

## ***Appendix B – Additional Hazardous Materials Information***

B-1 – Ensafe. Areas of Concern Map.

B-2 -- Ensafe. Remediation Update, May 27, 2010.

B-3 – AECOM. Oversight of Environmental Cleanup; May 5, 2010.

B-4 – Ensafe. Map ID: AK – Former FAA USTs; May 4, 2010.

B-1 – Ensafe. Areas of Concern Map.

## Legend

- A. Dredge Spoil Stockpile
  - B. East Fuel Tank Farm
  - C. Avis Rental Facility
  - D. National Rental Facility
  - E. Gaddie Property Area
  - F. Storm Water Runoff Area
  - G. South Fuel Tank Farm & Sheltair Discharge
  - H. Panama Air Center
  - I. West Fuel Tank Farm
  - J. Historic Fill Materials
  - K. Airport Boundary Site/Carter Property
  - L. Bldg. 1000 Storm Water Site
  - M. Off Shore Sediment Hole
  - N. Maintenance Shop
  - O. Scrap Yard
  - P. Household Waste Dump
  - Q. Ramp Area
  - R. Coastal Helicopter
  - S. DynCorp
  - T. East Ramp Drainage Basin
  - U. Former Ponds- East Ramp
  - V. Spurlin Industries
  - W. Parthenon Industries
  - X. Debris Piles
  - Y. Interior Drainage Ditches
  - Z. Rutherford Property
  - AA. Sheltair Discharge
  - AB. Sheltair FBO Maintenance Hangar
  - AC. Precision FBO Maintenance Hangar
  - AD. Chemical Wash Rack
  - AE. Lighthouse Marine
  - AF. Marine Transportation
  - AG. FL Dept. of Transportation
  - AH. Southeast Runway Protection Zone
  - AI. Private Hangars

East Industrial Area

Airport Property Boundary



B-2 -- Ensafe. Remediation Update, May 27, 2010.

#	Area	Map ID	AA Notification Date for IEI's	Environmental Remediation Work Proposal	Current Status
1	National Rental Facility/ Vanguard	D	AOC #4		Received FDEP NFA
2	West Fuel Farm	I	AOC #9		Received FDEP NFA
3	Bldg. 1000 Storm Water Site	L			Like to discuss why AECOM identified this site.
4	Off Shore Sediment Hole	M	SharePoint posted 3/19/2010		No contaminants identified in analysis performed in 2009
5	Household Waste Dump	P	7/9/2009 EnSafe memo		District has removed materials.
6	Rutherford	Z	SharePoint Posted 2/26/10		Phase II investigation in Apr 2010 showed no evidence of releases.
7	SheltAir Discharge	AA	10/1/08		Received FDEP NFA
8	Fire Fighting Training Area	AM			Phase II investigation in Apr 2010 showed no evidence of releases.
9	Southeast Runway Protection Zone	AH	SharePoint 2/26/10		No further issues
10	Dredge Material Stockpile	A	AOC #1		Awaiting executed final Completion Notice from the District.
11	Stormwater Runoff	F	AOC #6		Awaiting NFA from FDEP
12	Panama City Air Center Abandoned UST's	H	AOC #8		Awaiting NFA from FDEP
13	Aircraft Fueling and Ramp Areas	Q	SharePoint Posted 2/26/10	To be provided by AA	Some investigation has been conducted. Additional investigations to be initiated when access can be obtained in restricted areas.
14	Parthenon Prints	W	SharePoint Posted 2/26/10	To be provided by AA	Reports of releases by Parthenon onto District's property were provided in Feb 2010. A limited investigation in Apr 2010 showed no impact from these releases however a more extensive investigation is required
15	SheltAir Aviation Services FBO Hangar	AB	SharePoint Posted 2/26/10	To be provided by AA	Some investigation has been conducted. Additional investigations to be initiated when access can be obtained in restricted areas.
16	Marine Transport	AF/Y8	SharePoint posted 2/26/10	To be provided by AA	Environmental concerns associated with Marine Transport Services include the potential for impact from petroleum products and solvents. Based on EnSafe's observations, stormwater runoff flows east to a ditch along the District's property boundary. Ensafe recommendation: investigate soil and groundwater for VOCs, SVOCs, TRPH, TAL Metals and PCBs along the shared property border.
17	Former Building 300' S. of Main Terminal	AJ	6/29/05	To be provided by AA	Soil sampling by Southern Earth Science (SES) in 2007 detected arsenic, cadmium, chromium, barium, lead, mercury and endrin-aldehyde. SES installed temporary monitoring wells (T-3) in the same general location and collected groundwater sample for TRPH and RCRA 8 Metals analysis. Barium, chromium and selenium were detected.
18	West Property Boundary	AL	SharePoint Posted 2/26/10	To be provided by AA	A limited investigation in Apr 2010 showed no impact from these operations however a more extensive investigation is required.
19	Historical Spill Areas	AN	SharePoint Posted 2/26/10	To be provided by AA	A limited investigation in Apr 2010 showed no impact from these releases however a more extensive investigation is required when access can be obtained to restricted areas
20	Original Municipal Airport	AO	SharePoint posted 3/19/2010		Site research in process
21	Post 2007 Spill Reports (AOC #11)	TBD			Reports requested February 2010 and received March 2010. See Exhibit G #11 in contract.
<b>Reported Releases of Hazardous Substances</b>			<b>Incident Report Date</b>	<b>See the District Spill Report Summary Sheet for more information on each incident and Methods of Containment.</b>	
22	East Ramp		1/9/2006		4'x7' puddle/oil splash
23	Sowell Ramp/Gate 18		2/8/2006		100 sq. ft. fuel/hydraulic spill
24	Sowell Ramp/Gate 3A		2/25/2006		Leaking fuel. Spill approximately 16'x22'
25	Terminal Ramp/Boarding Gate 6		2/26/2006		Leaking oil / hydraulic line. Spill approximately 30'long x 2"wide
26	East Ramp		5/8/2006		Aircraft leaking fuel. Amount of fuel leaked unknown.
27	Sowell Ramp		6/1/2006		Approximately 5 gallons fuel leaked
28	West Fuel Farm		7/22/2006		8 gallons of fuel leaked
29	SheltAir Hangar		10/24/2006		2 gallons of fuel leaked from a 55 gallon container.
30	East Ramp		2/20/2007		Fuel truck from Chipola Aviation was found leaking. Spill area ~ 5' circumference
31	Terminal Ramp Boarding /Gate 6		10/23/2007		5 gallons of Jet A
32	East Ramp		10/21/2008		~ a half gallon of fuel
33	SheltAir Parking Ramp		10/20/2008		Approximately 100 sq. ft. fuel saturation on parking area blacktop and 100 sq. ft. saturation in grassy area
34	East Ramp/Hangar #8		1/17/2009		1 gallon of oil
35	Terminal Ramp		2/18/2009		Fuel spill from the previous day. 10'x8' fuel stain with a 2'x3' wet puddle of fuel discovered
36	East Ramp		3/11/2009		1 gallon of fuel
37	Terminal		9/18/2009		About a quart of fuel spilled
38	Between Precision and SheltAir		12/28/2009		Approximately 5 gallons (3'x10' area) leaked from the fuel line onto the asphalt
39	SheltAir		1/11/2010		2 gallons of Jet A fuel leaked onto asphalt
40	Former Dog Fly Plane Area	AQ	5/18/10	To be provided by AA	Data collected in April 2010 indicated evidence of a release of hazardous substances. Total petroleum hydrocarbons were detected in surface soils at a concentration of 940 mg/kg.
41	East Fuel Farm	B	AOC #2		Airport site assessment work is ongoing. Groundwater contamination is being addressed.
42	Avis Rental	C	AOC #3	To be provided by AA	Ensafe recommends that the appropriate party notify FDEP that a potential release has occurred in accordance with Chapter 62-761.820 Incident and Discharge Response. An investigation to determine the source, nature, and extent of petroleum compound contamination should be conducted in conjunction with planned UST removal. Any impact of these results on the existing FDEP SRCO should also be established.
43	Gaddie Property	E	AOC #5		Limited soil excavation is planned (the top 1'). District anticipates the soil removal and wetland restoration work will be complete before closing but 2 years of wetland monitoring will be required.
44	South Fuel Tank Farm	G	AOC #7		Continued groundwater monitoring
45	Historic Fills	J	AOC #10	To be provided by AA	Unresolved - parties disagree on appropriate response
46	Carter Properly/ Ole Lighthouse Marine	K/AE/Y5	12/08/08		Risk of continued contaminant migration from off-site. Investigation continues. FDEP has provided a hold harmless letter.

## DRAFT - ENVIRONMENTAL AOC and IEI STATUS

5/27/10

#	Area	Map ID	AA Notification Date for IEI's	Environmental Remediation Work Proposal	Current Status
47	Airport Maintenance Complex	N	7/9/2009 EnSafe memo	<b>A proposal for that addresses only the AST was provided to SABL on 5/25 for review and comment</b>	Data collected in Feb and April 2010 clearly shows evidence of multiple releases of hazardous substances in this area, some of which exceed Florida residential standards. The District reports that it has conducted an investigation in a portion of this area, but no results have been provided as of 5/13/10. Ensure that all remaining debris and scrap piles are removed and properly disposed offsite. Conduct an investigation of soil contamination, if any, that would likely have resulted from the diversity of debris and scrap material staged in these areas (Map IDs: N and O). Conduct a nature and extent of contamination study in the Maintenance Shop AST area (Included TRPH, SVOCs, and TAL Metals) in anticipation of a soil removal action. Expand the planned investigation of the Utility Sink Discharge Area to include TAL Metals in soil and groundwater, and SVOCs and pesticides in soil. Conduct a nature and extent of contamination study in the North Roll-Up Door/Sloped Concrete Drive area to include TRPH and TAL Metals. Thoroughly investigate soil beneath the concrete floor slab in the Maintenance Shop; include analysis for TRPH, VOCs, SVOCs, TAL Metals, and Pesticides.
48	Scrap Yard	O	7/9/2009 EnSafe memo	To be provided by AA	Ensure that all remaining debris and scrap piles are removed and properly disposed offsite. Conduct an investigation of soil contamination, if any, that would likely have resulted from the diversity of debris and scrap material staged in these areas (Map IDs: N and O).
49	Coastal Helicopter/ Century Boats	R	SharePoint Posted 2/26/10 3/4/10 AECOM Conference call <b>Updated on SharePoint 5/25</b>	To be provided by AA	Chemical constituents detected, some of which exceed residential standards. Conduct nature and extent of contamination study in this area. Re-inspect building after the parts warehouse is moved to better evaluate interior conditions. The significant "up lifting" of the thick concrete floor should also be evaluated in the event that a release occurred in that area.
50	DynCorp Hangar	S/AP	SharePoint Posted 2/26/10 <b>Combined Map ID AP &amp; S 5/25/10</b>	To be provided by AA	Data from limited soil investigation at the DynCorp Building suggests a history of industrial activity which has impacted site soil and groundwater. Further investigation is needed to fully characterize the impacts of past site activities on soil and groundwater.
51	East Ramp Drainage Basin	T	SharePoint Posted 2/26/10	To be provided by AA	Limited soil investigation in this area confirmed release of TRPH to this ditch.
52	Former Ponds/ East Ramp	U	SharePoint Posted 2/26/10 Data reported in May <b>Updated on SharePoint 5/25</b>	To be provided by AA	EnSafe recommends the debris identified in the northwest pond area be characterized, removed, and properly disposed followed by confirmation sampling. A soil sample in this former pond also exceeded residential standards for petroleum hydrocarbons. The soil and groundwater contamination detected in the southeast pond area may have resulted from historical filling activities, or may have migrated from adjoining industrial operations at Coastal Helicopter (Map ID R) and DynCorp (Map ID S) and/or fuel storage at the East Fuel Tank Farm (Map ID B). EnSafe recommends including this area in additional investigations conducted at those areas.
53	Spurlin Industries (Bath Tubs)	V/Y7	SharePoint Posted 2/26/10 Data reported in May <b>Updated on SharePoint 5/25</b>	To be provided by AA	EnSafe recommends that the PFN Airport (east)/Spurlin Industries (west)-shared boundaries be thoroughly assessed for the nature and extent of contamination entering the airport property. In addition, the extent of buried fiberglass debris material should be determined and the material excavated and properly disposed.
54	Airport Debris Piles	X	7/9/2009 EnSafe memo SharePoint Posted 2/26/10 3/4/10 AECOM Conference call <b>Updated on SharePoint 5/25</b> <b>New Fact Sheet</b>	To be provided by AA	Identify additional debris piles, if any, which may be present within this heavily wooded area. Remove all debris to an offsite location. Determine if soil and groundwater have been contaminated above residential standards by materials in the debris piles through confirmation sampling of VOCs, SVOCs, TRPH, TAL Metals, Pesticides, and PCBs.
55	Airport Drainage Ditches Rental Cars	Y-1	SharePoint Potted 2/26/10 <b>3/4/10 AECOM Conference call . Updated on SharePoint 5/27</b> <b>New Fact Sheet</b>	To be provided by AA	Samples exceeding Residential Standards. EnSafe recommends further investigation of the airport drainage ditch system to identify additional areas of petroleum contamination and remediate accordingly.
56	Airport Drainage Ditches Downgradient of West Fuel Farm	Y-2	SharePoint Potted 2/26/10 <b>3/4/10 AECOM Conference call . Updated on SharePoint 5/27</b> <b>New Fact Sheet</b>	To be provided by AA	Samples exceeding Residential Standards. EnSafe recommends further investigation of the airport drainage ditch system to identify additional areas of petroleum contamination and remediate accordingly.
57	Airport Drainage Ditches Terminal Ramp and SheltAir	Y-3	SharePoint Potted 2/26/10 <b>3/4/10 AECOM Conference call . Updated on SharePoint 5/27</b> <b>New Fact Sheet</b>	To be provided by AA	Samples exceeding Residential Standards. EnSafe recommends further investigation of the airport drainage ditch system to identify additional areas of petroleum contamination and remediate accordingly.
58	Airport Drainage Ditches Parallel to Runway 14-32	Y-4	SharePoint Potted 2/26/10 <b>3/4/10 AECOM Conference call . Updated on SharePoint 5/27</b> <b>New Fact Sheet</b>	To be provided by AA	Samples exceeding Residential Standards. EnSafe recommends further investigation of the airport drainage ditch system to identify additional areas of petroleum contamination and remediate accordingly.
59	Airport Drainage Ditches Near Gaddie	Y-9	SharePoint Potted 2/26/10 <b>3/4/10 AECOM Conference call . Updated on SharePoint 5/27</b> <b>New Fact Sheet</b>	To be provided by AA	Samples exceeding Residential Standards. EnSafe recommends further investigation of the airport drainage ditch system to identify additional areas of petroleum contamination and remediate accordingly.
60	Precision Avjet FBO Hangar	AC	SharePoint Posted 2/26/10 Data provided 5/6/2010	<b>A proposal was provided to SABL on 5/25 for review and comment</b>	EnSafe recommends the nature and extent of soil and groundwater contamination be determined, especially in the private hangars with earthen floors (see Map ID AI - Private Hangar Dirt Floors).
61	Former Chemical Wash Rack	AD	SharePoint Posted 2/26/10 <b>3/4/10 AECOM Conference call Updated on SharePoint 5/25</b>	To be provided by AA	A limited soils investigation at the former chemical wash rack confirms a history of industrial activity which has impacted site soil and groundwater. EnSafe recommends further investigation to fully characterize the impacts of past site activities on soil and groundwater.
62	FDOT	AG/Y6	SharePoint Posted 2/26/10 4/20/10 Fecal Coliform via e-mail 4/27/10 Hazardous Substances found in samples New data posted 5/17/2010.	To be provided by AA	Limited sampling identified hazardous substance TRPH, SVOC's, Pesticides and PCB's in soil and surface water, some of which exceed residential standards. EnSafe recommends that the PFN Airport/FDOT-shared boundary be assessed for potential contamination entering the airport property from FDOT or another offsite source. In addition, the fecal coliform results may indicate an immediate health hazard in that area.
63	Private Hangar Dirt Floors	AI	SharePoint Posted 2/26/10 3/4/10 AECOM Conference call	To be provided by AA	EnSafe recommends the nature and extent of soil and groundwater contamination be determined, especially in the private hangars with earthen floors. Data suggests that TRPH and SVOCs may also be found in soil in other areas under concrete or asphalt and/or building foundations. Remediation may be necessary but more effectively conducted after operations in these areas have been discontinued and demolition begun.
64	Former FAA USTs (VORTAC)	AK	SharePoint Posted 2/25/10 Data posted 5/11/2010	To be provided by AA	EnSafe recommends further investigation to determine the nature and extent of petroleum related contamination associated with the former UST located at the FAA Vortac..
65	Fire Station	AR	SharePoint Posted 5/27/10	To be provided by AA	<b>Ensafe recommends further investigation to determine the nature and extent of contamination</b>
66	3036 / 3040 Stanford Road	AS/Y10	SharePoint Posted 5/27/10	To be provided by AA	<b>Ensafe recommends further investigation to determine the nature and extent of contamination</b>

B-3 – AECOM. Oversight of Environmental Cleanup; May 5, 2010.

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**SITE UPDATES FOR KIMLEY-HORN (MAY 5, 2010). OVERSIGHT OF ENVIRONMENTAL CLEANUP OF CURRENT PANAMA CITY-BAY COUNTY INTERNATIONAL AIRPORT SITE**

Area of Concern	Responsible Party	Tasks Completed	Notes
Dredge Material Stockpile	Port Authority	Spoil pile materials excavated and moved to new Airport site. Post-Removal Sampling Report sent to FDEP. This report was provided to St. Andrew Bay. FDEP indicates SRCO is not applicable because this work is a component of the reuse authorization and restrictive covenant package for the new Airport site.	1) This site is completed. 2) Airport has sent Completion Notice & Environmental Certification to St. Andrew Bay Bay.
East Fuel Tank Farm	NFA October 2007	1) SRCO was in place for this AOC (related to a historic discharge) prior to tank removal work. 2) UST removal completed. 3) Impacted soil removed, and monitoring well installed and sampled, as part of UST removal assessment.	1) Prior to removal of USTs that had been closed in place, no environmental issues were anticipated based on previous investigative work and existing SRCO from FDEP. 2) Localized impacted soil found and removed during tank removal. 3) GW well installed and sampled. Benzene and toluene above GCTLs. Plume appears to be localized. 4) Airport has submitted notification to FDEP and has started a Site Assessment to delineation the plume with monitoring well nests. 5) Airport will submit a UST removal report to St. Andrew Bay for review (separate from the SA Report). Updated UST removal report will then be submitted to FDEP. 6) Airport's Site Assessment work is ongoing.
Panama Air Center Abandoned USTs	Precision Avjet FBO	UST removal and closure assessment completed.	1) This site is essentially completed with only the reporting task remaining. 2) Tank Closure Report recommending NFA sent to St. Andrew Bay on 4/6/10 for review. 3) Comments from St. Andrew Bay were addressed and report was updated. Airport intends to submit the report on May 5, 2010 to FDEP for SRCO.
National Rental Facility / Vanguard	National/Vanguard	Site Completed. SRCO received from FDEP (issued on Sept. 2, 2009).	1) This site is completed. 2) On 1/29/10, Airport forwarded the FDEP SRCO letter and associated report(s) to St. Andrew Bay and EnSafe.
Avis Rental	Avis	SRCO received from FDEP per historic discharge (issued on Mar. 5, 2010). Tanks need to removed per sales contract, and tank closure reporting needs to be provided. Tank removal tentatively planned for late May 2010.	1) This site is completed. 2) On 3/8/10, Airport forwarded the FDEP SRCO letter and associated report(s) to St. Andrew Bay and EnSafe. 3) Tanks need to removed per sales contract, and tank closure reporting needs to be provided. Tank removal tentatively planned for late May 2010.
Gaddie Property Area	Gaddie Property Owner	1) AECOM investigations show the soil in wetland area south of the former Gaddie Property is impacted by marginally elevated arsenic above Residential SCTL. 2) Copy of LSA and LSA Addendum Reports provided to St. Andrews on 10-13-09 for review. Airport forwarded reports to FDEP after St. Andrews review. 3) Per FDEP, dredge and fill permit is required for any soil excavation work in wetlands. 4) Airport met with FDEP on 9-16-09, 12-17-09, 1-13-10, and 2-19-10 for cleanup coordination. FDEP recognized the wetland medium as sediment not subject to the Residential SCTL. Airport and St. Andrew Bay agree to have top foot of impacted medium removed and replaced.	1) Cleanup activities are in process with a completion date by end of June 2010. 2) Dredge and Fill Permits received from USACE and FDEP. 3) Following cleanup, two years of follow on wetland monitoring will be required.
Stormwater Runoff Area	Precision Avjet FBO and Sheltair FBO	Soil cleanup work completed.	1) This site is essentially completed with only the reporting task remaining. 2) Airport is reviewing Interim Source Removal Report from cleanup contractor. 3) Next steps are to submit to St. Andrew Bay for review, address any comments from St. Andrew Bay, and then submit to FDEP for SRCO.
South Fuel Tank Farm	Sheltair/Sowell	1) AECOM investigations show the soil and groundwater immediately around tanks is impacted by marginally elevated petroleum compounds. 2) UST removal completed. Monitoring well installed on 2-16-10. Initial groundwater sample and 30-day sample were clean.	1) To complete cleanup, additional small amount of soil to be removed (hanger foundation issue delaying removal). Airport plans to complete the remaining soil removal by the end of June 2010. 2) Well that was installed at former USTs location was sampled on Feb. 18, 2010 for 62-770 Table B analytes. 30-day sample analyzed for xylenes. GW results were clean (no GCTL exceedances). 3) After removal of the remaining soil, it appears that four quarters (one year) of groundwater monitoring to confirm clean will be required for SRCO.
West Fuel Tank Farm	Sheltair/Sowell	Site Completed. SRCO received from FDEP (issued on Nov. 18, 2009).	1) This site is completed. 2) On 1/29/10, Airport forwarded the FDEP SRCO letter and associated report(s) to St. Andrew Bay and EnSafe.
Historic Fill Materials	Airport	1) AECOM investigations show that the shell-rich fill material on the east side of the end of Runway 14 exhibits localized pockets of slightly elevated arsenic above the residential soil standard (SCTL). Soil media sampling results show arsenic below the residential SCTL. 2) No groundwater impact identified. 3) Airport met with FDEP on 9-16-09, 12-17-09, and 1-13-10 for site coordination. FDEP indicates that shell-rich fill material is unregulated, similar to a construction material such as rip-rap. Comparison of this material to the 62-777 residential soil SCTL is not applicable.	1) Based on FDEP input from Jan. 13, 2010 site visit and follow up correspondence, shell fill material is not a regulated material (not considered soil) and it is not applicable to compare the results to 62-777 SCTLs. The soil samples collected (not the shell-rich fill material) show arsenic concentrations below the residential SCTL. 2) Airport has provided a draft of the assessment report to St. Andrew Bay for review. This report indicates that soil sample results meet residential soil standards, shell fill material is unregulated, and current site conditions support residential land use. 3) On April 22, 2010, Airport received St. Andrew comments on the report. Airport is reviewing the comments and is preparing the response. Airport is moving forward with submittal of report to FDEP.
Additional Area of Concern (Airport Boundary adjacent to Carter Property)	Carter Property Owner	1) Follow on assessment work by MACTEC concludes that the source of the MTBE and benzene-impacted groundwater (small plume on Airport property) appears to be the adjacent property (Ole Lighthouse Marine parcel). John Deere parcel is the "Carter property" in the State ATRP program, not Ole Lighthouse Marine. 2) MACTEC indicates that data from the Ole Lighthouse Marine property itself is required to definitely conclude that the adjacent property is the source of the MTBE. 3) Airport has sent FDEP a request for hold harmless letter.	1) Carter property in the State ATRP program is the John Deere parcel. Adjacent Ole Lighthouse Marine parcel appears to be the upgradient source of gasoline compounds in groundwater on the Airport property. 2) A Hold Harmless Letter has been received by FDEP. A site inspection of Ole Lighthouse Marine by the Airport and FDEP was performed 4/13/10. FDEP indicated that more current and comprehensive data (from Airport wells and neighboring parcels) is required to determine the exact source of the groundwater contaminants (source could be Ole Lighthouse, or Carter/John Deere Property). 3) Airport is moving forward with collection of groundwater samples from the wells on Airport property to provide current groundwater quality data. This sampling is planned for mid-May 2010.
Additional Area of Concern (Sheltair Discharge)	Discharge at Sheltair Facility	Site Completed. SRCO received from FDEP (issued on Feb. 19, 2010).	1) This site is completed. 2) On 2/22/10, Airport forwarded the FDEP SRCO letter and associated report(s) to St. Andrew Bay and EnSafe.
Additional Area of Concern (Building 1000)	Building 1000 (Former Raytheon Building)	1) AECOM identified this site during the data review and evaluation task. 2) Based on discussion with EnSafe, soil analyses modified to run VOCs, TRPH, and RCRA Metals at all five initial soil sampling locations described in the AECOM proposal. The monitoring well analyses are unchanged. 3) Soil and monitoring well sampling performed mid-February 2010 timeframe.	1) Airport's soil and groundwater assessment results are clean. 2) Airport is waiting on St. Andrew Bay/EnSafe Phase II sampling results and/or input for this area.
Additional Areas of Concern (Maintenance Dept Building and Household Waste Dumping)	Airport	1) Phil Coop Memo dated July 9, 2009. Airport provided official response on October 26, 2009. 2) Household Waste Dump has been removed (material disposed in a C&D Landfill). 3) For Maintenance Dept. Bldg., soil and monitoring well sampling performed mid-February 2010 timeframe.	Airport's soil and groundwater results are clean, with respect to the utility sink investigation. St. Andrew/Ensafe had a single soil hit for TRPH above the Residential SCTL. Nick sent an email to St. Andrew and Ensafe describing the variance in soil results due to different soil sampling intervals (Airport's 0-1 foot compared to St. Andrew's 0-3 inch interval). Airport's 0-1 foot interval is compliant with the FDEP regulations, whereas St. Andrew's 0-3 inch interval does not comply with FDEP regulations for soil assessment and comparison to Florida SCTLs. Airport is waiting on St. Andrew Bay/EnSafe Phase II sampling results for this area.
Additional Areas of Concern (EnSafe's Phase I and Phase II investigation)	TBD	1) Phil Coop provided a summary of results from their investigation work at numerous sites across the Airport. 2) Nick, John, and Joe reviewed the package and presented the Airport's position with St. Andrew and Ensafe on a conference call on March 8, 2010. 3) Airport viewed there was sufficient quality of data to move forward with two AOCs, the Maintenance Bldg. AST area and the private hangers. For the other sites, Airport conveyed that the data were considered screening (as previously discussed with St. Andrew/Ensafe) and that additional sampling per Florida regulations and Standard Operating Procedures (SOPs) were required to drive assessment and cleanup considerations/decisions.	1) Airport is updating its due diligence. Airport has contracted its own supplemental Phase I that is being performed by PBS&J. 2) St. Andrew Bay/EnSafe Phase II investigation is ongoing. Updated site fact sheets with Phase II data summary were provided to Airport on 5/3/10 and 5/4/10 for Spurlin Industries, FDOT area, and former FAA USTS. 3) On April 22, 2010, Airport received a letter from St. Andrew Bay/DLA Piper addressing several sites from Ensafe's initial sampling/screening work. Airport is reviewing the comments and is preparing a response. Airport is waiting on the additional Phase II data for the sites numbered as 2 through 6 in the DLA Piper letter.

B-4 – Ensafe. Map ID: AK – Former FAA USTs; May 4, 2010.

## **LOCATION**

Underground storage tanks (USTs) were registered to the Federal Aviation Authority (FAA) Air Traffic Control Tower at 3457 Airport Road and at the Panama Airport Trail VORTAC navigational aid.

## **BACKGROUND AND REGULATORY RESEARCH**

The FAA Air Traffic Control Tower is approximately 300 feet east of the PFN Main Terminal building. One 550-gallon UST was removed in May 1992. According to a Closure Assessment Form obtained from the Bay County Public Health Unit, no soil or groundwater contamination was reportedly detected during tank removal and no open violations concerning tank compliance was noted in the database. However no analytical reports have been located.

The FAA also operates a VORTAC navigational aid located between the two runways in the north portion of the subject property. One 550-gallon UST was removed near the VORTAC in May 1992. According to the Bay County Public Health Unit Closure Assessment Form, no soil or groundwater contamination was detected during tank removal. However no analytical reports have been located.

## **PREVIOUS INVESTIGATIONS**

No previous investigations of the subject property have been conducted as a result of operating, or during removal of, the FAA USTs.

## **ENSAFE 2010 PHASE II ESA**

Confirmation analytical results for the UST closures were not obtained; therefore, EnSafe conducted soil and groundwater sampling near the former UST locations to confirm that contamination is not present exceeding residential standards for VOCs, SVOCs, and TRPH.

## **FAA VORTAC UST**

EnSafe advanced a soil boring (PFNS2202) to 7 feet bgs using a hand auger southeast of the FAA VORTAC on April 5, 2010. Soil samples were collected from 2 to 4 feet bgs (PFNS220204) and 6 to 7 feet bgs (PFNS220207). The base of the tank was at 6 feet bgs (a 48-inch diameter tank under 2 feet of soil covered by 3 inches of asphalt). Although petroleum odors were observed, no organic vapors were detected during field screening. Using DPT, a temporary well (PFN22TW02) was set at 3 to 8 feet bgs. Soil and groundwater samples were analyzed for TRPH, VOCs, and SVOCs.



## **Analytical Results**

The PFNS220204 soil sample contained benzo(a)pyrene above the Residential SCTL of 0.20 mg/kg. Both samples contained TRPH and 11 SVOCs, with the SVOC concentrations decreasing by an order of magnitude from 4 to 7 feet bgs. Neither TRPH nor SVOCs were detected in groundwater.

#### **FAA Tower UST**

EnSafe advanced a soil boring (PFNS2201) to 10 feet bgs using a hand auger northeast of the FAA Tower on April 5, 2010. Soil samples were collected from 5 to 7 feet bgs (PFNS220107) and 9 to 10 feet bgs (PFNS220110). Lithology encountered was light brown wet sand to 4 feet bgs; from 5 to 10 feet bgs, the sand graded to sandy woody plat material. No odors were detected; organic vapors were detected from 0.3 to 0.7 ppm. Using DPT, a temporary well (PFN22TW01) was set at 5 to 10 feet bgs. Soil and groundwater samples were analyzed for TRPH, VOCs, and SVOCs.

#### **Analytical Results**

TRPH was detected at 22 mg/kg at 7 feet bgs and at 67 mg/kg at 10 feet bgs; TRPH was not detected in groundwater.

#### **RECOMMENDATIONS**

The SVOC detections – including the Residential SCTL exceedance of benzo(a)pyrene – in the soil boring advanced near the VORTAC indicates additional investigation in the former UST location is warranted. We further recommend that FAA be contacted to determine as nearly as possible the location of the former UST at the FAA Tower. Further investigation, if any, would depend on that location's proximity to the recent sampling locations.



## ANALYTICAL REPORT

Job Number: 640-27033-1

Job Description: Panama City GW and Soil Sampling

For:  
EnSafe, Inc.  
308 N. Peters Road  
Suite 200  
Knoxville, TN 37922  
Attention: Mr. Robert Smith



Approved for release.  
Tim Preston  
Project Manager II  
4/21/2010 11:07 AM

Tim Preston  
Project Manager II  
[timothyr.preston@testamericainc.com](mailto:timothyr.preston@testamericainc.com)  
04/21/2010

cc: Mr. Phil Coop  
Ms. Wendy Zayac

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the TestAmerica Project Manager who signed this test report. Measurement uncertainty data, as referenced in Section 20.12 of the TestAmerica Tallahassee Quality Assurance Manual, are available upon request.

TestAmerica Tallahassee Florida Department of Health Certification No. E81005

TestAmerica Laboratories, Inc.

TestAmerica Tallahassee 2846 Industrial Plaza Drive, Tallahassee, FL 32301

Tel (850) 878-3994 Fax (850) 878-9504 [www.testamericainc.com](http://www.testamericainc.com)



## EXECUTIVE SUMMARY - Detections

Client: EnSafe, Inc.

Job Number: 640-27033-1

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
<b>640-27033-1 PFNS220107</b>					
Acetone	0.013	I	0.048	mg/Kg	8260C
Bis(2-ethylhexyl) phthalate	0.061	I V	0.40	mg/Kg	8270C
Total Petroleum Hydrocarbons (C8-C40)	22		12	mg/Kg	FL-PRO
Percent Solids	82		0.00010	%	Moisture
<b>640-27033-2 PFNS220110</b>					
Acetone	0.036	I	0.051	mg/Kg	8260C
Methylene Chloride	0.0013	I V	0.0051	mg/Kg	8260C
Bis(2-ethylhexyl) phthalate	0.077	I V	0.43	mg/Kg	8270C
Total Petroleum Hydrocarbons (C8-C40)	67		13	mg/Kg	FL-PRO
Percent Solids	77		0.00010	%	Moisture
<b>640-27033-3 PFNS220204</b>					
Acetone	0.077		0.049	mg/Kg	8260C
Methylene Chloride	0.0021	I V	0.0049	mg/Kg	8260C
Anthracene	0.035	I	0.36	mg/Kg	8270C
Benzo[a]anthracene	0.19	I	0.36	mg/Kg	8270C
Benzo[a]pyrene	0.20	I	0.36	mg/Kg	8270C
Benzo[b]fluoranthene	0.25	I	0.36	mg/Kg	8270C
Benzo[g,h,i]perylene	0.12	I	0.36	mg/Kg	8270C
Benzo[k]fluoranthene	0.12	I	0.36	mg/Kg	8270C
Bis(2-ethylhexyl) phthalate	0.062	I V	0.36	mg/Kg	8270C
Chrysene	0.22	I	0.36	mg/Kg	8270C
Dibenz(a,h)anthracene	0.037	I	0.36	mg/Kg	8270C
Fluoranthene	0.38	I	0.36	mg/Kg	8270C
Indeno[1,2,3-cd]pyrene	0.094	I	0.36	mg/Kg	8270C
Phenanthrene	0.21	I	0.36	mg/Kg	8270C
Pyrene	0.35	I	0.36	mg/Kg	8270C
Total Petroleum Hydrocarbons (C8-C40)	30		11	mg/Kg	FL-PRO
Percent Solids	92		0.00010	%	Moisture

## EXECUTIVE SUMMARY - Detections

Client: EnSafe, Inc.

Job Number: 640-27033-1

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
<b>640-27033-4</b>	<b>PFNS220207</b>				
Methylene Chloride	0.0011	V	0.0055	mg/Kg	8260C
Benzo[a]anthracene	0.052		0.40	mg/Kg	8270C
Benzo[a]pyrene	0.049		0.40	mg/Kg	8270C
Benzo[b]fluoranthene	0.059		0.40	mg/Kg	8270C
Benzo[g,h,i]perylene	0.037		0.40	mg/Kg	8270C
Benzo[k]fluoranthene	0.029		0.40	mg/Kg	8270C
Bis(2-ethylhexyl) phthalate	0.075	V	0.40	mg/Kg	8270C
Chrysene	0.059		0.40	mg/Kg	8270C
Fluoranthene	0.084		0.40	mg/Kg	8270C
Indeno[1,2,3-cd]pyrene	0.031		0.40	mg/Kg	8270C
Phenanthrene	0.043		0.40	mg/Kg	8270C
Pyrene	0.086		0.40	mg/Kg	8270C
Total Petroleum Hydrocarbons (C8-C40)	24		12	mg/Kg	FL-PRO
Percent Solids	82		0.00010	%	Moisture
<b>640-27033-5</b>	<b>PFNS230101</b>				
Aluminum	1500	V	18	mg/Kg	6010B
Arsenic	0.51		0.88	mg/Kg	6010B
Barium	1.8		0.88	mg/Kg	6010B
Calcium	80		44	mg/Kg	6010B
Chromium	2.4		0.88	mg/Kg	6010B
Copper	0.73		1.8	mg/Kg	6010B
Iron	530		4.4	mg/Kg	6010B
Potassium	25		88	mg/Kg	6010B
Magnesium	44		44	mg/Kg	6010B
Manganese	1.2		0.88	mg/Kg	6010B
Nickel	0.46		3.5	mg/Kg	6010B
Lead	1.4		0.44	mg/Kg	6010B
Antimony	0.69	V	1.8	mg/Kg	6010B
Selenium	0.65		0.88	mg/Kg	6010B
Vanadium	3.2		0.88	mg/Kg	6010B
Zinc	0.81		1.8	mg/Kg	6010B
Percent Solids	97		0.00010	%	Moisture

## SAMPLE SUMMARY

Client: EnSafe, Inc.

Job Number: 640-27033-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
640-27033-1	PFNS220107	Solid	04/05/2010 1320	04/07/2010 0700
640-27033-2	PFNS220110	Solid	04/05/2010 1330	04/07/2010 0700
640-27033-3	PFNS220204	Solid	04/05/2010 1415	04/07/2010 0700
640-27033-4	PFNS220207	Solid	04/05/2010 1420	04/07/2010 0700
640-27033-5	PFNS230101	Solid	04/05/2010 1520	04/07/2010 0700
640-27033-6	PFNS230104	Solid	04/05/2010 1530	04/07/2010 0700
640-27033-6MS	PFNS230104	Solid	04/05/2010 1530	04/07/2010 0700
640-27033-6MSD	PFNS230104	Solid	04/05/2010 1530	04/07/2010 0700
640-27033-7	PFNS230107	Solid	04/05/2010 1545	04/07/2010 0700
640-27033-8TB	PFNT040510	Water	04/05/2010 1300	04/07/2010 0700
640-27033-9	PFNS240102	Solid	04/06/2010 0930	04/07/2010 0700
640-27033-10	PFNS240104	Solid	04/06/2010 0945	04/07/2010 0700
640-27033-11FD	PFNC240104	Solid	04/06/2010 0945	04/07/2010 0700
640-27033-12	PFNS240202	Solid	04/06/2010 1030	04/07/2010 0700
640-27033-13	PFNS240204	Solid	04/06/2010 1040	04/07/2010 0700
640-27033-14	PFNS240301	Solid	04/06/2010 1050	04/07/2010 0700
640-27033-15	PFNS240401	Solid	04/06/2010 1130	04/07/2010 0700
640-27033-16	PFNS250102	Solid	04/06/2010 1430	04/07/2010 0700
640-27033-17	PFNS250104	Solid	04/06/2010 1435	04/07/2010 0700
640-27033-18	PFNS250201	Solid	04/06/2010 1500	04/07/2010 0700

# Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

Client Sample ID: PFNS220107

Lab Sample ID: 640-27033-1  
Client Matrix: Solid

% Moisture: 17.7

Date Sampled: 04/05/2010 1320  
Date Received: 04/07/2010 0700

## 8260C Volatile Organic Compounds by GC/MS

Method:	8260C	Analysis Batch: 640-67483	Instrument ID:	VME
Preparation:	5035	Prep Batch: 640-67444	Lab File ID:	1E040809.D
Dilution:	1.0		Initial Weight/Volume:	6.29 g
Date Analyzed:	04/08/2010 1344		Final Weight/Volume:	5 g
Date Prepared:	04/08/2010 1157			

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
1,1,1,2-Tetrachloroethane		0.00061	U	0.00061	0.0048
1,1,1-Trichloroethane		0.0011	U	0.0011	0.0048
1,1,2,2-Tetrachloroethane		0.00097	U	0.00097	0.0048
1,1,2-Trichloroethane		0.00085	U	0.00085	0.0048
1,1-Dichloroethane		0.00038	U	0.00038	0.0048
1,1-Dichloroethene		0.0014	U	0.0014	0.0048
1,1-Dichloropropene		0.00085	U	0.00085	0.0048
1,2,3-Trichlorobenzene		0.00059	U	0.00059	0.0048
1,2,3-Trichloropropane		0.00097	U	0.00097	0.0048
1,2,4-Trichlorobenzene		0.0013	U	0.0013	0.0048
1,2,4-Trimethylbenzene		0.00053	U	0.00053	0.0048
1,2-Dibromo-3-Chloropropane		0.0014	U	0.0014	0.0097
1,2-Dichlorobenzene		0.00067	U	0.00067	0.0048
1,2-Dichloroethane		0.00070	U	0.00070	0.0048
1,2-Dichloroethene, Total		0.00043	U	0.00043	0.0048
1,2-Dichloropropane		0.0014	U	0.0014	0.0048
1,3,5-Trimethylbenzene		0.00046	U	0.00046	0.0048
1,3-Dichlorobenzene		0.00097	U	0.00097	0.0048
1,3-Dichloropropane		0.00096	U	0.00096	0.0048
1,4-Dichlorobenzene		0.00070	U	0.00070	0.0048
2,2-Dichloropropane		0.00060	U	0.00060	0.0048
2-Butanone (MEK)		0.015	U	0.015	0.024
2-Chlorotoluene		0.00051	U	0.00051	0.0048
2-Hexanone		0.0097	U	0.0097	0.024
4-Chlorotoluene		0.00058	U	0.00058	0.0048
4-Isopropyltoluene		0.00041	U	0.00041	0.0048
4-Methyl-2-pentanone (MIBK)		0.012	U	0.012	0.024
Acetone		0.013	I	0.013	0.048
Benzene		0.00025	U	0.00025	0.0048
Bromobenzene		0.00067	U	0.00067	0.0048
Bromoform		0.0011	U	0.0011	0.0048
Bromomethane		0.0023	U	0.0023	0.0097
Carbon disulfide		0.00051	U	0.00051	0.0048
Carbon tetrachloride		0.00038	U	0.00038	0.0048
Chlorobenzene		0.00054	U	0.00054	0.0048
Chlorobromomethane		0.0012	U	0.0012	0.0048
Chlorodibromomethane		0.00073	U	0.00073	0.0048
Chloroethane		0.00070	U	0.00070	0.0097
Chloroform		0.00043	U	0.00043	0.0048
Chloromethane		0.00025	U	0.00025	0.0097
cis-1,2-Dichloroethene		0.00057	U	0.00057	0.0048
cis-1,3-Dichloropropene		0.00066	U	0.00066	0.0048
Dibromomethane		0.0020	U	0.0020	0.0048
Dichlorobromomethane		0.00097	U	0.00097	0.0048
Dichlorodifluoromethane		0.00097	U	0.00097	0.0048
Ethylbenzene		0.00030	U	0.00030	0.0048

# Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

Client Sample ID: PFNS220107

Lab Sample ID: 640-27033-1  
Client Matrix: Solid

% Moisture: 17.7

Date Sampled: 04/05/2010 1320  
Date Received: 04/07/2010 0700

## 8260C Volatile Organic Compounds by GC/MS

Method:	8260C	Analysis Batch:	640-67483	Instrument ID:	VME
Preparation:	5035	Prep Batch:	640-67444	Lab File ID:	1E040809.D
Dilution:	1.0			Initial Weight/Volume:	6.29 g
Date Analyzed:	04/08/2010 1344			Final Weight/Volume:	5 g
Date Prepared:	04/08/2010 1157				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
Ethylene Dibromide		0.0013	U	0.0013	0.0048
Hexachlorobutadiene		0.00070	U	0.00070	0.0048
Isopropylbenzene		0.00044	U	0.00044	0.0048
Methylene Chloride		0.00097	U	0.00097	0.0048
m-Xylene & p-Xylene		0.00069	U	0.00069	0.0097
Naphthalene		0.0011	U	0.0011	0.0048
n-Butylbenzene		0.00043	U	0.00043	0.0048
N-Propylbenzene		0.00063	U	0.00063	0.0048
o-Xylene		0.00038	U	0.00038	0.0048
sec-Butylbenzene		0.00063	U	0.00063	0.0048
Styrene		0.00041	U	0.00041	0.0048
tert-Butylbenzene		0.00041	U	0.00041	0.0048
Tetrachloroethene		0.00061	U	0.00061	0.0048
Toluene		0.00058	U	0.00058	0.0048
trans-1,2-Dichloroethene		0.00043	U	0.00043	0.0048
trans-1,3-Dichloropropene		0.0013	U	0.0013	0.0048
Trichloroethene		0.00083	U	0.00083	0.0048
Trichlorofluoromethane		0.0014	U	0.0014	0.0048
Vinyl chloride		0.00058	U	0.00058	0.0097
Xylenes, Total		0.00069	U	0.00069	0.0097
Methyl tert-butyl ether		0.00042	U	0.00042	0.0048
Surrogate		%Rec	Qualifier	Acceptance Limits	
4-Bromofluorobenzene		91		67 - 130	
Dibromofluoromethane		101		61 - 130	
Toluene-d8 (Surr)		94		70 - 130	

# Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

Client Sample ID: PFNS220110

Lab Sample ID: 640-27033-2  
Client Matrix: Solid

% Moisture: 23.4

Date Sampled: 04/05/2010 1330  
Date Received: 04/07/2010 0700

## 8260C Volatile Organic Compounds by GC/MS

Method:	8260C	Analysis Batch:	640-67483	Instrument ID:	VME
Preparation:	5035	Prep Batch:	640-67444	Lab File ID:	1E040810.D
Dilution:	1.0			Initial Weight/Volume:	6.45 g
Date Analyzed:	04/08/2010 1412			Final Weight/Volume:	5 g
Date Prepared:	04/08/2010 1157				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
1,1,1,2-Tetrachloroethane		0.00064	U	0.00064	0.0051
1,1,1-Trichloroethane		0.0011	U	0.0011	0.0051
1,1,2,2-Tetrachloroethane		0.0010	U	0.0010	0.0051
1,1,2-Trichloroethane		0.00089	U	0.00089	0.0051
1,1-Dichloroethane		0.00039	U	0.00039	0.0051
1,1-Dichloroethene		0.0014	U	0.0014	0.0051
1,1-Dichloropropene		0.00089	U	0.00089	0.0051
1,2,3-Trichlorobenzene		0.00062	U	0.00062	0.0051
1,2,3-Trichloropropane		0.0010	U	0.0010	0.0051
1,2,4-Trichlorobenzene		0.0013	U	0.0013	0.0051
1,2,4-Trimethylbenzene		0.00056	U	0.00056	0.0051
1,2-Dibromo-3-Chloropropane		0.0014	U	0.0014	0.010
1,2-Dichlorobenzene		0.00070	U	0.00070	0.0051
1,2-Dichloroethane		0.00073	U	0.00073	0.0051
1,2-Dichloroethene, Total		0.00046	U	0.00046	0.0051
1,2-Dichloropropane		0.0015	U	0.0015	0.0051
1,3,5-Trimethylbenzene		0.00049	U	0.00049	0.0051
1,3-Dichlorobenzene		0.0010	U	0.0010	0.0051
1,3-Dichloropropane		0.0010	U	0.0010	0.0051
1,4-Dichlorobenzene		0.00074	U	0.00074	0.0051
2,2-Dichloropropane		0.00063	U	0.00063	0.0051
2-Butanone (MEK)		0.016	U	0.016	0.025
2-Chlorotoluene		0.00054	U	0.00054	0.0051
2-Hexanone		0.010	U	0.010	0.025
4-Chlorotoluene		0.00061	U	0.00061	0.0051
4-Isopropyltoluene		0.00043	U	0.00043	0.0051
4-Methyl-2-pentanone (MIBK)		0.012	U	0.012	0.025
Acetone		0.036	I	0.013	0.051
Benzene		0.00026	U	0.00026	0.0051
Bromobenzene		0.00070	U	0.00070	0.0051
Bromoform		0.0011	U	0.0011	0.0051
Bromomethane		0.0024	U	0.0024	0.010
Carbon disulfide		0.00054	U	0.00054	0.0051
Carbon tetrachloride		0.00039	U	0.00039	0.0051
Chlorobenzene		0.00057	U	0.00057	0.0051
Chlorobromomethane		0.0012	U	0.0012	0.0051
Chlorodibromomethane		0.00077	U	0.00077	0.0051
Chloroethane		0.00074	U	0.00074	0.010
Chloroform		0.00046	U	0.00046	0.0051
Chloromethane		0.00026	U	0.00026	0.010
cis-1,2-Dichloroethene		0.00060	U	0.00060	0.0051
cis-1,3-Dichloropropene		0.00069	U	0.00069	0.0051
Dibromomethane		0.0021	U	0.0021	0.0051
Dichlorobromomethane		0.0010	U	0.0010	0.0051
Dichlorodifluoromethane		0.0010	U	0.0010	0.0051
Ethylbenzene		0.00031	U	0.00031	0.0051

## Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

Client Sample ID: PFNS220110

Lab Sample ID: 640-27033-2  
Client Matrix: Solid

% Moisture: 23.4

Date Sampled: 04/05/2010 1330  
Date Received: 04/07/2010 0700

### 8260C Volatile Organic Compounds by GC/MS

Method:	8260C	Analysis Batch: 640-67483	Instrument ID:	VME
Preparation:	5035	Prep Batch: 640-67444	Lab File ID:	1E040810.D
Dilution:	1.0		Initial Weight/Volume:	6.45 g
Date Analyzed:	04/08/2010 1412		Final Weight/Volume:	5 g
Date Prepared:	04/08/2010 1157			

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
Ethylene Dibromide		0.0013	U	0.0013	0.0051
Hexachlorobutadiene		0.00073	U	0.00073	0.0051
Isopropylbenzene		0.00047	U	0.00047	0.0051
Methylene Chloride		0.0013	I V	0.0010	0.0051
m-Xylene & p-Xylene		0.00072	U	0.00072	0.010
Naphthalene		0.0011	U	0.0011	0.0051
n-Butylbenzene		0.00046	U	0.00046	0.0051
N-Propylbenzene		0.00066	U	0.00066	0.0051
o-Xylene		0.00039	U	0.00039	0.0051
sec-Butylbenzene		0.00066	U	0.00066	0.0051
Styrene		0.00043	U	0.00043	0.0051
tert-Butylbenzene		0.00043	U	0.00043	0.0051
Tetrachloroethene		0.00064	U	0.00064	0.0051
Toluene		0.00061	U	0.00061	0.0051
trans-1,2-Dichloroethene		0.00046	U	0.00046	0.0051
trans-1,3-Dichloropropene		0.0013	U	0.0013	0.0051
Trichloroethene		0.00087	U	0.00087	0.0051
Trichlorofluoromethane		0.0014	U	0.0014	0.0051
Vinyl chloride		0.00061	U	0.00061	0.010
Xylenes, Total		0.00072	U	0.00072	0.010
Methyl tert-butyl ether		0.00045	U	0.00045	0.0051
Surrogate		%Rec	Qualifier	Acceptance Limits	
4-Bromofluorobenzene		73		67 - 130	
Dibromofluoromethane		101		61 - 130	
Toluene-d8 (Surr)		94		70 - 130	

# Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

Client Sample ID: PFNS220204

Lab Sample ID: 640-27033-3  
Client Matrix: Solid

% Moisture: 7.7

Date Sampled: 04/05/2010 1415  
Date Received: 04/07/2010 0700

## 8260C Volatile Organic Compounds by GC/MS

Method:	8260C	Analysis Batch: 640-67483	Instrument ID:	VME
Preparation:	5035	Prep Batch: 640-67444	Lab File ID:	1E040811.D
Dilution:	1.0		Initial Weight/Volume:	5.54 g
Date Analyzed:	04/08/2010 1439		Final Weight/Volume:	5 g
Date Prepared:	04/08/2010 1157			

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
1,1,1,2-Tetrachloroethane		0.00062	U	0.00062	0.0049
1,1,1-Trichloroethane		0.0011	U	0.0011	0.0049
1,1,2,2-Tetrachloroethane		0.00098	U	0.00098	0.0049
1,1,2-Trichloroethane		0.00086	U	0.00086	0.0049
1,1-Dichloroethane		0.00038	U	0.00038	0.0049
1,1-Dichloroethene		0.0014	U	0.0014	0.0049
1,1-Dichloropropene		0.00086	U	0.00086	0.0049
1,2,3-Trichlorobenzene		0.00060	U	0.00060	0.0049
1,2,3-Trichloropropane		0.00098	U	0.00098	0.0049
1,2,4-Trichlorobenzene		0.0013	U	0.0013	0.0049
1,2,4-Trimethylbenzene		0.00054	U	0.00054	0.0049
1,2-Dibromo-3-Chloropropane		0.0014	U	0.0014	0.0098
1,2-Dichlorobenzene		0.00068	U	0.00068	0.0049
1,2-Dichloroethane		0.00070	U	0.00070	0.0049
1,2-Dichloroethene, Total		0.00044	U	0.00044	0.0049
1,2-Dichloropropane		0.0015	U	0.0015	0.0049
1,3,5-Trimethylbenzene		0.00047	U	0.00047	0.0049
1,3-Dichlorobenzene		0.00098	U	0.00098	0.0049
1,3-Dichloropropane		0.00097	U	0.00097	0.0049
1,4-Dichlorobenzene		0.00071	U	0.00071	0.0049
2,2-Dichloropropane		0.00061	U	0.00061	0.0049
2-Butanone (MEK)		0.016	U	0.016	0.024
2-Chlorotoluene		0.00052	U	0.00052	0.0049
2-Hexanone		0.0098	U	0.0098	0.024
4-Chlorotoluene		0.00059	U	0.00059	0.0049
4-Isopropyltoluene		0.00041	U	0.00041	0.0049
4-Methyl-2-pentanone (MIBK)		0.012	U	0.012	0.024
Acetone		0.077		0.013	0.049
Benzene		0.00025	U	0.00025	0.0049
Bromobenzene		0.00068	U	0.00068	0.0049
Bromoform		0.0011	U	0.0011	0.0049
Bromomethane		0.0023	U	0.0023	0.0098
Carbon disulfide		0.00052	U	0.00052	0.0049
Carbon tetrachloride		0.00038	U	0.00038	0.0049
Chlorobenzene		0.00055	U	0.00055	0.0049
Chlorobromomethane		0.0012	U	0.0012	0.0049
Chlorodibromomethane		0.00074	U	0.00074	0.0049
Chloroethane		0.00071	U	0.00071	0.0098
Chloroform		0.00044	U	0.00044	0.0049
Chloromethane		0.00025	U	0.00025	0.0098
cis-1,2-Dichloroethene		0.00058	U	0.00058	0.0049
cis-1,3-Dichloropropene		0.00067	U	0.00067	0.0049
Dibromomethane		0.0021	U	0.0021	0.0049
Dichlorobromomethane		0.00098	U	0.00098	0.0049
Dichlorodifluoromethane		0.00098	U	0.00098	0.0049
Ethylbenzene		0.00030	U	0.00030	0.0049

# Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

Client Sample ID: PFNS220204

Lab Sample ID: 640-27033-3  
Client Matrix: Solid

% Moisture: 7.7

Date Sampled: 04/05/2010 1415  
Date Received: 04/07/2010 0700

## 8260C Volatile Organic Compounds by GC/MS

Method:	8260C	Analysis Batch:	640-67483	Instrument ID:	VME
Preparation:	5035	Prep Batch:	640-67444	Lab File ID:	1E040811.D
Dilution:	1.0			Initial Weight/Volume:	5.54 g
Date Analyzed:	04/08/2010 1439			Final Weight/Volume:	5 g
Date Prepared:	04/08/2010 1157				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
Ethylene Dibromide		0.0013	U	0.0013	0.0049
Hexachlorobutadiene		0.00070	U	0.00070	0.0049
Isopropylbenzene		0.00045	U	0.00045	0.0049
Methylene Chloride		0.0021	I V	0.00098	0.0049
m-Xylene & p-Xylene		0.00069	U	0.00069	0.0098
Naphthalene		0.0011	U	0.0011	0.0049
n-Butylbenzene		0.00044	U	0.00044	0.0049
N-Propylbenzene		0.00064	U	0.00064	0.0049
o-Xylene		0.00038	U	0.00038	0.0049
sec-Butylbenzene		0.00064	U	0.00064	0.0049
Styrene		0.00041	U	0.00041	0.0049
tert-Butylbenzene		0.00041	U	0.00041	0.0049
Tetrachloroethene		0.00062	U	0.00062	0.0049
Toluene		0.00059	U	0.00059	0.0049
trans-1,2-Dichloroethene		0.00044	U	0.00044	0.0049
trans-1,3-Dichloropropene		0.0013	U	0.0013	0.0049
Trichloroethene		0.00084	U	0.00084	0.0049
Trichlorofluoromethane		0.0014	U	0.0014	0.0049
Vinyl chloride		0.00059	U	0.00059	0.0098
Xylenes, Total		0.00069	U	0.00069	0.0098
Methyl tert-butyl ether		0.00043	U	0.00043	0.0049
Surrogate		%Rec	Qualifier	Acceptance Limits	
4-Bromofluorobenzene		86		67 - 130	
Dibromofluoromethane		99		61 - 130	
Toluene-d8 (Surr)		96		70 - 130	

# Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

Client Sample ID: PFNS220207

Lab Sample ID: 640-27033-4  
Client Matrix: Solid

% Moisture: 17.9

Date Sampled: 04/05/2010 1420  
Date Received: 04/07/2010 0700

## 8260C Volatile Organic Compounds by GC/MS

Method:	8260C	Analysis Batch:	640-67483	Instrument ID:	VME
Preparation:	5035	Prep Batch:	640-67444	Lab File ID:	1E040812.D
Dilution:	1.0			Initial Weight/Volume:	5.56 g
Date Analyzed:	04/08/2010 1507			Final Weight/Volume:	5 g
Date Prepared:	04/08/2010 1157				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
1,1,1,2-Tetrachloroethane		0.00069	U	0.00069	0.0055
1,1,1-Trichloroethane		0.0012	U	0.0012	0.0055
1,1,2,2-Tetrachloroethane		0.0011	U	0.0011	0.0055
1,1,2-Trichloroethane		0.00096	U	0.00096	0.0055
1,1-Dichloroethane		0.00043	U	0.00043	0.0055
1,1-Dichloroethene		0.0015	U	0.0015	0.0055
1,1-Dichloropropene		0.00096	U	0.00096	0.0055
1,2,3-Trichlorobenzene		0.00067	U	0.00067	0.0055
1,2,3-Trichloropropane		0.0011	U	0.0011	0.0055
1,2,4-Trichlorobenzene		0.0014	U	0.0014	0.0055
1,2,4-Trimethylbenzene		0.00060	U	0.00060	0.0055
1,2-Dibromo-3-Chloropropane		0.0015	U	0.0015	0.011
1,2-Dichlorobenzene		0.00076	U	0.00076	0.0055
1,2-Dichloroethane		0.00079	U	0.00079	0.0055
1,2-Dichloroethene, Total		0.00049	U	0.00049	0.0055
1,2-Dichloropropane		0.0016	U	0.0016	0.0055
1,3,5-Trimethylbenzene		0.00053	U	0.00053	0.0055
1,3-Dichlorobenzene		0.0011	U	0.0011	0.0055
1,3-Dichloropropane		0.0011	U	0.0011	0.0055
1,4-Dichlorobenzene		0.00080	U	0.00080	0.0055
2,2-Dichloropropane		0.00068	U	0.00068	0.0055
2-Butanone (MEK)		0.018	U	0.018	0.027
2-Chlorotoluene		0.00058	U	0.00058	0.0055
2-Hexanone		0.011	U	0.011	0.027
4-Chlorotoluene		0.00066	U	0.00066	0.0055
4-Isopropyltoluene		0.00046	U	0.00046	0.0055
4-Methyl-2-pentanone (MIBK)		0.013	U	0.013	0.027
Acetone		0.014	U	0.014	0.055
Benzene		0.00028	U	0.00028	0.0055
Bromobenzene		0.00076	U	0.00076	0.0055
Bromoform		0.0012	U	0.0012	0.0055
Bromomethane		0.0026	U	0.0026	0.011
Carbon disulfide		0.00058	U	0.00058	0.0055
Carbon tetrachloride		0.00043	U	0.00043	0.0055
Chlorobenzene		0.00061	U	0.00061	0.0055
Chlorobromomethane		0.0013	U	0.0013	0.0055
Chlorodibromomethane		0.00083	U	0.00083	0.0055
Chloroethane		0.00080	U	0.00080	0.011
Chloroform		0.00049	U	0.00049	0.0055
Chloromethane		0.00028	U	0.00028	0.011
cis-1,2-Dichloroethene		0.00065	U	0.00065	0.0055
cis-1,3-Dichloropropene		0.00074	U	0.00074	0.0055
Dibromomethane		0.0023	U	0.0023	0.0055
Dichlorobromomethane		0.0011	U	0.0011	0.0055
Dichlorodifluoromethane		0.0011	U	0.0011	0.0055
Ethylbenzene		0.00034	U	0.00034	0.0055

## Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

Client Sample ID: PFNS220207

Lab Sample ID: 640-27033-4  
Client Matrix: Solid

% Moisture: 17.9

Date Sampled: 04/05/2010 1420  
Date Received: 04/07/2010 0700

### 8260C Volatile Organic Compounds by GC/MS

Method:	8260C	Analysis Batch: 640-67483	Instrument ID:	VME
Preparation:	5035	Prep Batch: 640-67444	Lab File ID:	1E040812.D
Dilution:	1.0		Initial Weight/Volume:	5.56 g
Date Analyzed:	04/08/2010 1507		Final Weight/Volume:	5 g
Date Prepared:	04/08/2010 1157			

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
Ethylene Dibromide		0.0014	U	0.0014	0.0055
Hexachlorobutadiene		0.00079	U	0.00079	0.0055
Isopropylbenzene		0.00050	U	0.00050	0.0055
Methylene Chloride		0.0011	I V	0.0011	0.0055
m-Xylene & p-Xylene		0.00078	U	0.00078	0.011
Naphthalene		0.0012	U	0.0012	0.0055
n-Butylbenzene		0.00049	U	0.00049	0.0055
N-Propylbenzene		0.00071	U	0.00071	0.0055
o-Xylene		0.00043	U	0.00043	0.0055
sec-Butylbenzene		0.00071	U	0.00071	0.0055
Styrene		0.00046	U	0.00046	0.0055
tert-Butylbenzene		0.00046	U	0.00046	0.0055
Tetrachloroethene		0.00069	U	0.00069	0.0055
Toluene		0.00066	U	0.00066	0.0055
trans-1,2-Dichloroethene		0.00049	U	0.00049	0.0055
trans-1,3-Dichloropropene		0.0014	U	0.0014	0.0055
Trichloroethene		0.00094	U	0.00094	0.0055
Trichlorofluoromethane		0.0015	U	0.0015	0.0055
Vinyl chloride		0.00066	U	0.00066	0.011
Xylenes, Total		0.00078	U	0.00078	0.011
Methyl tert-butyl ether		0.00048	U	0.00048	0.0055
Surrogate		%Rec	Qualifier	Acceptance Limits	
4-Bromofluorobenzene		86		67 - 130	
Dibromofluoromethane		100		61 - 130	
Toluene-d8 (Surr)		96		70 - 130	

# Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

Client Sample ID: PFNS220107

Lab Sample ID: 640-27033-1

Date Sampled: 04/05/2010 1320

Client Matrix: Solid

% Moisture: 17.7

Date Received: 04/07/2010 0700

## 8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	640-67695	Instrument ID:	SMC
Preparation:	3550B	Prep Batch:	640-67467	Lab File ID:	C0041413.D
Dilution:	1.0			Initial Weight/Volume:	00030.08 g
Date Analyzed:	04/14/2010 1538			Final Weight/Volume:	1.0 mL
Date Prepared:	04/09/2010 0945			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
1,2,4-Trichlorobenzene		0.016	U	0.016	0.40
1,2-Dichlorobenzene		0.030	U	0.030	0.40
1,3-Dichlorobenzene		0.024	U	0.024	0.40
1,4-Dichlorobenzene		0.021	U	0.021	0.40
2,4,5-Trichlorophenol		0.071	U	0.071	0.40
2,4,6-Trichlorophenol		0.019	U	0.019	0.40
2,4-Dichlorophenol		0.027	U	0.027	0.40
2,4-Dimethylphenol		0.017	U	0.017	0.40
2,4-Dinitrophenol		0.21	U	0.21	2.1
2,4-Dinitrotoluene		0.019	U	0.019	0.40
2,6-Dinitrotoluene		0.019	U	0.019	0.40
2-Chloronaphthalene		0.021	U	0.021	0.40
2-Chlorophenol		0.021	U	0.021	0.40
2-Methylnaphthalene		0.013	U	0.013	0.40
2-Methylphenol		0.023	U	0.023	0.40
2-Nitroaniline		0.011	U	0.011	2.1
2-Nitrophenol		0.027	U	0.027	0.40
3 & 4 Methylphenol		0.028	U	0.028	0.40
3,3'-Dichlorobenzidine		0.016	U	0.016	0.80
3-Nitroaniline		0.028	U	0.028	2.1
4,6-Dinitro-2-methylphenol		0.21	U	0.21	2.1
4-Bromophenyl phenyl ether		0.022	U	0.022	0.40
4-Chloro-3-methylphenol		0.036	U	0.036	0.40
4-Chloroaniline		0.016	U	0.016	0.80
4-Chlorophenyl phenyl ether		0.017	U	0.017	0.40
4-Nitroaniline		0.028	U	0.028	2.1
4-Nitrophenol		0.25	U	0.25	2.1
Acenaphthene		0.030	U	0.030	0.40
Acenaphthylene		0.052	U	0.052	0.40
Anthracene		0.027	U	0.027	0.40
Benzidine		0.40	U	0.40	3.3
Benzo[a]anthracene		0.015	U	0.015	0.40
Benzo[a]pyrene		0.012	U	0.012	0.40
Benzo[b]fluoranthene		0.0069	U	0.0069	0.40
Benzo[g,h,i]perylene		0.021	U	0.021	0.40
Benzo[k]fluoranthene		0.025	U	0.025	0.40
Benzoic acid		0.40	U	0.40	2.1
Benzyl alcohol		0.029	U	0.029	0.40
Bis(2-chloroethoxy)methane		0.028	U	0.028	0.40
Bis(2-chloroethyl)ether		0.030	U	0.030	0.40
Bis(2-ethylhexyl) phthalate		0.061	I V	0.013	0.40
2,2'-oxybis[1-chloropropane]		0.021	U	0.021	0.40
Butyl benzyl phthalate		0.016	U	0.016	0.40
Chrysene		0.025	U	0.025	0.40
Dibenz(a,h)anthracene		0.015	U	0.015	0.40
Dibenzofuran		0.013	U	0.013	0.40

## Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

Client Sample ID: PFNS220107

Lab Sample ID: 640-27033-1

Date Sampled: 04/05/2010 1320

Client Matrix: Solid

% Moisture: 17.7

Date Received: 04/07/2010 0700

### 8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 640-67695	Instrument ID:	SMC
Preparation:	3550B	Prep Batch: 640-67467	Lab File ID:	C0041413.D
Dilution:	1.0		Initial Weight/Volume:	00030.08 g
Date Analyzed:	04/14/2010 1538		Final Weight/Volume:	1.0 mL
Date Prepared:	04/09/2010 0945		Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
Diethyl phthalate		0.017	U	0.017	0.40
Dimethyl phthalate		0.022	U	0.022	0.40
Di-n-butyl phthalate		0.090	U	0.090	0.40
Di-n-octyl phthalate		0.016	U	0.016	0.40
Fluoranthene		0.023	U	0.023	0.40
Fluorene		0.058	U	0.058	0.40
Hexachlorobenzene		0.030	U	0.030	0.40
Hexachlorobutadiene		0.025	U	0.025	0.40
Hexachlorocyclopentadiene		0.019	U	0.019	0.40
Hexachloroethane		0.024	U	0.024	0.40
Indeno[1,2,3-cd]pyrene		0.017	U	0.017	0.40
Isophorone		0.015	U	0.015	0.40
Naphthalene		0.025	U	0.025	0.40
Nitrobenzene		0.019	U	0.019	0.40
N-Nitrosodimethylamine		0.062	U	0.062	0.40
N-Nitrosodi-n-propylamine		0.019	U	0.019	0.40
N-Nitrosodiphenylamine		0.059	U	0.059	0.40
Pentachlorophenol		0.059	U	0.059	2.1
Phenanthrene		0.028	U	0.028	0.40
Phenol		0.023	U	0.023	0.40
Pyrene		0.019	U	0.019	0.40
Surrogate		%Rec	Qualifier	Acceptance Limits	
2,4,6-Tribromophenol		88		24 - 135	
2-Fluorobiphenyl		80		30 - 135	
2-Fluorophenol		84		27 - 135	
Nitrobenzene-d5		66		22 - 135	
Phenol-d5		76		24 - 135	
Terphenyl-d14		98		36 - 135	

# Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

Client Sample ID: PFNS220110

Lab Sample ID: 640-27033-2  
Client Matrix: Solid

% Moisture: 23.4

Date Sampled: 04/05/2010 1330  
Date Received: 04/07/2010 0700

## 8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	640-67695	Instrument ID:	SMC
Preparation:	3550B	Prep Batch:	640-67467	Lab File ID:	C0041414.D
Dilution:	1.0			Initial Weight/Volume:	00030.04 g
Date Analyzed:	04/14/2010 1601			Final Weight/Volume:	1.0 mL
Date Prepared:	04/09/2010 0945			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
1,2,4-Trichlorobenzene		0.017	U	0.017	0.43
1,2-Dichlorobenzene		0.033	U	0.033	0.43
1,3-Dichlorobenzene		0.026	U	0.026	0.43
1,4-Dichlorobenzene		0.022	U	0.022	0.43
2,4,5-Trichlorophenol		0.077	U	0.077	0.43
2,4,6-Trichlorophenol		0.021	U	0.021	0.43
2,4-Dichlorophenol		0.029	U	0.029	0.43
2,4-Dimethylphenol		0.018	U	0.018	0.43
2,4-Dinitrophenol		0.22	U	0.22	2.2
2,4-Dinitrotoluene		0.021	U	0.021	0.43
2,6-Dinitrotoluene		0.021	U	0.021	0.43
2-Chloronaphthalene		0.022	U	0.022	0.43
2-Chlorophenol		0.022	U	0.022	0.43
2-Methylnaphthalene		0.014	U	0.014	0.43
2-Methylphenol		0.025	U	0.025	0.43
2-Nitroaniline		0.011	U	0.011	2.2
2-Nitrophenol		0.029	U	0.029	0.43
3 & 4 Methylphenol		0.030	U	0.030	0.43
3,3'-Dichlorobenzidine		0.017	U	0.017	0.86
3-Nitroaniline		0.030	U	0.030	2.2
4,6-Dinitro-2-methylphenol		0.22	U	0.22	2.2
4-Bromophenyl phenyl ether		0.023	U	0.023	0.43
4-Chloro-3-methylphenol		0.039	U	0.039	0.43
4-Chloroaniline		0.017	U	0.017	0.86
4-Chlorophenyl phenyl ether		0.018	U	0.018	0.43
4-Nitroaniline		0.030	U	0.030	2.2
4-Nitrophenol		0.27	U	0.27	2.2
Acenaphthene		0.033	U	0.033	0.43
Acenaphthylene		0.056	U	0.056	0.43
Anthracene		0.029	U	0.029	0.43
Benzidine		0.43	U	0.43	3.5
Benzo[a]anthracene		0.016	U	0.016	0.43
Benzo[a]pyrene		0.013	U	0.013	0.43
Benzo[b]fluoranthene		0.0074	U	0.0074	0.43
Benzo[g,h,i]perylene		0.022	U	0.022	0.43
Benzo[k]fluoranthene		0.027	U	0.027	0.43
Benzoic acid		0.43	U	0.43	2.2
Benzyl alcohol		0.031	U	0.031	0.43
Bis(2-chloroethoxy)methane		0.030	U	0.030	0.43
Bis(2-chloroethyl)ether		0.033	U	0.033	0.43
Bis(2-ethylhexyl) phthalate		0.077	I V	0.014	0.43
2,2'-oxybis[1-chloropropane]		0.022	U	0.022	0.43
Butyl benzyl phthalate		0.017	U	0.017	0.43
Chrysene		0.027	U	0.027	0.43
Dibenz(a,h)anthracene		0.016	U	0.016	0.43
Dibenzofuran		0.014	U	0.014	0.43

## Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

Client Sample ID: PFNS220110

Lab Sample ID: 640-27033-2

Date Sampled: 04/05/2010 1330

Client Matrix: Solid

% Moisture: 23.4

Date Received: 04/07/2010 0700

### 8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 640-67695	Instrument ID:	SMC
Preparation:	3550B	Prep Batch: 640-67467	Lab File ID:	C0041414.D
Dilution:	1.0		Initial Weight/Volume:	00030.04 g
Date Analyzed:	04/14/2010 1601		Final Weight/Volume:	1.0 mL
Date Prepared:	04/09/2010 0945		Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
Diethyl phthalate		0.018	U	0.018	0.43
Dimethyl phthalate		0.023	U	0.023	0.43
Di-n-butyl phthalate		0.096	U	0.096	0.43
Di-n-octyl phthalate		0.017	U	0.017	0.43
Fluoranthene		0.025	U	0.025	0.43
Fluorene		0.063	U	0.063	0.43
Hexachlorobenzene		0.033	U	0.033	0.43
Hexachlorobutadiene		0.027	U	0.027	0.43
Hexachlorocyclopentadiene		0.021	U	0.021	0.43
Hexachloroethane		0.026	U	0.026	0.43
Indeno[1,2,3-cd]pyrene		0.018	U	0.018	0.43
Isophorone		0.016	U	0.016	0.43
Naphthalene		0.027	U	0.027	0.43
Nitrobenzene		0.021	U	0.021	0.43
N-Nitrosodimethylamine		0.066	U	0.066	0.43
N-Nitrosodi-n-propylamine		0.021	U	0.021	0.43
N-Nitrosodiphenylamine		0.064	U	0.064	0.43
Pentachlorophenol		0.064	U	0.064	2.2
Phenanthrene		0.030	U	0.030	0.43
Phenol		0.025	U	0.025	0.43
Pyrene		0.021	U	0.021	0.43
Surrogate		%Rec	Qualifier	Acceptance Limits	
2,4,6-Tribromophenol		78		24 - 135	
2-Fluorobiphenyl		75		30 - 135	
2-Fluorophenol		73		27 - 135	
Nitrobenzene-d5		61		22 - 135	
Phenol-d5		68		24 - 135	
Terphenyl-d14		90		36 - 135	

# Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

Client Sample ID: PFNS220204

Lab Sample ID: 640-27033-3  
Client Matrix: Solid

% Moisture: 7.7

Date Sampled: 04/05/2010 1415  
Date Received: 04/07/2010 0700

## 8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	640-67695	Instrument ID:	SMC
Preparation:	3550B	Prep Batch:	640-67467	Lab File ID:	C0041415.D
Dilution:	1.0			Initial Weight/Volume:	00030.02 g
Date Analyzed:	04/14/2010 1625			Final Weight/Volume:	1.0 mL
Date Prepared:	04/09/2010 0945			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
1,2,4-Trichlorobenzene		0.014	U	0.014	0.36
1,2-Dichlorobenzene		0.027	U	0.027	0.36
1,3-Dichlorobenzene		0.022	U	0.022	0.36
1,4-Dichlorobenzene		0.018	U	0.018	0.36
2,4,5-Trichlorophenol		0.064	U	0.064	0.36
2,4,6-Trichlorophenol		0.017	U	0.017	0.36
2,4-Dichlorophenol		0.024	U	0.024	0.36
2,4-Dimethylphenol		0.015	U	0.015	0.36
2,4-Dinitrophenol		0.18	U	0.18	1.8
2,4-Dinitrotoluene		0.017	U	0.017	0.36
2,6-Dinitrotoluene		0.017	U	0.017	0.36
2-Chloronaphthalene		0.018	U	0.018	0.36
2-Chlorophenol		0.018	U	0.018	0.36
2-Methylnaphthalene		0.012	U	0.012	0.36
2-Methylphenol		0.021	U	0.021	0.36
2-Nitroaniline		0.0095	U	0.0095	1.8
2-Nitrophenol		0.024	U	0.024	0.36
3 & 4 Methylphenol		0.025	U	0.025	0.36
3,3'-Dichlorobenzidine		0.014	U	0.014	0.71
3-Nitroaniline		0.025	U	0.025	1.8
4,6-Dinitro-2-methylphenol		0.18	U	0.18	1.8
4-Bromophenyl phenyl ether		0.019	U	0.019	0.36
4-Chloro-3-methylphenol		0.032	U	0.032	0.36
4-Chloroaniline		0.014	U	0.014	0.71
4-Chlorophenyl phenyl ether		0.015	U	0.015	0.36
4-Nitroaniline		0.025	U	0.025	1.8
4-Nitrophenol		0.23	U	0.23	1.8
Acenaphthene		0.027	U	0.027	0.36
Acenaphthylene		0.047	U	0.047	0.36
Anthracene		0.035	I	0.024	0.36
Benzidine		0.36	U	0.36	2.9
Benzo[a]anthracene		0.19	I	0.013	0.36
Benzo[a]pyrene		0.20	I	0.010	0.36
Benzo[b]fluoranthene		0.25	I	0.0062	0.36
Benzo[g,h,i]perylene		0.12	I	0.018	0.36
Benzo[k]fluoranthene		0.12	I	0.023	0.36
Benzoic acid		0.36	U	0.36	1.8
Benzyl alcohol		0.026	U	0.026	0.36
Bis(2-chloroethoxy)methane		0.025	U	0.025	0.36
Bis(2-chloroethyl)ether		0.027	U	0.027	0.36
Bis(2-ethylhexyl) phthalate		0.062	I V	0.012	0.36
2,2'-oxybis[1-chloropropane]		0.018	U	0.018	0.36
Butyl benzyl phthalate		0.014	U	0.014	0.36
Chrysene		0.22	I	0.023	0.36
Dibenz(a,h)anthracene		0.037	I	0.013	0.36
Dibenzofuran		0.012	U	0.012	0.36

## Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

Client Sample ID: PFNS220204

Lab Sample ID: 640-27033-3

Client Matrix: Solid

% Moisture: 7.7

Date Sampled: 04/05/2010 1415

Date Received: 04/07/2010 0700

### 8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 640-67695	Instrument ID:	SMC
Preparation:	3550B	Prep Batch: 640-67467	Lab File ID:	C0041415.D
Dilution:	1.0		Initial Weight/Volume:	00030.02 g
Date Analyzed:	04/14/2010 1625		Final Weight/Volume:	1.0 mL
Date Prepared:	04/09/2010 0945		Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
Diethyl phthalate		0.015	U	0.015	0.36
Dimethyl phthalate		0.019	U	0.019	0.36
Di-n-butyl phthalate		0.080	U	0.080	0.36
Di-n-octyl phthalate		0.014	U	0.014	0.36
Fluoranthene		0.38		0.021	0.36
Fluorene		0.052	U	0.052	0.36
Hexachlorobenzene		0.027	U	0.027	0.36
Hexachlorobutadiene		0.023	U	0.023	0.36
Hexachlorocyclopentadiene		0.017	U	0.017	0.36
Hexachloroethane		0.022	U	0.022	0.36
Indeno[1,2,3-cd]pyrene		0.094	I	0.015	0.36
Isophorone		0.013	U	0.013	0.36
Naphthalene		0.023	U	0.023	0.36
Nitrobenzene		0.017	U	0.017	0.36
N-Nitrosodimethylamine		0.055	U	0.055	0.36
N-Nitrosodi-n-propylamine		0.017	U	0.017	0.36
N-Nitrosodiphenylamine		0.053	U	0.053	0.36
Pentachlorophenol		0.053	U	0.053	1.8
Phenanthrene		0.21	I	0.025	0.36
Phenol		0.021	U	0.021	0.36
Pyrene		0.35	I	0.017	0.36
Surrogate		%Rec	Qualifier	Acceptance Limits	
2,4,6-Tribromophenol		86		24 - 135	
2-Fluorobiphenyl		80		30 - 135	
2-Fluorophenol		83		27 - 135	
Nitrobenzene-d5		63		22 - 135	
Phenol-d5		76		24 - 135	
Terphenyl-d14		91		36 - 135	

# Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

Client Sample ID: PFNS220207

Lab Sample ID: 640-27033-4  
Client Matrix: Solid

% Moisture: 17.9

Date Sampled: 04/05/2010 1420  
Date Received: 04/07/2010 0700

## 8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	640-67695	Instrument ID:	SMC
Preparation:	3550B	Prep Batch:	640-67467	Lab File ID:	C0041416.D
Dilution:	1.0			Initial Weight/Volume:	00030.02 g
Date Analyzed:	04/14/2010 1649			Final Weight/Volume:	1.0 mL
Date Prepared:	04/09/2010 0945			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
1,2,4-Trichlorobenzene		0.016	U	0.016	0.40
1,2-Dichlorobenzene		0.030	U	0.030	0.40
1,3-Dichlorobenzene		0.024	U	0.024	0.40
1,4-Dichlorobenzene		0.021	U	0.021	0.40
2,4,5-Trichlorophenol		0.072	U	0.072	0.40
2,4,6-Trichlorophenol		0.019	U	0.019	0.40
2,4-Dichlorophenol		0.027	U	0.027	0.40
2,4-Dimethylphenol		0.017	U	0.017	0.40
2,4-Dinitrophenol		0.21	U	0.21	2.1
2,4-Dinitrotoluene		0.019	U	0.019	0.40
2,6-Dinitrotoluene		0.019	U	0.019	0.40
2-Chloronaphthalene		0.021	U	0.021	0.40
2-Chlorophenol		0.021	U	0.021	0.40
2-Methylnaphthalene		0.013	U	0.013	0.40
2-Methylphenol		0.023	U	0.023	0.40
2-Nitroaniline		0.011	U	0.011	2.1
2-Nitrophenol		0.027	U	0.027	0.40
3 & 4 Methylphenol		0.028	U	0.028	0.40
3,3'-Dichlorobenzidine		0.016	U	0.016	0.80
3-Nitroaniline		0.028	U	0.028	2.1
4,6-Dinitro-2-methylphenol		0.21	U	0.21	2.1
4-Bromophenyl phenyl ether		0.022	U	0.022	0.40
4-Chloro-3-methylphenol		0.037	U	0.037	0.40
4-Chloroaniline		0.016	U	0.016	0.80
4-Chlorophenyl phenyl ether		0.017	U	0.017	0.40
4-Nitroaniline		0.028	U	0.028	2.1
4-Nitrophenol		0.26	U	0.26	2.1
Acenaphthene		0.030	U	0.030	0.40
Acenaphthylene		0.052	U	0.052	0.40
Anthracene		0.027	U	0.027	0.40
Benzidine		0.40	U	0.40	3.3
Benzo[a]anthracene		0.052	I	0.015	0.40
Benzo[a]pyrene		0.049	I	0.012	0.40
Benzo[b]fluoranthene		0.059	I	0.0069	0.40
Benzo[g,h,i]perylene		0.037	I	0.021	0.40
Benzo[k]fluoranthene		0.029	I	0.026	0.40
Benzoic acid		0.40	U	0.40	2.1
Benzyl alcohol		0.029	U	0.029	0.40
Bis(2-chloroethoxy)methane		0.028	U	0.028	0.40
Bis(2-chloroethyl)ether		0.030	U	0.030	0.40
Bis(2-ethylhexyl) phthalate		0.075	I V	0.013	0.40
2,2'-oxybis[1-chloropropane]		0.021	U	0.021	0.40
Butyl benzyl phthalate		0.016	U	0.016	0.40
Chrysene		0.059	I	0.026	0.40
Dibenz(a,h)anthracene		0.015	U	0.015	0.40
Dibenzofuran		0.013	U	0.013	0.40

## Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

Client Sample ID: PFNS220207

Lab Sample ID: 640-27033-4

Date Sampled: 04/05/2010 1420

Client Matrix: Solid

% Moisture: 17.9

Date Received: 04/07/2010 0700

### 8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 640-67695	Instrument ID:	SMC
Preparation:	3550B	Prep Batch: 640-67467	Lab File ID:	C0041416.D
Dilution:	1.0		Initial Weight/Volume:	00030.02 g
Date Analyzed:	04/14/2010 1649		Final Weight/Volume:	1.0 mL
Date Prepared:	04/09/2010 0945		Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
Diethyl phthalate		0.017	U	0.017	0.40
Dimethyl phthalate		0.022	U	0.022	0.40
Di-n-butyl phthalate		0.090	U	0.090	0.40
Di-n-octyl phthalate		0.016	U	0.016	0.40
Fluoranthene		0.084	I	0.023	0.40
Fluorene		0.058	U	0.058	0.40
Hexachlorobenzene		0.030	U	0.030	0.40
Hexachlorobutadiene		0.026	U	0.026	0.40
Hexachlorocyclopentadiene		0.019	U	0.019	0.40
Hexachloroethane		0.024	U	0.024	0.40
Indeno[1,2,3-cd]pyrene		0.031	I	0.017	0.40
Isophorone		0.015	U	0.015	0.40
Naphthalene		0.026	U	0.026	0.40
Nitrobenzene		0.019	U	0.019	0.40
N-Nitrosodimethylamine		0.062	U	0.062	0.40
N-Nitrosodi-n-propylamine		0.019	U	0.019	0.40
N-Nitrosodiphenylamine		0.060	U	0.060	0.40
Pentachlorophenol		0.060	U	0.060	2.1
Phenanthrene		0.043	I	0.028	0.40
Phenol		0.023	U	0.023	0.40
Pyrene		0.086	I	0.019	0.40
Surrogate		%Rec	Qualifier	Acceptance Limits	
2,4,6-Tribromophenol		89		24 - 135	
2-Fluorobiphenyl		83		30 - 135	
2-Fluorophenol		85		27 - 135	
Nitrobenzene-d5		70		22 - 135	
Phenol-d5		76		24 - 135	
Terphenyl-d14		97		36 - 135	

## Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

Client Sample ID: PFNS220107

Lab Sample ID: 640-27033-1 Date Sampled: 04/05/2010 1320  
Client Matrix: Solid % Moisture: 17.7 Date Received: 04/07/2010 0700

### FL-PRO Florida - Petroleum Range Organics (GC)

Method:	FL-PRO	Analysis Batch:	640-67687	Instrument ID:	SGH
Preparation:	3550B	Prep Batch:	640-67469	Lab File ID:	1D14H22.d
Dilution:	1.0			Initial Weight/Volume:	00030.04 g
Date Analyzed:	04/14/2010 1353			Final Weight/Volume:	2.0 mL
Date Prepared:	04/09/2010 0945			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
Total Petroleum Hydrocarbons (C8-C40)		22		2.8	12
Surrogate			Qualifier	Acceptance Limits	
o-Terphenyl		97		62 - 109	
n-C39		101		60 - 118	

## Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

Client Sample ID: PFNS220110

Lab Sample ID: 640-27033-2  
Client Matrix: Solid

% Moisture: 23.4

Date Sampled: 04/05/2010 1330  
Date Received: 04/07/2010 0700

### FL-PRO Florida - Petroleum Range Organics (GC)

Method:	FL-PRO	Analysis Batch: 640-67687	Instrument ID:	SGH
Preparation:	3550B	Prep Batch: 640-67469	Lab File ID:	1D14H23.d
Dilution:	1.0		Initial Weight/Volume:	00030.05 g
Date Analyzed:	04/14/2010 1357		Final Weight/Volume:	2.0 mL
Date Prepared:	04/09/2010 0945		Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
Total Petroleum Hydrocarbons (C8-C40)		67		3.0	13
Surrogate		%Rec		Qualifier	
o-Terphenyl		91		Acceptance Limits	
n-C39		104		62 - 109	
				60 - 118	

## Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

Client Sample ID: PFNS220204

Lab Sample ID: 640-27033-3  
Client Matrix: Solid

% Moisture: 7.7

Date Sampled: 04/05/2010 1415  
Date Received: 04/07/2010 0700

### FL-PRO Florida - Petroleum Range Organics (GC)

Method:	FL-PRO	Analysis Batch: 640-67687	Instrument ID:	SGH
Preparation:	3550B	Prep Batch: 640-67469	Lab File ID:	1D14H24.d
Dilution:	1.0		Initial Weight/Volume:	00030.04 g
Date Analyzed:	04/14/2010 1402		Final Weight/Volume:	2.0 mL
Date Prepared:	04/09/2010 0945		Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
Total Petroleum Hydrocarbons (C8-C40)		30		2.5	11
Surrogate		%Rec	Qualifier	Acceptance Limits	
o-Terphenyl		91		62 - 109	
n-C39		96		60 - 118	

## Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

Client Sample ID: PFNS220207

Lab Sample ID: 640-27033-4  
Client Matrix: Solid

% Moisture: 17.9

Date Sampled: 04/05/2010 1420  
Date Received: 04/07/2010 0700

### FL-PRO Florida - Petroleum Range Organics (GC)

Method:	FL-PRO	Analysis Batch: 640-67687	Instrument ID:	SGH
Preparation:	3550B	Prep Batch: 640-67469	Lab File ID:	1D14H25.d
Dilution:	1.0		Initial Weight/Volume:	00030.01 g
Date Analyzed:	04/14/2010 1407		Final Weight/Volume:	2.0 mL
Date Prepared:	04/09/2010 0945		Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
Total Petroleum Hydrocarbons (C8-C40)		24		2.8	12
Surrogate		%Rec	Qualifier		Acceptance Limits
o-Terphenyl		99		62 - 109	
n-C39		108		60 - 118	

## Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

### General Chemistry

Client Sample ID: PFNS220107

Lab Sample ID: 640-27033-1 Date Sampled: 04/05/2010 1320  
Client Matrix: Solid Date Received: 04/07/2010 0700

Analyte	Result	Qual	Units	PQL	PQL	Dil	Method
Percent Solids	82	%		0.00010	0.00010	1.0	Moisture

Analysis Batch: 640-67474 Date Analyzed (Start): 04/09/2010 0900 (End) 04/12/2010 0930 DryWt Corrected: N

## Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

### General Chemistry

Client Sample ID: PFNS220110

Lab Sample ID: 640-27033-2 Date Sampled: 04/05/2010 1330  
Client Matrix: Solid Date Received: 04/07/2010 0700

Analyte	Result	Qual	Units	PQL	PQL	Dil	Method
Percent Solids	77	%		0.00010	0.00010	1.0	Moisture

Analysis Batch: 640-67474 Date Analyzed (Start): 04/09/2010 0900 (End) 04/12/2010 0930 DryWt Corrected: N

## Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

### General Chemistry

Client Sample ID: PFNS220204

Lab Sample ID: 640-27033-3 Date Sampled: 04/05/2010 1415  
Client Matrix: Solid Date Received: 04/07/2010 0700

Analyte	Result	Qual	Units	PQL	PQL	Dil	Method
Percent Solids	92	%		0.00010	0.00010	1.0	Moisture

Analysis Batch: 640-67474 Date Analyzed (Start): 04/09/2010 0900 (End) 04/12/2010 0930 DryWt Corrected: N

## Analytical Data

Client: EnSafe, Inc.

Job Number: 640-27033-1

### General Chemistry

Client Sample ID: PFNS220207

Lab Sample ID: 640-27033-4 Date Sampled: 04/05/2010 1420  
Client Matrix: Solid Date Received: 04/07/2010 0700

Analyte	Result	Qual	Units	PQL	PQL	Dil	Method
Percent Solids	82	%		0.00010	0.00010	1.0	Moisture

Analysis Batch: 640-67474 Date Analyzed (Start): 04/09/2010 0900 (End) 04/12/2010 0930 DryWt Corrected: N

**Quality Control Results**

Client: EnSafe, Inc.

Job Number: 640-27033-1

**Surrogate Recovery Report****8260C Volatile Organic Compounds by GC/MS****Client Matrix: Solid**

Lab Sample ID	Client Sample ID	BFB %Rec	DBFM %Rec	TOL %Rec
640-27033-1	PFNS220107	91	101	94
640-27033-2	PFNS220110	73	101	94
640-27033-3	PFNS220204	86	99	96
640-27033-4	PFNS220207	86	100	96
640-27033-6	PFNS230104	92	95	99
640-27033-9	PFNS240102	74	102	94
640-27033-10	PFNS240104	91	100	96
640-27033-11	PFNC240104	82	99	96
640-27033-12	PFNS240202	89	102	98
640-27033-13	PFNS240204	93	98	97
640-27033-16	PFNS250102	89	88	99
640-27033-17	PFNS250104	90	97	96
640-27033-18	PFNS250201	98	87	98

Surrogate	Acceptance Limits
BFB = 4-Bromofluorobenzene	67-130
DBFM = Dibromofluoromethane	61-130
TOL = Toluene-d8 (Surr)	70-130

# Quality Control Results

Client: EnSafe, Inc.

Job Number: 640-27033-1

## Surrogate Recovery Report

### 8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

#### Client Matrix: Solid

Lab Sample ID	Client Sample ID	TBP %Rec	FBP %Rec	2FP %Rec	NBZ %Rec	PHL %Rec	TPH %Rec
640-27033-1	PFNS220107	88	80	84	66	76	98
640-27033-2	PFNS220110	78	75	73	61	68	90
640-27033-3	PFNS220204	86	80	83	63	76	91
640-27033-4	PFNS220207	89	83	85	70	76	97
640-27033-6	PFNS230104	75	70	75	58	68	89
640-27033-9	PFNS240102	83	73	75	63	70	80
640-27033-10	PFNS240104	72	67	74	59	66	75
640-27033-11	PFNC240104	87	72	73	62	70	80
640-27033-12	PFNS240202	74	69	75	63	67	73
640-27033-13	PFNS240204	71	67	71	60	66	78
640-27033-14	PFNS240301	57	53	57	45	51	55
640-27033-15	PFNS240401	81	74	74	62	71	73
640-27033-16	PFNS250102	77	71	76	60	68	70
640-27033-17	PFNS250104	84	69	74	60	71	82
640-27033-18	PFNS250201	99	78	78	64	76	95
MB 640-67467/1-A		74	65	68	53	60	81
LCS 640-67467/2-A		77	68	72	57	66	84
LCSD 640-67467/3-A		83	72	73	60	70	91
640-27033-6 MS	PFNS230104 MS	78	63	63	52	61	79
640-27033-6 MSD	PFNS230104 MSD	82	66	62	47	61	79

Surrogate	Acceptance Limits
TBP = 2,4,6-Tribromophenol	24-135
FBP = 2-Fluorobiphenyl	30-135
2FP = 2-Fluorophenol	27-135
NBZ = Nitrobenzene-d5	22-135
PHL = Phenol-d5	24-135
TPH = Terphenyl-d14	36-135

**Quality Control Results**

Client: EnSafe, Inc.

Job Number: 640-27033-1

**Surrogate Recovery Report****FL-PRO Florida - Petroleum Range Organics (GC)****Client Matrix: Solid**

Lab Sample ID	Client Sample ID	OTPH %Rec	C39 %Rec
640-27033-1	PFNS220107	97	101
640-27033-2	PFNS220110	91	104
640-27033-3	PFNS220204	91	96
640-27033-4	PFNS220207	99	108
640-27033-6	PFNS230104	88	100
640-27033-9	PFNS240102	96	97
640-27033-10	PFNS240104	96	108
640-27033-11	PFNC240104	105	116
640-27033-12	PFNS240202	97	102
640-27033-13	PFNS240204	86	99
640-27033-14	PFNS240301	0J1	0J1
640-27033-15	PFNS240401	0J1	0J1
640-27033-16	PFNS250102	78	86
640-27033-17	PFNS250104	97	100
640-27033-18	PFNS250201	87	99
MB 640-67469/1-A		86	99
LCS 640-67469/2-A		83	87
LCSD 640-67469/3-A		86	88
640-27033-6 MS	PFNS230104 MS	90	97
640-27033-6 MSD	PFNS230104 MSD	102	99

Surrogate	Acceptance Limits
OTPH = o-Terphenyl	62-109
C39 = n-C39	60-118

## ANALYTICAL REPORT

Job Number: 640-27290-1

Job Description: Panama City GW and Soil Sampling

For:  
EnSafe, Inc.  
308 N. Peters Road  
Suite 200  
Knoxville, TN 37922  
Attention: Mr. Robert Smith



Approved for release.  
Tim Preston  
Project Manager II  
4/27/2010 10:14 AM

Tim Preston  
Project Manager II  
[timothy.r.preston@testamericainc.com](mailto:timothy.r.preston@testamericainc.com)  
04/27/2010

cc: Mr. Phil Coop  
Ms. Wendy Zayac

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the TestAmerica Project Manager who signed this test report. Measurement uncertainty data, as referenced in Section 20.12 of the TestAmerica Tallahassee Quality Assurance Manual, are available upon request.

TestAmerica Tallahassee Florida Department of Health Certification No. E81005

TestAmerica Laboratories, Inc.

TestAmerica Tallahassee 2846 Industrial Plaza Drive, Tallahassee, FL 32301

Tel (850) 878-3994 Fax (850) 878-9504 [www.testamericainc.com](http://www.testamericainc.com)



## SAMPLE SUMMARY

Client: EnSafe, Inc.

Job Number: 640-27290-1

<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Client Matrix</b>	<b>Date/Time Sampled</b>	<b>Date/Time Received</b>
640-27290-1	PFNG290301	Water	04/14/2010 1645	04/16/2010 1715
640-27290-2	PFNG290301F	Water	04/14/2010 1645	04/16/2010 1715
640-27290-3TB	PFNTA41410	Water	04/14/2010 1600	04/16/2010 1715
640-27290-4	PFNG290201	Water	04/14/2010 1655	04/16/2010 1715
640-27290-5	PFNG290201F	Water	04/14/2010 1655	04/16/2010 1715
640-27290-6	PFNG240201	Water	04/15/2010 0905	04/16/2010 1715
640-27290-7	PFNG250201	Water	04/15/2010 0915	04/16/2010 1715
640-27290-8	PFNG250201F	Water	04/15/2010 0915	04/16/2010 1715
640-27290-9	PFNG240101	Water	04/15/2010 0920	04/16/2010 1715
640-27290-10	PFNG240101F	Water	04/15/2010 0920	04/16/2010 1715
640-27290-11	PFNH240101	Water	04/15/2010 0920	04/16/2010 1715
640-27290-12	PFNH240101F	Water	04/15/2010 0920	04/16/2010 1715
640-27290-13	PFNG250101	Water	04/15/2010 1100	04/16/2010 1715
640-27290-14	PFNG250101F	Water	04/15/2010 1100	04/16/2010 1715
640-27290-15	PFNG210101	Water	04/15/2010 1120	04/16/2010 1715
640-27290-16	PFNG190101	Water	04/15/2010 1535	04/16/2010 1715
640-27290-17	PFNG190101F	Water	04/15/2010 1535	04/16/2010 1715
640-27290-18	PFNG190201	Water	04/15/2010 1540	04/16/2010 1715
640-27290-19	PFNG190201F	Water	04/15/2010 1540	04/16/2010 1715
640-27290-20	PFNG160601	Water	04/15/2010 1600	04/16/2010 1715
640-27290-21	PFNG160601F	Water	04/15/2010 1600	04/16/2010 1715
640-27290-22	PFNG010101	Water	04/16/2010 0930	04/16/2010 1715
640-27290-22MS	PFNG010101MS	Water	04/16/2010 0930	04/16/2010 1715
640-27290-22MSD	PFNG010101MSD	Water	04/16/2010 0930	04/16/2010 1715
640-27290-23	PFNG010201	Water	04/16/2010 0940	04/16/2010 1715
640-27290-24	PFNG010201F	Water	04/16/2010 0940	04/16/2010 1715
640-27290-25	PFNG010301	Water	04/16/2010 0920	04/16/2010 1715
640-27290-26	PFNH010301	Water	04/16/2010 0920	04/16/2010 1715
640-27290-27	PFNG260101	Water	04/16/2010 1110	04/16/2010 1715
640-27290-28	PFNG260201	Water	04/16/2010 1115	04/16/2010 1715
640-27290-29	PFNG260201F	Water	04/16/2010 1115	04/16/2010 1715
640-27290-30	PFNG180201	Water	04/16/2010 1110	04/16/2010 1715
640-27290-31TB	PFNT041610	Water	04/16/2010 0900	04/16/2010 1715
640-27290-32	PFNG220201	Water	04/16/2010 1535	04/16/2010 1715
640-27290-33	PFNG220101	Water	04/16/2010 1630	04/16/2010 1715

**Analytical Data**

Client: EnSafe, Inc.

Job Number: 640-27290-1

Client Sample ID: PFNG220201

Lab Sample ID: 640-27290-32

Date Sampled: 04/16/2010 1535

Client Matrix: Water

Date Received: 04/16/2010 1715

**8260C Volatile Organic Compounds by GC/MS**

Method:	8260C	Analysis Batch: 640-68058	Instrument ID:	VMA
Preparation:	5030C		Lab File ID:	1A042231.D
Dilution:	1.0		Initial Weight/Volume:	40 mL
Date Analyzed:	04/22/2010 1923		Final Weight/Volume:	40 mL
Date Prepared:	04/22/2010 1923			

Analyte	Result (ug/L)	Qualifier	MDL	PQL
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.29	U	0.29	1.0
1,1,2,2-Tetrachloroethane	0.25	U	0.25	1.0
1,1,2-Trichloroethane	0.34	U	0.34	1.0
1,1-Dichloroethane	0.18	U	0.18	1.0
1,1-Dichloroethene	0.24	U	0.24	1.0
1,1-Dichloropropene	0.27	U	0.27	1.0
1,2,3-Trichlorobenzene	0.24	U	0.24	1.0
1,2,3-Trichloropropane	0.29	U	0.29	1.0
1,2,4-Trichlorobenzene	0.12	U	0.12	1.0
1,2,4-Trimethylbenzene	0.20	U	0.20	1.0
1,2-Dibromo-3-Chloropropane	0.32	U	0.32	1.0
1,2-Dichlorobenzene	0.18	U	0.18	1.0
1,2-Dichloroethane	0.28	U	0.28	1.0
1,2-Dichloroethene, Total	0.45	U	0.45	1.0
1,2-Dichloropropane	0.27	U	0.27	1.0
1,3,5-Trimethylbenzene	0.23	U	0.23	1.0
1,3-Dichlorobenzene	0.21	U	0.21	1.0
1,3-Dichloropropane	0.29	U	0.29	1.0
1,4-Dichlorobenzene	0.19	U	0.19	1.0
2,2-Dichloropropane	0.27	U	0.27	1.0
2-Butanone (MEK)	3.0	U	3.0	10
2-Chlorotoluene	0.21	U	0.21	1.0
2-Hexanone	2.6	U	2.6	10
4-Chlorotoluene	0.20	U	0.20	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
4-Methyl-2-pentanone (MIBK)	2.2	U	2.2	10
Acetone	3.0	U	3.0	25
Benzene	0.28	U	0.28	1.0
Bromobenzene	0.25	U	0.25	1.0
Bromoform	0.18	U	0.18	1.0
Bromomethane	0.25	U	0.25	1.0
Carbon disulfide	0.13	U	0.13	1.0
Carbon tetrachloride	0.20	U	0.20	1.0
Chlorobenzene	0.27	U	0.27	1.0
Chlorobromomethane	0.14	U	0.14	1.0
Chlorodibromomethane	0.16	U	0.16	1.0
Chloroethane	0.53	U	0.53	1.0
Chloroform	0.21	U	0.21	1.0
Chloromethane	0.28	U	0.28	1.0
cis-1,2-Dichloroethene	0.22	U	0.22	1.0
cis-1,3-Dichloropropene	0.19	U	0.19	1.0
Dibromomethane	0.24	U	0.24	1.0
Dichlorobromomethane	0.26	U	0.26	1.0
Dichlorodifluoromethane	0.55	U	0.55	1.0
Ethylbenzene	0.25	U	0.25	1.0

**Analytical Data**

Client: EnSafe, Inc.

Job Number: 640-27290-1

Client Sample ID: PFNG220201

Lab Sample ID: 640-27290-32  
Client Matrix: WaterDate Sampled: 04/16/2010 1535  
Date Received: 04/16/2010 1715**8260C Volatile Organic Compounds by GC/MS**

Method:	8260C	Analysis Batch: 640-68058	Instrument ID:	VMA
Preparation:	5030C		Lab File ID:	1A042231.D
Dilution:	1.0		Initial Weight/Volume:	40 mL
Date Analyzed:	04/22/2010 1923		Final Weight/Volume:	40 mL
Date Prepared:	04/22/2010 1923			

Analyte	Result (ug/L)	Qualifier	MDL	PQL
Ethylene Dibromide	0.25	U	0.25	1.0
Hexachlorobutadiene	0.23	U	0.23	1.0
Isopropylbenzene	0.24	U	0.24	1.0
Methyl tert-butyl ether	0.21	U	0.21	1.0
Methylene Chloride	0.27	U	0.27	5.0
m-Xylene & p-Xylene	0.45	U	0.45	2.0
Naphthalene	0.19	U	0.19	1.0
n-Butylbenzene	0.18	U	0.18	1.0
N-Propylbenzene	0.19	U	0.19	1.0
o-Xylene	0.23	U	0.23	1.0
sec-Butylbenzene	0.22	U	0.22	1.0
Styrene	0.22	U	0.22	1.0
tert-Butylbenzene	0.26	U	0.26	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.24	U	0.24	1.0
trans-1,2-Dichloroethene	0.25	U	0.25	1.0
trans-1,3-Dichloropropene	0.20	U	0.20	1.0
Trichloroethene	0.26	U	0.26	1.0
Trichlorofluoromethane	0.24	U	0.24	1.0
Vinyl chloride	0.29	U	0.29	1.0
Xylenes, Total	0.68	U	0.68	2.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
Dibromofluoromethane	100		83 - 123	
Toluene-d8 (Surr)	100		78 - 126	
4-Bromofluorobenzene	95		70 - 119	

**Analytical Data**

Client: EnSafe, Inc.

Job Number: 640-27290-1

Client Sample ID: PFNG220101

Lab Sample ID: 640-27290-33

Date Sampled: 04/16/2010 1630

Client Matrix: Water

Date Received: 04/16/2010 1715

**8260C Volatile Organic Compounds by GC/MS**

Method:	8260C	Analysis Batch: 640-68058	Instrument ID:	VMA
Preparation:	5030C		Lab File ID:	1A042232.D
Dilution:	1.0		Initial Weight/Volume:	40 mL
Date Analyzed:	04/22/2010 1944		Final Weight/Volume:	40 mL
Date Prepared:	04/22/2010 1944			

Analyte	Result (ug/L)	Qualifier	MDL	PQL
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.29	U	0.29	1.0
1,1,2,2-Tetrachloroethane	0.25	U	0.25	1.0
1,1,2-Trichloroethane	0.34	U	0.34	1.0
1,1-Dichloroethane	0.18	U	0.18	1.0
1,1-Dichloroethene	0.24	U	0.24	1.0
1,1-Dichloropropene	0.27	U	0.27	1.0
1,2,3-Trichlorobenzene	0.24	U	0.24	1.0
1,2,3-Trichloropropane	0.29	U	0.29	1.0
1,2,4-Trichlorobenzene	0.12	U	0.12	1.0
1,2,4-Trimethylbenzene	0.20	U	0.20	1.0
1,2-Dibromo-3-Chloropropane	0.32	U	0.32	1.0
1,2-Dichlorobenzene	0.18	U	0.18	1.0
1,2-Dichloroethane	0.28	U	0.28	1.0
1,2-Dichloroethene, Total	0.45	U	0.45	1.0
1,2-Dichloropropane	0.27	U	0.27	1.0
1,3,5-Trimethylbenzene	0.23	U	0.23	1.0
1,3-Dichlorobenzene	0.21	U	0.21	1.0
1,3-Dichloropropane	0.29	U	0.29	1.0
1,4-Dichlorobenzene	0.19	U	0.19	1.0
2,2-Dichloropropane	0.27	U	0.27	1.0
2-Butanone (MEK)	3.0	U	3.0	10
2-Chlorotoluene	0.21	U	0.21	1.0
2-Hexanone	2.6	U	2.6	10
4-Chlorotoluene	0.20	U	0.20	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
4-Methyl-2-pentanone (MIBK)	2.2	U	2.2	10
Acetone	3.0	U	3.0	25
Benzene	0.28	U	0.28	1.0
Bromobenzene	0.25	U	0.25	1.0
Bromoform	0.18	U	0.18	1.0
Bromomethane	0.25	U	0.25	1.0
Carbon disulfide	0.13	U	0.13	1.0
Carbon tetrachloride	0.20	U	0.20	1.0
Chlorobenzene	0.27	U	0.27	1.0
Chlorobromomethane	0.14	U	0.14	1.0
Chlorodibromomethane	0.16	U	0.16	1.0
Chloroethane	0.53	U	0.53	1.0
Chloroform	0.21	U	0.21	1.0
Chloromethane	0.28	U	0.28	1.0
cis-1,2-Dichloroethene	0.22	U	0.22	1.0
cis-1,3-Dichloropropene	0.19	U	0.19	1.0
Dibromomethane	0.24	U	0.24	1.0
Dichlorobromomethane	0.26	U	0.26	1.0
Dichlorodifluoromethane	0.55	U	0.55	1.0
Ethylbenzene	0.25	U	0.25	1.0

**Analytical Data**

Client: EnSafe, Inc.

Job Number: 640-27290-1

**Client Sample ID:** PFNG220101Lab Sample ID: 640-27290-33  
Client Matrix: WaterDate Sampled: 04/16/2010 1630  
Date Received: 04/16/2010 1715**8260C Volatile Organic Compounds by GC/MS**

Method:	8260C	Analysis Batch: 640-68058	Instrument ID:	VMA
Preparation:	5030C		Lab File ID:	1A042232.D
Dilution:	1.0		Initial Weight/Volume:	40 mL
Date Analyzed:	04/22/2010 1944		Final Weight/Volume:	40 mL
Date Prepared:	04/22/2010 1944			

Analyte	Result (ug/L)	Qualifier	MDL	PQL
Ethylene Dibromide	0.25	U	0.25	1.0
Hexachlorobutadiene	0.23	U	0.23	1.0
Isopropylbenzene	0.24	U	0.24	1.0
Methyl tert-butyl ether	0.21	U	0.21	1.0
Methylene Chloride	0.27	U	0.27	5.0
m-Xylene & p-Xylene	0.45	U	0.45	2.0
Naphthalene	0.19	U	0.19	1.0
n-Butylbenzene	0.18	U	0.18	1.0
N-Propylbenzene	0.19	U	0.19	1.0
o-Xylene	0.23	U	0.23	1.0
sec-Butylbenzene	0.22	U	0.22	1.0
Styrene	0.22	U	0.22	1.0
tert-Butylbenzene	0.26	U	0.26	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.24	U	0.24	1.0
trans-1,2-Dichloroethene	0.25	U	0.25	1.0
trans-1,3-Dichloropropene	0.20	U	0.20	1.0
Trichloroethene	0.26	U	0.26	1.0
Trichlorofluoromethane	0.24	U	0.24	1.0
Vinyl chloride	0.29	U	0.29	1.0
Xylenes, Total	0.68	U	0.68	2.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
Dibromofluoromethane	100		83 - 123	
Toluene-d8 (Surr)	99		78 - 126	
4-Bromofluorobenzene	97		70 - 119	

**Analytical Data**

Client: EnSafe, Inc.

Job Number: 640-27290-1

Client Sample ID: PFNG220201

Lab Sample ID: 640-27290-32

Date Sampled: 04/16/2010 1535

Client Matrix: Water

Date Received: 04/16/2010 1715

**8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)**

Method:	8270C	Analysis Batch: 640-68148	Instrument ID:	SMC
Preparation:	3520C	Prep Batch: 640-67913	Lab File ID:	C0042528.D
Dilution:	1.0		Initial Weight/Volume:	1040 mL
Date Analyzed:	04/26/2010 0714		Final Weight/Volume:	1.0 mL
Date Prepared:	04/21/2010 1520		Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	PQL
1,2,4-Trichlorobenzene	0.49	U	0.49	9.6
1,2-Dichlorobenzene	0.42	U	0.42	9.6
1,3-Dichlorobenzene	0.40	U	0.40	9.6
1,4-Dichlorobenzene	0.38	U	0.38	9.6
2,4,5-Trichlorophenol	1.1	U	1.1	9.6
2,4,6-Trichlorophenol	0.89	U	0.89	9.6
2,4-Dichlorophenol	0.69	U	0.69	9.6
2,4-Dimethylphenol	0.72	U	0.72	9.6
2,4-Dinitrophenol	3.8	U	3.8	48
2,4-Dinitrotoluene	1.2	U	1.2	9.6
2,6-Dinitrotoluene	0.85	U	0.85	9.6
2-Chloronaphthalene	0.58	U	0.58	9.6
2-Chlorophenol	0.50	U	0.50	9.6
2-Methylnaphthalene	0.68	U	0.68	9.6
2-Methylphenol	0.75	U	0.75	9.6
2-Nitroaniline	0.81	U	0.81	48
2-Nitrophenol	0.56	U	0.56	9.6
3 & 4 Methylphenol	0.73	U	0.73	9.6
3,3'-Dichlorobenzidine	0.72	U	0.72	19
3-Nitroaniline	1.3	U	1.3	48
4,6-Dinitro-2-methylphenol	0.92	U	0.92	48
4-Bromophenyl phenyl ether	1.2	U J3	1.2	9.6
4-Chloro-3-methylphenol	1.2	U	1.2	9.6
4-Chloroaniline	0.65	U	0.65	19
4-Chlorophenyl phenyl ether	0.85	U	0.85	9.6
4-Nitroaniline	1.2	U	1.2	48
4-Nitrophenol	1.2	U	1.2	48
Acenaphthene	0.67	U	0.67	9.6
Acenaphthylene	0.82	U	0.82	9.6
Anthracene	1.2	U	1.2	9.6
Benzidine	1.1	U	1.1	77
Benzo[a]anthracene	0.82	U	0.82	9.6
Benzo[a]pyrene	0.96	U	0.96	9.6
Benzo[b]fluoranthene	0.94	U	0.94	9.6
Benzo[g,h,i]perylene	1.3	U	1.3	9.6
Benzo[k]fluoranthene	1.1	U	1.1	9.6
Benzoic acid	2.7	U J3	2.7	48
Benzyl alcohol	0.75	U	0.75	9.6
Bis(2-chloroethoxy)methane	0.69	U	0.69	9.6
Bis(2-chloroethyl)ether	0.57	U	0.57	9.6
Bis(2-ethylhexyl) phthalate	0.62	U	0.62	9.6
2,2'-oxybis[1-chloropropane]	0.68	U	0.68	9.6
Butyl benzyl phthalate	0.86	U	0.86	9.6
Chrysene	0.91	U	0.91	9.6
Dibenz(a,h)anthracene	1.2	U	1.2	9.6
Dibenzofuran	0.77	U	0.77	9.6

**Analytical Data**

Client: EnSafe, Inc.

Job Number: 640-27290-1

Client Sample ID: PFNG220201

Lab Sample ID: 640-27290-32

Date Sampled: 04/16/2010 1535

Client Matrix: Water

Date Received: 04/16/2010 1715

**8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)**

Method:	8270C	Analysis Batch: 640-68148	Instrument ID:	SMC
Preparation:	3520C	Prep Batch: 640-67913	Lab File ID:	C0042528.D
Dilution:	1.0		Initial Weight/Volume:	1040 mL
Date Analyzed:	04/26/2010 0714		Final Weight/Volume:	1.0 mL
Date Prepared:	04/21/2010 1520		Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	PQL
Diethyl phthalate	1.3	U	1.3	9.6
Dimethyl phthalate	1.1	U	1.1	9.6
Di-n-butyl phthalate	1.6	U	1.6	9.6
Di-n-octyl phthalate	0.56	U	0.56	9.6
Fluoranthene	1.4	U	1.4	9.6
Fluorene	1.1	U	1.1	9.6
Hexachlorobenzene	1.2	U	1.2	9.6
Hexachlorobutadiene	0.60	U	0.60	9.6
Hexachlorocyclopentadiene	0.20	U	0.20	9.6
Hexachloroethane	0.68	U	0.68	9.6
Indeno[1,2,3-cd]pyrene	1.2	U	1.2	9.6
Isophorone	0.78	U	0.78	9.6
Naphthalene	0.55	U	0.55	9.6
Nitrobenzene	0.61	U	0.61	9.6
N-Nitrosodimethylamine	3.0	U	3.0	9.6
N-Nitrosodi-n-propylamine	0.79	U	0.79	9.6
N-Nitrosodiphenylamine	1.1	U J3	1.1	9.6
Pentachlorophenol	1.1	U	1.1	48
Phenanthrene	1.4	U	1.4	9.6
Phenol	0.66	U	0.66	9.6
Pyrene	0.96	U	0.96	9.6

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	88		42 - 128
2-Fluorobiphenyl	79		31 - 113
2-Fluorophenol	58		27 - 111
Nitrobenzene-d5	88		39 - 123
Phenol-d5	68		23 - 123
Terphenyl-d14	65		10 - 138

**Analytical Data**

Client: EnSafe, Inc.

Job Number: 640-27290-1

Client Sample ID: PFNG220101

Lab Sample ID: 640-27290-33  
Client Matrix: WaterDate Sampled: 04/16/2010 1630  
Date Received: 04/16/2010 1715**8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)**

Method:	8270C	Analysis Batch: 640-68148	Instrument ID:	SMC
Preparation:	3520C	Prep Batch: 640-67913	Lab File ID:	C0042529.D
Dilution:	1.0		Initial Weight/Volume:	1040 mL
Date Analyzed:	04/26/2010 0738		Final Weight/Volume:	1.0 mL
Date Prepared:	04/21/2010 1520		Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	PQL
1,2,4-Trichlorobenzene	0.49	U	0.49	9.6
1,2-Dichlorobenzene	0.42	U	0.42	9.6
1,3-Dichlorobenzene	0.40	U	0.40	9.6
1,4-Dichlorobenzene	0.38	U	0.38	9.6
2,4,5-Trichlorophenol	1.1	U	1.1	9.6
2,4,6-Trichlorophenol	0.89	U	0.89	9.6
2,4-Dichlorophenol	0.69	U	0.69	9.6
2,4-Dimethylphenol	0.72	U	0.72	9.6
2,4-Dinitrophenol	3.8	U	3.8	48
2,4-Dinitrotoluene	1.2	U	1.2	9.6
2,6-Dinitrotoluene	0.85	U	0.85	9.6
2-Chloronaphthalene	0.58	U	0.58	9.6
2-Chlorophenol	0.50	U	0.50	9.6
2-Methylnaphthalene	0.68	U	0.68	9.6
2-Methylphenol	0.75	U	0.75	9.6
2-Nitroaniline	0.81	U	0.81	48
2-Nitrophenol	0.56	U	0.56	9.6
3 & 4 Methylphenol	0.73	U	0.73	9.6
3,3'-Dichlorobenzidine	0.72	U	0.72	19
3-Nitroaniline	1.3	U	1.3	48
4,6-Dinitro-2-methylphenol	0.92	U	0.92	48
4-Bromophenyl phenyl ether	1.2	U J3	1.2	9.6
4-Chloro-3-methylphenol	1.2	U	1.2	9.6
4-Chloroaniline	0.65	U	0.65	19
4-Chlorophenyl phenyl ether	0.85	U	0.85	9.6
4-Nitroaniline	1.2	U	1.2	48
4-Nitrophenol	1.2	U	1.2	48
Acenaphthene	0.67	U	0.67	9.6
Acenaphthylene	0.82	U	0.82	9.6
Anthracene	1.2	U	1.2	9.6
Benzidine	1.1	U	1.1	77
Benzo[a]anthracene	0.82	U	0.82	9.6
Benzo[a]pyrene	0.96	U	0.96	9.6
Benzo[b]fluoranthene	0.94	U	0.94	9.6
Benzo[g,h,i]perylene	1.3	U	1.3	9.6
Benzo[k]fluoranthene	1.1	U	1.1	9.6
Benzoic acid	2.7	U J3	2.7	48
Benzyl alcohol	0.75	U	0.75	9.6
Bis(2-chloroethoxy)methane	0.69	U	0.69	9.6
Bis(2-chloroethyl)ether	0.57	U	0.57	9.6
Bis(2-ethylhexyl) phthalate	0.62	U	0.62	9.6
2,2'-oxybis[1-chloropropane]	0.68	U	0.68	9.6
Butyl benzyl phthalate	0.86	U	0.86	9.6
Chrysene	0.91	U	0.91	9.6
Dibenz(a,h)anthracene	1.2	U	1.2	9.6
Dibenzofuran	0.77	U	0.77	9.6

**Analytical Data**

Client: EnSafe, Inc.

Job Number: 640-27290-1

Client Sample ID: PFNG220101

Lab Sample ID: 640-27290-33

Date Sampled: 04/16/2010 1630

Client Matrix: Water

Date Received: 04/16/2010 1715

**8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)**

Method:	8270C	Analysis Batch: 640-68148	Instrument ID:	SMC
Preparation:	3520C	Prep Batch: 640-67913	Lab File ID:	C0042529.D
Dilution:	1.0		Initial Weight/Volume:	1040 mL
Date Analyzed:	04/26/2010 0738		Final Weight/Volume:	1.0 mL
Date Prepared:	04/21/2010 1520		Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	PQL
Diethyl phthalate	1.3	U	1.3	9.6
Dimethyl phthalate	1.1	U	1.1	9.6
Di-n-butyl phthalate	1.6	U	1.6	9.6
Di-n-octyl phthalate	0.56	U	0.56	9.6
Fluoranthene	1.4	U	1.4	9.6
Fluorene	1.1	U	1.1	9.6
Hexachlorobenzene	1.2	U	1.2	9.6
Hexachlorobutadiene	0.60	U	0.60	9.6
Hexachlorocyclopentadiene	0.20	U	0.20	9.6
Hexachloroethane	0.68	U	0.68	9.6
Indeno[1,2,3-cd]pyrene	1.2	U	1.2	9.6
Isophorone	0.78	U	0.78	9.6
Naphthalene	0.55	U	0.55	9.6
Nitrobenzene	0.61	U	0.61	9.6
N-Nitrosodimethylamine	3.0	U	3.0	9.6
N-Nitrosodi-n-propylamine	0.79	U	0.79	9.6
N-Nitrosodiphenylamine	1.1	U J3	1.1	9.6
Pentachlorophenol	1.1	U	1.1	48
Phenanthrene	1.4	U	1.4	9.6
Phenol	0.66	U	0.66	9.6
Pyrene	0.96	U	0.96	9.6
Surrogate	%Rec	Qualifier	Acceptance Limits	
2,4,6-Tribromophenol	82		42 - 128	
2-Fluorobiphenyl	76		31 - 113	
2-Fluorophenol	67		27 - 111	
Nitrobenzene-d5	81		39 - 123	
Phenol-d5	73		23 - 123	
Terphenyl-d14	32		10 - 138	

**Analytical Data**

Client: EnSafe, Inc.

Job Number: 640-27290-1

**Client Sample ID:** PFNG220201Lab Sample ID: 640-27290-32  
Client Matrix: WaterDate Sampled: 04/16/2010 1535  
Date Received: 04/16/2010 1715**FL-PRO Florida - Petroleum Range Organics (GC)**

Method:	FL-PRO	Analysis Batch: 640-68178	Instrument ID:	SGJ
Preparation:	3520C	Prep Batch: 640-67914	Lab File ID:	1D27J9.d
Dilution:	1.0		Initial Weight/Volume:	1040 mL
Date Analyzed:	04/27/2010 0812		Final Weight/Volume:	2.0 mL
Date Prepared:	04/21/2010 1520		Injection Volume:	1 uL

Analyte	Result (mg/L)	Qualifier	MDL	PQL
Total Petroleum Hydrocarbons (C8-C40)	0.063	U	0.063	0.29
<hr/>				
Surrogate	%Rec	Qualifier	Acceptance Limits	
o-Terphenyl	122		82 - 142	
n-C39	117		42 - 193	

**Analytical Data**

Client: EnSafe, Inc.

Job Number: 640-27290-1

**Client Sample ID:** PFNG220101Lab Sample ID: 640-27290-33  
Client Matrix: WaterDate Sampled: 04/16/2010 1630  
Date Received: 04/16/2010 1715**FL-PRO Florida - Petroleum Range Organics (GC)**

Method:	FL-PRO	Analysis Batch: 640-68179	Instrument ID:	SGH
Preparation:	3520C	Prep Batch: 640-67914	Lab File ID:	1D27H6.d
Dilution:	1.0		Initial Weight/Volume:	1040 mL
Date Analyzed:	04/27/2010 0811		Final Weight/Volume:	2.0 mL
Date Prepared:	04/21/2010 1520		Injection Volume:	1 uL

Analyte	Result (mg/L)	Qualifier	MDL	PQL
Total Petroleum Hydrocarbons (C8-C40)	0.063	U	0.063	0.29
<hr/>				
Surrogate	%Rec	Qualifier	Acceptance Limits	
o-Terphenyl	115		82 - 142	
n-C39	116		42 - 193	

**Surrogate Recovery Report****8260C Volatile Organic Compounds by GC/MS****Client Matrix: Water**

Lab Sample ID	Client Sample ID	DBFM %Rec	TOL %Rec	BFB %Rec
640-27290-1	PFNG290301	104	98	100
640-27290-3	PFNTA41410	105	98	96
640-27290-4	PFNG290201	105	101	96
640-27290-6	PFNG240201	103	97	94
640-27290-7	PFNG250201	100	100	96
640-27290-9	PFNG240101	106	98	95
640-27290-11	PFNH240101	102	100	92
640-27290-13	PFNG250101	105	96	93
640-27290-15	PFNG210101	103	101	95
640-27290-16	PFNG190101	104	100	94
640-27290-18	PFNG190201	102	99	92
640-27290-20	PFNG160601	101	104	95
640-27290-22	PFNG010101	101	97	96
640-27290-23	PFNG010201	101	96	92
640-27290-25	PFNG010301	101	96	95
640-27290-26	PFNH010301	103	99	90
640-27290-27	PFNG260101	102	98	90
640-27290-28	PFNG260201	104	99	94
640-27290-30	PFNG180201	103	99	94
640-27290-31	PFNT041610	99	101	97
640-27290-32	PFNG220201	100	100	95
640-27290-33	PFNG220101	100	99	97
MB 640-68058/7		102	99	99
LCS 640-68058/3		102	98	104
LCS 640-68058/5		100	99	98
LCSD 640-68058/4		104	101	102
LCSD 640-68058/6		105	100	99
640-27290-22 MS	PFNG010101 MS	104	103	99
640-27290-22 MSD	PFNG010101 MSD	102	100	100

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane	83-123
TOL = Toluene-d8 (Surr)	78-126
BFB = 4-Bromofluorobenzene	70-119

**Quality Control Results**

Client: EnSafe, Inc.

Job Number: 640-27290-1

**Surrogate Recovery Report****8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)****Client Matrix: Water**

Lab Sample ID	Client Sample ID	TBP %Rec	FBP %Rec	2FP %Rec	NBZ %Rec	PHL %Rec	TPH %Rec
640-27290-1	PFNG290301	80	81	69	84	66	51
640-27290-4	PFNG290201	76	68	63	70	57	25
640-27290-6	PFNG240201	95	86	74	92	69	41
640-27290-7	PFNG250201	81	68	57	66	55	31
640-27290-9	PFNG240101	89	84	60	80	65	63
640-27290-11	PFNH240101	91	84	77	85	75	55
640-27290-13	PFNG250101	92	80	78	85	76	56
640-27290-15	PFNG210101	77	71	57	68	61	64
640-27290-16	PFNG190101	91	83	75	91	78	61
640-27290-18	PFNG190201	82	77	68	76	65	26
640-27290-20	PFNG160601	78	63	57	65	53	41
640-27290-22	PFNG010101	64	63	52	67	46	85
640-27290-23	PFNG010201	90	82	71	89	72	45
640-27290-25	PFNG010301	77	66	58	70	64	85
640-27290-26	PFNH010301	82	81	63	79	66	98
640-27290-27	PFNG260101	87	84	60	92	71	101
640-27290-28	PFNG260201	83	82	69	81	69	95
640-27290-30	PFNG180201	86	80	72	87	78	64
640-27290-32	PFNG220201	88	79	58	88	68	65
640-27290-33	PFNG220101	82	76	67	81	73	32
MB 640-67913/1-A		89	87	79	87	73	97
LCS 640-67913/2-A		97	88	60	81	65	88
LCSD 640-67913/3-A		97	86	62	84	64	84
640-27290-22 MS	PFNG010101 MS	94	80	57	75	55	88
640-27290-22 MSD	PFNG010101 MSD	91	82	69	77	65	81

Surrogate	Acceptance Limits
TBP = 2,4,6-Tribromophenol	42-128
FBP = 2-Fluorobiphenyl	31-113
2FP = 2-Fluorophenol	27-111
NBZ = Nitrobenzene-d5	39-123
PHL = Phenol-d5	23-123
TPH = Terphenyl-d14	10-138

**Surrogate Recovery Report****FL-PRO Florida - Petroleum Range Organics (GC)****Client Matrix: Water**

Lab Sample ID	Client Sample ID	OTPH	C39
		%Rec	%Rec
640-27290-1	PFNG290301	106	72
640-27290-4	PFNG290201	83	82
640-27290-6	PFNG240201	98	84
640-27290-7	PFNG250201	100	92
640-27290-9	PFNG240101	110	87
640-27290-11	PFNH240101	109	79
640-27290-13	PFNG250101	114	107
640-27290-15	PFNG210101	107	102
640-27290-16	PFNG190101	120	108
640-27290-18	PFNG190201	109	68
640-27290-20	PFNG160601	112	97
640-27290-22	PFNG010101	130	74
640-27290-23	PFNG010201	112	109
640-27290-25	PFNG010301	104	96
640-27290-26	PFNH010301	112	75
640-27290-27	PFNG260101	110	86
640-27290-28	PFNG260201	139	113
640-27290-30	PFNG180201	121	96
640-27290-32	PFNG220201	122	117
640-27290-33	PFNG220101	115	116
MB 640-67914/1-A		121	83
LCS 640-67914/2-A		99	123
LCSD 640-67914/3-A		102	110
640-27290-22 MS	PFNG010101 MS	115	115
640-27290-22 MSD	PFNG010101 MSD	107	103

Surrogate	Acceptance Limits
OTPH = o-Terphenyl	82-142
C39 = n-C39	42-193