

Notes: SCTLs = Soil Cleanup Target Levels per Chapter 62-777, Table II, Florida Administrative Code
GCTLs = Groundwater Cleanup Target Levels per Chapter 62-777, Table I, Florida Administrative Code (FAC)
NASADCs = Natural Attenuation Default Concentrations per Chapter 62-777, Table V, FAC
ft bls = feet below land surface
MTBE = methyl tertiary butyl ether
ppm = parts per million
UST = underground storage tank
µg/L = micrograms per liter

Florida Department of Transportation

TABLE 4: SOIL BORING AND OVA/FID LOG

Site 2: 7-Eleven Food Store No. 29301
150 Pinellas Bayway, Tierra Verde, Florida
FPN 410755-1-C2-01 Shaw Project No. 135581

Soil Boring No.	Date	Depth (ft bls)	Lithologic Description	OVA Results (ppm)		
				OVA Unfiltered	OVA Filtered	Corrected
SB-1	07/17/09	1	Dry, white, fine sand, low cohesiveness, no odor	0	-	0
		2	Moist, white, fine sand, low cohesiveness, no odor	0	-	0
		3◆	Wet, white, fine sand, low cohesiveness, no odor	0	-	0
		4	Wet, white, fine sand, low cohesiveness, no odor	0	-	0
		5	Wet, white, fine sand, low cohesiveness, no odor	0	-	0
		6	Wet, grey, fine sand, low cohesiveness, strong organic odor	0.3	0.1	0.2
		7	Wet, grey, fine sand, low cohesiveness, strong organic odor	18.5	12.5	6.0
		8	Wet, slightly sandy peat, very strong organic odor	75	71	4
		9	Wet, slightly sandy peat, very strong organic odor	555	548	7
		10	Wet, slightly sandy peat, very strong organic odor	765	758	7
SB-2	07/17/09	1	Dry, white, fine sand, low cohesiveness, no odor	0	-	0
		2	Moist, white, fine sand, low cohesiveness, no odor	0	-	0
		3◆	Wet, white, fine sand, low cohesiveness, no odor	0	-	0
		4	Wet, white, fine sand, low cohesiveness, no odor	0	-	0
		5	Wet, grey, fine sand, low cohesiveness, mild organic odor	14	12	2
		6	Wet, grey, fine sand, low cohesiveness, mild organic odor	378	370	8
		7	Wet, slightly sandy peat, strong organic odor	4,000	3,998	2
		8	Wet, slightly sandy peat, strong organic odor	4,120	4,114	6
		9	Wet, slightly sandy peat, strong organic odor	3,900	3,895	5
		10	Wet, slightly sandy peat, strong organic odor	3,800	3,790	10
SB-3	07/17/09	1	Dry, white, fine sand, low cohesiveness, no odor	0	-	0
		2	Moist, white, fine sand, low cohesiveness, no odor	0	-	0
		3◆★	Wet, white, fine sand, low cohesiveness, no odor	2,700	2,680	20
		4	Wet, white, fine sand, low cohesiveness, no odor	2,900	2,875	25
		5	Wet, grey, fine sand, low cohesiveness, strong organic odor	2,575	2,570	5
		6	Wet, grey, fine sand, low cohesiveness, strong organic odor	1,800	1,790	10
		7	Wet, slightly sandy peat, strong organic odor	2,600	2,597	3
		8	Wet, slightly sandy peat, strong organic odor	2,700	2,691	9
		9	Wet, slightly sandy peat, strong organic odor	2,100	2,098	2
		10	Wet, slightly sandy peat, strong organic odor	1,900	> 1,900	**

Notes: ◆ = groundwater encountered at this depth
★ = confirmatory laboratory soil sample collected
ft bls= feet below land surface
OVA = organic vapor analyzer
ppm = parts per million
** = denotes sample in which methane corrected reading exceeded uncorrected reading

Florida Department of Transportation

TABLE 5: SOIL BORING AND OVA/FID LOG

Site 4: Tierra Verde BP
128 Pinellas Bayway, Tierra Verde, Florida
FPN 410755-1-C2-01 Shaw Project No. 135581

Soil Boring No.	Date	Depth (ft bls)	Lithologic Description	OVA Results (ppm)		
				OVA Unfiltered	OVA Filtered	Corrected
SB-1	07/17/09	1	Dry, white, fine sand, low cohesiveness, no odor	0	-	0
		2	Moist, white, fine sand, low cohesiveness, no odor	0	-	0
		3	Moist, white, fine sand, low cohesiveness, no odor	0	-	0
		4◆	Wet, white, fine sand, low cohesiveness, no odor	0	-	0
		5	Wet, white, fine sand, low cohesiveness, no odor	3.7	3.1	0.6
		6	Wet, grey, fine sand, low cohesiveness, strong organic odor	74	68	6
		7	Wet, grey, fine sand, low cohesiveness, strong organic odor	677	669	8
		8	Wet, slightly sandy peat, very strong organic odor	3,400	> 3,400	**
		9	Wet, slightly sandy peat, very strong organic odor	3,800	> 3,800	**
		10	Wet, slightly sandy peat, very strong organic odor	3,100	> 3,100	**
SB-2	07/17/09	1	Moist, white, fine sand, low cohesiveness, no odor	0	-	0
		2	Moist, white, fine sand, low cohesiveness, no odor	0	-	0
		3★	Moist, white, fine sand, low cohesiveness, no odor	0.8	0.1	0.7
		4◆	Wet, white, fine sand, low cohesiveness, no odor	0	-	0
		5	Wet, white, fine sand, low cohesiveness, no odor	0	-	0
		6	Wet, grey, fine sand, low cohesiveness, strong organic odor	16.9	11.4	5.5
		7	Wet, grey, fine sand, low cohesiveness, strong organic odor	938	930	8
		8	Wet, slightly sandy peat, strong organic odor	3,600	> 3,600	**
		9	Wet, slightly sandy peat, strong organic odor	3,900	>3,900	**
		10	Wet, slightly sandy peat, strong organic odor	4,000	> 4,000	**
SB-3	07/17/09	1	Dry, white, fine sand, low cohesiveness, no odor	0	-	0
		2	Moist, white, fine sand, low cohesiveness, no odor	0	-	0
		3	Moist, white, fine sand, low cohesiveness, no odor	0	-	0
		4	Moist, white, fine sand, low cohesiveness, no odor	0	-	0
		5◆★	Wet, white, fine sand, low cohesiveness, no odor	0	-	0
		6	Wet, grey, fine sand, low cohesiveness, strong organic odor	0	-	0
		7	Wet, grey, fine sand, low cohesiveness, strong organic odor	0	-	0
		8	Wet, grey, fine sand, low cohesiveness, strong organic odor	0	-	0
		9	Wet, grey, fine sand, low cohesiveness, strong organic odor	9.3	6.1	3.2
		10	Wet, grey, fine sand, low cohesiveness, strong organic odor	12.0	9.0	3.0
SB-4	07/17/09	1	Dry, white, fine sand, low cohesiveness, no odor	0	-	0
		2	Moist, white, fine sand, low cohesiveness, no odor	0	-	0
		3	Moist, white, fine sand, low cohesiveness, no odor	0	-	0
		4	Moist, white, fine sand, low cohesiveness, no odor	0	-	0
		5◆★	Wet, white, fine sand, low cohesiveness, no odor	0	-	0
		6	Wet, white, fine sand, low cohesiveness, no odor	0	-	0
		7	Wet, white, fine sand, low cohesiveness, no odor	0	-	0
		8	Wet, white, fine sand, low cohesiveness, no odor	0	-	0
		9	Wet, white, fine sand, low cohesiveness, no odor	0	-	0
		10	Wet, grey, fine sand, low cohesiveness, moderate organic odor	1.1	0.9	0.2

Florida Department of Transportation

TABLE 5: SOIL BORING AND OVA/FID LOG

Site 4: Tierra Verde BP
128 Pinellas Bayway, Tierra Verde, Florida
FPN 410755-1-C2-01 Shaw Project No. 135581

Soil Boring No.	Date	Depth (ft bls)	Lithologic Description	OVA Results (ppm)		
				OVA Unfiltered	OVA Filtered	Corrected
SB-4R	09/23/09	1	Dry, grey, shell rich sand, low cohesiveness, slight organic odor	0	-	0
		2	Dry, grey, shell rich sand, low cohesiveness, slight organic odor	0	-	0
		3	Dry, grey, shell rich sand, low cohesiveness, slight organic odor	0	-	0
		4	Dry, grey, shell rich sand, low cohesiveness, slight organic odor	0	-	0
		5	Dry, grey, shell rich sand, low cohesiveness, slight organic odor	0	-	0
		6	Dry, grey, shell rich sand, low cohesiveness, slight organic odor	0	-	0
		7	Moist, grey, shell rich sand, low cohesiveness, slight organic odor	0	-	0
		8◆	Wet, grey, shell rich sand, low cohesiveness, slight organic odor	13.0	12.8	0.2
		9	Wet, grey, shell rich sand, low cohesiveness, slight organic odor	215	175	40
		10	Wet, grey, fine sand, low cohesiveness, moderate organic odor	2,800	2,400	400
		11	Wet, dark brown, shell rich silty sand, low cohesiveness, strong sulfur odor	3,200	3,100	100
		12	Wet, dark brown, shell rich silty sand, low cohesiveness, strong sulfur odor	3,000	2,850	150
SB-5	07/17/09	1	Dry, white, fine sand, low cohesiveness, no odor	0	-	0
		2	Moist, white, fine sand, low cohesiveness, no odor	0	-	0
		3	Moist, white, fine sand, low cohesiveness, no odor	0	-	0
		4	Moist, white, fine sand, low cohesiveness, no odor	0	-	0
		5◆✶	Wet, white, fine sand, low cohesiveness, no odor	0	-	0
		6	Wet, white, fine sand, low cohesiveness, no odor	0	-	0
		7	Wet, white, fine sand, low cohesiveness, no odor	0	-	0
		8	Wet, white, fine sand, low cohesiveness, no odor	0	-	0
		9	Wet, white, fine sand, low cohesiveness, no odor	0	-	0
		10	Wet, grey, fine sand, low cohesiveness, moderate organic odor	4.3	1.1	3.2
SB-6	07/17/09	1	Dry, tan, sand, low cohesiveness, no odor	0	-	0
		2	Moist, tan, sand, low cohesiveness, no odor	0	-	0
		3	Moist, tan, sand, low cohesiveness, no odor	0	-	0
		4	Moist, tan, sand, low cohesiveness, no odor	0	-	0
		5◆	Wet, tan, sand, low cohesiveness, no odor	0	-	0
		6	Wet, tan, sand, low cohesiveness, no odor	0	-	0
		7	Wet, tan, sand, low cohesiveness, no odor	0	-	0
		8	Wet, tan, sand, low cohesiveness, no odor	0	-	0
		9	Wet, tan, sand, low cohesiveness, no odor	0	-	0
		10	Wet, tan, sand, low cohesiveness, no odor	0	-	0
SB-7	07/17/09	1	Dry, tan, sand, low cohesiveness, no odor	0	-	0
		2	Moist, tan, sand, low cohesiveness, no odor	0	-	0
		3	Moist, tan, sand, low cohesiveness, no odor	0	-	0
		4	Moist, tan, sand, low cohesiveness, no odor	0	-	0
		5◆	Wet, tan, sand, low cohesiveness, no odor	0	-	0
		6	Wet, tan, sand, low cohesiveness, no odor	0	-	0
		7	Wet, tan, sand, low cohesiveness, no odor	0	-	0
		8	Wet, tan, sand, low cohesiveness, no odor	0	-	0
		9	Wet, tan, sand, low cohesiveness, no odor	0	-	0
		10	Wet, tan, sand, low cohesiveness, no odor	0	-	0

Florida Department of Transportation

TABLE 5: SOIL BORING AND OVA/FID LOG

Site 4: Tierra Verde BP
128 Pinellas Bayway, Tierra Verde, Florida
FPN 410755-1-C2-01 Shaw Project No. 135581

Soil Boring No.	Date	Depth (ft bls)	Lithologic Description	OVA Results (ppm)		
				OVA Unfiltered	OVA Filtered	Corrected
SB-8	07/17/09	1	Dry, tan, sand, low cohesiveness, no odor	0	-	0
		2	Moist, tan, sand, low cohesiveness, no odor	0	-	0
		3	Moist, tan, sand, low cohesiveness, no odor	0	-	0
		4	Moist, tan, sand, low cohesiveness, no odor	0	-	0
		5◆	Wet, tan, sand, low cohesiveness, no odor	0	-	0
		6	Wet, tan, sand, low cohesiveness, no odor	0	-	0
		7	Wet, tan, sand, low cohesiveness, no odor	0	-	0
		8	Wet, tan, sand, low cohesiveness, no odor	0	-	0
		9	Wet, tan, sand, low cohesiveness, no odor	0	-	0
		10	Wet, tan, sand, low cohesiveness, no odor	0	-	0

Notes: ◆ = groundwater encountered at this depth
★ = confirmatory laboratory soil sample collected
ft bls= feet below land surface
OVA = organic vapor analyzer
ppm = parts per million
** = denotes sample in which methane corrected reading exceeded uncorrected reading

Figures

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SDJF	APPROVED BY	
8-19-09		

DRAWING NUMBER 135581-A1

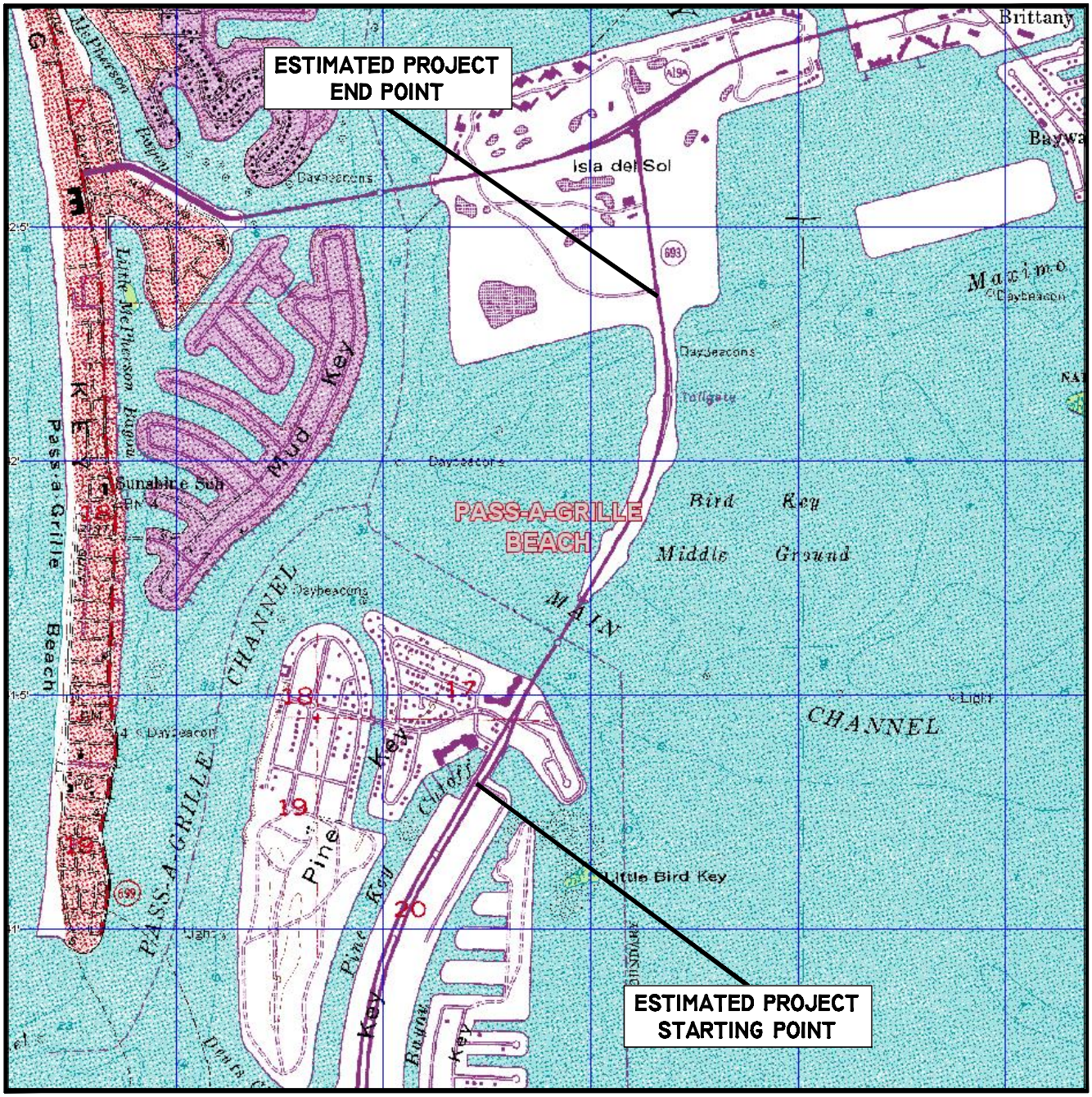


FIGURE 1

PROJECT LOCATION MAP
STATE ROAD 679 (PINELLAS BAYWAY)
OVER BOCA CIEGA BAY
PINELLAS COUNTY, FLORIDA

PREPARED FOR

FLORIDA DEPARTMENT OF TRANSPORTATION
TALLAHASSEE, FLORIDA

N

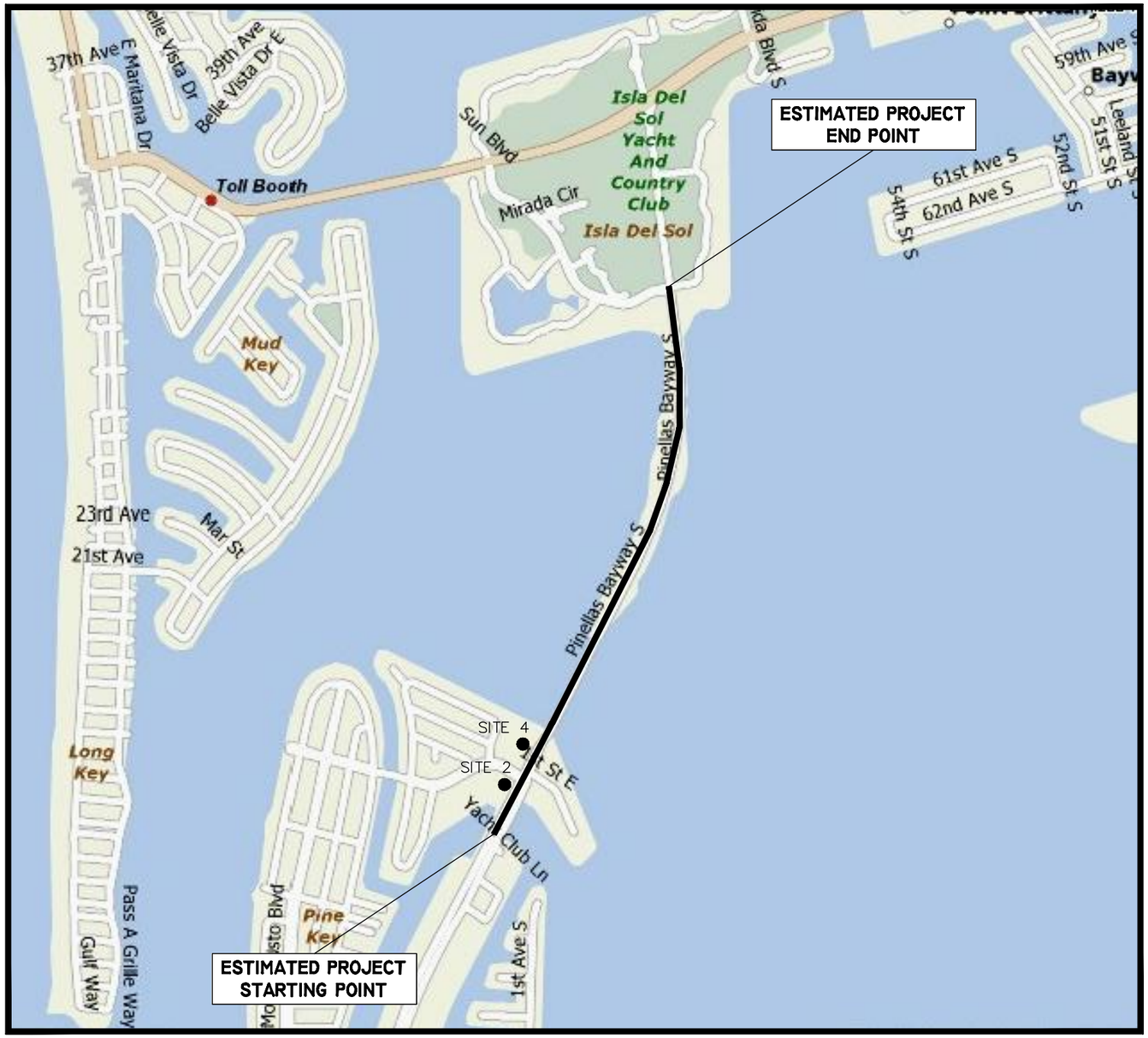
REFERENCE:

7.5 MINUTE U.S.G.S. TOPOGRAPHIC QUADRANGLE MAP, PASS-A-GRILLE BEACH, FLORIDA, DATED 1999.

SCALE
0 2,000 4,000 FEET

Shaw Shaw Environmental, Inc.

DRAWN BY | SDJF | 11-11-09
CHECKED BY | APPROVED BY
DRAWING NUMBER 135581-B5



LEGEND:

ESTIMATED PROJECT CORRIDOR

SITE 4 ● APPROXIMATE LOCATION and ID NUMBER

SCALE
0 1,300 2,600 FEET

FIGURE 2

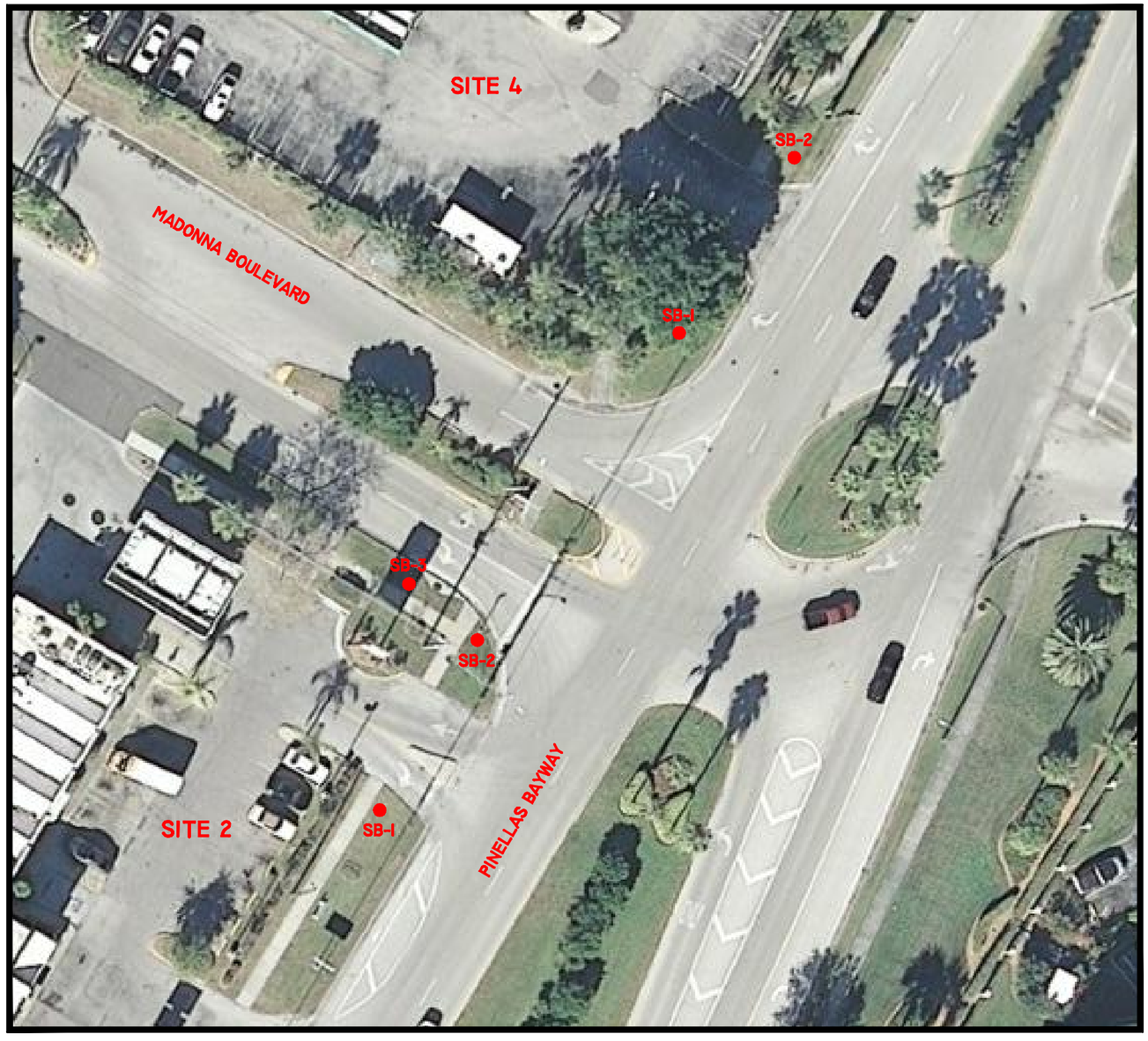
CORRIDOR AND SITE LOCATION MAP
STATE ROAD 679 (PINELLAS BAYWAY)
OVER BOCA CIEGA BAY
PINELLAS COUNTY, FLORIDA

PREPARED FOR

FLORIDA DEPARTMENT OF TRANSPORTATION
TALLAHASSEE, FLORIDA

Shaw Shaw Environmental, Inc.

DRAWN BY	DATE	CHECKED BY		DRAWING NUMBER
	SDJF			135581-B3
	11-3-09	APPROVED BY		



LEGEND:

● SOIL BORING LOCATION

SCALE

0 40 80 FEET

FIGURE 3

SOIL BORING LOCATION MAP
SITE 2 (7-ELEVEN STORE No. 29301)
130 PINELLAS BAYWAY
SITE 4 (TIERRA VERDE BP - SOUTHERN UST AREA)
128 PINELLAS BAYWAY
STATE ROAD 679 (PINELLAS BAYWAY)
OVER BOCA CIEGA BAY
PINELLAS COUNTY, FLORIDA

PREPARED FOR

FLORIDA DEPARTMENT OF TRANSPORTATION TALLAHASSEE, FLORIDA

Shaw Shaw Environmental, Inc.

DRAWN BY	CHECKED BY			DRAWING NUMBER
SDJF				135581-B4
11-3-09	APPROVED BY			

LEGEND:

● SOIL BORING LOCATION

SCALE

0 40 80 FEET

FIGURE 4

SOIL BORING LOCATION MAP
SITE 4 (TIERRA VERDE BP - NORTHERN UST AREA)
128 PINELLAS BAYWAY
STATE ROAD 679 (PINELLAS BAYWAY)
OVER BOCA CIEGA BAY
PINELLAS COUNTY, FLORIDA

PREPARED FOR

FLORIDA DEPARTMENT OF TRANSPORTATION TALLAHASSEE, FLORIDA

Shaw Shaw Environmental, Inc.

APPENDIX A
SCOPE OF SERVICES

ATTACHMENT "A"

SCOPE OF SERVICES

FOR

LEVEL I AND LEVEL II HAZARDOUS MATERIALS

AND

CONTAMINATION INVESTIGATION

FOR

S.R. 679 (PINELLAS BAYWAY) OVER BOCA CIEGA BAY
PINELLAS COUNTY, FLORIDA

FINANCIAL PROJECT NUMBERS
410755-1-C2-01

FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT 7

April 10, 2009

I. DESCRIPTION:

Consultant services are required for a Level I and Level II hazardous materials and contamination investigation for S.R. 679 (Pinellas Bayway) over Boca Ciega Bay in Pinellas County, Florida.

II. OBJECTIVES:

The Consultant shall investigate each site and evaluate adjacent properties for potential hazardous material and contamination problems. The elements of work shall include, but are not limited to, the following: public record searches; review of aerial photographs; onsite field review and verification; assignment of site rankings per Part 2, Chapter 22, of the *Project Development and Environmental (PD&E) Guidelines Manual*; and preparation of a technically concise report to document services performed.

III. PROVISIONS FOR WORK:

All work shall be performed in accordance with the applicable rules and regulations of the Florida Department of Environmental Protection and all other pertinent state and federal authorities.

IV. SERVICES:

A. Level I:

1. Perform site reconnaissance to verify acquired data for each site, including a careful examination of sites along the subject corridor to identify potential hazardous waste and pollutants associated with the proposed transportation improvement project per Part 2, Chapter 22 of the *Project Development and Environmental (PD&E) Guidelines Manual*. Shaw will pay particular attention to site storage and handling for those sites with changed land use and previously unrecorded or undocumented problems.

2. Perform public record searches to identify the current tenants and legal owners as well as past tenants and the associated land usage/business activities. Coordinate this data with the appropriate aerial survey.

3. Conduct state and local environmental and health agency visits and review state, local, and federal databases to secure lists and other information about the past and present users of hazardous materials; generators of hazardous waste, pollutants, industrial waste, and solid waste; agricultural operations involving pesticides, herbicides, and fertilizers; agricultural livestock

operations and potential "cattle dipping vat" operations; and storage tanks (above or below ground), as well as other potential soil and groundwater contaminants. Report problems with their usage (Notices of Violation, non-compliance documents, Consent Orders, etc.).

4. For each site, rank the potential for encountering hazardous waste or pollutants as a result of the transportation improvement project and the associated land purchases and construction activities using Part 2, Chapter 22 of the *PD&E Guidelines Manual.*

5. Submit a Level I Report to the department. The report will be technically concise and will include data collected, analyses, and recommendations made as a result of the Level I investigation. The report will include an executive summary, a narrative, tables, graphics, and appendices (site profiles, violation summaries, correspondence, etc.) to completely illustrate the screening effort. The report will discuss in detail the medium and high risk sites identified during the Level I investigation, and will provide recommendations for additional evaluations or investigations to be completed prior to the right-of-way acquisition phase and construction. Consultant will submit one (1) draft report to the department. Upon approval of the draft report by the department, Shaw will submit one (1) hard copy and three (3) electronic media compact disk copies of the report to the department.

B. Based on this information provided by the FDOT and as identified in the Level I, Consultant will as part of the Level II identify, evaluate, and prepare recommendations for the FDOT concerning potential hazardous waste and pollutants associated with the proposed transportation improvement project per Part 2, Chapter 22 of the PD&E Guidelines Manual. The services will include, but will not be limited to, the following tasks:

1. Prepare a site-specific health and safety plan to ensure a safe working environment.

2. Arrange with a utility locator service to identify and adequately mark all underground utilities in the areas where subsurface investigation will occur.

3. Properly decontaminate the auger tools before use and between boring locations in accordance with Florida Department of Environmental Protection (FDEP) Standard Operation Procedures (DEP-SOP-01/001), February 1, 2004.

4. As required, advance soil borings at the field determined locations at the sites outlined above. These boring locations may be at or adjacent to proposed structure, pipe, or utility locations; along proposed ROW lines; at suspect onsite locations; adjacent to stormwater management facilities; or in other

locations as determined by the onsite geologist. Utilizing direct-push technology, advance each boring to one (1) foot below the water table surface.

5. Conduct soil screening and obtain and analyze soil and groundwater samples from each potentially contaminated site. The work areas are in a suburban setting, therefore it is expected that some impervious surfaces, e.g. concrete and asphalt, will be present at the boring locations. Also, due to right of way constraints and common above-ground and below-ground obstructions, mechanical sampling equipment might not be appropriate. In all locations, installation of the soil borings and wells will be completed by hand, if possible.

6. Identify all monitoring wells, recovery wells, and contamination related potential obstructions to construction, etc., with or adjacent to the right of way that the proposed construction project will adversely impact.

7. At each boring location, collect duplicate soil samples at 12-inch depth intervals to the water table surface and place them into glass sample jars for screening with an organic vapor analyzer equipped with a flame-ionization detector in accordance with Rule 62-770.200(12), Florida Administrative Code. First, screen one sample without a carbon filter, then screen the other sample with a filter to determine the fraction of methane in each sample. Record the net resultant vapor measurement as the hydrocarbon vapor concentration. Note the lithology and depth to groundwater for each boring.

8. As necessary, submit soil samples from each site for laboratory analyses for the Used Oil Group or consistent with the known or suspected contaminants of concern (COCs) for each site. Laboratory soil sample depth and location will be field-determined and representative of soils exhibiting elevated hydrocarbon vapor concentration based on field-screening results, soil staining or odor, contact with buried solid waste, suspect spills, or other surface soil impacts.

9. Construct temporary wells in the same borings from which the laboratory soil samples were collected. Purge the wells in accordance with DEP-SOP-01/001 and collect groundwater samples for laboratory analyses. The samples will be collected by low-flow sampling techniques and submitted for analyses consistent with known or suspected COCs for each site.

10. Prepare a technically concise report documenting data collected and recommendations made as a result of these tasks. This report will include graphics, tables, and appendices to completely illustrate the assessment effort. The report will also provide recommendations for additional evaluations, investigations, or remediation activities to be completed prior to or during construction, should they be necessary.

V. DEPARTMENT RESPONSIBILITIES:

The FDOT may opt to provide any liaison function necessary to accomplish the work. Any questions concerning this project should be directed to Dale Hanson, telephone number (813) 975-6482.

VI. LENGTH OF SERVICES:

All tasks will be completed upon project completion.

APPENDIX B
LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY RECORDS

PEL a division of Spectrum Analytical, Inc.
featuring HANIBAL TECHNOLOGY

Florida Department of Health #E84207
June 30, 2009

CWA - Extractable Organics, General Chemistry,Metals,
Pesticides-herbicides-PCB's, Volatile Organics
RCRA/CERCLS - Extractable Organics, General Chemistry, Metals
Pesticides-Herbicides-PCB's, Volatile Organics

- CERTIFICATE OF ANALYSIS -

Report Date: 08/04/2009

To: Jim Cheze
Shaw Group
725 U.S. Highway 301 South
Tampa, FL 33612

W 813-612-3655

PROJECT ID: Pinellas Bayway Site #2
WORK ORDER: 2513131 Revised Report
DATE RECEIVED: Monday, July 20, 2009

Project Notes: Revised to include the full 8270 list for the soils.

(†): Short Hold Time Analysis Date

Samples reported on dry weight basis
All test results in this report pertain only to the samples as submitted.

PEL Contact: Mark Gudnason / extension: 242

8405 Benjamin Road, Suite A• Tampa, Florida 33634
813-888-9507• FAX: 800-480-6435
Website: www.pelab.com

PEL a division of Spectrum Analytical, Inc.
featuring Hanibal Technology

DATA QUALIFIER CODES

State of Florida, Department of Environmental Protection and
Department of Health _Rehabilitative Services / NELAC

I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

J Estimated value; value not accurate. This code shall be used in the following instances:

1. Surrogate recovery limits have been exceeded.
2. No known quality control criteria exits for the component.
3. The reported value did not meet the established quality control criteria for either precision or accuracy but falls within the NELAC marginal exceedance range.

3M. The reported value did not meet the established quality control criteria for either precision or accuracy and falls beyond the NELAC range for marginal exceedances.

3R. The RPD for the LCSD exceeds the laboratory established control limits.

4. The sample matrix interfered with the ability to make an accurate determination.
5. The data is questionable because of improper laboratory or field protocols (e.g. composite sample was collected instead of a grab sample).

L Off-scale high. Actual value is known to be greater than the value given. To be used when the concentration of the analyte is above the acceptable limit for quantitation (exceeds the linear range of the highest calibration standard) and the calibration curve is known to exhibit a negative deflection.

Q Sample held beyond acceptable holding time. This code shall be used if the value is derived from a sample that was prepared or analyzed after the approved holding time restrictions for the sample preparation or analysis.

U Indicates that the compound was analyzed for but not detected above the method detection limit (MDL).

V Indicates that the analyte was detected in both the sample and the associated method blank. Note: The value in the blank shall not be subtracted from associated samples.

Y The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.

Note: There was not sufficient sample volume to perform a matrix spike/duplicate for the following method(s).
: 8260, 8270_SIM, FL-PRO
A Blank and Laboratory Control sample was analyzed to ensure the method performed within acceptable guidelines.

RL - Reporing Limit. The PEL lowest Practical Quanititation Limit (PQL), defined by the lowest point in the calibration curve.

CASE NARRATIVE
METALS

PEL Lab Reference No./SDG: 2513131

Client: Shaw Group

I. RECEIPT

Exceptions encountered upon receipt are addressed in the Sample Receipt Confirmation Report, included with the Chain-of-Custody documentation, or communication included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHOD

Analyses were performed according to the PEL, a Division of Spectrum Analytical, Standard Operating Procedures and EPA Method 6010B for ICP metals.

IV. PREPARATION

Soil samples were prepared according to PEL Laboratory's Standard Operating Procedures and EPA Method 3050B.
Water samples were prepared according to PEL Laboratory's Standard Operating Procedures and EPA Method 3010A.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

1. Calibration Blanks:

All acceptance criteria were met.

2. Method Blanks:

All acceptance criteria were met.

C. Spikes:

1. Laboratory Control Spikes (LCS):

An LCS/LCSD set was analyzed.
All percent recovery and relative percent difference (RPD) criteria were met.

2. Post Digestion Spike:

All acceptance criteria were met.

CASE NARRATIVE
METALS

PEL Lab Reference No./SDG: 2513131

Client: Shaw Group

3. **Matrix Spike/Matrix Spike Duplicate Samples (MS/SD):**

No spikes requested by client.

D. Duplicate:

No sample duplicates are reported with this method. (Spike duplicates are referenced above in section C. Spikes.)

E. Serial Dilution:

All acceptance criteria were met.

F. ICP Interference Check Samples:

All acceptance criteria were met.

G. Samples:

Sample analysis proceeded normally.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and PEL, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

Linda Lee M. Gale

SIGNED: **DATE:** 07/24/2009

CASE NARRATIVE
EDB GC SEMIVOLATILE ORGANIC

PEL Lab Reference No./SDG: 2513131

Client: Shaw Group

I. RECEIPT

Exceptions encountered upon receipt are addressed in the Sample Receipt Confirmation Report, included with the Chain-of-Custody documentation, or communication included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

SW846/EPA 8011.

IV. PREPARATION

Water samples were prepared by SW846/EPA 8011 for semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

An LCS/LCSD set was analyzed.
All percent recovery and relative percent difference (RPD) criteria were met.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

No spikes requested by client.

E. Internal Standards:

This method does not require the use of internal standards.

CASE NARRATIVE
EDB GC SEMIVOLATILE ORGANIC

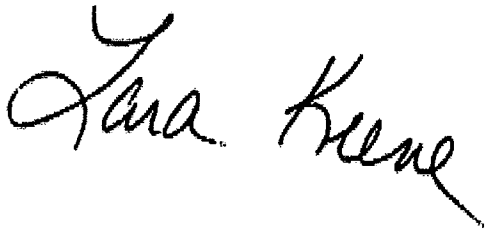
PEL Lab Reference No./SDG: 2513131

Client: Shaw Group

F. Samples:

Sample analysis proceeded normally.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and PEL, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.



SIGNED: **DATE:** 07/27/2009

CASE NARRATIVE
POLYCHLORINATED BIPHENYLS (PCB) SEMIVOLATILE ORGANIC

PEL Lab Reference No./SDG: 2513131

Client: Shaw Group

I. RECEIPT

Exceptions encountered upon receipt are addressed in the Sample Receipt Confirmation Report, included with the Chain-of-Custody documentation, or communication included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

EPA SW846 8082 for Aroclor analysis.

IV. PREPARATION

Soil samples were prepared by SW846 EPA 3545 for 8082 semi-volatile analysis.
Water samples were prepared by SW846 EPA 3510 for 8082 semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.
Closing CCV CCV742673 had recoveries above QC limits. Since there were no compounds found above RL in the associated samples, it can be assumed that had they been in the samples they would have been detected. Acceptance criteria were met and no further action was taken.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

PCB 1016 and PCB 1260 were used as the spiking solution for all QC spikes.

1. Laboratory Control Spikes (LCS)

An LCS/LCSD set was analyzed.
All percent recovery and relative percent difference (RPD) criteria were met.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

CASE NARRATIVE
POLYCHLORINATED BIPHENYLS (PCB) SEMIVOLATILE ORGANIC

PEL Lab Reference No./SDG: 2513131

Client: Shaw Group

No spikes requested by client.

E. Internal Standards:

This method does not require the use of internal standards.

F. Samples:

Sample analysis proceeded normally.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and PEL, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

SIGNED: Tara Kreme **DATE:** 07/27/2009

CASE NARRATIVE
GC/MS VOLATILE ORGANICS

PEL Lab Reference No./SDG: 2513131

Client: Shaw Group

I. RECEIPT

Exceptions encountered upon receipt are addressed in the Sample Receipt Confirmation Report, included with the Chain-of-Custody documentation, or communication included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

EPA 8260B/SW846

IV. PREPARATION

Soil samples were prepared by SW846/5035 for EPA8260B volatiles analysis. All aspects of sample preparation proceeded without exception.

Water samples were prepared by SW846/5030 for EPA8260B volatiles analysis. All aspects of sample preparation proceeded without exception.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met with the exception of:

LCS 072009LCS22 was analyzed with the soil samples on 07/20/09. The following analyte(s) were recovered above criteria: 2-Hexanone at 131 % with criteria of (72-127), Acrolein at 113 % with criteria of (70-111). No further action was required, as ME criteria were met.

CASE NARRATIVE
GC/MS VOLATILE ORGANICS

PEL Lab Reference No./SDG: 2513131

Client: Shaw Group

LCS 072009LCS22D was analyzed with the soil samples on 07/20/09. The following analyte(s) were recovered above criteria: Acrolein at 116 % with criteria of (70-111). The following analyte(s) exceeded RPD criteria: Bromoform at 20.9 % with criteria of (13). No further action was required, as ME criteria were met.

LCS 0721LCS52 was analyzed with the water samples on 07/21/09. The following analyte(s) were recovered above criteria: Chloroethane at 154 % with criteria of (72-135). The following analyte(s) had marginal exceedance limit failures: Chloroethane at 154 % with criteria of (61.5-145.5). No further action was taken, since the high range was exceeded and the LCSD met ME criteria for this analyte.

LCS 0721LCS52D was analyzed with the water samples on 07/21/09. The following analyte(s) were recovered above criteria: Chloroethane at 144 % with criteria of (72-135) No further action was required, as ME criteria was met.

Samples coded accordingly.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

No spikes requested by client.

E. Internal Standards:

All acceptance criteria were met.

F. Samples:

Sample analysis proceeded normally. Client specified reporting limits were used.

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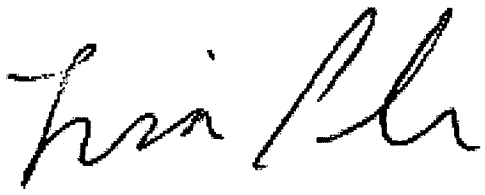
SIGNED: 

DATE: 07/23/2009

CASE NARRATIVE
GC/MS SEMIVOLATILE ORGANICS

PEL Lab Reference No./SDG: 2513131

Client: Shaw Group

I. RECEIPT

Exceptions encountered upon receipt are addressed in the Sample Receipt Confirmation Report, included with the Chain-of-Custody documentation, or communication included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

EPA SW846 8270

IV. PREPARATION

Soil samples were prepared by SW846 EPA 3545 for 8270 semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met. PEL does not analyze a low calibration standard at the requested RL for all analytes. The low calibration standard is 270 ug/kg for the following analyte(s): 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2-Methylphenol (o-Cresol), 3-Nitroaniline, 4-Nitroaniline, Bis(2-Chloroethoxy)methane, Chrysene, Hexachlorobenzene, N-Nitrosodimethylamine, N-Nitrosodiphenylamine. The low calibration standard is 670 ug/kg for the following analyte(s): Benzoic acid, Pentachlorophenol.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met with the exception of:
LCS 688LCS was analyzed with the soil samples extracted on 07/30/09. The following analyte(s) were recovered below criteria: 2,4-Dinitrophenol at 28.3 % with criteria of (29-130), 2,4-Dinitrotoluene at 73.4 % with criteria of (77-115), 2,6-Dinitrotoluene at 71.9 % with criteria of (73-110), 2-Methylnaphthalene at 70 % with criteria of (72-

PEL Lab Reference No./SDG: 2513131

Client: Shaw Group

105), 2-Nitroaniline at 70.4 % with criteria of (71-120), 4-Nitroaniline at 65.2 % with criteria of (70-115), Benzyl alcohol at 62.5 % with criteria of (64-125), Fluoranthene at 68.2 % with criteria of (74-115). The following analyte(s) had marginal exceedance limit failures: 3-Nitroaniline at 60.7 % with criteria of (70.3-115.7), Dibenzofuran at 68.5 % with criteria of (70-110), Hexachlorobenzene at 69.3 % with criteria of (69.8-127.2).

Samples coded accordingly.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

No spikes requested by client.

E. Internal Standards:

All acceptance criteria were met.

F. Samples:

Sample analysis proceeded normally.

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SIGNED: **DATE:** 08/03/2009

CASE NARRATIVE
GC/MS SEMIVOLATILE ORGANICS

PEL Lab Reference No./SDG: 2513131

Client: Shaw Group

I. RECEIPT

Exceptions encountered upon receipt are addressed in the Sample Receipt Confirmation Report, included with the Chain-of-Custody documentation, or communication included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

EPA SW846 8270C.

IV. PREPARATION

Water samples were prepared by SW846 EPA 3510 for 8270 semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

No spikes requested by client.

E. Internal Standards:

All acceptance criteria were met.

CASE NARRATIVE
GC/MS SEMIVOLATILE ORGANICS

PEL Lab Reference No./SDG: 2513131

Client: Shaw Group

F. Samples:

Sample analysis proceeded normally.

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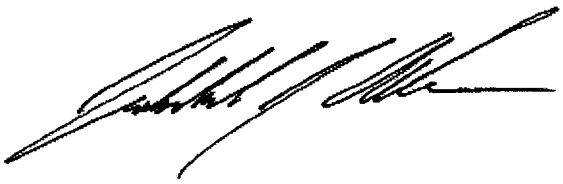
SIGNED:  **DATE:** 07/26/2009

CASE NARRATIVE
HPLC SEMIVOLATILE ORGANICS

PEL Lab Reference No./SDG: 2513131

Client: Shaw Group

I. RECEIPT

Exceptions encountered upon receipt are addressed in the Sample Receipt Confirmation Report, included with the Chain-of-Custody documentation, or communication included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

SW846/EPA 8310

IV. PREPARATION

Soil samples were prepared by SW846, EPA Method 3550 for 8310 semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. **Laboratory Control Spikes (LCS)**

   All acceptance criteria were met.

2. **Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)**

   No spikes requested by client.

E. Internal Standards:

This method does not require the use of internal standards.

CASE NARRATIVE
HPLC SEMIVOLATILE ORGANICS

PEL Lab Reference No./SDG: 2513131

Client: Shaw Group

F. Samples:

Sample analysis proceeded normally.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and PEL, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

SIGNED: Tina Keene **DATE:** 07/26/2009

CASE NARRATIVE
FLORIDA PETROLEUM RANGE ORGANICS (FL PRO) SEMIVOLATILE ORGANICS

PEL Lab Reference No./SDG: 2513131

Client: Shaw Group

I. RECEIPT

Exceptions encountered upon receipt are addressed in the Sample Receipt Confirmation Report, included with the Chain-of-Custody documentation, or communication included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

Florida DEP/FL PRO

IV. PREPARATION

Soil samples were prepared by SW846 EPA 3550 for FL PRO semi-volatile analysis.
Water samples were prepared by SW846 EPA 3510 for FL PRO semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met with the exception of:
Sample 6654LCS was recovered above criteria for the following surrogate(s): C39 Surrogate at 122 % with criteria of (60-118). Since surrogate C39 was just above acceptable criteria, and since surrogate o-terphenyl met all criteria, no further action was taken.

Samples coded accordingly.

D. Spikes:

1. Laboratory Control Spikes (LCS)

An LCS/LCSD set was analyzed.
All percent recovery and relative percent difference (RPD) criteria were met.

CASE NARRATIVE
FLORIDA PETROLEUM RANGE ORGANICS (FL PRO) SEMIVOLATILE ORGANICS

PEL Lab Reference No./SDG: 2513131

Client: Shaw Group

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

No spikes requested by client.

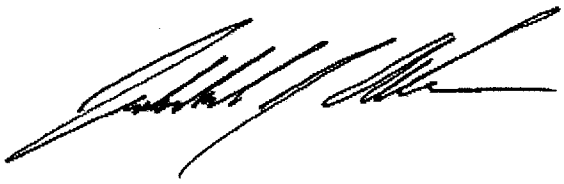
E. Internal Standards:

This method does not require the use of internal standards.

F. Samples:

Sample analysis proceeded normally.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and PEL, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

SIGNED:  **DATE:** 07/27/2009

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131

PROJECT ID: Pinellas Bayway Site #2

PEL Lab# : 251313101

Client ID : SB 3at 3ft

Matrix : SO

Collection Information:

Sample Date: 7/17/2009 9:30:00 AM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Arsenic	6010	0.567 U	07/22/2009 2:11	07/21/2009 12:10	mg/Kg	0.567	1.13	1
Cadmium	6010	0.166 I	07/22/2009 2:11	07/21/2009 12:10	mg/Kg	0.0567	0.567	1
Chromium	6010	**1.63**	07/22/2009 2:11	07/21/2009 12:10	mg/Kg	0.181	0.567	1
Lead	6010	**6.08**	07/22/2009 2:11	07/21/2009 12:10	mg/Kg	0.385	0.907	1
Aroclor-1016	8082	3.6 U	07/22/2009 6:39	07/21/2009 17:21	ug/Kg	3.6	25	1
Aroclor-1221	8082	6.2 U	07/22/2009 6:39	07/21/2009 17:21	ug/Kg	6.2	25	1
Aroclor-1232	8082	17 U	07/22/2009 6:39	07/21/2009 17:21	ug/Kg	17	25	1
Aroclor-1242	8082	6.2 U	07/22/2009 6:39	07/21/2009 17:21	ug/Kg	6.2	25	1
Aroclor-1248	8082	9.3 U	07/22/2009 6:39	07/21/2009 17:21	ug/Kg	9.3	25	1
Aroclor-1254	8082	2.7 U	07/22/2009 6:39	07/21/2009 17:21	ug/Kg	2.7	25	1
Aroclor-1260	8082	4 U	07/22/2009 6:39	07/21/2009 17:21	ug/Kg	4	25	1
Decachlorobiphenyl(SURR)	8082	94.8	07/22/2009 6:39	07/21/2009 17:21	%	4	(33 - 140)	1
1,1,1,2-Tetrachloroethane	8260	0.77 U	07/20/2009 12:21		ug/kg	0.77	2.1	1
1,1,1-Trichloroethane	8260	0.56 U	07/20/2009 12:21		ug/kg	0.56	2.1	1
1,1,2,2-Tetrachloroethane	8260	0.63 U	07/20/2009 12:21		ug/kg	0.63	2.1	1
1,1,2-Trichloroethane	8260	0.85 U	07/20/2009 12:21		ug/kg	0.85	2.1	1
1,1-Dichloroethane	8260	0.72 U	07/20/2009 12:21		ug/kg	0.72	2.1	1
1,1-Dichloroethene	8260	0.69 U	07/20/2009 12:21		ug/kg	0.69	2.1	1
1,1-Dichloropropene	8260	0.5 U	07/20/2009 12:21		ug/kg	0.5	2.1	1
1,2,3-Trichlorobenzene	8260	0.51 U	07/20/2009 12:21		ug/kg	0.51	2.1	1
1,2,3-Trichloropropane	8260	0.92 U	07/20/2009 12:21		ug/kg	0.92	2.1	1
1,2,4-Trichlorobenzene	8260	0.61 U	07/20/2009 12:21		ug/kg	0.61	2.1	1
1,2,4-Trimethylbenzene	8260	0.34 U	07/20/2009 12:21		ug/kg	0.34	2.1	1
1,2-Dibromo-3-chloropropane	8260	2.3 U	07/20/2009 12:21		ug/kg	2.3	10.4	1
1,2-Dibromoethane(EDB)	8260	1 U	07/20/2009 12:21		ug/kg	1	2.1	1
1,2-Dichlorobenzene	8260	0.5 U	07/20/2009 12:21		ug/kg	0.5	2.1	1
1,2-Dichloroethane	8260	0.52 U	07/20/2009 12:21		ug/kg	0.52	2.1	1
1,2-Dichloropropane	8260	0.97 U	07/20/2009 12:21		ug/kg	0.97	2.1	1
1,3,5-Trimethylbenzene	8260	0.43 U	07/20/2009 12:21		ug/kg	0.43	2.1	1
1,3-Dichlorobenzene	8260	0.55 U	07/20/2009 12:21		ug/kg	0.55	2.1	1
1,3-Dichloropropane	8260	0.56 U	07/20/2009 12:21		ug/kg	0.56	2.1	1
1,4-Dichlorobenzene	8260	0.56 U	07/20/2009 12:21		ug/kg	0.56	2.1	1
2,2-Dichloropropane	8260	0.64 U	07/20/2009 12:21		ug/kg	0.64	2.1	1
2-Butanone	8260	1.8 U	07/20/2009 12:21		ug/kg	1.8	10.4	1
2-Chlorotoluene	8260	0.47 U	07/20/2009 12:21		ug/kg	0.47	2.1	1
2-Hexanone	8260	1.7 J3U	07/20/2009 12:21		ug/kg	1.7	10.4	1
4-Chlorotoluene	8260	0.38 U	07/20/2009 12:21		ug/kg	0.38	2.1	1
4-Isopropyltoluene	8260	0.98 U	07/20/2009 12:21		ug/kg	0.98	2.1	1
4-Methyl-2-pentanone	8260	1.2 U	07/20/2009 12:21		ug/kg	1.2	10.4	1
Acetone	8260	5.8 I	07/20/2009 12:21		ug/kg	5	10.4	1
Acrolein	8260	4.7 J3U	07/20/2009 12:21		ug/kg	4.7	26.1	1
Acrylonitrile	8260	3.6 U	07/20/2009 12:21		ug/kg	3.6	5.2	1
Benzene	8260	0.44 U	07/20/2009 12:21		ug/kg	0.44	2.1	1
Bromobenzene	8260	0.71 U	07/20/2009 12:21		ug/kg	0.71	2.1	1
Bromochloromethane	8260	0.79 U	07/20/2009 12:21		ug/kg	0.79	2.1	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131
PROJECT ID: Pinellas Bayway Site #2

PEL Lab# : 251313101
Client ID : SB 3at 3ft
Matrix : SO

Collection Information:
Sample Date: 7/17/2009 9:30:00 AM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Bromodichloromethane	8260	0.45 U	07/20/2009 12:21		ug/kg	0.45	2.1	1
Bromoform	8260	2.1 J3RU	07/20/2009 12:21		ug/kg	2.1	5.2	1
Bromomethane	8260	1 U	07/20/2009 12:21		ug/kg	1	2.1	1
Carbon disulfide	8260	0.52 U	07/20/2009 12:21		ug/kg	0.52	2.1	1
Carbon tetrachloride	8260	0.51 U	07/20/2009 12:21		ug/kg	0.51	2.1	1
Chlorobenzene	8260	0.56 U	07/20/2009 12:21		ug/kg	0.56	2.1	1
Chloroethane	8260	1.2 U	07/20/2009 12:21		ug/kg	1.2	5.2	1
Chloroform	8260	0.54 U	07/20/2009 12:21		ug/kg	0.54	2.1	1
Chloromethane	8260	0.9 U	07/20/2009 12:21		ug/kg	0.9	2.1	1
cis-1,2-Dichloroethene	8260	1.2 U	07/20/2009 12:21		ug/kg	1.2	2.1	1
cis-1,3-Dichloropropene	8260	0.46 U	07/20/2009 12:21		ug/kg	0.46	2.1	1
Dibromochloromethane	8260	0.68 U	07/20/2009 12:21		ug/kg	0.68	2.1	1
Dibromomethane	8260	0.91 U	07/20/2009 12:21		ug/kg	0.91	2.1	1
Dichlorodifluoromethane	8260	0.69 U	07/20/2009 12:21		ug/kg	0.69	2.1	1
Ethylbenzene	8260	0.79 U	07/20/2009 12:21		ug/kg	0.79	2.1	1
Hexachlorobutadiene	8260	0.86 U	07/20/2009 12:21		ug/kg	0.86	4.2	1
Isopropylbenzene (Cumene)	8260	0.82 U	07/20/2009 12:21		ug/kg	0.82	2.1	1
Methyl iodide	8260	0.48 U	07/20/2009 12:21		ug/kg	0.48	2.1	1
Methylene chloride	8260	1.2 U	07/20/2009 12:21		ug/kg	1.2	5.2	1
MTBE	8260	0.58 U	07/20/2009 12:21		ug/kg	0.58	2.1	1
Naphthalene	8260	0.71 U	07/20/2009 12:21		ug/kg	0.71	2.1	1
n-Butylbenzene	8260	0.48 U	07/20/2009 12:21		ug/kg	0.48	2.1	1
n-Propylbenzene	8260	0.42 U	07/20/2009 12:21		ug/kg	0.42	2.1	1
o-Xylene	8260	0.54 U	07/20/2009 12:21		ug/kg	0.54	2.1	1
p,m-Xylene	8260	0.68 U	07/20/2009 12:21		ug/kg	0.68	4.2	1
sec-Butylbenzene	8260	0.63 U	07/20/2009 12:21		ug/kg	0.63	2.1	1
Styrene	8260	0.45 U	07/20/2009 12:21		ug/kg	0.45	2.1	1
tert-Butylbenzene	8260	0.69 U	07/20/2009 12:21		ug/kg	0.69	2.1	1
Tetrachloroethene	8260	0.54 U	07/20/2009 12:21		ug/kg	0.54	2.1	1
Toluene	8260	0.91 U	07/20/2009 12:21		ug/kg	0.91	2.1	1
trans-1,2-Dichloroethene	8260	0.79 U	07/20/2009 12:21		ug/kg	0.79	2.1	1
trans-1,3-Dichloropropene	8260	0.58 U	07/20/2009 12:21		ug/kg	0.58	2.1	1
Trichloroethene	8260	0.96 U	07/20/2009 12:21		ug/kg	0.96	2.1	1
Trichlorofluoromethane	8260	0.66 U	07/20/2009 12:21		ug/kg	0.66	2.1	1
Vinyl acetate	8260	1.1 U	07/20/2009 12:21		ug/kg	1.1	5.2	1
Vinyl chloride	8260	0.99 U	07/20/2009 12:21		ug/kg	0.99	2.1	1
1,2-Dichloroethane-d4(SURR)	8260	102	07/20/2009 12:21		%	0.99	(71 - 124)	1
4-Bromofluorobenzene(SURR)	8260	104	07/20/2009 12:21		%	0.99	(54 - 126)	1
Dibromofluoromethane(SURR)	8260	94.4	07/20/2009 12:21		%	0.99	(68 - 119)	1
Toluene d8(SURR)	8260	97.4	07/20/2009 12:21		%	0.99	(59 - 127)	1
1,2,4-Trichlorobenzene	8270	48.9 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	48.9	228	1
1,2-Dichlorobenzene	8270	48.1 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	48.1	228	1
1,3-Dichlorobenzene	8270	51.5 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	51.5	228	1
1,4-Dichlorobenzene	8270	53.2 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	53.2	228	1
1-Methylnaphthalene	8270	52.3 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	52.3	228	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131
PROJECT ID: Pinellas Bayway Site #2

PEL Lab# : 251313101
Client ID : SB 3at 3ft
Matrix : SO

Collection Information:
Sample Date: 7/17/2009 9:30:00 AM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
2,2-Oxybis(1-chloropropane)	8270	186 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	186	228	1
2,4,5-Trichlorophenol	8270	62.4 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	62.4	225	1
2,4,6-Trichlorophenol	8270	57.4 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	57.4	225	1
2,4-Dichlorophenol	8270	63.3 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	63.3	225	1
2,4-Dimethylphenol	8270	48.1 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	48.1	225	1
2,4-Dinitrophenol	8270	186 J3U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	186	1130	1
2,4-Dinitrotoluene	8270	41.3 J3U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	41.3	228	1
2,6-Dinitrotoluene	8270	42.2 J3U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	42.2	228	1
2-Chloronaphthalene	8270	56.3 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	56.3	228	1
2-Chlorophenol	8270	58.2 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	58.2	228	1
2-Methyl-4,6-dinitrophenol	8270	224 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	224	228	1
2-Methylnaphthalene	8270	48.9 J3U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	48.9	228	1
2-Methylphenol (o-Cresol)	8270	81 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	81	225	1
2-Nitroaniline	8270	48.1 J3MU	07/31/2009 20:54	07/30/2009 13:51	ug/kg	48.1	228	1
2-Nitrophenol	8270	60.8 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	60.8	228	1
3,3'-Dichlorobenzidine	8270	49.8 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	49.8	228	1
3-Nitroaniline	8270	67.5 J3U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	67.5	225	1
4-Bromophenyl-phenylether	8270	41.3 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	41.3	228	1
4-Chloro-3-methylphenol	8270	47.2 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	47.2	228	1
4-Chloroaniline	8270	53.2 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	53.2	228	1
4-Chlorophenyl-phenylether	8270	43 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	43	228	1
4-Methylphenol	8270	49.8 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	49.8	228	1
4-Nitroaniline	8270	74.2 J3U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	74.2	225	1
4-Nitrophenol	8270	44.7 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	44.7	563	1
Acenaphthene	8270	41.3 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	41.3	228	1
Acenaphthylene	8270	46.4 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	46.4	228	1
Aniline	8270	65 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	65	228	1
Anthracene	8270	50.6 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	50.6	228	1
Benzidine	8270	506 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	506	565	1
Benzo(a)anthracene	8270	48.1 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	48.1	228	1
Benzo(a)pyrene	8270	36.3 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	36.3	228	1
Benzo(b)fluoranthene	8270	53.2 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	53.2	228	1
Benzo(g,h,i)perylene	8270	33.8 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	33.8	228	1
Benzo(k)fluoranthene	8270	48.1 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	48.1	228	1
Benzoic acid	8270	228 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	228	563	1
Benzyl alcohol	8270	77.6 J3U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	77.6	563	1
Bis(2-Chloroethoxy)methane	8270	48.1 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	48.1	225	1
Bis(2-Chloroethyl)ether	8270	56.5 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	56.5	228	1
bis(2-ethylhexyl)phthalate	8270	70 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	70	228	1
Butylbenzylphthalate	8270	53.2 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	53.2	228	1
Chrysene	8270	28.7 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	28.7	225	1
Dibenz(a,h)anthracene	8270	34.6 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	34.6	228	1
Dibenzofuran	8270	45.6 J3MU	07/31/2009 20:54	07/30/2009 13:51	ug/kg	45.6	228	1
Diethylphthalate	8270	43 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	43	228	1
Dimethyl-phthalate	8270	49.8 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	49.8	228	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131

PROJECT ID: Pinellas Bayway Site #2

PEL Lab# : 251313101

Client ID : SB 3at 3ft

Matrix : SO

Collection Information:

Sample Date: 7/17/2009 9:30:00 AM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Di-n-butylphthalate	8270	37.1 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	37.1	228	1
Di-n-octylphthalate	8270	48.9 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	48.9	228	1
Fluoranthene	8270	40.5 J3U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	40.5	228	1
Fluorene	8270	43 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	43	228	1
Hexachlorobenzene	8270	44.7 J3MU	07/31/2009 20:54	07/30/2009 13:51	ug/kg	44.7	225	1
Hexachlorobutadiene	8270	48.9 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	48.9	228	1
Hexachlorocyclopentadiene	8270	33.8 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	33.8	563	1
Hexachloroethane	8270	42.2 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	42.2	228	1
Indeno(1,2,3-cd)pyrene	8270	43.9 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	43.9	228	1
Isophorone	8270	49.8 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	49.8	228	1
Naphthalene	8270	54 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	54	228	1
Nitrobenzene	8270	50.6 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	50.6	228	1
N-Nitrosodimethylamine	8270	59.9 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	59.9	225	1
N-Nitroso-di-n-propylamine	8270	51.5 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	51.5	228	1
N-Nitrosodiphenylamine	8270	53.2 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	53.2	225	1
Pentachlorophenol	8270	112 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	112	228	1
Phenanthrene	8270	47.2 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	47.2	228	1
Phenol	8270	54.8 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	54.8	1120	1
Pyrene	8270	77.6 U	07/31/2009 20:54	07/30/2009 13:51	ug/kg	77.6	228	1
2,4,6-Tribromophenol(SURR)	8270	79.2	07/31/2009 20:54	07/30/2009 13:51	%	77.6	(19 - 122)	1
2-Fluorobiphenyl(SURR)	8270	73.7	07/31/2009 20:54	07/30/2009 13:51	%	77.6	(30 - 115)	1
2-Fluorophenol(SURR)	8270	79.3	07/31/2009 20:54	07/30/2009 13:51	%	77.6	(25 - 121)	1
Nitrobenzene-d5(SURR)	8270	82.6	07/31/2009 20:54	07/30/2009 13:51	%	77.6	(23 - 120)	1
Phenol-d5(SURR)	8270	72.8	07/31/2009 20:54	07/30/2009 13:51	%	77.6	(24 - 113)	1
p-Terphenyl-d14(SURR)	8270	70.5	07/31/2009 20:54	07/30/2009 13:51	%	77.6	(18 - 137)	1
1-Methylnaphthalene	8310	3.4 U	07/24/2009 2:02	07/23/2009 13:51	ug/kg	3.4	8.3	1
2-Methylnaphthalene	8310	3.2 U	07/24/2009 2:02	07/23/2009 13:51	ug/kg	3.2	8.3	1
Acenaphthene	8310	0.91 U	07/24/2009 2:02	07/23/2009 13:51	ug/kg	0.91	8.3	1
Acenaphthylene	8310	0.99 U	07/24/2009 2:02	07/23/2009 13:51	ug/kg	0.99	8.3	1
Anthracene	8310	0.91 U	07/24/2009 2:02	07/23/2009 13:51	ug/kg	0.91	8.3	1
Benzo(a)anthracene	8310	**27.7**	07/24/2009 2:02	07/23/2009 13:51	ug/kg	1.6	8.3	1
Benzo(a)pyrene	8310	**30.9**	07/24/2009 2:02	07/23/2009 13:51	ug/kg	2.7	8.3	1
Benzo(b)fluoranthene	8310	**37.7**	07/24/2009 2:02	07/23/2009 13:51	ug/kg	2.2	8.3	1
Benzo(g,h,i)perylene	8310	**45.4**	07/24/2009 2:02	07/23/2009 13:51	ug/kg	2.2	8.3	1
Benzo(k)fluoranthene	8310	**13.6**	07/24/2009 2:02	07/23/2009 13:51	ug/kg	1.2	8.3	1
Chrysene	8310	**38.7**	07/24/2009 2:02	07/23/2009 13:51	ug/kg	2.3	8.3	1
Dibenz(a,h)anthracene	8310	6.3 I	07/24/2009 2:02	07/23/2009 13:51	ug/kg	0.91	8.3	1
Fluoranthene	8310	**81.6**	07/24/2009 2:02	07/23/2009 13:51	ug/kg	1.6	8.3	1
Fluorene	8310	1.6 U	07/24/2009 2:02	07/23/2009 13:51	ug/kg	1.6	8.3	1
Indeno(1,2,3-cd)pyrene	8310	**25.1**	07/24/2009 2:02	07/23/2009 13:51	ug/kg	0.91	8.3	1
Naphthalene	8310	2.2 U	07/24/2009 2:02	07/23/2009 13:51	ug/kg	2.2	8.3	1
Phenanthrene	8310	**12.6**	07/24/2009 2:02	07/23/2009 13:51	ug/kg	1.4	8.3	1
Pyrene	8310	**46.3**	07/24/2009 2:02	07/23/2009 13:51	ug/kg	2.5	8.3	1
p-Terphenyl-d14(SURR)	8310	90.3	07/24/2009 2:02	07/23/2009 13:51	%	2.5	(17 - 119)	1
TPH	FL-PRO	6.8 U	07/27/2009 3:25	07/26/2009 15:23	mg/Kg	6.8	11.9	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131
PROJECT ID: Pinellas Bayway Site #2

PEL Lab# : 251313101
Client ID : SB 3at 3ft
Matrix : SO

Collection Information:
Sample Date: 7/17/2009 9:30:00 AM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
C39 Surrogate(SURR)	FL-PRO	102	07/27/2009 3:25	07/26/2009 15:23	%	6.8	(60 - 118)	1
o-Terphenyl Surrogate(SURR)	FL-PRO	91.4	07/27/2009 3:25	07/26/2009 15:23	%	6.8	(62 - 109)	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131
PROJECT ID: Pinellas Bayway Site #2

PEL Lab# : 251313102
Client ID : SB 3at 8ft
Matrix : GW

Collection Information:
Sample Date: 7/17/2009 10:00:00 AM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Arsenic	6010	3.31 U	07/22/2009 16:33	07/21/2009 13:19	ug/L	3.31	10	1
Cadmium	6010	0.72 U	07/22/2009 16:33	07/21/2009 13:19	ug/L	0.72	5	1
Chromium	6010	6.53 I	07/22/2009 16:33	07/21/2009 13:19	ug/L	0.43	10	1
Lead	6010	3.7 U	07/22/2009 16:33	07/21/2009 13:19	ug/L	3.7	15	1
1,2-Dibromoethane(EDB)	8011	0.00596 U	07/23/2009 19:39	07/22/2009 15:36	ug/L	0.006	0.0196	1
1,1,2,2-Tetrachloroethane(SURR	8011	112	07/23/2009 19:39	07/22/2009 15:36	%	0.006	(70 - 130)	1
Aroclor-1016	8082	0.36 U	07/24/2009 2:29	07/23/2009 12:45	ug/L	0.36	0.51	1
Aroclor-1221	8082	0.44 U	07/24/2009 2:29	07/23/2009 12:45	ug/L	0.44	0.51	1
Aroclor-1232	8082	0.2 U	07/24/2009 2:29	07/23/2009 12:45	ug/L	0.2	0.51	1
Aroclor-1242	8082	0.31 U	07/24/2009 2:29	07/23/2009 12:45	ug/L	0.31	0.51	1
Aroclor-1248	8082	0.13 U	07/24/2009 2:29	07/23/2009 12:45	ug/L	0.13	0.51	1
Aroclor-1254	8082	0.12 U	07/24/2009 2:29	07/23/2009 12:45	ug/L	0.12	0.51	1
Aroclor-1260	8082	0.25 U	07/24/2009 2:29	07/23/2009 12:45	ug/L	0.25	0.51	1
Decachlorobiphenyl(SURR)	8082	100	07/24/2009 2:29	07/23/2009 12:45	%	0.25	(16 - 116)	1
1,1,1,2-Tetrachloroethane	8260	0.25 U	07/22/2009 0:08		ug/l	0.25	1	1
1,1,1-Trichloroethane	8260	0.19 U	07/22/2009 0:08		ug/l	0.19	1	1
1,1,2,2-Tetrachloroethane	8260	0.33 U	07/22/2009 0:08		ug/l	0.33	1	1
1,1,2-Trichloroethane	8260	0.28 U	07/22/2009 0:08		ug/l	0.28	1	1
1,1-Dichloroethane	8260	0.28 U	07/22/2009 0:08		ug/l	0.28	1	1
1,1-Dichloroethene	8260	0.24 U	07/22/2009 0:08		ug/l	0.24	1	1
1,1-Dichloropropene	8260	0.19 U	07/22/2009 0:08		ug/l	0.19	1	1
1,2,3-Trichlorobenzene	8260	0.61 U	07/22/2009 0:08		ug/l	0.61	1	1
1,2,3-Trichloropropane	8260	0.76 U	07/22/2009 0:08		ug/l	0.76	1	1
1,2,4-Trichlorobenzene	8260	0.5 U	07/22/2009 0:08		ug/l	0.5	1	1
1,2,4-Trimethylbenzene	8260	0.17 U	07/22/2009 0:08		ug/l	0.17	1	1
1,2-Dibromo-3-chloropropane	8260	1.4 U	07/22/2009 0:08		ug/l	1.4	2	1
1,2-Dibromoethane(EDB)	8260	0.33 U	07/22/2009 0:08		ug/l	0.33	1	1
1,2-Dichlorobenzene	8260	0.26 U	07/22/2009 0:08		ug/l	0.26	1	1
1,2-Dichloroethane	8260	0.4 U	07/22/2009 0:08		ug/l	0.4	1	1
1,2-Dichloropropane	8260	0.27 U	07/22/2009 0:08		ug/l	0.27	1	1
1,3,5-Trimethylbenzene	8260	0.22 U	07/22/2009 0:08		ug/l	0.22	1	1
1,3-Dichlorobenzene	8260	0.2 U	07/22/2009 0:08		ug/l	0.2	1	1
1,3-Dichloropropane	8260	0.19 U	07/22/2009 0:08		ug/l	0.19	1	1
1,4-Dichlorobenzene	8260	0.24 U	07/22/2009 0:08		ug/l	0.24	1	1
2,2-Dichloropropane	8260	0.32 U	07/22/2009 0:08		ug/l	0.32	1	1
2-Butanone	8260	4 U	07/22/2009 0:08		ug/l	4	4	1
2-Chlorotoluene	8260	0.32 U	07/22/2009 0:08		ug/l	0.32	1	1
2-Hexanone	8260	0.95 U	07/22/2009 0:08		ug/l	0.95	5	1
4-Chlorotoluene	8260	0.12 U	07/22/2009 0:08		ug/l	0.12	1	1
4-Isopropyltoluene	8260	0.24 U	07/22/2009 0:08		ug/l	0.24	1	1
4-Methyl-2-pentanone	8260	0.61 U	07/22/2009 0:08		ug/l	0.61	5	1
Acetone	8260	5.6 U	07/22/2009 0:08		ug/l	5.6	10	1
Acrolein	8260	3.3 U	07/22/2009 0:08		ug/l	3.3	10	1
Acrylonitrile	8260	1.3 U	07/22/2009 0:08		ug/l	1.3	4	1
Benzene	8260	0.16 U	07/22/2009 0:08		ug/l	0.16	1	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131

PROJECT ID: Pinellas Bayway Site #2

PEL Lab# : 251313102
Client ID : SB 3at 8ft
Matrix : GW

Collection Information:
Sample Date: 7/17/2009 10:00:00 AM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Bromobenzene	8260	0.27 U	07/22/2009 0:08		ug/l	0.27	1	1
Bromochloromethane	8260	0.38 U	07/22/2009 0:08		ug/l	0.38	1	1
Bromodichloromethane	8260	0.15 U	07/22/2009 0:08		ug/l	0.15	1	1
Bromoethane	8260	0.45 U	07/22/2009 0:08		ug/l	0.45	1	1
Bromoform	8260	0.36 U	07/22/2009 0:08		ug/l	0.36	1	1
Bromomethane	8260	0.76 U	07/22/2009 0:08		ug/l	0.76	1	1
Carbon disulfide	8260	0.29 U	07/22/2009 0:08		ug/l	0.29	1	1
Carbon tetrachloride	8260	0.33 U	07/22/2009 0:08		ug/l	0.33	1	1
Chlorobenzene	8260	0.18 U	07/22/2009 0:08		ug/l	0.18	1	1
Chloroethane	8260	0.99 J3MU	07/22/2009 0:08		ug/l	0.99	1	1
Chloroform	8260	0.29 U	07/22/2009 0:08		ug/l	0.29	1	1
Chloromethane	8260	0.68 U	07/22/2009 0:08		ug/l	0.68	1	1
cis-1,2-Dichloroethene	8260	0.29 U	07/22/2009 0:08		ug/l	0.29	1	1
cis-1,3-Dichloropropene	8260	0.23 U	07/22/2009 0:08		ug/l	0.23	1	1
Dibromochloromethane	8260	0.34 U	07/22/2009 0:08		ug/l	0.34	1	1
Dibromomethane	8260	0.53 U	07/22/2009 0:08		ug/l	0.53	1	1
Dichlorodifluoromethane	8260	0.23 U	07/22/2009 0:08		ug/l	0.23	1	1
Ethylbenzene	8260	0.43 U	07/22/2009 0:08		ug/l	0.43	1	1
Hexachlorobutadiene	8260	0.62 U	07/22/2009 0:08		ug/l	0.62	1	1
Isopropylbenzene (Cumene)	8260	0.41 U	07/22/2009 0:08		ug/l	0.41	1	1
Methyl iodide	8260	0.4 U	07/22/2009 0:08		ug/l	0.4	1	1
Methylene chloride	8260	0.52 U	07/22/2009 0:08		ug/l	0.52	1	1
MTBE	8260	**1.4**	07/22/2009 0:08		ug/l	0.26	1	1
Naphthalene	8260	0.32 U	07/22/2009 0:08		ug/l	0.32	1	1
n-Butylbenzene	8260	0.22 U	07/22/2009 0:08		ug/l	0.22	1	1
n-Propylbenzene	8260	0.28 U	07/22/2009 0:08		ug/l	0.28	1	1
o-Xylene	8260	0.2 U	07/22/2009 0:08		ug/l	0.2	1	1
p,m-Xylene	8260	0.27 U	07/22/2009 0:08		ug/l	0.27	2	1
sec-Butylbenzene	8260	0.2 U	07/22/2009 0:08		ug/l	0.2	1	1
Styrene	8260	0.2 U	07/22/2009 0:08		ug/l	0.2	1	1
tert-Butylbenzene	8260	0.28 U	07/22/2009 0:08		ug/l	0.28	1	1
Tetrachloroethene	8260	0.35 U	07/22/2009 0:08		ug/l	0.35	1	1
Toluene	8260	0.22 U	07/22/2009 0:08		ug/l	0.22	1	1
trans-1,2-Dichloroethene	8260	0.23 U	07/22/2009 0:08		ug/l	0.23	1	1
trans-1,3-Dichloropropene	8260	0.17 U	07/22/2009 0:08		ug/l	0.17	1	1
Trichloroethene	8260	0.42 U	07/22/2009 0:08		ug/l	0.42	1	1
Trichlorofluoromethane	8260	0.45 U	07/22/2009 0:08		ug/l	0.45	1	1
Vinyl acetate	8260	0.36 U	07/22/2009 0:08		ug/l	0.36	2	1
Vinyl chloride	8260	0.28 U	07/22/2009 0:08		ug/l	0.28	1	1
1,2-Dichloroethane-d4(SURR)	8260	106	07/22/2009 0:08		%	0.28	(80 - 120)	1
4-Bromofluorobenzene(SURR)	8260	104	07/22/2009 0:08		%	0.28	(86 - 115)	1
Dibromofluoromethane(SURR)	8260	107	07/22/2009 0:08		%	0.28	(86 - 118)	1
Toluene d8(SURR)	8260	103	07/22/2009 0:08		%	0.28	(88 - 110)	1
1-Methylnaphthalene	8270 SIM	0.02 U	07/26/2009 0:56	07/23/2009 13:12	ug/l	0.02	0.05	1
2-Methylnaphthalene	8270 SIM	0.027 I	07/26/2009 0:56	07/23/2009 13:12	ug/l	0.02	0.05	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131
PROJECT ID: Pinellas Bayway Site #2

PEL Lab# : 251313102
Client ID : SB 3at 8ft
Matrix : GW

Collection Information:
Sample Date: 7/17/2009 10:00:00 AM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Acenaphthene	8270 SIM	0.02 U	07/26/2009 0:56	07/23/2009 13:12	ug/l	0.02	0.05	1
Acenaphthylene	8270 SIM	0.02 U	07/26/2009 0:56	07/23/2009 13:12	ug/l	0.02	0.05	1
Anthracene	8270 SIM	0.02 U	07/26/2009 0:56	07/23/2009 13:12	ug/l	0.02	0.05	1
Benzo(a)anthracene	8270 SIM	0.02 U	07/26/2009 0:56	07/23/2009 13:12	ug/l	0.02	0.05	1
Benzo(a)pyrene	8270 SIM	0.02 U	07/26/2009 0:56	07/23/2009 13:12	ug/l	0.02	0.05	1
Benzo(b)fluoranthene	8270 SIM	0.02 U	07/26/2009 0:56	07/23/2009 13:12	ug/l	0.02	0.05	1
Benzo(g,h,i)perylene	8270 SIM	0.02 U	07/26/2009 0:56	07/23/2009 13:12	ug/l	0.02	0.05	1
Benzo(k)fluoranthene	8270 SIM	0.02 U	07/26/2009 0:56	07/23/2009 13:12	ug/l	0.02	0.05	1
Chrysene	8270 SIM	0.02 U	07/26/2009 0:56	07/23/2009 13:12	ug/l	0.02	0.05	1
Dibenz(a,h)anthracene	8270 SIM	0.02 U	07/26/2009 0:56	07/23/2009 13:12	ug/l	0.02	0.05	1
Fluoranthene	8270 SIM	0.02 U	07/26/2009 0:56	07/23/2009 13:12	ug/l	0.02	0.05	1
Fluorene	8270 SIM	0.02 U	07/26/2009 0:56	07/23/2009 13:12	ug/l	0.02	0.05	1
Indeno(1,2,3-cd)pyrene	8270 SIM	0.02 U	07/26/2009 0:56	07/23/2009 13:12	ug/l	0.02	0.05	1
Naphthalene	8270 SIM	0.043 I	07/26/2009 0:56	07/23/2009 13:12	ug/l	0.02	0.05	1
Phenanthrene	8270 SIM	0.02 U	07/26/2009 0:56	07/23/2009 13:12	ug/l	0.02	0.05	1
Pyrene	8270 SIM	0.02 U	07/26/2009 0:56	07/23/2009 13:12	ug/l	0.02	0.05	1
p-Terphenyl-d14(SURR)	8270 SIM	78	07/26/2009 0:56	07/23/2009 13:12	%	0.02	(33 - 141)	1
TPH	FL-PRO	0.26 U	07/22/2009 2:11	07/21/2009 10:27	mg/L	0.26	0.35	1
C39 Surrogate(SURR)	FL-PRO	80	07/22/2009 2:11	07/21/2009 10:27	%	0.26	(42 - 193)	1
o-Terphenyl Surrogate(SURR)	FL-PRO	84	07/22/2009 2:11	07/21/2009 10:27	%	0.26	(82 - 142)	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131
PROJECT ID: Pinellas Bayway Site #2

QC SUMMARY

METHOD: 6010

Method Blank 288878 **Matrix :** SQ

Associated Lab Samples : 251313101 288878 288879 288880

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
Arsenic	U	7/22/2009	7/21/2009	mg/Kg	0.5	1
Cadmium	U	7/22/2009	7/21/2009	mg/Kg	0.05	1
Chromium	U	7/22/2009	7/21/2009	mg/Kg	0.16	1
Lead	U	7/22/2009	7/21/2009	mg/Kg	0.34	1

Method Blank 288910 **Matrix :** WQ

Associated Lab Samples : 251313102 288910 288911 288912

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
Arsenic	U	7/22/2009	7/21/2009	ug/L	3.31	1
Cadmium	U	7/22/2009	7/21/2009	ug/L	0.72	1
Chromium	U	7/22/2009	7/21/2009	ug/L	0.43	1
Lead	U	7/22/2009	7/21/2009	ug/L	3.7	1

LABORATORY CONTROL SAMPLE: 288879 **Matrix :** SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
Arsenic	mg/Kg	50	46.8	93.6	(80-120)		
Cadmium	mg/Kg	50	47.7	95.4	(80-120)		
Chromium	mg/Kg	50	47.6	95.2	(80-120)		
Lead	mg/Kg	50	49.6	99.2	(80-120)		

LABORATORY CONTROL SAMPLE: 288880 **Matrix :** SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
Arsenic	mg/Kg	50	47.7	95.4	(80-120)	1.9	20
Cadmium	mg/Kg	50	48.2	96.4	(80-120)	1	20
Chromium	mg/Kg	50	48.3	96.6	(80-120)	1.5	20
Lead	mg/Kg	50	50.1	100.2	(80-120)	1	20

LABORATORY CONTROL SAMPLE: 288911 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131

PROJECT ID: Pinellas Bayway Site #2

METHOD: 6010

LABORATORY CONTROL SAMPLE: 288911 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
Arsenic	ug/L	500	452	90.4	(80-120)		
Cadmium	ug/L	500	440	88	(80-120)		
Chromium	ug/L	500	436	87.2	(80-120)		
Lead	ug/L	500	459	91.8	(80-120)		

LABORATORY CONTROL SAMPLE: 288912 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
Arsenic	ug/L	500	494	98.8	(80-120)	8.9	20
Cadmium	ug/L	500	476	95.2	(80-120)	7.9	20
Chromium	ug/L	500	476	95.2	(80-120)	8.8	20
Lead	ug/L	500	500	100	(80-120)	8.6	20

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131
PROJECT ID: Pinellas Bayway Site #2

METHOD: 8011

Method Blank 288991 **Matrix :** WQ

Associated Lab Samples : 251313102 288991 288992 288993

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
1,2-Dibromoethane(EDB)	U	7/23/2009	7/22/2009	ug/L	0.00605	1
1,1,2,2-Tetrachloroethane(SURR	104	7/23/2009	7/22/2009	%	(70 - 130)	1

LABORATORY CONTROL SAMPLE: 288992 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
1,2-Dibromoethane(EDB)	ug/L	0.12	0.14	117	(60-140)		
1,1,2,2-Tetrachloroethane(SURR	ug/L	0.24	0.29	121	(70-130)		

LABORATORY CONTROL SAMPLE: 288993 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
1,2-Dibromoethane(EDB)	ug/L	0.12	0.14	117	(60-140)	0	10
1,1,2,2-Tetrachloroethane(SURR	ug/L	0.24	0.28	117	(70-130)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131
PROJECT ID: Pinellas Bayway Site #2

METHOD: 8082

Method Blank 288869 **Matrix :** SQ

Associated Lab Samples : 251313101 288869 288870

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
Aroclor-1016	U	7/22/2009	7/21/2009	ug/Kg	4.3	1
Aroclor-1221	U	7/22/2009	7/21/2009	ug/Kg	7.4	1
Aroclor-1232	U	7/22/2009	7/21/2009	ug/Kg	20	1
Aroclor-1242	U	7/22/2009	7/21/2009	ug/Kg	7.4	1
Aroclor-1248	U	7/22/2009	7/21/2009	ug/Kg	11	1
Aroclor-1254	U	7/22/2009	7/21/2009	ug/Kg	3.2	1
Aroclor-1260	U	7/22/2009	7/21/2009	ug/Kg	4.7	1
Decachlorobiphenyl(SURR) (S)	83.7	7/22/2009	7/21/2009	%	(33 - 140)	1

Method Blank 289003 **Matrix :** WQ

Associated Lab Samples : 251313102 289003 289004 289005

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
Aroclor-1016	U	7/23/2009	7/23/2009	ug/L	0.36	1
Aroclor-1221	U	7/23/2009	7/23/2009	ug/L	0.43	1
Aroclor-1232	U	7/23/2009	7/23/2009	ug/L	0.2	1
Aroclor-1242	U	7/23/2009	7/23/2009	ug/L	0.31	1
Aroclor-1248	U	7/23/2009	7/23/2009	ug/L	0.13	1
Aroclor-1254	U	7/23/2009	7/23/2009	ug/L	0.12	1
Aroclor-1260	U	7/23/2009	7/23/2009	ug/L	0.25	1
Decachlorobiphenyl(SURR) (S)	98	7/23/2009	7/23/2009	%	(16 - 116)	1

LABORATORY CONTROL SAMPLE: 288870 **Matrix :** SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
Aroclor-1016	ug/Kg	667	508	76.2	(40-140)		
Aroclor-1260	ug/Kg	667	438	65.7	(60-125)		
Decachlorobiphenyl(SURR) (S)	ug/Kg	66.7	66.1	99.1	(33-140)		

LABORATORY CONTROL SAMPLE: 289004 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
Aroclor-1016	ug/L	10	8.7	87	(39-122)		
Aroclor-1260	ug/L	10	7.4	74	(30-118)		
Decachlorobiphenyl(SURR) (S)	ug/L	1	0.94	94	(16-116)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131
PROJECT ID: Pinellas Bayway Site #2

METHOD: 8082

LABORATORY CONTROL SAMPLE: 289005 Matrix : WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
Aroclor-1016	ug/L	10	9.2	92	(39-122)	5.6	15
Aroclor-1260	ug/L	10	7.6	76	(30-118)	2.7	12
Decachlorobiphenyl(SURR) (S)	ug/L	1	0.98	98	(16-116)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131
PROJECT ID: Pinellas Bayway Site #2

METHOD: 8260

Method Blank 072009BLK22 **Matrix :** SQ

Associated Lab Samples : 072009BLK22 072009LCS22 072009LCS22D 251313101

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
1,1,1,2-Tetrachloroethane	U	7/20/2009		ug/kg	0.74	1
1,1,1-Trichloroethane	U	7/20/2009		ug/kg	0.54	1
1,1,2,2-Tetrachloroethane	U	7/20/2009		ug/kg	0.6	1
1,1,2-Trichloroethane	U	7/20/2009		ug/kg	0.81	1
1,1-Dichloroethane	U	7/20/2009		ug/kg	0.69	1
1,1-Dichloroethene	U	7/20/2009		ug/kg	0.66	1
1,1-Dichloropropene	U	7/20/2009		ug/kg	0.48	1
1,2,3-Trichlorobenzene	U	7/20/2009		ug/kg	0.49	1
1,2,3-Trichloropropane	U	7/20/2009		ug/kg	0.88	1
1,2,4-Trichlorobenzene	U	7/20/2009		ug/kg	0.58	1
1,2,4-Trimethylbenzene	U	7/20/2009		ug/kg	0.33	1
1,2-Dibromo-3-chloropropane	U	7/20/2009		ug/kg	2.2	1
1,2-Dibromoethane(EDB)	U	7/20/2009		ug/kg	1	1
1,2-Dichlorobenzene	U	7/20/2009		ug/kg	0.48	1
1,2-Dichloroethane	U	7/20/2009		ug/kg	0.5	1
1,2-Dichloropropane	U	7/20/2009		ug/kg	0.93	1
1,3,5-Trimethylbenzene	U	7/20/2009		ug/kg	0.41	1
1,3-Dichlorobenzene	U	7/20/2009		ug/kg	0.53	1
1,3-Dichloropropane	U	7/20/2009		ug/kg	0.54	1
1,4-Dichlorobenzene	U	7/20/2009		ug/kg	0.54	1
2,2-Dichloropropane	U	7/20/2009		ug/kg	0.61	1
2-Butanone	U	7/20/2009		ug/kg	1.7	1
2-Chlorotoluene	U	7/20/2009		ug/kg	0.45	1
2-Hexanone	J3U	7/20/2009		ug/kg	1.6	1
4-Chlorotoluene	U	7/20/2009		ug/kg	0.36	1
4-Isopropyltoluene	U	7/20/2009		ug/kg	0.94	1
4-Methyl-2-pentanone	U	7/20/2009		ug/kg	1.2	1
Acetone	U	7/20/2009		ug/kg	4.8	1
Acrolein	J3U	7/20/2009		ug/kg	4.5	1
Acrylonitrile	U	7/20/2009		ug/kg	3.5	1
Benzene	U	7/20/2009		ug/kg	0.42	1
Bromobenzene	U	7/20/2009		ug/kg	0.68	1
Bromochloromethane	U	7/20/2009		ug/kg	0.76	1
Bromodichloromethane	U	7/20/2009		ug/kg	0.43	1
Bromoform	J3RU	7/20/2009		ug/kg	2	1
Bromomethane	U	7/20/2009		ug/kg	1	1
Carbon disulfide	U	7/20/2009		ug/kg	0.5	1
Carbon tetrachloride	U	7/20/2009		ug/kg	0.49	1
Chlorobenzene	U	7/20/2009		ug/kg	0.54	1
Chloroethane	U	7/20/2009		ug/kg	1.2	1
Chloroform	U	7/20/2009		ug/kg	0.52	1
Chloromethane	U	7/20/2009		ug/kg	0.86	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131
PROJECT ID: Pinellas Bayway Site #2

METHOD: 8260

Method Blank 072009BLK22 **Matrix :** SQ

Associated Lab Samples : 072009BLK22 072009LCS22 072009LCS22D 251313101

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
cis-1,2-Dichloroethene	U	7/20/2009		ug/kg	1.2	1
cis-1,3-Dichloropropene	U	7/20/2009		ug/kg	0.44	1
Dibromochloromethane	U	7/20/2009		ug/kg	0.65	1
Dibromomethane	U	7/20/2009		ug/kg	0.87	1
Dichlorodifluoromethane	U	7/20/2009		ug/kg	0.66	1
Ethylbenzene	U	7/20/2009		ug/kg	0.76	1
Hexachlorobutadiene	U	7/20/2009		ug/kg	0.82	1
Isopropylbenzene (Cumene)	U	7/20/2009		ug/kg	0.79	1
Methyl iodide	U	7/20/2009		ug/kg	0.46	1
Methylene chloride	U	7/20/2009		ug/kg	1.2	1
MTBE	U	7/20/2009		ug/kg	0.56	1
Naphthalene	U	7/20/2009		ug/kg	0.68	1
n-Butylbenzene	U	7/20/2009		ug/kg	0.46	1
n-Propylbenzene	U	7/20/2009		ug/kg	0.4	1
o-Xylene	U	7/20/2009		ug/kg	0.52	1
p,m-Xylene	U	7/20/2009		ug/kg	0.65	1
sec-Butylbenzene	U	7/20/2009		ug/kg	0.6	1
Styrene	U	7/20/2009		ug/kg	0.43	1
tert-Butylbenzene	U	7/20/2009		ug/kg	0.66	1
Tetrachloroethene	U	7/20/2009		ug/kg	0.52	1
Toluene	U	7/20/2009		ug/kg	0.87	1
trans-1,2-Dichloroethene	U	7/20/2009		ug/kg	0.76	1
trans-1,3-Dichloropropene	U	7/20/2009		ug/kg	0.56	1
Trichloroethene	U	7/20/2009		ug/kg	0.92	1
Trichlorofluoromethane	U	7/20/2009		ug/kg	0.63	1
Vinyl acetate	U	7/20/2009		ug/kg	1.1	1
Vinyl chloride	U	7/20/2009		ug/kg	0.95	1
1,2-Dichloroethane-d4(SURR) (S	120	7/20/2009		%	(71 - 124)	1
4-Bromofluorobenzene(SURR) (	113	7/20/2009		%	(54 - 126)	1
Dibromofluoromethane(SURR) (	115	7/20/2009		%	(68 - 119)	1
Toluene d8(SURR) (S)	109	7/20/2009		%	(59 - 127)	1

Method Blank 0721BLK55 **Matrix :** WQ

Associated Lab Samples : 0721BLK55 0721LCS52 0721LCS52D 251313102

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
1,1,1,2-Tetrachloroethane	U	7/21/2009		ug/l	0.25	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131
PROJECT ID: Pinellas Bayway Site #2

METHOD: 8260

Method Blank 0721BLK55 **Matrix :** WQ

Associated Lab Samples : 0721BLK55 0721LCS52 0721LCS52D 251313102

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
1,1,1-Trichloroethane	U	7/21/2009		ug/l	0.19	1
1,1,2,2-Tetrachloroethane	U	7/21/2009		ug/l	0.33	1
1,1,2-Trichloroethane	U	7/21/2009		ug/l	0.28	1
1,1-Dichloroethane	U	7/21/2009		ug/l	0.28	1
1,1-Dichloroethene	U	7/21/2009		ug/l	0.24	1
1,1-Dichloropropene	U	7/21/2009		ug/l	0.19	1
1,2,3-Trichlorobenzene	U	7/21/2009		ug/l	0.61	1
1,2,3-Trichloropropane	U	7/21/2009		ug/l	0.76	1
1,2,4-Trichlorobenzene	U	7/21/2009		ug/l	0.5	1
1,2,4-Trimethylbenzene	U	7/21/2009		ug/l	0.17	1
1,2-Dibromo-3-chloropropane	U	7/21/2009		ug/l	1.4	1
1,2-Dibromoethane(EDB)	U	7/21/2009		ug/l	0.33	1
1,2-Dichlorobenzene	U	7/21/2009		ug/l	0.26	1
1,2-Dichloroethane	U	7/21/2009		ug/l	0.4	1
1,2-Dichloropropane	U	7/21/2009		ug/l	0.27	1
1,3,5-Trimethylbenzene	U	7/21/2009		ug/l	0.22	1
1,3-Dichlorobenzene	U	7/21/2009		ug/l	0.2	1
1,3-Dichloropropane	U	7/21/2009		ug/l	0.19	1
1,4-Dichlorobenzene	U	7/21/2009		ug/l	0.24	1
2,2-Dichloropropane	U	7/21/2009		ug/l	0.32	1
2-Butanone	U	7/21/2009		ug/l	4	1
2-Chlorotoluene	U	7/21/2009		ug/l	0.32	1
2-Hexanone	U	7/21/2009		ug/l	0.95	1
4-Chlorotoluene	U	7/21/2009		ug/l	0.12	1
4-Isopropyltoluene	U	7/21/2009		ug/l	0.24	1
4-Methyl-2-pentanone	U	7/21/2009		ug/l	0.61	1
Acetone	U	7/21/2009		ug/l	5.6	1
Acrolein	U	7/21/2009		ug/l	3.3	1
Acrylonitrile	U	7/21/2009		ug/l	1.3	1
Benzene	U	7/21/2009		ug/l	0.16	1
Bromobenzene	U	7/21/2009		ug/l	0.27	1
Bromochloromethane	U	7/21/2009		ug/l	0.38	1
Bromodichloromethane	U	7/21/2009		ug/l	0.15	1
Bromoethane	U	7/21/2009		ug/l	0.45	1
Bromoform	U	7/21/2009		ug/l	0.36	1
Bromomethane	U	7/21/2009		ug/l	0.76	1
Carbon disulfide	U	7/21/2009		ug/l	0.29	1
Carbon tetrachloride	U	7/21/2009		ug/l	0.33	1
Chlorobenzene	U	7/21/2009		ug/l	0.18	1
Chloroethane	J3MU	7/21/2009		ug/l	0.99	1
Chloroform	U	7/21/2009		ug/l	0.29	1
Chloromethane	U	7/21/2009		ug/l	0.68	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131
PROJECT ID: Pinellas Bayway Site #2

METHOD: 8260

Method Blank 0721BLK55 **Matrix :** WQ

Associated Lab Samples : 0721BLK55 0721LCS52 0721LCS52D 251313102

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
cis-1,2-Dichloroethene	U	7/21/2009		ug/l	0.29	1
cis-1,3-Dichloropropene	U	7/21/2009		ug/l	0.23	1
Dibromochloromethane	U	7/21/2009		ug/l	0.34	1
Dibromomethane	U	7/21/2009		ug/l	0.53	1
Dichlorodifluoromethane	U	7/21/2009		ug/l	0.23	1
Ethylbenzene	U	7/21/2009		ug/l	0.43	1
Hexachlorobutadiene	U	7/21/2009		ug/l	0.62	1
Isopropylbenzene (Cumene)	U	7/21/2009		ug/l	0.41	1
Methyl iodide	U	7/21/2009		ug/l	0.4	1
Methylene chloride	U	7/21/2009		ug/l	0.52	1
MTBE	U	7/21/2009		ug/l	0.26	1
Naphthalene	U	7/21/2009		ug/l	0.32	1
n-Butylbenzene	U	7/21/2009		ug/l	0.22	1
n-Propylbenzene	U	7/21/2009		ug/l	0.28	1
o-Xylene	U	7/21/2009		ug/l	0.2	1
p,m-Xylene	U	7/21/2009		ug/l	0.27	1
sec-Butylbenzene	U	7/21/2009		ug/l	0.2	1
Styrene	U	7/21/2009		ug/l	0.2	1
tert-Butylbenzene	U	7/21/2009		ug/l	0.28	1
Tetrachloroethene	U	7/21/2009		ug/l	0.35	1
Toluene	U	7/21/2009		ug/l	0.22	1
trans-1,2-Dichloroethene	U	7/21/2009		ug/l	0.23	1
trans-1,3-Dichloropropene	U	7/21/2009		ug/l	0.17	1
Trichloroethene	U	7/21/2009		ug/l	0.42	1
Trichlorofluoromethane	U	7/21/2009		ug/l	0.45	1
Vinyl acetate	U	7/21/2009		ug/l	0.36	1
Vinyl chloride	U	7/21/2009		ug/l	0.28	1
1,2-Dichloroethane-d4(SURR) (S	106	7/21/2009		%	(80 - 120)	1
4-Bromofluorobenzene(SURR) (	104	7/21/2009		%	(86 - 115)	1
Dibromofluoromethane(SURR) (	104	7/21/2009		%	(86 - 118)	1
Toluene d8(SURR) (S)	102	7/21/2009		%	(88 - 110)	1

LABORATORY CONTROL SAMPLE: 072009LCS22 **Matrix :** SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
1,1,1,2-Tetrachloroethane	ug/kg	20	21.6	108	(82-121)		
1,1,1-Trichloroethane	ug/kg	20	18.9	94.5	(70-130)		
1,1,2,2-Tetrachloroethane	ug/kg	20	21.5	108	(82-122)		
1,1,2-Trichloroethane	ug/kg	20	20.2	101	(70-130)		
1,1-Dichloroethane	ug/kg	20	19.6	98	(70-130)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131
PROJECT ID: Pinellas Bayway Site #2

METHOD: 8260

LABORATORY CONTROL SAMPLE: 072009LCS22 Matrix : SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC		% REC LIMITS	RPD	RPD LIMIT
1,1-Dichloroethene	ug/kg	20	18	90		(73-130)		
1,1-Dichloropropene	ug/kg	20	19.2	96		(70-130)		
1,2,3-Trichlorobenzene	ug/kg	20	18.4	92		(70-130)		
1,2,3-Trichloropropane	ug/kg	20	23.7	118		(74-129)		
1,2,4-Trichlorobenzene	ug/kg	20	19.1	95.5		(70-130)		
1,2,4-Trimethylbenzene	ug/kg	20	19.6	98		(70-130)		
1,2-Dibromo-3-chloropropane	ug/kg	20	19.2	96		(72-143)		
1,2-Dibromoethane(EDB)	ug/kg	20	20.4	102		(70-130)		
1,2-Dichlorobenzene	ug/kg	20	19.3	96.5		(70-130)		
1,2-Dichloroethane	ug/kg	20	20.2	101		(78-136)		
1,2-Dichloropropane	ug/kg	20	19.3	96.5		(70-130)		
1,3,5-Trimethylbenzene	ug/kg	20	20	100		(70-130)		
1,3-Dichlorobenzene	ug/kg	20	19.8	99		(70-130)		
1,3-Dichloropropane	ug/kg	20	20.2	101		(70-130)		
1,4-Dichlorobenzene	ug/kg	20	20.4	102		(70-130)		
2,2-Dichloropropane	ug/kg	20	19.5	97.5		(73-132)		
2-Butanone	ug/kg	40	51.5	129		(72-136)		
2-Chlorotoluene	ug/kg	20	19.1	95.5		(81-122)		
2-Hexanone	ug/kg	40	52.4	131	*	(72-127)		
4-Chlorotoluene	ug/kg	20	19.6	98		(70-130)		
4-Isopropyltoluene	ug/kg	20	19.1	95.5		(70-130)		
4-Methyl-2-pentanone	ug/kg	40	43.8	110		(80-125)		
Acetone	ug/kg	40	53.4	134		(59-142)		
Acrolein	ug/kg	40	45.2	113	*	(70-111)		
Acrylonitrile	ug/kg	40	43	108		(74-117)		
Benzene	ug/kg	20	19.2	96		(70-130)		
Bromobenzene	ug/kg	20	19.9	99.5		(79-141)		
Bromochloromethane	ug/kg	20	19.3	96.5		(70-130)		
Bromodichloromethane	ug/kg	20	20.3	102		(70-130)		
Bromoform	ug/kg	20	23.3	116		(79-119)		
Bromomethane	ug/kg	20	18.9	94.5		(22-136)		
Carbon disulfide	ug/kg	20	18.6	93		(76-121)		
Carbon tetrachloride	ug/kg	20	19.8	99		(70-130)		
Chlorobenzene	ug/kg	20	20	100		(70-130)		
Chloroethane	ug/kg	20	20	100		(48-147)		
Chloroform	ug/kg	20	19.3	96.5		(70-130)		
Chloromethane	ug/kg	20	19	95		(63-135)		
cis-1,2-Dichloroethene	ug/kg	20	19.9	99.5		(70-130)		
cis-1,3-Dichloropropene	ug/kg	20	20.3	102		(70-130)		
Dibromochloromethane	ug/kg	20	20.4	102		(75-131)		
Dibromomethane	ug/kg	20	20	100		(82-133)		
Dichlorodifluoromethane	ug/kg	20	17.9	89.5		(52-139)		
Ethylbenzene	ug/kg	20	19.3	96.5		(70-130)		
Hexachlorobutadiene	ug/kg	20	20.8	104		(70-130)		
Isopropylbenzene (Cumene)	ug/kg	20	21.1	106		(70-130)		
Methyl iodide	ug/kg	20	18.9	94.5		(70-130)		
Methylene chloride	ug/kg	20	18.3	91.5		(78-122)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131
PROJECT ID: Pinellas Bayway Site #2

METHOD: 8260

LABORATORY CONTROL SAMPLE: 072009LCS22 **Matrix :** SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
MTBE	ug/kg	20	19.9	99.5	(79-132)		
Naphthalene	ug/kg	20	19.9	99.5	(70-130)		
n-Butylbenzene	ug/kg	20	17.8	89	(70-130)		
n-Propylbenzene	ug/kg	20	19.5	97.5	(81-116)		
o-Xylene	ug/kg	20	19.3	96.5	(70-130)		
p,m-Xylene	ug/kg	40	40.4	101	(70-130)		
sec-Butylbenzene	ug/kg	20	19.6	98	(70-130)		
Styrene	ug/kg	20	20.6	103	(70-130)		
tert-Butylbenzene	ug/kg	20	19.9	99.5	(70-130)		
Tetrachloroethene	ug/kg	20	18.9	94.5	(69-134)		
Toluene	ug/kg	20	19.2	96	(70-130)		
trans-1,2-Dichloroethene	ug/kg	20	18.1	90.5	(70-130)		
trans-1,3-Dichloropropene	ug/kg	20	20.5	102	(82-129)		
Trichloroethene	ug/kg	20	19.7	98.5	(75-126)		
Trichlorofluoromethane	ug/kg	20	19	95	(61-136)		
Vinyl acetate	ug/kg	20	19.1	95.5	(60-115)		
Vinyl chloride	ug/kg	20	18.7	93.5	(65-129)		
1,2-Dichloroethane-d4(SURR) (S	ug/kg	50	48	96	(71-124)		
4-Bromofluorobenzene(SURR) (	ug/kg	50	47.3	94.6	(54-126)		
Dibromofluoromethane(SURR) (	ug/kg	50	44.8	89.6	(68-119)		
Toluene d8(SURR) (S)	ug/kg	50	47.3	94.6	(59-127)		

LABORATORY CONTROL SAMPLE: 072009LCS22D **Matrix :** SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
1,1,1,2-Tetrachloroethane	ug/kg	20	21.1	106	(82-121)	2.3	9
1,1,1-Trichloroethane	ug/kg	20	17.9	89.5	(70-130)	5.4	30
1,1,2,2-Tetrachloroethane	ug/kg	20	20.6	103	(82-122)	4.3	18
1,1,2-Trichloroethane	ug/kg	20	20.1	100	(70-130)	0.5	30
1,1-Dichloroethane	ug/kg	20	19.1	95.5	(70-130)	2.6	30
1,1-Dichloroethene	ug/kg	20	19	95	(73-130)	5.4	16
1,1-Dichloropropene	ug/kg	20	19.7	98.5	(70-130)	2.6	30
1,2,3-Trichlorobenzene	ug/kg	20	18.5	92.5	(70-130)	0.5	30
1,2,3-Trichloropropane	ug/kg	20	21	105	(74-129)	12.1	13
1,2,4-Trichlorobenzene	ug/kg	20	18.7	93.5	(70-130)	2.1	30
1,2,4-Trimethylbenzene	ug/kg	20	19.6	98	(70-130)	0	30
1,2-Dibromo-3-chloropropane	ug/kg	20	16.9	84.5	(72-143)	12.7	23
1,2-Dibromoethane(EDB)	ug/kg	20	19.9	99.5	(70-130)	2.5	30
1,2-Dichlorobenzene	ug/kg	20	19.6	98	(70-130)	1.5	30
1,2-Dichloroethane	ug/kg	20	19.3	96.5	(78-136)	4.6	12
1,2-Dichloropropane	ug/kg	20	20.1	100	(70-130)	4.1	30
1,3,5-Trimethylbenzene	ug/kg	20	19.2	96	(70-130)	4.1	30
1,3-Dichlorobenzene	ug/kg	20	19.1	95.5	(70-130)	3.6	30
1,3-Dichloropropane	ug/kg	20	19.4	97	(70-130)	4	30
1,4-Dichlorobenzene	ug/kg	20	19.3	96.5	(70-130)	5.5	30
2,2-Dichloropropane	ug/kg	20	20.2	101	(73-132)	3.5	18
2-Butanone	ug/kg	40	49.8	124	(72-136)	3.4	30

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131

PROJECT ID: Pinellas Bayway Site #2

METHOD: 8260

LABORATORY CONTROL SAMPLE: 072009LCS22D Matrix : SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC		% REC LIMITS	RPD	RPD LIMIT
2-Chlorotoluene	ug/kg	20	19.1	95.5		(81-122)	0	12
2-Hexanone	ug/kg	40	48.9	122		(72-127)	6.9	21
4-Chlorotoluene	ug/kg	20	19.7	98.5		(70-130)	0.5	30
4-Isopropyltoluene	ug/kg	20	19.4	97		(70-130)	1.6	30
4-Methyl-2-pentanone	ug/kg	40	41.9	105		(80-125)	4.4	15
Acetone	ug/kg	40	51.6	129		(59-142)	3.4	30
Acrolein	ug/kg	40	46.3	116	*	(70-111)	2.4	30
Acrylonitrile	ug/kg	40	42.8	107		(74-117)	0.5	30
Benzene	ug/kg	20	19.7	98.5		(70-130)	2.6	30
Bromobenzene	ug/kg	20	19.5	97.5		(79-141)	2	13
Bromochloromethane	ug/kg	20	18.4	92		(70-130)	4.8	30
Bromodichloromethane	ug/kg	20	20.3	102		(70-130)	0	30
Bromoform	ug/kg	20	18.9	94.5		(79-119)	20.9 *	13
Bromomethane	ug/kg	20	18.4	92		(22-136)	2.7	30
Carbon disulfide	ug/kg	20	18.7	93.5		(76-121)	0.5	17
Carbon tetrachloride	ug/kg	20	20.2	101		(70-130)	2	30
Chlorobenzene	ug/kg	20	19.5	97.5		(70-130)	2.5	30
Chloroethane	ug/kg	20	19.3	96.5		(48-147)	3.6	16
Chloroform	ug/kg	20	19.4	97		(70-130)	0.5	30
Chloromethane	ug/kg	20	18.7	93.5		(63-135)	1.6	18
cis-1,2-Dichloroethene	ug/kg	20	19.8	99		(70-130)	0.5	30
cis-1,3-Dichloropropene	ug/kg	20	19	95		(70-130)	6.6	30
Dibromochloromethane	ug/kg	20	19.9	99.5		(75-131)	2.5	10
Dibromomethane	ug/kg	20	19.4	97		(82-133)	3	13
Dichlorodifluoromethane	ug/kg	20	18	90		(52-139)	0.6	20
Ethylbenzene	ug/kg	20	19.4	97		(70-130)	0.5	30
Hexachlorobutadiene	ug/kg	20	19.4	97		(70-130)	7	30
Isopropylbenzene (Cumene)	ug/kg	20	18.7	93.5		(70-130)	12.1	30
Methyl iodide	ug/kg	20	19.2	96		(70-130)	1.6	30
Methylene chloride	ug/kg	20	17.6	88		(78-122)	3.9	17
MTBE	ug/kg	20	20.2	101		(79-132)	1.5	17
Naphthalene	ug/kg	20	19.2	96		(70-130)	3.6	30
n-Butylbenzene	ug/kg	20	19.2	96		(70-130)	7.6	30
n-Propylbenzene	ug/kg	20	19	95		(81-116)	2.6	10
o-Xylene	ug/kg	20	19.5	97.5		(70-130)	1	30
p,m-Xylene	ug/kg	40	39.8	99.5		(70-130)	1.5	30
sec-Butylbenzene	ug/kg	20	20	100		(70-130)	2	30
Styrene	ug/kg	20	19.8	99		(70-130)	4	30
tert-Butylbenzene	ug/kg	20	19.3	96.5		(70-130)	3.1	30
Tetrachloroethene	ug/kg	20	19	95		(69-134)	0.5	16
Toluene	ug/kg	20	19.2	96		(70-130)	0	30
trans-1,2-Dichloroethene	ug/kg	20	19.6	98		(70-130)	8	30
trans-1,3-Dichloropropene	ug/kg	20	21.1	106		(82-129)	2.9	14
Trichloroethene	ug/kg	20	19.5	97.5		(75-126)	1	12
Trichlorofluoromethane	ug/kg	20	20.6	103		(61-136)	8.1	14
Vinyl acetate	ug/kg	20	18.7	93.5		(60-115)	2.1	30
Vinyl chloride	ug/kg	20	19.3	96.5		(65-129)	3.2	21

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131
PROJECT ID: Pinellas Bayway Site #2

METHOD: 8260

LABORATORY CONTROL SAMPLE: 072009LCS22D **Matrix :** SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
1,2-Dichloroethane-d4(SURR) (S	ug/kg	50	58	116	(71-124)		
4-Bromofluorobenzene(SURR) (	ug/kg	50	55.7	111	(54-126)		
Dibromofluoromethane(SURR) (	ug/kg	50	55.2	110	(68-119)		
Toluene d8(SURR) (S)	ug/kg	50	54.6	109	(59-127)		

LABORATORY CONTROL SAMPLE: 0721LCS52 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
1,1,1,2-Tetrachloroethane	ug/l	20	22.3	112	(75-133)		
1,1,1-Trichloroethane	ug/l	20	21.6	108	(79-123)		
1,1,2,2-Tetrachloroethane	ug/l	20	19.6	98	(84-113)		
1,1,2-Trichloroethane	ug/l	20	20.4	102	(80-117)		
1,1-Dichloroethane	ug/l	20	21.4	107	(76-118)		
1,1-Dichloroethene	ug/l	20	21.4	107	(81-119)		
1,1-Dichloropropene	ug/l	20	21.3	106	(80-119)		
1,2,3-Trichlorobenzene	ug/l	20	21.3	106	(73-141)		
1,2,3-Trichloropropane	ug/l	20	18.5	92.5	(84-119)		
1,2,4-Trichlorobenzene	ug/l	20	21.2	106	(83-123)		
1,2,4-Trimethylbenzene	ug/l	20	21.5	108	(82-124)		
1,2-Dibromo-3-chloropropane	ug/l	20	20	100	(63-130)		
1,2-Dibromoethane(EDB)	ug/l	20	20.2	101	(84-121)		
1,2-Dichlorobenzene	ug/l	20	21.2	106	(70-130)		
1,2-Dichloroethane	ug/l	20	21.9	110	(83-114)		
1,2-Dichloropropane	ug/l	20	18.7	93.5	(74-118)		
1,3,5-Trimethylbenzene	ug/l	20	21.6	108	(84-124)		
1,3-Dichlorobenzene	ug/l	20	21	105	(84-118)		
1,3-Dichloropropane	ug/l	20	19.9	99.5	(83-112)		
1,4-Dichlorobenzene	ug/l	20	20.3	102	(70-130)		
2,2-Dichloropropane	ug/l	20	24.2	121	(52-147)		
2-Butanone	ug/l	40	38	95	(76-124)		
2-Chlorotoluene	ug/l	20	21.7	108	(70-130)		
2-Hexanone	ug/l	40	38.8	97	(75-132)		
4-Chlorotoluene	ug/l	20	20.9	104	(83-123)		
4-Isopropyltoluene	ug/l	20	22	110	(83-126)		
4-Methyl-2-pentanone	ug/l	40	40.7	102	(61-134)		
Acetone	ug/l	40	32.5	81.2	(45-156)		
Acrolein	ug/l	40	33.9	84.8	(61-125)		
Acrylonitrile	ug/l	40	41.9	105	(62-132)		
Benzene	ug/l	20	21	105	(71-120)		
Bromobenzene	ug/l	20	20.8	104	(74-120)		
Bromochloromethane	ug/l	20	20.4	102	(70-116)		
Bromodichloromethane	ug/l	20	21.4	107	(78-117)		
Bromoethane	ug/l	20	24.3	122	(60-150)		
Bromoform	ug/l	20	20.2	101	(71-128)		
Bromomethane	ug/l	20	25.3	126	(58-144)		
Carbon disulfide	ug/l	20	22.6	113	(65-121)		
Carbon tetrachloride	ug/l	20	20.5	102	(67-138)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131
PROJECT ID: Pinellas Bayway Site #2

METHOD: 8260

LABORATORY CONTROL SAMPLE: 0721LCS52 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC		% REC LIMITS	RPD	RPD LIMIT
Chlorobenzene	ug/l	20	21.1	106		(70-130)		
Chloroethane	ug/l	20	30.9	154	*	(72-135)		
Chloroform	ug/l	20	20.8	104		(80-115)		
Chloromethane	ug/l	20	19.4	97		(63-124)		
cis-1,2-Dichloroethene	ug/l	20	22.1	110		(75-123)		
cis-1,3-Dichloropropene	ug/l	20	22.4	112		(63-129)		
Dibromochloromethane	ug/l	20	21.9	110		(78-123)		
Dibromomethane	ug/l	20	20.4	102		(75-119)		
Dichlorodifluoromethane	ug/l	20	21.1	106		(62-133)		
Ethylbenzene	ug/l	20	21	105		(70-130)		
Hexachlorobutadiene	ug/l	20	23	115		(68-149)		
Isopropylbenzene (Cumene)	ug/l	20	21.3	106		(83-123)		
Methyl iodide	ug/l	20	21.3	106		(56-133)		
Methylene chloride	ug/l	20	21.6	108		(75-111)		
MTBE	ug/l	20	21.1	106		(76-123)		
Naphthalene	ug/l	20	20.6	103		(80-131)		
n-Butylbenzene	ug/l	20	22.1	110		(83-125)		
n-Propylbenzene	ug/l	20	21.7	108		(82-121)		
o-Xylene	ug/l	20	21.7	108		(70-130)		
p,m-Xylene	ug/l	40	41.8	104		(70-130)		
sec-Butylbenzene	ug/l	20	21.8	109		(83-122)		
Styrene	ug/l	20	21.2	106		(70-130)		
tert-Butylbenzene	ug/l	20	21.6	108		(82-125)		
Tetrachloroethene	ug/l	20	21.1	106		(70-130)		
Toluene	ug/l	20	21.3	106		(75-119)		
trans-1,2-Dichloroethene	ug/l	20	19.2	96		(79-121)		
trans-1,3-Dichloropropene	ug/l	20	20	100		(68-127)		
Trichloroethene	ug/l	20	21.7	108		(76-123)		
Trichlorofluoromethane	ug/l	20	22.8	114		(74-135)		
Vinyl acetate	ug/l	20	20.4	102		(49-136)		
Vinyl chloride	ug/l	20	23.4	117		(60-124)		
1,2-Dichloroethane-d4(SURR) (S	ug/l	50	51.8	104		(80-120)		
4-Bromofluorobenzene(SURR) (	ug/l	50	52.1	104		(86-115)		
Dibromofluoromethane(SURR) (	ug/l	50	51.7	103		(86-118)		
Toluene d8(SURR) (S)	ug/l	50	50.6	101		(88-110)		

LABORATORY CONTROL SAMPLE: 0721LCS52D **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
1,1,1,2-Tetrachloroethane	ug/l	20	22.6	113	(75-133)	1.3	20
1,1,1-Trichloroethane	ug/l	20	21.8	109	(79-123)	0.9	20
1,1,2,2-Tetrachloroethane	ug/l	20	19.9	99.5	(84-113)	1.5	20
1,1,2-Trichloroethane	ug/l	20	20.5	102	(80-117)	0.5	20
1,1-Dichloroethane	ug/l	20	21.5	108	(76-118)	0.5	20
1,1-Dichloroethene	ug/l	20	23.6	118	(81-119)	9.8	20
1,1-Dichloropropene	ug/l	20	21.4	107	(80-119)	0.5	20
1,2,3-Trichlorobenzene	ug/l	20	21.1	106	(73-141)	0.9	20

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131

PROJECT ID: Pinellas Bayway Site #2

METHOD: 8260

LABORATORY CONTROL SAMPLE: 0721LCS52D **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC		% REC LIMITS	RPD	RPD LIMIT
1,2,3-Trichloropropane	ug/l	20	19.2	96		(84-119)	3.7	20
1,2,4-Trichlorobenzene	ug/l	20	21.1	106		(83-123)	0.5	20
1,2,4-Trimethylbenzene	ug/l	20	21.6	108		(82-124)	0.5	20
1,2-Dibromo-3-chloropropane	ug/l	20	20.7	104		(63-130)	3.4	20
1,2-Dibromoethane(EDB)	ug/l	20	20.3	102		(84-121)	0.5	20
1,2-Dichlorobenzene	ug/l	20	20.9	104		(70-130)	1.4	20
1,2-Dichloroethane	ug/l	20	20.8	104		(83-114)	5.2	20
1,2-Dichloropropane	ug/l	20	21.5	108		(74-118)	13.9	20
1,3,5-Trimethylbenzene	ug/l	20	21.8	109		(84-124)	0.9	20
1,3-Dichlorobenzene	ug/l	20	21.2	106		(84-118)	0.9	20
1,3-Dichloropropane	ug/l	20	20.1	100		(83-112)	1	20
1,4-Dichlorobenzene	ug/l	20	20.2	101		(70-130)	0.5	20
2,2-Dichloropropane	ug/l	20	24.4	122		(52-147)	0.8	20
2-Butanone	ug/l	40	38.7	96.8		(76-124)	1.8	20
2-Chlorotoluene	ug/l	20	21.8	109		(70-130)	0.5	20
2-Hexanone	ug/l	40	40	100		(75-132)	3	20
4-Chlorotoluene	ug/l	20	21.4	107		(83-123)	2.4	20
4-Isopropyltoluene	ug/l	20	21.9	110		(83-126)	0.5	20
4-Methyl-2-pentanone	ug/l	40	40.9	102		(61-134)	0.5	20
Acetone	ug/l	40	33.4	83.5		(45-156)	2.7	20
Acrolein	ug/l	40	33	82.5		(61-125)	2.7	20
Acrylonitrile	ug/l	40	41.9	105		(62-132)	0	20
Benzene	ug/l	20	21.2	106		(71-120)	0.9	20
Bromobenzene	ug/l	20	21.1	106		(74-120)	1.4	20
Bromochloromethane	ug/l	20	20.4	102		(70-116)	0	20
Bromodichloromethane	ug/l	20	21.4	107		(78-117)	0	20
Bromoethane	ug/l	20	24.7	124		(60-150)	1.6	20
Bromoform	ug/l	20	20.9	104		(71-128)	3.4	20
Bromomethane	ug/l	20	24	120		(58-144)	5.3	20
Carbon disulfide	ug/l	20	21.8	109		(65-121)	3.6	20
Carbon tetrachloride	ug/l	20	20.9	104		(67-138)	1.9	20
Chlorobenzene	ug/l	20	21.2	106		(70-130)	0.5	20
Chloroethane	ug/l	20	28.7	144	*	(72-135)	7.4	20
Chloroform	ug/l	20	20.8	104		(80-115)	0	20
Chloromethane	ug/l	20	20.1	100		(63-124)	3.5	20
cis-1,2-Dichloroethene	ug/l	20	21.6	108		(75-123)	2.3	20
cis-1,3-Dichloropropene	ug/l	20	22	110		(63-129)	1.8	20
Dibromochloromethane	ug/l	20	21.4	107		(78-123)	2.3	20
Dibromomethane	ug/l	20	20.3	102		(75-119)	0.5	20
Dichlorodifluoromethane	ug/l	20	21.2	106		(62-133)	0.5	20
Ethylbenzene	ug/l	20	21.4	107		(70-130)	1.9	20
Hexachlorobutadiene	ug/l	20	22.5	112		(68-149)	2.2	20
Isopropylbenzene (Cumene)	ug/l	20	21.8	109		(83-123)	2.3	20
Methyl iodide	ug/l	20	22	110		(56-133)	3.2	20
Methylene chloride	ug/l	20	21.4	107		(75-111)	0.9	20
MTBE	ug/l	20	20.8	104		(76-123)	1.4	20
Naphthalene	ug/l	20	20.6	103		(80-131)	0	20

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131

PROJECT ID: Pinellas Bayway Site #2

METHOD: 8260

LABORATORY CONTROL SAMPLE: 0721LCS52D **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
n-Butylbenzene	ug/l	20	22.1	110	(83-125)	0	20
n-Propylbenzene	ug/l	20	21.6	108	(82-121)	0.5	20
o-Xylene	ug/l	20	21.9	110	(70-130)	0.9	20
p,m-Xylene	ug/l	40	41.9	105	(70-130)	0.2	20
sec-Butylbenzene	ug/l	20	21.9	110	(83-122)	0.5	20
Styrene	ug/l	20	21.1	106	(70-130)	0.5	20
tert-Butylbenzene	ug/l	20	21.9	110	(82-125)	1.4	20
Tetrachloroethene	ug/l	20	20.8	104	(70-130)	1.4	20
Toluene	ug/l	20	21.4	107	(75-119)	0.5	20
trans-1,2-Dichloroethene	ug/l	20	21.6	108	(79-121)	11.8	20
trans-1,3-Dichloropropene	ug/l	20	20.2	101	(68-127)	1	20
Trichloroethene	ug/l	20	22	110	(76-123)	1.4	20
Trichlorofluoromethane	ug/l	20	23.7	118	(74-135)	3.9	21
Vinyl acetate	ug/l	20	20.4	102	(49-136)	0	20
Vinyl chloride	ug/l	20	23.4	117	(60-124)	0	20
1,2-Dichloroethane-d4(SURR) (S	ug/l	50	51.7	103	(80-120)		
4-Bromofluorobenzene(SURR) (	ug/l	50	52	104	(86-115)		
Dibromofluoromethane(SURR) (	ug/l	50	51.6	103	(86-118)		
Toluene d8(SURR) (S)	ug/l	50	50.7	101	(88-110)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131

PROJECT ID: Pinellas Bayway Site #2

METHOD: 8270

Method Blank 289402 **Matrix :** SQ

Associated Lab Samples : 251313101 289402 289403

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
1,2,4-Trichlorobenzene	U	7/31/2009	7/30/2009	ug/kg	58	1
1,2-Dichlorobenzene	U	7/31/2009	7/30/2009	ug/kg	57	1
1,3-Dichlorobenzene	U	7/31/2009	7/30/2009	ug/kg	61	1
1,4-Dichlorobenzene	U	7/31/2009	7/30/2009	ug/kg	63	1
1-Methylnaphthalene	U	7/31/2009	7/30/2009	ug/kg	62	1
2,2-Oxybis(1-chloropropane)	U	7/31/2009	7/30/2009	ug/kg	220	1
2,4,5-Trichlorophenol	U	7/31/2009	7/30/2009	ug/kg	74	1
2,4,6-Trichlorophenol	U	7/31/2009	7/30/2009	ug/kg	68	1
2,4-Dichlorophenol	U	7/31/2009	7/30/2009	ug/kg	75	1
2,4-Dimethylphenol	U	7/31/2009	7/30/2009	ug/kg	57	1
2,4-Dinitrophenol	J3U	7/31/2009	7/30/2009	ug/kg	220	1
2,4-Dinitrotoluene	J3U	7/31/2009	7/30/2009	ug/kg	49	1
2,6-Dinitrotoluene	J3U	7/31/2009	7/30/2009	ug/kg	50	1
2-Chloronaphthalene	U	7/31/2009	7/30/2009	ug/kg	66.7	1
2-Chlorophenol	U	7/31/2009	7/30/2009	ug/kg	69	1
2-Methyl-4,6-dinitrophenol	U	7/31/2009	7/30/2009	ug/kg	266	1
2-Methylnaphthalene	J3U	7/31/2009	7/30/2009	ug/kg	58	1
2-Methylphenol (o-Cresol)	U	7/31/2009	7/30/2009	ug/kg	96	1
2-Nitroaniline	J3MU	7/31/2009	7/30/2009	ug/kg	57	1
2-Nitrophenol	U	7/31/2009	7/30/2009	ug/kg	72	1
3,3'-Dichlorobenzidine	U	7/31/2009	7/30/2009	ug/kg	59	1
3-Nitroaniline	J3U	7/31/2009	7/30/2009	ug/kg	80	1
4-Bromophenyl-phenylether	U	7/31/2009	7/30/2009	ug/kg	49	1
4-Chloro-3-methylphenol	U	7/31/2009	7/30/2009	ug/kg	56	1
4-Chloroaniline	U	7/31/2009	7/30/2009	ug/kg	63	1
4-Chlorophenyl-phenylether	U	7/31/2009	7/30/2009	ug/kg	51	1
4-Methylphenol	U	7/31/2009	7/30/2009	ug/kg	59	1
4-Nitroaniline	J3U	7/31/2009	7/30/2009	ug/kg	88	1
4-Nitrophenol	U	7/31/2009	7/30/2009	ug/kg	53	1
Acenaphthene	U	7/31/2009	7/30/2009	ug/kg	49	1
Acenaphthylene	U	7/31/2009	7/30/2009	ug/kg	55	1
Aniline	U	7/31/2009	7/30/2009	ug/kg	77	1
Anthracene	U	7/31/2009	7/30/2009	ug/kg	60	1
Benzidine	U	7/31/2009	7/30/2009	ug/kg	600	1
Benzo(a)anthracene	U	7/31/2009	7/30/2009	ug/kg	57	1
Benzo(a)pyrene	U	7/31/2009	7/30/2009	ug/kg	43	1
Benzo(b)fluoranthene	U	7/31/2009	7/30/2009	ug/kg	63	1
Benzo(g,h,i)perylene	U	7/31/2009	7/30/2009	ug/kg	40	1
Benzo(k)fluoranthene	U	7/31/2009	7/30/2009	ug/kg	57	1
Benzoic acid	U	7/31/2009	7/30/2009	ug/kg	270	1
Benzyl alcohol	J3U	7/31/2009	7/30/2009	ug/kg	92	1
Bis(2-Chloroethoxy)methane	U	7/31/2009	7/30/2009	ug/kg	57	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131
PROJECT ID: Pinellas Bayway Site #2

METHOD: 8270

Method Blank 289402 **Matrix :** SQ

Associated Lab Samples : 251313101 289402 289403

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
Bis(2-Chloroethyl)ether	U	7/31/2009	7/30/2009	ug/kg	67	1
bis(2-ethylhexyl)phthalate	U	7/31/2009	7/30/2009	ug/kg	83	1
Butylbenzylphthalate	U	7/31/2009	7/30/2009	ug/kg	63	1
Chrysene	U	7/31/2009	7/30/2009	ug/kg	34	1
Dibenz(a,h)anthracene	U	7/31/2009	7/30/2009	ug/kg	41	1
Dibenzofuran	J3MU	7/31/2009	7/30/2009	ug/kg	54	1
Diethylphthalate	U	7/31/2009	7/30/2009	ug/kg	51	1
Dimethyl-phthalate	U	7/31/2009	7/30/2009	ug/kg	59	1
Di-n-butylphthalate	U	7/31/2009	7/30/2009	ug/kg	44	1
Di-n-octylphthalate	U	7/31/2009	7/30/2009	ug/kg	58	1
Fluoranthene	J3U	7/31/2009	7/30/2009	ug/kg	48	1
Fluorene	U	7/31/2009	7/30/2009	ug/kg	51	1
Hexachlorobenzene	J3MU	7/31/2009	7/30/2009	ug/kg	53	1
Hexachlorobutadiene	U	7/31/2009	7/30/2009	ug/kg	58	1
Hexachlorocyclopentadiene	U	7/31/2009	7/30/2009	ug/kg	40	1
Hexachloroethane	U	7/31/2009	7/30/2009	ug/kg	50	1
Indeno(1,2,3-cd)pyrene	U	7/31/2009	7/30/2009	ug/kg	52	1
Isophorone	U	7/31/2009	7/30/2009	ug/kg	59	1
Naphthalene	U	7/31/2009	7/30/2009	ug/kg	64	1
Nitrobenzene	U	7/31/2009	7/30/2009	ug/kg	60	1
N-Nitrosodimethylamine	U	7/31/2009	7/30/2009	ug/kg	71	1
N-Nitroso-di-n-propylamine	U	7/31/2009	7/30/2009	ug/kg	61	1
N-Nitrosodiphenylamine	U	7/31/2009	7/30/2009	ug/kg	63	1
Pentachlorophenol	U	7/31/2009	7/30/2009	ug/kg	133	1
Phenanthrene	U	7/31/2009	7/30/2009	ug/kg	56	1
Phenol	U	7/31/2009	7/30/2009	ug/kg	65	1
Pyrene	U	7/31/2009	7/30/2009	ug/kg	92	1
2,4,6-Tribromophenol(SURR) (S)	73.9	7/31/2009	7/30/2009	%	(19 - 122)	1
2-Fluorobiphenyl(SURR) (S)	71.8	7/31/2009	7/30/2009	%	(30 - 115)	1
2-Fluorophenol(SURR) (S)	77.4	7/31/2009	7/30/2009	%	(25 - 121)	1
Nitrobenzene-d5(SURR) (S)	79.6	7/31/2009	7/30/2009	%	(23 - 120)	1
Phenol-d5(SURR) (S)	70.9	7/31/2009	7/30/2009	%	(24 - 113)	1
p-Terphenyl-d14(SURR) (S)	68.1	7/31/2009	7/30/2009	%	(18 - 137)	1

LABORATORY CONTROL SAMPLE: 289403 **Matrix :** SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
1,2,4-Trichlorobenzene	ug/kg	2670	1920	71.9	(71-110)		
1,2-Dichlorobenzene	ug/kg	2670	1830	68.5	(65-95)		
1,3-Dichlorobenzene	ug/kg	2670	1820	68.2	(67-100)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131

PROJECT ID: Pinellas Bayway Site #2

METHOD: 8270

LABORATORY CONTROL SAMPLE: 289403 Matrix : SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC		% REC LIMITS	RPD	RPD LIMIT
1,4-Dichlorobenzene	ug/kg	2670	1810	67.8		(62-105)		
1-Methylnaphthalene	ug/kg	2670	1980	74.2		(67-145)		
2,2-Oxybis(1-chloropropane)	ug/kg	2670	2130	79.8		(52-115)		
2,4,5-Trichlorophenol	ug/kg	2670	1980	74.2		(61-110)		
2,4,6-Trichlorophenol	ug/kg	2670	1860	69.7		(62-110)		
2,4-Dichlorophenol	ug/kg	2670	1920	71.9		(64-110)		
2,4-Dimethylphenol	ug/kg	2670	1960	73.4		(65-105)		
2,4-Dinitrophenol	ug/kg	5330	1510	28.3	*	(29-130)		
2,4-Dinitrotoluene	ug/kg	2670	1960	73.4	*	(77-115)		
2,6-Dinitrotoluene	ug/kg	2670	1920	71.9	*	(73-110)		
2-Chloronaphthalene	ug/kg	2670	1930	72.3		(72-105)		
2-Chlorophenol	ug/kg	2670	1900	71.2		(54-105)		
2-Methyl-4,6-dinitrophenol	ug/kg	2670	1260	47.2		(34-135)		
2-Methylnaphthalene	ug/kg	2670	1870	70	*	(72-105)		
2-Methylphenol (o-Cresol)	ug/kg	2670	1940	72.7		(58-105)		
2-Nitroaniline	ug/kg	2670	1880	70.4	*	(71-120)		
2-Nitrophenol	ug/kg	2670	1950	73		(61-110)		
3,3'-Dichlorobenzidine	ug/kg	2670	1680	62.9		(41-130)		
3-Nitroaniline	ug/kg	2670	1620	60.7	*	(76-110)		
4-Bromophenyl-phenylether	ug/kg	2670	2160	80.9		(59-115)		
4-Chloro-3-methylphenol	ug/kg	2670	1960	73.4		(62-115)		
4-Chloroaniline	ug/kg	2670	1540	57.7		(57-95)		
4-Chlorophenyl-phenylether	ug/kg	2670	2120	79.4		(65-110)		
4-Methylphenol	ug/kg	2670	1890	70.8		(57-105)		
4-Nitroaniline	ug/kg	2670	1740	65.2	*	(70-115)		
4-Nitrophenol	ug/kg	2670	1650	61.8		(52-140)		
Acenaphthene	ug/kg	2670	1820	68.2		(65-110)		
Acenaphthylene	ug/kg	2670	1870	70		(66-105)		
Aniline	ug/kg	2670	1790	67		(47-140)		
Anthracene	ug/kg	2670	1880	70.4		(67-105)		
Benzidine	ug/kg	2670	644	24.1		(10-149)		
Benzo(a)anthracene	ug/kg	2670	1840	68.9		(67-110)		
Benzo(a)pyrene	ug/kg	2670	1840	68.9		(60-110)		
Benzo(b)fluoranthene	ug/kg	2670	1820	68.2		(49-115)		
Benzo(g,h,i)perylene	ug/kg	2670	1930	72.3		(41-125)		
Benzo(k)fluoranthene	ug/kg	2670	1900	71.2		(53-125)		
Benzoic acid	ug/kg	5330	1410	26.5		(10-106)		
Benzyl alcohol	ug/kg	2670	1670	62.5	*	(64-125)		
Bis(2-Chloroethoxy)methane	ug/kg	2670	2180	81.6		(70-110)		
Bis(2-Chloroethyl)ether	ug/kg	2670	2070	77.5		(61-105)		
bis(2-ethylhexyl)phthalate	ug/kg	2670	2460	92.1		(65-125)		
Butylbenzylphthalate	ug/kg	2670	2510	94		(66-125)		
Chrysene	ug/kg	2670	1850	69.3		(65-110)		
Dibenz(a,h)anthracene	ug/kg	2670	1820	68.2		(40-125)		
Dibenzofuran	ug/kg	2670	1830	68.5	*	(75-105)		
Diethylphthalate	ug/kg	2670	2190	82		(68-115)		
Dimethyl-phthalate	ug/kg	2670	2150	80.5		(69-110)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131

PROJECT ID: Pinellas Bayway Site #2

METHOD: 8270

LABORATORY CONTROL SAMPLE: 289403 Matrix : SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC		% REC LIMITS	RPD	RPD LIMIT
Di-n-butylphthalate	ug/kg	2670	2200	82.4		(67-110)		
Di-n-octylphthalate	ug/kg	2670	2360	88.4		(64-130)		
Fluoranthene	ug/kg	2670	1820	68.2	*	(74-115)		
Fluorene	ug/kg	2670	1800	67.4		(67-110)		
Hexachlorobenzene	ug/kg	2670	1850	69.3	*	(77-120)		
Hexachlorobutadiene	ug/kg	2670	2130	79.8		(79-115)		
Hexachlorocyclopentadiene	ug/kg	2670	1800	67.4		(34-139)		
Hexachloroethane	ug/kg	2670	1850	69.3		(65-110)		
Indeno(1,2,3-cd)pyrene	ug/kg	2670	1770	66.3		(40-120)		
Isophorone	ug/kg	2670	2080	77.9		(69-110)		
Naphthalene	ug/kg	2670	1870	70		(67-105)		
Nitrobenzene	ug/kg	2670	1930	72.3		(71-115)		
N-Nitrosodimethylamine	ug/kg	2670	2080	77.9		(48-115)		
N-Nitroso-di-n-propylamine	ug/kg	2670	2040	76.4		(59-115)		
N-Nitrosodiphenylamine	ug/kg	2670	2190	82		(77-115)		
Pentachlorophenol	ug/kg	2670	1380	51.7		(36-120)		
Phenanthrene	ug/kg	2670	1810	67.8		(67-110)		
Phenol	ug/kg	2670	1810	67.8		(46-100)		
Pyrene	ug/kg	2670	1940	72.7		(67-125)		
2,4,6-Tribromophenol(SURR) (S)	ug/kg	13300	9500	71.4		(19-122)		
2-Fluorobiphenyl(SURR) (S)	ug/kg	6670	4660	69.9		(30-115)		
2-Fluorophenol(SURR) (S)	ug/kg	13300	9940	74.7		(25-121)		
Nitrobenzene-d5(SURR) (S)	ug/kg	6670	5130	76.9		(23-120)		
Phenol-d5(SURR) (S)	ug/kg	13300	9140	68.7		(24-113)		
p-Terphenyl-d14(SURR) (S)	ug/kg	6670	4450	66.7		(18-137)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131
PROJECT ID: Pinellas Bayway Site #2

METHOD: 8270 SIM

Method Blank 289006 **Matrix :** WQ

Associated Lab Samples : 251313102 289006 289007 289008

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
1-Methylnaphthalene	U	7/25/2009	7/23/2009	ug/l	0.02	1
2-Methylnaphthalene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Acenaphthene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Acenaphthylene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Anthracene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Benzo(a)anthracene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Benzo(a)pyrene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Benzo(b)fluoranthene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Benzo(g,h,i)perylene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Benzo(k)fluoranthene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Chrysene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Dibenz(a,h)anthracene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Fluoranthene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Fluorene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Indeno(1,2,3-cd)pyrene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Naphthalene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Phenanthrene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Pyrene	U	7/25/2009	7/23/2009	ug/l	0.02	1
p-Terphenyl-d14(SURR) (S)	96	7/25/2009	7/23/2009	%	(33 - 141)	1

LABORATORY CONTROL SAMPLE: 289007 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
1-Methylnaphthalene	ug/l	0.5	0.4	80	(53-125)		
2-Methylnaphthalene	ug/l	0.5	0.41	82	(38-132)		
Acenaphthene	ug/l	0.5	0.4	80	(70-117)		
Acenaphthylene	ug/l	0.5	0.4	80	(59-124)		
Anthracene	ug/l	0.5	0.4	80	(74-119)		
Benzo(a)anthracene	ug/l	0.5	0.43	86	(72-134)		
Benzo(a)pyrene	ug/l	0.5	0.44	88	(50-142)		
Benzo(b)fluoranthene	ug/l	0.5	0.44	88	(62-147)		
Benzo(g,h,i)perylene	ug/l	0.5	0.43	86	(57-138)		
Benzo(k)fluoranthene	ug/l	0.5	0.42	84	(74-123)		
Chrysene	ug/l	0.5	0.42	84	(75-118)		
Dibenz(a,h)anthracene	ug/l	0.5	0.45	90	(53-150)		
Fluoranthene	ug/l	0.5	0.43	86	(76-117)		
Fluorene	ug/l	0.5	0.41	82	(74-124)		
Indeno(1,2,3-cd)pyrene	ug/l	0.5	0.44	88	(63-135)		
Naphthalene	ug/l	0.5	0.4	80	(74-112)		
Phenanthrene	ug/l	0.5	0.4	80	(80-118)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131

PROJECT ID: Pinellas Bayway Site #2

METHOD: 8270 SIM

LABORATORY CONTROL SAMPLE: 289007 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
Pyrene	ug/l	0.5	0.4	80	(71-122)		
p-Terphenyl-d14(SURR) (S)	ug/l	0.5	0.5	100	(33-141)		

LABORATORY CONTROL SAMPLE: 289008 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
1-Methylnaphthalene	ug/l	0.5	0.43	86	(53-125)		
2-Methylnaphthalene	ug/l	0.5	0.44	88	(38-132)		
Acenaphthene	ug/l	0.5	0.43	86	(70-117)		
Acenaphthylene	ug/l	0.5	0.43	86	(59-124)		
Anthracene	ug/l	0.5	0.42	84	(74-119)		
Benzo(a)anthracene	ug/l	0.5	0.45	90	(72-134)		
Benzo(a)pyrene	ug/l	0.5	0.46	92	(50-142)		
Benzo(b)fluoranthene	ug/l	0.5	0.46	92	(62-147)		
Benzo(g,h,i)perylene	ug/l	0.5	0.49	98	(57-138)		
Benzo(k)fluoranthene	ug/l	0.5	0.43	86	(74-123)		
Chrysene	ug/l	0.5	0.44	88	(75-118)		
Dibenz(a,h)anthracene	ug/l	0.5	0.53	106	(53-150)		
Fluoranthene	ug/l	0.5	0.42	84	(76-117)		
Fluorene	ug/l	0.5	0.43	86	(74-124)		
Indeno(1,2,3-cd)pyrene	ug/l	0.5	0.54	108	(63-135)		
Naphthalene	ug/l	0.5	0.43	86	(74-112)		
Phenanthrene	ug/l	0.5	0.41	82	(80-118)		
Pyrene	ug/l	0.5	0.44	88	(71-122)		
p-Terphenyl-d14(SURR) (S)	ug/l	0.5	0.45	90	(33-141)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131
PROJECT ID: Pinellas Bayway Site #2

METHOD: 8310

Method Blank 289009 **Matrix :** SQ

Associated Lab Samples : 251313101 289009 289010

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
1-Methylnaphthalene	U	7/23/2009	7/23/2009	ug/kg	4.1	1
2-Methylnaphthalene	U	7/23/2009	7/23/2009	ug/kg	3.9	1
Acenaphthene	U	7/23/2009	7/23/2009	ug/kg	1.1	1
Acenaphthylene	U	7/23/2009	7/23/2009	ug/kg	1.2	1
Anthracene	U	7/23/2009	7/23/2009	ug/kg	1.1	1
Benzo(a)anthracene	U	7/23/2009	7/23/2009	ug/kg	2	1
Benzo(a)pyrene	U	7/23/2009	7/23/2009	ug/kg	3.3	1
Benzo(b)fluoranthene	U	7/23/2009	7/23/2009	ug/kg	2.6	1
Benzo(g,h,i)perylene	U	7/23/2009	7/23/2009	ug/kg	2.6	1
Benzo(k)fluoranthene	U	7/23/2009	7/23/2009	ug/kg	1.4	1
Chrysene	U	7/23/2009	7/23/2009	ug/kg	2.8	1
Dibenz(a,h)anthracene	U	7/23/2009	7/23/2009	ug/kg	1.1	1
Fluoranthene	U	7/23/2009	7/23/2009	ug/kg	2	1
Fluorene	U	7/23/2009	7/23/2009	ug/kg	1.9	1
Indeno(1,2,3-cd)pyrene	U	7/23/2009	7/23/2009	ug/kg	1.1	1
Naphthalene	U	7/23/2009	7/23/2009	ug/kg	2.6	1
Phenanthrene	U	7/23/2009	7/23/2009	ug/kg	1.7	1
Pyrene	U	7/23/2009	7/23/2009	ug/kg	3	1
p-Terphenyl-d14(SURR) (S)	82.7	7/23/2009	7/23/2009	%	(17 - 119)	1

LABORATORY CONTROL SAMPLE: 289010 **Matrix :** SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
1-Methylnaphthalene	ug/kg	667	513	76.9	(70-111)		
2-Methylnaphthalene	ug/kg	667	511	76.6	(62-110)		
Acenaphthene	ug/kg	667	504	75.6	(68-109)		
Acenaphthylene	ug/kg	667	482	72.3	(67-112)		
Anthracene	ug/kg	667	478	71.7	(68-117)		
Benzo(a)anthracene	ug/kg	667	498	74.7	(68-112)		
Benzo(a)pyrene	ug/kg	667	432	64.8	(52-116)		
Benzo(b)fluoranthene	ug/kg	667	512	76.8	(69-114)		
Benzo(g,h,i)perylene	ug/kg	667	498	74.7	(53-119)		
Benzo(k)fluoranthene	ug/kg	667	498	74.7	(67-115)		
Chrysene	ug/kg	667	500	75	(66-117)		
Dibenz(a,h)anthracene	ug/kg	667	496	74.4	(68-118)		
Fluoranthene	ug/kg	667	518	77.7	(71-110)		
Fluorene	ug/kg	667	515	77.2	(68-118)		
Indeno(1,2,3-cd)pyrene	ug/kg	667	497	74.5	(61-122)		
Naphthalene	ug/kg	667	504	75.6	(69-114)		
Phenanthrene	ug/kg	667	505	75.7	(69-116)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131
PROJECT ID: Pinellas Bayway Site #2

METHOD: 8310

LABORATORY CONTROL SAMPLE: 289010 **Matrix :** SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
Pyrene	ug/kg	667	515	77.2	(71-115)		
p-Terphenyl-d14(SURR) (S)	ug/kg	1330	1010	75.9	(17-119)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131
PROJECT ID: Pinellas Bayway Site #2

METHOD: FL-PRO

Method Blank 288853 **Matrix :** WQ

Associated Lab Samples : 251313102 288853 288854 288855

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
TPH	U	7/21/2009	7/21/2009	mg/L	0.25	1
C39 Surrogate(SURR) (S)	93.3	7/21/2009	7/21/2009	%	(42 - 193)	1
o-Terphenyl Surrogate(SURR) (	99	7/21/2009	7/21/2009	%	(82 - 142)	1

Method Blank 289129 **Matrix :** SQ

Associated Lab Samples : 251313101 289129 289130

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
TPH	U	7/26/2009	7/26/2009	mg/Kg	5.9	1
C39 Surrogate(SURR) (S)	102	7/26/2009	7/26/2009	%	(60 - 118)	1
o-Terphenyl Surrogate(SURR) (	107	7/26/2009	7/26/2009	%	(62 - 109)	1

LABORATORY CONTROL SAMPLE: 288854 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC		% REC LIMITS	RPD	RPD LIMIT
TPH	mg/L	3.4	2.8	82.4		(55-118)		
C39 Surrogate(SURR) (S)	mg/L	0.15	0.13	86.7		(42-193)		
o-Terphenyl Surrogate(SURR) (	mg/L	0.1	0.098	98		(82-142)		

LABORATORY CONTROL SAMPLE: 288855 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC		% REC LIMITS	RPD	RPD LIMIT
TPH	mg/L	3.4	3	88.2		(55-118)	6.9	20
C39 Surrogate(SURR) (S)	mg/L	0.15	0.14	93.3		(42-193)		
o-Terphenyl Surrogate(SURR) (	mg/L	0.1	0.1	100		(82-142)		

LABORATORY CONTROL SAMPLE: 289130 **Matrix :** SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC		% REC LIMITS	RPD	RPD LIMIT
TPH	mg/Kg	25.8	24.8	96.1		(63-153)		
C39 Surrogate(SURR) (S)	mg/Kg	4.5	5.5	122	*	(60-118)		
o-Terphenyl Surrogate(SURR) (	mg/Kg	3	3.2	107		(62-109)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513131

PROJECT ID: Pinellas Bayway Site #2

Brian C. Spann

Digitally signed by Brian C. Spann
DN: cn=Brian C. Spann, o=Spectrum, ou=PEL, email=bspann@pelab.com, c=US
Date: 2009.08.04 15:57:32 -04'00'

Brian C. Spann Laboratory Manager

or

Mark Gudnason Quality Assurance Officer

PEL

A Division of SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1 25131 31 KC

Special Handling:
TAT- Indicate Date Needed:
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: SHAW E+I
725 South US Hwy 301
TAMPA FL 33619

Project Mgr.: James Cheze

Invoice To:

P.O. No.: RQN:

Project No.: 135581
Site Name: Pinellas Bayway Site #2
Location: Tierra Verde State: FL
Sampler(s): Wm Stovall

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9=_____ 10=_____ 11=_____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: 6010 (RCRA 8 per kit)	8260 (Full)	8270_SIM (Full)	FL-PRO	8082 PCBs	504 EDB			List preservative code below: (2) (6)	Notes:
	SB3 @ 3'	7-17-09	0930	G	SO	3		3		X	X	X	X	X					"5-7 Day TAT" 01
	SB3 @ 8'	7-17-09	1000	G	GW	6	3		1	X	X	X	X	X	X				"FDOT Rates" 02

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____

State specific reporting standards:

☐ E-mail to James.Cheze@shawgrp.com
EDD Format: PHC2 (8260, 6010, FLPRO)
PW Vials + jars (frozen per client)

Condition upon receipt: ☒ Iced ☐ Ambient ☒ °C 3.0, 3.2, 4.5

Relinquished by:	Received by:	Date:	Time:
7-15-09	Wm Stovall	7-17-09	0830
Wm Stovall 7-20-09 10:31am	7-20-09 9:55am	7/20/09	0830
	KC CLIM	7/20/09	1031

SAMPLE RECEIPT CONFIRMATION SHEET

Client Information

SDG:	2513131	**Req:**	87310
Client:	Shaw	**Project:**	Generic1
Level:	1	**Date Rec'd:**	7/20/2009 10:31:00 AM
Rec'd via:	courier	**Due Date:**	07/27/09

Sample Verification

Samples/Cooler Secure?	Yes	**All Samples on COC accounted For?**	Yes
Temperature of Samples(Celsius)	3.0C-4.5C	**All Samples Rec'd Intact?**	Yes
pH Verified?	Yes	**Sample Vol. Stuff. For Analysis?**	Yes
pH WNL?	Yes	**Samples Rec'd W/I Hold Time?**	Yes
Soil Origin (Domestic/Foreign):	Domestic	**Are All Samples to be Analyzed?**	Yes
Site Location/Project on COC?	Yes	**Correct Sample Containers?**	Yes
Client Project # on COC?	Yes	**COC Comments written on COC?**	Yes
Project Mgr. Indicated on COC?	Yes	**Samplers Initials on COC?**	Yes
COC relinquished/Dated by Client?	Yes	**Sample Date/Time Indicated?**	Yes
COC Received/Dated by PEL?	Yes	**TAT Requested:**	STD
Specific Subcontract Indicated?	No	**Client Requests Verbal Results?**	No
Samples Received By	courier	**Client Requests Faxed Results?**	No
PEL to Conduct ALL Analyses?	Yes		

PEER REVIEW: 

PEL a division of Spectrum Analytical, Inc.
featuring HANIBAL TECHNOLOGY

Florida Department of Health #E84207
June 30, 2009

CWA - Extractable Organics, General Chemistry,Metals,
Pesticides-herbicides-PCB's, Volatile Organics
RCRA/CERCLS - Extractable Organics, General Chemistry, Metals
Pesticides-Herbicides-PCB's, Volatile Organics

- CERTIFICATE OF ANALYSIS -

Report Date: 08/04/2009

To: Jim Cheze
Shaw Group
725 U.S. Highway 301 South
Tampa, FL 33612

W 813-612-3655

PROJECT ID: Pinellas Bayway Site #4
WORK ORDER: 2513130
DATE RECEIVED: Monday, July 20, 2009

Revised Report

Project Notes: Revised to include the full 8270 list for the soils.

(†): Short Hold Time Analysis Date

Samples reported on dry weight basis
All test results in this report pertain only to the samples as submitted.

PEL Contact: Mark Gudnason / extension: 242

8405 Benjamin Road, Suite A• Tampa, Florida 33634
813-888-9507• FAX: 800-480-6435
Website: www.pelab.com

PEL a division of Spectrum Analytical, Inc.
featuring Hanibal Technology

DATA QUALIFIER CODES

State of Florida, Department of Environmental Protection and
Department of Health _Rehabilitative Services / NELAC

I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

J Estimated value; value not accurate. This code shall be used in the following instances:

1. Surrogate recovery limits have been exceeded.
2. No known quality control criteria exits for the component.
3. The reported value did not meet the established quality control criteria for either precision or accuracy but falls within the NELAC marginal exceedance range.

3M. The reported value did not meet the established quality control criteria for either precision or accuracy and falls beyond the NELAC range for marginal exceedances.

3R. The RPD for the LCSD exceeds the laboratory established control limits.

4. The sample matrix interfered with the ability to make an accurate determination.
5. The data is questionable because of improper laboratory or field protocols (e.g. composite sample was collected instead of a grab sample).

L Off-scale high. Actual value is known to be greater than the value given. To be used when the concentration of the analyte is above the acceptable limit for quantitation (exceeds the linear range of the highest calibration standard) and the calibration curve is known to exhibit a negative deflection.

Q Sample held beyond acceptable holding time. This code shall be used if the value is derived from a sample that was prepared or analyzed after the approved holding time restrictions for the sample preparation or analysis.

U Indicates that the compound was analyzed for but not detected above the method detection limit (MDL).

V Indicates that the analyte was detected in both the sample and the associated method blank. Note: The value in the blank shall not be subtracted from associated samples.

Y The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.

Note: There was not sufficient sample volume to perform a matrix spike/duplicate for the following method(s).
: 8260, 8270_SIM, 8310
A Blank and Laboratory Control sample was analyzed to ensure the method performed within acceptable guidelines.

RL - Reporing Limit. The PEL lowest Practical Quanititation Limit (PQL), defined by the lowest point in the calibration curve.

CASE NARRATIVE
METALS

PEL Lab Reference No./SDG: 2513130

Client: Shaw Group

I. RECEIPT

Exceptions encountered upon receipt are addressed in the Sample Receipt Confirmation Report, included with the Chain-of-Custody documentation, or communication included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHOD

Analyses were performed according to the PEL, a Division of Spectrum Analytical, Standard Operating Procedures and EPA Method 6010B for ICP metals.

IV. PREPARATION

Soil samples were prepared according to PEL Laboratory's Standard Operating Procedures and EPA Method 3050B.
Water samples were prepared according to PEL Laboratory's Standard Operating Procedures and EPA Method 3010A.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

1. Calibration Blanks:

All acceptance criteria were met.

2. Method Blanks:

All acceptance criteria were met.

C. Spikes:

1. Laboratory Control Spikes (LCS):

An LCS/LCSD set was analyzed.
All percent recovery and relative percent difference (RPD) criteria were met.

2. Post Digestion Spike:

All acceptance criteria were met.

CASE NARRATIVE
METALS

PEL Lab Reference No./SDG: 2513130

Client: Shaw Group

3. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD):

No spikes requested by client.

D. Duplicate:

No sample duplicates are reported with this method. (Spike duplicates are referenced above in section C. Spikes.)

E. Serial Dilution:

All acceptance criteria were met.

F. ICP Interference Check Samples:

All acceptance criteria were met.

G. Samples:

Sample analysis proceeded normally.

Samples SB 4 at 10ft, SB 4 at 5ft required a 2X dilution due to interference with the following analyte(s): Arsenic.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and PEL, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

Linda Lee M. Gale

SIGNED: **DATE:** 07/24/2009

CASE NARRATIVE
EDB GC SEMIVOLATILE ORGANIC

PEL Lab Reference No./SDG: 2513130

Client: Shaw Group

I. RECEIPT

Exceptions encountered upon receipt are addressed in the Sample Receipt Confirmation Report, included with the Chain-of-Custody documentation, or communication included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

SW846/EPA 8011.

IV. PREPARATION

Water samples were prepared by SW846/EPA 8011 for semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

An LCS/LCSD set was analyzed.
All percent recovery and relative percent difference (RPD) criteria were met.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

No spikes requested by client.

E. Internal Standards:

This method does not require the use of internal standards.

CASE NARRATIVE
EDB GC SEMIVOLATILE ORGANIC

PEL Lab Reference No./SDG: 2513130

Client: Shaw Group

F. Samples:

Sample analysis proceeded normally.

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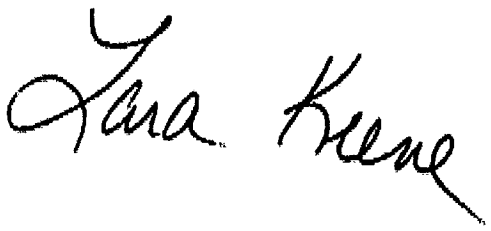

SIGNED: **DATE:** 07/27/2009

CASE NARRATIVE
POLYCHLORINATED BIPHENYLS (PCB) SEMIVOLATILE ORGANIC

PEL Lab Reference No./SDG: 2513130

Client: Shaw Group

I. RECEIPT

Exceptions encountered upon receipt are addressed in the Sample Receipt Confirmation Report, included with the Chain-of-Custody documentation, or communication included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

EPA SW846 8082 for Aroclor analysis.

IV. PREPARATION

Soil samples were prepared by SW846 EPA 3545 for 8082 semi-volatile analysis.
Water samples were prepared by SW846 EPA 3510 for 8082 semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.
Closing CCV CCV742673 had recoveries above QC limits. Since there were no compounds found above RL in the associated samples, it can be assumed that had they been in the samples they would have been detected. Acceptance criteria were met and no further action was taken.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

PCB 1016 and PCB 1260 were used as the spiking solution for all QC spikes.

1. Laboratory Control Spikes (LCS)

An LCS/LCSD set was analyzed.
All percent recovery and relative percent difference (RPD) criteria were met.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

CASE NARRATIVE
POLYCHLORINATED BIPHENYLS (PCB) SEMIVOLATILE ORGANIC

PEL Lab Reference No./SDG: 2513130

Client: Shaw Group

No spikes requested by client.

E. Internal Standards:

This method does not require the use of internal standards.

F. Samples:

Sample analysis proceeded normally.

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SIGNED: **DATE:** 07/27/2009

CASE NARRATIVE
GC/MS VOLATILE ORGANICS

PEL Lab Reference No./SDG: 2513130

Client: Shaw Group

I. RECEIPT

Exceptions encountered upon receipt are addressed in the Sample Receipt Confirmation Report, included with the Chain-of-Custody documentation, or communication included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

EPA 8260B/SW846

IV. PREPARATION

Soil samples were prepared by SW846/5035 for EPA8260B volatiles analysis. All aspects of sample preparation proceeded without exception.

Water samples were prepared by SW846/5030 for EPA8260B volatiles analysis. All aspects of sample preparation proceeded without exception.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met with the exception of:

LCS 072009LCS22 was analyzed with the soil samples on 07/20/09. The following analyte(s) were recovered above criteria: 2-Hexanone at 131 % with criteria of (72-127), Acrolein at 113 % with criteria of (70-111). No further action was required since ME criteria were met.

CASE NARRATIVE
GC/MS VOLATILE ORGANICS

PEL Lab Reference No./SDG: 2513130

Client: Shaw Group

LCS 072009LCS22D was analyzed with the soil samples on 07/20/09. The following analyte(s) were recovered above criteria: Acrolein at 116 % with criteria of (70-111). The following analyte(s) exceeded RPD criteria: Bromoform at 20.9 % with criteria of (13). No further action was required since ME criteria were met.

LCS 0721LCS52 was analyzed with the water samples on 07/21/09. The following analyte(s) were recovered above criteria: Chloroethane at 154 % with criteria of (72-135). The following analyte(s) had marginal exceedance limit failures: Chloroethane at 154 % with criteria of (61.5-145.5). No further action was taken, since the high range was exceeded and the LCSD met ME criteria.

LCS 0721LCS52D was analyzed with the water samples on 07/21/09. The following analyte(s) were recovered above criteria: Chloroethane at 144 % with criteria of (72-135). No further action was required since ME criteria was met.

Samples coded accordingly.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

No spikes requested by client.

E. Internal Standards:

All acceptance criteria were met.

F. Samples:

Sample analysis proceeded normally. Client specified reporting limits were used.

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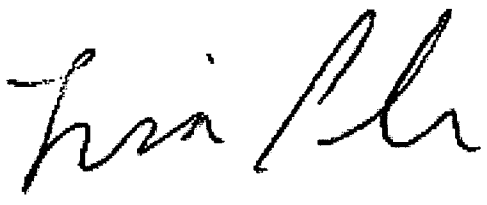
SIGNED:  **DATE:** 07/23/2009

CASE NARRATIVE
GC/MS SEMIVOLATILE ORGANICS

PEL Lab Reference No./SDG: 2513130

Client: Shaw Group

I. RECEIPT

Exceptions encountered upon receipt are addressed in the Sample Receipt Confirmation Report, included with the Chain-of-Custody documentation, or communication included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

EPA SW846 8270

IV. PREPARATION

Soil samples were prepared by SW846 EPA 3545 for 8270 semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met. PEL does not analyze a low calibration standard at the requested RL for all analytes. The low calibration standard is 270 ug/kg for the following analyte(s): 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2-Methylphenol (o-Cresol), 3-Nitroaniline, 4-Nitroaniline, Bis(2-Chloroethoxy)methane, Chrysene, Hexachlorobenzene, N-Nitrosodimethylamine, N-Nitrosodiphenylamine. The low calibration standard is 670 ug/kg for the following analyte(s): Benzoic acid, Pentachlorophenol.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met with the exception of:
LCS 688LCS was analyzed with the soil samples extracted on 07/30/09. The following analyte(s) were recovered below criteria: 2,4-Dinitrophenol at 28.3 % with criteria of (29-130), 2,4-Dinitrotoluene at 73.4 % with criteria of (77-115), 2,6-Dinitrotoluene at 71.9 % with criteria of (73-110), 2-Methylnaphthalene at 70 % with criteria of (72-

PEL Lab Reference No./SDG: 2513130

Client: Shaw Group

105), 2-Nitroaniline at 70.4 % with criteria of (71-120), 4-Nitroaniline at 65.2 % with criteria of (70-115), Benzyl alcohol at 62.5 % with criteria of (64-125), Fluoranthene at 68.2 % with criteria of (74-115). The following analyte(s) had marginal exceedance limit failures: 3-Nitroaniline at 60.7 % with criteria of (70.3-115.7), Dibenzofuran at 68.5 % with criteria of (70-110), Hexachlorobenzene at 69.3 % with criteria of (69.8-127.2).

Since all other analytes met all acceptance criteria, no further action was taken.

Samples coded accordingly.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

No spikes requested by client.

E. Internal Standards:

All acceptance criteria were met.

F. Samples:

Sample analysis proceeded normally.

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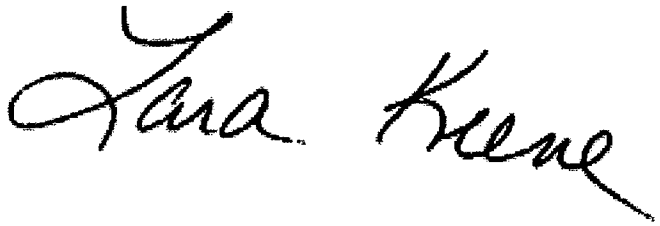

SIGNED: **DATE:** 08/03/2009

CASE NARRATIVE
GC/MS SEMIVOLATILE ORGANICS

PEL Lab Reference No./SDG: 2513130

Client: Shaw Group

I. RECEIPT

Exceptions encountered upon receipt are addressed in the Sample Receipt Confirmation Report, included with the Chain-of-Custody documentation, or communication included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

EPA SW846 8270C.

IV. PREPARATION

Water samples were prepared by SW846 EPA 3510 for 8270 semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. **Laboratory Control Spikes (LCS)**

   All acceptance criteria were met

2. **Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)**

   No spikes requested by client.

E. Internal Standards:

All acceptance criteria were met.

CASE NARRATIVE
GC/MS SEMIVOLATILE ORGANICS

PEL Lab Reference No./SDG: 2513130

Client: Shaw Group

F. Samples:

Sample analysis proceeded normally.

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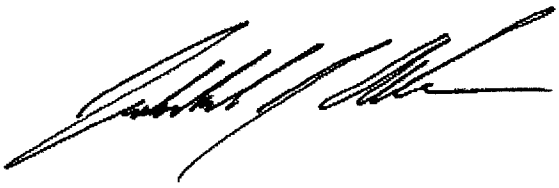
SIGNED:  **DATE:** 07/26/2009

CASE NARRATIVE
HPLC SEMIVOLATILE ORGANICS

PEL Lab Reference No./SDG: 2513130

Client: Shaw Group

I. RECEIPT

Exceptions encountered upon receipt are addressed in the Sample Receipt Confirmation Report, included with the Chain-of-Custody documentation, or communication included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

SW846/EPA 8310

IV. PREPARATION

Soil samples were prepared by SW846, EPA Method 3550 for 8310 semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

No spikes requested by client.

E. Internal Standards:

This method does not require the use of internal standards.

CASE NARRATIVE
HPLC SEMIVOLATILE ORGANICS

PEL Lab Reference No./SDG: 2513130

Client: Shaw Group

F. Samples:

Sample analysis proceeded normally.

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SIGNED: **DATE:** 07/24/2009

CASE NARRATIVE
FLORIDA PETROLEUM RANGE ORGANICS (FL PRO) SEMIVOLATILE ORGANICS

PEL Lab Reference No./SDG: 2513130

Client: Shaw Group

I. RECEIPT

Exceptions encountered upon receipt are addressed in the Sample Receipt Confirmation Report, included with the Chain-of-Custody documentation, or communication included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

Florida DEP/FL PRO

IV. PREPARATION

Soil samples were prepared by SW846 EPA 3550 for FL PRO semi-volatile analysis.
Water samples were prepared by SW846 EPA 3510 for FL PRO semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met with the exception of:
Sample 6654LCS was recovered above criteria for the following surrogate(s): C39 Surrogate at 122 % with criteria of (60-118). Since surrogate C39 was just above acceptable criteria, and since surrogate o-terphenyl and all other quality control criteria were met, no further action was taken.

Sample SB 2 at 8ft was recovered below criteria for the following surrogate(s): o-Terphenyl Surrogate at 58 % with criteria of (82-142). The most probable cause for the exceedance is matrix interference. There were notations during the extraction phase stating that there were heavy emulsions during the extraction phase. Since surrogate o-terphenyl and all other quality control criteria were met, no further action was taken.

Samples coded accordingly.

CASE NARRATIVE
FLORIDA PETROLEUM RANGE ORGANICS (FL PRO) SEMIVOLATILE ORGANICS

PEL Lab Reference No./SDG: 2513130

Client: Shaw Group

D. Spikes:

1. Laboratory Control Spikes (LCS)

An LCS/LCSD set was analyzed.
All percent recovery and relative percent difference (RPD) criteria were met.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

No spikes requested by client.

E. Internal Standards:

This method does not require the use of internal standards.

F. Samples:

Sample analysis proceeded normally.

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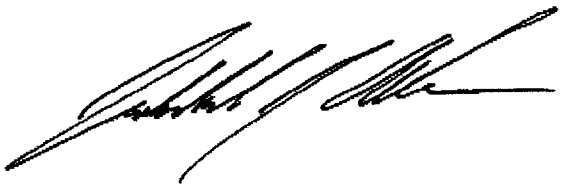
SIGNED:  **DATE:** 07/27/2009

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313001
Client ID : SB 3 at 5ft
Matrix : SO

Collection Information:
Sample Date: 7/17/2009 2:10:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Arsenic	6010	0.417 U	07/22/2009 17:04	07/21/2009 12:10	mg/Kg	0.417	0.834	1
Cadmium	6010	0.0786 I	07/22/2009 17:04	07/21/2009 12:10	mg/Kg	0.0417	0.417	1
Chromium	6010	**2.81**	07/22/2009 17:04	07/21/2009 12:10	mg/Kg	0.134	0.417	1
Lead	6010	0.538 I	07/22/2009 17:04	07/21/2009 12:10	mg/Kg	0.284	0.668	1
Aroclor-1016	8082	3.4 U	07/22/2009 3:31	07/21/2009 17:21	ug/Kg	3.4	24	1
Aroclor-1221	8082	5.9 U	07/22/2009 3:31	07/21/2009 17:21	ug/Kg	5.9	24	1
Aroclor-1232	8082	16 U	07/22/2009 3:31	07/21/2009 17:21	ug/Kg	16	24	1
Aroclor-1242	8082	5.9 U	07/22/2009 3:31	07/21/2009 17:21	ug/Kg	5.9	24	1
Aroclor-1248	8082	8.8 U	07/22/2009 3:31	07/21/2009 17:21	ug/Kg	8.8	24	1
Aroclor-1254	8082	2.5 U	07/22/2009 3:31	07/21/2009 17:21	ug/Kg	2.5	24	1
Aroclor-1260	8082	3.7 U	07/22/2009 3:31	07/21/2009 17:21	ug/Kg	3.7	24	1
Aroclor-1262	8082	4 U	07/22/2009 3:31	07/21/2009 17:21	ug/Kg	4	24	1
Aroclor-1268	8082	4.6 U	07/22/2009 3:31	07/21/2009 17:21	ug/Kg	4.6	24	1
Decachlorobiphenyl(SURR)	8082	93.2	07/22/2009 3:31	07/21/2009 17:21	%	4.6	(33 - 140)	1
1,1,1,2-Tetrachloroethane	8260	0.91 U	07/20/2009 13:35		ug/kg	0.91	2.5	1
1,1,1-Trichloroethane	8260	0.66 U	07/20/2009 13:35		ug/kg	0.66	2.5	1
1,1,2,2-Tetrachloroethane	8260	0.74 U	07/20/2009 13:35		ug/kg	0.74	2.5	1
1,1,2-Trichloroethane	8260	1 U	07/20/2009 13:35		ug/kg	1	2.5	1
1,1-Dichloroethane	8260	0.85 U	07/20/2009 13:35		ug/kg	0.85	2.5	1
1,1-Dichloroethene	8260	0.81 U	07/20/2009 13:35		ug/kg	0.81	2.5	1
1,1-Dichloropropene	8260	0.59 U	07/20/2009 13:35		ug/kg	0.59	2.5	1
1,2,3-Trichlorobenzene	8260	0.6 U	07/20/2009 13:35		ug/kg	0.6	2.5	1
1,2,3-Trichloropropane	8260	1.1 U	07/20/2009 13:35		ug/kg	1.1	2.5	1
1,2,4-Trichlorobenzene	8260	0.72 U	07/20/2009 13:35		ug/kg	0.72	2.5	1
1,2,4-Trimethylbenzene	8260	0.41 U	07/20/2009 13:35		ug/kg	0.41	2.5	1
1,2-Dibromo-3-chloropropane	8260	2.7 U	07/20/2009 13:35		ug/kg	2.7	12.3	1
1,2-Dibromoethane(EDB)	8260	1.2 U	07/20/2009 13:35		ug/kg	1.2	2.5	1
1,2-Dichlorobenzene	8260	0.59 U	07/20/2009 13:35		ug/kg	0.59	2.5	1
1,2-Dichloroethane	8260	0.62 U	07/20/2009 13:35		ug/kg	0.62	2.5	1
1,2-Dichloropropane	8260	1.1 U	07/20/2009 13:35		ug/kg	1.1	2.5	1
1,3,5-Trimethylbenzene	8260	0.5 U	07/20/2009 13:35		ug/kg	0.5	2.5	1
1,3-Dichlorobenzene	8260	0.65 U	07/20/2009 13:35		ug/kg	0.65	2.5	1
1,3-Dichloropropane	8260	0.66 U	07/20/2009 13:35		ug/kg	0.66	2.5	1
1,4-Dichlorobenzene	8260	0.66 U	07/20/2009 13:35		ug/kg	0.66	2.5	1
2,2-Dichloropropane	8260	0.75 U	07/20/2009 13:35		ug/kg	0.75	2.5	1
2-Butanone	8260	2.1 U	07/20/2009 13:35		ug/kg	2.1	12.3	1
2-Chlorotoluene	8260	0.55 U	07/20/2009 13:35		ug/kg	0.55	2.5	1
2-Hexanone	8260	2 J3U	07/20/2009 13:35		ug/kg	2	12.3	1
4-Chlorotoluene	8260	0.44 U	07/20/2009 13:35		ug/kg	0.44	2.5	1
4-Isopropyltoluene	8260	1.2 U	07/20/2009 13:35		ug/kg	1.2	2.5	1
4-Methyl-2-pentanone	8260	1.5 U	07/20/2009 13:35		ug/kg	1.5	12.3	1
Acetone	8260	5.9 U	07/20/2009 13:35		ug/kg	5.9	12.3	1
Acrolein	8260	5.5 J3U	07/20/2009 13:35		ug/kg	5.5	30.8	1
Acrylonitrile	8260	4.3 U	07/20/2009 13:35		ug/kg	4.3	6.2	1
Benzene	8260	0.52 U	07/20/2009 13:35		ug/kg	0.52	2.5	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130

PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313001

Client ID : SB 3 at 5ft

Matrix : SO

Collection Information:

Sample Date: 7/17/2009 2:10:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Bromobenzene	8260	0.84 U	07/20/2009 13:35		ug/kg	0.84	2.5	1
Bromochloromethane	8260	0.94 U	07/20/2009 13:35		ug/kg	0.94	2.5	1
Bromodichloromethane	8260	0.53 U	07/20/2009 13:35		ug/kg	0.53	2.5	1
Bromoform	8260	2.5 J3RU	07/20/2009 13:35		ug/kg	2.5	6.2	1
Bromomethane	8260	1.2 U	07/20/2009 13:35		ug/kg	1.2	2.5	1
Carbon disulfide	8260	0.62 U	07/20/2009 13:35		ug/kg	0.62	2.5	1
Carbon tetrachloride	8260	0.6 U	07/20/2009 13:35		ug/kg	0.6	2.5	1
Chlorobenzene	8260	0.66 U	07/20/2009 13:35		ug/kg	0.66	2.5	1
Chloroethane	8260	1.5 U	07/20/2009 13:35		ug/kg	1.5	6.2	1
Chloroform	8260	0.64 U	07/20/2009 13:35		ug/kg	0.64	2.5	1
Chloromethane	8260	1.1 U	07/20/2009 13:35		ug/kg	1.1	2.5	1
cis-1,2-Dichloroethene	8260	1.5 U	07/20/2009 13:35		ug/kg	1.5	2.5	1
cis-1,3-Dichloropropene	8260	0.54 U	07/20/2009 13:35		ug/kg	0.54	2.5	1
Dibromochloromethane	8260	0.8 U	07/20/2009 13:35		ug/kg	0.8	2.5	1
Dibromomethane	8260	1.1 U	07/20/2009 13:35		ug/kg	1.1	2.5	1
Dichlorodifluoromethane	8260	0.81 U	07/20/2009 13:35		ug/kg	0.81	2.5	1
Ethylbenzene	8260	0.94 U	07/20/2009 13:35		ug/kg	0.94	2.5	1
Hexachlorobutadiene	8260	1 U	07/20/2009 13:35		ug/kg	1	4.9	1
Isopropylbenzene (Cumene)	8260	0.97 U	07/20/2009 13:35		ug/kg	0.97	2.5	1
Methyl iodide	8260	0.57 U	07/20/2009 13:35		ug/kg	0.57	2.5	1
Methylene chloride	8260	1.5 U	07/20/2009 13:35		ug/kg	1.5	6.2	1
MTBE	8260	0.69 U	07/20/2009 13:35		ug/kg	0.69	2.5	1
Naphthalene	8260	0.84 U	07/20/2009 13:35		ug/kg	0.84	2.5	1
n-Butylbenzene	8260	0.57 U	07/20/2009 13:35		ug/kg	0.57	2.5	1
n-Propylbenzene	8260	0.49 U	07/20/2009 13:35		ug/kg	0.49	2.5	1
o-Xylene	8260	0.64 U	07/20/2009 13:35		ug/kg	0.64	2.5	1
p,m-Xylene	8260	0.8 U	07/20/2009 13:35		ug/kg	0.8	4.9	1
sec-Butylbenzene	8260	0.74 U	07/20/2009 13:35		ug/kg	0.74	2.5	1
Styrene	8260	0.53 U	07/20/2009 13:35		ug/kg	0.53	2.5	1
tert-Butylbenzene	8260	0.81 U	07/20/2009 13:35		ug/kg	0.81	2.5	1
Tetrachloroethene	8260	0.64 U	07/20/2009 13:35		ug/kg	0.64	2.5	1
Toluene	8260	1.1 U	07/20/2009 13:35		ug/kg	1.1	2.5	1
trans-1,2-Dichloroethene	8260	0.94 U	07/20/2009 13:35		ug/kg	0.94	2.5	1
trans-1,3-Dichloropropene	8260	0.69 U	07/20/2009 13:35		ug/kg	0.69	2.5	1
Trichloroethene	8260	1.1 U	07/20/2009 13:35		ug/kg	1.1	2.5	1
Trichlorofluoromethane	8260	0.78 U	07/20/2009 13:35		ug/kg	0.78	2.5	1
Vinyl acetate	8260	1.4 U	07/20/2009 13:35		ug/kg	1.4	6.2	1
Vinyl chloride	8260	1.2 U	07/20/2009 13:35		ug/kg	1.2	2.5	1
1,2-Dichloroethane-d4(SURR)	8260	92.8	07/20/2009 13:35		%	1.2	(71 - 124)	1
4-Bromofluorobenzene(SURR)	8260	86.2	07/20/2009 13:35		%	1.2	(54 - 126)	1
Dibromofluoromethane(SURR)	8260	93	07/20/2009 13:35		%	1.2	(68 - 119)	1
Toluene d8(SURR)	8260	84.2	07/20/2009 13:35		%	1.2	(59 - 127)	1
1,2,4-Trichlorobenzene	8270	45.2 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	45.2	211	1
1,2-Dichlorobenzene	8270	44.5 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	44.5	211	1
1,3-Dichlorobenzene	8270	47.6 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	47.6	211	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130

PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313001

Client ID : SB 3 at 5ft

Matrix : SO

Collection Information:

Sample Date: 7/17/2009 2:10:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
1,4-Dichlorobenzene	8270	49.2 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	49.2	211	1
1-Methylnaphthalene	8270	48.4 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	48.4	211	1
2,2-Oxybis(1-chloropropane)	8270	172 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	172	211	1
2,4,5-Trichlorophenol	8270	57.7 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	57.7	208	1
2,4,6-Trichlorophenol	8270	53.1 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	53.1	208	1
2,4-Dichlorophenol	8270	58.5 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	58.5	208	1
2,4-Dimethylphenol	8270	44.5 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	44.5	208	1
2,4-Dinitrophenol	8270	172 J3U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	172	1040	1
2,4-Dinitrotoluene	8270	38.2 J3U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	38.2	211	1
2,6-Dinitrotoluene	8270	39 J3U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	39	211	1
2-Chloronaphthalene	8270	52 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	52	211	1
2-Chlorophenol	8270	53.8 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	53.8	211	1
2-Methyl-4,6-dinitrophenol	8270	208 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	208	211	1
2-Methylnaphthalene	8270	45.2 J3U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	45.2	211	1
2-Methylphenol (o-Cresol)	8270	74.9 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	74.9	208	1
2-Nitroaniline	8270	44.5 J3U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	44.5	211	1
2-Nitrophenol	8270	56.2 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	56.2	211	1
3,3'-Dichlorobenzidine	8270	46 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	46	211	1
3-Nitroaniline	8270	62.4 J3MU	07/31/2009 18:29	07/30/2009 13:51	ug/kg	62.4	208	1
4-Bromophenyl-phenylether	8270	38.2 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	38.2	211	1
4-Chloro-3-methylphenol	8270	43.7 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	43.7	211	1
4-Chloroaniline	8270	49.2 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	49.2	211	1
4-Chlorophenyl-phenylether	8270	39.8 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	39.8	211	1
4-Methylphenol	8270	46 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	46	211	1
4-Nitroaniline	8270	68.7 J3U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	68.7	208	1
4-Nitrophenol	8270	41.4 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	41.4	520	1
Acenaphthene	8270	38.2 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	38.2	211	1
Acenaphthylene	8270	42.9 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	42.9	211	1
Aniline	8270	60.1 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	60.1	211	1
Anthracene	8270	46.8 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	46.8	211	1
Benzidine	8270	468 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	468	523	1
Benzo(a)anthracene	8270	44.5 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	44.5	211	1
Benzo(a)pyrene	8270	33.6 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	33.6	211	1
Benzo(b)fluoranthene	8270	49.2 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	49.2	211	1
Benzo(g,h,i)perylene	8270	31.2 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	31.2	211	1
Benzo(k)fluoranthene	8270	44.5 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	44.5	211	1
Benzoic acid	8270	211 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	211	520	1
Benzyl alcohol	8270	71.8 J3U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	71.8	520	1
Bis(2-Chloroethoxy)methane	8270	44.5 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	44.5	208	1
Bis(2-Chloroethyl)ether	8270	52.3 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	52.3	211	1
bis(2-ethylhexyl)phthalate	8270	64.8 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	64.8	211	1
Butylbenzylphthalate	8270	49.2 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	49.2	211	1
Chrysene	8270	26.5 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	26.5	208	1
Dibenz(a,h)anthracene	8270	32 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	32	211	1
Dibenzofuran	8270	42.1 J3MU	07/31/2009 18:29	07/30/2009 13:51	ug/kg	42.1	211	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313001
Client ID : SB 3 at 5ft
Matrix : SO

Collection Information:
Sample Date: 7/17/2009 2:10:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Diethylphthalate	8270	39.8 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	39.8	211	1
Dimethyl-phthalate	8270	46 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	46	211	1
Di-n-butylphthalate	8270	34.3 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	34.3	211	1
Di-n-octylphthalate	8270	45.2 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	45.2	211	1
Fluoranthene	8270	37.4 J3U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	37.4	211	1
Fluorene	8270	39.8 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	39.8	211	1
Hexachlorobenzene	8270	41.4 J3MU	07/31/2009 18:29	07/30/2009 13:51	ug/kg	41.4	208	1
Hexachlorobutadiene	8270	45.2 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	45.2	211	1
Hexachlorocyclopentadiene	8270	31.2 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	31.2	520	1
Hexachloroethane	8270	39 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	39	211	1
Indeno(1,2,3-cd)pyrene	8270	40.6 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	40.6	211	1
Isophorone	8270	46 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	46	211	1
Naphthalene	8270	49.9 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	49.9	211	1
Nitrobenzene	8270	46.8 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	46.8	211	1
N-Nitrosodimethylamine	8270	55.4 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	55.4	208	1
N-Nitroso-di-n-propylamine	8270	47.6 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	47.6	211	1
N-Nitrosodiphenylamine	8270	49.2 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	49.2	208	1
Pentachlorophenol	8270	104 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	104	211	1
Phenanthrene	8270	43.7 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	43.7	211	1
Phenol	8270	50.7 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	50.7	1040	1
Pyrene	8270	71.8 U	07/31/2009 18:29	07/30/2009 13:51	ug/kg	71.8	211	1
2,4,6-Tribromophenol(SURR)	8270	72.1	07/31/2009 18:29	07/30/2009 13:51	%	71.8	(19 - 122)	1
2-Fluorobiphenyl(SURR)	8270	67.1	07/31/2009 18:29	07/30/2009 13:51	%	71.8	(30 - 115)	1
2-Fluorophenol(SURR)	8270	73.9	07/31/2009 18:29	07/30/2009 13:51	%	71.8	(25 - 121)	1
Nitrobenzene-d5(SURR)	8270	73.7	07/31/2009 18:29	07/30/2009 13:51	%	71.8	(23 - 120)	1
Phenol-d5(SURR)	8270	66.8	07/31/2009 18:29	07/30/2009 13:51	%	71.8	(24 - 113)	1
p-Terphenyl-d14(SURR)	8270	64	07/31/2009 18:29	07/30/2009 13:51	%	71.8	(18 - 137)	1
1-Methylnaphthalene	8310	3.2 U	07/24/2009 0:20	07/23/2009 13:51	ug/kg	3.2	7.8	1
2-Methylnaphthalene	8310	3.1 U	07/24/2009 0:20	07/23/2009 13:51	ug/kg	3.1	7.8	1
Acenaphthene	8310	0.86 U	07/24/2009 0:20	07/23/2009 13:51	ug/kg	0.86	7.8	1
Acenaphthylene	8310	0.94 U	07/24/2009 0:20	07/23/2009 13:51	ug/kg	0.94	7.8	1
Anthracene	8310	0.86 U	07/24/2009 0:20	07/23/2009 13:51	ug/kg	0.86	7.8	1
Benzo(a)anthracene	8310	1.6 U	07/24/2009 0:20	07/23/2009 13:51	ug/kg	1.6	7.8	1
Benzo(a)pyrene	8310	2.6 U	07/24/2009 0:20	07/23/2009 13:51	ug/kg	2.6	7.8	1
Benzo(b)fluoranthene	8310	2 U	07/24/2009 0:20	07/23/2009 13:51	ug/kg	2	7.8	1
Benzo(g,h,i)perylene	8310	2 U	07/24/2009 0:20	07/23/2009 13:51	ug/kg	2	7.8	1
Benzo(k)fluoranthene	8310	1.1 U	07/24/2009 0:20	07/23/2009 13:51	ug/kg	1.1	7.8	1
Chrysene	8310	2.2 U	07/24/2009 0:20	07/23/2009 13:51	ug/kg	2.2	7.8	1
Dibenz(a,h)anthracene	8310	0.86 U	07/24/2009 0:20	07/23/2009 13:51	ug/kg	0.86	7.8	1
Fluoranthene	8310	1.6 U	07/24/2009 0:20	07/23/2009 13:51	ug/kg	1.6	7.8	1
Fluorene	8310	1.5 U	07/24/2009 0:20	07/23/2009 13:51	ug/kg	1.5	7.8	1
Indeno(1,2,3-cd)pyrene	8310	0.86 U	07/24/2009 0:20	07/23/2009 13:51	ug/kg	0.86	7.8	1
Naphthalene	8310	2 U	07/24/2009 0:20	07/23/2009 13:51	ug/kg	2	7.8	1
Phenanthrene	8310	1.3 U	07/24/2009 0:20	07/23/2009 13:51	ug/kg	1.3	7.8	1
Pyrene	8310	2.4 U	07/24/2009 0:20	07/23/2009 13:51	ug/kg	2.4	7.8	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313001
Client ID : SB 3 at 5ft
Matrix : SO

Collection Information:
Sample Date: 7/17/2009 2:10:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
p-Terphenyl-d14(SURR)	8310	76.4	07/24/2009 0:20	07/23/2009 13:51	%	2.4	(17 - 119)	1
TPH	FL-PRO	6.3 U	07/27/2009 0:39	07/26/2009 15:23	mg/Kg	6.3	11.1	1
C39 Surrogate(SURR)	FL-PRO	100	07/27/2009 0:39	07/26/2009 15:23	%	6.3	(60 - 118)	1
o-Terphenyl Surrogate(SURR)	FL-PRO	100	07/27/2009 0:39	07/26/2009 15:23	%	6.3	(62 - 109)	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313002
Client ID : SB 4 at 5ft
Matrix : SO

Collection Information:
Sample Date: 7/17/2009 2:20:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Cadmium	6010	0.0616 I	07/22/2009 1:58	07/21/2009 12:10	mg/Kg	0.0445	0.445	1
Chromium	6010	**1.63**	07/22/2009 1:58	07/21/2009 12:10	mg/Kg	0.142	0.445	1
Lead	6010	**4.18**	07/22/2009 1:58	07/21/2009 12:10	mg/Kg	0.302	0.712	1
Arsenic	6010	0.889 U	07/22/2009 17:29	07/21/2009 12:10	mg/Kg	0.889	1.78	2
Aroclor-1016	8082	3.4 U	07/22/2009 4:02	07/21/2009 17:21	ug/Kg	3.4	24	1
Aroclor-1221	8082	5.8 U	07/22/2009 4:02	07/21/2009 17:21	ug/Kg	5.8	24	1
Aroclor-1232	8082	16 U	07/22/2009 4:02	07/21/2009 17:21	ug/Kg	16	24	1
Aroclor-1242	8082	5.8 U	07/22/2009 4:02	07/21/2009 17:21	ug/Kg	5.8	24	1
Aroclor-1248	8082	8.7 U	07/22/2009 4:02	07/21/2009 17:21	ug/Kg	8.7	24	1
Aroclor-1254	8082	2.5 U	07/22/2009 4:02	07/21/2009 17:21	ug/Kg	2.5	24	1
Aroclor-1260	8082	3.7 U	07/22/2009 4:02	07/21/2009 17:21	ug/Kg	3.7	24	1
Aroclor-1262	8082	3.9 U	07/22/2009 4:02	07/21/2009 17:21	ug/Kg	3.9	24	1
Aroclor-1268	8082	4.6 U	07/22/2009 4:02	07/21/2009 17:21	ug/Kg	4.6	24	1
Decachlorobiphenyl(SURR)	8082	90.1	07/22/2009 4:02	07/21/2009 17:21	%	4.6	(33 - 140)	1
1,1,1,2-Tetrachloroethane	8260	0.89 U	07/20/2009 12:46		ug/kg	0.89	2.4	1
1,1,1-Trichloroethane	8260	0.65 U	07/20/2009 12:46		ug/kg	0.65	2.4	1
1,1,2,2-Tetrachloroethane	8260	0.72 U	07/20/2009 12:46		ug/kg	0.72	2.4	1
1,1,2-Trichloroethane	8260	0.98 U	07/20/2009 12:46		ug/kg	0.98	2.4	1
1,1-Dichloroethane	8260	0.83 U	07/20/2009 12:46		ug/kg	0.83	2.4	1
1,1-Dichloroethene	8260	0.8 U	07/20/2009 12:46		ug/kg	0.8	2.4	1
1,1-Dichloropropene	8260	0.58 U	07/20/2009 12:46		ug/kg	0.58	2.4	1
1,2,3-Trichlorobenzene	8260	0.59 U	07/20/2009 12:46		ug/kg	0.59	2.4	1
1,2,3-Trichloropropane	8260	1.1 U	07/20/2009 12:46		ug/kg	1.1	2.4	1
1,2,4-Trichlorobenzene	8260	0.7 U	07/20/2009 12:46		ug/kg	0.7	2.4	1
1,2,4-Trimethylbenzene	8260	0.4 U	07/20/2009 12:46		ug/kg	0.4	2.4	1
1,2-Dibromo-3-chloropropane	8260	2.6 U	07/20/2009 12:46		ug/kg	2.6	12.1	1
1,2-Dibromoethane(EDB)	8260	1.2 U	07/20/2009 12:46		ug/kg	1.2	2.4	1
1,2-Dichlorobenzene	8260	0.58 U	07/20/2009 12:46		ug/kg	0.58	2.4	1
1,2-Dichloroethane	8260	0.6 U	07/20/2009 12:46		ug/kg	0.6	2.4	1
1,2-Dichloropropane	8260	1.1 U	07/20/2009 12:46		ug/kg	1.1	2.4	1
1,3,5-Trimethylbenzene	8260	0.49 U	07/20/2009 12:46		ug/kg	0.49	2.4	1
1,3-Dichlorobenzene	8260	0.64 U	07/20/2009 12:46		ug/kg	0.64	2.4	1
1,3-Dichloropropane	8260	0.65 U	07/20/2009 12:46		ug/kg	0.65	2.4	1
1,4-Dichlorobenzene	8260	0.65 U	07/20/2009 12:46		ug/kg	0.65	2.4	1
2,2-Dichloropropane	8260	0.74 U	07/20/2009 12:46		ug/kg	0.74	2.4	1
2-Butanone	8260	2 U	07/20/2009 12:46		ug/kg	2	12.1	1
2-Chlorotoluene	8260	0.54 U	07/20/2009 12:46		ug/kg	0.54	2.4	1
2-Hexanone	8260	1.9 J3U	07/20/2009 12:46		ug/kg	1.9	12.1	1
4-Chlorotoluene	8260	0.43 U	07/20/2009 12:46		ug/kg	0.43	2.4	1
4-Isopropyltoluene	8260	1.1 U	07/20/2009 12:46		ug/kg	1.1	2.4	1
4-Methyl-2-pentanone	8260	1.4 U	07/20/2009 12:46		ug/kg	1.4	12.1	1
Acetone	8260	5.8 U	07/20/2009 12:46		ug/kg	5.8	12.1	1
Acrolein	8260	5.4 J3U	07/20/2009 12:46		ug/kg	5.4	30.2	1
Acrylonitrile	8260	4.2 U	07/20/2009 12:46		ug/kg	4.2	6	1
Benzene	8260	0.51 U	07/20/2009 12:46		ug/kg	0.51	2.4	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313002
Client ID : SB 4 at 5ft
Matrix : SO

Collection Information:
Sample Date: 7/17/2009 2:20:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Bromobenzene	8260	0.82 U	07/20/2009 12:46		ug/kg	0.82	2.4	1
Bromochloromethane	8260	0.92 U	07/20/2009 12:46		ug/kg	0.92	2.4	1
Bromodichloromethane	8260	0.52 U	07/20/2009 12:46		ug/kg	0.52	2.4	1
Bromoform	8260	2.4 J3RU	07/20/2009 12:46		ug/kg	2.4	6	1
Bromomethane	8260	1.2 U	07/20/2009 12:46		ug/kg	1.2	2.4	1
Carbon disulfide	8260	0.6 U	07/20/2009 12:46		ug/kg	0.6	2.4	1
Carbon tetrachloride	8260	0.59 U	07/20/2009 12:46		ug/kg	0.59	2.4	1
Chlorobenzene	8260	0.65 U	07/20/2009 12:46		ug/kg	0.65	2.4	1
Chloroethane	8260	1.4 U	07/20/2009 12:46		ug/kg	1.4	6	1
Chloroform	8260	0.63 U	07/20/2009 12:46		ug/kg	0.63	2.4	1
Chloromethane	8260	1 U	07/20/2009 12:46		ug/kg	1	2.4	1
cis-1,2-Dichloroethene	8260	1.4 U	07/20/2009 12:46		ug/kg	1.4	2.4	1
cis-1,3-Dichloropropene	8260	0.53 U	07/20/2009 12:46		ug/kg	0.53	2.4	1
Dibromochloromethane	8260	0.78 U	07/20/2009 12:46		ug/kg	0.78	2.4	1
Dibromomethane	8260	1 U	07/20/2009 12:46		ug/kg	1	2.4	1
Dichlorodifluoromethane	8260	0.8 U	07/20/2009 12:46		ug/kg	0.8	2.4	1
Ethylbenzene	8260	0.92 U	07/20/2009 12:46		ug/kg	0.92	2.4	1
Hexachlorobutadiene	8260	0.99 U	07/20/2009 12:46		ug/kg	0.99	4.8	1
Isopropylbenzene (Cumene)	8260	0.95 U	07/20/2009 12:46		ug/kg	0.95	2.4	1
Methyl iodide	8260	0.56 U	07/20/2009 12:46		ug/kg	0.56	2.4	1
Methylene chloride	8260	1.4 U	07/20/2009 12:46		ug/kg	1.4	6	1
MTBE	8260	0.68 U	07/20/2009 12:46		ug/kg	0.68	2.4	1
Naphthalene	8260	0.82 U	07/20/2009 12:46		ug/kg	0.82	2.4	1
n-Butylbenzene	8260	0.56 U	07/20/2009 12:46		ug/kg	0.56	2.4	1
n-Propylbenzene	8260	0.48 U	07/20/2009 12:46		ug/kg	0.48	2.4	1
o-Xylene	8260	0.63 U	07/20/2009 12:46		ug/kg	0.63	2.4	1
p,m-Xylene	8260	0.78 U	07/20/2009 12:46		ug/kg	0.78	4.8	1
sec-Butylbenzene	8260	0.72 U	07/20/2009 12:46		ug/kg	0.72	2.4	1
Styrene	8260	0.52 U	07/20/2009 12:46		ug/kg	0.52	2.4	1
tert-Butylbenzene	8260	0.8 U	07/20/2009 12:46		ug/kg	0.8	2.4	1
Tetrachloroethene	8260	0.63 U	07/20/2009 12:46		ug/kg	0.63	2.4	1
Toluene	8260	1 U	07/20/2009 12:46		ug/kg	1	2.4	1
trans-1,2-Dichloroethene	8260	0.92 U	07/20/2009 12:46		ug/kg	0.92	2.4	1
trans-1,3-Dichloropropene	8260	0.68 U	07/20/2009 12:46		ug/kg	0.68	2.4	1
Trichloroethene	8260	1.1 U	07/20/2009 12:46		ug/kg	1.1	2.4	1
Trichlorofluoromethane	8260	0.76 U	07/20/2009 12:46		ug/kg	0.76	2.4	1
Vinyl acetate	8260	1.3 U	07/20/2009 12:46		ug/kg	1.3	6	1
Vinyl chloride	8260	1.1 U	07/20/2009 12:46		ug/kg	1.1	2.4	1
1,2-Dichloroethane-d4(SURR)	8260	106	07/20/2009 12:46		%	1.1	(71 - 124)	1
4-Bromofluorobenzene(SURR)	8260	96.2	07/20/2009 12:46		%	1.1	(54 - 126)	1
Dibromofluoromethane(SURR)	8260	96.4	07/20/2009 12:46		%	1.1	(68 - 119)	1
Toluene d8(SURR)	8260	95.8	07/20/2009 12:46		%	1.1	(59 - 127)	1
1,2,4-Trichlorobenzene	8270	44 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	44	205	1
1,2-Dichlorobenzene	8270	43.2 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	43.2	205	1
1,3-Dichlorobenzene	8270	46.3 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	46.3	205	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313002
Client ID : SB 4 at 5ft
Matrix : SO

Collection Information:
Sample Date: 7/17/2009 2:20:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
1,4-Dichlorobenzene	8270	47.8 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	47.8	205	1
1-Methylnaphthalene	8270	47 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	47	205	1
2,2-Oxybis(1-chloropropane)	8270	167 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	167	205	1
2,4,5-Trichlorophenol	8270	56.1 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	56.1	202	1
2,4,6-Trichlorophenol	8270	51.6 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	51.6	202	1
2,4-Dichlorophenol	8270	56.9 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	56.9	202	1
2,4-Dimethylphenol	8270	43.2 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	43.2	202	1
2,4-Dinitrophenol	8270	167 J3U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	167	1020	1
2,4-Dinitrotoluene	8270	37.2 J3U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	37.2	205	1
2,6-Dinitrotoluene	8270	37.9 J3U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	37.9	205	1
2-Chloronaphthalene	8270	50.6 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	50.6	205	1
2-Chlorophenol	8270	52.3 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	52.3	205	1
2-Methyl-4,6-dinitrophenol	8270	202 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	202	205	1
2-Methylnaphthalene	8270	44 J3U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	44	205	1
2-Methylphenol (o-Cresol)	8270	72.8 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	72.8	202	1
2-Nitroaniline	8270	43.2 J3U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	43.2	205	1
2-Nitrophenol	8270	54.6 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	54.6	205	1
3,3'-Dichlorobenzidine	8270	44.8 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	44.8	205	1
3-Nitroaniline	8270	60.7 J3MU	07/31/2009 19:56	07/30/2009 13:51	ug/kg	60.7	202	1
4-Bromophenyl-phenylether	8270	37.2 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	37.2	205	1
4-Chloro-3-methylphenol	8270	42.5 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	42.5	205	1
4-Chloroaniline	8270	47.8 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	47.8	205	1
4-Chlorophenyl-phenylether	8270	38.7 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	38.7	205	1
4-Methylphenol	8270	44.8 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	44.8	205	1
4-Nitroaniline	8270	66.7 J3U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	66.7	202	1
4-Nitrophenol	8270	40.2 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	40.2	506	1
Acenaphthene	8270	37.2 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	37.2	205	1
Acenaphthylene	8270	41.7 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	41.7	205	1
Aniline	8270	58.4 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	58.4	205	1
Anthracene	8270	45.5 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	45.5	205	1
Benzidine	8270	455 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	455	508	1
Benzo(a)anthracene	8270	43.2 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	43.2	205	1
Benzo(a)pyrene	8270	32.6 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	32.6	205	1
Benzo(b)fluoranthene	8270	47.8 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	47.8	205	1
Benzo(g,h,i)perylene	8270	30.3 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	30.3	205	1
Benzo(k)fluoranthene	8270	43.2 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	43.2	205	1
Benzoic acid	8270	205 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	205	506	1
Benzyl alcohol	8270	69.8 J3U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	69.8	506	1
Bis(2-Chloroethoxy)methane	8270	43.2 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	43.2	202	1
Bis(2-Chloroethyl)ether	8270	50.8 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	50.8	205	1
bis(2-ethylhexyl)phthalate	8270	63 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	63	205	1
Butylbenzylphthalate	8270	47.8 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	47.8	205	1
Chrysene	8270	28.7 I	07/31/2009 19:56	07/30/2009 13:51	ug/kg	25.8	202	1
Dibenz(a,h)anthracene	8270	31.1 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	31.1	205	1
Dibenzofuran	8270	41 J3MU	07/31/2009 19:56	07/30/2009 13:51	ug/kg	41	205	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130

PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313002

Client ID : SB 4 at 5ft

Matrix : SO

Collection Information:

Sample Date: 7/17/2009 2:20:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Diethylphthalate	8270	38.7 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	38.7	205	1
Dimethyl-phthalate	8270	44.8 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	44.8	205	1
Di-n-butylphthalate	8270	33.4 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	33.4	205	1
Di-n-octylphthalate	8270	44 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	44	205	1
Fluoranthene	8270	37.7 J3 I	07/31/2009 19:56	07/30/2009 13:51	ug/kg	36.4	205	1
Fluorene	8270	38.7 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	38.7	205	1
Hexachlorobenzene	8270	40.2 J3MU	07/31/2009 19:56	07/30/2009 13:51	ug/kg	40.2	202	1
Hexachlorobutadiene	8270	44 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	44	205	1
Hexachlorocyclopentadiene	8270	30.3 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	30.3	506	1
Hexachloroethane	8270	37.9 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	37.9	205	1
Indeno(1,2,3-cd)pyrene	8270	39.4 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	39.4	205	1
Isophorone	8270	44.8 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	44.8	205	1
Naphthalene	8270	48.5 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	48.5	205	1
Nitrobenzene	8270	45.5 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	45.5	205	1
N-Nitrosodimethylamine	8270	53.8 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	53.8	202	1
N-Nitroso-di-n-propylamine	8270	46.3 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	46.3	205	1
N-Nitrosodiphenylamine	8270	47.8 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	47.8	202	1
Pentachlorophenol	8270	101 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	101	205	1
Phenanthrene	8270	42.5 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	42.5	205	1
Phenol	8270	49.3 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	49.3	1010	1
Pyrene	8270	69.8 U	07/31/2009 19:56	07/30/2009 13:51	ug/kg	69.8	205	1
2,4,6-Tribromophenol(SURR)	8270	76.4	07/31/2009 19:56	07/30/2009 13:51	%	69.8	(19 - 122)	1
2-Fluorobiphenyl(SURR)	8270	70.2	07/31/2009 19:56	07/30/2009 13:51	%	69.8	(30 - 115)	1
2-Fluorophenol(SURR)	8270	77.5	07/31/2009 19:56	07/30/2009 13:51	%	69.8	(25 - 121)	1
Nitrobenzene-d5(SURR)	8270	78.5	07/31/2009 19:56	07/30/2009 13:51	%	69.8	(23 - 120)	1
Phenol-d5(SURR)	8270	70.3	07/31/2009 19:56	07/30/2009 13:51	%	69.8	(24 - 113)	1
p-Terphenyl-d14(SURR)	8270	66.4	07/31/2009 19:56	07/30/2009 13:51	%	69.8	(18 - 137)	1
1-Methylnaphthalene	8310	3.1 U	07/24/2009 0:46	07/23/2009 13:51	ug/kg	3.1	7.6	1
2-Methylnaphthalene	8310	3 U	07/24/2009 0:46	07/23/2009 13:51	ug/kg	3	7.6	1
Acenaphthene	8310	0.84 U	07/24/2009 0:46	07/23/2009 13:51	ug/kg	0.84	7.6	1
Acenaphthylene	8310	0.92 U	07/24/2009 0:46	07/23/2009 13:51	ug/kg	0.92	7.6	1
Anthracene	8310	0.84 U	07/24/2009 0:46	07/23/2009 13:51	ug/kg	0.84	7.6	1
Benzo(a)anthracene	8310	**31.2**	07/24/2009 0:46	07/23/2009 13:51	ug/kg	1.5	7.6	1
Benzo(a)pyrene	8310	**39.4**	07/24/2009 0:46	07/23/2009 13:51	ug/kg	2.5	7.6	1
Benzo(b)fluoranthene	8310	**50.5**	07/24/2009 0:46	07/23/2009 13:51	ug/kg	2	7.6	1
Benzo(g,h,i)perylene	8310	**61.9**	07/24/2009 0:46	07/23/2009 13:51	ug/kg	2	7.6	1
Benzo(k)fluoranthene	8310	**19.3**	07/24/2009 0:46	07/23/2009 13:51	ug/kg	1.1	7.6	1
Chrysene	8310	**46.6**	07/24/2009 0:46	07/23/2009 13:51	ug/kg	2.1	7.6	1
Dibenz(a,h)anthracene	8310	7.4 I	07/24/2009 0:46	07/23/2009 13:51	ug/kg	0.84	7.6	1
Fluoranthene	8310	**90.2**	07/24/2009 0:46	07/23/2009 13:51	ug/kg	1.5	7.6	1
Fluorene	8310	1.4 U	07/24/2009 0:46	07/23/2009 13:51	ug/kg	1.4	7.6	1
Indeno(1,2,3-cd)pyrene	8310	**37.4**	07/24/2009 0:46	07/23/2009 13:51	ug/kg	0.84	7.6	1
Naphthalene	8310	2 U	07/24/2009 0:46	07/23/2009 13:51	ug/kg	2	7.6	1
Phenanthrene	8310	**15.8**	07/24/2009 0:46	07/23/2009 13:51	ug/kg	1.3	7.6	1
Pyrene	8310	**64.8**	07/24/2009 0:46	07/23/2009 13:51	ug/kg	2.3	7.6	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313002
Client ID : SB 4 at 5ft
Matrix : SO

Collection Information:
Sample Date: 7/17/2009 2:20:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
p-Terphenyl-d14(SURR)	8310	78.6	07/24/2009 0:46	07/23/2009 13:51	%	2.3	(17 - 119)	1
TPH	FL-PRO	6.2 U	07/27/2009 1:06	07/26/2009 15:23	mg/Kg	6.2	10.9	1
C39 Surrogate(SURR)	FL-PRO	108	07/27/2009 1:06	07/26/2009 15:23	%	6.2	(60 - 118)	1
o-Terphenyl Surrogate(SURR)	FL-PRO	106	07/27/2009 1:06	07/26/2009 15:23	%	6.2	(62 - 109)	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313003
Client ID : SB 5 at 5ft
Matrix : SO

Collection Information:
Sample Date: 7/17/2009 2:25:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Arsenic	6010	0.467 U	07/22/2009 2:03	07/21/2009 12:10	mg/Kg	0.467	0.935	1
Cadmium	6010	0.13 I	07/22/2009 2:03	07/21/2009 12:10	mg/Kg	0.0467	0.467	1
Chromium	6010	**2.11**	07/22/2009 2:03	07/21/2009 12:10	mg/Kg	0.15	0.467	1
Lead	6010	0.542 I	07/22/2009 2:03	07/21/2009 12:10	mg/Kg	0.318	0.748	1
Aroclor-1016	8082	3.4 U	07/22/2009 4:33	07/21/2009 17:21	ug/Kg	3.4	23	1
Aroclor-1221	8082	5.8 U	07/22/2009 4:33	07/21/2009 17:21	ug/Kg	5.8	23	1
Aroclor-1232	8082	16 U	07/22/2009 4:33	07/21/2009 17:21	ug/Kg	16	23	1
Aroclor-1242	8082	5.8 U	07/22/2009 4:33	07/21/2009 17:21	ug/Kg	5.8	23	1
Aroclor-1248	8082	8.6 U	07/22/2009 4:33	07/21/2009 17:21	ug/Kg	8.6	23	1
Aroclor-1254	8082	2.5 U	07/22/2009 4:33	07/21/2009 17:21	ug/Kg	2.5	23	1
Aroclor-1260	8082	3.7 U	07/22/2009 4:33	07/21/2009 17:21	ug/Kg	3.7	23	1
Aroclor-1262	8082	3.9 U	07/22/2009 4:33	07/21/2009 17:21	ug/Kg	3.9	23	1
Aroclor-1268	8082	4.5 U	07/22/2009 4:33	07/21/2009 17:21	ug/Kg	4.5	23	1
Decachlorobiphenyl(SURR)	8082	78.7	07/22/2009 4:33	07/21/2009 17:21	%	4.5	(33 - 140)	1
1,1,1,2-Tetrachloroethane	8260	0.97 U	07/20/2009 13:10		ug/kg	0.97	2.6	1
1,1,1-Trichloroethane	8260	0.71 U	07/20/2009 13:10		ug/kg	0.71	2.6	1
1,1,2,2-Tetrachloroethane	8260	0.79 U	07/20/2009 13:10		ug/kg	0.79	2.6	1
1,1,2-Trichloroethane	8260	1.1 U	07/20/2009 13:10		ug/kg	1.1	2.6	1
1,1-Dichloroethane	8260	0.9 U	07/20/2009 13:10		ug/kg	0.9	2.6	1
1,1-Dichloroethene	8260	0.87 U	07/20/2009 13:10		ug/kg	0.87	2.6	1
1,1-Dichloropropene	8260	0.63 U	07/20/2009 13:10		ug/kg	0.63	2.6	1
1,2,3-Trichlorobenzene	8260	0.64 U	07/20/2009 13:10		ug/kg	0.64	2.6	1
1,2,3-Trichloropropane	8260	1.2 U	07/20/2009 13:10		ug/kg	1.2	2.6	1
1,2,4-Trichlorobenzene	8260	0.76 U	07/20/2009 13:10		ug/kg	0.76	2.6	1
1,2,4-Trimethylbenzene	8260	0.43 U	07/20/2009 13:10		ug/kg	0.43	2.6	1
1,2-Dibromo-3-chloropropane	8260	2.9 U	07/20/2009 13:10		ug/kg	2.9	13.1	1
1,2-Dibromoethane(EDB)	8260	1.3 U	07/20/2009 13:10		ug/kg	1.3	2.6	1
1,2-Dichlorobenzene	8260	0.63 U	07/20/2009 13:10		ug/kg	0.63	2.6	1
1,2-Dichloroethane	8260	0.66 U	07/20/2009 13:10		ug/kg	0.66	2.6	1
1,2-Dichloropropane	8260	1.2 U	07/20/2009 13:10		ug/kg	1.2	2.6	1
1,3,5-Trimethylbenzene	8260	0.54 U	07/20/2009 13:10		ug/kg	0.54	2.6	1
1,3-Dichlorobenzene	8260	0.7 U	07/20/2009 13:10		ug/kg	0.7	2.6	1
1,3-Dichloropropane	8260	0.71 U	07/20/2009 13:10		ug/kg	0.71	2.6	1
1,4-Dichlorobenzene	8260	0.71 U	07/20/2009 13:10		ug/kg	0.71	2.6	1
2,2-Dichloropropane	8260	0.8 U	07/20/2009 13:10		ug/kg	0.8	2.6	1
2-Butanone	8260	2.2 U	07/20/2009 13:10		ug/kg	2.2	13.1	1
2-Chlorotoluene	8260	0.59 U	07/20/2009 13:10		ug/kg	0.59	2.6	1
2-Hexanone	8260	2.1 J3U	07/20/2009 13:10		ug/kg	2.1	13.1	1
4-Chlorotoluene	8260	0.47 U	07/20/2009 13:10		ug/kg	0.47	2.6	1
4-Isopropyltoluene	8260	1.2 U	07/20/2009 13:10		ug/kg	1.2	2.6	1
4-Methyl-2-pentanone	8260	1.6 U	07/20/2009 13:10		ug/kg	1.6	13.1	1
Acetone	8260	6.3 U	07/20/2009 13:10		ug/kg	6.3	13.1	1
Acrolein	8260	5.9 J3U	07/20/2009 13:10		ug/kg	5.9	32.8	1
Acrylonitrile	8260	4.6 U	07/20/2009 13:10		ug/kg	4.6	6.6	1
Benzene	8260	0.55 U	07/20/2009 13:10		ug/kg	0.55	2.6	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130

PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313003
Client ID : SB 5 at 5ft
Matrix : SO

Collection Information:
Sample Date: 7/17/2009 2:25:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Bromobenzene	8260	0.89 U	07/20/2009 13:10		ug/kg	0.89	2.6	1
Bromochloromethane	8260	1 U	07/20/2009 13:10		ug/kg	1	2.6	1
Bromodichloromethane	8260	0.56 U	07/20/2009 13:10		ug/kg	0.56	2.6	1
Bromoform	8260	2.6 J3RU	07/20/2009 13:10		ug/kg	2.6	6.6	1
Bromomethane	8260	1.3 U	07/20/2009 13:10		ug/kg	1.3	2.6	1
Carbon disulfide	8260	0.66 U	07/20/2009 13:10		ug/kg	0.66	2.6	1
Carbon tetrachloride	8260	0.64 U	07/20/2009 13:10		ug/kg	0.64	2.6	1
Chlorobenzene	8260	0.71 U	07/20/2009 13:10		ug/kg	0.71	2.6	1
Chloroethane	8260	1.6 U	07/20/2009 13:10		ug/kg	1.6	6.6	1
Chloroform	8260	0.68 U	07/20/2009 13:10		ug/kg	0.68	2.6	1
Chloromethane	8260	1.1 U	07/20/2009 13:10		ug/kg	1.1	2.6	1
cis-1,2-Dichloroethene	8260	1.6 U	07/20/2009 13:10		ug/kg	1.6	2.6	1
cis-1,3-Dichloropropene	8260	0.58 U	07/20/2009 13:10		ug/kg	0.58	2.6	1
Dibromochloromethane	8260	0.85 U	07/20/2009 13:10		ug/kg	0.85	2.6	1
Dibromomethane	8260	1.1 U	07/20/2009 13:10		ug/kg	1.1	2.6	1
Dichlorodifluoromethane	8260	0.87 U	07/20/2009 13:10		ug/kg	0.87	2.6	1
Ethylbenzene	8260	1 U	07/20/2009 13:10		ug/kg	1	2.6	1
Hexachlorobutadiene	8260	1.1 U	07/20/2009 13:10		ug/kg	1.1	5.2	1
Isopropylbenzene (Cumene)	8260	1 U	07/20/2009 13:10		ug/kg	1	2.6	1
Methyl iodide	8260	0.6 U	07/20/2009 13:10		ug/kg	0.6	2.6	1
Methylene chloride	8260	1.6 U	07/20/2009 13:10		ug/kg	1.6	6.6	1
MTBE	8260	0.74 U	07/20/2009 13:10		ug/kg	0.74	2.6	1
Naphthalene	8260	0.89 U	07/20/2009 13:10		ug/kg	0.89	2.6	1
n-Butylbenzene	8260	0.6 U	07/20/2009 13:10		ug/kg	0.6	2.6	1
n-Propylbenzene	8260	0.52 U	07/20/2009 13:10		ug/kg	0.52	2.6	1
o-Xylene	8260	0.68 U	07/20/2009 13:10		ug/kg	0.68	2.6	1
p,m-Xylene	8260	0.85 U	07/20/2009 13:10		ug/kg	0.85	5.2	1
sec-Butylbenzene	8260	0.79 U	07/20/2009 13:10		ug/kg	0.79	2.6	1
Styrene	8260	0.56 U	07/20/2009 13:10		ug/kg	0.56	2.6	1
tert-Butylbenzene	8260	0.87 U	07/20/2009 13:10		ug/kg	0.87	2.6	1
Tetrachloroethene	8260	0.68 U	07/20/2009 13:10		ug/kg	0.68	2.6	1
Toluene	8260	1.1 U	07/20/2009 13:10		ug/kg	1.1	2.6	1
trans-1,2-Dichloroethene	8260	1 U	07/20/2009 13:10		ug/kg	1	2.6	1
trans-1,3-Dichloropropene	8260	0.74 U	07/20/2009 13:10		ug/kg	0.74	2.6	1
Trichloroethene	8260	1.2 U	07/20/2009 13:10		ug/kg	1.2	2.6	1
Trichlorofluoromethane	8260	0.83 U	07/20/2009 13:10		ug/kg	0.83	2.6	1
Vinyl acetate	8260	1.4 U	07/20/2009 13:10		ug/kg	1.4	6.6	1
Vinyl chloride	8260	1.2 U	07/20/2009 13:10		ug/kg	1.2	2.6	1
1,2-Dichloroethane-d4(SURR)	8260	102	07/20/2009 13:10		%	1.2	(71 - 124)	1
4-Bromofluorobenzene(SURR)	8260	98.6	07/20/2009 13:10		%	1.2	(54 - 126)	1
Dibromofluoromethane(SURR)	8260	98.4	07/20/2009 13:10		%	1.2	(68 - 119)	1
Toluene d8(SURR)	8260	90.2	07/20/2009 13:10		%	1.2	(59 - 127)	1
1,2,4-Trichlorobenzene	8270	44 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	44	205	1
1,2-Dichlorobenzene	8270	43.2 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	43.2	205	1
1,3-Dichlorobenzene	8270	46.3 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	46.3	205	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313003
Client ID : SB 5 at 5ft
Matrix : SO

Collection Information:
Sample Date: 7/17/2009 2:25:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
1,4-Dichlorobenzene	8270	47.8 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	47.8	205	1
1-Methylnaphthalene	8270	47 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	47	205	1
2,2-Oxybis(1-chloropropane)	8270	167 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	167	205	1
2,4,5-Trichlorophenol	8270	56.1 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	56.1	202	1
2,4,6-Trichlorophenol	8270	51.6 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	51.6	202	1
2,4-Dichlorophenol	8270	56.9 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	56.9	202	1
2,4-Dimethylphenol	8270	43.2 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	43.2	202	1
2,4-Dinitrophenol	8270	167 J3U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	167	1020	1
2,4-Dinitrotoluene	8270	37.2 J3U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	37.2	205	1
2,6-Dinitrotoluene	8270	37.9 J3U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	37.9	205	1
2-Chloronaphthalene	8270	50.6 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	50.6	205	1
2-Chlorophenol	8270	52.4 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	52.4	205	1
2-Methyl-4,6-dinitrophenol	8270	202 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	202	205	1
2-Methylnaphthalene	8270	44 J3U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	44	205	1
2-Methylphenol (o-Cresol)	8270	72.8 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	72.8	202	1
2-Nitroaniline	8270	43.2 J3U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	43.2	205	1
2-Nitrophenol	8270	54.6 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	54.6	205	1
3,3'-Dichlorobenzidine	8270	44.8 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	44.8	205	1
3-Nitroaniline	8270	60.7 J3MU	07/31/2009 20:25	07/30/2009 13:51	ug/kg	60.7	202	1
4-Bromophenyl-phenylether	8270	37.2 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	37.2	205	1
4-Chloro-3-methylphenol	8270	42.5 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	42.5	205	1
4-Chloroaniline	8270	47.8 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	47.8	205	1
4-Chlorophenyl-phenylether	8270	38.7 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	38.7	205	1
4-Methylphenol	8270	44.8 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	44.8	205	1
4-Nitroaniline	8270	66.8 J3U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	66.8	202	1
4-Nitrophenol	8270	40.2 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	40.2	506	1
Acenaphthene	8270	37.2 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	37.2	205	1
Acenaphthylene	8270	41.7 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	41.7	205	1
Aniline	8270	58.4 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	58.4	205	1
Anthracene	8270	45.5 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	45.5	205	1
Benzidine	8270	455 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	455	508	1
Benzo(a)anthracene	8270	43.2 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	43.2	205	1
Benzo(a)pyrene	8270	32.6 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	32.6	205	1
Benzo(b)fluoranthene	8270	47.8 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	47.8	205	1
Benzo(g,h,i)perylene	8270	30.3 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	30.3	205	1
Benzo(k)fluoranthene	8270	43.2 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	43.2	205	1
Benzoic acid	8270	205 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	205	506	1
Benzyl alcohol	8270	69.8 J3U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	69.8	506	1
Bis(2-Chloroethoxy)methane	8270	43.2 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	43.2	202	1
Bis(2-Chloroethyl)ether	8270	50.8 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	50.8	205	1
bis(2-ethylhexyl)phthalate	8270	63 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	63	205	1
Butylbenzylphthalate	8270	47.8 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	47.8	205	1
Chrysene	8270	25.8 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	25.8	202	1
Dibenz(a,h)anthracene	8270	31.1 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	31.1	205	1
Dibenzofuran	8270	41 J3MU	07/31/2009 20:25	07/30/2009 13:51	ug/kg	41	205	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130

PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313003

Client ID : SB 5 at 5ft

Matrix : SO

Collection Information:

Sample Date: 7/17/2009 2:25:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Diethylphthalate	8270	38.7 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	38.7	205	1
Dimethyl-phthalate	8270	44.8 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	44.8	205	1
Di-n-butylphthalate	8270	33.4 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	33.4	205	1
Di-n-octylphthalate	8270	44 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	44	205	1
Fluoranthene	8270	36.4 J3U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	36.4	205	1
Fluorene	8270	38.7 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	38.7	205	1
Hexachlorobenzene	8270	40.2 J3MU	07/31/2009 20:25	07/30/2009 13:51	ug/kg	40.2	202	1
Hexachlorobutadiene	8270	44 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	44	205	1
Hexachlorocyclopentadiene	8270	30.3 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	30.3	506	1
Hexachloroethane	8270	37.9 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	37.9	205	1
Indeno(1,2,3-cd)pyrene	8270	39.4 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	39.4	205	1
Isophorone	8270	44.8 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	44.8	205	1
Naphthalene	8270	48.6 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	48.6	205	1
Nitrobenzene	8270	45.5 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	45.5	205	1
N-Nitrosodimethylamine	8270	53.9 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	53.9	202	1
N-Nitroso-di-n-propylamine	8270	46.3 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	46.3	205	1
N-Nitrosodiphenylamine	8270	47.8 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	47.8	202	1
Pentachlorophenol	8270	101 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	101	205	1
Phenanthrene	8270	42.5 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	42.5	205	1
Phenol	8270	49.3 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	49.3	1010	1
Pyrene	8270	69.8 U	07/31/2009 20:25	07/30/2009 13:51	ug/kg	69.8	205	1
2,4,6-Tribromophenol(SURR)	8270	74.4	07/31/2009 20:25	07/30/2009 13:51	%	69.8	(19 - 122)	1
2-Fluorobiphenyl(SURR)	8270	69.4	07/31/2009 20:25	07/30/2009 13:51	%	69.8	(30 - 115)	1
2-Fluorophenol(SURR)	8270	75.3	07/31/2009 20:25	07/30/2009 13:51	%	69.8	(25 - 121)	1
Nitrobenzene-d5(SURR)	8270	76.7	07/31/2009 20:25	07/30/2009 13:51	%	69.8	(23 - 120)	1
Phenol-d5(SURR)	8270	69	07/31/2009 20:25	07/30/2009 13:51	%	69.8	(24 - 113)	1
p-Terphenyl-d14(SURR)	8270	66.2	07/31/2009 20:25	07/30/2009 13:51	%	69.8	(18 - 137)	1
1-Methylnaphthalene	8310	3.2 U	07/24/2009 1:11	07/23/2009 13:51	ug/kg	3.2	7.9	1
2-Methylnaphthalene	8310	3.1 U	07/24/2009 1:11	07/23/2009 13:51	ug/kg	3.1	7.9	1
Acenaphthene	8310	0.86 U	07/24/2009 1:11	07/23/2009 13:51	ug/kg	0.86	7.9	1
Acenaphthylene	8310	0.94 U	07/24/2009 1:11	07/23/2009 13:51	ug/kg	0.94	7.9	1
Anthracene	8310	6.3 I	07/24/2009 1:11	07/23/2009 13:51	ug/kg	0.86	7.9	1
Benzo(a)anthracene	8310	**22.7**	07/24/2009 1:11	07/23/2009 13:51	ug/kg	1.6	7.9	1
Benzo(a)pyrene	8310	**15.1**	07/24/2009 1:11	07/23/2009 13:51	ug/kg	2.6	7.9	1
Benzo(b)fluoranthene	8310	**15.7**	07/24/2009 1:11	07/23/2009 13:51	ug/kg	2	7.9	1
Benzo(g,h,i)perylene	8310	**17.8**	07/24/2009 1:11	07/23/2009 13:51	ug/kg	2	7.9	1
Benzo(k)fluoranthene	8310	**8**	07/24/2009 1:11	07/23/2009 13:51	ug/kg	1.1	7.9	1
Chrysene	8310	**23.4**	07/24/2009 1:11	07/23/2009 13:51	ug/kg	2.2	7.9	1
Dibenz(a,h)anthracene	8310	0.86 U	07/24/2009 1:11	07/23/2009 13:51	ug/kg	0.86	7.9	1
Fluoranthene	8310	**48.8**	07/24/2009 1:11	07/23/2009 13:51	ug/kg	1.6	7.9	1
Fluorene	8310	4.4 I	07/24/2009 1:11	07/23/2009 13:51	ug/kg	1.5	7.9	1
Indeno(1,2,3-cd)pyrene	8310	**11.4**	07/24/2009 1:11	07/23/2009 13:51	ug/kg	0.86	7.9	1
Naphthalene	8310	2 U	07/24/2009 1:11	07/23/2009 13:51	ug/kg	2	7.9	1
Phenanthrene	8310	**27.9**	07/24/2009 1:11	07/23/2009 13:51	ug/kg	1.3	7.9	1
Pyrene	8310	**35.8**	07/24/2009 1:11	07/23/2009 13:51	ug/kg	2.4	7.9	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313003
Client ID : SB 5 at 5ft
Matrix : SO

Collection Information:
Sample Date: 7/17/2009 2:25:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
p-Terphenyl-d14(SURR)	8310	86	07/24/2009 1:11	07/23/2009 13:51	%	2.4	(17 - 119)	1
TPH	FL-PRO	10.3 U	07/24/2009 7:45	07/23/2009 16:20	mg/Kg	10.3	18.2	1
C39 Surrogate(SURR)	FL-PRO	65.8	07/24/2009 7:45	07/23/2009 16:20	%	10.3	(60 - 118)	1
o-Terphenyl Surrogate(SURR)	FL-PRO	71.7	07/24/2009 7:45	07/23/2009 16:20	%	10.3	(62 - 109)	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313004
Client ID : SB 2 at 8ft
Matrix : GW

Collection Information:
Sample Date: 7/17/2009 11:50:00 AM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Arsenic	6010	5.73 I	07/22/2009 16:29	07/21/2009 13:19	ug/L	3.31	10	1
Cadmium	6010	0.906 I	07/22/2009 16:29	07/21/2009 13:19	ug/L	0.72	5	1
Chromium	6010	**10.9**	07/22/2009 16:29	07/21/2009 13:19	ug/L	0.43	10	1
Lead	6010	3.7 U	07/22/2009 16:29	07/21/2009 13:19	ug/L	3.7	15	1
1,2-Dibromoethane(EDB)	8011	0.00595 U	07/23/2009 17:27	07/22/2009 15:36	ug/L	0.006	0.0195	1
1,1,2,2-Tetrachloroethane(SURR	8011	121	07/23/2009 17:27	07/22/2009 15:36	%	0.006	(70 - 130)	1
Aroclor-1016	8082	0.36 U	07/24/2009 0:24	07/23/2009 12:45	ug/L	0.36	0.51	1
Aroclor-1221	8082	0.44 U	07/24/2009 0:24	07/23/2009 12:45	ug/L	0.44	0.51	1
Aroclor-1232	8082	0.2 U	07/24/2009 0:24	07/23/2009 12:45	ug/L	0.2	0.51	1
Aroclor-1242	8082	0.31 U	07/24/2009 0:24	07/23/2009 12:45	ug/L	0.31	0.51	1
Aroclor-1248	8082	0.13 U	07/24/2009 0:24	07/23/2009 12:45	ug/L	0.13	0.51	1
Aroclor-1254	8082	0.12 U	07/24/2009 0:24	07/23/2009 12:45	ug/L	0.12	0.51	1
Aroclor-1260	8082	0.25 U	07/24/2009 0:24	07/23/2009 12:45	ug/L	0.25	0.51	1
Aroclor-1262	8082	0.057 U	07/24/2009 0:24	07/23/2009 12:45	ug/L	0.057	0.51	1
Aroclor-1268	8082	0.038 U	07/24/2009 0:24	07/23/2009 12:45	ug/L	0.038	0.51	1
Decachlorobiphenyl(SURR)	8082	84	07/24/2009 0:24	07/23/2009 12:45	%	0.038	(16 - 116)	1
1,1,1,2-Tetrachloroethane	8260	0.25 U	07/21/2009 22:34		ug/l	0.25	1	1
1,1,1-Trichloroethane	8260	0.19 U	07/21/2009 22:34		ug/l	0.19	1	1
1,1,2,2-Tetrachloroethane	8260	0.33 U	07/21/2009 22:34		ug/l	0.33	1	1
1,1,2-Trichloroethane	8260	0.28 U	07/21/2009 22:34		ug/l	0.28	1	1
1,1-Dichloroethane	8260	0.28 U	07/21/2009 22:34		ug/l	0.28	1	1
1,1-Dichloroethene	8260	0.24 U	07/21/2009 22:34		ug/l	0.24	1	1
1,1-Dichloropropene	8260	0.19 U	07/21/2009 22:34		ug/l	0.19	1	1
1,2,3-Trichlorobenzene	8260	0.61 U	07/21/2009 22:34		ug/l	0.61	1	1
1,2,3-Trichloropropane	8260	0.76 U	07/21/2009 22:34		ug/l	0.76	1	1
1,2,4-Trichlorobenzene	8260	0.5 U	07/21/2009 22:34		ug/l	0.5	1	1
1,2,4-Trimethylbenzene	8260	0.17 U	07/21/2009 22:34		ug/l	0.17	1	1
1,2-Dibromo-3-chloropropane	8260	1.4 U	07/21/2009 22:34		ug/l	1.4	2	1
1,2-Dibromoethane(EDB)	8260	0.33 U	07/21/2009 22:34		ug/l	0.33	1	1
1,2-Dichlorobenzene	8260	0.26 U	07/21/2009 22:34		ug/l	0.26	1	1
1,2-Dichloroethane	8260	0.4 U	07/21/2009 22:34		ug/l	0.4	1	1
1,2-Dichloropropane	8260	0.27 U	07/21/2009 22:34		ug/l	0.27	1	1
1,3,5-Trimethylbenzene	8260	0.22 U	07/21/2009 22:34		ug/l	0.22	1	1
1,3-Dichlorobenzene	8260	0.2 U	07/21/2009 22:34		ug/l	0.2	1	1
1,3-Dichloropropane	8260	0.19 U	07/21/2009 22:34		ug/l	0.19	1	1
1,4-Dichlorobenzene	8260	0.24 U	07/21/2009 22:34		ug/l	0.24	1	1
2,2-Dichloropropane	8260	0.32 U	07/21/2009 22:34		ug/l	0.32	1	1
2-Butanone	8260	4 U	07/21/2009 22:34		ug/l	4	4	1
2-Chlorotoluene	8260	0.32 U	07/21/2009 22:34		ug/l	0.32	1	1
2-Hexanone	8260	0.95 U	07/21/2009 22:34		ug/l	0.95	5	1
4-Chlorotoluene	8260	0.12 U	07/21/2009 22:34		ug/l	0.12	1	1
4-Isopropyltoluene	8260	0.24 U	07/21/2009 22:34		ug/l	0.24	1	1
4-Methyl-2-pentanone	8260	0.61 U	07/21/2009 22:34		ug/l	0.61	5	1
Acetone	8260	5.6 U	07/21/2009 22:34		ug/l	5.6	10	1
Acrolein	8260	3.3 U	07/21/2009 22:34		ug/l	3.3	10	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313004
Client ID : SB 2 at 8ft
Matrix : GW

Collection Information:
Sample Date: 7/17/2009 11:50:00 AM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Acrylonitrile	8260	1.3 U	07/21/2009 22:34		ug/l	1.3	4	1
Benzene	8260	0.16 U	07/21/2009 22:34		ug/l	0.16	1	1
Bromobenzene	8260	0.27 U	07/21/2009 22:34		ug/l	0.27	1	1
Bromochloromethane	8260	0.38 U	07/21/2009 22:34		ug/l	0.38	1	1
Bromodichloromethane	8260	0.15 U	07/21/2009 22:34		ug/l	0.15	1	1
Bromoethane	8260	0.45 U	07/21/2009 22:34		ug/l	0.45	1	1
Bromoform	8260	0.36 U	07/21/2009 22:34		ug/l	0.36	1	1
Bromomethane	8260	0.76 U	07/21/2009 22:34		ug/l	0.76	1	1
Carbon disulfide	8260	0.29 U	07/21/2009 22:34		ug/l	0.29	1	1
Carbon tetrachloride	8260	0.33 U	07/21/2009 22:34		ug/l	0.33	1	1
Chlorobenzene	8260	0.18 U	07/21/2009 22:34		ug/l	0.18	1	1
Chloroethane	8260	0.99 J3MU	07/21/2009 22:34		ug/l	0.99	1	1
Chloroform	8260	0.29 U	07/21/2009 22:34		ug/l	0.29	1	1
Chloromethane	8260	0.68 U	07/21/2009 22:34		ug/l	0.68	1	1
cis-1,2-Dichloroethene	8260	0.29 U	07/21/2009 22:34		ug/l	0.29	1	1
cis-1,3-Dichloropropene	8260	0.23 U	07/21/2009 22:34		ug/l	0.23	1	1
Dibromochloromethane	8260	0.34 U	07/21/2009 22:34		ug/l	0.34	1	1
Dibromomethane	8260	0.53 U	07/21/2009 22:34		ug/l	0.53	1	1
Dichlorodifluoromethane	8260	0.23 U	07/21/2009 22:34		ug/l	0.23	1	1
Ethylbenzene	8260	0.43 U	07/21/2009 22:34		ug/l	0.43	1	1
Hexachlorobutadiene	8260	0.62 U	07/21/2009 22:34		ug/l	0.62	1	1
Isopropylbenzene (Cumene)	8260	0.41 U	07/21/2009 22:34		ug/l	0.41	1	1
Methyl iodide	8260	0.4 U	07/21/2009 22:34		ug/l	0.4	1	1
Methylene chloride	8260	0.52 U	07/21/2009 22:34		ug/l	0.52	1	1
MTBE	8260	0.26 U	07/21/2009 22:34		ug/l	0.26	1	1
Naphthalene	8260	0.32 U	07/21/2009 22:34		ug/l	0.32	1	1
n-Butylbenzene	8260	0.22 U	07/21/2009 22:34		ug/l	0.22	1	1
n-Propylbenzene	8260	0.28 U	07/21/2009 22:34		ug/l	0.28	1	1
o-Xylene	8260	0.2 U	07/21/2009 22:34		ug/l	0.2	1	1
p,m-Xylene	8260	0.27 U	07/21/2009 22:34		ug/l	0.27	2	1
sec-Butylbenzene	8260	0.2 U	07/21/2009 22:34		ug/l	0.2	1	1
Styrene	8260	0.2 U	07/21/2009 22:34		ug/l	0.2	1	1
tert-Butylbenzene	8260	0.28 U	07/21/2009 22:34		ug/l	0.28	1	1
Tetrachloroethene	8260	0.35 U	07/21/2009 22:34		ug/l	0.35	1	1
Toluene	8260	0.22 U	07/21/2009 22:34		ug/l	0.22	1	1
trans-1,2-Dichloroethene	8260	0.23 U	07/21/2009 22:34		ug/l	0.23	1	1
trans-1,3-Dichloropropene	8260	0.17 U	07/21/2009 22:34		ug/l	0.17	1	1
Trichloroethene	8260	0.42 U	07/21/2009 22:34		ug/l	0.42	1	1
Trichlorofluoromethane	8260	0.45 U	07/21/2009 22:34		ug/l	0.45	1	1
Vinyl acetate	8260	0.36 U	07/21/2009 22:34		ug/l	0.36	2	1
Vinyl chloride	8260	0.28 U	07/21/2009 22:34		ug/l	0.28	1	1
1,2-Dichloroethane-d4(SURR)	8260	104	07/21/2009 22:34		%	0.28	(80 - 120)	1
4-Bromofluorobenzene(SURR)	8260	101	07/21/2009 22:34		%	0.28	(86 - 115)	1
Dibromofluoromethane(SURR)	8260	103	07/21/2009 22:34		%	0.28	(86 - 118)	1
Toluene d8(SURR)	8260	99.4	07/21/2009 22:34		%	0.28	(88 - 110)	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313004
Client ID : SB 2 at 8ft
Matrix : GW

Collection Information:
Sample Date: 7/17/2009 11:50:00 AM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
1-Methylnaphthalene	8270 SIM	0.044 I	07/25/2009 22:58	07/23/2009 13:12	ug/l	0.02	0.05	1
2-Methylnaphthalene	8270 SIM	**0.086**	07/25/2009 22:58	07/23/2009 13:12	ug/l	0.02	0.05	1
Acenaphthene	8270 SIM	0.02 U	07/25/2009 22:58	07/23/2009 13:12	ug/l	0.02	0.05	1
Acenaphthylene	8270 SIM	0.036 I	07/25/2009 22:58	07/23/2009 13:12	ug/l	0.02	0.05	1
Anthracene	8270 SIM	0.02 U	07/25/2009 22:58	07/23/2009 13:12	ug/l	0.02	0.05	1
Benzo(a)anthracene	8270 SIM	0.02 U	07/25/2009 22:58	07/23/2009 13:12	ug/l	0.02	0.05	1
Benzo(a)pyrene	8270 SIM	0.02 U	07/25/2009 22:58	07/23/2009 13:12	ug/l	0.02	0.05	1
Benzo(b)fluoranthene	8270 SIM	0.02 U	07/25/2009 22:58	07/23/2009 13:12	ug/l	0.02	0.05	1
Benzo(g,h,i)perylene	8270 SIM	0.02 U	07/25/2009 22:58	07/23/2009 13:12	ug/l	0.02	0.05	1
Benzo(k)fluoranthene	8270 SIM	0.02 U	07/25/2009 22:58	07/23/2009 13:12	ug/l	0.02	0.05	1
Chrysene	8270 SIM	0.02 U	07/25/2009 22:58	07/23/2009 13:12	ug/l	0.02	0.05	1
Dibenz(a,h)anthracene	8270 SIM	0.02 U	07/25/2009 22:58	07/23/2009 13:12	ug/l	0.02	0.05	1
Fluoranthene	8270 SIM	0.02 U	07/25/2009 22:58	07/23/2009 13:12	ug/l	0.02	0.05	1
Fluorene	8270 SIM	0.029 I	07/25/2009 22:58	07/23/2009 13:12	ug/l	0.02	0.05	1
Indeno(1,2,3-cd)pyrene	8270 SIM	0.02 U	07/25/2009 22:58	07/23/2009 13:12	ug/l	0.02	0.05	1
Naphthalene	8270 SIM	**0.14**	07/25/2009 22:58	07/23/2009 13:12	ug/l	0.02	0.05	1
Phenanthrene	8270 SIM	0.02 U	07/25/2009 22:58	07/23/2009 13:12	ug/l	0.02	0.05	1
Pyrene	8270 SIM	0.02 U	07/25/2009 22:58	07/23/2009 13:12	ug/l	0.02	0.05	1
p-Terphenyl-d14(SURR)	8270 SIM	66	07/25/2009 22:58	07/23/2009 13:12	%	0.02	(33 - 141)	1
TPH	FL-PRO	0.25 U	07/22/2009 0:20	07/21/2009 10:27	mg/L	0.25	0.34	1
C39 Surrogate(SURR)	FL-PRO	52	07/22/2009 0:20	07/21/2009 10:27	%	0.25	(42 - 193)	1
o-Terphenyl Surrogate(SURR)	FL-PRO	58 J1	07/22/2009 0:20	07/21/2009 10:27	%	0.25	(82 - 142)	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313005
Client ID : SB 4 at 10ft
Matrix : GW

Collection Information:
Sample Date: 7/17/2009 2:30:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Cadmium	6010	1.04 I	07/22/2009 16:25	07/21/2009 13:19	UG/L	0.72	5	1
Chromium	6010	3.49 I	07/22/2009 16:25	07/21/2009 13:19	UG/L	0.43	10	1
Lead	6010	3.7 U	07/22/2009 16:25	07/21/2009 13:19	UG/L	3.7	15	1
Arsenic	6010	14.8 I	07/23/2009 16:17	07/21/2009 13:19	UG/L	6.62	20	2
1,2-Dibromoethane(EDB)	8011	0.00603 U	07/23/2009 18:00	07/22/2009 15:36	ug/L	0.0060	0.0198	1
1,1,2,2-Tetrachloroethane(SURR	8011	125	07/23/2009 18:00	07/22/2009 15:36	%	0.0060	(70 - 130)	1
Aroclor-1016	8082	0.36 U	07/24/2009 0:55	07/23/2009 12:45	ug/L	0.36	0.51	1
Aroclor-1221	8082	0.44 U	07/24/2009 0:55	07/23/2009 12:45	ug/L	0.44	0.51	1
Aroclor-1232	8082	0.2 U	07/24/2009 0:55	07/23/2009 12:45	ug/L	0.2	0.51	1
Aroclor-1242	8082	0.31 U	07/24/2009 0:55	07/23/2009 12:45	ug/L	0.31	0.51	1
Aroclor-1248	8082	0.13 U	07/24/2009 0:55	07/23/2009 12:45	ug/L	0.13	0.51	1
Aroclor-1254	8082	0.12 U	07/24/2009 0:55	07/23/2009 12:45	ug/L	0.12	0.51	1
Aroclor-1260	8082	0.25 U	07/24/2009 0:55	07/23/2009 12:45	ug/L	0.25	0.51	1
Aroclor-1262	8082	0.057 U	07/24/2009 0:55	07/23/2009 12:45	ug/L	0.057	0.51	1
Aroclor-1268	8082	0.038 U	07/24/2009 0:55	07/23/2009 12:45	ug/L	0.038	0.51	1
Decachlorobiphenyl(SURR)	8082	96	07/24/2009 0:55	07/23/2009 12:45	%	0.038	(16 - 116)	1
1,1,1,2-Tetrachloroethane	8260	0.25 U	07/21/2009 22:58		ug/l	0.25	1	1
1,1,1-Trichloroethane	8260	0.19 U	07/21/2009 22:58		ug/l	0.19	1	1
1,1,2,2-Tetrachloroethane	8260	0.33 U	07/21/2009 22:58		ug/l	0.33	1	1
1,1,2-Trichloroethane	8260	0.28 U	07/21/2009 22:58		ug/l	0.28	1	1
1,1-Dichloroethane	8260	0.28 U	07/21/2009 22:58		ug/l	0.28	1	1
1,1-Dichloroethene	8260	0.24 U	07/21/2009 22:58		ug/l	0.24	1	1
1,1-Dichloropropene	8260	0.19 U	07/21/2009 22:58		ug/l	0.19	1	1
1,2,3-Trichlorobenzene	8260	0.61 U	07/21/2009 22:58		ug/l	0.61	1	1
1,2,3-Trichloropropane	8260	0.76 U	07/21/2009 22:58		ug/l	0.76	1	1
1,2,4-Trichlorobenzene	8260	0.5 U	07/21/2009 22:58		ug/l	0.5	1	1
1,2,4-Trimethylbenzene	8260	0.17 U	07/21/2009 22:58		ug/l	0.17	1	1
1,2-Dibromo-3-chloropropane	8260	1.4 U	07/21/2009 22:58		ug/l	1.4	2	1
1,2-Dibromoethane(EDB)	8260	0.33 U	07/21/2009 22:58		ug/l	0.33	1	1
1,2-Dichlorobenzene	8260	0.26 U	07/21/2009 22:58		ug/l	0.26	1	1
1,2-Dichloroethane	8260	0.4 U	07/21/2009 22:58		ug/l	0.4	1	1
1,2-Dichloropropane	8260	0.27 U	07/21/2009 22:58		ug/l	0.27	1	1
1,3,5-Trimethylbenzene	8260	0.22 U	07/21/2009 22:58		ug/l	0.22	1	1
1,3-Dichlorobenzene	8260	0.2 U	07/21/2009 22:58		ug/l	0.2	1	1
1,3-Dichloropropane	8260	0.19 U	07/21/2009 22:58		ug/l	0.19	1	1
1,4-Dichlorobenzene	8260	0.24 U	07/21/2009 22:58		ug/l	0.24	1	1
2,2-Dichloropropane	8260	0.32 U	07/21/2009 22:58		ug/l	0.32	1	1
2-Butanone	8260	4 U	07/21/2009 22:58		ug/l	4	4	1
2-Chlorotoluene	8260	0.32 U	07/21/2009 22:58		ug/l	0.32	1	1
2-Hexanone	8260	0.95 U	07/21/2009 22:58		ug/l	0.95	5	1
4-Chlorotoluene	8260	0.12 U	07/21/2009 22:58		ug/l	0.12	1	1
4-Isopropyltoluene	8260	0.24 U	07/21/2009 22:58		ug/l	0.24	1	1
4-Methyl-2-pentanone	8260	0.61 U	07/21/2009 22:58		ug/l	0.61	5	1
Acetone	8260	5.6 U	07/21/2009 22:58		ug/l	5.6	10	1
Acrolein	8260	3.3 U	07/21/2009 22:58		ug/l	3.3	10	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313005
Client ID : SB 4 at 10ft
Matrix : GW

Collection Information:
Sample Date: 7/17/2009 2:30:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Acrylonitrile	8260	1.3 U	07/21/2009 22:58		ug/l	1.3	4	1
Benzene	8260	0.16 U	07/21/2009 22:58		ug/l	0.16	1	1
Bromobenzene	8260	0.27 U	07/21/2009 22:58		ug/l	0.27	1	1
Bromochloromethane	8260	0.38 U	07/21/2009 22:58		ug/l	0.38	1	1
Bromodichloromethane	8260	0.15 U	07/21/2009 22:58		ug/l	0.15	1	1
Bromoethane	8260	0.45 U	07/21/2009 22:58		ug/l	0.45	1	1
Bromoform	8260	0.36 U	07/21/2009 22:58		ug/l	0.36	1	1
Bromomethane	8260	0.76 U	07/21/2009 22:58		ug/l	0.76	1	1
Carbon disulfide	8260	0.29 U	07/21/2009 22:58		ug/l	0.29	1	1
Carbon tetrachloride	8260	0.33 U	07/21/2009 22:58		ug/l	0.33	1	1
Chlorobenzene	8260	0.18 U	07/21/2009 22:58		ug/l	0.18	1	1
Chloroethane	8260	0.99 J3MU	07/21/2009 22:58		ug/l	0.99	1	1
Chloroform	8260	0.29 U	07/21/2009 22:58		ug/l	0.29	1	1
Chloromethane	8260	0.68 U	07/21/2009 22:58		ug/l	0.68	1	1
cis-1,2-Dichloroethene	8260	0.29 U	07/21/2009 22:58		ug/l	0.29	1	1
cis-1,3-Dichloropropene	8260	0.23 U	07/21/2009 22:58		ug/l	0.23	1	1
Dibromochloromethane	8260	0.34 U	07/21/2009 22:58		ug/l	0.34	1	1
Dibromomethane	8260	0.53 U	07/21/2009 22:58		ug/l	0.53	1	1
Dichlorodifluoromethane	8260	0.23 U	07/21/2009 22:58		ug/l	0.23	1	1
Ethylbenzene	8260	0.43 U	07/21/2009 22:58		ug/l	0.43	1	1
Hexachlorobutadiene	8260	0.62 U	07/21/2009 22:58		ug/l	0.62	1	1
Isopropylbenzene (Cumene)	8260	0.41 U	07/21/2009 22:58		ug/l	0.41	1	1
Methyl iodide	8260	0.4 U	07/21/2009 22:58		ug/l	0.4	1	1
Methylene chloride	8260	0.52 U	07/21/2009 22:58		ug/l	0.52	1	1
MTBE	8260	0.26 U	07/21/2009 22:58		ug/l	0.26	1	1
Naphthalene	8260	0.32 U	07/21/2009 22:58		ug/l	0.32	1	1
n-Butylbenzene	8260	0.22 U	07/21/2009 22:58		ug/l	0.22	1	1
n-Propylbenzene	8260	0.28 U	07/21/2009 22:58		ug/l	0.28	1	1
o-Xylene	8260	0.2 U	07/21/2009 22:58		ug/l	0.2	1	1
p,m-Xylene	8260	0.27 U	07/21/2009 22:58		ug/l	0.27	2	1
sec-Butylbenzene	8260	0.2 U	07/21/2009 22:58		ug/l	0.2	1	1
Styrene	8260	0.2 U	07/21/2009 22:58		ug/l	0.2	1	1
tert-Butylbenzene	8260	0.28 U	07/21/2009 22:58		ug/l	0.28	1	1
Tetrachloroethene	8260	0.35 U	07/21/2009 22:58		ug/l	0.35	1	1
Toluene	8260	0.22 U	07/21/2009 22:58		ug/l	0.22	1	1
trans-1,2-Dichloroethene	8260	0.23 U	07/21/2009 22:58		ug/l	0.23	1	1
trans-1,3-Dichloropropene	8260	0.17 U	07/21/2009 22:58		ug/l	0.17	1	1
Trichloroethene	8260	0.42 U	07/21/2009 22:58		ug/l	0.42	1	1
Trichlorofluoromethane	8260	0.45 U	07/21/2009 22:58		ug/l	0.45	1	1
Vinyl acetate	8260	0.36 U	07/21/2009 22:58		ug/l	0.36	2	1
Vinyl chloride	8260	0.28 U	07/21/2009 22:58		ug/l	0.28	1	1
1,2-Dichloroethane-d4(SURR)	8260	111	07/21/2009 22:58		%	0.28	(80 - 120)	1
4-Bromofluorobenzene(SURR)	8260	105	07/21/2009 22:58		%	0.28	(86 - 115)	1
Dibromofluoromethane(SURR)	8260	109	07/21/2009 22:58		%	0.28	(86 - 118)	1
Toluene d8(SURR)	8260	104	07/21/2009 22:58		%	0.28	(88 - 110)	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130

PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313005

Client ID : SB 4 at 10ft

Matrix : GW

Collection Information:

Sample Date: 7/17/2009 2:30:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
1-Methylnaphthalene	8270 SIM	0.02 U	07/25/2009 23:27	07/23/2009 13:12	ug/l	0.02	0.051	1
2-Methylnaphthalene	8270 SIM	0.02 U	07/25/2009 23:27	07/23/2009 13:12	ug/l	0.02	0.051	1
Acenaphthene	8270 SIM	0.02 U	07/25/2009 23:27	07/23/2009 13:12	ug/l	0.02	0.051	1
Acenaphthylene	8270 SIM	0.02 U	07/25/2009 23:27	07/23/2009 13:12	ug/l	0.02	0.051	1
Anthracene	8270 SIM	0.02 U	07/25/2009 23:27	07/23/2009 13:12	ug/l	0.02	0.051	1
Benzo(a)anthracene	8270 SIM	0.02 U	07/25/2009 23:27	07/23/2009 13:12	ug/l	0.02	0.051	1
Benzo(a)pyrene	8270 SIM	0.02 U	07/25/2009 23:27	07/23/2009 13:12	ug/l	0.02	0.051	1
Benzo(b)fluoranthene	8270 SIM	0.02 U	07/25/2009 23:27	07/23/2009 13:12	ug/l	0.02	0.051	1
Benzo(g,h,i)perylene	8270 SIM	0.02 U	07/25/2009 23:27	07/23/2009 13:12	ug/l	0.02	0.051	1
Benzo(k)fluoranthene	8270 SIM	0.02 U	07/25/2009 23:27	07/23/2009 13:12	ug/l	0.02	0.051	1
Chrysene	8270 SIM	0.02 U	07/25/2009 23:27	07/23/2009 13:12	ug/l	0.02	0.051	1
Dibenz(a,h)anthracene	8270 SIM	0.02 U	07/25/2009 23:27	07/23/2009 13:12	ug/l	0.02	0.051	1
Fluoranthene	8270 SIM	0.02 U	07/25/2009 23:27	07/23/2009 13:12	ug/l	0.02	0.051	1
Fluorene	8270 SIM	0.02 U	07/25/2009 23:27	07/23/2009 13:12	ug/l	0.02	0.051	1
Indeno(1,2,3-cd)pyrene	8270 SIM	0.02 U	07/25/2009 23:27	07/23/2009 13:12	ug/l	0.02	0.051	1
Naphthalene	8270 SIM	0.025 I	07/25/2009 23:27	07/23/2009 13:12	ug/l	0.02	0.051	1
Phenanthrene	8270 SIM	0.02 U	07/25/2009 23:27	07/23/2009 13:12	ug/l	0.02	0.051	1
Pyrene	8270 SIM	0.02 U	07/25/2009 23:27	07/23/2009 13:12	ug/l	0.02	0.051	1
p-Terphenyl-d14(SURR)	8270 SIM	94.1	07/25/2009 23:27	07/23/2009 13:12	%	0.02	(33 - 141)	1
TPH	FL-PRO	0.26 U	07/22/2009 0:47	07/21/2009 10:27	mg/L	0.26	0.35	1
C39 Surrogate(SURR)	FL-PRO	80	07/22/2009 0:47	07/21/2009 10:27	%	0.26	(42 - 193)	1
o-Terphenyl Surrogate(SURR)	FL-PRO	86	07/22/2009 0:47	07/21/2009 10:27	%	0.26	(82 - 142)	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313006
Client ID : SB 3 at 10ft
Matrix : GW

Collection Information:
Sample Date: 7/17/2009 2:50:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Arsenic	6010	3.31 U	07/22/2009 16:21	07/21/2009 13:19	ug/L	3.31	10	1
Cadmium	6010	1.11 I	07/22/2009 16:21	07/21/2009 13:19	ug/L	0.72	5	1
Chromium	6010	5.1 I	07/22/2009 16:21	07/21/2009 13:19	ug/L	0.43	10	1
Lead	6010	3.7 U	07/22/2009 16:21	07/21/2009 13:19	ug/L	3.7	15	1
1,2-Dibromoethane(EDB)	8011	0.00603 U	07/23/2009 18:33	07/22/2009 15:36	ug/L	0.0060	0.0198	1
1,1,2,2-Tetrachloroethane(SURR	8011	121	07/23/2009 18:33	07/22/2009 15:36	%	0.0060	(70 - 130)	1
Aroclor-1016	8082	0.37 U	07/24/2009 1:26	07/23/2009 12:45	ug/L	0.37	0.51	1
Aroclor-1221	8082	0.44 U	07/24/2009 1:26	07/23/2009 12:45	ug/L	0.44	0.51	1
Aroclor-1232	8082	0.2 U	07/24/2009 1:26	07/23/2009 12:45	ug/L	0.2	0.51	1
Aroclor-1242	8082	0.32 U	07/24/2009 1:26	07/23/2009 12:45	ug/L	0.32	0.51	1
Aroclor-1248	8082	0.13 U	07/24/2009 1:26	07/23/2009 12:45	ug/L	0.13	0.51	1
Aroclor-1254	8082	0.12 U	07/24/2009 1:26	07/23/2009 12:45	ug/L	0.12	0.51	1
Aroclor-1260	8082	0.26 U	07/24/2009 1:26	07/23/2009 12:45	ug/L	0.26	0.51	1
Aroclor-1262	8082	0.057 U	07/24/2009 1:26	07/23/2009 12:45	ug/L	0.057	0.51	1
Aroclor-1268	8082	0.039 U	07/24/2009 1:26	07/23/2009 12:45	ug/L	0.039	0.51	1
Decachlorobiphenyl(SURR)	8082	100	07/24/2009 1:26	07/23/2009 12:45	%	0.039	(16 - 116)	1
1,1,1,2-Tetrachloroethane	8260	0.25 U	07/21/2009 23:21		ug/l	0.25	1	1
1,1,1-Trichloroethane	8260	0.19 U	07/21/2009 23:21		ug/l	0.19	1	1
1,1,2,2-Tetrachloroethane	8260	0.33 U	07/21/2009 23:21		ug/l	0.33	1	1
1,1,2-Trichloroethane	8260	0.28 U	07/21/2009 23:21		ug/l	0.28	1	1
1,1-Dichloroethane	8260	0.28 U	07/21/2009 23:21		ug/l	0.28	1	1
1,1-Dichloroethene	8260	0.24 U	07/21/2009 23:21		ug/l	0.24	1	1
1,1-Dichloropropene	8260	0.19 U	07/21/2009 23:21		ug/l	0.19	1	1
1,2,3-Trichlorobenzene	8260	0.61 U	07/21/2009 23:21		ug/l	0.61	1	1
1,2,3-Trichloropropane	8260	0.76 U	07/21/2009 23:21		ug/l	0.76	1	1
1,2,4-Trichlorobenzene	8260	0.5 U	07/21/2009 23:21		ug/l	0.5	1	1
1,2,4-Trimethylbenzene	8260	0.17 U	07/21/2009 23:21		ug/l	0.17	1	1
1,2-Dibromo-3-chloropropane	8260	1.4 U	07/21/2009 23:21		ug/l	1.4	2	1
1,2-Dibromoethane(EDB)	8260	0.33 U	07/21/2009 23:21		ug/l	0.33	1	1
1,2-Dichlorobenzene	8260	0.26 U	07/21/2009 23:21		ug/l	0.26	1	1
1,2-Dichloroethane	8260	0.4 U	07/21/2009 23:21		ug/l	0.4	1	1
1,2-Dichloropropane	8260	0.27 U	07/21/2009 23:21		ug/l	0.27	1	1
1,3,5-Trimethylbenzene	8260	0.22 U	07/21/2009 23:21		ug/l	0.22	1	1
1,3-Dichlorobenzene	8260	0.2 U	07/21/2009 23:21		ug/l	0.2	1	1
1,3-Dichloropropane	8260	0.19 U	07/21/2009 23:21		ug/l	0.19	1	1
1,4-Dichlorobenzene	8260	0.24 U	07/21/2009 23:21		ug/l	0.24	1	1
2,2-Dichloropropane	8260	0.32 U	07/21/2009 23:21		ug/l	0.32	1	1
2-Butanone	8260	4 U	07/21/2009 23:21		ug/l	4	4	1
2-Chlorotoluene	8260	0.32 U	07/21/2009 23:21		ug/l	0.32	1	1
2-Hexanone	8260	0.95 U	07/21/2009 23:21		ug/l	0.95	5	1
4-Chlorotoluene	8260	0.12 U	07/21/2009 23:21		ug/l	0.12	1	1
4-Isopropyltoluene	8260	0.24 U	07/21/2009 23:21		ug/l	0.24	1	1
4-Methyl-2-pentanone	8260	0.61 U	07/21/2009 23:21		ug/l	0.61	5	1
Acetone	8260	5.6 U	07/21/2009 23:21		ug/l	5.6	10	1
Acrolein	8260	3.3 U	07/21/2009 23:21		ug/l	3.3	10	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130

PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313006

Client ID : SB 3 at 10ft

Matrix : GW

Collection Information:

Sample Date: 7/17/2009 2:50:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Acrylonitrile	8260	1.3 U	07/21/2009 23:21		ug/l	1.3	4	1
Benzene	8260	0.16 U	07/21/2009 23:21		ug/l	0.16	1	1
Bromobenzene	8260	0.27 U	07/21/2009 23:21		ug/l	0.27	1	1
Bromochloromethane	8260	0.38 U	07/21/2009 23:21		ug/l	0.38	1	1
Bromodichloromethane	8260	0.15 U	07/21/2009 23:21		ug/l	0.15	1	1
Bromoethane	8260	0.45 U	07/21/2009 23:21		ug/l	0.45	1	1
Bromoform	8260	0.36 U	07/21/2009 23:21		ug/l	0.36	1	1
Bromomethane	8260	0.76 U	07/21/2009 23:21		ug/l	0.76	1	1
Carbon disulfide	8260	0.29 U	07/21/2009 23:21		ug/l	0.29	1	1
Carbon tetrachloride	8260	0.33 U	07/21/2009 23:21		ug/l	0.33	1	1
Chlorobenzene	8260	0.18 U	07/21/2009 23:21		ug/l	0.18	1	1
Chloroethane	8260	0.99 J3MU	07/21/2009 23:21		ug/l	0.99	1	1
Chloroform	8260	0.29 U	07/21/2009 23:21		ug/l	0.29	1	1
Chloromethane	8260	0.68 U	07/21/2009 23:21		ug/l	0.68	1	1
cis-1,2-Dichloroethene	8260	0.29 U	07/21/2009 23:21		ug/l	0.29	1	1
cis-1,3-Dichloropropene	8260	0.23 U	07/21/2009 23:21		ug/l	0.23	1	1
Dibromochloromethane	8260	0.34 U	07/21/2009 23:21		ug/l	0.34	1	1
Dibromomethane	8260	0.53 U	07/21/2009 23:21		ug/l	0.53	1	1
Dichlorodifluoromethane	8260	0.23 U	07/21/2009 23:21		ug/l	0.23	1	1
Ethylbenzene	8260	0.43 U	07/21/2009 23:21		ug/l	0.43	1	1
Hexachlorobutadiene	8260	0.62 U	07/21/2009 23:21		ug/l	0.62	1	1
Isopropylbenzene (Cumene)	8260	0.41 U	07/21/2009 23:21		ug/l	0.41	1	1
Methyl iodide	8260	0.4 U	07/21/2009 23:21		ug/l	0.4	1	1
Methylene chloride	8260	0.52 U	07/21/2009 23:21		ug/l	0.52	1	1
MTBE	8260	0.26 U	07/21/2009 23:21		ug/l	0.26	1	1
Naphthalene	8260	0.32 U	07/21/2009 23:21		ug/l	0.32	1	1
n-Butylbenzene	8260	0.22 U	07/21/2009 23:21		ug/l	0.22	1	1
n-Propylbenzene	8260	0.28 U	07/21/2009 23:21		ug/l	0.28	1	1
o-Xylene	8260	0.2 U	07/21/2009 23:21		ug/l	0.2	1	1
p,m-Xylene	8260	0.27 U	07/21/2009 23:21		ug/l	0.27	2	1
sec-Butylbenzene	8260	0.2 U	07/21/2009 23:21		ug/l	0.2	1	1
Styrene	8260	0.2 U	07/21/2009 23:21		ug/l	0.2	1	1
tert-Butylbenzene	8260	0.28 U	07/21/2009 23:21		ug/l	0.28	1	1
Tetrachloroethene	8260	0.35 U	07/21/2009 23:21		ug/l	0.35	1	1
Toluene	8260	0.22 U	07/21/2009 23:21		ug/l	0.22	1	1
trans-1,2-Dichloroethene	8260	0.23 U	07/21/2009 23:21		ug/l	0.23	1	1
trans-1,3-Dichloropropene	8260	0.17 U	07/21/2009 23:21		ug/l	0.17	1	1
Trichloroethene	8260	0.42 U	07/21/2009 23:21		ug/l	0.42	1	1
Trichlorofluoromethane	8260	0.45 U	07/21/2009 23:21		ug/l	0.45	1	1
Vinyl acetate	8260	0.36 U	07/21/2009 23:21		ug/l	0.36	2	1
Vinyl chloride	8260	0.28 U	07/21/2009 23:21		ug/l	0.28	1	1
1,2-Dichloroethane-d4(SURR)	8260	112	07/21/2009 23:21		%	0.28	(80 - 120)	1
4-Bromofluorobenzene(SURR)	8260	107	07/21/2009 23:21		%	0.28	(86 - 115)	1
Dibromofluoromethane(SURR)	8260	110	07/21/2009 23:21		%	0.28	(86 - 118)	1
Toluene d8(SURR)	8260	106	07/21/2009 23:21		%	0.28	(88 - 110)	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313006
Client ID : SB 3 at 10ft
Matrix : GW

Collection Information:
Sample Date: 7/17/2009 2:50:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
1-Methylnaphthalene	8270 SIM	0.02 U	07/25/2009 23:57	07/23/2009 13:12	ug/l	0.02	0.051	1
2-Methylnaphthalene	8270 SIM	0.02 U	07/25/2009 23:57	07/23/2009 13:12	ug/l	0.02	0.051	1
Acenaphthene	8270 SIM	0.02 U	07/25/2009 23:57	07/23/2009 13:12	ug/l	0.02	0.051	1
Acenaphthylene	8270 SIM	0.02 U	07/25/2009 23:57	07/23/2009 13:12	ug/l	0.02	0.051	1
Anthracene	8270 SIM	0.02 U	07/25/2009 23:57	07/23/2009 13:12	ug/l	0.02	0.051	1
Benzo(a)anthracene	8270 SIM	0.02 U	07/25/2009 23:57	07/23/2009 13:12	ug/l	0.02	0.051	1
Benzo(a)pyrene	8270 SIM	0.02 U	07/25/2009 23:57	07/23/2009 13:12	ug/l	0.02	0.051	1
Benzo(b)fluoranthene	8270 SIM	0.02 U	07/25/2009 23:57	07/23/2009 13:12	ug/l	0.02	0.051	1
Benzo(g,h,i)perylene	8270 SIM	0.02 U	07/25/2009 23:57	07/23/2009 13:12	ug/l	0.02	0.051	1
Benzo(k)fluoranthene	8270 SIM	0.02 U	07/25/2009 23:57	07/23/2009 13:12	ug/l	0.02	0.051	1
Chrysene	8270 SIM	0.02 U	07/25/2009 23:57	07/23/2009 13:12	ug/l	0.02	0.051	1
Dibenz(a,h)anthracene	8270 SIM	0.02 U	07/25/2009 23:57	07/23/2009 13:12	ug/l	0.02	0.051	1
Fluoranthene	8270 SIM	0.02 U	07/25/2009 23:57	07/23/2009 13:12	ug/l	0.02	0.051	1
Fluorene	8270 SIM	0.02 U	07/25/2009 23:57	07/23/2009 13:12	ug/l	0.02	0.051	1
Indeno(1,2,3-cd)pyrene	8270 SIM	0.02 U	07/25/2009 23:57	07/23/2009 13:12	ug/l	0.02	0.051	1
Naphthalene	8270 SIM	0.028 I	07/25/2009 23:57	07/23/2009 13:12	ug/l	0.02	0.051	1
Phenanthrene	8270 SIM	0.02 U	07/25/2009 23:57	07/23/2009 13:12	ug/l	0.02	0.051	1
Pyrene	8270 SIM	0.02 U	07/25/2009 23:57	07/23/2009 13:12	ug/l	0.02	0.051	1
p-Terphenyl-d14(SURR)	8270 SIM	88	07/25/2009 23:57	07/23/2009 13:12	%	0.02	(33 - 141)	1
TPH	FL-PRO	0.26 U	07/22/2009 1:15	07/21/2009 10:27	mg/L	0.26	0.35	1
C39 Surrogate(SURR)	FL-PRO	80	07/22/2009 1:15	07/21/2009 10:27	%	0.26	(42 - 193)	1
o-Terphenyl Surrogate(SURR)	FL-PRO	92	07/22/2009 1:15	07/21/2009 10:27	%	0.26	(82 - 142)	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313007
Client ID : SB 5 at 10ft
Matrix : GW

Collection Information:
Sample Date: 7/17/2009 3:30:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Arsenic	6010	3.31 U	07/22/2009 16:00	07/21/2009 13:19	ug/L	3.31	10	1
Cadmium	6010	0.788 I	07/22/2009 16:00	07/21/2009 13:19	ug/L	0.72	5	1
Chromium	6010	5.19 I	07/22/2009 16:00	07/21/2009 13:19	ug/L	0.43	10	1
Lead	6010	3.7 U	07/22/2009 16:00	07/21/2009 13:19	ug/L	3.7	15	1
1,2-Dibromoethane(EDB)	8011	0.00606 U	07/23/2009 19:06	07/22/2009 15:36	ug/L	0.0061	0.0199	1
1,1,2,2-Tetrachloroethane(SURR	8011	117	07/23/2009 19:06	07/22/2009 15:36	%	0.0061	(70 - 130)	1
Aroclor-1016	8082	0.36 U	07/24/2009 1:58	07/23/2009 12:45	ug/L	0.36	0.51	1
Aroclor-1221	8082	0.44 U	07/24/2009 1:58	07/23/2009 12:45	ug/L	0.44	0.51	1
Aroclor-1232	8082	0.2 U	07/24/2009 1:58	07/23/2009 12:45	ug/L	0.2	0.51	1
Aroclor-1242	8082	0.31 U	07/24/2009 1:58	07/23/2009 12:45	ug/L	0.31	0.51	1
Aroclor-1248	8082	0.13 U	07/24/2009 1:58	07/23/2009 12:45	ug/L	0.13	0.51	1
Aroclor-1254	8082	0.12 U	07/24/2009 1:58	07/23/2009 12:45	ug/L	0.12	0.51	1
Aroclor-1260	8082	0.25 U	07/24/2009 1:58	07/23/2009 12:45	ug/L	0.25	0.51	1
Aroclor-1262	8082	0.057 U	07/24/2009 1:58	07/23/2009 12:45	ug/L	0.057	0.51	1
Aroclor-1268	8082	0.038 U	07/24/2009 1:58	07/23/2009 12:45	ug/L	0.038	0.51	1
Decachlorobiphenyl(SURR)	8082	82	07/24/2009 1:58	07/23/2009 12:45	%	0.038	(16 - 116)	1
1,1,1,2-Tetrachloroethane	8260	0.25 U	07/21/2009 23:45		ug/l	0.25	1	1
1,1,1-Trichloroethane	8260	0.19 U	07/21/2009 23:45		ug/l	0.19	1	1
1,1,2,2-Tetrachloroethane	8260	0.33 U	07/21/2009 23:45		ug/l	0.33	1	1
1,1,2-Trichloroethane	8260	0.28 U	07/21/2009 23:45		ug/l	0.28	1	1
1,1-Dichloroethane	8260	0.28 U	07/21/2009 23:45		ug/l	0.28	1	1
1,1-Dichloroethene	8260	0.24 U	07/21/2009 23:45		ug/l	0.24	1	1
1,1-Dichloropropene	8260	0.19 U	07/21/2009 23:45		ug/l	0.19	1	1
1,2,3-Trichlorobenzene	8260	0.61 U	07/21/2009 23:45		ug/l	0.61	1	1
1,2,3-Trichloropropane	8260	0.76 U	07/21/2009 23:45		ug/l	0.76	1	1
1,2,4-Trichlorobenzene	8260	0.5 U	07/21/2009 23:45		ug/l	0.5	1	1
1,2,4-Trimethylbenzene	8260	0.17 U	07/21/2009 23:45		ug/l	0.17	1	1
1,2-Dibromo-3-chloropropane	8260	1.4 U	07/21/2009 23:45		ug/l	1.4	2	1
1,2-Dibromoethane(EDB)	8260	0.33 U	07/21/2009 23:45		ug/l	0.33	1	1
1,2-Dichlorobenzene	8260	0.26 U	07/21/2009 23:45		ug/l	0.26	1	1
1,2-Dichloroethane	8260	0.4 U	07/21/2009 23:45		ug/l	0.4	1	1
1,2-Dichloropropane	8260	0.27 U	07/21/2009 23:45		ug/l	0.27	1	1
1,3,5-Trimethylbenzene	8260	0.22 U	07/21/2009 23:45		ug/l	0.22	1	1
1,3-Dichlorobenzene	8260	0.2 U	07/21/2009 23:45		ug/l	0.2	1	1
1,3-Dichloropropane	8260	0.19 U	07/21/2009 23:45		ug/l	0.19	1	1
1,4-Dichlorobenzene	8260	0.24 U	07/21/2009 23:45		ug/l	0.24	1	1
2,2-Dichloropropane	8260	0.32 U	07/21/2009 23:45		ug/l	0.32	1	1
2-Butanone	8260	4 U	07/21/2009 23:45		ug/l	4	4	1
2-Chlorotoluene	8260	0.32 U	07/21/2009 23:45		ug/l	0.32	1	1
2-Hexanone	8260	0.95 U	07/21/2009 23:45		ug/l	0.95	5	1
4-Chlorotoluene	8260	0.12 U	07/21/2009 23:45		ug/l	0.12	1	1
4-Isopropyltoluene	8260	0.24 U	07/21/2009 23:45		ug/l	0.24	1	1
4-Methyl-2-pentanone	8260	0.61 U	07/21/2009 23:45		ug/l	0.61	5	1
Acetone	8260	5.6 U	07/21/2009 23:45		ug/l	5.6	10	1
Acrolein	8260	3.3 U	07/21/2009 23:45		ug/l	3.3	10	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313007
Client ID : SB 5 at 10ft
Matrix : GW

Collection Information:
Sample Date: 7/17/2009 3:30:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Acrylonitrile	8260	1.3 U	07/21/2009 23:45		ug/l	1.3	4	1
Benzene	8260	0.16 U	07/21/2009 23:45		ug/l	0.16	1	1
Bromobenzene	8260	0.27 U	07/21/2009 23:45		ug/l	0.27	1	1
Bromochloromethane	8260	0.38 U	07/21/2009 23:45		ug/l	0.38	1	1
Bromodichloromethane	8260	0.15 U	07/21/2009 23:45		ug/l	0.15	1	1
Bromoethane	8260	0.45 U	07/21/2009 23:45		ug/l	0.45	1	1
Bromoform	8260	0.36 U	07/21/2009 23:45		ug/l	0.36	1	1
Bromomethane	8260	0.76 U	07/21/2009 23:45		ug/l	0.76	1	1
Carbon disulfide	8260	0.29 U	07/21/2009 23:45		ug/l	0.29	1	1
Carbon tetrachloride	8260	0.33 U	07/21/2009 23:45		ug/l	0.33	1	1
Chlorobenzene	8260	0.18 U	07/21/2009 23:45		ug/l	0.18	1	1
Chloroethane	8260	0.99 J3MU	07/21/2009 23:45		ug/l	0.99	1	1
Chloroform	8260	0.29 U	07/21/2009 23:45		ug/l	0.29	1	1
Chloromethane	8260	0.68 U	07/21/2009 23:45		ug/l	0.68	1	1
cis-1,2-Dichloroethene	8260	0.29 U	07/21/2009 23:45		ug/l	0.29	1	1
cis-1,3-Dichloropropene	8260	0.23 U	07/21/2009 23:45		ug/l	0.23	1	1
Dibromochloromethane	8260	0.34 U	07/21/2009 23:45		ug/l	0.34	1	1
Dibromomethane	8260	0.53 U	07/21/2009 23:45		ug/l	0.53	1	1
Dichlorodifluoromethane	8260	0.23 U	07/21/2009 23:45		ug/l	0.23	1	1
Ethylbenzene	8260	0.43 U	07/21/2009 23:45		ug/l	0.43	1	1
Hexachlorobutadiene	8260	0.62 U	07/21/2009 23:45		ug/l	0.62	1	1
Isopropylbenzene (Cumene)	8260	0.41 U	07/21/2009 23:45		ug/l	0.41	1	1
Methyl iodide	8260	0.4 U	07/21/2009 23:45		ug/l	0.4	1	1
Methylene chloride	8260	0.52 U	07/21/2009 23:45		ug/l	0.52	1	1
MTBE	8260	0.26 U	07/21/2009 23:45		ug/l	0.26	1	1
Naphthalene	8260	0.32 U	07/21/2009 23:45		ug/l	0.32	1	1
n-Butylbenzene	8260	0.22 U	07/21/2009 23:45		ug/l	0.22	1	1
n-Propylbenzene	8260	0.28 U	07/21/2009 23:45		ug/l	0.28	1	1
o-Xylene	8260	0.2 U	07/21/2009 23:45		ug/l	0.2	1	1
p,m-Xylene	8260	0.27 U	07/21/2009 23:45		ug/l	0.27	2	1
sec-Butylbenzene	8260	0.2 U	07/21/2009 23:45		ug/l	0.2	1	1
Styrene	8260	0.2 U	07/21/2009 23:45		ug/l	0.2	1	1
tert-Butylbenzene	8260	0.28 U	07/21/2009 23:45		ug/l	0.28	1	1
Tetrachloroethene	8260	0.35 U	07/21/2009 23:45		ug/l	0.35	1	1
Toluene	8260	0.22 U	07/21/2009 23:45		ug/l	0.22	1	1
trans-1,2-Dichloroethene	8260	0.23 U	07/21/2009 23:45		ug/l	0.23	1	1
trans-1,3-Dichloropropene	8260	0.17 U	07/21/2009 23:45		ug/l	0.17	1	1
Trichloroethene	8260	0.42 U	07/21/2009 23:45		ug/l	0.42	1	1
Trichlorofluoromethane	8260	0.45 U	07/21/2009 23:45		ug/l	0.45	1	1
Vinyl acetate	8260	0.36 U	07/21/2009 23:45		ug/l	0.36	2	1
Vinyl chloride	8260	0.28 U	07/21/2009 23:45		ug/l	0.28	1	1
1,2-Dichloroethane-d4(SURR)	8260	106	07/21/2009 23:45		%	0.28	(80 - 120)	1
4-Bromofluorobenzene(SURR)	8260	102	07/21/2009 23:45		%	0.28	(86 - 115)	1
Dibromofluoromethane(SURR)	8260	106	07/21/2009 23:45		%	0.28	(86 - 118)	1
Toluene d8(SURR)	8260	101	07/21/2009 23:45		%	0.28	(88 - 110)	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313007
Client ID : SB 5 at 10ft
Matrix : GW

Collection Information:
Sample Date: 7/17/2009 3:30:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
1-Methylnaphthalene	8270 SIM	0.02 U	07/26/2009 0:27	07/23/2009 13:12	ug/l	0.02	0.05	1
2-Methylnaphthalene	8270 SIM	0.02 U	07/26/2009 0:27	07/23/2009 13:12	ug/l	0.02	0.05	1
Acenaphthene	8270 SIM	0.02 U	07/26/2009 0:27	07/23/2009 13:12	ug/l	0.02	0.05	1
Acenaphthylene	8270 SIM	0.02 U	07/26/2009 0:27	07/23/2009 13:12	ug/l	0.02	0.05	1
Anthracene	8270 SIM	0.02 U	07/26/2009 0:27	07/23/2009 13:12	ug/l	0.02	0.05	1
Benzo(a)anthracene	8270 SIM	0.02 U	07/26/2009 0:27	07/23/2009 13:12	ug/l	0.02	0.05	1
Benzo(a)pyrene	8270 SIM	0.02 U	07/26/2009 0:27	07/23/2009 13:12	ug/l	0.02	0.05	1
Benzo(b)fluoranthene	8270 SIM	0.02 U	07/26/2009 0:27	07/23/2009 13:12	ug/l	0.02	0.05	1
Benzo(g,h,i)perylene	8270 SIM	0.02 U	07/26/2009 0:27	07/23/2009 13:12	ug/l	0.02	0.05	1
Benzo(k)fluoranthene	8270 SIM	0.02 U	07/26/2009 0:27	07/23/2009 13:12	ug/l	0.02	0.05	1
Chrysene	8270 SIM	0.02 U	07/26/2009 0:27	07/23/2009 13:12	ug/l	0.02	0.05	1
Dibenz(a,h)anthracene	8270 SIM	0.02 U	07/26/2009 0:27	07/23/2009 13:12	ug/l	0.02	0.05	1
Fluoranthene	8270 SIM	0.02 U	07/26/2009 0:27	07/23/2009 13:12	ug/l	0.02	0.05	1
Fluorene	8270 SIM	0.02 U	07/26/2009 0:27	07/23/2009 13:12	ug/l	0.02	0.05	1
Indeno(1,2,3-cd)pyrene	8270 SIM	0.02 U	07/26/2009 0:27	07/23/2009 13:12	ug/l	0.02	0.05	1
Naphthalene	8270 SIM	0.022 I	07/26/2009 0:27	07/23/2009 13:12	ug/l	0.02	0.05	1
Phenanthrene	8270 SIM	0.02 U	07/26/2009 0:27	07/23/2009 13:12	ug/l	0.02	0.05	1
Pyrene	8270 SIM	0.02 U	07/26/2009 0:27	07/23/2009 13:12	ug/l	0.02	0.05	1
p-Terphenyl-d14(SURR)	8270 SIM	92	07/26/2009 0:27	07/23/2009 13:12	%	0.02	(33 - 141)	1
TPH	FL-PRO	0.26 U	07/22/2009 1:43	07/21/2009 10:27	mg/L	0.26	0.35	1
C39 Surrogate(SURR)	FL-PRO	107	07/22/2009 1:43	07/21/2009 10:27	%	0.26	(42 - 193)	1
o-Terphenyl Surrogate(SURR)	FL-PRO	99	07/22/2009 1:43	07/21/2009 10:27	%	0.26	(82 - 142)	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130

PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313008

Client ID : SB 2 at 3ft

Matrix : SO

Collection Information:

Sample Date: 7/17/2009 11:05:00 AM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Arsenic	6010	0.527 U	07/22/2009 2:07	07/21/2009 12:10	mg/Kg	0.527	1.05	1
Cadmium	6010	0.152 I	07/22/2009 2:07	07/21/2009 12:10	mg/Kg	0.0527	0.527	1
Chromium	6010	**1.74**	07/22/2009 2:07	07/21/2009 12:10	mg/Kg	0.169	0.527	1
Lead	6010	0.359 U	07/22/2009 2:07	07/21/2009 12:10	mg/Kg	0.359	0.844	1
Aroclor-1016	8082	3.4 U	07/22/2009 6:07	07/21/2009 17:21	ug/Kg	3.4	24	1
Aroclor-1221	8082	5.9 U	07/22/2009 6:07	07/21/2009 17:21	ug/Kg	5.9	24	1
Aroclor-1232	8082	16 U	07/22/2009 6:07	07/21/2009 17:21	ug/Kg	16	24	1
Aroclor-1242	8082	5.9 U	07/22/2009 6:07	07/21/2009 17:21	ug/Kg	5.9	24	1
Aroclor-1248	8082	8.8 U	07/22/2009 6:07	07/21/2009 17:21	ug/Kg	8.8	24	1
Aroclor-1254	8082	2.5 U	07/22/2009 6:07	07/21/2009 17:21	ug/Kg	2.5	24	1
Aroclor-1260	8082	3.7 U	07/22/2009 6:07	07/21/2009 17:21	ug/Kg	3.7	24	1
Aroclor-1262	8082	4 U	07/22/2009 6:07	07/21/2009 17:21	ug/Kg	4	24	1
Aroclor-1268	8082	4.6 U	07/22/2009 6:07	07/21/2009 17:21	ug/Kg	4.6	24	1
Decachlorobiphenyl(SURR)	8082	93.6	07/22/2009 6:07	07/21/2009 17:21	%	4.6	(33 - 140)	1
1,1,1,2-Tetrachloroethane	8260	0.8 U	07/20/2009 14:25		ug/kg	0.8	2.2	1
1,1,1-Trichloroethane	8260	0.58 U	07/20/2009 14:25		ug/kg	0.58	2.2	1
1,1,2,2-Tetrachloroethane	8260	0.64 U	07/20/2009 14:25		ug/kg	0.64	2.2	1
1,1,2-Trichloroethane	8260	0.87 U	07/20/2009 14:25		ug/kg	0.87	2.2	1
1,1-Dichloroethane	8260	0.74 U	07/20/2009 14:25		ug/kg	0.74	2.2	1
1,1-Dichloroethene	8260	0.71 U	07/20/2009 14:25		ug/kg	0.71	2.2	1
1,1-Dichloropropene	8260	0.52 U	07/20/2009 14:25		ug/kg	0.52	2.2	1
1,2,3-Trichlorobenzene	8260	0.53 U	07/20/2009 14:25		ug/kg	0.53	2.2	1
1,2,3-Trichloropropane	8260	0.95 U	07/20/2009 14:25		ug/kg	0.95	2.2	1
1,2,4-Trichlorobenzene	8260	0.62 U	07/20/2009 14:25		ug/kg	0.62	2.2	1
1,2,4-Trimethylbenzene	8260	0.36 U	07/20/2009 14:25		ug/kg	0.36	2.2	1
1,2-Dibromo-3-chloropropane	8260	2.4 U	07/20/2009 14:25		ug/kg	2.4	10.8	1
1,2-Dibromoethane(EDB)	8260	1.1 U	07/20/2009 14:25		ug/kg	1.1	2.2	1
1,2-Dichlorobenzene	8260	0.52 U	07/20/2009 14:25		ug/kg	0.52	2.2	1
1,2-Dichloroethane	8260	0.54 U	07/20/2009 14:25		ug/kg	0.54	2.2	1
1,2-Dichloropropane	8260	1 U	07/20/2009 14:25		ug/kg	1	2.2	1
1,3,5-Trimethylbenzene	8260	0.44 U	07/20/2009 14:25		ug/kg	0.44	2.2	1
1,3-Dichlorobenzene	8260	0.57 U	07/20/2009 14:25		ug/kg	0.57	2.2	1
1,3-Dichloropropane	8260	0.58 U	07/20/2009 14:25		ug/kg	0.58	2.2	1
1,4-Dichlorobenzene	8260	0.58 U	07/20/2009 14:25		ug/kg	0.58	2.2	1
2,2-Dichloropropane	8260	0.66 U	07/20/2009 14:25		ug/kg	0.66	2.2	1
2-Butanone	8260	1.8 U	07/20/2009 14:25		ug/kg	1.8	10.8	1
2-Chlorotoluene	8260	0.48 U	07/20/2009 14:25		ug/kg	0.48	2.2	1
2-Hexanone	8260	1.7 J3U	07/20/2009 14:25		ug/kg	1.7	10.8	1
4-Chlorotoluene	8260	0.39 U	07/20/2009 14:25		ug/kg	0.39	2.2	1
4-Isopropyltoluene	8260	1 U	07/20/2009 14:25		ug/kg	1	2.2	1
4-Methyl-2-pentanone	8260	1.3 U	07/20/2009 14:25		ug/kg	1.3	10.8	1
Acetone	8260	5.2 U	07/20/2009 14:25		ug/kg	5.2	10.8	1
Acrolein	8260	4.8 J3U	07/20/2009 14:25		ug/kg	4.8	26.9	1
Acrylonitrile	8260	3.8 U	07/20/2009 14:25		ug/kg	3.8	5.4	1
Benzene	8260	0.45 U	07/20/2009 14:25		ug/kg	0.45	2.2	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313008
Client ID : SB 2 at 3ft
Matrix : SO

Collection Information:
Sample Date: 7/17/2009 11:05:00 AM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Bromobenzene	8260	0.73 U	07/20/2009 14:25		ug/kg	0.73	2.2	1
Bromochloromethane	8260	0.82 U	07/20/2009 14:25		ug/kg	0.82	2.2	1
Bromodichloromethane	8260	0.46 U	07/20/2009 14:25		ug/kg	0.46	2.2	1
Bromoform	8260	2.2 J3RU	07/20/2009 14:25		ug/kg	2.2	5.4	1
Bromomethane	8260	1.1 U	07/20/2009 14:25		ug/kg	1.1	2.2	1
Carbon disulfide	8260	0.54 U	07/20/2009 14:25		ug/kg	0.54	2.2	1
Carbon tetrachloride	8260	0.53 U	07/20/2009 14:25		ug/kg	0.53	2.2	1
Chlorobenzene	8260	0.58 U	07/20/2009 14:25		ug/kg	0.58	2.2	1
Chloroethane	8260	1.3 U	07/20/2009 14:25		ug/kg	1.3	5.4	1
Chloroform	8260	0.56 U	07/20/2009 14:25		ug/kg	0.56	2.2	1
Chloromethane	8260	0.92 U	07/20/2009 14:25		ug/kg	0.92	2.2	1
cis-1,2-Dichloroethene	8260	1.3 U	07/20/2009 14:25		ug/kg	1.3	2.2	1
cis-1,3-Dichloropropene	8260	0.47 U	07/20/2009 14:25		ug/kg	0.47	2.2	1
Dibromochloromethane	8260	0.7 U	07/20/2009 14:25		ug/kg	0.7	2.2	1
Dibromomethane	8260	0.94 U	07/20/2009 14:25		ug/kg	0.94	2.2	1
Dichlorodifluoromethane	8260	0.71 U	07/20/2009 14:25		ug/kg	0.71	2.2	1
Ethylbenzene	8260	0.82 U	07/20/2009 14:25		ug/kg	0.82	2.2	1
Hexachlorobutadiene	8260	0.88 U	07/20/2009 14:25		ug/kg	0.88	4.3	1
Isopropylbenzene (Cumene)	8260	0.85 U	07/20/2009 14:25		ug/kg	0.85	2.2	1
Methyl iodide	8260	0.5 U	07/20/2009 14:25		ug/kg	0.5	2.2	1
Methylene chloride	8260	1.3 U	07/20/2009 14:25		ug/kg	1.3	5.4	1
MTBE	8260	0.6 U	07/20/2009 14:25		ug/kg	0.6	2.2	1
Naphthalene	8260	0.73 U	07/20/2009 14:25		ug/kg	0.73	2.2	1
n-Butylbenzene	8260	0.5 U	07/20/2009 14:25		ug/kg	0.5	2.2	1
n-Propylbenzene	8260	0.43 U	07/20/2009 14:25		ug/kg	0.43	2.2	1
o-Xylene	8260	0.56 U	07/20/2009 14:25		ug/kg	0.56	2.2	1
p,m-Xylene	8260	0.7 U	07/20/2009 14:25		ug/kg	0.7	4.3	1
sec-Butylbenzene	8260	0.64 U	07/20/2009 14:25		ug/kg	0.64	2.2	1
Styrene	8260	0.46 U	07/20/2009 14:25		ug/kg	0.46	2.2	1
tert-Butylbenzene	8260	0.71 U	07/20/2009 14:25		ug/kg	0.71	2.2	1
Tetrachloroethene	8260	0.56 U	07/20/2009 14:25		ug/kg	0.56	2.2	1
Toluene	8260	0.94 U	07/20/2009 14:25		ug/kg	0.94	2.2	1
trans-1,2-Dichloroethene	8260	0.82 U	07/20/2009 14:25		ug/kg	0.82	2.2	1
trans-1,3-Dichloropropene	8260	0.6 U	07/20/2009 14:25		ug/kg	0.6	2.2	1
Trichloroethene	8260	0.99 U	07/20/2009 14:25		ug/kg	0.99	2.2	1
Trichlorofluoromethane	8260	0.68 U	07/20/2009 14:25		ug/kg	0.68	2.2	1
Vinyl acetate	8260	1.2 U	07/20/2009 14:25		ug/kg	1.2	5.4	1
Vinyl chloride	8260	1 U	07/20/2009 14:25		ug/kg	1	2.2	1
1,2-Dichloroethane-d4(SURR)	8260	113	07/20/2009 14:25		%	1	(71 - 124)	1
4-Bromofluorobenzene(SURR)	8260	117	07/20/2009 14:25		%	1	(54 - 126)	1
Dibromofluoromethane(SURR)	8260	118	07/20/2009 14:25		%	1	(68 - 119)	1
Toluene d8(SURR)	8260	110	07/20/2009 14:25		%	1	(59 - 127)	1
1-Methylnaphthalene	8310	3.2 U	07/24/2009 1:37	07/23/2009 13:51	ug/kg	3.2	7.8	1
2-Methylnaphthalene	8310	3 U	07/24/2009 1:37	07/23/2009 13:51	ug/kg	3	7.8	1
Acenaphthene	8310	0.86 U	07/24/2009 1:37	07/23/2009 13:51	ug/kg	0.86	7.8	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130

PROJECT ID: Pinellas Bayway Site #4

PEL Lab# : 251313008

Client ID : SB 2 at 3ft

Matrix : SO

Collection Information:

Sample Date: 7/17/2009 11:05:00 AM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Acenaphthylene	8310	0.94 U	07/24/2009 1:37	07/23/2009 13:51	ug/kg	0.94	7.8	1
Anthracene	8310	0.86 U	07/24/2009 1:37	07/23/2009 13:51	ug/kg	0.86	7.8	1
Benzo(a)anthracene	8310	3.2 I	07/24/2009 1:37	07/23/2009 13:51	ug/kg	1.6	7.8	1
Benzo(a)pyrene	8310	3.5 I	07/24/2009 1:37	07/23/2009 13:51	ug/kg	2.6	7.8	1
Benzo(b)fluoranthene	8310	2 U	07/24/2009 1:37	07/23/2009 13:51	ug/kg	2	7.8	1
Benzo(g,h,i)perylene	8310	5.2 I	07/24/2009 1:37	07/23/2009 13:51	ug/kg	2	7.8	1
Benzo(k)fluoranthene	8310	1.1 U	07/24/2009 1:37	07/23/2009 13:51	ug/kg	1.1	7.8	1
Chrysene	8310	5.6 I	07/24/2009 1:37	07/23/2009 13:51	ug/kg	2.2	7.8	1
Dibenz(a,h)anthracene	8310	0.86 U	07/24/2009 1:37	07/23/2009 13:51	ug/kg	0.86	7.8	1
Fluoranthene	8310	3.8 I	07/24/2009 1:37	07/23/2009 13:51	ug/kg	1.6	7.8	1
Fluorene	8310	1.5 U	07/24/2009 1:37	07/23/2009 13:51	ug/kg	1.5	7.8	1
Indeno(1,2,3-cd)pyrene	8310	2.7 I	07/24/2009 1:37	07/23/2009 13:51	ug/kg	0.86	7.8	1
Naphthalene	8310	2 U	07/24/2009 1:37	07/23/2009 13:51	ug/kg	2	7.8	1
Phenanthrene	8310	1.3 U	07/24/2009 1:37	07/23/2009 13:51	ug/kg	1.3	7.8	1
Pyrene	8310	4.3 I	07/24/2009 1:37	07/23/2009 13:51	ug/kg	2.3	7.8	1
p-Terphenyl-d14(SURR)	8310	86.9	07/24/2009 1:37	07/23/2009 13:51	%	2.3	(17 - 119)	1
TPH	FL-PRO	6.2 U	07/27/2009 1:34	07/26/2009 15:23	mg/Kg	6.2	10.9	1
C39 Surrogate(SURR)	FL-PRO	106	07/27/2009 1:34	07/26/2009 15:23	%	6.2	(60 - 118)	1
o-Terphenyl Surrogate(SURR)	FL-PRO	100	07/27/2009 1:34	07/26/2009 15:23	%	6.2	(62 - 109)	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

QC SUMMARY

METHOD: 6010

Method Blank 288878 **Matrix :** SQ

Associated Lab Samples : 251313001 251313002 251313002DL1 251313003 251313008 288878 288879 288880

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
Arsenic	U	7/22/2009	7/21/2009	mg/Kg	0.5	1
Cadmium	U	7/22/2009	7/21/2009	mg/Kg	0.05	1
Chromium	U	7/22/2009	7/21/2009	mg/Kg	0.16	1
Lead	U	7/22/2009	7/21/2009	mg/Kg	0.34	1

Method Blank 288910 **Matrix :** WQ

Associated Lab Samples : 251313004 251313005 251313005DL1 251313006 251313007 288910 288911 288912

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
Arsenic	U	7/22/2009	7/21/2009	ug/L	3.31	1
Cadmium	U	7/22/2009	7/21/2009	ug/L	0.72	1
Chromium	U	7/22/2009	7/21/2009	ug/L	0.43	1
Lead	U	7/22/2009	7/21/2009	ug/L	3.7	1

LABORATORY CONTROL SAMPLE: 288879 **Matrix :** SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
Arsenic	mg/Kg	50	46.8	93.6	(80-120)		
Cadmium	mg/Kg	50	47.7	95.4	(80-120)		
Chromium	mg/Kg	50	47.6	95.2	(80-120)		
Lead	mg/Kg	50	49.6	99.2	(80-120)		

LABORATORY CONTROL SAMPLE: 288880 **Matrix :** SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
Arsenic	mg/Kg	50	47.7	95.4	(80-120)	1.9	20
Cadmium	mg/Kg	50	48.2	96.4	(80-120)	1	20
Chromium	mg/Kg	50	48.3	96.6	(80-120)	1.5	20
Lead	mg/Kg	50	50.1	100.2	(80-120)	1	20

LABORATORY CONTROL SAMPLE: 288911 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

METHOD: 6010

LABORATORY CONTROL SAMPLE: 288911 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
Arsenic	ug/L	500	452	90.4	(80-120)		
Cadmium	ug/L	500	440	88	(80-120)		
Chromium	ug/L	500	436	87.2	(80-120)		
Lead	ug/L	500	459	91.8	(80-120)		

LABORATORY CONTROL SAMPLE: 288912 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
Arsenic	ug/L	500	494	98.8	(80-120)	8.9	20
Cadmium	ug/L	500	476	95.2	(80-120)	7.9	20
Chromium	ug/L	500	476	95.2	(80-120)	8.8	20
Lead	ug/L	500	500	100	(80-120)	8.6	20

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

METHOD: 8011

Method Blank 288991 **Matrix :** WQ

Associated Lab Samples : 251313004 251313005 251313006 251313007 288991 288992 288993

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
1,2-Dibromoethane(EDB)	U	7/23/2009	7/22/2009	ug/L	0.00605	1
1,1,2,2-Tetrachloroethane(SURR	104	7/23/2009	7/22/2009	%	(70 - 130)	1

LABORATORY CONTROL SAMPLE: 288992 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
1,2-Dibromoethane(EDB)	ug/L	0.12	0.14	117	(60-140)		
1,1,2,2-Tetrachloroethane(SURR	ug/L	0.24	0.29	121	(70-130)		

LABORATORY CONTROL SAMPLE: 288993 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
1,2-Dibromoethane(EDB)	ug/L	0.12	0.14	117	(60-140)	0	10
1,1,2,2-Tetrachloroethane(SURR	ug/L	0.24	0.28	117	(70-130)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

METHOD: 8082

Method Blank 288869 **Matrix :** SQ

Associated Lab Samples : 251313001 251313002 251313003 251313008 288869 288870

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
Aroclor-1016	U	7/22/2009	7/21/2009	ug/Kg	4.3	1
Aroclor-1221	U	7/22/2009	7/21/2009	ug/Kg	7.4	1
Aroclor-1232	U	7/22/2009	7/21/2009	ug/Kg	20	1
Aroclor-1242	U	7/22/2009	7/21/2009	ug/Kg	7.4	1
Aroclor-1248	U	7/22/2009	7/21/2009	ug/Kg	11	1
Aroclor-1254	U	7/22/2009	7/21/2009	ug/Kg	3.2	1
Aroclor-1260	U	7/22/2009	7/21/2009	ug/Kg	4.7	1
Aroclor-1262	U	7/22/2009	7/21/2009	ug/Kg	5	1
Aroclor-1268	U	7/22/2009	7/21/2009	ug/Kg	5.8	1
Decachlorobiphenyl(SURR) (S)	83.7	7/22/2009	7/21/2009	%	(33 - 140)	1

Method Blank 289003 **Matrix :** WQ

Associated Lab Samples : 251313004 251313005 251313006 251313007 289003 289004 289005

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
Aroclor-1016	U	7/23/2009	7/23/2009	ug/L	0.36	1
Aroclor-1221	U	7/23/2009	7/23/2009	ug/L	0.43	1
Aroclor-1232	U	7/23/2009	7/23/2009	ug/L	0.2	1
Aroclor-1242	U	7/23/2009	7/23/2009	ug/L	0.31	1
Aroclor-1248	U	7/23/2009	7/23/2009	ug/L	0.13	1
Aroclor-1254	U	7/23/2009	7/23/2009	ug/L	0.12	1
Aroclor-1260	U	7/23/2009	7/23/2009	ug/L	0.25	1
Aroclor-1262	U	7/23/2009	7/23/2009	ug/L	0.056	1
Aroclor-1268	U	7/23/2009	7/23/2009	ug/L	0.038	1
Decachlorobiphenyl(SURR) (S)	98	7/23/2009	7/23/2009	%	(16 - 116)	1

LABORATORY CONTROL SAMPLE: 288870 **Matrix :** SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
Aroclor-1016	ug/Kg	667	508	76.2	(40-140)		
Aroclor-1260	ug/Kg	667	438	65.7	(60-125)		
Decachlorobiphenyl(SURR) (S)	ug/Kg	66.7	66.1	99.1	(33-140)		

LABORATORY CONTROL SAMPLE: 289004 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

METHOD: 8082

LABORATORY CONTROL SAMPLE: 289004 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
Aroclor-1016	ug/L	10	8.7	87	(39-122)		
Aroclor-1260	ug/L	10	7.4	74	(30-118)		
Decachlorobiphenyl(SURR) (S)	ug/L	1	0.94	94	(16-116)		

LABORATORY CONTROL SAMPLE: 289005 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
Aroclor-1016	ug/L	10	9.2	92	(39-122)	5.6	15
Aroclor-1260	ug/L	10	7.6	76	(30-118)	2.7	12
Decachlorobiphenyl(SURR) (S)	ug/L	1	0.98	98	(16-116)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4
METHOD: 8260

Method Blank 072009BLK22 **Matrix :** SQ

Associated Lab Samples : 072009BLK22 072009LCS22 072009LCS22D 251313001 251313002 251313003 251313008

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
1,1,1,2-Tetrachloroethane	U	7/20/2009		ug/kg	0.74	1
1,1,1-Trichloroethane	U	7/20/2009		ug/kg	0.54	1
1,1,2,2-Tetrachloroethane	U	7/20/2009		ug/kg	0.6	1
1,1,2-Trichloroethane	U	7/20/2009		ug/kg	0.81	1
1,1-Dichloroethane	U	7/20/2009		ug/kg	0.69	1
1,1-Dichloroethene	U	7/20/2009		ug/kg	0.66	1
1,1-Dichloropropene	U	7/20/2009		ug/kg	0.48	1
1,2,3-Trichlorobenzene	U	7/20/2009		ug/kg	0.49	1
1,2,3-Trichloropropane	U	7/20/2009		ug/kg	0.88	1
1,2,4-Trichlorobenzene	U	7/20/2009		ug/kg	0.58	1
1,2,4-Trimethylbenzene	U	7/20/2009		ug/kg	0.33	1
1,2-Dibromo-3-chloropropane	U	7/20/2009		ug/kg	2.2	1
1,2-Dibromoethane(EDB)	U	7/20/2009		ug/kg	1	1
1,2-Dichlorobenzene	U	7/20/2009		ug/kg	0.48	1
1,2-Dichloroethane	U	7/20/2009		ug/kg	0.5	1
1,2-Dichloropropane	U	7/20/2009		ug/kg	0.93	1
1,3,5-Trimethylbenzene	U	7/20/2009		ug/kg	0.41	1
1,3-Dichlorobenzene	U	7/20/2009		ug/kg	0.53	1
1,3-Dichloropropane	U	7/20/2009		ug/kg	0.54	1
1,4-Dichlorobenzene	U	7/20/2009		ug/kg	0.54	1
2,2-Dichloropropane	U	7/20/2009		ug/kg	0.61	1
2-Butanone	U	7/20/2009		ug/kg	1.7	1
2-Chlorotoluene	U	7/20/2009		ug/kg	0.45	1
2-Hexanone	J3U	7/20/2009		ug/kg	1.6	1
4-Chlorotoluene	U	7/20/2009		ug/kg	0.36	1
4-Isopropyltoluene	U	7/20/2009		ug/kg	0.94	1
4-Methyl-2-pentanone	U	7/20/2009		ug/kg	1.2	1
Acetone	U	7/20/2009		ug/kg	4.8	1
Acrolein	J3U	7/20/2009		ug/kg	4.5	1
Acrylonitrile	U	7/20/2009		ug/kg	3.5	1
Benzene	U	7/20/2009		ug/kg	0.42	1
Bromobenzene	U	7/20/2009		ug/kg	0.68	1
Bromochloromethane	U	7/20/2009		ug/kg	0.76	1
Bromodichloromethane	U	7/20/2009		ug/kg	0.43	1
Bromoform	J3RU	7/20/2009		ug/kg	2	1
Bromomethane	U	7/20/2009		ug/kg	1	1
Carbon disulfide	U	7/20/2009		ug/kg	0.5	1
Carbon tetrachloride	U	7/20/2009		ug/kg	0.49	1
Chlorobenzene	U	7/20/2009		ug/kg	0.54	1
Chloroethane	U	7/20/2009		ug/kg	1.2	1
Chloroform	U	7/20/2009		ug/kg	0.52	1
Chloromethane	U	7/20/2009		ug/kg	0.86	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4
METHOD: 8260

Method Blank 072009BLK22 **Matrix :** SQ

Associated Lab Samples : 072009BLK22 072009LCS22 072009LCS22D 251313001 251313002 251313003 251313008

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
cis-1,2-Dichloroethene	U	7/20/2009		ug/kg	1.2	1
cis-1,3-Dichloropropene	U	7/20/2009		ug/kg	0.44	1
Dibromochloromethane	U	7/20/2009		ug/kg	0.65	1
Dibromomethane	U	7/20/2009		ug/kg	0.87	1
Dichlorodifluoromethane	U	7/20/2009		ug/kg	0.66	1
Ethylbenzene	U	7/20/2009		ug/kg	0.76	1
Hexachlorobutadiene	U	7/20/2009		ug/kg	0.82	1
Isopropylbenzene (Cumene)	U	7/20/2009		ug/kg	0.79	1
Methyl iodide	U	7/20/2009		ug/kg	0.46	1
Methylene chloride	U	7/20/2009		ug/kg	1.2	1
MTBE	U	7/20/2009		ug/kg	0.56	1
Naphthalene	U	7/20/2009		ug/kg	0.68	1
n-Butylbenzene	U	7/20/2009		ug/kg	0.46	1
n-Propylbenzene	U	7/20/2009		ug/kg	0.4	1
o-Xylene	U	7/20/2009		ug/kg	0.52	1
p,m-Xylene	U	7/20/2009		ug/kg	0.65	1
sec-Butylbenzene	U	7/20/2009		ug/kg	0.6	1
Styrene	U	7/20/2009		ug/kg	0.43	1
tert-Butylbenzene	U	7/20/2009		ug/kg	0.66	1
Tetrachloroethene	U	7/20/2009		ug/kg	0.52	1
Toluene	U	7/20/2009		ug/kg	0.87	1
trans-1,2-Dichloroethene	U	7/20/2009		ug/kg	0.76	1
trans-1,3-Dichloropropene	U	7/20/2009		ug/kg	0.56	1
Trichloroethene	U	7/20/2009		ug/kg	0.92	1
Trichlorofluoromethane	U	7/20/2009		ug/kg	0.63	1
Vinyl acetate	U	7/20/2009		ug/kg	1.1	1
Vinyl chloride	U	7/20/2009		ug/kg	0.95	1
1,2-Dichloroethane-d4(SURR) (S	120	7/20/2009		%	(71 - 124)	1
4-Bromofluorobenzene(SURR) (	113	7/20/2009		%	(54 - 126)	1
Dibromofluoromethane(SURR) (	115	7/20/2009		%	(68 - 119)	1
Toluene d8(SURR) (S)	109	7/20/2009		%	(59 - 127)	1

Method Blank 0721BLK55 **Matrix :** WQ

Associated Lab Samples : 0721BLK55 0721LCS52 0721LCS52D 251313004 251313005 251313006 251313007

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
1,1,1,2-Tetrachloroethane	U	7/21/2009		ug/l	0.25	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4
METHOD: 8260

Method Blank 0721BLK55 **Matrix :** WQ

Associated Lab Samples : 0721BLK55 0721LCS52 0721LCS52D 251313004 251313005 251313006 251313007

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
1,1,1-Trichloroethane	U	7/21/2009		ug/l	0.19	1
1,1,2,2-Tetrachloroethane	U	7/21/2009		ug/l	0.33	1
1,1,2-Trichloroethane	U	7/21/2009		ug/l	0.28	1
1,1-Dichloroethane	U	7/21/2009		ug/l	0.28	1
1,1-Dichloroethene	U	7/21/2009		ug/l	0.24	1
1,1-Dichloropropene	U	7/21/2009		ug/l	0.19	1
1,2,3-Trichlorobenzene	U	7/21/2009		ug/l	0.61	1
1,2,3-Trichloropropane	U	7/21/2009		ug/l	0.76	1
1,2,4-Trichlorobenzene	U	7/21/2009		ug/l	0.5	1
1,2,4-Trimethylbenzene	U	7/21/2009		ug/l	0.17	1
1,2-Dibromo-3-chloropropane	U	7/21/2009		ug/l	1.4	1
1,2-Dibromoethane(EDB)	U	7/21/2009		ug/l	0.33	1
1,2-Dichlorobenzene	U	7/21/2009		ug/l	0.26	1
1,2-Dichloroethane	U	7/21/2009		ug/l	0.4	1
1,2-Dichloropropane	U	7/21/2009		ug/l	0.27	1
1,3,5-Trimethylbenzene	U	7/21/2009		ug/l	0.22	1
1,3-Dichlorobenzene	U	7/21/2009		ug/l	0.2	1
1,3-Dichloropropane	U	7/21/2009		ug/l	0.19	1
1,4-Dichlorobenzene	U	7/21/2009		ug/l	0.24	1
2,2-Dichloropropane	U	7/21/2009		ug/l	0.32	1
2-Butanone	U	7/21/2009		ug/l	4	1
2-Chlorotoluene	U	7/21/2009		ug/l	0.32	1
2-Hexanone	U	7/21/2009		ug/l	0.95	1
4-Chlorotoluene	U	7/21/2009		ug/l	0.12	1
4-Isopropyltoluene	U	7/21/2009		ug/l	0.24	1
4-Methyl-2-pentanone	U	7/21/2009		ug/l	0.61	1
Acetone	U	7/21/2009		ug/l	5.6	1
Acrolein	U	7/21/2009		ug/l	3.3	1
Acrylonitrile	U	7/21/2009		ug/l	1.3	1
Benzene	U	7/21/2009		ug/l	0.16	1
Bromobenzene	U	7/21/2009		ug/l	0.27	1
Bromochloromethane	U	7/21/2009		ug/l	0.38	1
Bromodichloromethane	U	7/21/2009		ug/l	0.15	1
Bromoethane	U	7/21/2009		ug/l	0.45	1
Bromoform	U	7/21/2009		ug/l	0.36	1
Bromomethane	U	7/21/2009		ug/l	0.76	1
Carbon disulfide	U	7/21/2009		ug/l	0.29	1
Carbon tetrachloride	U	7/21/2009		ug/l	0.33	1
Chlorobenzene	U	7/21/2009		ug/l	0.18	1
Chloroethane	J3MU	7/21/2009		ug/l	0.99	1
Chloroform	U	7/21/2009		ug/l	0.29	1
Chloromethane	U	7/21/2009		ug/l	0.68	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

METHOD: 8260

Method Blank 0721BLK55 **Matrix :** WQ

Associated Lab Samples : 0721BLK55 0721LCS52 0721LCS52D 251313004 251313005 251313006 251313007

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
cis-1,2-Dichloroethene	U	7/21/2009		ug/l	0.29	1
cis-1,3-Dichloropropene	U	7/21/2009		ug/l	0.23	1
Dibromochloromethane	U	7/21/2009		ug/l	0.34	1
Dibromomethane	U	7/21/2009		ug/l	0.53	1
Dichlorodifluoromethane	U	7/21/2009		ug/l	0.23	1
Ethylbenzene	U	7/21/2009		ug/l	0.43	1
Hexachlorobutadiene	U	7/21/2009		ug/l	0.62	1
Isopropylbenzene (Cumene)	U	7/21/2009		ug/l	0.41	1
Methyl iodide	U	7/21/2009		ug/l	0.4	1
Methylene chloride	U	7/21/2009		ug/l	0.52	1
MTBE	U	7/21/2009		ug/l	0.26	1
Naphthalene	U	7/21/2009		ug/l	0.32	1
n-Butylbenzene	U	7/21/2009		ug/l	0.22	1
n-Propylbenzene	U	7/21/2009		ug/l	0.28	1
o-Xylene	U	7/21/2009		ug/l	0.2	1
p,m-Xylene	U	7/21/2009		ug/l	0.27	1
sec-Butylbenzene	U	7/21/2009		ug/l	0.2	1
Styrene	U	7/21/2009		ug/l	0.2	1
tert-Butylbenzene	U	7/21/2009		ug/l	0.28	1
Tetrachloroethene	U	7/21/2009		ug/l	0.35	1
Toluene	U	7/21/2009		ug/l	0.22	1
trans-1,2-Dichloroethene	U	7/21/2009		ug/l	0.23	1
trans-1,3-Dichloropropene	U	7/21/2009		ug/l	0.17	1
Trichloroethene	U	7/21/2009		ug/l	0.42	1
Trichlorofluoromethane	U	7/21/2009		ug/l	0.45	1
Vinyl acetate	U	7/21/2009		ug/l	0.36	1
Vinyl chloride	U	7/21/2009		ug/l	0.28	1
1,2-Dichloroethane-d4(SURR) (S	106	7/21/2009		%	(80 - 120)	1
4-Bromofluorobenzene(SURR) (	104	7/21/2009		%	(86 - 115)	1
Dibromofluoromethane(SURR) (	104	7/21/2009		%	(86 - 118)	1
Toluene d8(SURR) (S)	102	7/21/2009		%	(88 - 110)	1

LABORATORY CONTROL SAMPLE: 072009LCS22 **Matrix :** SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
1,1,1,2-Tetrachloroethane	ug/kg	20	21.6	108	(82-121)		
1,1,1-Trichloroethane	ug/kg	20	18.9	94.5	(70-130)		
1,1,2,2-Tetrachloroethane	ug/kg	20	21.5	108	(82-122)		
1,1,2-Trichloroethane	ug/kg	20	20.2	101	(70-130)		
1,1-Dichloroethane	ug/kg	20	19.6	98	(70-130)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

METHOD: 8260

LABORATORY CONTROL SAMPLE: 072009LCS22 Matrix : SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC		% REC LIMITS	RPD	RPD LIMIT
1,1-Dichloroethene	ug/kg	20	18	90		(73-130)		
1,1-Dichloropropene	ug/kg	20	19.2	96		(70-130)		
1,2,3-Trichlorobenzene	ug/kg	20	18.4	92		(70-130)		
1,2,3-Trichloropropane	ug/kg	20	23.7	118		(74-129)		
1,2,4-Trichlorobenzene	ug/kg	20	19.1	95.5		(70-130)		
1,2,4-Trimethylbenzene	ug/kg	20	19.6	98		(70-130)		
1,2-Dibromo-3-chloropropane	ug/kg	20	19.2	96		(72-143)		
1,2-Dibromoethane(EDB)	ug/kg	20	20.4	102		(70-130)		
1,2-Dichlorobenzene	ug/kg	20	19.3	96.5		(70-130)		
1,2-Dichloroethane	ug/kg	20	20.2	101		(78-136)		
1,2-Dichloropropane	ug/kg	20	19.3	96.5		(70-130)		
1,3,5-Trimethylbenzene	ug/kg	20	20	100		(70-130)		
1,3-Dichlorobenzene	ug/kg	20	19.8	99		(70-130)		
1,3-Dichloropropane	ug/kg	20	20.2	101		(70-130)		
1,4-Dichlorobenzene	ug/kg	20	20.4	102		(70-130)		
2,2-Dichloropropane	ug/kg	20	19.5	97.5		(73-132)		
2-Butanone	ug/kg	40	51.5	129		(72-136)		
2-Chlorotoluene	ug/kg	20	19.1	95.5		(81-122)		
2-Hexanone	ug/kg	40	52.4	131	*	(72-127)		
4-Chlorotoluene	ug/kg	20	19.6	98		(70-130)		
4-Isopropyltoluene	ug/kg	20	19.1	95.5		(70-130)		
4-Methyl-2-pentanone	ug/kg	40	43.8	110		(80-125)		
Acetone	ug/kg	40	53.4	134		(59-142)		
Acrolein	ug/kg	40	45.2	113	*	(70-111)		
Acrylonitrile	ug/kg	40	43	108		(74-117)		
Benzene	ug/kg	20	19.2	96		(70-130)		
Bromobenzene	ug/kg	20	19.9	99.5		(79-141)		
Bromochloromethane	ug/kg	20	19.3	96.5		(70-130)		
Bromodichloromethane	ug/kg	20	20.3	102		(70-130)		
Bromoform	ug/kg	20	23.3	116		(79-119)		
Bromomethane	ug/kg	20	18.9	94.5		(22-136)		
Carbon disulfide	ug/kg	20	18.6	93		(76-121)		
Carbon tetrachloride	ug/kg	20	19.8	99		(70-130)		
Chlorobenzene	ug/kg	20	20	100		(70-130)		
Chloroethane	ug/kg	20	20	100		(48-147)		
Chloroform	ug/kg	20	19.3	96.5		(70-130)		
Chloromethane	ug/kg	20	19	95		(63-135)		
cis-1,2-Dichloroethene	ug/kg	20	19.9	99.5		(70-130)		
cis-1,3-Dichloropropene	ug/kg	20	20.3	102		(70-130)		
Dibromochloromethane	ug/kg	20	20.4	102		(75-131)		
Dibromomethane	ug/kg	20	20	100		(82-133)		
Dichlorodifluoromethane	ug/kg	20	17.9	89.5		(52-139)		
Ethylbenzene	ug/kg	20	19.3	96.5		(70-130)		
Hexachlorobutadiene	ug/kg	20	20.8	104		(70-130)		
Isopropylbenzene (Cumene)	ug/kg	20	21.1	106		(70-130)		
Methyl iodide	ug/kg	20	18.9	94.5		(70-130)		
Methylene chloride	ug/kg	20	18.3	91.5		(78-122)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

METHOD: 8260

LABORATORY CONTROL SAMPLE: 072009LCS22 Matrix : SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
MTBE	ug/kg	20	19.9	99.5	(79-132)		
Naphthalene	ug/kg	20	19.9	99.5	(70-130)		
n-Butylbenzene	ug/kg	20	17.8	89	(70-130)		
n-Propylbenzene	ug/kg	20	19.5	97.5	(81-116)		
o-Xylene	ug/kg	20	19.3	96.5	(70-130)		
p,m-Xylene	ug/kg	40	40.4	101	(70-130)		
sec-Butylbenzene	ug/kg	20	19.6	98	(70-130)		
Styrene	ug/kg	20	20.6	103	(70-130)		
tert-Butylbenzene	ug/kg	20	19.9	99.5	(70-130)		
Tetrachloroethene	ug/kg	20	18.9	94.5	(69-134)		
Toluene	ug/kg	20	19.2	96	(70-130)		
trans-1,2-Dichloroethene	ug/kg	20	18.1	90.5	(70-130)		
trans-1,3-Dichloropropene	ug/kg	20	20.5	102	(82-129)		
Trichloroethene	ug/kg	20	19.7	98.5	(75-126)		
Trichlorofluoromethane	ug/kg	20	19	95	(61-136)		
Vinyl acetate	ug/kg	20	19.1	95.5	(60-115)		
Vinyl chloride	ug/kg	20	18.7	93.5	(65-129)		
1,2-Dichloroethane-d4(SURR) (S	ug/kg	50	48	96	(71-124)		
4-Bromofluorobenzene(SURR) (	ug/kg	50	47.3	94.6	(54-126)		
Dibromofluoromethane(SURR) (	ug/kg	50	44.8	89.6	(68-119)		
Toluene d8(SURR) (S)	ug/kg	50	47.3	94.6	(59-127)		

LABORATORY CONTROL SAMPLE: 072009LCS22D Matrix : SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
1,1,1,2-Tetrachloroethane	ug/kg	20	21.1	106	(82-121)	2.3	9
1,1,1-Trichloroethane	ug/kg	20	17.9	89.5	(70-130)	5.4	30
1,1,2,2-Tetrachloroethane	ug/kg	20	20.6	103	(82-122)	4.3	18
1,1,2-Trichloroethane	ug/kg	20	20.1	100	(70-130)	0.5	30
1,1-Dichloroethane	ug/kg	20	19.1	95.5	(70-130)	2.6	30
1,1-Dichloroethene	ug/kg	20	19	95	(73-130)	5.4	16
1,1-Dichloropropene	ug/kg	20	19.7	98.5	(70-130)	2.6	30
1,2,3-Trichlorobenzene	ug/kg	20	18.5	92.5	(70-130)	0.5	30
1,2,3-Trichloropropane	ug/kg	20	21	105	(74-129)	12.1	13
1,2,4-Trichlorobenzene	ug/kg	20	18.7	93.5	(70-130)	2.1	30
1,2,4-Trimethylbenzene	ug/kg	20	19.6	98	(70-130)	0	30
1,2-Dibromo-3-chloropropane	ug/kg	20	16.9	84.5	(72-143)	12.7	23
1,2-Dibromoethane(EDB)	ug/kg	20	19.9	99.5	(70-130)	2.5	30
1,2-Dichlorobenzene	ug/kg	20	19.6	98	(70-130)	1.5	30
1,2-Dichloroethane	ug/kg	20	19.3	96.5	(78-136)	4.6	12
1,2-Dichloropropane	ug/kg	20	20.1	100	(70-130)	4.1	30
1,3,5-Trimethylbenzene	ug/kg	20	19.2	96	(70-130)	4.1	30
1,3-Dichlorobenzene	ug/kg	20	19.1	95.5	(70-130)	3.6	30
1,3-Dichloropropane	ug/kg	20	19.4	97	(70-130)	4	30
1,4-Dichlorobenzene	ug/kg	20	19.3	96.5	(70-130)	5.5	30
2,2-Dichloropropane	ug/kg	20	20.2	101	(73-132)	3.5	18
2-Butanone	ug/kg	40	49.8	124	(72-136)	3.4	30

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

METHOD: 8260

LABORATORY CONTROL SAMPLE: 072009LCS22D Matrix : SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC		% REC LIMITS	RPD	RPD LIMIT
2-Chlorotoluene	ug/kg	20	19.1	95.5		(81-122)	0	12
2-Hexanone	ug/kg	40	48.9	122		(72-127)	6.9	21
4-Chlorotoluene	ug/kg	20	19.7	98.5		(70-130)	0.5	30
4-Isopropyltoluene	ug/kg	20	19.4	97		(70-130)	1.6	30
4-Methyl-2-pentanone	ug/kg	40	41.9	105		(80-125)	4.4	15
Acetone	ug/kg	40	51.6	129		(59-142)	3.4	30
Acrolein	ug/kg	40	46.3	116	*	(70-111)	2.4	30
Acrylonitrile	ug/kg	40	42.8	107		(74-117)	0.5	30
Benzene	ug/kg	20	19.7	98.5		(70-130)	2.6	30
Bromobenzene	ug/kg	20	19.5	97.5		(79-141)	2	13
Bromochloromethane	ug/kg	20	18.4	92		(70-130)	4.8	30
Bromodichloromethane	ug/kg	20	20.3	102		(70-130)	0	30
Bromoform	ug/kg	20	18.9	94.5		(79-119)	20.9 *	13
Bromomethane	ug/kg	20	18.4	92		(22-136)	2.7	30
Carbon disulfide	ug/kg	20	18.7	93.5		(76-121)	0.5	17
Carbon tetrachloride	ug/kg	20	20.2	101		(70-130)	2	30
Chlorobenzene	ug/kg	20	19.5	97.5		(70-130)	2.5	30
Chloroethane	ug/kg	20	19.3	96.5		(48-147)	3.6	16
Chloroform	ug/kg	20	19.4	97		(70-130)	0.5	30
Chloromethane	ug/kg	20	18.7	93.5		(63-135)	1.6	18
cis-1,2-Dichloroethene	ug/kg	20	19.8	99		(70-130)	0.5	30
cis-1,3-Dichloropropene	ug/kg	20	19	95		(70-130)	6.6	30
Dibromochloromethane	ug/kg	20	19.9	99.5		(75-131)	2.5	10
Dibromomethane	ug/kg	20	19.4	97		(82-133)	3	13
Dichlorodifluoromethane	ug/kg	20	18	90		(52-139)	0.6	20
Ethylbenzene	ug/kg	20	19.4	97		(70-130)	0.5	30
Hexachlorobutadiene	ug/kg	20	19.4	97		(70-130)	7	30
Isopropylbenzene (Cumene)	ug/kg	20	18.7	93.5		(70-130)	12.1	30
Methyl iodide	ug/kg	20	19.2	96		(70-130)	1.6	30
Methylene chloride	ug/kg	20	17.6	88		(78-122)	3.9	17
MTBE	ug/kg	20	20.2	101		(79-132)	1.5	17
Naphthalene	ug/kg	20	19.2	96		(70-130)	3.6	30
n-Butylbenzene	ug/kg	20	19.2	96		(70-130)	7.6	30
n-Propylbenzene	ug/kg	20	19	95		(81-116)	2.6	10
o-Xylene	ug/kg	20	19.5	97.5		(70-130)	1	30
p,m-Xylene	ug/kg	40	39.8	99.5		(70-130)	1.5	30
sec-Butylbenzene	ug/kg	20	20	100		(70-130)	2	30
Styrene	ug/kg	20	19.8	99		(70-130)	4	30
tert-Butylbenzene	ug/kg	20	19.3	96.5		(70-130)	3.1	30
Tetrachloroethene	ug/kg	20	19	95		(69-134)	0.5	16
Toluene	ug/kg	20	19.2	96		(70-130)	0	30
trans-1,2-Dichloroethene	ug/kg	20	19.6	98		(70-130)	8	30
trans-1,3-Dichloropropene	ug/kg	20	21.1	106		(82-129)	2.9	14
Trichloroethene	ug/kg	20	19.5	97.5		(75-126)	1	12
Trichlorofluoromethane	ug/kg	20	20.6	103		(61-136)	8.1	14
Vinyl acetate	ug/kg	20	18.7	93.5		(60-115)	2.1	30
Vinyl chloride	ug/kg	20	19.3	96.5		(65-129)	3.2	21

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

METHOD: 8260

LABORATORY CONTROL SAMPLE: 072009LCS22D **Matrix :** SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
1,2-Dichloroethane-d4(SURR) (S	ug/kg	50	58	116	(71-124)		
4-Bromofluorobenzene(SURR) (	ug/kg	50	55.7	111	(54-126)		
Dibromofluoromethane(SURR) (	ug/kg	50	55.2	110	(68-119)		
Toluene d8(SURR) (S)	ug/kg	50	54.6	109	(59-127)		

LABORATORY CONTROL SAMPLE: 0721LCS52 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
1,1,1,2-Tetrachloroethane	ug/l	20	22.3	112	(75-133)		
1,1,1-Trichloroethane	ug/l	20	21.6	108	(79-123)		
1,1,2,2-Tetrachloroethane	ug/l	20	19.6	98	(84-113)		
1,1,2-Trichloroethane	ug/l	20	20.4	102	(80-117)		
1,1-Dichloroethane	ug/l	20	21.4	107	(76-118)		
1,1-Dichloroethene	ug/l	20	21.4	107	(81-119)		
1,1-Dichloropropene	ug/l	20	21.3	106	(80-119)		
1,2,3-Trichlorobenzene	ug/l	20	21.3	106	(73-141)		
1,2,3-Trichloropropane	ug/l	20	18.5	92.5	(84-119)		
1,2,4-Trichlorobenzene	ug/l	20	21.2	106	(83-123)		
1,2,4-Trimethylbenzene	ug/l	20	21.5	108	(82-124)		
1,2-Dibromo-3-chloropropane	ug/l	20	20	100	(63-130)		
1,2-Dibromoethane(EDB)	ug/l	20	20.2	101	(84-121)		
1,2-Dichlorobenzene	ug/l	20	21.2	106	(70-130)		
1,2-Dichloroethane	ug/l	20	21.9	110	(83-114)		
1,2-Dichloropropane	ug/l	20	18.7	93.5	(74-118)		
1,3,5-Trimethylbenzene	ug/l	20	21.6	108	(84-124)		
1,3-Dichlorobenzene	ug/l	20	21	105	(84-118)		
1,3-Dichloropropane	ug/l	20	19.9	99.5	(83-112)		
1,4-Dichlorobenzene	ug/l	20	20.3	102	(70-130)		
2,2-Dichloropropane	ug/l	20	24.2	121	(52-147)		
2-Butanone	ug/l	40	38	95	(76-124)		
2-Chlorotoluene	ug/l	20	21.7	108	(70-130)		
2-Hexanone	ug/l	40	38.8	97	(75-132)		
4-Chlorotoluene	ug/l	20	20.9	104	(83-123)		
4-Isopropyltoluene	ug/l	20	22	110	(83-126)		
4-Methyl-2-pentanone	ug/l	40	40.7	102	(61-134)		
Acetone	ug/l	40	32.5	81.2	(45-156)		
Acrolein	ug/l	40	33.9	84.8	(61-125)		
Acrylonitrile	ug/l	40	41.9	105	(62-132)		
Benzene	ug/l	20	21	105	(71-120)		
Bromobenzene	ug/l	20	20.8	104	(74-120)		
Bromochloromethane	ug/l	20	20.4	102	(70-116)		
Bromodichloromethane	ug/l	20	21.4	107	(78-117)		
Bromoethane	ug/l	20	24.3	122	(60-150)		
Bromoform	ug/l	20	20.2	101	(71-128)		
Bromomethane	ug/l	20	25.3	126	(58-144)		
Carbon disulfide	ug/l	20	22.6	113	(65-121)		
Carbon tetrachloride	ug/l	20	20.5	102	(67-138)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

METHOD: 8260

LABORATORY CONTROL SAMPLE: 0721LCS52 Matrix : WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC		% REC LIMITS	RPD	RPD LIMIT
Chlorobenzene	ug/l	20	21.1	106		(70-130)		
Chloroethane	ug/l	20	30.9	154	*	(72-135)		
Chloroform	ug/l	20	20.8	104		(80-115)		
Chloromethane	ug/l	20	19.4	97		(63-124)		
cis-1,2-Dichloroethene	ug/l	20	22.1	110		(75-123)		
cis-1,3-Dichloropropene	ug/l	20	22.4	112		(63-129)		
Dibromochloromethane	ug/l	20	21.9	110		(78-123)		
Dibromomethane	ug/l	20	20.4	102		(75-119)		
Dichlorodifluoromethane	ug/l	20	21.1	106		(62-133)		
Ethylbenzene	ug/l	20	21	105		(70-130)		
Hexachlorobutadiene	ug/l	20	23	115		(68-149)		
Isopropylbenzene (Cumene)	ug/l	20	21.3	106		(83-123)		
Methyl iodide	ug/l	20	21.3	106		(56-133)		
Methylene chloride	ug/l	20	21.6	108		(75-111)		
MTBE	ug/l	20	21.1	106		(76-123)		
Naphthalene	ug/l	20	20.6	103		(80-131)		
n-Butylbenzene	ug/l	20	22.1	110		(83-125)		
n-Propylbenzene	ug/l	20	21.7	108		(82-121)		
o-Xylene	ug/l	20	21.7	108		(70-130)		
p,m-Xylene	ug/l	40	41.8	104		(70-130)		
sec-Butylbenzene	ug/l	20	21.8	109		(83-122)		
Styrene	ug/l	20	21.2	106		(70-130)		
tert-Butylbenzene	ug/l	20	21.6	108		(82-125)		
Tetrachloroethene	ug/l	20	21.1	106		(70-130)		
Toluene	ug/l	20	21.3	106		(75-119)		
trans-1,2-Dichloroethene	ug/l	20	19.2	96		(79-121)		
trans-1,3-Dichloropropene	ug/l	20	20	100		(68-127)		
Trichloroethene	ug/l	20	21.7	108		(76-123)		
Trichlorofluoromethane	ug/l	20	22.8	114		(74-135)		
Vinyl acetate	ug/l	20	20.4	102		(49-136)		
Vinyl chloride	ug/l	20	23.4	117		(60-124)		
1,2-Dichloroethane-d4(SURR) (S	ug/l	50	51.8	104		(80-120)		
4-Bromofluorobenzene(SURR) (	ug/l	50	52.1	104		(86-115)		
Dibromofluoromethane(SURR) (	ug/l	50	51.7	103		(86-118)		
Toluene d8(SURR) (S)	ug/l	50	50.6	101		(88-110)		

LABORATORY CONTROL SAMPLE: 0721LCS52D Matrix : WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
1,1,1,2-Tetrachloroethane	ug/l	20	22.6	113	(75-133)	1.3	20
1,1,1-Trichloroethane	ug/l	20	21.8	109	(79-123)	0.9	20
1,1,2,2-Tetrachloroethane	ug/l	20	19.9	99.5	(84-113)	1.5	20
1,1,2-Trichloroethane	ug/l	20	20.5	102	(80-117)	0.5	20
1,1-Dichloroethane	ug/l	20	21.5	108	(76-118)	0.5	20
1,1-Dichloroethene	ug/l	20	23.6	118	(81-119)	9.8	20
1,1-Dichloropropene	ug/l	20	21.4	107	(80-119)	0.5	20
1,2,3-Trichlorobenzene	ug/l	20	21.1	106	(73-141)	0.9	20

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

METHOD: 8260

LABORATORY CONTROL SAMPLE: 0721LCS52D **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC		% REC LIMITS	RPD	RPD LIMIT
1,2,3-Trichloropropane	ug/l	20	19.2	96		(84-119)	3.7	20
1,2,4-Trichlorobenzene	ug/l	20	21.1	106		(83-123)	0.5	20
1,2,4-Trimethylbenzene	ug/l	20	21.6	108		(82-124)	0.5	20
1,2-Dibromo-3-chloropropane	ug/l	20	20.7	104		(63-130)	3.4	20
1,2-Dibromoethane(EDB)	ug/l	20	20.3	102		(84-121)	0.5	20
1,2-Dichlorobenzene	ug/l	20	20.9	104		(70-130)	1.4	20
1,2-Dichloroethane	ug/l	20	20.8	104		(83-114)	5.2	20
1,2-Dichloropropane	ug/l	20	21.5	108		(74-118)	13.9	20
1,3,5-Trimethylbenzene	ug/l	20	21.8	109		(84-124)	0.9	20
1,3-Dichlorobenzene	ug/l	20	21.2	106		(84-118)	0.9	20
1,3-Dichloropropane	ug/l	20	20.1	100		(83-112)	1	20
1,4-Dichlorobenzene	ug/l	20	20.2	101		(70-130)	0.5	20
2,2-Dichloropropane	ug/l	20	24.4	122		(52-147)	0.8	20
2-Butanone	ug/l	40	38.7	96.8		(76-124)	1.8	20
2-Chlorotoluene	ug/l	20	21.8	109		(70-130)	0.5	20
2-Hexanone	ug/l	40	40	100		(75-132)	3	20
4-Chlorotoluene	ug/l	20	21.4	107		(83-123)	2.4	20
4-Isopropyltoluene	ug/l	20	21.9	110		(83-126)	0.5	20
4-Methyl-2-pentanone	ug/l	40	40.9	102		(61-134)	0.5	20
Acetone	ug/l	40	33.4	83.5		(45-156)	2.7	20
Acrolein	ug/l	40	33	82.5		(61-125)	2.7	20
Acrylonitrile	ug/l	40	41.9	105		(62-132)	0	20
Benzene	ug/l	20	21.2	106		(71-120)	0.9	20
Bromobenzene	ug/l	20	21.1	106		(74-120)	1.4	20
Bromochloromethane	ug/l	20	20.4	102		(70-116)	0	20
Bromodichloromethane	ug/l	20	21.4	107		(78-117)	0	20
Bromoethane	ug/l	20	24.7	124		(60-150)	1.6	20
Bromoform	ug/l	20	20.9	104		(71-128)	3.4	20
Bromomethane	ug/l	20	24	120		(58-144)	5.3	20
Carbon disulfide	ug/l	20	21.8	109		(65-121)	3.6	20
Carbon tetrachloride	ug/l	20	20.9	104		(67-138)	1.9	20
Chlorobenzene	ug/l	20	21.2	106		(70-130)	0.5	20
Chloroethane	ug/l	20	28.7	144	*	(72-135)	7.4	20
Chloroform	ug/l	20	20.8	104		(80-115)	0	20
Chloromethane	ug/l	20	20.1	100		(63-124)	3.5	20
cis-1,2-Dichloroethene	ug/l	20	21.6	108		(75-123)	2.3	20
cis-1,3-Dichloropropene	ug/l	20	22	110		(63-129)	1.8	20
Dibromochloromethane	ug/l	20	21.4	107		(78-123)	2.3	20
Dibromomethane	ug/l	20	20.3	102		(75-119)	0.5	20
Dichlorodifluoromethane	ug/l	20	21.2	106		(62-133)	0.5	20
Ethylbenzene	ug/l	20	21.4	107		(70-130)	1.9	20
Hexachlorobutadiene	ug/l	20	22.5	112		(68-149)	2.2	20
Isopropylbenzene (Cumene)	ug/l	20	21.8	109		(83-123)	2.3	20
Methyl iodide	ug/l	20	22	110		(56-133)	3.2	20
Methylene chloride	ug/l	20	21.4	107		(75-111)	0.9	20
MTBE	ug/l	20	20.8	104		(76-123)	1.4	20
Naphthalene	ug/l	20	20.6	103		(80-131)	0	20

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130

PROJECT ID: Pinellas Bayway Site #4

METHOD: 8260

LABORATORY CONTROL SAMPLE: 0721LCS52D **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
n-Butylbenzene	ug/l	20	22.1	110	(83-125)	0	20
n-Propylbenzene	ug/l	20	21.6	108	(82-121)	0.5	20
o-Xylene	ug/l	20	21.9	110	(70-130)	0.9	20
p,m-Xylene	ug/l	40	41.9	105	(70-130)	0.2	20
sec-Butylbenzene	ug/l	20	21.9	110	(83-122)	0.5	20
Styrene	ug/l	20	21.1	106	(70-130)	0.5	20
tert-Butylbenzene	ug/l	20	21.9	110	(82-125)	1.4	20
Tetrachloroethene	ug/l	20	20.8	104	(70-130)	1.4	20
Toluene	ug/l	20	21.4	107	(75-119)	0.5	20
trans-1,2-Dichloroethene	ug/l	20	21.6	108	(79-121)	11.8	20
trans-1,3-Dichloropropene	ug/l	20	20.2	101	(68-127)	1	20
Trichloroethene	ug/l	20	22	110	(76-123)	1.4	20
Trichlorofluoromethane	ug/l	20	23.7	118	(74-135)	3.9	21
Vinyl acetate	ug/l	20	20.4	102	(49-136)	0	20
Vinyl chloride	ug/l	20	23.4	117	(60-124)	0	20
1,2-Dichloroethane-d4(SURR) (S	ug/l	50	51.7	103	(80-120)		
4-Bromofluorobenzene(SURR) (	ug/l	50	52	104	(86-115)		
Dibromofluoromethane(SURR) (	ug/l	50	51.6	103	(86-118)		
Toluene d8(SURR) (S)	ug/l	50	50.7	101	(88-110)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

METHOD: 8270

Method Blank 289402 **Matrix :** SQ

Associated Lab Samples : 251313001 251313002 251313003 289402 289403

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
1,2,4-Trichlorobenzene	U	7/31/2009	7/30/2009	ug/kg	58	1
1,2-Dichlorobenzene	U	7/31/2009	7/30/2009	ug/kg	57	1
1,3-Dichlorobenzene	U	7/31/2009	7/30/2009	ug/kg	61	1
1,4-Dichlorobenzene	U	7/31/2009	7/30/2009	ug/kg	63	1
1-Methylnaphthalene	U	7/31/2009	7/30/2009	ug/kg	62	1
2,2-Oxybis(1-chloropropane)	U	7/31/2009	7/30/2009	ug/kg	220	1
2,4,5-Trichlorophenol	U	7/31/2009	7/30/2009	ug/kg	74	1
2,4,6-Trichlorophenol	U	7/31/2009	7/30/2009	ug/kg	68	1
2,4-Dichlorophenol	U	7/31/2009	7/30/2009	ug/kg	75	1
2,4-Dimethylphenol	U	7/31/2009	7/30/2009	ug/kg	57	1
2,4-Dinitrophenol	J3U	7/31/2009	7/30/2009	ug/kg	220	1
2,4-Dinitrotoluene	J3U	7/31/2009	7/30/2009	ug/kg	49	1
2,6-Dinitrotoluene	J3U	7/31/2009	7/30/2009	ug/kg	50	1
2-Chloronaphthalene	U	7/31/2009	7/30/2009	ug/kg	66.7	1
2-Chlorophenol	U	7/31/2009	7/30/2009	ug/kg	69	1
2-Methyl-4,6-dinitrophenol	U	7/31/2009	7/30/2009	ug/kg	266	1
2-Methylnaphthalene	J3U	7/31/2009	7/30/2009	ug/kg	58	1
2-Methylphenol (o-Cresol)	U	7/31/2009	7/30/2009	ug/kg	96	1
2-Nitroaniline	J3U	7/31/2009	7/30/2009	ug/kg	57	1
2-Nitrophenol	U	7/31/2009	7/30/2009	ug/kg	72	1
3,3'-Dichlorobenzidine	U	7/31/2009	7/30/2009	ug/kg	59	1
3-Nitroaniline	J3MU	7/31/2009	7/30/2009	ug/kg	80	1
4-Bromophenyl-phenylether	U	7/31/2009	7/30/2009	ug/kg	49	1
4-Chloro-3-methylphenol	U	7/31/2009	7/30/2009	ug/kg	56	1
4-Chloroaniline	U	7/31/2009	7/30/2009	ug/kg	63	1
4-Chlorophenyl-phenylether	U	7/31/2009	7/30/2009	ug/kg	51	1
4-Methylphenol	U	7/31/2009	7/30/2009	ug/kg	59	1
4-Nitroaniline	J3U	7/31/2009	7/30/2009	ug/kg	88	1
4-Nitrophenol	U	7/31/2009	7/30/2009	ug/kg	53	1
Acenaphthene	U	7/31/2009	7/30/2009	ug/kg	49	1
Acenaphthylene	U	7/31/2009	7/30/2009	ug/kg	55	1
Aniline	U	7/31/2009	7/30/2009	ug/kg	77	1
Anthracene	U	7/31/2009	7/30/2009	ug/kg	60	1
Benzidine	U	7/31/2009	7/30/2009	ug/kg	600	1
Benzo(a)anthracene	U	7/31/2009	7/30/2009	ug/kg	57	1
Benzo(a)pyrene	U	7/31/2009	7/30/2009	ug/kg	43	1
Benzo(b)fluoranthene	U	7/31/2009	7/30/2009	ug/kg	63	1
Benzo(g,h,i)perylene	U	7/31/2009	7/30/2009	ug/kg	40	1
Benzo(k)fluoranthene	U	7/31/2009	7/30/2009	ug/kg	57	1
Benzoic acid	U	7/31/2009	7/30/2009	ug/kg	270	1
Benzyl alcohol	J3U	7/31/2009	7/30/2009	ug/kg	92	1
Bis(2-Chloroethoxy)methane	U	7/31/2009	7/30/2009	ug/kg	57	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

METHOD: 8270

Method Blank 289402 **Matrix :** SQ

Associated Lab Samples : 251313001 251313002 251313003 289402 289403

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
Bis(2-Chloroethyl)ether	U	7/31/2009	7/30/2009	ug/kg	67	1
bis(2-ethylhexyl)phthalate	U	7/31/2009	7/30/2009	ug/kg	83	1
Butylbenzylphthalate	U	7/31/2009	7/30/2009	ug/kg	63	1
Chrysene	U	7/31/2009	7/30/2009	ug/kg	34	1
Dibenz(a,h)anthracene	U	7/31/2009	7/30/2009	ug/kg	41	1
Dibenzofuran	J3MU	7/31/2009	7/30/2009	ug/kg	54	1
Diethylphthalate	U	7/31/2009	7/30/2009	ug/kg	51	1
Dimethyl-phthalate	U	7/31/2009	7/30/2009	ug/kg	59	1
Di-n-butylphthalate	U	7/31/2009	7/30/2009	ug/kg	44	1
Di-n-octylphthalate	U	7/31/2009	7/30/2009	ug/kg	58	1
Fluoranthene	J3U	7/31/2009	7/30/2009	ug/kg	48	1
Fluorene	U	7/31/2009	7/30/2009	ug/kg	51	1
Hexachlorobenzene	J3MU	7/31/2009	7/30/2009	ug/kg	53	1
Hexachlorobutadiene	U	7/31/2009	7/30/2009	ug/kg	58	1
Hexachlorocyclopentadiene	U	7/31/2009	7/30/2009	ug/kg	40	1
Hexachloroethane	U	7/31/2009	7/30/2009	ug/kg	50	1
Indeno(1,2,3-cd)pyrene	U	7/31/2009	7/30/2009	ug/kg	52	1
Isophorone	U	7/31/2009	7/30/2009	ug/kg	59	1
Naphthalene	U	7/31/2009	7/30/2009	ug/kg	64	1
Nitrobenzene	U	7/31/2009	7/30/2009	ug/kg	60	1
N-Nitrosodimethylamine	U	7/31/2009	7/30/2009	ug/kg	71	1
N-Nitroso-di-n-propylamine	U	7/31/2009	7/30/2009	ug/kg	61	1
N-Nitrosodiphenylamine	U	7/31/2009	7/30/2009	ug/kg	63	1
Pentachlorophenol	U	7/31/2009	7/30/2009	ug/kg	133	1
Phenanthrene	U	7/31/2009	7/30/2009	ug/kg	56	1
Phenol	U	7/31/2009	7/30/2009	ug/kg	65	1
Pyrene	U	7/31/2009	7/30/2009	ug/kg	92	1
2,4,6-Tribromophenol(SURR) (S)	73.9	7/31/2009	7/30/2009	%	(19 - 122)	1
2-Fluorobiphenyl(SURR) (S)	71.8	7/31/2009	7/30/2009	%	(30 - 115)	1
2-Fluorophenol(SURR) (S)	77.4	7/31/2009	7/30/2009	%	(25 - 121)	1
Nitrobenzene-d5(SURR) (S)	79.6	7/31/2009	7/30/2009	%	(23 - 120)	1
Phenol-d5(SURR) (S)	70.9	7/31/2009	7/30/2009	%	(24 - 113)	1
p-Terphenyl-d14(SURR) (S)	68.1	7/31/2009	7/30/2009	%	(18 - 137)	1

LABORATORY CONTROL SAMPLE: 289403 **Matrix :** SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
1,2,4-Trichlorobenzene	ug/kg	2670	1920	71.9	(71-110)		
1,2-Dichlorobenzene	ug/kg	2670	1830	68.5	(65-95)		
1,3-Dichlorobenzene	ug/kg	2670	1820	68.2	(67-100)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

METHOD: 8270

LABORATORY CONTROL SAMPLE: 289403 Matrix : SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC		% REC LIMITS	RPD	RPD LIMIT
1,4-Dichlorobenzene	ug/kg	2670	1810	67.8		(62-105)		
1-Methylnaphthalene	ug/kg	2670	1980	74.2		(67-145)		
2,2-Oxybis(1-chloropropane)	ug/kg	2670	2130	79.8		(52-115)		
2,4,5-Trichlorophenol	ug/kg	2670	1980	74.2		(61-110)		
2,4,6-Trichlorophenol	ug/kg	2670	1860	69.7		(62-110)		
2,4-Dichlorophenol	ug/kg	2670	1920	71.9		(64-110)		
2,4-Dimethylphenol	ug/kg	2670	1960	73.4		(65-105)		
2,4-Dinitrophenol	ug/kg	5330	1510	28.3	*	(29-130)		
2,4-Dinitrotoluene	ug/kg	2670	1960	73.4	*	(77-115)		
2,6-Dinitrotoluene	ug/kg	2670	1920	71.9	*	(73-110)		
2-Chloronaphthalene	ug/kg	2670	1930	72.3		(72-105)		
2-Chlorophenol	ug/kg	2670	1900	71.2		(54-105)		
2-Methyl-4,6-dinitrophenol	ug/kg	2670	1260	47.2		(34-135)		
2-Methylnaphthalene	ug/kg	2670	1870	70	*	(72-105)		
2-Methylphenol (o-Cresol)	ug/kg	2670	1940	72.7		(58-105)		
2-Nitroaniline	ug/kg	2670	1880	70.4	*	(71-120)		
2-Nitrophenol	ug/kg	2670	1950	73		(61-110)		
3,3'-Dichlorobenzidine	ug/kg	2670	1680	62.9		(41-130)		
3-Nitroaniline	ug/kg	2670	1620	60.7	*	(76-110)		
4-Bromophenyl-phenylether	ug/kg	2670	2160	80.9		(59-115)		
4-Chloro-3-methylphenol	ug/kg	2670	1960	73.4		(62-115)		
4-Chloroaniline	ug/kg	2670	1540	57.7		(57-95)		
4-Chlorophenyl-phenylether	ug/kg	2670	2120	79.4		(65-110)		
4-Methylphenol	ug/kg	2670	1890	70.8		(57-105)		
4-Nitroaniline	ug/kg	2670	1740	65.2	*	(70-115)		
4-Nitrophenol	ug/kg	2670	1650	61.8		(52-140)		
Acenaphthene	ug/kg	2670	1820	68.2		(65-110)		
Acenaphthylene	ug/kg	2670	1870	70		(66-105)		
Aniline	ug/kg	2670	1790	67		(47-140)		
Anthracene	ug/kg	2670	1880	70.4		(67-105)		
Benzidine	ug/kg	2670	644	24.1		(10-149)		
Benzo(a)anthracene	ug/kg	2670	1840	68.9		(67-110)		
Benzo(a)pyrene	ug/kg	2670	1840	68.9		(60-110)		
Benzo(b)fluoranthene	ug/kg	2670	1820	68.2		(49-115)		
Benzo(g,h,i)perylene	ug/kg	2670	1930	72.3		(41-125)		
Benzo(k)fluoranthene	ug/kg	2670	1900	71.2		(53-125)		
Benzoic acid	ug/kg	5330	1410	26.5		(10-106)		
Benzyl alcohol	ug/kg	2670	1670	62.5	*	(64-125)		
Bis(2-Chloroethoxy)methane	ug/kg	2670	2180	81.6		(70-110)		
Bis(2-Chloroethyl)ether	ug/kg	2670	2070	77.5		(61-105)		
bis(2-ethylhexyl)phthalate	ug/kg	2670	2460	92.1		(65-125)		
Butylbenzylphthalate	ug/kg	2670	2510	94		(66-125)		
Chrysene	ug/kg	2670	1850	69.3		(65-110)		
Dibenz(a,h)anthracene	ug/kg	2670	1820	68.2		(40-125)		
Dibenzofuran	ug/kg	2670	1830	68.5	*	(75-105)		
Diethylphthalate	ug/kg	2670	2190	82		(68-115)		
Dimethyl-phthalate	ug/kg	2670	2150	80.5		(69-110)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130

PROJECT ID: Pinellas Bayway Site #4

METHOD: 8270

LABORATORY CONTROL SAMPLE: 289403 **Matrix :** SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC		% REC LIMITS	RPD	RPD LIMIT
Di-n-butylphthalate	ug/kg	2670	2200	82.4		(67-110)		
Di-n-octylphthalate	ug/kg	2670	2360	88.4		(64-130)		
Fluoranthene	ug/kg	2670	1820	68.2	*	(74-115)		
Fluorene	ug/kg	2670	1800	67.4		(67-110)		
Hexachlorobenzene	ug/kg	2670	1850	69.3	*	(77-120)		
Hexachlorobutadiene	ug/kg	2670	2130	79.8		(79-115)		
Hexachlorocyclopentadiene	ug/kg	2670	1800	67.4		(34-139)		
Hexachloroethane	ug/kg	2670	1850	69.3		(65-110)		
Indeno(1,2,3-cd)pyrene	ug/kg	2670	1770	66.3		(40-120)		
Isophorone	ug/kg	2670	2080	77.9		(69-110)		
Naphthalene	ug/kg	2670	1870	70		(67-105)		
Nitrobenzene	ug/kg	2670	1930	72.3		(71-115)		
N-Nitrosodimethylamine	ug/kg	2670	2080	77.9		(48-115)		
N-Nitroso-di-n-propylamine	ug/kg	2670	2040	76.4		(59-115)		
N-Nitrosodiphenylamine	ug/kg	2670	2190	82		(77-115)		
Pentachlorophenol	ug/kg	2670	1380	51.7		(36-120)		
Phenanthrene	ug/kg	2670	1810	67.8		(67-110)		
Phenol	ug/kg	2670	1810	67.8		(46-100)		
Pyrene	ug/kg	2670	1940	72.7		(67-125)		
2,4,6-Tribromophenol(SURR) (S)	ug/kg	13300	9500	71.4		(19-122)		
2-Fluorobiphenyl(SURR) (S)	ug/kg	6670	4660	69.9		(30-115)		
2-Fluorophenol(SURR) (S)	ug/kg	13300	9940	74.7		(25-121)		
Nitrobenzene-d5(SURR) (S)	ug/kg	6670	5130	76.9		(23-120)		
Phenol-d5(SURR) (S)	ug/kg	13300	9140	68.7		(24-113)		
p-Terphenyl-d14(SURR) (S)	ug/kg	6670	4450	66.7		(18-137)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4
METHOD: 8270 SIM

Method Blank 289006 **Matrix :** WQ

Associated Lab Samples : 251313004 251313005 251313006 251313007 289006 289007 289008

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
1-Methylnaphthalene	U	7/25/2009	7/23/2009	ug/l	0.02	1
2-Methylnaphthalene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Acenaphthene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Acenaphthylene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Anthracene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Benzo(a)anthracene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Benzo(a)pyrene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Benzo(b)fluoranthene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Benzo(g,h,i)perylene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Benzo(k)fluoranthene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Chrysene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Dibenz(a,h)anthracene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Fluoranthene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Fluorene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Indeno(1,2,3-cd)pyrene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Naphthalene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Phenanthrene	U	7/25/2009	7/23/2009	ug/l	0.02	1
Pyrene	U	7/25/2009	7/23/2009	ug/l	0.02	1
p-Terphenyl-d14(SURR) (S)	96	7/25/2009	7/23/2009	%	(33 - 141)	1

LABORATORY CONTROL SAMPLE: 289007 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
1-Methylnaphthalene	ug/l	0.5	0.4	80	(53-125)		
2-Methylnaphthalene	ug/l	0.5	0.41	82	(38-132)		
Acenaphthene	ug/l	0.5	0.4	80	(70-117)		
Acenaphthylene	ug/l	0.5	0.4	80	(59-124)		
Anthracene	ug/l	0.5	0.4	80	(74-119)		
Benzo(a)anthracene	ug/l	0.5	0.43	86	(72-134)		
Benzo(a)pyrene	ug/l	0.5	0.44	88	(50-142)		
Benzo(b)fluoranthene	ug/l	0.5	0.44	88	(62-147)		
Benzo(g,h,i)perylene	ug/l	0.5	0.43	86	(57-138)		
Benzo(k)fluoranthene	ug/l	0.5	0.42	84	(74-123)		
Chrysene	ug/l	0.5	0.42	84	(75-118)		
Dibenz(a,h)anthracene	ug/l	0.5	0.45	90	(53-150)		
Fluoranthene	ug/l	0.5	0.43	86	(76-117)		
Fluorene	ug/l	0.5	0.41	82	(74-124)		
Indeno(1,2,3-cd)pyrene	ug/l	0.5	0.44	88	(63-135)		
Naphthalene	ug/l	0.5	0.4	80	(74-112)		
Phenanthrene	ug/l	0.5	0.4	80	(80-118)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

METHOD: 8270 SIM

LABORATORY CONTROL SAMPLE: 289007 Matrix : WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
Pyrene	ug/l	0.5	0.4	80	(71-122)		
p-Terphenyl-d14(SURR) (S)	ug/l	0.5	0.5	100	(33-141)		

LABORATORY CONTROL SAMPLE: 289008 Matrix : WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
1-Methylnaphthalene	ug/l	0.5	0.43	86	(53-125)		
2-Methylnaphthalene	ug/l	0.5	0.44	88	(38-132)		
Acenaphthene	ug/l	0.5	0.43	86	(70-117)		
Acenaphthylene	ug/l	0.5	0.43	86	(59-124)		
Anthracene	ug/l	0.5	0.42	84	(74-119)		
Benzo(a)anthracene	ug/l	0.5	0.45	90	(72-134)		
Benzo(a)pyrene	ug/l	0.5	0.46	92	(50-142)		
Benzo(b)fluoranthene	ug/l	0.5	0.46	92	(62-147)		
Benzo(g,h,i)perylene	ug/l	0.5	0.49	98	(57-138)		
Benzo(k)fluoranthene	ug/l	0.5	0.43	86	(74-123)		
Chrysene	ug/l	0.5	0.44	88	(75-118)		
Dibenz(a,h)anthracene	ug/l	0.5	0.53	106	(53-150)		
Fluoranthene	ug/l	0.5	0.42	84	(76-117)		
Fluorene	ug/l	0.5	0.43	86	(74-124)		
Indeno(1,2,3-cd)pyrene	ug/l	0.5	0.54	108	(63-135)		
Naphthalene	ug/l	0.5	0.43	86	(74-112)		
Phenanthrene	ug/l	0.5	0.41	82	(80-118)		
Pyrene	ug/l	0.5	0.44	88	(71-122)		
p-Terphenyl-d14(SURR) (S)	ug/l	0.5	0.45	90	(33-141)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

METHOD: 8310

Method Blank 289009 **Matrix :** SQ

Associated Lab Samples : 251313001 251313002 251313003 251313008 289009 289010

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
1-Methylnaphthalene	U	7/23/2009	7/23/2009	ug/kg	4.1	1
2-Methylnaphthalene	U	7/23/2009	7/23/2009	ug/kg	3.9	1
Acenaphthene	U	7/23/2009	7/23/2009	ug/kg	1.1	1
Acenaphthylene	U	7/23/2009	7/23/2009	ug/kg	1.2	1
Anthracene	U	7/23/2009	7/23/2009	ug/kg	1.1	1
Benzo(a)anthracene	U	7/23/2009	7/23/2009	ug/kg	2	1
Benzo(a)pyrene	U	7/23/2009	7/23/2009	ug/kg	3.3	1
Benzo(b)fluoranthene	U	7/23/2009	7/23/2009	ug/kg	2.6	1
Benzo(g,h,i)perylene	U	7/23/2009	7/23/2009	ug/kg	2.6	1
Benzo(k)fluoranthene	U	7/23/2009	7/23/2009	ug/kg	1.4	1
Chrysene	U	7/23/2009	7/23/2009	ug/kg	2.8	1
Dibenz(a,h)anthracene	U	7/23/2009	7/23/2009	ug/kg	1.1	1
Fluoranthene	U	7/23/2009	7/23/2009	ug/kg	2	1
Fluorene	U	7/23/2009	7/23/2009	ug/kg	1.9	1
Indeno(1,2,3-cd)pyrene	U	7/23/2009	7/23/2009	ug/kg	1.1	1
Naphthalene	U	7/23/2009	7/23/2009	ug/kg	2.6	1
Phenanthrene	U	7/23/2009	7/23/2009	ug/kg	1.7	1
Pyrene	U	7/23/2009	7/23/2009	ug/kg	3	1
p-Terphenyl-d14(SURR) (S)	82.7	7/23/2009	7/23/2009	%	(17 - 119)	1

LABORATORY CONTROL SAMPLE: 289010 **Matrix :** SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
1-Methylnaphthalene	ug/kg	667	513	76.9	(70-111)		
2-Methylnaphthalene	ug/kg	667	511	76.6	(62-110)		
Acenaphthene	ug/kg	667	504	75.6	(68-109)		
Acenaphthylene	ug/kg	667	482	72.3	(67-112)		
Anthracene	ug/kg	667	478	71.7	(68-117)		
Benzo(a)anthracene	ug/kg	667	498	74.7	(68-112)		
Benzo(a)pyrene	ug/kg	667	432	64.8	(52-116)		
Benzo(b)fluoranthene	ug/kg	667	512	76.8	(69-114)		
Benzo(g,h,i)perylene	ug/kg	667	498	74.7	(53-119)		
Benzo(k)fluoranthene	ug/kg	667	498	74.7	(67-115)		
Chrysene	ug/kg	667	500	75	(66-117)		
Dibenz(a,h)anthracene	ug/kg	667	496	74.4	(68-118)		
Fluoranthene	ug/kg	667	518	77.7	(71-110)		
Fluorene	ug/kg	667	515	77.2	(68-118)		
Indeno(1,2,3-cd)pyrene	ug/kg	667	497	74.5	(61-122)		
Naphthalene	ug/kg	667	504	75.6	(69-114)		
Phenanthrene	ug/kg	667	505	75.7	(69-116)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

METHOD: 8310

LABORATORY CONTROL SAMPLE: 289010 **Matrix :** SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
Pyrene	ug/kg	667	515	77.2	(71-115)		
p-Terphenyl-d14(SURR) (S)	ug/kg	1330	1010	75.9	(17-119)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4
METHOD: FL-PRO

Method Blank 288853 **Matrix :** WQ

Associated Lab Samples : 251313004 251313005 251313006 251313007 288853 288854 288855

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
TPH	U	7/21/2009	7/21/2009	mg/L	0.25	1
C39 Surrogate(SURR) (S)	93.3	7/21/2009	7/21/2009	%	(42 - 193)	1
o-Terphenyl Surrogate(SURR) (	99	7/21/2009	7/21/2009	%	(82 - 142)	1

Method Blank 289019 **Matrix :** SQ

Associated Lab Samples : 251313003 289019 289020

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
TPH	U	7/24/2009	7/23/2009	mg/Kg	13	1
C39 Surrogate(SURR) (S)	79	7/24/2009	7/23/2009	%	(60 - 118)	1
o-Terphenyl Surrogate(SURR) (	86.6	7/24/2009	7/23/2009	%	(62 - 109)	1

Method Blank 289129 **Matrix :** SQ

Associated Lab Samples : 251313001 251313002 251313008 289129 289130

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
TPH	U	7/26/2009	7/26/2009	mg/Kg	5.9	1
C39 Surrogate(SURR) (S)	102	7/26/2009	7/26/2009	%	(60 - 118)	1
o-Terphenyl Surrogate(SURR) (	107	7/26/2009	7/26/2009	%	(62 - 109)	1

LABORATORY CONTROL SAMPLE: 288854 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
TPH	mg/L	3.4	2.8	82.4	(55-118)		
C39 Surrogate(SURR) (S)	mg/L	0.15	0.13	86.7	(42-193)		
o-Terphenyl Surrogate(SURR) (	mg/L	0.1	0.098	98	(82-142)		

LABORATORY CONTROL SAMPLE: 288855 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
TPH	mg/L	3.4	3	88.2	(55-118)	6.9	20

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

METHOD: FL-PRO

LABORATORY CONTROL SAMPLE: 288855 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC		% REC LIMITS	RPD	RPD LIMIT
C39 Surrogate(SURR) (S)	mg/L	0.15	0.14	93.3		(42-193)		
o-Terphenyl Surrogate(SURR) (	mg/L	0.1	0.1	100		(82-142)		

LABORATORY CONTROL SAMPLE: 289020 **Matrix :** SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC		% REC LIMITS	RPD	RPD LIMIT
TPH	mg/Kg	56.7	48.1	84.8		(63-153)		
C39 Surrogate(SURR) (S)	mg/Kg	10	7.8	78		(60-118)		
o-Terphenyl Surrogate(SURR) (	mg/Kg	6.7	6	89.6		(62-109)		

LABORATORY CONTROL SAMPLE: 289130 **Matrix :** SQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC		% REC LIMITS	RPD	RPD LIMIT
TPH	mg/Kg	25.8	24.8	96.1		(63-153)		
C39 Surrogate(SURR) (S)	mg/Kg	4.5	5.5	122	*	(60-118)		
o-Terphenyl Surrogate(SURR) (	mg/Kg	3	3.2	107		(62-109)		

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513130
PROJECT ID: Pinellas Bayway Site #4

Brian C. Spann

Digitally signed by Brian C. Spann
DN: cn=Brian C. Spann, o=Spectrum, ou=PEL, email=bspann@pelab.com, c=US
Date: 2009.08.04 15:57:59 -04'00'

Brian C. Spann Laboratory Manager

or

Mark Gudnason Quality Assurance Officer

PEL
A DIVISION OF SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1 2513130 FC

Special Handling:
TAT- Indicate Date Needed:
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: SHAW E+I
225 S US Hwy 301
TAMPA FL 33619

Project Mgr.: James Cheze

Invoice To:

P.O. No.: RQN:

Project No.: [redacted] 135581 (LMS)
Site Name: Pinellas Byway Site #4
Location: Tierra Verde State: FL
Sampler(s): Wm Stuart

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9=_____ 10=_____ 11=_____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

List preservative code below:

Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____
State specific reporting standards:
_____

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: 6010 RCRA 4 (+ Hg)	8260 (Full)	8270 Stm (Full)	FL-PRO	8082 PCB's	SO4 EDB		Notes:
	SB3@5'	7-17-09	1410	G	SO	3		3		X	X	X	X	X			"5-7 DAY TAT" 01
	SB4@5'	7-17-09	1420	G	SO	3		3		X	X	X	X	X			"FDOT Rates" 02
	SB5@5'	7-17-09	1425	G	SO	3		3		X	X	X	X	X			03
	SB2@8'	7-17-09	1150	G	GW	6	3		1	X	X	X	X	X	X		04
	SB4@10'	7-17-09	1430	G	GW	6	3		1	X	X	X	X	X	X		05
	SB3@10'	7-17-09	1450	G	GW	6	3		1	X	X	X	X	X	X		06
	SB5@10'	7-17-09	1530	G	GW	6	3		1	X	X	X	X	X	X		07
	SB2@3'	7/17/09	1105	G	SO	3		3		X	X	X	X	X			added per client 08

☐ E-mail to James.Cheze@shawgrp.com
EDD Format pH < 2 (8260, FLPRO, 6010)
PW Vials + jars (frozen per client)

Condition upon receipt: ☒ Iced ☐ Ambient ☒ °C 3.0, 3.2, 4.5

Relinquished by:	Received by:	Date:	Time:
	Wm Stuart	7-17-09	0530
Wm Stuart	7-20-09 9:56am	7/20/09	0900
7-20-09 10:21am	IM	7/20/09	1031

8405 Benjamin Road • Tampa, Florida 33634 • 813-888-9507 • FAX 813-889-7128 • www.pelab.com

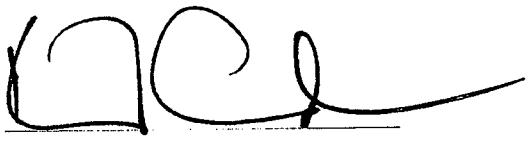
SAMPLE RECEIPT CONFIRMATION SHEET

Client Information

SDG:	2513130	**Req:**	87310
Client:	Shaw	**Project:**	Generic1
Level:	1	**Date Rec'd:**	7/20/2009 10:31:00 AM
Rec'd via:	courier	**Due Date:**	07/27/09

Sample Verification

Samples/Cooler Secure?	Yes	**All Samples on COC accounted For?**	Yes
Temperature of Samples(Celsius)	3.0C-4.5C	**All Samples Rec'd Intact?**	Yes
pH Verified?	Yes	**Sample Vol. Stuff. For Analysis?**	Yes
pH WNL?	Yes	**Samples Rec'd W/I Hold Time?**	Yes
Soil Origin (Domestic/Foreign):	Domestic	**Are All Samples to be Analyzed?**	Yes
Site Location/Project on COC?	Yes	**Correct Sample Containers?**	Yes
Client Project # on COC?	Yes	**COC Comments written on COC?**	Yes
Project Mgr. Indicated on COC?	Yes	**Samplers Initials on COC?**	Yes
COC relinquished/Dated by Client?	Yes	**Sample Date/Time Indicated?**	Yes
COC Received/Dated by PEL?	Yes	**TAT Requested:**	STD
Specific Subcontract Indicated?	No	**Client Requests Verbal Results?**	No
Samples Received By	courier	**Client Requests Faxed Results?**	No
PEL to Conduct ALL Analyses?	Yes		

PEER REVIEW: 

PEL a division of Spectrum Analytical, Inc.
featuring HANIBAL TECHNOLOGY

Florida Department of Health #E84207
June 30, 2009

CWA - Extractable Organics, General Chemistry,Metals,
Pesticides-herbicides-PCB's, Volatile Organics
RCRA/CERCLS - Extractable Organics, General Chemistry, Metals
Pesticides-Herbicides-PCB's, Volatile Organics

- CERTIFICATE OF ANALYSIS -

Report Date: 09/28/2009

To: Jim Cheze
Shaw Group
725 U.S. Highway 301 South
Tampa, FL 33612

W 813-612-3655

PROJECT ID:	Pinellas Bayway
WORK ORDER:	2513633
DATE RECEIVED:	Wednesday, September 23, 2009

Project Notes:

(†): Short Hold Time Analysis Date

Samples reported on dry weight basis
All test results in this report pertain only to the samples as submitted.

PEL Contact: Mark Gudnason / extension: 242

8405 Benjamin Road, Suite A• Tampa, Florida 33634
813-888-9507• FAX: 813-889-7128
Website: www.pelab.com

PEL a division of Spectrum Analytical, Inc.
featuring Hanibal Technology

DATA QUALIFIER CODES

State of Florida, Department of Environmental Protection and
Department of Health _Rehabilitative Services / NELAC

I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

J Estimated value; value not accurate. This code shall be used in the following instances:

1. Surrogate recovery limits have been exceeded.
2. No known quality control criteria exits for the component.
3. The reported value did not meet the established quality control criteria for either precision or accuracy but falls within the NELAC marginal exceedance range.

3M. The reported value did not meet the established quality control criteria for either precision or accuracy and falls beyond the NELAC range for marginal exceedances.

3R. The RPD for the LCSD exceeds the laboratory established control limits.

4. The sample matrix interfered with the ability to make an accurate determination.
5. The data is questionable because of improper laboratory or field protocols (e.g. composite sample was collected instead of a grab sample).

L Off-scale high. Actual value is known to be greater than the value given. To be used when the concentration of the analyte is above the acceptable limit for quantitation (exceeds the linear range of the highest calibration standard) and the calibration curve is known to exhibit a negative deflection.

Q Sample held beyond acceptable holding time. This code shall be used if the value is derived from a sample that was prepared or analyzed after the approved holding time restrictions for the sample preparation or analysis.

U Indicates that the compound was analyzed for but not detected above the method detection limit (MDL).

V Indicates that the analyte was detected in both the sample and the associated method blank. Note: The value in the blank shall not be subtracted from associated samples.

Y The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.

RL - Reporing Limit. The PEL lowest Practical Quanititation Limit (PQL), defined by the lowest point in the calibration curve.

CASE NARRATIVE
METALS

PEL Lab Reference No./SDG: 2513633

Client: Shaw Group

I. RECEIPT

Exceptions encountered upon receipt are addressed in the Sample Receipt Confirmation Report, included with the Chain-of-Custody documentation, or communication included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHOD

Analyses were performed according to the PEL, a Division of Spectrum Analytical, Standard Operating Procedures and EPA Method 6010B for ICP metals.

IV. PREPARATION

Water samples were prepared according to PEL Laboratory's Standard Operating Procedures and EPA Method 3010A.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

1. Calibration Blanks:

All acceptance criteria were met.

2. Method Blanks:

All acceptance criteria were met.

C. Spikes:

1. Laboratory Control Spikes (LCS):

An LCS/LCSD set was analyzed.
All percent recovery and relative percent difference (RPD) criteria were met.

2. Post Digestion Spike:

All acceptance criteria were met.

CASE NARRATIVE
METALS

PEL Lab Reference No./SDG: 2513633

Client: Shaw Group

3. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD):

No spikes requested by client.

D. Duplicate:

No sample duplicates are reported with this method. (Spike duplicates are referenced above in section C. Spikes.)

E. Serial Dilution:

All acceptance criteria were met.

F. ICP Interference Check Samples:

All acceptance criteria were met.

G. Samples:

Sample analysis proceeded normally.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and PEL, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

Linda Lee M. Gale

SIGNED: **DATE:** 09/28/2009

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513633
PROJECT ID: Pinellas Bayway

PEL Lab# : 251363301
Client ID : SB-4R
Matrix : GW

Collection Information:
Sample Date: 9/23/2009 12:00:00 PM

Parameter	Method	Results	Analysis Date	Prep Date	Units	MDL	RL	Dilution Factor
Arsenic	6010	**17.8**	09/25/2009 14:01	09/24/2009 12:33	ug/L	3.31	10	1

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513633
PROJECT ID: Pinellas Bayway

QC SUMMARY

METHOD: 6010

Method Blank 291661 **Matrix :** WQ

Associated Lab Samples : 251363301 291661 291662 291663

Parameter	Results	Analysis Date	Prep Date	Units	RL	Dilution Factor
Arsenic	U	9/25/2009	9/24/2009	ug/L	3.31	1

LABORATORY CONTROL SAMPLE: 291662 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
Arsenic	ug/L	500	485	97	(80-120)		

LABORATORY CONTROL SAMPLE: 291663 **Matrix :** WQ

PARAMETER	UNITS	SPIKE CONC	LCS RESULT	SPIKE % REC	% REC LIMITS	RPD	RPD LIMIT
Arsenic	ug/L	500	474	94.8	(80-120)	2.3	20

- CERTIFICATE OF ANALYSIS -

FLDOH #E84207

To: Jim Cheze
Shaw Group

WORK ORDER: 2513633
PROJECT ID: Pinellas Bayway

Brian C Spann

Digitally signed by Brian C Spann
DN: cn=Brian C Spann, o=PEL, ou=PEL, a Division of Spectrum Analytical, email=bspann@pelab.com, c=US
Date: 2009.09.28 15:17:18 -04'00'

Brian C. Spann Laboratory Manager

or

Mark Gudnason Quality Assurance Officer

PEL
A DIVISION OF SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1 2513633 KC

Special Handling:
TAT- Indicate Date Needed:
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: SHAW E+I
725 S US Hwy 301
TAMPA FL 33619

Project Mgr.: James Cheze

Invoice To:

P.O. No.: RQN:

Project No.: Pinellas Bayway
Site Name: BP (128 Pinellas Bayway Terra Verde FL)
Location: ~~SB-4R~~ State: FL
Sampler(s): Wm Stowell

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11= 4

List preservative code below: 4

Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: EPA(6010) Arsenic	QA/QC Reporting Level
	SB-4R	9/23/09	1200	G	GW				1	X	01
											(3-5 DAY TAT) (FDOT Rates)

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other
State specific reporting standards:

☐ E-mail to James.Cheze@Shawgrp.com
EDD Format pdf2

Condition upon receipt: ☒ Iced ☐ Ambient ☒ °C 2.6

Relinquished by:	Received by:	Date:	Time:
		09/23/09	0845
Wm Stowell 9/23/09 1550		9/23/09	3:23pm
		9/23/09	1553

8405 Benjamin Road • Tampa, Florida 33634 • 813-888-9507 • FAX 813-889-7128 • www.pelab.com

SAMPLE RECEIPT CONFIRMATION SHEET

Client Information

SDG:	2513633	**Req:**	87310
Client:	Shaw	**Project:**	Generic1
Level:	1	**Date Rec'd:**	9/23/2009 3:53:00 PM
Rec'd via:	courier	**Due Date:**	09/28/09

Sample Verification

Samples/Cooler Secure?	Yes	**All Samples on COC accounted For?**	Yes
Temperature of Samples(Celsius)	2.6C	**All Samples Rec'd Intact?**	Yes
pH Verified?	Yes	**Sample Vol. Stuff. For Analysis?**	Yes
pH WNL?	Yes	**Samples Rec'd W/I Hold Time?**	Yes
Soil Origin (Domestic/Foreign):		**Are All Samples to be Analyzed?**	Yes
Site Location/Project on COC?	Yes	**Correct Sample Containers?**	Yes
Client Project # on COC?	Yes	**COC Comments written on COC?**	Yes
Project Mgr. Indicated on COC?	Yes	**Samplers Initials on COC?**	Yes
COC relinquished/Dated by Client?	Yes	**Sample Date/Time Indicated?**	Yes
COC Received/Dated by PEL?	Yes	**TAT Requested:**	STD
Specific Subcontract Indicated?	No	**Client Requests Verbal Results?**	No
Samples Received By	courier	**Client Requests Faxed Results?**	No
PEL to Conduct ALL Analyses?	Yes		

PEER REVIEW: