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NAS CECIL FIELD, FL
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ABANDON/CLOSE IN-PLACE LETTER REPORT FOR TANK 285 NAS CECIL FIELD FL
7/5/2004
CH2MHILL CONSTRUCTORS INC

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July 5, 2004

Mr. Mark Davidson
NAVFAC EFD SOUTH
P.O. Box 190010
N. Charleston, SC 29419-9010

Subject: Abandon/Close In-Place Tank 285
Contract Task Order No. 0057
Former Naval Air Station Cecil Field, Jacksonville, Florida

Dear Mr. Davidson:

CH2M HILL Constructors, Inc. (CH2M HILL) is pleased to submit this letter report to Naval Facilities Engineering Command, Engineering Field Division, Southern Division (NAVFAC EFD SOUTH) under Contract Task Order (CTO) No. 0057 for Response Action Contract (RAC) Number N62467-98-D-0995. The contents of this letter report document the activities to abandon/close in-place Tank 285 located in the vicinity of Building 285 at former Naval Air Station (NAS) Cecil Field, Jacksonville, Florida. These activities were performed in response to the NAVFAC EFD SOUTH Technical Direction dated December 18, 2003 to perform necessary actions to Abandon/Close In-place Tank 285 at former NAS Cecil Field, Jacksonville, Florida.

Building 285 was identified as the control house for the former North Tank Fuel Farm and is currently not in use. Tank 285 was identified as part of the septic system for Building 285. Sampling completed by Tetra Tech NUS, Inc. showed no contaminated soil or groundwater in the vicinity of Tank 285.

The approved procedures to abandon/close in-place Tank 285 are outlined in the approved CTO No. 0057 Work Plan Addendum No. 17, Revision No. 01 (CH2M HILL, 2003). Tank 285 abandonment/closure activities were completed from February 12, 2004 to May 28, 2004. Photographs documenting the site activities are provided in Attachment 1.

Tank 285 abandonment/closure activities include the following:

Waste Characterization Sampling

1. The sediment in Tank 285 was sampled on February 12, 2004 for disposal characterization and shipped to PEL Laboratories for the following analyses:
   - Target Compound List (TCL) Volatiles by U.S. Environmental Protection Agency (EPA) Method 8260B
   - TCL Semi-volatiles by EPA Method 8270C
   - TCL Pesticides by EPA Method 8081A

- TCL Herbicides by EPA Method 8151A
- Target Analyte List (TAL) Metals by EPA Method 6010B
- Polychlorinated biphenyls (PCBs) by EPA Method 8082
- Total Petroleum Hydrocarbons (TPH) by FL-PRO Method
- pH by EPA Method 9045B
- Corrosivity by EPA Method 9045A
- Cyanide (total) by EPA Method 9010
- Sulfide (total) by EPA Method 9030

2. The results of the waste disposal characterization analysis for totals indicated that lead would potentially exceed the toxicity leachate characteristic limit of 5 milligrams/liter (mg/L). Therefore, an additional sediment sample was collected on March 31, 2004 for disposal characterization and shipped to PEL Laboratories for Toxicity Characteristic Leaching Procedure (TCLP) lead analysis by EPA Method 1311/6010B.

3. The liquid in the Tank 285 sump was sampled for disposal characterization on February 12, 2004 and shipped to PEL Laboratories for the following analyses:

   - TCL Volatiles by EPA Method 8260B
   - TCL Semi-volatiles by EPA Method 8270C
   - TCL Pesticides by EPA Method 8081A
   - TCL Herbicides by EPA Method 8151A
   - TAL Metals by EPA Method 6010B
   - PCBs by EPA Method 8082
   - TPH by FL-PRO Method
   - pH by EPA Method 9045B
   - Corrosivity by EPA Method 9045A
   - Cyanide (total) by EPA Method 9010
   - Sulfide (total) by EPA Method 9030
   - Ignitability by EPA Method 1010

The waste characterization laboratory analytical reports are provided in Enclosure 5.

Tank 285 Abandonment/Closure Activities, completed February 24, 2004

1. Site preparation included utility clearance, establishing site controls, and construction of drum staging/containment area.

2. All soil and vegetation was removed to expose the extents of Tank 285. The soil/vegetation was assumed "clean" and was utilized as fill material.

3. The lid of Tank 285 was removed and demolished using a backhoe, decontaminated with a pressure washer, and used as fill material.

4. All encountered solids were removed from Tank 285 using a backhoe and containerized in three 55-gallon drums.

5. All encountered liquids in Tank 285 and sump were removed by utilizing a 2-inch diaphragm pump and containerized in one 55-gallon drum.

6. Tank 285 was decontaminated using a pressure washer and all decontamination water was removed using a 2-inch diaphragm pump and containerized in one 55-gallon drum.

7. The Tank 285 sump and attached sump pump were removed following decontamination. The sump was containerized in one 55-gallon drum and the sump pump was disposed of as construction debris.

8. The 4-inch diameter polyvinyl chloride (PVC) inlet pipe to Tank 285 and the 2-inch diameter PVC discharge pipe from the sump were cut and capped with PVC caps.

9. The concrete floor of Tank 285 was demolished with a backhoe to allow for proper drainage.

10. Tank 285 and sump area was backfilled and machine compacted to grade with certified clean fill. The laboratory analytical report certifying the fill as clean is provided in Attachment 6.

11. Used personal protective equipment was containerized in one 55-gallon drum.

Transportation and Disposal

1. Based on laboratory analytical results, the generated solid/liquid waste was characterized as non-hazardous petroleum-contaminated.

2. Environmental Remediation Services, Inc. transported the seven 55-gallon drums for disposal on May 28, 2004. Five of the drums contained solids and were disposed at Chesser Island Landfill and two drums contained liquids were disposed by Industrial Water Services on June 24, 2004.

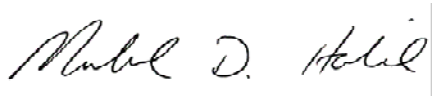
3. The Transportation and Disposal log, waste disposal profiles, non-hazardous waste manifests, and certificates of disposal are provided in Enclosures 2, 3, and 4 respectively.

As outlined in this letter report, CH2M HILL has completed the project scope stated in the CTO No. 0057 Work Plan Addendum No. 17, Revision No. 01 (CH2M HILL, 2003).

If you have any questions with regard to this submittal, please contact me at (904) 777-4812 ext. 233.

Respectfully,

CH2M HILL



Michael D. Halil, P.E.
Contract Task Order Manager

Attachments (6)

Cc: Mr. Mark Speranza (Tetra Tech NUS, Inc.)
Mr. Larry Blackburn (EFA Southeast) (CD only)
Mr. Doyle Brittain (EPA)
Mr. David Grabka (FDEP)
Mr. Jimmy Jones (Southern Division) (w/o enclosures)
Project File No. 263231

Attachment 1

Site Photographs

Photograph 01: Construction of 55-gallon drum containment area

Photograph 02: 55-gallon drum containment area

Photograph 03: View of Tank 285 with top removed

Photograph 04: Removal of sediment in Tank 285

Photograph 05: Sediment from Tank 285 being containerized

Photograph 06: Tank 285 with sediment removed

Photograph 07: Decontamination water being removed from Tank 285

Photograph 08: 2-inch sump line capped

Photograph 09: Sump with lid removed

Photograph 10: Sump after liquid contents were removed and containerized

Photograph 11: Removal of sump

Photograph 12: Capping 4-inch inlet line

Photograph 13: 4-inch inlet line capped

Photograph 14: Demolition of Tank 285 floor

Photograph 15: Backfilling Tank 285

Photograph 16: Tank 285 site following site restoration

Attachment 2

Transportation and Disposal Log

Transportation and Disposal Log

CTO No	Project No	Project Name	Site Description	Container Type	Container Desig.	Waste Profile Sample No	Contractor	Transporter	Date Transported	Transporter EPA ID	Load ID	Disposal Facility	Disp Fac EPA ID	Media	Waste Type (Haz, Nonhaz, TSCA)	Waste Code/ Haz Waste No	Disposal Date	Manifest Number	Disposal Treatment Method (Enter disposal quantity under appropriate method)					Certif of Disp/ Destruc Date	Comments/ Notes	File Status (see note)
																			Incineration	Recycle	Landfill	Other	Unit			
0057	263231	T285	Tank 285	Drum	-	N/A	CCI	ERS	05/28/04	N/A	1	Chesser	not req'd	Solids	Nonhaz	-	06/07/04	4469			5		drums	06/24/04	5 Drums	
0057	263231	T285	Tank 285	Drum	-	N/A	CCI	ERS	05/28/04	N/A	2	IWS	FLD981928484	Liquids	Nonhaz	-	06/07/04	4468		2			drums	06/24/04	2 Drums	

Attachment 3

Waste Disposal Profile

WASTE MANAGEMENT

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

Service Agreement on File? ☒ YES ☐ NO

☐ Hazardous ☒ Non-Hazardous ☐ TSCA

Profile Number:

Renewal Date

A. Waste Generator Information

1.	Generator Name:	NAS Cecil Field, Public Works Center	2.	SIC Code	
3.	Facility Street Address:	P.O. Box 30, Code, 331	4.	Phone	(904)777-4812
5.	Facility City:	Jacksonville	6.	State/Province:	Florida
7.	Zip/Postal Code:	32313	8.	Generator USEPA/FED ID #:	Not Required
9.	County:	Duval	10.	State/Province ID#:	
11	Customer Name:	Environmental Remediation Services, Inc.	12.	Customer Phone::	(904)791-9992
13.	Customer Contact:	Charlie Owens	14.	Customer Fax:	(904)791-9833
15.	Billing Address	760 Talleyrand Avenue; Jacksonville, FL 32202			☐ Same as above

B. Waste Stream Information

1. **DESCRIPTION**

a. Name of Waste: Waste tank solids

b. Processing Generating Waste: Sludge/solids removed during cleaning of septic tank located in petroleum impacted area. One drum contains PPE.

c. Color	d. Strong odor (describe)	e. Physical state @ 70°F	f. Layers	g. Free liquid range
Various	NA	☐ Solid ☐ Liquid ☐ Gas ☒ Sludge ☐ Other	☒ Single Layer ☐ Multi-Layer	to NA %
				h. pH: Range 6.39 to NA

I. Liquid Flash Point: ☐ <73°F ☐73-99°F ☐ 100-139°F ☐ 140-199°F ☐ ≥ 200°F ☒ Not Applicable

j. Chemical Composition (List all constituents [including halogenated organics, debris, and UHC's] present in any concentration and submit representative analysis):.

Constituents	Concentration Range	Constituents	Concentration Range
Please see attached lab analysis.			
Soil	75-100%		
PPE/visqueen	0-25%		

TOTAL COMPOSITION MUST EQUAL OR EXCEED 100%

k. ☐ Oxidizer ☐ Pyrophoric ☐ Explosive ☐ Radioactive ☐ Carcinogen ☐ Infectious ☐ Shock Sensitive ☐ Water Reactive

l. Does the waste represented by this profile contain any of the carcinogens which require OSHA Notification? (list in Section B.1.j)..... ☐ YES ☒ NO

m. Does the waste represented by this profile contain dioxins? (list in B.1.j)..... ☐ YES ☒ NO

n. Does the waste represented by this profile contain asbestos?..... ☐ YES ☒ NO

If yes..... ☐ friable ☐ non-friable

o. Does the waste represented by this profile contain benzene..... ☐ YES ☒ NO

If yes, concentration _____ Ppm

Is the waste subject to benzene waste operations NESHAP?..... ☐ YES ☒ NO

p. Is the waste subject to RCRA Subpart CC controls..... ☐ YES ☒ NO

If no, does the waste meet the organic LDR Exemption:..... ☐ YES ☒ NO

If no, does the waste contain <500 ppmw volatile organic (VOC's)?..... ☐ YES ☒ NO

Volatile organic concentration _____ ppmw

q. Does the waste contain any Class I or Class II ozone-depleting substance?..... ☐ YES ☒ NO

r. Does the waste contain debris? (list in Section B.1.j)..... ☒ YES ☐ NO

s. Is the waste subject to controls as a Group 1 wastewater or residual under the HON?..... ☐ YES ☒ NO

If yes, is it a Table 8 _____ or Table 9 _____ Compound?

2. **Quantity of Waste**

Estimated Annual Volume Four (4) 55 gallon drums ☐ Tons ☐ Yards ☒ Drums ☐ Other (specify) _____

3. **Shipping Information**

a. Packaging:

☐ Bulk Solid; Type/Size: _____ ☐ Bulk Liquid, Type/Size _____

☒ Drum; Type/Size: 55 gallon ☐ Other: _____

b. Shipping Frequency: Units _____ Per: ☐ Month ☐ Quarter ☐ Year ☒ One Time ☐ Other _____

c. Is this a U.S. Department of Transportation (USDOT) Hazardous Material? (If no, skip d, e and f)..... ☐ YES ☒ NO

WASTE MANAGEMENT

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

d. Reportable Quantity (lbs.; kgs.): _____ e. Hazard Class/ID#: _____

f. USDOT Shipping Name: _____

g. Personal Protective Equipment Requirements: _____

h. Transporter/Transfer Station: _____

C. Generator's Certification (Please check appropriate responses, sign, and date below.)

1. Is this a USEPA hazardous waste (40 CFR Part 261)? If the answer is no, skip to 2..... ☐ YES ☒ NO
   a. If yes, identify ALL USEPA listed and characteristic waste code numbers (D,F,K,P,U) _____
   b. If a characteristic hazardous waste, do underlying hazardous constituents) (UHCs) apply? (if yes, list in Section.B.1.j)..... ☐ YES ☐ NO
   c. Does this waste contain debris? (if yes, list size and type in Chemical Composition - B.1.)..... ☐ YES ☐ NO

2. Is the waste from a soil remediation project?..... ☐ YES ☒ NO
   a. Will the Alternative Soil treatment Standards to be invoked?..... ☐ YES ☒ NO
   b. Do underlying hazardous constituents apply? (If yes, list in Section B.1.j)..... ☐ YES ☒ NO

3. Is the waste from a CERCLA (40 CFR 300, Appendix B) or state mandated clean-up?..... ☐ YES ☒ NO
   If yes, attach Record of Decision (ROD), 104/106 or 122 order or court order that governs site clean-up for activity. For state mandated clean-up, provide relevant documentation.

4. Does the waste represented by this waste profile sheet contain radioactive material?..... ☐ YES ☒ NO
   a. Is disposal regulated by the Nuclear Regulatory Commission?..... ☐ YES ☐ NO
   b. If NORM, identify isotopes and concentration, pCi/g _____ ☐ YES ☐ NO

5. Does the waste represented by this waste profile sheet contain concentrations of Polychlorinated Biphenyls (PCBs) regulated by 40 CFR 761? (if yes, list in Chemical Composition - B.1.j)..... ☐ YES ☒ NO
   a. Were the PCBs imported into the U.S.?..... ☐ YES ☐ NO
   b. Are PCBs regulated under the "Self-Implementing Remediation (Mega) Rule?"..... ☐ YES ☐ NO

6. Do the waste profile sheet and all the attachments contain true and accurate descriptions of the waste material, and has all relevant information within the possession of the Generator regarding known or suspected hazards pertaining to the waste been disclosed to the Contractor?..... ☒ YES ☐ NO

7. Will all changes which occur in the character of the waste be identified by the Generator and disclosed to the Contractor prior to providing the waste to the Contractor?..... ☒ YES NO

☐ Check here if a Certificate of Destruction or Disposal is required.

Any sample submitted is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. I authorize WMI to obtain a sample from any waste shipment for purposes of recertification. If this certification is made by a broker, the undersigned signs as authorized agent of the generator and has confirmed the information contained in this Profile Sheet from information provided by the generator and additional information as it has determined to be reasonably necessary. If approved for management, Contractor has all the necessary permits and licenses for the waste that has been characterized and identified by this approved profile.

Certification Signature: [signature] Title: Environmental Prof. Spec

Name (Type or Print) Mitchell B. McPherson Company Name Navy Public Works Cut JAX Date: 5-27-04

☐ Check if additional information is attached. Indicate the number of attached pages. _____

D. WMI Management's Decision

FOR WMI USE ONLY

1. Management Method ☐ Landfill ☐ Non-hazardous Solidification ☐ Bioremediation ☐ Incineration ☐ Hazardous Stabilization ☐ Other (Specify) _____
2. Proposed Ultimate Management Facility: _____
3. Precautions, Special Handling Procedures, or Limitation on Approval _____

4. Waste Form: _____ 5. Source _____ 6. System Type _____

Special Waste Decision..... ☐ Approved ☐ Disapproved

Salesperson's Signature: _____ Date: _____

Division Approval Signature (Optional): _____ Date: _____

Special Waste Approvals Person Signature _____ Date: _____

WASTE MANAGEMENT

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

Information on this form is used to determine if the waste may be transported, treated, stored or disposed in a legal, safe, and environmentally sound manner. This information will be maintained in strict confidence. Answers must be provided for sections A, B, and C and must be printed in ink or typed. A response of "NONE" or NA" (not applicable) can be made if appropriate. If additional space is needed, indicate on the form that additional information is attached, and attach the information to Generator's Waste Profile Sheet. If you have questions concerning this form, please contact the Contractor's sales representative.

A. Waste Generator Information

1. **Generator Name** - Enter the name of the facility where the waste is generated.
2. **SIC Code** - Enter the four digit Standard Industrial Classification Code for the facility where the waste is generated.
3. **Facility Street Address** -Enter the street address (not P.O. Box) of the facility where the waste is generated.
4. **Phone** - Enter Generator's area code and phone number.
5. **Facility City** - Enter the city where the waste is generated.
6. **State/Province** - Enter the state or province where the waste is generated.
7. **Zip/Postal Code** - Enter the generating facility's zip or postal code.
8. **Generator USEPA/FEDERAL ID #** - Enter the identification number issued by the USEPA, Canadian, or Mexican Federal Agency to the facility generating the waste(if applicable).
9. **County** - Enter the county where the waste is generated.
10. **State/Province ID#** - Enter the identification number issued by the state or province to the facility generating the waste (if applicable).
11. **Customer Name** - Entity that the Contractor is directly working with regarding the represented waste stream. If the same as the Generator, mark "Same as Above".
12. **Customer Phone** - Enter technical contact's area code and telephone number.
13. **Customer Contact** - Enter the name of the person who can answer technical questions about the waste.
14. **Customer Fax** - Area code and facsimile number for the customer.
15. **Billing Address** - Address where bill for services should be sent.

B. Waste Stream Information

1.a. **Name of Waste** - Enter a name generally descriptive of this waste (e.g., paint sludge, fluorescent bulbs).

1.b **Process Generating Waste** - Describe the process generating the waste in detail. List the specific process/operation or source that generates the waste (e.g., incineration of municipal refuse, asbestos removal, wastewater treatment, building maintenance).
At a minimum, the Generator should answer the following questions in determining the process generating the waste.

- What chemicals are stored and/or used at the facility?
- Is the waste generated from the production /manufacturing of any of the following industries: wood preservation; inorganic pigments; organic pigments; pesticides; explosives; petroleum refining; iron and steel, copper, lead or zinc production?
- Is the waste a result from degreasing, solvent parts cleaning, recovery/reclaiming of solvents (bottoms), waste water treatment (sludges), or electroplating?

1.c. **Color** - Describe the color of the waste (e.g., blue, transparent, varies).

1.d. **Strong odor** - DO NOT SMELL THE WASTE! If the waste has a known odor, then describe (e.g., acrid, pungent, solvent, sweet.).

1.e. **Physical state @ 70°F** - If the four boxes provided do not apply, a descriptive phrase may be entered after "Other" e.g., multi-phase).

1.f. **Layers** - Single Layers means the waste is homogenous. Multi-layer means the waste is comprised of two or more layers (e.g., oil/water/sludge).

1.g. **Free liquid range** - Range (in percent by volume) of free liquids in the waste.

1.h. **pH Range** - Indicate the pH range.

1.I. **Liquid Flash Point** - Indicate the flash point obtained using the appropriate test method.

1.j. **Chemical Composition** - List all organic and/or inorganic components of the waste using chemical names. If trade names are used, attach Material Safety Data Sheets or other documents that adequately describe the composition of the waste. For each component, estimate the range (in percent) in which the component is present.`

1.k.. Check all that apply.

1.l. Identify any element, chemical compound, or mixture in concentration of 0.1 percent or greater that is considered a carcinogen or potential carcinogen pursuant to OSHA.

1.m. Indicate if the waste contains any dioxins (list in Section B.1.j)

1.n. Indicate if the waste contains asbestos. Indicate if the asbestos is friable.

1.o. Indicate if the waste contains benzene, the level in ppm, and whether it is subject to the benzene NESHAP.

1.p. Indicate if the waste is subject to RCRA Subpart CC . Also, indicate whether the waste meets the organic LDR Exemption or contains less than 500 ppmw Volatile Organic (VO). Indicate the VO concentration, if known, in parts per million weight.

1.q. Indicate if the waste contains any Class I or Class II ozone-depleting controlled substances.

1.r. Indicate if the waste contains debris (list size and type in B.1.j.)

1.s. Indicate if the wastewater or residual is subject to 40 CFR Part 63 subpart G controls. If yes, indicate if it is a Table 8 or Table 9 compound.

2. **Quantity of Waste** - Approximate volume in tons, yards, or other (e.g., drums, gallons) that will be received by the ultimate management facility. This volume amount is not intended for use in complying with state and/or permit restrictions.

3.a. **Packaging** - Choose the appropriate option or "other" along with a description.

3.b. **Shipping Frequency** - Choose the appropriate option or "other" along with a description.

3.c. **Is this a U.S. Department of Transportation (USDOT) hazardous material?** - Choose the appropriate response: yes or no.

WASTE MANAGEMENT

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

3.d. **Reportable quantity (lbs.; kgs.)** If the answer to 3.c. is yes, enter the Reportable quantity (RQ) established by 40 CFR 302.4 or equivalent Canadian or Mexican regulation for this waste. Indicate the appropriate units for the RQ.

3.e. **Hazard Class/ID #** - If the answer to 3.c. is yes, indicate the proper USDOT hazard class and identification number.

3.f. **USDOT Shipping Name** - IF the answer to 3.c. is yes, enter the proper USDOT shipping name for the waste.

3.g. **Personal Protective Equipment Requirements** - All personal protective equipment necessary to safely manage the waste stream.

3.h. **Transporter/Transfer Station** – Transporter and/or transfer station name.

C. Generator's Certification (Please check appropriate responses, sign, and date below.)

Indicate the appropriate response to questions/statements 1, 2, 3, 4, 5, 6, and 7. By signing this Generator's Waste Profile Sheet, the Generator certifies the responses are true and accurate with respect to the waste stream(s) listed.

Certification Signature - Signature of an authorized employee of the Generator or representative of the generator if authorized in writing by the generator.
Title - Enter Employee's title.
Name - Type or Print Employee's name.
Company Name - Company employing the person certifying the Generator's Waste Profile Sheet.
Date - Enter the date this Generator's Waste Profile Sheet is signed.

D. WMI Management's Decision

FOR WMI USE ONLY

To be completed by WMI.

INDUSTRIAL WATER SERVICES

MATERIAL PROFILE FORM

JACKSONVILLE (904) 354 - 0372 FAX: (904) 353 - 4033
MOBILE (251) 694 - 7500 FAX: (251) 694 - 7508
CHICAGO (773) 646 - 9700 FAX: (773) 646 - 9730

Generator Name: NAS Cecil Field, Public Works Center
City / State: Jacksonville, Florida
SIC / NAICS Code:
IL EPA ID #:
Name of material: Wastewater from tank cleaning
Gallons: 150 Frequency: one time
Process generating waste: Wastewater from cleaning of septic tank located in petroleum impacted area.

Customer Name: Environmental Remediation Services, Inc.
Customer Address: 760 Talleyrand Avenue
City / State / Zip: Jacksonville, FL 32202
Phone #: (904)791-9992
Fax #: (904)791-9833
Technical Contact: Charlie Owens

QUESTIONNAIRE

(check one) ☐ Used Oil ☐ Petroleum Contact Water ☐ Virgin Product ☒ Nonhazardous Waste

1. Is the waste hazardous by:
   - Ignitability? ___ Yes X No
   - Corrosivity? ___ Yes X No
   - Reactivity? ___ Yes X No
2. Does the waste contain:
   - Herbicides, pesticides, insecticides? ___ Yes X No
   - Dioxins? ___ Yes X No
   - Radioactive substances? ___ Yes X No
   - Domestic wastes? ___ Yes X No
   - Biohazardous materials? ___ Yes X No
3. Is this a hazardous waste (F, K, U, or P listed) as defined by 40 CFR 261 Subpart D? ___ Yes X No
   If yes to the above, identify the listing.
4. Is the waste derived from outside an underground storage tank (UST)? ___ Yes X No
5. If waste is derived from a fuel, is the fuel leaded? ___ Yes X No

CONSTITUENTS

Does the waste contain any constituents listed in the table below? X Yes ___ No If yes, indicate the level present.
How was the level determined? X Generator Knowledge X Total laboratory analysis X TCLP Laboratory analysis
*** PLEASE SEE ATTACHED LABORATORY ANALYSIS. ******

EPA #	Contaminant	Actual level (ppm)	EPA #	Contaminant	Actual level (ppm)
D004	ARSENIC	0.005	D032	HEXACHLOROBENZENE	BDL
D005	BARIUM	0.081	D033	HEXACHLOROBUTADIENE	BDL
D018	BENZENE	BDL	D034	HEXACHLOROETHANE	BDL
D006	CADMIUM	0.006	D008	LEAD	0.138
D019	CARBON TETRACHLORIDE	BDL	D013	LINDANE	BDL
D020	CHLORDANE	BDL	D009	MERCURY	0.0005
D021	CHLOROBENZENE	BDL	D014	METHOXYCHLOR	BDL
D022	CHLOROFORM	BDL	D035	METHYL ETHYL KETONE	BDL
D007	CHROMIUM	0.033	D036	NITROBENZENE	BDL
D024	CRESOL (M)	BDL	D037	PENTACHLOROPHENOL	BDL
D023	CRESOL (O)	BDL	D038	PYRIDINE	BDL
D025	CRESOL (P)	BDL	D010	SELENIUM	0.006
D026	CRESOL	BDL	D011	SILVER	BDL
D016	2,4-D	BDL	D039	TETRACHLOROETHYLENE	BDL
D027	1,4-DICHLOROBENZENE	BDL	D015	TOXAPHENE	BDL
D028	1,2-DICHLOROETHANE	BDL	D040	TRICHLOROETHYLENE	BDL
D029	1,1-DICHLOROETHYLENE	BDL	D041	2,4,5-TRICHLOROPHENOL	BDL
D030	2,4-DINITROTOLUENE	BDL	D042	2,4,6-TRICHLOROPHENOL	BDL
D012	ENDRIN	BDL	D017	2,4,5-TP (SILVEX)	BDL

D031	HEPTACHLOR	BDL	D043	VINYL CHLORIDE	BDL

CONSTITUENTS (continued)

(page 2)

Contaminant	Actual level (ppm)	Contaminant			Actual level (ppm)
ANTIMONY	0.019	bis 2-ETHYL HEXYL PHTHALATE			BDL
COBALT	0.002	CARBAZOLE			BDL
COPPER	0.238	n-DECANE			BDL
MOLYBDENUM	NA	2,3-DICHLOROANILINE			BDL
NICKEL	0.015	FLUORANTHENE			BDL
TIN	NA	n-OCTADECANE			BDL
TITANIUM	NA	PCB's	___ less than 2 mg/L	___ greater than 2 mg/L	BDL
VANADIUM	0.024	CYANIDES	X less than 2 mg/L	___ greater than 2 mg/L	
ZINC	4.63	SULFIDES	X less than 2 mg/L	___ greater than 2 mg/L	

NA = NOT ANALYZED

PHYSICAL CHARACTERISTICS

Color Clear Odor? [X] No [ ] Yes If yes, describe _____

pH 7.6 Flash Point (°F) > 160 Total Suspended Solids (%) 0

Total Organic Halogens X less than 1,000 mg/L ___ greater than 1,000 mg/L actual level _____ mg/L

Physical state: ___ solid X liquid ___ semi-solid ___ powder

Layers: X single phase ___ multi-layered ___ bi-layered

Viscosity: ___ very thin X thin ___ moderate ___ thick ___ does not pour

REPRESENTATIVE SAMPLE CERTIFICATION

Sample source TANK 285 CECIL FIELD Sample date 02/12/2004

Sampler name Jeff Marks Title _____

Sampler employer (if other than generator): J.A. JONES ENVIRONMENTAL

The sampler's signature certifies that any sample submitted is representative of the material described above pursuant to 40 CFR 261.20 (c) or equivalent rules.

Sampler signature _____

GENERATOR CERTIFICATION

By signing this profile, you certify that:

1. You are the generator or the duly authorized representative of the generator.
2. This waste is not a hazardous waste as defined by USEPA Federal Regulation, unless noted above.
3. This waste does not contain regulated materials or regulated concentrations of PCB's (polychlorinated biphenyls).
4. This sheet contains true and accurate descriptions of the material and all relevant information in your possession regarding known or suspected hazards have been disclosed.
5. The analytical data presented herein or attached hereto were derived from testing a representative sample taken in accordance with 40 CFR 261.20 (c) or equivalent rules.
6. If any changes occur in the character of the material, you will notify the Contractor prior to the Contractor removing the material.
7. If the material is PCW, there are no hazardous constituents above those found in the source of the PCW.

Generator Signature [signature] Date 5-27-04

Printed Name Mitchell B. McPherson

Title Env. Prot. Spec.

Attachment 4

Non-Hazardous Manifest
Certificate of Disposal

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

14012

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: Not Required
Manifest Document No.: 04466
2. Page 1 of 1

3. Generator's Name and Mailing Address
NAS CECIL FIELD, PUBLIC WORKS CENTER
P.O. BOX 30, CODE 331, JACKSONVILLE, FL 32313
4. Generator's Phone ( )

5. Transporter 1 Company Name: Environmental Remediation Svc.
6. US EPA ID Number: FLD984261412
A. Transporter's Phone: 904/791-9992

7. Transporter 2 Company Name
8. US EPA ID Number
B. Transporter's Phone

9. Designated Facility Name and Site Address
Industrial Water Services
1640 Talleyrand Ave.
Jacksonville, Florida 32206
10. US EPA ID Number: FLD981928484
C. Facility's Phone: 904/354-0372

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-Hazardous Waste Water	~~001~~ gwc 002	~~TT~~ DM	gwc 5	G
b. N/A				
c. N/A				
d. N/A				

D. Additional Descriptions for Materials Listed Above
N/A

E. Handling Codes for Wastes Listed Above
N/A

15. Special Handling Instructions and Additional Information
ERS Project No. 4712
ERS Manifest No: 04468
IWS Approval Number: 02364 CTO-0057
Emergency Contact: Environmental Remediation Services, Inc. (904) 791-9992 471201

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Printed/Typed Name: X Mitchell B. McPherson
Signature:
Month Day Year: 10 5 98 04

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Jim Curtis
Signature:
Month Day Year: 10 5 2 8 0 4

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: M Bott
Signature:
Month Day Year: 6 17 04

GENERATOR
TRANSPORTER
FACILITY

Orig Mailed to Waste Generator

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

ORIGINAL - RETURN TO GENERATOR

12-BLC-M5

14011

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: Not Required

Manifest Document No.: 044469

2. Page 1 of 1

GENERATOR

3. Generator's Name and Mailing Address
NAS CECIL FIELD, PUBLIC WORKS CENTER
P.O. BOX 30, CODE 331, JACKSONVILLE, FL 32313

4. Generator's Phone ( )

5. Transporter 1 Company Name: Environmental Remediation Services, Inc.

6. US EPA ID Number: FLD984261412

A. Transporter's Phone: 904/791-9992

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Chesser Island Landfill
Hwy 121 S., Folkston, Ga 31537

10. US EPA ID Number: Not Required

C. Facility's Phone: 912/496-7918

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-HAZARDOUS WASTE SOLIDS	005	DM	250.0	P
b. N/A				
c. N/A				
d. N/A				

D. Additional Descriptions for Materials Listed Above
Approval Number: WM-VA 8676

E. Handling Codes for Wastes Listed Above: N/A

15. Special Handling Instructions and Additional Information
ERS Project: 4712
ERS Manifest: 044469
In Case of Emergency Call (904) 791-9992, 24 HRS A DAY
471201
CTO-0057

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Printed/Typed Name: Mitchell B. McPherson
Signature: [signature]
Month Day Year: 05 28 04

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Jim Curtis
Signature: [signature]
Month Day Year: 05 28 04

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: P. LORD
Signature: [signature]
Month Day Year: 06 07 04

Orig mailed to Transporter 1

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

ORIGINAL - RETURN TO GENERATOR

12 BLC ME

WASTE MANAGEMENT

CERTIFICATE OF DISPOSAL

This is to document the disposition of waste material(s) removed from your facility located at:

NAS Cecil Field, Public Works Center, P.O. Box 30, Code 331 Jacksonville, FL 32313

A. The waste material(s) consisted of
a) Waste Tank Solids (Special Waste Profile VA-8986)

B. The waste material(s) were transported by:

1st Company: Environmental Remediation Services EPA ID #:

The waste material(s) were disposed of at:
Facility: Chesser Island Road Landfill (Solid Handling Permit #024-006 D (SL)
Address: P.O. Box 128, Highway 121 @ Chesser Island Road
Folkston, GA 31537-0128

C. Disposal of your waste material(s) was accomplished by the following method(s):
a) Subtitle-D Landfill, immediately compacted and covered in accordance with all permit regulations

E. Date of Disposal: June 7, 2004

F. Tons Disposed: 5 drums (as part of ticket #42915)

Chesser Island Road Landfill
P.O. Box 128, Hwy 121 @Chesser Island Rd
Folkston, Ga 31537
912/496-7918

Linda Hair

Linda Hair, Office Manager

INDUSTRIAL WATER SERVICES

Corporate Office
1010 East Adams St. • Jacksonville, FL 32202
P.O. Box 43369 • Jacksonville, FL 32203
Phone: (904) 354-0372 • (800) 447-3592
Fax: (904) 350-1313 • www.iwsww.com

CERTIFICATE OF COMPLIANCE AND DISPOSAL

Generator: NAS Cecil Field, Public Works
Site Location: Jacksonville, Fl
Manifest Number: 04468

This certifies that on the 7th of June, 2004; 110 gallons of Non Hazardous wastewater as described on manifest number 04468 was disposed of and/or recycled in compliance with all applicable state, federal and local regulations under Industrial User Permit Number ISN 019.

Facility Name:	Industrial Water Services, Inc.
Facility Address:	1640 Talleyrand Avenue Jacksonville, FL
Facility EPA ID#:	FLD 981 928 484
Certified By:	Leslie Detlefsen
Signature:	Leslie Detlefs
Date:	June 24, 2004

12123 South Stony Island Avenue
Chicago, IL 60633
(773) 646-9700
Fax: (773) 646-9730

1640 Talleyrand Avenue
Jacksonville, FL 32206
(904) 354-0372
Fax: (904) 353-4033

1980 Avenue "A"
Mobile, AL 36615
(251) 694-7500
Fax: (251) 694-7508

Attachment 5

Laboratory Analytical Results
Tank 285 Waste Characterization

(provided on CD)

PEL Laboratories, Inc.

Customer Name:	CH2M Hill
Date and Time Received:	2/13/2004 10:00:00 AM
Date Reported:	2/27/2004
Laboratory Submission Number/SDG:	2402125
Project:	Former NAS Cecil Field

Samples: The submission consisted of 2 samples with sample identification shown in the attached data tables.

Tests: The samples were analyzed for the methods listed on the attached table of contents.

Results: See the attached data tables for results.

Distribution of Report to:

CH2M Hill
Attn: Melissa Osborne
Phone: W 770-604-9182
F 770-604-9282

Respectfully Submitted,

Brian Spann
Laboratory Manager
PEL Laboratories, Inc.

Note: Submitted material will be retained for 30 days unless otherwise requested by client or consumed in analysis. PEL letters and reports are for the exclusive use of the client to whom they are addressed. Our Letters and reports apply to the sample tested and are n necessarily indicative of the qualities of apparently identical or similar materials

4420 Pendola Point Road • Tampa, Florida 33619
(813)247-2805 • FAX: (813)248-1537
Website: www.pelab.com

Organics 1
METHOD 8260 GC/ MS VOLATILE ORGANICS 4
Sample Data 9
QC Summary 16
Standards Data 49
METHOD 8270 GC/ MS SEMI- VOLATILE ORGANICS 77
Sample Data 82
QC Summary 86
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METHOD 8081 GC/ ECD PESTICIDE ORGANICS 130
Sample Data 135
QC Summary 137
Standards Data 161
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QC Summary 201
Standards Data 217
METHOD 8151 GC/ ECD HERBICIDE ORGANICS 245
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WET CHEMISTRY DATA PACKAGE TOTALS..... 390
Sample Data 394
QC Summary 396

Chain of Custody Documentation 406

Addendum 411

Organics

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Organic Data Qualifiers

U Indicates the analyte was analyzed for but not detected. The number adjacent to the "U" qualifier indicates the reporting limit for that analyte. The reporting limit can vary from sample to sample depending on dilution factors or the percent moisture adjustment when indicated.

J Indicates estimated value. It is used when the data indicates the presence of an analyte above the method detection limit (MDL) yet lower than the reporting limit.

B Indicates the analyte was found in the associated blank as well as in the sample. The notation indicates possible contamination of the sample.

E Indicates the value reported is above the highest calibration standard for that analyte. The sample should be analyzed at an appropriate dilution. "E" qualified values are estimations and the diluted result may be reported on another Form 1.

D Indicates the analyte has been identified in a dilution reanalysis. "D" qualifiers are used for samples that have been analyzed at a lesser dilution than required for accurate quantitation.

C The "C" qualifier indicates the presence of this analyte has been confirmed by GC/MS analysis.

P This qualifier is used for pesticide / Aroclor target analytes where there is greater than 25% difference for the detected concentration between the two GC columns.

N This qualifier indicates presumptive evidence of an analyte. This qualifier is only used for tentatively identified compounds (TIC), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the "N" qualifier is not used.

A This qualifier indicates that a TIC is a suspected aldol-condensation product.

X Data flagged as rejected by analyst utilizing analytical judgement.

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Organic Sample ID Qualifiers

The qualifiers that may be appended to the lab sample ID and/or the client sample ID for organic analysis are defined below:

DL Diluted reanalysis. Indicates that the results of the original analysis of the sample contained compounds that exceeded the calibration range. The sample was diluted and reanalyzed. May be followed by a digit to indicate multiple dilutions of the sample. The results of more than one diluted reanalysis may be reported.

R Reanalysis. The extract was reanalyzed without re-extraction. The "R" is not used if the sample was also re-extracted. May be followed by a digit to indicate multiple reanalysis of the sample at the same dilution.

RE Re-extracted. The extract was reanalyzed with re-extraction. May be followed by a digit to indicate multiple re-extraction of the same sample at the same dilution.

MS Matrix spike (may be followed by a digit to indicate multiple matrix within a sample set).

SD Matrix spike duplicate (may be followed by a digit to indicate multiple matrix spike duplicate within a sample set).

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GC/MS VOLATILE ORGANICS

METHOD 8260

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CASE NARRATIVE
GC/MS VOLATILE ORGANICS

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

EPA 8260B/SW846

IV. PREPARATION

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

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

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met with the exception of:

Sample 57285TS040212 was recovered above criteria for the following surrogate(s): 1,2-Dichloroethane-d4 at 125 % with criteria of (71-124), 4-Bromofluorobenzene at 164 % with criteria of (54-126), and Dibromofluoromethane at 127 % with criteria of (68-119). The sample was reanalyzed as a high level methanol extract meeting all surrogate criteria. These results were most likely due to the sample matrix. Samples coded accordingly.

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

D. Spikes:

1. Laboratory Control Spikes (LCS/LCSD)

All acceptance criteria were met with the exception of:

LCS 021304LCSA32 was analyzed with the water samples on 02/13/04. The following analyte was recovered above criteria: 1,2,3-Trichlorobenzene at 124 % with criteria of (91-122).

LCS 021304LCSA32D was analyzed with the water samples on 02/13/04. The following analyte was recovered below criteria: Isopropylbenzene (Cumene) at 94 % with criteria of (96-118).

LCS 021604MLCSS22 was analyzed with the soil samples on 02/16/04. The following analyte was recovered above criteria: MTBE at 140 % with criteria of (68-125).

LCS 021604MLCSS22D was analyzed with the soil samples on 02/16/04. The following analyte(s) were recovered above criteria: 1,1,2,2-Tetrachloroethane at 114 % with criteria of (64-113) and MTBE at 137 % with criteria of (68-125).

No further action was necessary. These results are within the PEL 10% limits. Samples coded accordingly.

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

No spikes requested by client.

E. Internal Standards:

All acceptance criteria were met with the exception of:

57285TS040212 did not meet criteria for the following internal standard(s): Chlorobenzene-d5 and 1,4-Dichlorobenzene-d4. A second low level soil was reanalyzed with similar results. The sample was then reanalyzed as a high level methanol extract meeting all internal standard criteria. Only one low level analysis is included in the hard copy and Edata. Samples coded accordingly.

F. Samples:

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

Sample 57285TS040212 required a high level methanol extraction and analysis due to a high concentration of 1,4-Dichlorobenzene. Both low and high level runs are reported.

CASE NARRATIVE
GC/MS VOLATILE ORGANICS

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

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

SIGNED: _____ **DATE:** 2-19-04

W:\volsnarratives\2402125_8260.doc

VOLATILE ORGANIC CROSS REFERENCE TABLE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Method: 8260

EPA Sample No	Lab Sample ID
57285TS040212	240212501
57285TS040212DL1	240212501DL1
57TB1W040212	240212502

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Sample Data

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1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 240212501 Lab File ID: 12501.D

Sample wt/vol: 6.5 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 1322

PercentSolids: 33.1 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Waste Character Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
75-71-8	Dichlorodifluoromethane	4.6	U
74-87-3	Chloromethane	4.6	U
75-01-4	Vinyl chloride	4.6	U
74-83-9	Bromomethane	4.6	U
75-00-3	Chloroethane	4.6	U
75-69-4	Trichlorofluoromethane	4.6	U
75-35-4	1,1-Dichloroethene	4.6	U
75-15-0	Carbon disulfide	4.6	U
75-09-2	Methylene chloride	4.6	U
156-60-5	trans-1,2-Dichloroethene	4.6	U
75-34-3	1,1-Dichloroethane	4.6	U
67-64-1	Acetone	42.2	
156-59-2	cis-1,2-Dichloroethene	4.6	U
74-97-5	Bromochloromethane	4.6	U
78-93-3	2-Butanone	9.3	U
67-66-3	Chloroform	4.6	U
71-55-6	1,1,1-Trichloroethane	4.6	U
56-23-5	Carbon tetrachloride	4.6	U
71-43-2	Benzene	4.6	U
107-06-2	1,2-Dichloroethane	4.6	U
79-01-6	Trichloroethene	4.6	U
78-87-5	1,2-Dichloropropane	4.6	U
75-27-4	Bromodichloromethane	4.6	U
10061-01-5	cis-1,3-Dichloropropene	4.6	U
108-10-1	4-Methyl-2-pentanone	9.3	U
108-88-3	Toluene	4.6	U
10061-02-6	trans-1,3-Dichloropropene	4.6	U

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Form I

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 240212501 Lab File ID: 12501.D

Sample wt/vol: 6.5 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 1322

PercentSolids: 33.1 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Waste Character Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
79-00-5	1,1,2-Trichloroethane	4.6	U
127-18-4	Tetrachloroethene	4.6	U
591-78-6	2-Hexanone	9.3	U
124-48-1	Dibromochloromethane	4.6	U
106-93-4	1,2-Dibromoethane(EDB)	4.6	U
108-90-7	Chlorobenzene	4.6	U
100-41-4	Ethylbenzene	4.6	U
100-42-5	Styrene	4.6	U
75-25-2	Bromoform	4.6	U
98-82-8	Isopropylbenzene (Cumene)	4.6	U
79-34-5	1,1,2,2-Tetrachloroethane	4.6	U
541-73-1	1,3-Dichlorobenzene	4.6	U
106-46-7	1,4-Dichlorobenzene	193	E
95-50-1	1,2-Dichlorobenzene	4.6	U
96-12-8	1,2-Dibromo-3-chloropropane	4.6	U
120-82-1	1,2,4-Trichlorobenzene	4.6	U
87-61-6	1,2,3-Trichlorobenzene	4.6	U
1330-20-7	Xylene (total)	13.9	U
1634-04-4	MTBE	4.6	U
110-82-7	Cyclohexane	4.6	U
76-13-1	1,1,2-Trichlorotrifluoroethane	4.6	U
79-20-9	Methyl Acetate	9.7	
108-87-2	Methyl Cyclohexane	4.6	U

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212DL1

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 240212501DL1 Lab File ID: 12501MR.D

Sample wt/vol: 5.59 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 10 Date Extracted:

Level:(low/med) HIGH Date Analyzed: 02/16/04 Time: 1619

PercentSolids: 33.1 decanted : Dilution Factor: 50

Extraction: PURGETRAP Station ID: Waste Character Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
75-71-8	Dichlorodifluoromethane	270	U
74-87-3	Chloromethane	270	U
75-01-4	Vinyl chloride	270	U
74-83-9	Bromomethane	270	U
75-00-3	Chloroethane	270	U
75-69-4	Trichlorofluoromethane	270	U
75-35-4	1,1-Dichloroethene	270	U
75-15-0	Carbon disulfide	270	U
75-09-2	Methylene chloride	270	U
156-60-5	trans-1,2-Dichloroethene	270	U
75-34-3	1,1-Dichloroethane	270	U
67-64-1	Acetone	1080	U
156-59-2	cis-1,2-Dichloroethene	270	U
74-97-5	Bromochloromethane	270	U
78-93-3	2-Butanone	1080	U
67-66-3	Chloroform	270	U
71-55-6	1,1,1-Trichloroethane	270	U
56-23-5	Carbon tetrachloride	270	U
71-43-2	Benzene	270	U
107-06-2	1,2-Dichloroethane	270	U
79-01-6	Trichloroethene	270	U
78-87-5	1,2-Dichloropropane	270	U
75-27-4	Bromodichloromethane	270	U
10061-01-5	cis-1,3-Dichloropropene	270	U
108-10-1	4-Methyl-2-pentanone	1080	U
108-88-3	Toluene	270	U
10061-02-6	trans-1,3-Dichloropropene	270	U

270204 1530

Form I

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212DL1

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 240212501DL1 Lab File ID: 12501MR.D

Sample wt/vol: 5.59 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 10 Date Extracted:

Level:(low/med) HIGH Date Analyzed: 02/16/04 Time: 1619

PercentSolids: 33.1 decanted : Dilution Factor: 50

Extraction: PURGETRAP Station ID: Waste Character Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
79-00-5	1,1,2-Trichloroethane	270	U
127-18-4	Tetrachloroethene	270	U
591-78-6	2-Hexanone	1080	U
124-48-1	Dibromochloromethane	270	U
106-93-4	1,2-Dibromoethane(EDB)	270	U
108-90-7	Chlorobenzene	270	U
100-41-4	Ethylbenzene	270	U
100-42-5	Styrene	270	U
75-25-2	Bromoform	270	U
98-82-8	Isopropylbenzene (Cumene)	270	U
79-34-5	1,1,2,2-Tetrachloroethane	270	U
541-73-1	1,3-Dichlorobenzene	270	U
106-46-7	1,4-Dichlorobenzene	6820	
95-50-1	1,2-Dichlorobenzene	270	U
96-12-8	1,2-Dibromo-3-chloropropane	459	U
120-82-1	1,2,4-Trichlorobenzene	270	U
87-61-6	1,2,3-Trichlorobenzene	270	U
1330-20-7	Xylene (total)	811	U
1634-04-4	MTBE	270	U
76-13-1	1,1,2-Trichlorotrifluoroethane	270	U
110-82-7	Cyclohexane	270	U
79-20-9	Methyl Acetate	768	
108-87-2	Methyl Cyclohexane	270	U

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57TB1W040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: WATER Lab Sample ID: 240212502 Lab File ID: 12502.D

Sample wt/vol: 5 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 1351

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Trip Blank #1 Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-15-0	Carbon disulfide	1	U
75-09-2	Methylene chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
67-64-1	Acetone	4	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	Bromochloromethane	1	U
78-93-3	2-Butanone	2	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-10-1	4-Methyl-2-pentanone	2	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U

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Form I

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57TB1W040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: WATER Lab Sample ID: 240212502 Lab File ID: 12502.D

Sample wt/vol: 5 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 1351

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Trip Blank #1 Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
591-78-6	2-Hexanone	2	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane(EDB)	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene (Cumene)	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U
1330-20-7	Xylene (total)	3	U
1634-04-4	MTBE	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
108-87-2	Methyl Cyclohexane	1	U
79-20-9	Methyl Acetate	1	U
110-82-7	Cyclohexane	1	U

QC Summary

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

021304BLKA32

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: WATER Lab Sample ID: 021304BLKA32 Lab File ID: BLK32.D

Sample wt/vol: 5 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 0829

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-15-0	Carbon disulfide	1	U
75-09-2	Methylene chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
67-64-1	Acetone	4	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	Bromochloromethane	1	U
78-93-3	2-Butanone	2	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-10-1	4-Methyl-2-pentanone	2	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U

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Form I

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

021304BLKA32

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: WATER Lab Sample ID: 021304BLKA32 Lab File ID: BLK32.D

Sample wt/vol: 5 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 0829

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
591-78-6	2-Hexanone	2	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane(EDB)	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene (Cumene)	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U
1330-20-7	Xylene (total)	3	U
1634-04-4	MTBE	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
108-87-2	Methyl Cyclohexane	1	U
79-20-9	Methyl Acetate	1	U
110-82-7	Cyclohexane	1	U

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

021304BLKS11

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 021304BLKS11 Lab File ID: BLK11.D

Sample wt/vol: 5 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 0932

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
75-71-8	Dichlorodifluoromethane	2	U
74-87-3	Chloromethane	2	U
75-01-4	Vinyl chloride	2	U
74-83-9	Bromomethane	2	U
75-00-3	Chloroethane	2	U
75-69-4	Trichlorofluoromethane	2	U
75-35-4	1,1-Dichloroethene	2	U
75-15-0	Carbon disulfide	2	U
75-09-2	Methylene chloride	2	U
156-60-5	trans-1,2-Dichloroethene	2	U
75-34-3	1,1-Dichloroethane	2	U
67-64-1	Acetone	10	U
156-59-2	cis-1,2-Dichloroethene	2	U
74-97-5	Bromochloromethane	2	U
78-93-3	2-Butanone	4	U
67-66-3	Chloroform	2	U
71-55-6	1,1,1-Trichloroethane	2	U
56-23-5	Carbon tetrachloride	2	U
71-43-2	Benzene	2	U
107-06-2	1,2-Dichloroethane	2	U
79-01-6	Trichloroethene	2	U
78-87-5	1,2-Dichloropropane	2	U
75-27-4	Bromodichloromethane	2	U
10061-01-5	cis-1,3-Dichloropropene	2	U
108-10-1	4-Methyl-2-pentanone	4	U
108-88-3	Toluene	2	U
10061-02-6	trans-1,3-Dichloropropene	2	U

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Form I

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

021304BLKS11

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 021304BLKS11 Lab File ID: BLK11.D

Sample wt/vol: 5 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 0932

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
79-00-5	1,1,2-Trichloroethane	2	U
127-18-4	Tetrachloroethene	2	U
591-78-6	2-Hexanone	4	U
124-48-1	Dibromochloromethane	2	U
106-93-4	1,2-Dibromoethane(EDB)	2	U
108-90-7	Chlorobenzene	2	U
100-41-4	Ethylbenzene	2	U
100-42-5	Styrene	2	U
75-25-2	Bromoform	2	U
98-82-8	Isopropylbenzene (Cumene)	2	U
79-34-5	1,1,2,2-Tetrachloroethane	2	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	2	U
95-50-1	1,2-Dichlorobenzene	2	U
96-12-8	1,2-Dibromo-3-chloropropane	2	U
120-82-1	1,2,4-Trichlorobenzene	2	U
87-61-6	1,2,3-Trichlorobenzene	2	U
1330-20-7	Xylene (total)	6	U
1634-04-4	MTBE	2	U
110-82-7	Cyclohexane	2	U
76-13-1	1,1,2-Trichlorotrifluoroethane	2	U
79-20-9	Methyl Acetate	2	U
108-87-2	Methyl Cyclohexane	2	U

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

021604MBLKS22

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 021604MBLKS22 Lab File ID: MBLK22.D

Sample wt/vol: 5 Units: G Date Received: 02/16/04

Concentrated Extract Volume: 10 Date Extracted:

Level:(low/med) HIGH Date Analyzed: 02/16/04 Time: 1106

PercentSolids: 100 decanted : Dilution Factor: 50

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
75-71-8	Dichlorodifluoromethane	100	U
74-87-3	Chloromethane	100	U
75-01-4	Vinyl chloride	100	U
74-83-9	Bromomethane	100	U
75-00-3	Chloroethane	100	U
75-69-4	Trichlorofluoromethane	100	U
75-35-4	1,1-Dichloroethene	100	U
75-15-0	Carbon disulfide	100	U
75-09-2	Methylene chloride	100	U
156-60-5	trans-1,2-Dichloroethene	100	U
75-34-3	1,1-Dichloroethane	100	U
67-64-1	Acetone	400	U
156-59-2	cis-1,2-Dichloroethene	100	U
74-97-5	Bromochloromethane	100	U
78-93-3	2-Butanone	400	U
67-66-3	Chloroform	100	U
71-55-6	1,1,1-Trichloroethane	100	U
56-23-5	Carbon tetrachloride	100	U
71-43-2	Benzene	100	U
107-06-2	1,2-Dichloroethane	100	U
79-01-6	Trichloroethene	100	U
78-87-5	1,2-Dichloropropane	100	U
75-27-4	Bromodichloromethane	100	U
10061-01-5	cis-1,3-Dichloropropene	100	U
108-10-1	4-Methyl-2-pentanone	400	U
108-88-3	Toluene	100	U
10061-02-6	trans-1,3-Dichloropropene	100	U

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Form I

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

021604MBLKS22

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 021604MBLKS22 Lab File ID: MBLK22.D

Sample wt/vol: 5 Units: G Date Received: 02/16/04

Concentrated Extract Volume: 10 Date Extracted:

Level:(low/med) HIGH Date Analyzed: 02/16/04 Time: 1106

PercentSolids: 100 decanted : Dilution Factor: 50

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
79-00-5	1,1,2-Trichloroethane	100	U
127-18-4	Tetrachloroethene	100	U
591-78-6	2-Hexanone	400	U
124-48-1	Dibromochloromethane	100	U
106-93-4	1,2-Dibromoethane(EDB)	100	U
108-90-7	Chlorobenzene	100	U
100-41-4	Ethylbenzene	100	U
100-42-5	Styrene	100	U
75-25-2	Bromoform	100	U
98-82-8	Isopropylbenzene (Cumene)	100	U
79-34-5	1,1,2,2-Tetrachloroethane	100	U
541-73-1	1,3-Dichlorobenzene	100	U
106-46-7	1,4-Dichlorobenzene	100	U
95-50-1	1,2-Dichlorobenzene	100	U
96-12-8	1,2-Dibromo-3-chloropropane	170	U
120-82-1	1,2,4-Trichlorobenzene	100	U
87-61-6	1,2,3-Trichlorobenzene	100	U
1330-20-7	Xylene (total)	300	U
1634-04-4	MTBE	100	U
76-13-1	1,1,2-Trichlorotrifluoroethane	100	U
110-82-7	Cyclohexane	100	U
79-20-9	Methyl Acetate	190	U
108-87-2	Methyl Cyclohexane	100	U

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VOLATILE ORGANIC METHOD BLANK SUMMARY

EPA Sample No.

021304BLKA32

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID: BLK32.D Lab Sample ID: 021304BLKA32

Instrument ID: VMS03 Date Extracted:

Matrix: WATER Date Analyzed: 02/13/04

Level:(low/med) LOW Time Analyzed: 0829

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	021304LCSA32	021304LCSA32	LCS32.D	02/13/04	0534
2	021304LCSA32D	021304LCSA32D	LCS32D.D	02/13/04	0558
3	57TB1W040212	240212502	12502.D	02/13/04	1351

COMMENTS:

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Form IV

VOLATILE ORGANIC METHOD BLANK SUMMARY

EPA Sample No.: 021304BLKS11

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID: BLK11.D Lab Sample ID: 021304BLKS11

Instrument ID: VMS01 Date Extracted:

Matrix: SOIL Date Analyzed: 02/13/04

Level:(low/med) LOW Time Analyzed: 0932

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	021304LCSS11	021304LCSS11	LCSR.D	02/13/04	0841
2	021304LCSS11D	021304LCSS11D	LCSDR.D	02/13/04	0907
3	57285TS040212	240212501	12501.D	02/13/04	1322

COMMENTS:

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VOLATILE ORGANIC METHOD BLANK SUMMARY

EPA Sample No.

021604MBLKS22

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID: MBLK22.D Lab Sample ID: 021604MBLKS22

Instrument ID: VMS02 Date Extracted:

Matrix: SOIL Date Analyzed: 02/16/04

Level:(low/med) HIGH Time Analyzed: 1106

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	021604MLCSS22	021604MLCSS22	MLCS22.D	02/16/04	0947
2	021604MLCSS22D	021604MLCSS22D	MLCSD22.D	02/16/04	1013
3	57285TS040212DL1	240212501DL1	12501MR.D	02/16/04	1619

COMMENTS:

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Form IV

2A

WATER VOLATILE ORGANIC SURROGATE RECOVERY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402125

Column(1): DB-624 ID: 0.18 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
021304BLKA32	100.0	98.8	96.0	104.0			0
021304LCSA32	98.0	98.2	93.6	104.0			0
021304LCSA32D	99.6	100.0	93.2	106.0			0
57TB1W040212	100.0	99.8	98.6	108.0			0

Control Limits

S1	=	Dibromofluoromethane	86	-	118
S2	=	Toluene d8	88	-	110
S3	=	4-Bromofluorobenzene	86	-	115
S4	=	1,2-Dichloroethane-d4	80	-	120

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

Control limit source: (lab/method) METHOD

Form II

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2A

SOIL VOLATILE ORGANIC SURROGATE RECOVERY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402125

Column(1): DB-624 ID: 0.18 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
021304BLKS11	108.0	100.0	94.6	97.4			0
021304LCSS11	113.0	99.4	97.2	100.0			0
021304LCSS11D	107.0	98.8	91.6	104.0			0
021604MBLKS22	106.0	102.0	112.0	107.0			0
021604MLCSS22	104.0	102.0	109.0	106.0			0
021604MLCSS22D	107.0	105.0	111.0	109.0			0
57285TS040212	127.0 *	116.0	164.0 *	125.0 *			3
57285TS040212DL1	105.0	101.0	110.0	105.0			0

Control Limits

S1	=	Dibromofluoromethane	68 -	119
S2	=	Toluene d8	59 -	127
S3	=	4-Bromofluorobenzene	54 -	126
S4	=	1,2-Dichloroethane-d4	71 -	124

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out
Control limit source: (lab/method) METHOD

Form II

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VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID: BFB31R.D BFB Injection Date: 01/29/04

Instrument ID: VMS03 BFB Injection Time: 0336

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	16.5	
75	30.0 - 60.0% of mass 95	44.3	
95	Base Peak, 100% relative abundance	100	
96	5.0 - 9.0% of mass 95	6.5	
173	Less than 2.0% of mass 174	0.3	(0.4)1
174	50.0 - 100.0% of mass 95	77.4	
175	5.0 - 9.0% of mass 174	5.7	(7.4)1
176	Greater than 95.0%, but less than 101.0% of mass 174	75.9	(98.1)1
177	5.0 - 9.0% of mass 176	4.4	(5.8)2

1-Value is % of mass 174

2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	STD156467	1PPBCAL	1PPB.D	01/29/04	0453
2	STD156509	2PPBCAL	2PPB.D	01/29/04	0518
3	STD156515	80PPBCAL	80PPB.D	01/29/04	0542
4	STD156514	60PPBCAL	60PPB.D	01/29/04	0610
5	STD156512	50PPBCAL	50PPB.D	01/29/04	0638
6	STD156468	20PPBCAL	20PPB.D	01/29/04	0706
7	STD156466	10PPBCAL	10PPB.D	01/29/04	0734
8	STD156513	5PPBCAL	5PPB.D	01/29/04	0801
9	SSC156529	SEC32	SEC32.D	01/29/04	0858

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID: BFB11.D BFB Injection Date: 02/02/04

Instrument ID: VMS01 BFB Injection Time: 0636

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) YES

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	26.3	
75	30.0 - 60.0% of mass 95	54.6	
95	Base Peak, 100% relative abundance	100	
96	5.0 - 9.0% of mass 95	6.7	
173	Less than 2.0% of mass 174	0.1	(0.2)1
174	50.0 - 100.0% of mass 95	77.6	
175	5.0 - 9.0% of mass 174	5.6	(7.2)1
176	Greater than 95.0%, but less than 101.0% of mass 174	76.4	(98.4)1
177	5.0 - 9.0% of mass 176	5	(6.6)2

1-Value is % of mass 174

2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	STD157524	2PPBCAL	2PPB.D	02/02/04	0815
2	STD157529	5PPBCAL	5PPB.D	02/02/04	0841
3	STD157508	10PPBCAL	10PPB.D	02/02/04	0907
4	STD157510	20PPBCAL	20PPB.D	02/02/04	0934
5	STD157531	60PPBCAL	60PPB.D	02/02/04	1026
6	STD157533	80PPBCAL	80PPB.D	02/02/04	1052
7	STD157527	50PPBCAL	50PPBR.D	02/02/04	1118
8	SSC157542	SEC11	SEC11.D	02/02/04	1145

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID: BFBS21.D BFB Injection Date: 02/04/04

Instrument ID: VMS02 BFB Injection Time: 0435

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	17.3	
75	30.0 - 60.0% of mass 95	41.7	
95	Base Peak, 100% relative abundance	100	
96	5.0 - 9.0% of mass 95	6.6	
173	Less than 2.0% of mass 174	0	(0)1
174	50.0 - 100.0% of mass 95	68	
175	5.0 - 9.0% of mass 174	4.9	(7.2)1
176	Greater than 95.0%, but less than 101.0% of mass 174	64.9	(95.4)1
177	5.0 - 9.0% of mass 176	4.3	(6.6)2

1-Value is % of mass 174

2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	STD158165	60PPBCAL	60PPB.D	02/04/04	0534
2	STD158163	50PPBCAL	50PPB.D	02/04/04	0601
3	STD158155	20PPBCAL	20PPB.D	02/04/04	0628
4	STD158153	10PPBCAL	10PPB.D	02/04/04	0655
5	STD158164	5PPBCAL	5PPB.D	02/04/04	0721
6	STD158162	2PPBCAL	2PPB.D	02/04/04	0749
7	STD158154	1PPBCAL	1PPB.D	02/04/04	0816
8	STD158167	80PPBCAL	80PPBR.D	02/04/04	0844
9	SSC158171	SEC21	SEC21.D	02/04/04	1024

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID: BFB31.D BFB Injection Date: 02/13/04

Instrument ID: VMS03 BFB Injection Time: 0423

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	16.3	
75	30.0 - 60.0% of mass 95	45	
95	Base Peak, 100% relative abundance	100	
96	5.0 - 9.0% of mass 95	7.1	
173	Less than 2.0% of mass 174	0.4	(0.4)1
174	50.0 - 100.0% of mass 95	81.4	
175	5.0 - 9.0% of mass 174	6.3	(7.7)1
176	Greater than 95.0%, but less than 101.0% of mass 174	78.2	(96)1
177	5.0 - 9.0% of mass 176	4.8	(6.1)2

1-Value is % of mass 174

2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCV160331	021304CCVA31	50CCV31.D	02/13/04	0447
2	021304LCSA32	021304LCSA32	LCS32.D	02/13/04	0534
3	021304LCSA32D	021304LCSA32	LCS32D.D	02/13/04	0558
4	021304BLKA32	021304BLKA32	BLK32.D	02/13/04	0829
5	57TB1W040212	240212502	12502.D	02/13/04	1351

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID: BFBA22.D BFB Injection Date: 02/16/04

Instrument ID: VMS02 BFB Injection Time: 0549

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	18	
75	30.0 - 60.0% of mass 95	42.7	
95	Base Peak, 100% relative abundance	100	
96	5.0 - 9.0% of mass 95	6.6	
173	Less than 2.0% of mass 174	0	(0)1
174	50.0 - 100.0% of mass 95	60.6	
175	5.0 - 9.0% of mass 174	4.4	(7.2)1
176	Greater than 95.0%, but less than 101.0% of mass 174	58.1	(95.9)1
177	5.0 - 9.0% of mass 176	3.8	(6.6)2

1-Value is % of mass 174

2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCV160882	021604CCVS22	50CCV22.D	02/16/04	0642
2	021604MLCSS22	021604MLCSS2	MLCS22.D	02/16/04	0947
3	021604MLCSS22D	021604MLCSS2	MLCSD22.D	02/16/04	1013
4	021604MBLKS22	021604MBLKS2	MBLK22.D	02/16/04	1106
5	57285TS040212DL1	240212501DL1	12501MR.D	02/16/04	1619

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID: BFB12.D BFB Injection Date: 02/13/04

Instrument ID: VMS01 BFB Injection Time: 0616

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) YES

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	28	
75	30.0 - 60.0% of mass 95	58.8	
95	Base Peak, 100% relative abundance	100	
96	5.0 - 9.0% of mass 95	6.2	
173	Less than 2.0% of mass 174	0.5	(0.7)1
174	50.0 - 100.0% of mass 95	76.4	
175	5.0 - 9.0% of mass 174	5	(6.5)1
176	Greater than 95.0%, but less than 101.0% of mass 174	75.3	(98.5)1
177	5.0 - 9.0% of mass 176	5.1	(6.7)2

1-Value is % of mass 174

2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCV160947	021304CCV12	50CCV12.D	02/13/04	0715
2	021304LCSS11	021304LCSS11	LCSR.D	02/13/04	0841
3	021304LCSS11D	021304LCSS11	LCSDR.D	02/13/04	0907
4	021304BLKS11	021304BLKS11	BLK11.D	02/13/04	0932
5	57285TS040212	240212501	12501.D	02/13/04	1322

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID (Standard): 50PPBR.D Date Analyzed: 2/2/2004

Instrument ID: VMS01 Time Analyzed: 11:18

GC Column: DB-624 ID: 0.18 (mm)

Matrix: (soil/water) S Heated Purge: (Y/N) Yes

		IS1 AREA	#	RT	IS2 AREA	#	RT	IS3 AREA	#	RT
	MID CAL STD	314312		9.57	162985		11.91	453354		6.26
	UPPER LIMIT	628624		10.07	325970		12.41	906708		6.76
	LOWER LIMIT	157156		9.07	81492.5		11.41	226677		5.76
	EPA SAMPLE NO.									
1	021304LCSS11	191569		9.57	109052		11.91	270038		6.26
2	021304LCSS11D	196356		9.57	113071		11.91	272309		6.26
3	021304BLKS11	190231		9.57	109118		11.91	269381		6.26
4	57285TS040212	149993	*	9.57	59590	*	11.91	263846		6.26

IS1 = Chlorobenzene d5

IS2 = 1,4-Dichlorobenzene-d4

IS3 = Fluorobenzene

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

270204 1530

FORM VIII

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID (Standard): 50PPB.D Date Analyzed: 2/4/2004

Instrument ID: VMS02 Time Analyzed: 6:01

GC Column: DB-624 ID: 0.18 (mm)

Matrix: (soil/water) S Heated Purge: (Y/N) No

		IS1 AREA	#	RT	IS2 AREA	#	RT	IS3 AREA	#	RT
	MID CAL STD	653132		11.18	302572		14.12	902931		7.32
	UPPER LIMIT	1306264		11.68	605144		14.62	1805862		7.82
	LOWER LIMIT	326566		10.68	151286		13.62	451465.5		6.82
	EPA SAMPLE NO.									
1	021604MLCSS22	548111		11.18	239708		14.12	760814		7.32
2	021604MLCSS22D	543325		11.18	234183		14.12	748600		7.32
3	021604MBLKS22	547318		11.18	229300		14.12	755801		7.32
4	57285TS040212DL1	530141		11.18	233846		14.12	739298		7.32

IS1 = Chlorobenzene d5

IS2 = 1,4-Dichlorobenzene-d4

IS3 = Fluorobenzene

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

270204 1530

FORM VIII

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID (Standard): 5PPB.D Date Analyzed: 1/29/2004

Instrument ID: VMS03 Time Analyzed: 8:01

GC Column: DB-624 ID: 0.18 (mm)

Matrix: (soil/water) W Heated Purge: (Y/N) No

		IS1 AREA	#	RT	IS2 AREA	#	RT	IS3 AREA	#	RT
	MID CAL STD	686629		11.08	340987		13.50	829650		7.79
	UPPER LIMIT	1373258		11.58	681974		14.00	1659300		8.29
	LOWER LIMIT	343314.5		10.58	170493.5		13.00	414825		7.29
	EPA SAMPLE NO.									
1	021304LCSA32	711653		11.08	405687		13.50	855530		7.80
2	021304LCSA32D	719413		11.08	410567		13.50	853467		7.79
3	021304BLKA32	705997		11.08	375488		13.50	835327		7.80
4	57TB1W040212	679523		11.08	367765		13.50	824781		7.80

IS1 = Chlorobenzene d5

IS2 = 1,4-Dichlorobenzene-d4

IS3 = Fluorobenzene

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

270204 1530

FORM VIII

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021304LCSA32

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	20	19.8	99.0		21.0	56 - 144
Chloromethane	20	19.4	97.0		18.0	48 - 149
Vinyl chloride	20	16.7	83.5		24.0	66 - 128
Bromomethane	20	19.3	96.5		20.0	55 - 159
Chloroethane	20	19.2	96.0		12.0	77 - 144
Trichlorofluoromethane	20	18.4	92.0		14.0	65 - 190
1,1-Dichloroethene	20	21	105.0		14.0	75 - 150
Carbon disulfide	20	19.5	97.5		17.0	72 - 142
Methylene chloride	20	20.2	101.0		9.0	81 - 129
trans-1,2-Dichloroethene	20	20.8	104.0		14.0	84 - 135
1,1-Dichloroethane	20	20.7	104.0		10.0	88 - 127
Acetone	60	68.4	114.0		19.0	70 - 135
cis-1,2-Dichloroethene	20	21.4	107.0		11.0	88 - 127
Bromochloromethane	20	21	105.0		12.0	80 - 124
2-Butanone	60	61.2	102.0		20.0	83 - 127
Chloroform	20	20.1	100.0		13.0	83 - 127
1,1,1-Trichloroethane	20	21.4	107.0		12.0	83 - 132
Carbon tetrachloride	20	22.8	114.0		15.0	74 - 140
Benzene	20	20.6	103.0		10.0	82 - 129
1,2-Dichloroethane	20	21.4	107.0		8.0	86 - 120
Trichloroethene	20	20.9	104.0		13.0	82 - 127
1,2-Dichloropropane	20	20.6	103.0		11.0	83 - 126
Bromodichloromethane	20	20.5	102.0		13.0	84 - 127
cis-1,3-Dichloropropene	20	21.8	109.0		13.0	67 - 133
4-Methyl-2-pentanone	60	57	95.0		15.0	64 - 140
Toluene	20	20.6	103.0		13.0	82 - 128
trans-1,3-Dichloropropene	20	24.3	122.0		10.0	62 - 137
1,1,2-Trichloroethane	20	21.2	106.0		13.0	86 - 117
Tetrachloroethene	20	21.2	106.0		11.0	87 - 124
2-Hexanone	60	69.8	116.0		19.0	58 - 136
Dibromochloromethane	20	21.2	106.0		12.0	87 - 123
1,2-Dibromoethane(EDB)	20	20.9	104.0		11.0	79 - 117

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1530

Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021304LCSA32

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Chlorobenzene	20	20.9	104.0		12.0	87 - 117
Ethylbenzene	20	21.2	106.0		13.0	89 - 121
Styrene	20	21.2	106.0		13.0	80 - 127
Bromoform	20	23.7	118.0		10.0	67 - 129
Isopropylbenzene (Cumene)	20	19.8	99.0		10.0	96 - 118
1,1,2,2-Tetrachloroethane	20	19.5	97.5		9.0	87 - 116
1,3-Dichlorobenzene	20	20.5	102.0		13.0	88 - 121
1,4-Dichlorobenzene	20	20.3	102.0		11.0	88 - 118
1,2-Dichlorobenzene	20	21	105.0		13.0	91 - 116
1,2-Dibromo-3-chloropropane	20	22.6	113.0		17.0	82 - 127
1,2,4-Trichlorobenzene	20	23.9	120.0		11.0	84 - 124
1,2,3-Trichlorobenzene	20	24.7	124.0 *		11.0	91 - 122
Xylene (total)	60	62.6	104.0		9.0	82 - 124
MTBE	20	21.3	106.0		17.0	83 - 131
1,1,2-Trichlorotrifluoroethane	20	20.6	103.0		30.0	70 - 130
Methyl Cyclohexane	20	21.2	106.0		30.0	70 - 130
Methyl Acetate	20	21.3	106.0		30.0	70 - 130
Cyclohexane	20	21.2	106.0		30.0	70 - 130

Spike Recovery: 1 out of 50 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1530

Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021304LCSA32D

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	20	18.6	93.0	6.2	21.0	56 - 144
Chloromethane	20	19	95.0	2.1	18.0	48 - 149
Vinyl chloride	20	16.2	81.0	3.0	24.0	66 - 128
Bromomethane	20	18.4	92.0	4.8	20.0	55 - 159
Chloroethane	20	17.8	89.0	7.6	12.0	77 - 144
Trichlorofluoromethane	20	17.2	86.0	6.7	14.0	65 - 190
1,1-Dichloroethene	20	19.8	99.0	5.9	14.0	75 - 150
Carbon disulfide	20	18.3	91.5	6.3	17.0	72 - 142
Methylene chloride	20	19.9	99.5	1.5	9.0	81 - 129
trans-1,2-Dichloroethene	20	20.1	100.0	3.4	14.0	84 - 135
1,1-Dichloroethane	20	20.1	100.0	2.9	10.0	88 - 127
Acetone	60	64.7	108.0	5.6	19.0	70 - 135
cis-1,2-Dichloroethene	20	20.9	104.0	2.4	11.0	88 - 127
Bromochloromethane	20	20.5	102.0	2.4	12.0	80 - 124
2-Butanone	60	66.3	110.0	8.0	20.0	83 - 127
Chloroform	20	19.7	98.5	2.0	13.0	83 - 127
1,1,1-Trichloroethane	20	20.3	102.0	5.3	12.0	83 - 132
Carbon tetrachloride	20	21.7	108.0	4.9	15.0	74 - 140
Benzene	20	20.1	100.0	2.5	10.0	82 - 129
1,2-Dichloroethane	20	20.6	103.0	3.8	8.0	86 - 120
Trichloroethene	20	20.4	102.0	2.4	13.0	82 - 127
1,2-Dichloropropane	20	19.7	98.5	4.5	11.0	83 - 126
Bromodichloromethane	20	19.9	99.5	3.0	13.0	84 - 127
cis-1,3-Dichloropropene	20	21.5	108.0	1.4	13.0	67 - 133
4-Methyl-2-pentanone	60	55.6	92.7	2.5	15.0	64 - 140
Toluene	20	20	100.0	3.0	13.0	82 - 128
trans-1,3-Dichloropropene	20	23.6	118.0	2.9	10.0	62 - 137
1,1,2-Trichloroethane	20	20.8	104.0	1.9	13.0	86 - 117
Tetrachloroethene	20	20.6	103.0	2.9	11.0	87 - 124
2-Hexanone	60	66.2	110.0	5.3	19.0	58 - 136
Dibromochloromethane	20	20.8	104.0	1.9	12.0	87 - 123
1,2-Dibromoethane(EDB)	20	20.8	104.0	0.5	11.0	79 - 117

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1530

Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021304LCSA32D

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Chlorobenzene	20	19.8	99.0	5.4	12.0	87 - 117
Ethylbenzene	20	20.3	102.0	4.3	13.0	89 - 121
Styrene	20	20.7	104.0	2.4	13.0	80 - 127
Bromoform	20	22	110.0	7.4	10.0	67 - 129
Isopropylbenzene (Cumene)	20	18.8	94.0 *	5.2	10.0	96 - 118
1,1,2,2-Tetrachloroethane	20	18.3	91.5	6.3	9.0	87 - 116
1,3-Dichlorobenzene	20	20	100.0	2.5	13.0	88 - 121
1,4-Dichlorobenzene	20	20	100.0	1.5	11.0	88 - 118
1,2-Dichlorobenzene	20	20.4	102.0	2.9	13.0	91 - 116
1,2-Dibromo-3-chloropropane	20	21	105.0	7.3	17.0	82 - 127
1,2,4-Trichlorobenzene	20	23.2	116.0	3.0	11.0	84 - 124
1,2,3-Trichlorobenzene	20	22.4	112.0	9.8	11.0	91 - 122
Xylene (total)	60	60.1	100.0	4.1	9.0	82 - 124
MTBE	20	21.4	107.0	0.5	17.0	83 - 131
1,1,2-Trichlorotrifluoroethane	20	19.5	97.5	5.5	30.0	70 - 130
Methyl Cyclohexane	20	19.9	99.5	6.3	30.0	70 - 130
Methyl Acetate	20	22.1	110.0	3.7	30.0	70 - 130
Cyclohexane	20	19.8	99.0	6.8	30.0	70 - 130

Spike Recovery: 1 out of 50 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1530

Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021304LCSS11

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	20	23.1	116.0		29.0	33 - 126
Chloromethane	20	17.3	86.5		38.0	40 - 142
Vinyl chloride	20	20.4	102.0		37.0	49 - 139
Bromomethane	20	19.9	99.5		29.0	51 - 140
Chloroethane	20	19.7	98.5		30.0	60 - 139
Trichlorofluoromethane	20	21.6	108.0		30.0	75 - 141
1,1-Dichloroethene	20	20.7	104.0		33.0	68 - 135
Carbon disulfide	20	19.8	99.0		34.0	60 - 134
Methylene chloride	20	20	100.0		29.0	54 - 136
trans-1,2-Dichloroethene	20	19.6	98.0		32.0	74 - 123
1,1-Dichloroethane	20	19.6	98.0		34.0	67 - 126
Acetone	60	65.6	109.0		40.0	59 - 132
cis-1,2-Dichloroethene	20	18.6	93.0		38.0	70 - 120
Bromochloromethane	20	19.1	95.5		47.0	72 - 119
2-Butanone	60	61	102.0		36.0	59 - 133
Chloroform	20	21.8	109.0		29.0	65 - 120
1,1,1-Trichloroethane	20	21.3	106.0		45.0	68 - 128
Carbon tetrachloride	20	21.1	106.0		38.0	68 - 130
Benzene	20	18.5	92.5		37.0	68 - 126
1,2-Dichloroethane	20	21.8	109.0		34.0	67 - 119
Trichloroethene	20	19.7	98.5		37.0	76 - 116
1,2-Dichloropropane	20	18.4	92.0		44.0	68 - 120
Bromodichloromethane	20	20.6	103.0		33.0	67 - 121
cis-1,3-Dichloropropene	20	20	100.0		36.0	69 - 120
4-Methyl-2-pentanone	60	58.7	97.8		31.0	65 - 125
Toluene	20	19.6	98.0		32.0	71 - 124
trans-1,3-Dichloropropene	20	20.4	102.0		37.0	62 - 122
1,1,2-Trichloroethane	20	19	95.0		40.0	63 - 123
Tetrachloroethene	20	19.4	97.0		29.0	67 - 118
2-Hexanone	60	65.8	110.0		39.0	59 - 131
Dibromochloromethane	20	19.6	98.0		37.0	63 - 118
1,2-Dibromoethane(EDB)	20	18.6	93.0		36.0	62 - 118

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1530

Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021304LCSS11

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Chlorobenzene	20	19.2	96.0		36.0	64 - 122
Ethylbenzene	20	18.2	91.0		33.0	65 - 124
Styrene	20	19.6	98.0		32.0	60 - 125
Bromoform	20	20.1	100.0		29.0	59 - 119
Isopropylbenzene (Cumene)	20	17.3	86.5		35.0	73 - 122
1,1,2,2-Tetrachloroethane	20	17.5	87.5		33.0	64 - 113
1,3-Dichlorobenzene	20	18.4	92.0		42.0	64 - 117
1,4-Dichlorobenzene	20	19	95.0		38.0	62 - 116
1,2-Dichlorobenzene	20	18.4	92.0		40.0	64 - 120
1,2-Dibromo-3-chloropropane	20	19.8	99.0		32.0	53 - 118
1,2,4-Trichlorobenzene	20	20.2	101.0		46.0	60 - 114
1,2,3-Trichlorobenzene	20	20.6	103.0		50.0	66 - 130
Xylene (total)	60	57.1	95.2		29.0	65 - 121
MTBE	20	22.6	113.0		26.0	68 - 125
Cyclohexane	20	17.7	88.5		30.0	62 - 130
1,1,2-Trichlorotrifluoroethane	20	20	100.0		33.0	62 - 131
Methyl Acetate	20	20.4	102.0		30.0	59 - 126
Methyl Cyclohexane	20	17.8	89.0		30.0	67 - 126

Spike Recovery: 0 out of 50 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1530

Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021304LCSS11D

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	20	20.4	102.0	12.4	29.0	33 - 126
Chloromethane	20	15.6	78.0	10.3	38.0	40 - 142
Vinyl chloride	20	18.2	91.0	11.4	37.0	49 - 139
Bromomethane	20	20.5	102.0	3.0	29.0	51 - 140
Chloroethane	20	20.6	103.0	4.5	30.0	60 - 139
Trichlorofluoromethane	20	21.1	106.0	2.3	30.0	75 - 141
1,1-Dichloroethene	20	19.4	97.0	6.5	33.0	68 - 135
Carbon disulfide	20	19.2	96.0	3.1	34.0	60 - 134
Methylene chloride	20	19.9	99.5	0.5	29.0	54 - 136
trans-1,2-Dichloroethene	20	18.7	93.5	4.7	32.0	74 - 123
1,1-Dichloroethane	20	18.8	94.0	4.2	34.0	67 - 126
Acetone	60	59.6	99.3	9.6	40.0	59 - 132
cis-1,2-Dichloroethene	20	18.4	92.0	1.1	38.0	70 - 120
Bromochloromethane	20	18.8	94.0	1.6	47.0	72 - 119
2-Butanone	60	59.6	99.3	2.3	36.0	59 - 133
Chloroform	20	20.1	100.0	8.1	29.0	65 - 120
1,1,1-Trichloroethane	20	20.8	104.0	2.4	45.0	68 - 128
Carbon tetrachloride	20	19.2	96.0	9.4	38.0	68 - 130
Benzene	20	17.5	87.5	5.6	37.0	68 - 126
1,2-Dichloroethane	20	21.4	107.0	1.9	34.0	67 - 119
Trichloroethene	20	18.3	91.5	7.4	37.0	76 - 116
1,2-Dichloropropane	20	18	90.0	2.2	44.0	68 - 120
Bromodichloromethane	20	20	100.0	3.0	33.0	67 - 121
cis-1,3-Dichloropropene	20	19.3	96.5	3.6	36.0	69 - 120
4-Methyl-2-pentanone	60	52.7	87.8	10.8	31.0	65 - 125
Toluene	20	18.4	92.0	6.3	32.0	71 - 124
trans-1,3-Dichloropropene	20	19.4	97.0	5.0	37.0	62 - 122
1,1,2-Trichloroethane	20	18.8	94.0	1.1	40.0	63 - 123
Tetrachloroethene	20	17	85.0	13.2	29.0	67 - 118
2-Hexanone	60	58.5	97.5	11.7	39.0	59 - 131
Dibromochloromethane	20	18.5	92.5	5.8	37.0	63 - 118
1,2-Dibromoethane(EDB)	20	19	95.0	2.1	36.0	62 - 118

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1530

Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021304LCSS11D

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Chlorobenzene	20	19	95.0	1.0	36.0	64 - 122
Ethylbenzene	20	17.4	87.0	4.5	33.0	65 - 124
Styrene	20	17.9	89.5	9.1	32.0	60 - 125
Bromoform	20	19.4	97.0	3.5	29.0	59 - 119
Isopropylbenzene (Cumene)	20	15.8	79.0	9.1	35.0	73 - 122
1,1,2,2-Tetrachloroethane	20	16.9	84.5	3.5	33.0	64 - 113
1,3-Dichlorobenzene	20	17.2	86.0	6.7	42.0	64 - 117
1,4-Dichlorobenzene	20	17.4	87.0	8.8	38.0	62 - 116
1,2-Dichlorobenzene	20	17.9	89.5	2.8	40.0	64 - 120
1,2-Dibromo-3-chloropropane	20	18	90.0	9.5	32.0	53 - 118
1,2,4-Trichlorobenzene	20	18.4	92.0	9.3	46.0	60 - 114
1,2,3-Trichlorobenzene	20	17.8	89.0	14.6	50.0	66 - 130
Xylene (total)	60	53.9	89.8	5.8	29.0	65 - 121
MTBE	20	22.6	113.0	0.0	26.0	68 - 125
Cyclohexane	20	16.6	83.0	6.4	30.0	62 - 130
1,1,2-Trichlorotrifluoroethane	20	19.4	97.0	3.0	33.0	62 - 131
Methyl Acetate	20	19.2	96.0	6.1	30.0	59 - 126
Methyl Cyclohexane	20	17.7	88.5	0.6	30.0	67 - 126

Spike Recovery: 0 out of 50 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1530

Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021604MLCSS22

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	2000	2180	109.0		29.0	33 - 126
Chloromethane	2000	2110	106.0		38.0	40 - 142
Vinyl chloride	2000	2110	106.0		37.0	49 - 139
Bromomethane	2000	2080	104.0		29.0	51 - 140
Chloroethane	2000	2050	102.0		30.0	60 - 139
Trichlorofluoromethane	2000	1940	97.0		30.0	75 - 141
1,1-Dichloroethene	2000	1940	97.0		33.0	68 - 135
Carbon disulfide	2000	1730	86.5		34.0	60 - 134
Methylene chloride	2000	2000	100.0		29.0	54 - 136
trans-1,2-Dichloroethene	2000	2050	102.0		32.0	74 - 123
1,1-Dichloroethane	2000	2050	102.0		34.0	67 - 126
Acetone	6000	5380	89.7		40.0	59 - 132
cis-1,2-Dichloroethene	2000	2020	101.0		38.0	70 - 120
Bromochloromethane	2000	2220	111.0		47.0	72 - 119
2-Butanone	6000	6110	102.0		36.0	59 - 133
Chloroform	2000	2070	104.0		29.0	65 - 120
1,1,1-Trichloroethane	2000	2080	104.0		45.0	68 - 128
Carbon tetrachloride	2000	2050	102.0		38.0	68 - 130
Benzene	2000	2020	101.0		37.0	68 - 126
1,2-Dichloroethane	2000	2160	108.0		34.0	67 - 119
Trichloroethene	2000	1940	97.0		37.0	76 - 116
1,2-Dichloropropane	2000	2140	107.0		44.0	68 - 120
Bromodichloromethane	2000	2170	108.0		33.0	67 - 121
cis-1,3-Dichloropropene	2000	2140	107.0		36.0	69 - 120
4-Methyl-2-pentanone	6000	6040	101.0		31.0	65 - 125
Toluene	2000	2020	101.0		32.0	71 - 124
trans-1,3-Dichloropropene	2000	2060	103.0		37.0	62 - 122
1,1,2-Trichloroethane	2000	2030	102.0		40.0	63 - 123
Tetrachloroethene	2000	1800	90.0		29.0	67 - 118
2-Hexanone	6000	5920	98.7		39.0	59 - 131
Dibromochloromethane	2000	2000	100.0		37.0	63 - 118
1,2-Dibromoethane(EDB)	2000	2130	106.0		36.0	62 - 118

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1530

Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021604MLCSS22

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Chlorobenzene	2000	1980	99.0		36.0	64 - 122
Ethylbenzene	2000	2020	101.0		33.0	65 - 124
Styrene	2000	2080	104.0		32.0	60 - 125
Bromoform	2000	1790	89.5		29.0	59 - 119
Isopropylbenzene (Cumene)	2000	2070	104.0		35.0	73 - 122
1,1,2,2-Tetrachloroethane	2000	2200	110.0		33.0	64 - 113
1,3-Dichlorobenzene	2000	2070	104.0		42.0	64 - 117
1,4-Dichlorobenzene	2000	2050	102.0		38.0	62 - 116
1,2-Dichlorobenzene	2000	2080	104.0		40.0	64 - 120
1,2-Dibromo-3-chloropropane	2000	2090	104.0		32.0	53 - 118
1,2,4-Trichlorobenzene	2000	1910	95.5		46.0	60 - 114
1,2,3-Trichlorobenzene	2000	1840	92.0		50.0	66 - 130
Xylene (total)	6000	6050	101.0		29.0	65 - 121
MTBE	2000	2810	140.0 *		26.0	68 - 125
1,1,2-Trichlorotrifluoroethane	2000	1960	98.0		33.0	62 - 131
Cyclohexane	2000	1780	89.0		30.0	62 - 130
Methyl Acetate	2000	2250	112.0		30.0	59 - 126
Methyl Cyclohexane	2000	1720	86.0		30.0	67 - 126

Spike Recovery: 1 out of 50 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1530

Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021604MLCSS22D

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	2000	2450	122.0	11.7	29.0	33 - 126
Chloromethane	2000	2220	111.0	5.1	38.0	40 - 142
Vinyl chloride	2000	2250	112.0	6.4	37.0	49 - 139
Bromomethane	2000	2210	110.0	6.1	29.0	51 - 140
Chloroethane	2000	2220	111.0	8.0	30.0	60 - 139
Trichlorofluoromethane	2000	2010	100.0	3.5	30.0	75 - 141
1,1-Dichloroethene	2000	2080	104.0	7.0	33.0	68 - 135
Carbon disulfide	2000	1700	85.0	1.7	34.0	60 - 134
Methylene chloride	2000	2340	117.0	15.7	29.0	54 - 136
trans-1,2-Dichloroethene	2000	2100	105.0	2.4	32.0	74 - 123
1,1-Dichloroethane	2000	2090	104.0	1.9	34.0	67 - 126
Acetone	6000	5270	87.8	2.1	40.0	59 - 132
cis-1,2-Dichloroethene	2000	2120	106.0	4.8	38.0	70 - 120
Bromochloromethane	2000	2270	114.0	2.2	47.0	72 - 119
2-Butanone	6000	6250	104.0	2.3	36.0	59 - 133
Chloroform	2000	2170	108.0	4.7	29.0	65 - 120
1,1,1-Trichloroethane	2000	2240	112.0	7.4	45.0	68 - 128
Carbon tetrachloride	2000	2130	106.0	3.8	38.0	68 - 130
Benzene	2000	2130	106.0	5.3	37.0	68 - 126
1,2-Dichloroethane	2000	2240	112.0	3.6	34.0	67 - 119
Trichloroethene	2000	2000	100.0	3.0	37.0	76 - 116
1,2-Dichloropropane	2000	2210	110.0	3.2	44.0	68 - 120
Bromodichloromethane	2000	2210	110.0	1.8	33.0	67 - 121
cis-1,3-Dichloropropene	2000	2110	106.0	1.4	36.0	69 - 120
4-Methyl-2-pentanone	6000	6380	106.0	5.5	31.0	65 - 125
Toluene	2000	2080	104.0	2.9	32.0	71 - 124
trans-1,3-Dichloropropene	2000	2150	108.0	4.3	37.0	62 - 122
1,1,2-Trichloroethane	2000	2090	104.0	2.9	40.0	63 - 123
Tetrachloroethene	2000	1920	96.0	6.5	29.0	67 - 118
2-Hexanone	6000	6100	102.0	3.0	39.0	59 - 131
Dibromochloromethane	2000	2030	102.0	1.5	37.0	63 - 118
1,2-Dibromoethane(EDB)	2000	2140	107.0	0.5	36.0	62 - 118

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1530

Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021604MLCSS22D

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Chlorobenzene	2000	2070	104.0	4.4	36.0	64 - 122
Ethylbenzene	2000	2020	101.0	0.0	33.0	65 - 124
Styrene	2000	2120	106.0	1.9	32.0	60 - 125
Bromoform	2000	1810	90.5	1.1	29.0	59 - 119
Isopropylbenzene (Cumene)	2000	2190	110.0	5.6	35.0	73 - 122
1,1,2,2-Tetrachloroethane	2000	2280	114.0 *	3.6	33.0	64 - 113
1,3-Dichlorobenzene	2000	2120	106.0	2.4	42.0	64 - 117
1,4-Dichlorobenzene	2000	2150	108.0	4.8	38.0	62 - 116
1,2-Dichlorobenzene	2000	2130	106.0	2.4	40.0	64 - 120
1,2-Dibromo-3-chloropropane	2000	2270	114.0	8.3	32.0	53 - 118
1,2,4-Trichlorobenzene	2000	1950	97.5	2.1	46.0	60 - 114
1,2,3-Trichlorobenzene	2000	1910	95.5	3.7	50.0	66 - 130
Xylene (total)	6000	6300	105.0	4.0	29.0	65 - 121
MTBE	2000	2740	137.0 *	2.5	26.0	68 - 125
1,1,2-Trichlorotrifluoroethane	2000	2150	108.0	9.2	33.0	62 - 131
Cyclohexane	2000	1920	96.0	7.6	30.0	62 - 130
Methyl Acetate	2000	2240	112.0	0.4	30.0	59 - 126
Methyl Cyclohexane	2000	1850	92.5	7.3	30.0	67 - 126

Spike Recovery: 2 out of 50 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1530

Form III

Standards Data

270204 1530

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS01 Calibration Date: 02/02/04

GC Column: DB-624 ID: 0.18 (mm) Calibration Time: 1118

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF2 =2PPB.D RRF5 =5PPB.D
RRF10 =10PPB.D RRF20 =20PPB.D RRF50 =50PPBR.D

COMPOUND		RRF2	RRF5	RRF10	RRF20	RRF50	$\overline{RRF}$	%RSD OR R^2
Dichlorodifluoromethane		0.894	0.933	0.943	0.918	0.838		
Chloromethane	#	0.844	0.600	0.627	0.565	0.554		#
Vinyl chloride	*	0.457	0.429	0.544	0.499	0.507		*
Bromomethane		0.472	0.374	0.404	0.361	0.282		
Chloroethane		0.204	0.223	0.249	0.251	0.197		
Trichlorofluoromethane		1.180	1.105	1.215	1.121	1.030		
1,1-Dichloroethene	*	0.898	0.779	0.930	0.875	0.788		*
Carbon disulfide		1.325	1.337	1.398	1.362	1.217		
Methylene chloride		0.501	0.422	0.473	0.436	0.438		
trans-1,2-Dichloroethene		0.667	0.671	0.821	0.776	0.736		
1,1-Dichloroethane	#	0.813	0.861	0.920	0.868	0.884		#
Acetone			0.343	0.284	0.237	0.229		
cis-1,2-Dichloroethene		0.430	0.443	0.504	0.479	0.484		
Bromochloromethane		0.251	0.220	0.265	0.247	0.244		
2-Butanone		0.265	0.214	0.223	0.204	0.224		
Chloroform	*	0.993	0.994	1.037	1.008	0.965		*
1,1,1-Trichloroethane		0.906	0.900	1.032	0.968	0.915		
Carbon tetrachloride		0.774	0.806	0.856	0.834	0.803		
Benzene		1.550	1.474	1.563	1.511	1.458		
1,2-Dichloroethane		1.024	1.017	1.050	0.991	0.970		
Trichloroethene		0.457	0.455	0.510	0.478	0.485		
1,2-Dichloropropane	*	0.333	0.362	0.382	0.407	0.375		*
Bromodichloromethane		0.704	0.726	0.775	0.755	0.759		
cis-1,3-Dichloropropene		0.699	0.706	0.745	0.716	0.715		
4-Methyl-2-pentanone		1.353	1.038	1.288	1.215	1.293		
Toluene	*	0.983	0.926	0.967	0.929	0.934		*
trans-1,3-Dichloropropene		0.819	0.757	0.792	0.741	0.768		
1,1,2-Trichloroethane		0.438	0.321	0.371	0.346	0.353		
Tetrachloroethene		0.580	0.596	0.624	0.619	0.573		
2-Hexanone		0.531	0.416	0.450	0.474	0.489		
Dibromochloromethane		0.816	0.768	0.795	0.790	0.767		
1,2-Dibromoethane(EDB)		0.633	0.532	0.588	0.573	0.596		
Chlorobenzene	#	1.576	1.549	1.666	1.686	1.590		#
Ethylbenzene	*	0.869	0.852	0.860	0.840	0.801		*

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FORM VI

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS01 Calibration Date: 02/02/04

GC Column: DB-624 ID: 0.18 (mm) Calibration Time: 1118

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF2 =2PPB.D RRF5 =5PPB.D
RRF10 =10PPB.D RRF20 =20PPB.D RRF50 =50PPBR.D

COMPOUND	RRF2	RRF5	RRF10	RRF20	RRF50	$\overline{RRF}$	%RSD OR R^2
Styrene	1.675	1.742	1.777	1.717	1.690		
Bromoform #	0.435	0.505	0.502	0.487	0.479		#
Isopropylbenzene (Cumene)	5.726	5.241	5.470	5.486	5.242		
1,1,2,2-Tetrachloroethane #	1.311	1.089	1.230	1.198	1.184		#
1,3-Dichlorobenzene	2.930	2.571	2.748	2.653	2.584		
1,4-Dichlorobenzene	2.508	2.384	2.628	2.556	2.578		
1,2-Dichlorobenzene	2.555	2.407	2.474	2.344	2.381		
1,2-Dibromo-3-chloropropane	0.259	0.197	0.281	0.286	0.286		
1,2,4-Trichlorobenzene	1.422	1.425	1.544	1.592	1.599		
1,2,3-Trichlorobenzene	1.543	1.248	1.351	1.399	1.511		
MTBE	1.194	1.131	1.168	1.120	1.076		
Cyclohexane	0.596	0.536	0.556	0.557	0.579		
1,1,2-Trichlorotrifluoroethane	0.332	0.411	0.446	0.444	0.407		
Methyl Acetate	0.529	0.410	0.342	0.379	0.339		
Methyl Cyclohexane	0.628	0.590	0.671	0.639	0.624		
o-Xylene	2.354	2.440	2.544	2.428	2.245		
p,m-Xylene	1.009	0.983	1.060	1.005	0.927		
Dibromofluoromethane(SURR)	0.548	0.546	0.569	0.548	0.542		
Toluene d8(SURR)	1.448	1.392	1.479	1.410	1.387		
4-Bromofluorobenzene(SURR)	1.601	1.649	1.841	1.744	1.738		
1,2-Dichloroethane-d4(SURR)	0.100	0.083	0.102	0.094	0.096		

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FORM VI

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VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS01 Calibration Date: 02/02/04

GC Column: DB-624 ID: 0.18 (mm) Calibration Time: 1118

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF60 =60PPB.D RRF80 =80PPB.D

COMPOUND		RRF60	RRF80				$\overline{RRF}$	%RSD OR R^2		
Dichlorodifluoromethane		0.947	0.903				0.91085	4.2		
Chloromethane	#	0.584	0.563				0.61952	16.5	#	<-
Vinyl chloride	*	0.558	0.507				0.50011	9.1	*	
Bromomethane		0.300	0.275				0.35234	20.5		<-
Chloroethane		0.211	0.205				0.21994	10		
Trichlorofluoromethane		1.141	1.093				1.12641	5.3		
1,1-Dichloroethene	*	0.883	0.804				0.85094	7	*	
Carbon disulfide		1.258	1.220				1.30238	5.5		
Methylene chloride		0.428	0.412				0.44435	7.1		
trans-1,2-Dichloroethene		0.784	0.700				0.73633	8.1		
1,1-Dichloroethane	#	0.897	0.858				0.87149	3.9	#	
Acetone		0.219	0.207				0.25318	20.3		<-
cis-1,2-Dichloroethene		0.493	0.458				0.47014	5.8		
Bromochloromethane		0.236	0.219				0.24037	6.8		
2-Butanone		0.209	0.200				0.2197	10.1		
Chloroform	*	0.989	0.914				0.9855	3.9	*	
1,1,1-Trichloroethane		1.002	0.904				0.94666	5.7		
Carbon tetrachloride		0.874	0.818				0.82354	4.1		
Benzene		1.527	1.454				1.50526	2.9		
1,2-Dichloroethane		0.968	0.896				0.98797	5.1		
Trichloroethene		0.513	0.472				0.48154	4.8		
1,2-Dichloropropane	*	0.379	0.357				0.37057	6.2	*	
Bromodichloromethane		0.744	0.696				0.73683	4		
cis-1,3-Dichloropropene		0.720	0.693				0.7134	2.4		
4-Methyl-2-pentanone		1.231	1.217				1.23347	8.1		
Toluene	*	0.966	0.899				0.94341	3.1	*	
trans-1,3-Dichloropropene		0.758	0.731				0.76638	3.9		
1,1,2-Trichloroethane		0.344	0.331				0.35753	10.8		
Tetrachloroethene		0.605	0.577				0.59628	3.5		
2-Hexanone		0.439	0.460				0.46556	8		
Dibromochloromethane		0.788	0.754				0.78262	2.7		
1,2-Dibromoethane(EDB)		0.571	0.566				0.57989	5.3		
Chlorobenzene	#	1.598	1.575				1.60568	3.2	#	
Ethylbenzene	*	0.835	0.803				0.83713	3.2	*	

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FORM VI

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS01 Calibration Date: 02/02/04

GC Column: DB-624 ID: 0.18 (mm) Calibration Time: 1118

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF60 =60PPB.D RRF80 =80PPB.D

COMPOUND		RRF60	RRF80				$\overline{RRF}$	%RSD OR R^2		
Styrene		1.645	1.621				1.69535	3.2		
Bromoform	#	0.457	0.475				0.47719	5.2	#	
Isopropylbenzene (Cumene)		5.875	5.713				5.53614	4.4		
1,1,2,2-Tetrachloroethane	#	1.188	1.148				1.19257	5.8	#	
1,3-Dichlorobenzene		2.817	2.653				2.70802	4.8		
1,4-Dichlorobenzene		2.736	2.618				2.57272	4.3		
1,2-Dichlorobenzene		2.401	2.250				2.40166	4		
1,2-Dibromo-3-chloropropane		0.303	0.277				0.26992	12.9		
1,2,4-Trichlorobenzene		1.775	1.725				1.58319	8.5		
1,2,3-Trichlorobenzene		1.539	1.575				1.45236	8.4		
MTBE		1.040	0.978				1.10118	6.8		
Cyclohexane		0.582	0.570				0.56808	3.5		
1,1,2-Trichlorotrifluoroethane		0.452	0.432				0.4177	10		
Methyl Acetate		0.320	0.295				0.37351	21		<-
Methyl Cyclohexane		0.686	0.643				0.64025	4.9		
o-Xylene		2.300	2.258				2.36701	4.6		
p,m-Xylene		1.014	0.968				0.99529	4.2		
Dibromofluoromethane(SURR)		0.528	0.511				0.54172	3.3		
Toluene d8(SURR)		1.338	1.333				1.39802	3.8		
4-Bromofluorobenzene(SURR)		1.687	1.732				1.71321	4.5		
1,2-Dichloroethane-d4(SURR)		0.091	0.091				0.09384	6.6		

Average Used: 6.7

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FORM VI

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS02 Calibration Date: 02/04/04

GC Column: DB-624 ID: 0.18 (mm) Calibration Time: 0844

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF1 =1PPB.D RRF2 =2PPB.D
RRF5 =5PPB.D RRF10 =10PPB.D RRF20 =20PPB.D

COMPOUND		RRF1	RRF2	RRF5	RRF10	RRF20	$\overline{RRF}$	%RSD OR R^2
Dichlorodifluoromethane		0.235	0.181	0.233	0.173	0.187		
Chloromethane	#	0.543	0.525	0.550	0.421	0.444		#
Vinyl chloride	*	0.387	0.375	0.384	0.295	0.307		*
Bromomethane		0.243	0.222	0.223	0.176	0.185		
Chloroethane		0.273	0.263	0.257	0.199	0.199		
Trichlorofluoromethane		0.214	0.218	0.219	0.176	0.190		
1,1-Dichloroethene	*	0.363	0.359	0.376	0.324	0.331		*
Carbon disulfide		0.945	0.886	0.912	0.750	0.847		
Methylene chloride		0.477	0.461	0.466	0.371	0.365		
trans-1,2-Dichloroethene		0.470	0.471	0.482	0.435	0.435		
1,1-Dichloroethane	#	0.663	0.635	0.642	0.579	0.582		#
Acetone			0.100	0.159	0.115	0.099		
cis-1,2-Dichloroethene		0.378	0.339	0.331	0.314	0.319		
Bromochloromethane		0.356	0.349	0.357	0.337	0.334		
2-Butanone			0.252	0.287	0.199	0.213		
Chloroform	*	0.537	0.516	0.508	0.464	0.459		*
1,1,1-Trichloroethane		0.304	0.283	0.276	0.274	0.257		
Carbon tetrachloride		0.263	0.257	0.276	0.262	0.264		
Benzene		1.604	1.424	1.435	1.274	1.271		
1,2-Dichloroethane		0.374	0.344	0.348	0.326	0.319		
Trichloroethene		0.329	0.293	0.300	0.277	0.270		
1,2-Dichloropropane	*	0.430	0.411	0.413	0.375	0.374		*
Bromodichloromethane		0.389	0.371	0.376	0.341	0.350		
cis-1,3-Dichloropropene		0.581	0.535	0.553	0.525	0.532		
4-Methyl-2-pentanone			0.587	0.592	0.430	0.459		
Toluene	*	0.867	0.770	0.783	0.712	0.700		*
trans-1,3-Dichloropropene		0.489	0.475	0.487	0.447	0.450		
1,1,2-Trichloroethane		0.311	0.294	0.287	0.267	0.256		
Tetrachloroethene		0.273	0.275	0.266	0.245	0.251		
2-Hexanone			0.605	0.588	0.434	0.447		
Dibromochloromethane		0.420	0.395	0.407	0.377	0.375		
1,2-Dibromoethane(EDB)		0.338	0.379	0.377	0.360	0.359		
Chlorobenzene	#	1.217	1.090	1.100	0.997	1.003		#
Ethylbenzene	*	0.607	0.564	0.567	0.515	0.514		*

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FORM VI

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS02 Calibration Date: 02/04/04

GC Column: DB-624 ID: 0.18 (mm) Calibration Time: 0844

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF1 =1PPB.D RRF2 =2PPB.D
RRF5 =5PPB.D RRF10 =10PPB.D RRF20 =20PPB.D

COMPOUND	RRF1	RRF2	RRF5	RRF10	RRF20	$\overline{RRF}$	%RSD OR R^2
Styrene	1.259	1.238	1.226	1.156	1.139		
Bromoform #	0.252	0.242	0.248	0.223	0.229		#
Isopropylbenzene (Cumene)	0.948	0.925	0.941	0.870	0.839		
1,1,2,2-Tetrachloroethane #	1.329	1.332	1.242	1.159	1.145		#
1,3-Dichlorobenzene	1.811	1.648	1.635	1.553	1.505		
1,4-Dichlorobenzene	1.784	1.676	1.604	1.562	1.532		
1,2-Dichlorobenzene	1.539	1.531	1.463	1.381	1.377		
1,2-Dibromo-3-chloropropane	0.167	0.130	0.156	0.146	0.149		
1,2,4-Trichlorobenzene	0.744	0.700	0.710	0.697	0.709		
1,2,3-Trichlorobenzene	0.664	0.713	0.653	0.636	0.619		
MTBE	0.774	0.611	0.640	0.568	0.560		
1,1,2-Trichlorotrifluoroethane	0.188	0.190	0.229	0.176	0.186		
Cyclohexane	0.752	0.645	0.612	0.524	0.521		
Methyl Acetate	0.377	0.336	0.398	0.314	0.338		
Methyl Cyclohexane	0.651	0.532	0.518	0.441	0.426		
o-Xylene	1.547	1.508	1.466	1.383	1.325		
p,m-Xylene	0.805	0.720	0.694	0.654	0.652		
Dibromofluoromethane(SURR)		0.265	0.253	0.244	0.268		
Toluene d8(SURR)		0.997	0.948	0.906	1.001		
4-Bromofluorobenzene(SURR)		1.059	1.056	1.007	1.084		
1,2-Dichloroethane-d4(SURR)		0.068	0.066	0.066	0.077		

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FORM VI

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS02 Calibration Date: 02/04/04

GC Column: DB-624 ID: 0.18 (mm) Calibration Time: 0844

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF50 =50PPB.D RRF60 =60PPB.D
RRF80 =80PPBR.D

COMPOUND		RRF50	RRF60	RRF80			$\overline{RRF}$	%RSD OR R^2		
Dichlorodifluoromethane		0.206	0.213	0.218			0.206	11.3		
Chloromethane	#	0.450	0.450	0.403			0.47322	12.2	#	
Vinyl chloride	*	0.284	0.289	0.291			0.32632	14.3	*	
Bromomethane		0.189	0.191	0.188			0.20205	11.8		
Chloroethane		0.211	0.220	0.217			0.22975	12.9		
Trichlorofluoromethane		0.201	0.198	0.200			0.20196	7.3		
1,1-Dichloroethene	*	0.329	0.346	0.344			0.34645	5.3	*	
Carbon disulfide		0.857	0.874	0.851			0.86522	6.6		
Methylene chloride		0.427	0.433	0.432			0.42914	9.7		
trans-1,2-Dichloroethene		0.449	0.456	0.452			0.45633	3.8		
1,1-Dichloroethane	#	0.601	0.589	0.593			0.61057	5.1	#	
Acetone		0.093	0.094	0.099			0.10851	21.7		<-
cis-1,2-Dichloroethene		0.327	0.337	0.337			0.33548	5.8		
Bromochloromethane		0.351	0.350	0.359			0.34918	2.6		
2-Butanone		0.209	0.208	0.227			0.2278	13.7		
Chloroform	*	0.477	0.496	0.487			0.49318	5.4	*	
1,1,1-Trichloroethane		0.298	0.310	0.311			0.28915	6.8		
Carbon tetrachloride		0.277	0.288	0.291			0.27243	4.6		
Benzene		1.340	1.355	1.365			1.38344	7.8		
1,2-Dichloroethane		0.334	0.331	0.341			0.33979	4.9		
Trichloroethene		0.282	0.292	0.294			0.29219	6.1		
1,2-Dichloropropane	*	0.387	0.395	0.400			0.39803	4.9	*	
Bromodichloromethane		0.361	0.370	0.252			0.35134	12.2		
cis-1,3-Dichloropropene		0.546	0.565	0.560			0.54977	3.4		
4-Methyl-2-pentanone		0.435	0.434	0.463			0.48552	14.8		
Toluene	*	0.728	0.742	0.748			0.75629	6.9	*	
trans-1,3-Dichloropropene		0.474	0.477	0.484			0.47301	3.4		
1,1,2-Trichloroethane		0.268	0.266	0.273			0.27803	6.6		
Tetrachloroethene		0.256	0.267	0.272			0.26312	4.2		
2-Hexanone		0.420	0.420	0.454			0.48124	16.6		<-
Dibromochloromethane		0.392	0.403	0.411			0.39735	4		
1,2-Dibromoethane(EDB)		0.365	0.372	0.386			0.36706	4.1		
Chlorobenzene	#	1.007	1.040	1.063			1.06443	6.9	#	
Ethylbenzene	*	0.508	0.537	0.542			0.54426	6.2	*	

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FORM VI

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS02 Calibration Date: 02/04/04

GC Column: DB-624 ID: 0.18 (mm) Calibration Time: 0844

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF50 =50PPB.D RRF60 =60PPB.D
RRF80 =80PPBR.D

COMPOUND		RRF50	RRF60	RRF80			$\overline{RRF}$	%RSD OR R^2	
Styrene		1.166	1.218	1.223			1.20318	3.6	
Bromoform	#	0.238	0.243	0.248			0.24028	4.1	#
Isopropylbenzene (Cumene)		0.874	0.899	0.913			0.90115	4.2	
1,1,2,2-Tetrachloroethane	#	1.167	1.163	1.239			1.22208	6.2	#
1,3-Dichlorobenzene		1.563	1.588	1.611			1.61416	5.7	
1,4-Dichlorobenzene		1.566	1.602	1.632			1.61995	4.9	
1,2-Dichlorobenzene		1.424	1.417	1.434			1.44579	4.3	
1,2-Dibromo-3-chloropropane		0.146	0.144	0.157			0.14926	7.3	
1,2,4-Trichlorobenzene		0.726	0.734	0.760			0.72238	3.1	
1,2,3-Trichlorobenzene		0.648	0.655	0.673			0.6576	4.2	
MTBE		0.601	0.628	0.592			0.62171	10.8	
1,1,2-Trichlorotrifluoroethane		0.202	0.212	0.210			0.19904	8.8	
Cyclohexane		0.548	0.573	0.625			0.60001	12.8	
Methyl Acetate		0.348	0.350	0.362			0.35284	7.4	
Methyl Cyclohexane		0.427	0.450	0.455			0.48756	15.8	<-
o-Xylene		1.346	1.374	1.419			1.42098	5.6	
p,m-Xylene		0.661	0.684	0.692			0.69524	7.2	
==========									
Dibromofluoromethane(SURR)		0.257	0.263	0.262			0.25895	3.2	
Toluene d8(SURR)		0.960	0.976	0.993			0.96872	3.5	
4-Bromofluorobenzene(SURR)		1.046	1.052	1.082			1.05514	2.4	
1,2-Dichloroethane-d4(SURR)		0.075	0.076	0.076			0.07189	7	

Average Used: 7.4

270204 1530

FORM VI

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS03 Calibration Date: 01/29/04

GC Column: DB-624 ID: 0.18 (mm) Calibration Time: 0801

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF1 =1PPB.D RRF2 =2PPB.D
RRF5 =5PPB.D RRF10 =10PPB.D RRF20 =20PPB.D

COMPOUND		RRF1	RRF2	RRF5	RRF10	RRF20	$\overline{RRF}$	%RSD OR R^2
Dichlorodifluoromethane		0.366	0.426	0.402	0.370	0.375		
Chloromethane	#	0.364	0.399	0.437	0.334	0.364		#
Vinyl chloride	*	0.389	0.433	0.419	0.340	0.330		*
Bromomethane		0.262	0.301	0.261	0.226	0.233		
Chloroethane		0.302	0.272	0.263	0.241	0.230		
Trichlorofluoromethane		0.432	0.482	0.490	0.444	0.441		
1,1-Dichloroethene	*	0.488	0.470	0.486	0.406	0.460		*
Carbon disulfide		1.222	1.141	1.201	1.034	1.118		
Methylene chloride		0.522	0.466	0.491	0.427	0.461		
trans-1,2-Dichloroethene		0.451	0.492	0.484	0.402	0.450		
1,1-Dichloroethane	#	0.652	0.605	0.589	0.509	0.572		#
Acetone			0.110	0.092	0.085	0.068		
cis-1,2-Dichloroethene		0.378	0.393	0.390	0.333	0.360		
Bromochloromethane		0.160	0.174	0.194	0.163	0.176		
2-Butanone		0.120	0.103	0.103	0.100	0.106		
Chloroform	*	0.653	0.598	0.650	0.554	0.595		*
1,1,1-Trichloroethane		0.480	0.458	0.483	0.437	0.470		
Carbon tetrachloride		0.387	0.394	0.408	0.345	0.398		
Benzene		1.424	1.380	1.451	1.279	1.358		
1,2-Dichloroethane		0.442	0.426	0.462	0.400	0.428		
Trichloroethene		0.400	0.391	0.407	0.340	0.377		
1,2-Dichloropropane	*	0.381	0.350	0.379	0.326	0.356		*
Bromodichloromethane		0.496	0.439	0.453	0.410	0.443		
cis-1,3-Dichloropropene		0.485	0.432	0.485	0.447	0.507		
4-Methyl-2-pentanone		0.565	0.539	0.581	0.525	0.534		
Toluene	*	0.919	0.872	0.922	0.789	0.871		*
trans-1,3-Dichloropropene		0.365	0.321	0.376	0.349	0.405		
1,1,2-Trichloroethane		0.298	0.293	0.322	0.283	0.301		
Tetrachloroethene		0.348	0.345	0.348	0.298	0.325		
2-Hexanone		0.167	0.181	0.158	0.166	0.174		
Dibromochloromethane		0.412	0.401	0.405	0.376	0.390		
1,2-Dibromoethane(EDB)		0.364	0.311	0.354	0.317	0.332		
Chlorobenzene	#	1.379	1.297	1.298	1.141	1.197		#
Ethylbenzene	*	0.635	0.605	0.666	0.553	0.573		*

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FORM VI

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS03 Calibration Date: 01/29/04

GC Column: DB-624 ID: 0.18 (mm) Calibration Time: 0801

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF1 =1PPB.D RRF2 =2PPB.D
RRF5 =5PPB.D RRF10 =10PPB.D RRF20 =20PPB.D

COMPOUND	RRF1	RRF2	RRF5	RRF10	RRF20	$\overline{RRF}$	%RSD OR R^2
Styrene	1.286	1.240	1.346	1.194	1.268		
Bromoform #	0.222	0.210	0.238	0.217	0.233		#
Isopropylbenzene (Cumene)	3.168	3.340	3.619	2.991	3.367		
1,1,2,2-Tetrachloroethane #	0.980	0.906	0.974	0.795	0.831		#
1,3-Dichlorobenzene	1.885	1.782	1.802	1.590	1.721		
1,4-Dichlorobenzene	1.985	1.764	1.857	1.589	1.717		
1,2-Dichlorobenzene	1.651	1.630	1.725	1.477	1.596		
1,2-Dibromo-3-chloropropane	0.092	0.081	0.118	0.103	0.122		
1,2,4-Trichlorobenzene	0.701	0.722	0.776	0.712	0.771		
1,2,3-Trichlorobenzene	0.719	0.618	0.734	0.657	0.699		
MTBE	0.654	0.620	0.637	0.633	0.679		
1,1,2-Trichlorotrifluoroethane	0.345	0.366	0.335	0.312	0.315		
Methyl Cyclohexane	0.319	0.333	0.342	0.283	0.324		
Methyl Acetate	0.220	0.197	0.200	0.180	0.188		
Cyclohexane	0.517	0.468	0.533	0.408	0.483		
o-Xylene	1.517	1.508	1.570	1.401	1.462		
p,m-Xylene	0.781	0.775	0.814	0.699	0.736		
Dibromofluoromethane(SURR)		0.318	0.321	0.324	0.335		
Toluene d8(SURR)		1.186	1.226	1.215	1.342		
4-Bromofluorobenzene(SURR)		1.027	1.067	1.038	1.099		
1,2-Dichloroethane-d4(SURR)		0.073	0.073	0.076	0.079		

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FORM VI

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS03 Calibration Date: 01/29/04

GC Column: DB-624 ID: 0.18 (mm) Calibration Time: 0801

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF50 =50PPB.D RRF60 =60PPB.D
RRF80 =80PPB.D

COMPOUND		RRF50	RRF60	RRF80			$\overline{RRF}$	%RSD OR R^2	
Dichlorodifluoromethane		0.410	0.407	0.405			0.39526	5.5	
Chloromethane	#	0.376	0.381	0.360			0.37692	8.2	#
Vinyl chloride	*	0.322	0.321	0.319			0.35917	13.1	*
Bromomethane		0.247	0.244	0.243			0.25208	9.3	
Chloroethane		0.245	0.245	0.244			0.25518	9	
Trichlorofluoromethane		0.476	0.481	0.480			0.46572	4.9	
1,1-Dichloroethene	*	0.473	0.472	0.476			0.46621	5.6	*
Carbon disulfide		1.134	1.160	1.156			1.14567	5	
Methylene chloride		0.480	0.473	0.471			0.474	5.7	
trans-1,2-Dichloroethene		0.479	0.478	0.470			0.46345	6.2	
1,1-Dichloroethane	#	0.593	0.598	0.595			0.58899	6.8	#
Acetone		0.070	0.067	0.064			0.07925	1	
cis-1,2-Dichloroethene		0.391	0.387	0.388			0.37732	5.6	
Bromochloromethane		0.194	0.195	0.191			0.18092	8	
2-Butanone		0.108	0.112	0.106			0.1073	5.9	
Chloroform	*	0.620	0.619	0.608			0.61208	5.2	*
1,1,1-Trichloroethane		0.506	0.516	0.509			0.48236	5.7	
Carbon tetrachloride		0.429	0.441	0.453			0.40693	8.4	
Benzene		1.397	1.421	1.398			1.38849	3.8	
1,2-Dichloroethane		0.462	0.451	0.451			0.44036	4.8	
Trichloroethene		0.407	0.411	0.401			0.39172	6	
1,2-Dichloropropane	*	0.372	0.373	0.368			0.36318	5	*
Bromodichloromethane		0.477	0.477	0.473			0.45825	6	
cis-1,3-Dichloropropene		0.568	0.574	0.567			0.50828	11.1	
4-Methyl-2-pentanone		0.559	0.550	0.536			0.54862	3.4	
Toluene	*	0.920	0.922	0.898			0.88899	5.1	*
trans-1,3-Dichloropropene		0.476	0.479	0.477			0.40589	15.6	<-
1,1,2-Trichloroethane		0.318	0.313	0.307			0.3042	4.4	
Tetrachloroethene		0.339	0.359	0.346			0.33828	5.6	
2-Hexanone		0.191	0.196	0.186			0.17734	7.5	
Dibromochloromethane		0.441	0.449	0.446			0.41512	6.6	
1,2-Dibromoethane(EDB)		0.360	0.367	0.358			0.3454	6.4	
Chlorobenzene	#	1.262	1.291	1.238			1.26287	5.7	#
Ethylbenzene	*	0.620	0.649	0.611			0.61395	6.1	*

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FORM VI

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS03 Calibration Date: 01/29/04

GC Column: DB-624 ID: 0.18 (mm) Calibration Time: 0801

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF50 =50PPB.D RRF60 =60PPB.D
RRF80 =80PPB.D

COMPOUND		RRF50	RRF60	RRF80			$\overline{RRF}$	%RSD OR R^2	
Styrene		1.363	1.397	1.356			1.30623	5.4	
Bromoform	#	0.256	0.259	0.254			0.2361	8.1	#
Isopropylbenzene (Cumene)		3.439	3.428	3.408			3.34501	5.7	
1,1,2,2-Tetrachloroethane	#	0.851	0.840	0.822			0.87492	8	#
1,3-Dichlorobenzene		1.771	1.797	1.745			1.76156	4.8	
1,4-Dichlorobenzene		1.759	1.771	1.733			1.77198	6.4	
1,2-Dichlorobenzene		1.668	1.653	1.632			1.62898	4.4	
1,2-Dibromo-3-chloropropane		0.134	0.131	0.131			0.11396	1	
1,2,4-Trichlorobenzene		0.846	0.851	0.844			0.77764	8.1	
1,2,3-Trichlorobenzene		0.751	0.752	0.742			0.70888	6.8	
MTBE		0.732	0.711	0.729			0.67447	6.7	
1,1,2-Trichlorotrifluoroethane		0.333	0.350	0.339			0.33681	5.3	
Methyl Cyclohexane		0.347	0.363	0.359			0.3337	7.7	
Methyl Acetate		0.207	0.199	0.201			0.199	6	
Cyclohexane		0.506	0.531	0.518			0.49549	8.4	
o-Xylene		1.571	1.639	1.546			1.52687	4.8	
p,m-Xylene		0.789	0.812	0.768			0.77172	5	
Dibromofluoromethane(SURR)		0.348	0.338	0.329			0.3306	3.2	
Toluene d8(SURR)		1.351	1.333	1.289			1.27749	5.3	
4-Bromofluorobenzene(SURR)		1.088	1.058	1.025			1.05746	2.8	
1,2-Dichloroethane-d4(SURR)		0.081	0.081	0.080			0.07752	4.6	

Average Used: 6.2

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FORM VI

7SSC

VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS03 CalibrationDate: 01/29/04 Time: 0858

CCV ID: SSC156529 Lab File ID: SEC32.D Init. Calib. Date: 01/29/04

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND		$\overline{RRF}$	RRF	%D	
Dichlorodifluoromethane		0.39526	0.38514	2.6	
Chloromethane	#	0.37692	0.35481	5.9	#
Vinyl chloride	*	0.35917	0.31842	11.3	*
Bromomethane		0.25208	0.23671	6.1	
Chloroethane		0.25518	0.23248	8.9	
Trichlorofluoromethane		0.46572	0.46845	0.6	
1,1-Dichloroethene	*	0.46621	0.46014	1.3	*
Carbon disulfide		1.14567	1.098	4.2	
Methylene chloride		0.474	0.464	2.1	
trans-1,2-Dichloroethene		0.46345	0.46555	0.5	
1,1-Dichloroethane	#	0.58899	0.57508	2.4	#
Acetone		0.07925	0.0651	8.4	
cis-1,2-Dichloroethene		0.37732	0.37783	0.1	
Bromochloromethane		0.18092	0.18818	4.0	
2-Butanone		0.1073	0.10297	4.0	
Chloroform	*	0.61208	0.59236	3.2	*
1,1,1-Trichloroethane		0.48236	0.4979	3.2	
Carbon tetrachloride		0.40693	0.42193	3.7	
Benzene		1.38849	1.365	1.7	
1,2-Dichloroethane		0.44036	0.43506	1.2	
Trichloroethene		0.39172	0.38583	1.5	
1,2-Dichloropropane	*	0.36318	0.36035	0.8	*
Bromodichloromethane		0.45825	0.45911	0.2	
cis-1,3-Dichloropropene		0.50828	0.54597	7.4	
4-Methyl-2-pentanone		0.54862	0.56312	2.6	
Toluene	*	0.88899	0.87838	1.2	*
trans-1,3-Dichloropropene		0.40589	0.45231	11.4	
1,1,2-Trichloroethane		0.3042	0.30766	1.1	
Tetrachloroethene		0.33828	0.33474	1.0	
2-Hexanone		0.17734	0.1898	7.0	
Dibromochloromethane		0.41512	0.42734	2.9	
1,2-Dibromoethane(EDB)		0.3454	0.35654	3.2	
Chlorobenzene	#	1.26287	1.216	3.7	#
Ethylbenzene	*	0.61395	0.60325	1.7	*
Styrene		1.30623	1.319	1.0	
Bromoform	#	0.2361	0.24937	5.6	#

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FORM VII

7SSC

VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS03 CalibrationDate: 01/29/04 Time: 0858

CCV ID: SSC156529 Lab File ID: SEC32.D Init. Calib. Date: 01/29/04

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND	$\overline{RRF}$	RRF	%D
Isopropylbenzene (Cumene)	3.34501	3.384	1.2
1,1,2,2-Tetrachloroethane #	0.87492	0.85172	2.7 #
1,3-Dichlorobenzene	1.76156	1.763	0.1
1,4-Dichlorobenzene	1.77198	1.748	1.4
1,2-Dichlorobenzene	1.62898	1.681	3.2
1,2-Dibromo-3-chloropropane	0.11396	0.13017	0.6
1,2,4-Trichlorobenzene	0.77764	0.84954	9.2
1,2,3-Trichlorobenzene	0.70888	0.75805	6.9
MTBE	0.67447	0.70827	5.0
1,1,2-Trichlorotrifluoroethane	0.33681	0.33032	1.9
Methyl Acetate	0.199	0.19818	0.4
Cyclohexane	0.49549	0.51091	3.1
Methyl Cyclohexane	0.3337	0.34646	3.8
o-Xylene	1.52687	1.555	1.8
p,m-Xylene	0.77172	0.76338	1.1
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Dibromofluoromethane(SURR)	0.3306	0.33668	1.8
Toluene d8(SURR)	1.27749	1.337	4.7
4-Bromofluorobenzene(SURR)	1.05746	1.1	4.0
1,2-Dichloroethane-d4(SURR)	0.07752	0.08149	5.1

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FORM VII

7SSC

VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS01 CalibrationDate: 02/02/04 Time: 1145

CCV ID: SSC157542 Lab File ID: SEC11.D Init. Calib. Date: 02/02/04

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) YES

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND		$\overline{RRF}$	RRF	%D	
Dichlorodifluoromethane		0.91085	0.80763	11.3	
Chloromethane	#	0.61952	0.55172	10.9	#
Vinyl chloride	*	0.50011	0.48189	3.6	*
Bromomethane		0.35234	0.28922	17.9	
Chloroethane		0.21994	0.20569	6.5	
Trichlorofluoromethane		1.12641	0.97114	13.8	
1,1-Dichloroethene	*	0.85094	0.79782	6.2	*
Carbon disulfide		1.30238	1.186	8.9	
Methylene chloride		0.44435	0.4138	6.9	
trans-1,2-Dichloroethene		0.73633	0.72816	1.1	
1,1-Dichloroethane	#	0.87149	0.87534	0.4	#
Acetone		0.25318	0.24152	4.6	
cis-1,2-Dichloroethene		0.47014	0.49234	4.7	
Bromochloromethane		0.24037	0.23303	3.1	
2-Butanone		0.2197	0.22434	2.1	
Chloroform	*	0.9855	0.92284	6.4	*
1,1,1-Trichloroethane		0.94666	0.91358	3.5	
Carbon tetrachloride		0.82354	0.7689	6.6	
Benzene		1.50526	1.434	4.7	
1,2-Dichloroethane		0.98797	0.95586	3.3	
Trichloroethene		0.48154	0.492	2.2	
1,2-Dichloropropane	*	0.37057	0.38154	3.0	*
Bromodichloromethane		0.73683	0.75328	2.2	
cis-1,3-Dichloropropene		0.7134	0.73842	3.5	
4-Methyl-2-pentanone		1.23347	1.284	4.1	
Toluene	*	0.94341	0.9358	0.8	*
trans-1,3-Dichloropropene		0.76638	0.7758	1.2	
1,1,2-Trichloroethane		0.35753	0.37033	3.6	
Tetrachloroethene		0.59628	0.5274	11.6	
2-Hexanone		0.46556	0.49755	6.9	
Dibromochloromethane		0.78262	0.76321	2.5	
1,2-Dibromoethane(EDB)		0.57989	0.56899	1.9	
Chlorobenzene	#	1.60568	1.55	3.5	#
Ethylbenzene	*	0.83713	0.7515	10.2	*
Styrene		1.69535	1.597	5.8	
Bromoform	#	0.47719	0.48239	1.1	#

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FORM VII

7SSC

VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS01 CalibrationDate: 02/02/04 Time: 1145

CCV ID: SSC157542 Lab File ID: SEC11.D Init. Calib. Date: 02/02/04

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) YES

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND	$\overline{RRF}$	RRF	%D
Isopropylbenzene (Cumene)	5.53614	5.076	8.3
1,1,2,2-Tetrachloroethane #	1.19257	1.116	6.4 #
1,3-Dichlorobenzene	2.70802	2.547	5.9
1,4-Dichlorobenzene	2.57272	2.546	1.0
1,2-Dichlorobenzene	2.40166	2.29	4.6
1,2-Dibromo-3-chloropropane	0.26992	0.28863	6.9
1,2,4-Trichlorobenzene	1.58319	1.62	2.3
1,2,3-Trichlorobenzene	1.45236	1.441	0.8
MTBE	1.10118	1.09	1.0
1,1,2-Trichlorotrifluoroethane	0.4177	0.37196	11.0
Methyl Acetate	0.37351	0.34045	8.9
Cyclohexane	0.56808	0.52765	7.1
Methyl Cyclohexane	0.64025	0.59262	7.4
o-Xylene	2.36701	2.228	5.9
p,m-Xylene	0.99529	0.91542	8.0
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Dibromofluoromethane(SURR)	0.54172	0.5433	0.3
Toluene d8(SURR)	1.39802	1.394	0.3
4-Bromofluorobenzene(SURR)	1.71321	1.673	2.3
1,2-Dichloroethane-d4(SURR)	0.09384	0.09725	3.6

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FORM VII

7SSC

VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS02 CalibrationDate: 02/04/04 Time: 1024

CCV ID: SSC158171 Lab File ID: SEC21.D Init. Calib. Date: 02/04/04

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND		$\overline{RRF}$	RRF	%D	
Dichlorodifluoromethane		0.206	0.22141	7.5	
Chloromethane	#	0.47322	0.43133	8.9	#
Vinyl chloride	*	0.32632	0.30595	6.2	*
Bromomethane		0.20205	0.19666	2.7	
Chloroethane		0.22975	0.2301	0.2	
Trichlorofluoromethane		0.20196	0.21172	4.8	
1,1-Dichloroethene	*	0.34645	0.36936	6.6	*
Carbon disulfide		0.86522	0.90933	5.1	
Methylene chloride		0.42914	0.41068	4.3	
trans-1,2-Dichloroethene		0.45633	0.48451	6.2	
1,1-Dichloroethane	#	0.61057	0.63008	3.2	#
Acetone		0.10851	0.09526	12.2	
cis-1,2-Dichloroethene		0.33548	0.34873	3.9	
Bromochloromethane		0.34918	0.36312	4.0	
2-Butanone		0.2278	0.20539	9.8	
Chloroform	*	0.49318	0.51553	4.5	*
1,1,1-Trichloroethane		0.28915	0.32711	13.1	
Carbon tetrachloride		0.27243	0.30865	13.3	
Benzene		1.38344	1.43	3.4	
1,2-Dichloroethane		0.33979	0.34631	1.9	
Trichloroethene		0.29219	0.30548	4.5	
1,2-Dichloropropane	*	0.39803	0.40894	2.7	*
Bromodichloromethane		0.35134	0.38519	9.6	
cis-1,3-Dichloropropene		0.54977	0.58478	6.4	
4-Methyl-2-pentanone		0.48552	0.42901	11.6	
Toluene	*	0.75629	0.79726	5.4	*
trans-1,3-Dichloropropene		0.47301	0.49123	3.9	
1,1,2-Trichloroethane		0.27803	0.27299	1.8	
Tetrachloroethene		0.26312	0.27867	5.9	
2-Hexanone		0.48124	0.41457	13.9	
Dibromochloromethane		0.39735	0.40777	2.6	
1,2-Dibromoethane(EDB)		0.36706	0.37569	2.4	
Chlorobenzene	#	1.06443	1.084	1.8	#
Ethylbenzene	*	0.54426	0.55818	2.6	*
Styrene		1.20318	1.252	4.1	
Bromoform	#	0.24028	0.23969	0.2	#

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FORM VII

7SSC

VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS02 CalibrationDate: 02/04/04 Time: 1024

CCV ID: SSC158171 Lab File ID: SEC21.D Init. Calib. Date: 02/04/04

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND	$\overline{RRF}$	RRF	%D
Isopropylbenzene (Cumene)	0.90115	0.96722	7.3
1,1,2,2-Tetrachloroethane #	1.22208	1.142	6.6 #
1,3-Dichlorobenzene	1.61416	1.671	3.5
1,4-Dichlorobenzene	1.61995	1.695	4.6
1,2-Dichlorobenzene	1.44579	1.482	2.5
1,2-Dibromo-3-chloropropane	0.14926	0.14079	5.7
1,2,4-Trichlorobenzene	0.72238	0.78074	8.1
1,2,3-Trichlorobenzene	0.6576	0.68585	4.3
MTBE	0.62171	0.64262	3.4
1,1,2-Trichlorotrifluoroethane	0.19904	0.22352	12.3
Methyl Acetate	0.35284	0.33423	5.3
Cyclohexane	0.60001	0.60001	0.0
Methyl Cyclohexane	0.48756	0.48545	0.4
o-Xylene	1.42098	1.443	1.5
p,m-Xylene	0.69524	0.7172	3.2
==========			
Dibromofluoromethane(SURR)	0.25895	0.25324	2.2
Toluene d8(SURR)	0.96872	0.96828	0.0
4-Bromofluorobenzene(SURR)	1.05514	1.04	1.4
1,2-Dichloroethane-d4(SURR)	0.07189	0.07263	1.0

VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS03 CalibrationDate: 02/13/04 Time: 0447

CCV ID: CCV160331 Lab File ID: 50CCV31.D Init. Calib. Date: 01/29/04

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND		$\overline{RRF}$	RRF50	%D	
Dichlorodifluoromethane		0.39526	0.42799	8.3	
Chloromethane	#	0.37692	0.38817	3.0	#
Vinyl chloride	*	0.35917	0.30152	16.1	*
Bromomethane		0.25208	0.2535	0.6	
Chloroethane		0.25518	0.2499	2.1	
Trichlorofluoromethane		0.46572	0.42863	8.0	
1,1-Dichloroethene	*	0.46621	0.48206	3.4	*
Carbon disulfide		1.14567	1.133	1.1	
Methylene chloride		0.474	0.47053	0.7	
trans-1,2-Dichloroethene		0.46345	0.46043	0.7	
1,1-Dichloroethane	#	0.58899	0.59059	0.3	#
Acetone		0.07925	0.07886	17.0	
cis-1,2-Dichloroethene		0.37732	0.3846	1.9	
Bromochloromethane		0.18092	0.18979	4.9	
2-Butanone		0.1073	0.12239	14.1	
Chloroform	*	0.61208	0.60528	1.1	*
1,1,1-Trichloroethane		0.48236	0.50771	5.3	
Carbon tetrachloride		0.40693	0.46598	14.5	
Benzene		1.38849	1.373	1.1	
1,2-Dichloroethane		0.44036	0.4444	0.9	
Trichloroethene		0.39172	0.41021	4.7	
1,2-Dichloropropane	*	0.36318	0.36117	0.6	*
Bromodichloromethane		0.45825	0.46574	1.6	
cis-1,3-Dichloropropene		0.50828	0.56412	11.0	
4-Methyl-2-pentanone		0.54862	0.53471	2.5	
Toluene	*	0.88899	0.86	3.3	*
trans-1,3-Dichloropropene		0.40589	0.47856	17.9	
1,1,2-Trichloroethane		0.3042	0.30555	0.4	
Tetrachloroethene		0.33828	0.35351	4.5	
2-Hexanone		0.17734	0.20618	16.3	
Dibromochloromethane		0.41512	0.44837	8.0	
1,2-Dibromoethane(EDB)		0.3454	0.3707	7.3	
Chlorobenzene	#	1.26287	1.241	1.7	#
Ethylbenzene	*	0.61395	0.6245	1.7	*
Styrene		1.30623	1.367	4.7	
Bromoform	#	0.2361	0.27364	15.9	#

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FORM VII

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VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS03 CalibrationDate: 02/13/04 Time: 0447

CCV ID: CCV160331 Lab File ID: 50CCV31.D Init. Calib. Date: 01/29/04

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND	$\overline{RRF}$	RRF50	%D
Isopropylbenzene (Cumene)	3.34501	3.195	4.5
1,1,2,2-Tetrachloroethane #	0.87492	0.7979	8.8 #
1,3-Dichlorobenzene	1.76156	1.742	1.1
1,4-Dichlorobenzene	1.77198	1.745	1.5
1,2-Dichlorobenzene	1.62898	1.646	1.0
1,2-Dibromo-3-chloropropane	0.11396	0.14113	7.6
1,2,4-Trichlorobenzene	0.77764	0.9137	17.5
1,2,3-Trichlorobenzene	0.70888	0.81194	14.5
MTBE	0.67447	0.73981	9.7
1,1,2-Trichlorotrifluoroethane	0.33681	0.3736	10.9
Methyl Acetate	0.199	0.20722	4.1
Cyclohexane	0.49549	0.51034	3.0
Methyl Cyclohexane	0.3337	0.35109	5.2
o-Xylene	1.52687	1.56	2.2
p,m-Xylene	0.77172	0.77062	0.1
==========			
Dibromofluoromethane(SURR)	0.3306	0.31848	3.7
Toluene d8(SURR)	1.27749	1.246	2.5
4-Bromofluorobenzene(SURR)	1.05746	0.99656	5.8
1,2-Dichloroethane-d4(SURR)	0.07752	0.07973	2.9

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FORM VII

7

VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS01 CalibrationDate: 02/13/04 Time: 0715

CCV ID: CCV160947 Lab File ID: 50CCV12.D Init. Calib. Date: 02/02/04

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) YES

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND		$\overline{RRF}$	RRF50	%D	
Dichlorodifluoromethane		0.91085	1.019	11.9	
Chloromethane	#	0.61952	0.52676	15.0	#
Vinyl chloride	*	0.50011	0.48747	2.5	*
Bromomethane		0.35234	0.33906	3.8	
Chloroethane		0.21994	0.23364	6.2	
Trichlorofluoromethane		1.12641	1.18	4.8	
1,1-Dichloroethene	*	0.85094	0.91187	7.2	*
Carbon disulfide		1.30238	1.232	5.4	
Methylene chloride		0.44435	0.42963	3.3	
trans-1,2-Dichloroethene		0.73633	0.76081	3.3	
1,1-Dichloroethane	#	0.87149	0.89214	2.4	#
Acetone		0.25318	0.27103	7.1	
cis-1,2-Dichloroethene		0.47014	0.47119	0.2	
Bromochloromethane		0.24037	0.23781	1.1	
2-Butanone		0.2197	0.2335	6.3	
Chloroform	*	0.9855	1.081	9.7	*
1,1,1-Trichloroethane		0.94666	1.039	9.8	
Carbon tetrachloride		0.82354	0.86942	5.6	
Benzene		1.50526	1.437	4.5	
1,2-Dichloroethane		0.98797	1.151	16.5	
Trichloroethene		0.48154	0.50054	3.9	
1,2-Dichloropropane	*	0.37057	0.3678	0.7	*
Bromodichloromethane		0.73683	0.83085	12.8	
cis-1,3-Dichloropropene		0.7134	0.75237	5.5	
4-Methyl-2-pentanone		1.23347	1.191	3.4	
Toluene	*	0.94341	0.8892	5.7	*
trans-1,3-Dichloropropene		0.76638	0.87497	14.2	
1,1,2-Trichloroethane		0.35753	0.36458	2.0	
Tetrachloroethene		0.59628	0.56848	4.7	
2-Hexanone		0.46556	0.49142	5.6	
Dibromochloromethane		0.78262	0.82385	5.3	
1,2-Dibromoethane(EDB)		0.57989	0.60459	4.3	
Chlorobenzene	#	1.60568	1.578	1.7	#
Ethylbenzene	*	0.83713	0.76662	8.4	*
Styrene		1.69535	1.64	3.3	
Bromoform	#	0.47719	0.50741	6.3	#

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FORM VII

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VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS01 CalibrationDate: 02/13/04 Time: 0715

CCV ID: CCV160947 Lab File ID: 50CCV12.D Init. Calib. Date: 02/02/04

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) YES

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND	$\overline{RRF}$	RRF50	%D
Isopropylbenzene (Cumene)	5.53614	5.031	9.1
1,1,2,2-Tetrachloroethane #	1.19257	1.117	6.3 #
1,3-Dichlorobenzene	2.70802	2.463	9.0
1,4-Dichlorobenzene	2.57272	2.482	3.5
1,2-Dichlorobenzene	2.40166	2.211	7.9
1,2-Dibromo-3-chloropropane	0.26992	0.30306	12.3
1,2,4-Trichlorobenzene	1.58319	1.511	4.6
1,2,3-Trichlorobenzene	1.45236	1.41	2.9
MTBE	1.10118	1.221	10.9
1,1,2-Trichlorotrifluoroethane	0.4177	0.41051	1.7
Methyl Acetate	0.37351	0.36123	3.3
Methyl Cyclohexane	0.64025	0.56662	11.5
Cyclohexane	0.56808	0.47978	15.5
o-Xylene	2.36701	2.386	0.8
p,m-Xylene	0.99529	0.95623	3.9
==========			
Dibromofluoromethane(SURR)	0.54172	0.58936	8.8
Toluene d8(SURR)	1.39802	1.386	0.9
4-Bromofluorobenzene(SURR)	1.71321	1.621	5.4
1,2-Dichloroethane-d4(SURR)	0.09384	0.09485	1.1

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FORM VII

VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS02 CalibrationDate: 02/16/04 Time: 0642

CCV ID: CCV160882 Lab File ID: 50CCV22.D Init. Calib. Date: 02/04/04

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND		$\overline{RRF}$	RRF50	%D		
Dichlorodifluoromethane		0.206	0.25405	23.3		<-
Chloromethane	#	0.47322	0.48209	1.9	#	
Vinyl chloride	*	0.32632	0.31936	2.1	*	
Bromomethane		0.20205	0.20989	3.9		
Chloroethane		0.22975	0.24195	5.3		
Trichlorofluoromethane		0.20196	0.22051	9.2		
1,1-Dichloroethene	*	0.34645	0.34999	1.0	*	
Carbon disulfide		0.86522	0.81537	5.8		
Methylene chloride		0.42914	0.40901	4.7		
trans-1,2-Dichloroethene		0.45633	0.48132	5.5		
1,1-Dichloroethane	#	0.61057	0.64665	5.9	#	
Acetone		0.10851	0.10367	4.5		
cis-1,2-Dichloroethene		0.33548	0.33526	0.1		
Bromochloromethane		0.34918	0.37856	8.4		
2-Butanone		0.2278	0.23983	5.3		
Chloroform	*	0.49318	0.50458	2.3	*	
1,1,1-Trichloroethane		0.28915	0.27006	6.6		
Carbon tetrachloride		0.27243	0.29244	7.3		
Benzene		1.38344	1.368	1.1		
1,2-Dichloroethane		0.33979	0.34857	2.6		
Trichloroethene		0.29219	0.278	4.9		
1,2-Dichloropropane	*	0.39803	0.41494	4.2	*	
Bromodichloromethane		0.35134	0.37986	8.1		
cis-1,3-Dichloropropene		0.54977	0.57057	3.8		
4-Methyl-2-pentanone		0.48552	0.49906	2.8		
Toluene	*	0.75629	0.75802	0.2	*	
trans-1,3-Dichloropropene		0.47301	0.49158	3.9		
1,1,2-Trichloroethane		0.27803	0.27713	0.3		
Tetrachloroethene		0.26312	0.24931	5.2		
2-Hexanone		0.48124	0.47655	1.0		
Dibromochloromethane		0.39735	0.39975	0.6		
1,2-Dibromoethane(EDB)		0.36706	0.3743	2.0		
Chlorobenzene	#	1.06443	1.04	2.3	#	
Ethylbenzene	*	0.54426	0.5355	1.6	*	
Styrene		1.20318	1.225	1.8		
Bromoform	#	0.24028	0.2237	6.9	#	

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FORM VII

VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: VMS02 CalibrationDate: 02/16/04 Time: 0642

CCV ID: CCV160882 Lab File ID: 50CCV22.D Init. Calib. Date: 02/04/04

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND		$\overline{RRF}$	RRF50	%D		
Isopropylbenzene (Cumene)		0.90115	0.91198	1.2		
1,1,2,2-Tetrachloroethane	#	1.22208	1.254	2.6	#	
1,3-Dichlorobenzene		1.61416	1.59	1.5		
1,4-Dichlorobenzene		1.61995	1.623	0.2		
1,2-Dichlorobenzene		1.44579	1.436	0.7		
1,2-Dibromo-3-chloropropane		0.14926	0.1563	4.7		
1,2,4-Trichlorobenzene		0.72238	0.69362	4.0		
1,2,3-Trichlorobenzene		0.6576	0.60958	7.3		
MTBE		0.62171	0.80355	29.2		<-
1,1,2-Trichlorotrifluoroethane		0.19904	0.21675	8.9		
Methyl Acetate		0.35284	0.38687	9.6		
Methyl Cyclohexane		0.48756	0.44814	8.1		
Cyclohexane		0.60001	0.55436	7.6		
o-Xylene		1.42098	1.41	0.8		
p,m-Xylene		0.69524	0.67889	2.4		
==========						
Dibromofluoromethane(SURR)		0.25895	0.27642	6.7		
Toluene d8(SURR)		0.96872	0.992	2.4		
4-Bromofluorobenzene(SURR)		1.05514	1.125	6.6		
1,2-Dichloroethane-d4(SURR)		0.07189	0.07619	6.0		

Average Used: 4.9

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FORM VII

Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402125

METHOD: 8260 **MATRIX:** S

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
1,1,1-Trichloroethane	68-128	45	48-138	45			
1,1,2,2-Tetrachloroethane	64-113	33	12-155	33			
1,1,2-Trichloroethane	63-123	40	19-135	40			
1,1,2-Trichlorotrifluoroethane	62-131	33	52-140	33			
1,1-Dichloroethane	67-126	34	24-149	34			
1,1-Dichloroethene	68-135	33	41-144	33			
1,2,3-Trichlorobenzene	66-130	50	13-126	50			
1,2,4-Trichlorobenzene	60-114	46	D-117	46			
1,2-Dibromo-3-chloropropane	53-118	32	39-133	32			
1,2-Dibromoethane(EDB)	62-118	36	61-118	36			
1,2-Dichlorobenzene	64-120	40	26-126	40			
1,2-Dichloroethane	67-119	34	47-132	34			
1,2-Dichloroethane-d4							71-124
1,2-Dichloropropane	68-120	44	56-121	44			
1,3-Dichlorobenzene	64-117	42	26-133	42			
1,4-Dichlorobenzene	62-116	38	20-130	38			
2-Butanone	59-133	36	40-132	36			
2-Hexanone	59-131	39	30-134	39			
4-Bromofluorobenzene							54-126
4-Methyl-2-pentanone	65-125	31	45-126	31			
Acetone	59-132	40	D-203	40			
Benzene	68-126	37	23-144	37			
Bromochloromethane	72-119	47	71-113	47			
Bromodichloromethane	67-121	33	48-121	33			
Bromoform	59-119	29	32-119	29			
Bromomethane	51-140	29	37-142	29			
Carbon disulfide	60-134	34	27-158	34			
Carbon tetrachloride	68-130	38	39-142	38			
Chlorobenzene	64-122	36	33-125	36			
Chloroethane	60-139	30	52-143	30			
Chloroform	65-120	29	48-130	29			
Chloromethane	40-142	38	29-145	38			
cis-1,2-Dichloroethene	70-120	38	58-129	38			
cis-1,3-Dichloropropene	69-120	36	45-118	36			
Cyclohexane	62-130	30	42-139	30			
Dibromochloromethane	63-118	37	37-126	37			
Dibromofluoromethane							68-119
Dichlorodifluoromethane	33-126	29	28-140	29			
Ethylbenzene	65-124	33	24-142	33			

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Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402125

METHOD: 8260 **MATRIX:** S

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
Isopropylbenzene (Cumene)	73-122	35	33-146	35			
Methyl Acetate	59-126	30	54-159	30			
Methyl Cyclohexane	67-126	30	53-138	30			
Methylene chloride	54-136	29	40-133	29			
MTBE	68-125	26	75-125	26			
Styrene	60-125	32	29-116	32			
Tetrachloroethene	67-118	29	44-128	29			
Toluene	71-124	32	53-120	32			
Toluene d8							59-127
trans-1,2-Dichloroethene	74-123	32	55-137	32			
trans-1,3-Dichloropropene	62-122	37	43-121	37			
Trichloroethene	76-116	37	54-119	37			
Trichlorofluoromethane	75-141	30	57-157	30			
Vinyl chloride	49-139	37	46-148	37			
Xylene (total)	65-121	29	50-126	29			

METHOD: 8260 **MATRIX:** W

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
1,1,1-Trichloroethane	83-132	12	79-134	12			
1,1,2,2-Tetrachloroethane	87-116	9	88-117	9			
1,1,2-Trichloroethane	86-117	13	77-126	13			
1,1,2-Trichlorotrifluoroethane	70-130	30	70-130	30			
1,1-Dichloroethane	88-127	10	79-135	10			
1,1-Dichloroethene	75-150	14	84-129	14			
1,2,3-Trichlorobenzene	91-122	11	75-138	11			
1,2,4-Trichlorobenzene	84-124	11	75-133	11			
1,2-Dibromo-3-chloropropane	82-127	17	81-123	17			
1,2-Dibromoethane(EDB)	79-117	11	75-124	11			
1,2-Dichlorobenzene	91-116	13	81-126	13			
1,2-Dichloroethane	86-120	8	80-133	8			
1,2-Dichloroethane-d4							80-120
1,2-Dichloropropane	83-126	11	79-128	11			
1,3-Dichlorobenzene	88-121	13	81-130	13			
1,4-Dichlorobenzene	88-118	11	80-125	11			
2-Butanone	83-127	20	82-119	20			
2-Hexanone	58-136	19	77-126	19			

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Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402125

METHOD: 8260 **MATRIX:** W

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
4-Bromofluorobenzene							86-115
4-Methyl-2-pentanone	64-140	15	88-123	15			
Acetone	70-135	19	60-117	19			
Benzene	82-129	10	51-141	10			
Bromochloromethane	80-124	12	76-130	12			
Bromodichloromethane	84-127	13	79-130	13			
Bromoform	67-129	10	78-121	10			
Bromomethane	55-159	20	88-117	20			
Carbon disulfide	72-142	17	64-169	17			
Carbon tetrachloride	74-140	15	75-132	15			
Chlorobenzene	87-117	12	82-123	12			
Chloroethane	77-144	12	90-117	12			
Chloroform	83-127	13	76-134	13			
Chloromethane	48-149	18	74-113	18			
cis-1,2-Dichloroethene	88-127	11	77-128	11			
cis-1,3-Dichloropropene	67-133	13	81-123	13			
Cyclohexane	70-130	30	70-130	30			
Dibromochloromethane	87-123	12	80-128	12			
Dibromofluoromethane							86-118
Dichlorodifluoromethane	56-144	21	54-127	21			
Ethylbenzene	89-121	13	77-124	13			
Isopropylbenzene (Cumene)	96-118	10	81-128	10			
Methyl Acetate	70-130	30	70-130	30			
Methyl Cyclohexane	70-130	30	70-130	30			
Methylene chloride	81-129	9	75-133	9			
MTBE	83-131	17	78-140	17			
Styrene	80-127	13	83-127	13			
Tetrachloroethene	87-124	11	86-120	11			
Toluene	82-128	13	75-132	13			
Toluene d8							88-110
trans-1,2-Dichloroethene	84-135	14	73-141	14			
trans-1,3-Dichloropropene	62-137	10	81-126	10			
Trichloroethene	82-127	13	76-128	13			
Trichlorofluoromethane	65-190	14	65-162	14			
Vinyl chloride	66-128	24	60-118	24			
Xylene (total)	82-124	9	86-129	9			

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GC/MS SEMI-VOLATILE ORGANICS

METHOD 8270

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CASE NARRATIVE
GC/MS SEMIVOLATILE ORGANICS

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

EPA SW846 8270

IV. PREPARATION

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

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met with the exception of:
LCS 021704LCS was analyzed with the soil samples extracted on 02/17/04. The following analyte(s) were recovered below criteria: Benzaldehyde at 0 % with criteria of (60-130).

No further action was taken.

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

A client requested MS/SD set was analyzed.
All percent recovery and relative percent difference(RPD) criteria were met with the exception of:

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

MS - 57285TS040212MS was analyzed with the soil samples extracted on 02/17/04. The following analyte(s) were recovered below criteria: 2-Methyl-4,6-dinitrophenol at 0 % with criteria of (6-135), 2-Methylnaphthalene at -79.7 % with criteria of (30-129), Benzaldehyde at 0 % with criteria of (60-130), Hexachloroethane at 20.9 % with criteria of (28-90) and the following analyte(s) were recovered above criteria: Caprolactam at 176 % with criteria of (60-130), Phenol at 76.7 % with criteria of (13-69).

SD - 57285TS040212sd was analyzed with the soil samples extracted on 02/17/04. The following analyte(s) were recovered below criteria: 2,4-Dichlorophenol at 59.4 % with criteria of (63-130), 2-Methyl-4,6-dinitrophenol at 0 % with criteria of (6-135), 2-Methylnaphthalene at -103 % with criteria of (30-129), 2-Nitroaniline at 58.6 % with criteria of (64-131), Atrazine at 42.1 % with criteria of (60-130), Benzaldehyde at 0 % with criteria of (60-130), Biphenyl at 52.6 % with criteria of (60-130), Bis(2-Chloroethyl)ether at 48.1 % with criteria of (52-123), Hexachloroethane at 20 % with criteria of (28-90), Nitrobenzene at 51.5 % with criteria of (53-127), N-Nitrosodiphenylamine at 60.9 % with criteria of (64-140), Pyrene at 49.6 % with criteria of (56-103) and the following analyte(s) were recovered above criteria: Caprolactam at 161 % with criteria of (60-130). The following analyte(s) exceeded rpd criteria: 1,2,4,5-Tetrachlorobenzene at 30.6 % with criteria of (30), 2,4-Dichlorophenol at 31.9 % with criteria of (19), 2,4-Dinitrotoluene at 35.9 % with criteria of (29), 2,6-Dinitrotoluene at 35.9 % with criteria of (23), 2-Chloronaphthalene at 27.1 % with criteria of (23), 2-Chlorophenol at 29.7 % with criteria of (19), 2-Methylnaphthalene at 25.9 % with criteria of (21), 2-Methylphenol (o-Cresol) at 29.3 % with criteria of (18), 3-Nitroaniline at 35.8 % with criteria of (23), 4-Bromophenyl-phenylether at 38.6 % with criteria of (22), 4-Chloro-3-methylphenol at 24.8 % with criteria of (21), 4-Chlorophenyl-phenylether at 37.6 % with criteria of (27), 4-Methylphenol at 29.5 % with criteria of (21), 4-Nitroaniline at 42.7 % with criteria of (31), 4-Nitrophenol at 56.9 % with criteria of (30), Acenaphthene at 27.9 % with criteria of (21), Acenaphthylene at 31.4 % with criteria of (21), Anthracene at 31.8 % with criteria of (28), Atrazine at 43.9 % with criteria of (30), Benzo(k)fluoranthene at 46.1 % with criteria of (33), bis(2-ethylhexyl)phthalate at 34 % with criteria of (19), Butylbenzylphthalate at 33.9 % with criteria of (29), Carbazole at 35.3 % with criteria of (30), Dibenz(a,h)anthracene at 34.5 % with criteria of (32), Dibenzofuran at 29.3 % with criteria of (20), Diethylphthalate at 35.3 % with criteria of (20), Dimethyl-phthalate at 38.8 % with criteria of (25), Di-n-butylphthalate at 35.7 % with criteria of (31), Di-n-octylphthalate at 36.6 % with criteria of (34), Fluorene at 35 % with criteria of (25), Isophorone at 27.9 % with criteria of (20), Naphthalene at 22 % with criteria of (21), Nitrobenzene at 34.4 % with criteria of (20), N-Nitrosodiphenylamine at 36.4 % with criteria of (30), Pentachlorophenol at 43.8 % with criteria of (31).

The MS/SD had most analytes meeting criteria. The RPD not meeting criteria could be due to the matrix variances between the MS/SD soil

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

portions that were extracted. Since the LCS and MS/MSD had most analytes passing criteria, no further action was taken.

E. Internal Standards:

All acceptance criteria were met.

F. Samples:

Sample analysis proceeded normally.
Sample 57285TS040212 required a 1:5 dilution due to high concentration of the following analyte(s): Matrix interference.

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

SIGNED:_____ **DATE:** 2-23-04

SEMI-VOLATILE ORGANIC CROSS REFERENCE TABLE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Method: 8270

EPA Sample No	Lab Sample ID
57285TS040212	240212501

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Sample Data

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 240212501 Lab File ID: 125-1D5.D

Sample wt/vol: 15.07 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 1 Date Extracted: 02/17/04

Level:(low/med) LOW Date Analyzed: 02/19/04 Time: 1804

PercentSolids: 33.1 decanted : Dilution Factor: 5

Extraction: OTHER Station ID: Waste Character Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
111-44-4	Bis(2-Chloroethyl)ether	4060	U
108-95-2	Phenol	4060	U
95-57-8	2-Chlorophenol	4060	U
108-60-1	2,2-Oxybis(1-chloropropane)	4060	U
95-48-7	2-Methylphenol (o-Cresol)	4060	U
67-72-1	Hexachloroethane	4060	U
621-64-7	N-Nitroso-di-n-propylamine	4060	U
106-44-5	4-Methylphenol	4060	U
98-95-3	Nitrobenzene	4060	U
78-59-1	Isophorone	4060	U
88-75-5	2-Nitrophenol	4060	U
105-67-9	2,4-Dimethylphenol	4060	U
111-91-1	Bis(2-Chloroethoxy)methane	4060	U
120-83-2	2,4-Dichlorophenol	4060	U
91-20-3	Naphthalene	4060	U
106-47-8	4-Chloroaniline	4060	U
91-57-6	2-Methylnaphthalene	4820	
87-68-3	Hexachlorobutadiene	4060	U
59-50-7	4-Chloro-3-methylphenol	4060	U
77-47-4	Hexachlorocyclopentadiene	4060	U
88-06-2	2,4,6-Trichlorophenol	4060	U
95-95-4	2,4,5-Trichlorophenol	4060	U
91-58-7	2-Chloronaphthalene	4060	U
88-74-4	2-Nitroaniline	4060	U
208-96-8	Acenaphthylene	4060	U
131-11-3	Dimethyl-phthalate	4060	U
606-20-2	2,6-Dinitrotoluene	4060	U

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 240212501 Lab File ID: 125-1D5.D

Sample wt/vol: 15.07 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 1 Date Extracted: 02/17/04

Level:(low/med) LOW Date Analyzed: 02/19/04 Time: 1804

PercentSolids: 33.1 decanted : Dilution Factor: 5

Extraction: OTHER Station ID: Waste Character Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
83-32-9	Acenaphthene	4060	U
99-09-2	3-Nitroaniline	4060	U
51-28-5	2,4-Dinitrophenol	10100	U
132-64-9	Dibenzofuran	4060	U
121-14-2	2,4-Dinitrotoluene	4060	U
100-02-7	4-Nitrophenol	4060	U
86-73-7	Fluorene	4060	U
7005-72-3	4-Chlorophenyl-phenylether	4060	U
84-66-2	Diethylphthalate	4060	U
100-01-6	4-Nitroaniline	4060	U
534-52-1	2-Methyl-4,6-dinitrophenol	4060	U
86-30-6	N-Nitrosodiphenylamine	4060	U
101-55-3	4-Bromophenyl-phenylether	4060	U
118-74-1	Hexachlorobenzene	4060	U
87-86-5	Pentachlorophenol	4060	U
85-01-8	Phenanthrene	4060	U
120-12-7	Anthracene	4060	U
84-74-2	Di-n-butylphthalate	4060	U
206-44-0	Fluoranthene	4060	U
129-00-0	Pyrene	4060	U
85-68-7	Butylbenzylphthalate	4060	U
91-94-1	3,3'-Dichlorobenzidine	4060	U
56-55-3	Benzo(a)anthracene	4060	U
218-01-9	Chrysene	4060	U
117-81-7	bis(2-ethylhexyl)phthalate	846	J
117-84-0	Di-n-octylphthalate	4060	U
205-99-2	Benzo(b)fluoranthene	4060	U

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 240212501 Lab File ID: 125-1D5.D

Sample wt/vol: 15.07 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 1 Date Extracted: 02/17/04

Level:(low/med) LOW Date Analyzed: 02/19/04 Time: 1804

PercentSolids: 33.1 decanted : Dilution Factor: 5

Extraction: OTHER Station ID: Waste Character Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
207-08-9	Benzo(k)fluoranthene	4060	U
50-32-8	Benzo(a)pyrene	4060	U
193-39-5	Indeno(1,2,3-cd)pyrene	4060	U
53-70-3	Dibenz(a,h)anthracene	4060	U
191-24-2	Benzo(g,h,i)perylene	4060	U
98-86-2	Acetophenone	4060	U
95-94-3	1,2,4,5-Tetrachlorobenzene	4060	U
86-74-8	Carbazole	4060	U
105-60-2	Caprolactam	4060	U
92-52-4	Biphenyl	4060	U
1912-24-9	Atrazine	4060	U
100-52-7	Benzaldehyde	4060	U

QC Summary

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

021704BLKS01

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 129814 Lab File ID: 0217BLK.D

Sample wt/vol: 15.02 Units: G Date Received: 02/17/04

Concentrated Extract Volume: 1 Date Extracted: 02/17/04

Level:(low/med) LOW Date Analyzed: 02/19/04 Time: 1012

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
111-44-4	Bis(2-Chloroethyl)ether	270	U
108-95-2	Phenol	270	U
95-57-8	2-Chlorophenol	270	U
108-60-1	2,2-Oxybis(1-chloropropane)	270	U
95-48-7	2-Methylphenol (o-Cresol)	270	U
67-72-1	Hexachloroethane	270	U
621-64-7	N-Nitroso-di-n-propylamine	270	U
106-44-5	4-Methylphenol	270	U
98-95-3	Nitrobenzene	270	U
78-59-1	Isophorone	270	U
88-75-5	2-Nitrophenol	270	U
105-67-9	2,4-Dimethylphenol	270	U
111-91-1	Bis(2-Chloroethoxy)methane	270	U
120-83-2	2,4-Dichlorophenol	270	U
91-20-3	Naphthalene	270	U
106-47-8	4-Chloroaniline	270	U
91-57-6	2-Methylnaphthalene	270	U
87-68-3	Hexachlorobutadiene	270	U
59-50-7	4-Chloro-3-methylphenol	270	U
77-47-4	Hexachlorocyclopentadiene	270	U
88-06-2	2,4,6-Trichlorophenol	270	U
95-95-4	2,4,5-Trichlorophenol	270	U
91-58-7	2-Chloronaphthalene	270	U
88-74-4	2-Nitroaniline	270	U
208-96-8	Acenaphthylene	270	U
131-11-3	Dimethyl-phthalate	270	U
606-20-2	2,6-Dinitrotoluene	270	U

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

021704BLKS01

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 129814 Lab File ID: 0217BLK.D

Sample wt/vol: 15.02 Units: G Date Received: 02/17/04

Concentrated Extract Volume: 1 Date Extracted: 02/17/04

Level:(low/med) LOW Date Analyzed: 02/19/04 Time: 1012

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
83-32-9	Acenaphthene	270	U
99-09-2	3-Nitroaniline	270	U
51-28-5	2,4-Dinitrophenol	669	U
132-64-9	Dibenzofuran	270	U
121-14-2	2,4-Dinitrotoluene	270	U
100-02-7	4-Nitrophenol	270	U
86-73-7	Fluorene	270	U
7005-72-3	4-Chlorophenyl-phenylether	270	U
84-66-2	Diethylphthalate	270	U
100-01-6	4-Nitroaniline	270	U
534-52-1	2-Methyl-4,6-dinitrophenol	270	U
86-30-6	N-Nitrosodiphenylamine	270	U
101-55-3	4-Bromophenyl-phenylether	270	U
118-74-1	Hexachlorobenzene	270	U
87-86-5	Pentachlorophenol	270	U
85-01-8	Phenanthrene	270	U
120-12-7	Anthracene	270	U
84-74-2	Di-n-butylphthalate	270	U
206-44-0	Fluoranthene	270	U
129-00-0	Pyrene	270	U
85-68-7	Butylbenzylphthalate	270	U
91-94-1	3,3'-Dichlorobenzidine	270	U
56-55-3	Benzo(a)anthracene	270	U
218-01-9	Chrysene	270	U
117-81-7	bis(2-ethylhexyl)phthalate	270	U
117-84-0	Di-n-octylphthalate	270	U
205-99-2	Benzo(b)fluoranthene	270	U

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

021704BLKS01

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 129814 Lab File ID: 0217BLK.D

Sample wt/vol: 15.02 Units: G Date Received: 02/17/04

Concentrated Extract Volume: 1 Date Extracted: 02/17/04

Level:(low/med) LOW Date Analyzed: 02/19/04 Time: 1012

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
207-08-9	Benzo(k)fluoranthene	270	U
50-32-8	Benzo(a)pyrene	270	U
193-39-5	Indeno(1,2,3-cd)pyrene	270	U
53-70-3	Dibenz(a,h)anthracene	270	U
191-24-2	Benzo(g,h,i)perylene	270	U
98-86-2	Acetophenone	270	U
95-94-3	1,2,4,5-Tetrachlorobenzene	270	U
86-74-8	Carbazole	270	U
105-60-2	Caprolactam	270	U
92-52-4	Biphenyl	270	U
1912-24-9	Atrazine	270	U
100-52-7	Benzaldehyde	270	U

SEMI-VOLATILE ORGANIC METHOD BLANK SUMMARY

EPA Sample No.

021704BLKS01

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID: 0217BLK.D Lab Sample ID: 129814

Instrument ID: SMSD01 Date Extracted: 02/17/04

Matrix: SOIL Date Analyzed: 02/19/04

Level:(low/med) LOW Time Analyzed: 1012

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	021704LCS	129816	0217LCS.D	02/19/04	1218
2	57285TS040212ms	129819	125-1MS5.D	02/19/04	1701
3	57285TS040212sd	129820	125-1SD5.D	02/19/04	1732
4	57285TS040212	240212501	125-1D5.D	02/19/04	1804

COMMENTS:

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Form IV

2A

SOIL SEMI-VOLATILE ORGANIC SURROGATE RECOVERY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402125

Column(1): HPMS-5 ID: 0.25 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
021704BLKS01	52.1	55.5	56.0	57.7	52.0	59.0	0
021704LCS	57.4	54.4	60.4	61.9	65.6	64.1	0
57285TS040212	81.8	86.8	97.0	79.5	93.5	102.0	0
57285TS040212ms	66.2	74.1	67.3	68.4	76.7	82.8	0
57285TS040212sd	50.8	56.5	50.2	51.5	53.5	57.8	0

Control Limits

S1	=	2-Fluorophenol	25	-	121
S2	=	Phenol-d5	24	-	113
S3	=	Nitrobenzene-d5	23	-	120
S4	=	2-Fluorobiphenyl	30	-	115
S5	=	2,4,6-Tribromophenol	19	-	122
S6	=	p-Terphenyl-d14	18	-	137

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out
Control limit source: (lab/method) METHOD

Form II

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID: DFTPP8270.D DFTPP Injection Date: 02/10/04

Instrument ID: SMSD01 DFTPP Injection Time: 0839

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0% of mass 198	37.9	
68	Less than 2.0% of mass 69	0.3	(0.7)1
69	Less than 100.0% of mass 198	46.9	
70	Less than 2.0% of mass 69	0.1	(0.3)1
127	40.0 - 60.0% of mass 198	46.6	
197	Less than 1.0% of mass 198	0	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	6.4	
275	10.0 - 30.0% of mass 198	19.7	
365	1.0 - 100.0% of mass 198	2	
441	0.0 - 100.0% of mass 443	8.3	(73)2
442	40.0 - 100.0% of mass 198	58.8	
443	17.0 - 23.0% of mass 442	11.4	(19.4)3

1-Value is % of mass 69

2-Value is % of mass 443

3-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	STD160493	SV1941	100STD.D	02/10/04	0859
2	STD160494	SV1942	75STD.D	02/10/04	0931
3	STD160495	SV1943	60STD.D	02/10/04	1003
4	STD160496	SV1944	45STD.D	02/10/04	1035
5	STD160500	SV1947	4STD.D	02/10/04	1211
6	STD160498	SV1945	20STD.D	02/10/04	1244
7	STD160499	SV1946	10STD.D	02/10/04	1524
8	SSC160629	SV1948	45SEC.D	02/10/04	1805

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID: DFTPPsow.D DFTPP Injection Date: 02/10/04

Instrument ID: SMSD01 DFTPP Injection Time: 1922

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0% of mass 198	39	
68	Less than 2.0% of mass 69	0	(0)1
69	Less than 100.0% of mass 198	48.8	
70	Less than 2.0% of mass 69	0	(0)1
127	40.0 - 60.0% of mass 198	47.2	
197	Less than 1.0% of mass 198	0	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	6.7	
275	10.0 - 30.0% of mass 198	19.6	
365	1.0 - 100.0% of mass 198	1.9	
441	0.0 - 100.0% of mass 443	8	(76.2)2
442	40.0 - 100.0% of mass 198	53.7	
443	17.0 - 23.0% of mass 442	10.5	(19.5)3

1-Value is % of mass 69

2-Value is % of mass 443

3-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	STD160485	SV1703	100SOW.D	02/10/04	1941
2	STD160486	SV1704	75SOW.D	02/10/04	2014
3	STD160487	SV1705	60SOW.D	02/10/04	2046
4	STD160488	SV1706	45SOW.D	02/10/04	2118
5	STD160489	SV1707	20SOW.D	02/10/04	2150
6	STD160490	SV1708	10SOW.D	02/10/04	2222
7	STD160491	SV1709	4SOW.D	02/10/04	2254
8	SSC160492	SV1768	45SOWSEC.	02/10/04	2326

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID: DFTPPap9.D DFTPP Injection Date: 02/11/04

Instrument ID: SMSD01 DFTPP Injection Time: 1646

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0% of mass 198	37.1	
68	Less than 2.0% of mass 69	0	(0)1
69	Less than 100.0% of mass 198	46.5	
70	Less than 2.0% of mass 69	0.1	(0.2)1
127	40.0 - 60.0% of mass 198	46.2	
197	Less than 1.0% of mass 198	0	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	6.6	
275	10.0 - 30.0% of mass 198	19.7	
365	1.0 - 100.0% of mass 198	2.2	
441	0.0 - 100.0% of mass 443	8.6	(73.1)2
442	40.0 - 100.0% of mass 198	60.8	
443	17.0 - 23.0% of mass 442	11.7	(19.3)3

1-Value is % of mass 69

2-Value is % of mass 443

3-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	STD160502	SV1950	100AP9.D	02/11/04	1705
2	STD160503	SV1951	75AP9.D	02/11/04	1737
3	STD160504	SV1952	60AP9.D	02/11/04	1809
4	STD160505	SV1953	45AP9.D	02/11/04	1842
5	STD160507	SV1954	20AP9.D	02/11/04	1914
6	STD160508	SV1955	10AP9.D	02/11/04	1946
7	STD160509	SV1956	4AP9.D	02/11/04	2018

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID: DFTPPap9sec.D DFTPP Injection Date: 02/12/04

Instrument ID: SMSD01 DFTPP Injection Time: 1331

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0% of mass 198	35.4	
68	Less than 2.0% of mass 69	0	(0)1
69	Less than 100.0% of mass 198	44.5	
70	Less than 2.0% of mass 69	0	(0)1
127	40.0 - 60.0% of mass 198	46.2	
197	Less than 1.0% of mass 198	0	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	6.6	
275	10.0 - 30.0% of mass 198	20.7	
365	1.0 - 100.0% of mass 198	2.3	
441	0.0 - 100.0% of mass 443	9.4	(74.7)2
442	40.0 - 100.0% of mass 198	65.1	
443	17.0 - 23.0% of mass 442	12.5	(19.2)3

1-Value is % of mass 69

2-Value is % of mass 443

3-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSC160510	SV1982	45AP9SEC.D	02/12/04	1719

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID: DFTPP2.D DFTPP Injection Date: 02/19/04

Instrument ID: SMSD01 DFTPP Injection Time: 0819

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0% of mass 198	39.7	
68	Less than 2.0% of mass 69	0	(0)1
69	Less than 100.0% of mass 198	48.8	
70	Less than 2.0% of mass 69	0	(0)1
127	40.0 - 60.0% of mass 198	46.5	
197	Less than 1.0% of mass 198	0	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	6.9	
275	10.0 - 30.0% of mass 198	19.3	
365	1.0 - 100.0% of mass 198	1.8	
441	0.0 - 100.0% of mass 443	7.7	(73.6)2
442	40.0 - 100.0% of mass 198	51.5	
443	17.0 - 23.0% of mass 442	10.5	(20.4)3

1-Value is % of mass 69

2-Value is % of mass 443

3-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCV162225	SV1944	45CCV.D	02/19/04	0838
2	CCV162224	SV1953	45AP9CCV.D	02/19/04	0909
3	CCV162227	SV1706	45SOWCCV.	02/19/04	0941
4	021704BLKS01	129814	0217BLK.D	02/19/04	1012
5	021704LCS	129816	0217LCS.D	02/19/04	1218

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID: DFTPP4.D DFTPP Injection Date: 02/19/04

Instrument ID: SMSD01 DFTPP Injection Time: 1301

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0% of mass 198	34.1	
68	Less than 2.0% of mass 69	0	(0)1
69	Less than 100.0% of mass 198	43.7	
70	Less than 2.0% of mass 69	0.1	(0.2)1
127	40.0 - 60.0% of mass 198	44.2	
197	Less than 1.0% of mass 198	0	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	6.7	
275	10.0 - 30.0% of mass 198	20.3	
365	1.0 - 100.0% of mass 198	2.2	
441	0.0 - 100.0% of mass 443	9.3	(76.8)2
442	40.0 - 100.0% of mass 198	62.4	
443	17.0 - 23.0% of mass 442	12.1	(19.4)3

1-Value is % of mass 69

2-Value is % of mass 443

3-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCV162226	162226	45CCV1.D	02/19/04	1320
2	CCV162215	162215	45AP9CV1.D	02/19/04	1351
3	CCV162228	162228	45SOWCV1.	02/19/04	1423
4	57285TS040212ms	129819	125-1MS5.D	02/19/04	1701
5	57285TS040212sd	129820	125-1SD5.D	02/19/04	1732
6	57285TS040212	240212501	125-1D5.D	02/19/04	1804

8A

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID (Standard): 45STD.D Date Analyzed: 2/10/04

Instrument ID: SMSD01 Time Analyzed: 10:35

GC Column: HPMS-5 ID: 0.25 (mm)

		IS1 AREA	#	RT	IS2 AREA	#	RT	IS3 AREA	#	RT
	MID CAL STD	335510		6.05	1221175		7.44	636486		9.98
	UPPER LIMIT	671020		6.55	2442350		7.94	1272972		10.48
	LOWER LIMIT	167755		5.55	610587.5		6.94	318243		9.48
	EPA SAMPLE NO.									
1	021704BLKS01	380196		6.03	1322796		7.40	685411		9.93
2	021704LCS	340621		6.03	1189165		7.41	608797		9.94
3	57285TS040212MS	297078		6.02	909546		7.40	463874		9.95
4	57285TS040212sd	287528		6.02	933650		7.41	484668		9.95
5	57285TS040212	264911		6.02	769787		7.41	411777		9.95

IS1 = 1,4-Dichlorobenzene-d4

IS2 = Naphthalene-d8

IS3 = Acenaphthene-d10

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

270204 1739

FORM VIII

8A

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID (Standard): 45STD.D Date Analyzed: 2/10/04

Instrument ID: SMSD01 Time Analyzed: 10:35

GC Column: HPMS-5 ID: 0.25 (mm)

		IS4 AREA	#	RT	IS5 AREA	#	RT	IS6 AREA	#	RT
	MID CAL STD	985906		12.62	713629		17.81	736854		20.44
	UPPER LIMIT	1971812		13.12	1427258		18.31	1473708		20.94
	LOWER LIMIT	492953		12.12	356814.5		17.31	368427		19.94
	EPA SAMPLE NO.									
1	021704BLKS01	1064132		12.56	796398		17.74	735379		20.37
2	021704LCS	922689		12.57	643265		17.75	648504		20.38
3	57285TS040212MS	788267		12.58	795617		17.77	799033		20.40
4	57285TS040212sd	796110		12.57	788864		17.77	816299		20.39
5	57285TS040212	693732		12.57	716220		17.76	686680		20.39

IS4 = Phenanthrene-d10

IS5 = Chrysene-d12

IS6 = Perylene-d12

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

270204 1739

FORM VIII

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021704LCS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Bis(2-Chloroethyl)ether	2660	1740	65.4		22.0	57 - 123
Phenol	2660	1610	60.5		31.0	47 - 105
2-Chlorophenol	2660	1810	68.0		19.0	51 - 118
2,2-Oxybis(1-chloropropane)	2660	1770	66.5		28.0	60 - 132
2-Methylphenol (o-Cresol)	2660	1660	62.4		18.0	59 - 119
Hexachloroethane	2660	1720	64.7		22.0	61 - 136
N-Nitroso-di-n-propylamine	2660	1590	59.8		30.0	48 - 82
4-Methylphenol	2660	1580	59.4		21.0	58 - 125
Nitrobenzene	2660	1810	68.0		20.0	62 - 122
Isophorone	2660	2310	86.8		20.0	63 - 144
2-Nitrophenol	2660	1790	67.3		25.0	56 - 124
2,4-Dimethylphenol	2660	2020	75.9		34.0	47 - 107
Bis(2-Chloroethoxy)methane	2660	2420	91.0		27.0	71 - 133
2,4-Dichlorophenol	2660	1810	68.0		19.0	59 - 122
Naphthalene	2660	1870	70.3		21.0	64 - 120
4-Chloroaniline	2660	1600	60.2		21.0	59 - 130
2-Methylnaphthalene	2660	1900	71.4		21.0	63 - 135
Hexachlorobutadiene	2660	2020	75.9		22.0	65 - 142
4-Chloro-3-methylphenol	2660	1940	72.9		21.0	60 - 128
Hexachlorocyclopentadiene	2660	1840	69.2		48.0	24 - 119
2,4,6-Trichlorophenol	2660	1840	69.2		21.0	54 - 126
2,4,5-Trichlorophenol	2660	1940	72.9		24.0	60 - 127
2-Chloronaphthalene	2660	1840	69.2		23.0	59 - 135
2-Nitroaniline	2660	2230	83.8		20.0	61 - 144
Acenaphthylene	2660	1950	73.3		21.0	60 - 134
Dimethyl-phthalate	2660	1850	69.5		25.0	63 - 128
2,6-Dinitrotoluene	2660	2140	80.5		23.0	65 - 140
Acenaphthene	2660	1900	71.4		21.0	61 - 130
3-Nitroaniline	2660	1870	70.3		23.0	62 - 129
2,4-Dinitrophenol	2660	1680	63.2		84.0	10 - 123
Dibenzofuran	2660	1940	72.9		20.0	64 - 138
2,4-Dinitrotoluene	2660	2140	80.5		29.0	61 - 144

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1739

Form III

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021704LCS

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
4-Nitrophenol	2660	1590	59.8		30.0	42 - 135
Fluorene	2660	1990	74.8		25.0	67 - 130
4-Chlorophenyl-phenylether	2660	1960	73.7		27.0	64 - 131
Diethylphthalate	2660	2010	75.6		20.0	70 - 127
4-Nitroaniline	2660	1900	71.4		31.0	60 - 135
2-Methyl-4,6-dinitrophenol	2660	1990	74.8		46.0	46 - 129
N-Nitrosodiphenylamine	2660	2240	84.2		30.0	64 - 140
4-Bromophenyl-phenylether	2660	1820	68.4		22.0	62 - 106
Hexachlorobenzene	2660	2050	77.1		35.0	67 - 126
Pentachlorophenol	2660	1700	63.9		31.0	53 - 113
Phenanthrene	2660	2090	78.6		30.0	65 - 121
Anthracene	2660	2110	79.3		28.0	68 - 115
Di-n-butylphthalate	2660	2170	81.6		31.0	64 - 135
Fluoranthene	2660	2100	78.9		30.0	67 - 124
Pyrene	2660	2110	79.3		38.0	67 - 125
Butylbenzylphthalate	2660	2250	84.6		29.0	65 - 149
3,3'-Dichlorobenzidine	2660	1960	73.7		16.0	43 - 139
Benzo(a)anthracene	2660	2020	75.9		31.0	63 - 127
Chrysene	2660	2090	78.6		33.0	61 - 133
bis(2-ethylhexyl)phthalate	2660	2190	82.3		19.0	66 - 138
Di-n-octylphthalate	2660	2160	81.2		34.0	63 - 124
Benzo(b)fluoranthene	2660	2030	76.3		21.0	56 - 113
Benzo(k)fluoranthene	2660	2080	78.2		33.0	52 - 126
Benzo(a)pyrene	2660	2190	82.3		33.0	60 - 128
Indeno(1,2,3-cd)pyrene	2660	2130	80.1		50.0	50 - 163
Dibenz(a,h)anthracene	2660	2350	88.3		32.0	28 - 147
Benzo(g,h,i)perylene	2660	2380	89.5		28.0	54 - 142
Acetophenone	5330	2680	50.3		30.0	2 - 135
1,2,4,5-Tetrachlorobenzene	2660	1760	66.2		30.0	43 - 93
Carbazole	2660	2110	79.3		30.0	27 - 155
Caprolactam	2660	1940	72.9		30.0	60 - 130
Biphenyl	2660	1680	63.2		30.0	60 - 130

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1739

Form III

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021704LCS

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Atrazine	2660	1670	62.8		30.0	60 - 130
Benzaldehyde	2660	0	0.0 *		30.0	60 - 130

Spike Recovery: 1 out of 66 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1739

Form III

3

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 57285TS040212MS

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	SAMPLE CONCENTRATION UG/KG	MS CONCENTRATION UG/KG	MS % REC #	QC LIMITS REC.
Bis(2-Chloroethyl)ether	2660	0	1500	56.4	52 - 123
Phenol	2660	0	2040	76.7 *	13 - 69
2-Chlorophenol	2660	0	1780	66.9	30 - 109
2,2-Oxybis(1-chloropropane)	2660	0	1710	64.3	21 - 119
2-Methylphenol (o-Cresol)	2660	0	1800	67.7	29 - 109
Hexachloroethane	2660	0	557	20.9 *	28 - 90
N-Nitroso-di-n-propylamine	2660	0	1900	71.4	48 - 82
4-Methylphenol	2660	0	1710	64.3	22 - 103
Nitrobenzene	2660	0	1940	72.9	53 - 127
Isophorone	2660	0	2610	98.1	60 - 140
2-Nitrophenol	2660	0	2160	81.2	0 - 144
2,4-Dimethylphenol	2660	0	1990	74.8	31 - 93
Bis(2-Chloroethoxy)methane	2660	0	2680	101.0	49 - 133
2,4-Dichlorophenol	2660	0	2180	82.0	63 - 130
Naphthalene	2660	0	1870	70.3	42 - 108
4-Chloroaniline	2660	0	1410	53.0	18 - 131
2-Methylnaphthalene	2660	4820	2700	-79.7 *	30 - 129
Hexachlorobutadiene	2660	0	1590	59.8	10 - 97
4-Chloro-3-methylphenol	2660	0	1540	57.9	35 - 116
Hexachlorocyclopentadiene	2660	0	0	0.0	0 - 89
2,4,6-Trichlorophenol	2660	0	2080	78.2	36 - 118
2,4,5-Trichlorophenol	2660	0	2000	75.2	33 - 124
2-Chloronaphthalene	2660	0	1760	66.2	28 - 125
2-Nitroaniline	2660	0	1890	71.1	64 - 131
Acenaphthylene	2660	0	1880	70.7	36 - 126
Dimethyl-phthalate	2660	0	2060	77.4	48 - 123
2,6-Dinitrotoluene	2660	0	2200	82.7	53 - 135
Acenaphthene	2660	0	1960	73.7	28 - 126
3-Nitroaniline	2660	0	1910	71.8	38 - 130
2,4-Dinitrophenol	2660	0	0	0.0	0 - 137

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

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3

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

57285TS040212MS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	SAMPLE CONCENTRATION UG/KG	MS CONCENTRATION UG/KG	MS % REC #	QC LIMITS REC.
Dibenzofuran	2660	0	2150	80.8	23 - 140
2,4-Dinitrotoluene	2660	0	2200	82.7	46 - 123
4-Nitrophenol	2660	0	2100	78.9	0 - 149
Fluorene	2660	0	2250	84.6	52 - 131
4-Chlorophenyl-phenylether	2660	0	2210	83.1	38 - 124
Diethylphthalate	2660	0	2100	78.9	43 - 135
4-Nitroaniline	2660	0	2360	88.7	51 - 127
2-Methyl-4,6-dinitrophenol	2660	0	0	0.0 *	6 - 135
N-Nitrosodiphenylamine	2660	0	2340	88.0	64 - 140
4-Bromophenyl-phenylether	2660	0	1760	66.2	32 - 115
Hexachlorobenzene	2660	0	1890	71.1	40 - 124
Pentachlorophenol	2660	0	1670	62.8	6 - 138
Phenanthrene	2660	0	2200	82.7	12 - 137
Anthracene	2660	0	2150	80.8	50 - 128
Di-n-butylphthalate	2660	0	2280	85.7	42 - 133
Fluoranthene	2660	0	2450	92.1	58 - 103
Pyrene	2660	0	1740	65.4	56 - 103
Butylbenzylphthalate	2660	0	1930	72.6	21 - 148
3,3'-Dichlorobenzidine	2660	0	854	32.1	13 - 104
Benzo(a)anthracene	2660	0	1980	74.4	40 - 109
Chrysene	2660	0	2090	78.6	40 - 113
bis(2-ethylhexyl)phthalate	2660	846	2100	47.1	0 - 157
Di-n-octylphthalate	2660	0	2200	82.7	41 - 122
Benzo(b)fluoranthene	2660	0	2110	79.3	9 - 132
Benzo(k)fluoranthene	2660	0	2430	91.4	19 - 105
Benzo(a)pyrene	2660	0	2300	86.5	3 - 126
Indeno(1,2,3-cd)pyrene	2660	0	1330	50.0	24 - 135
Dibenz(a,h)anthracene	2660	0	1530	57.5	25 - 136
Benzo(g,h,i)perylene	2660	0	1090	41.0	22 - 133
Acetophenone	5320	0	2990	56.2	2 - 135

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS: _____

Form III

270204 1739

3

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

57285TS040212MS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	SAMPLE CONCENTRATION UG/KG	MS CONCENTRATION UG/KG	MS % REC #	QC LIMITS REC.
1,2,4,5-Tetrachlorobenzene	2660	0	1620	60.9	43 - 93
Carbazole	2660	0	2400	90.2	55 - 123
Caprolactam	2660	0	4680	176.0 *	60 - 130
Biphenyl	2660	0	1880	70.7	60 - 130
Atrazine	2660	0	1750	65.8	60 - 130
Benzaldehyde	2660	0	0	0.0 *	60 - 130

Spike Recovery: 6 out of 66 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS: _____

Form III

270204 1739

3

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

57285TS040212sd

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	MSD CONCENTRATION UG/KG	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Bis(2-Chloroethyl)ether	2660	1280	48.1 *	15.8	22	52 - 123
Phenol	2660	1640	61.7	21.7	31	13 - 69
2-Chlorophenol	2660	1320	49.6	29.7 *	19	30 - 109
2,2-Oxybis(1-chloropropane)	2660	1420	53.4	18.5	28	21 - 119
2-Methylphenol (o-Cresol)	2660	1340	50.4	29.3 *	18	29 - 109
Hexachloroethane	2660	533	20.0 *	4.4	22	28 - 90
N-Nitroso-di-n-propylamine	2660	1440	54.1	27.5	30	48 - 82
4-Methylphenol	2660	1270	47.7	29.5 *	21	22 - 103
Nitrobenzene	2660	1370	51.5 *	34.4 *	20	53 - 127
Isophorone	2660	1970	74.1	27.9 *	20	60 - 140
2-Nitrophenol	2660	1700	63.9	23.8	25	0 - 144
2,4-Dimethylphenol	2660	1540	57.9	25.5	34	31 - 93
Bis(2-Chloroethoxy)methane	2660	2140	80.5	22.4	27	49 - 133
2,4-Dichlorophenol	2660	1580	59.4 *	31.9 *	19	63 - 130
Naphthalene	2660	1500	56.4	22.0 *	21	42 - 108
4-Chloroaniline	2660	1280	48.1	9.7	21	18 - 131
2-Methylnaphthalene	2660	2080	-103.0 *	25.9 *	21	30 - 129
Hexachlorobutadiene	2660	1420	53.4	11.3	22	10 - 97
4-Chloro-3-methylphenol	2660	1200	45.1	24.8 *	21	35 - 116
Hexachlorocyclopentadiene	2660	0	0.0		48	0 - 89
2,4,6-Trichlorophenol	2660	1720	64.7	18.9	21	36 - 118
2,4,5-Trichlorophenol	2660	1670	62.8	18.0	24	33 - 124
2-Chloronaphthalene	2660	1340	50.4	27.1 *	23	28 - 125
2-Nitroaniline	2660	1560	58.6 *	19.1	20	64 - 131
Acenaphthylene	2660	1370	51.5	31.4 *	21	36 - 126
Dimethyl-phthalate	2660	1390	52.3	38.8 *	25	48 - 123
2,6-Dinitrotoluene	2660	1530	57.5	35.9 *	23	53 - 135
Acenaphthene	2660	1480	55.6	27.9 *	21	28 - 126
3-Nitroaniline	2660	1330	50.0	35.8 *	23	38 - 130
2,4-Dinitrophenol	2660	0	0.0		84	0 - 137

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

270204 1739

3

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

57285TS040212sd

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	MSD CONCENTRATION UG/KG	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dibenzofuran	2660	1600	60.2	29.3 *	20	23 - 140
2,4-Dinitrotoluene	2660	1530	57.5	35.9 *	29	46 - 123
4-Nitrophenol	2660	1170	44.0	56.9 *	30	0 - 149
Fluorene	2660	1580	59.4	35.0 *	25	52 - 131
4-Chlorophenyl-phenylether	2660	1510	56.8	37.6 *	27	38 - 124
Diethylphthalate	2660	1470	55.3	35.3 *	20	43 - 135
4-Nitroaniline	2660	1530	57.5	42.7 *	31	51 - 127
2-Methyl-4,6-dinitrophenol	2660	0	0.0 *		46	6 - 135
N-Nitrosodiphenylamine	2660	1620	60.9 *	36.4 *	30	64 - 140
4-Bromophenyl-phenylether	2660	1190	44.7	38.6 *	22	32 - 115
Hexachlorobenzene	2660	1400	52.6	29.8	35	40 - 124
Pentachlorophenol	2660	1070	40.2	43.8 *	31	6 - 138
Phenanthrene	2660	1720	64.7	24.5	30	12 - 137
Anthracene	2660	1560	58.6	31.8 *	28	50 - 128
Di-n-butylphthalate	2660	1590	59.8	35.7 *	31	42 - 133
Fluoranthene	2660	1860	69.9	27.4	30	58 - 103
Pyrene	2660	1320	49.6 *	27.5	38	56 - 103
Butylbenzylphthalate	2660	1370	51.5	33.9 *	29	21 - 148
3,3'-Dichlorobenzidine	2660	817	30.7	4.4	16	13 - 104
Benzo(a)anthracene	2660	1500	56.4	27.6	31	40 - 109
Chrysene	2660	1500	56.4	32.9	33	40 - 113
bis(2-ethylhexyl)phthalate	2660	1490	24.2	34.0 *	19	0 - 157
Di-n-octylphthalate	2660	1520	57.1	36.6 *	34	41 - 122
Benzo(b)fluoranthene	2660	1720	64.7	20.4	21	9 - 132
Benzo(k)fluoranthene	2660	1520	57.1	46.1 *	33	19 - 105
Benzo(a)pyrene	2660	1650	62.0	32.9	33	3 - 126
Indeno(1,2,3-cd)pyrene	2660	1010	38.0	27.4	50	24 - 135
Dibenz(a,h)anthracene	2660	1080	40.6	34.5 *	32	25 - 136
Benzo(g,h,i)perylene	2660	898	33.8	19.3	28	22 - 133
Acetophenone	5330	2410	45.2	21.5	30	2 - 135

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

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3

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

57285TS040212sd

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. _____ SAS No: _____ SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	MSD CONCENTRATION UG/KG	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,2,4,5-Tetrachlorobenzene	2660	1190	44.7	30.6 *	30	43 - 93
Carbazole	2660	1680	63.2	35.3 *	30	55 - 123
Caprolactam	2660	4290	161.0 *	8.7	30	60 - 130
Biphenyl	2660	1400	52.6 *	29.3	30	60 - 130
Atrazine	2660	1120	42.1 *	43.9 *	30	60 - 130
Benzaldehyde	2660	0	0.0 *		30	60 - 130

RPD: 35 out of 66 outside limits

Spike Recovery: 13 out of 66 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS: _____

Form III

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Standards Data

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SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SMSD01 Calibration Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time: 2018

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF4 =4STD.D RRF10 =10STD.D
RRF20 =20STD.D RRF45 =45STD.D RRF60 =60STD.D

COMPOUND		RRF4	RRF10	RRF20	RRF45	RRF60	$\overline{RRF}$	%RSD OR R^2
Bis(2-Chloroethyl)ether		1.538	1.427	1.289	1.450	1.368		
Phenol	*	1.903	1.737	1.484	1.481	1.284		*
2-Chlorophenol		1.419	1.392	1.211	1.425	1.341		
2,2-Oxybis(1-chloropropane)		2.298	2.111	1.854	2.072	1.845		
2-Methylphenol (o-Cresol)		1.261	1.201	1.065	1.220	1.102		
Hexachloroethane		0.595	0.566	0.499	0.578	0.549		
N-Nitroso-di-n-propylamine	#	0.914	0.884	0.784	0.895	0.827		#
4-Methylphenol		1.335	1.277	1.109	1.282	1.153		
Nitrobenzene		0.371	0.345	0.300	0.326	0.311		
Isophorone		0.546	0.520	0.461	0.539	0.521		
2-Nitrophenol	*	0.220	0.213	0.191	0.228	0.225		*
2,4-Dimethylphenol		0.330	0.306	0.269	0.301	0.286		
Bis(2-Chloroethoxy)methane		0.482	0.450	0.384	0.418	0.395		
2,4-Dichlorophenol	*	0.320	0.304	0.268	0.302	0.291		*
Naphthalene		1.080	1.039	0.875	0.954	0.875		
4-Chloroaniline		0.486	0.455	0.401	0.445	0.422		
2-Methylnaphthalene		0.710	0.664	0.568	0.616	0.573		
Hexachlorobutadiene	*	0.161	0.159	0.136	0.147	0.143		*
4-Chloro-3-methylphenol	*	0.294	0.272	0.241	0.272	0.256		*
Hexachlorocyclopentadiene	#	0.242	0.261	0.232	0.291	0.295		#
2,4,6-Trichlorophenol	*	0.378	0.377	0.344	0.386	0.371		*
2,4,5-Trichlorophenol		0.412	0.386	0.353	0.421	0.392		
2-Chloronaphthalene		1.236	1.176	1.010	1.108	1.058		
2-Nitroaniline		0.313	0.306	0.289	0.332	0.316		
Acenaphthylene		2.006	1.933	1.653	1.744	1.600		
Dimethyl-phthalate		1.490	1.386	1.193	1.297	1.253		
2,6-Dinitrotoluene		0.304	0.316	0.277	0.305	0.294		
Acenaphthene	*	1.145	1.096	0.950	1.019	0.957		*
3-Nitroaniline		0.395	0.391	0.349	0.409	0.395		
2,4-Dinitrophenol	#		0.135	0.135	0.219	0.227		#
Dibenzofuran		1.748	1.664	1.430	1.543	1.452		
2,4-Dinitrotoluene		0.304	0.316	0.277	0.305	0.294		
4-Nitrophenol	#	0.133	0.134	0.127	0.148	0.149		#
Fluorene		1.393	1.315	1.150	1.206	1.104		

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FORM VI

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SMSD01 Calibration Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time: 2018

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF4 =4STD.D RRF10 =10STD.D
RRF20 =20STD.D RRF45 =45STD.D RRF60 =60STD.D

COMPOUND		RRF4	RRF10	RRF20	RRF45	RRF60	$\overline{RRF}$	%RSD OR R^2
4-Chlorophenyl-phenylether		0.599	0.564	0.487	0.533	0.496		
Diethylphthalate		1.441	1.321	1.145	1.272	1.192		
4-Nitroaniline		0.411	0.383	0.340	0.409	0.400		
2-Methyl-4,6-dinitrophenol		0.096	0.144	0.131	0.182	0.185		
N-Nitrosodiphenylamine	*	0.534	0.519	0.447	0.500	0.485		*
4-Bromophenyl-phenylether		0.190	0.186	0.164	0.189	0.186		
Hexachlorobenzene		0.239	0.233	0.203	0.228	0.223		
Pentachlorophenol	*	0.123	0.145	0.128	0.162	0.164		*
Phenanthrene		1.165	1.115	0.954	1.028	0.978		
Anthracene		1.164	1.090	0.940	1.042	0.984		
Di-n-butylphthalate		1.437	1.368	1.186	1.357	1.274		
Fluoranthene	*	1.094	1.031	0.893	1.010	0.949		*
Pyrene		1.439	1.386	1.222	1.427	1.437		
Butylbenzylphthalate		0.745	0.728	0.664	0.811	0.826		
3,3'-Dichlorobenzidine		0.402	0.411	0.371	0.454	0.452		
Benzo(a)anthracene		1.232	1.178	1.043	1.257	1.262		
Chrysene		1.194	1.127	0.958	1.136	1.133		
bis(2-ethylhexyl)phthalate		1.039	1.019	0.930	1.127	1.120		
Di-n-octylphthalate	*	1.686	1.683	1.608	1.976	1.916		*
Benzo(b)fluoranthene		1.281	1.157	1.075	1.196	1.143		
Benzo(k)fluoranthene		1.150	1.104	0.941	1.117	1.067		
Benzo(a)pyrene	*	1.041	1.019	0.910	1.048	1.040		*
Indeno(1,2,3-cd)pyrene		1.144	0.959	0.823	1.304	1.177		
Dibenz(a,h)anthracene		1.051	1.023	0.912	1.069	1.076		
Benzo(g,h,i)perylene		1.026	1.014	0.906	1.076	1.104		
Acetophenone		1.834	1.906	1.767	1.676	1.505		
1,2,4,5-Tetrachlorobenzene		0.560	0.613	0.588	0.572	0.522		
Carbazole		1.147	1.064	0.915	1.032	0.989		
Caprolactam		0.132	0.191	0.188	0.180	0.179		
Biphenyl		1.479	1.856	1.754	1.488	1.355		
Atrazine		0.191	0.260	0.251	0.237	0.230		
Benzaldehyde		1.068	1.371	1.278	1.116	1.026		
==========								
2-Fluorophenol(SURR)		1.468	1.391	1.216	1.365	1.235		

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FORM VI

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SMSD01 Calibration Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time: 2018

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF4 =4STD.D RRF10 =10STD.D
RRF20 =20STD.D RRF45 =45STD.D RRF60 =60STD.D

COMPOUND	RRF4	RRF10	RRF20	RRF45	RRF60	$\overline{RRF}$	%RSD OR R^2
Phenol-d5(SURR)	1.688	1.623	1.371	1.333	1.129		
Nitrobenzene-d5(SURR)	0.378	0.357	0.312	0.355	0.343		
2-Fluorobiphenyl(SURR)	1.415	1.350	1.156	1.251	1.192		
2,4,6-Tribromophenol(SURR)	0.121	0.127	0.109	0.125	0.121		
p-Terphenyl-d14(SURR)	0.805	0.736	0.640	0.709	0.678		

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SMSD01 Calibration Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time: 2018

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF75 =75STD.D RRF100 =100STD.D

COMPOUND		RRF75	RRF100				$\overline{RRF}$	%RSD OR R^2		
Bis(2-Chloroethyl)ether		1.379	1.323				1.3963	6		
Phenol	*						1.57774	15.4	*	<-
2-Chlorophenol		1.338	1.234				1.33715	6.4		
2,2-Oxybis(1-chloropropane)		1.803	1.607				1.94139	11.9		
2-Methylphenol (o-Cresol)		1.114	1.000				1.13746	8.2		
Hexachloroethane		0.531	0.467				0.54074	8.4		
N-Nitroso-di-n-propylamine	#	0.840	0.753				0.84243	7.1	#	
4-Methylphenol		1.155	1.050				1.19444	8.7		
Nitrobenzene		0.298	0.260				0.31584	11.3		
Isophorone							0.51753	6.5		
2-Nitrophenol	*	0.219	0.201				0.21379	6.3	*	
2,4-Dimethylphenol		0.274	0.247				0.28759	9.5		
Bis(2-Chloroethoxy)methane		0.375	0.335				0.40554	12.1		
2,4-Dichlorophenol	*	0.282	0.257				0.2892	7.6	*	
Naphthalene		0.817	0.721				0.90854	13.8		
4-Chloroaniline		0.405	0.360				0.42496	9.7		
2-Methylnaphthalene		0.541	0.476				0.59245	13.2		
Hexachlorobutadiene	*	0.140	0.128				0.14468	8.3	*	
4-Chloro-3-methylphenol	*	0.248	0.224				0.25815	9	*	
Hexachlorocyclopentadiene	#	0.285	0.272				0.26819	9	#	
2,4,6-Trichlorophenol	*	0.382	0.350				0.36958	4.4	*	
2,4,5-Trichlorophenol		0.372	0.369				0.38617	6.3		
2-Chloronaphthalene		1.000	0.933				1.07456	9.9		
2-Nitroaniline		0.307	0.298				0.30863	4.4		
Acenaphthylene		1.494	1.378				1.68677	13.4		
Dimethyl-phthalate		1.213	1.162				1.28494	9.1		
2,6-Dinitrotoluene		0.282	0.269				0.29258	5.9		
Acenaphthene	*	0.904	0.835				0.98652	11	*	
3-Nitroaniline		0.382	0.366				0.3839	5.2		
2,4-Dinitrophenol	#	0.236	0.239				0.19849	25.1	#	<-
Dibenzofuran		1.372	1.278				1.49822	11		
2,4-Dinitrotoluene		0.282	0.269				0.29258	5.9		
4-Nitrophenol	#	0.146	0.146				0.14042	6.2	#	
Fluorene		1.026	0.918				1.15891	14.1		

270204 1740

FORM VI

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SMSD01 Calibration Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time: 2018

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF75 =75STD.D RRF100 =100STD.D

COMPOUND		RRF75	RRF100				$\overline{RRF}$	%RSD OR R^2		
4-Chlorophenyl-phenylether		0.463	0.427				0.50985	11.7		
Diethylphthalate		1.145	1.059				1.22506	10.5		
4-Nitroaniline		0.401	0.395				0.39122	6.3		
2-Methyl-4,6-dinitrophenol		0.187	0.182				0.15806	22.2		<-
N-Nitrosodiphenylamine	*	0.462	0.438				0.4836	7.5	*	
4-Bromophenyl-phenylether		0.177	0.165				0.17954	6.2		
Hexachlorobenzene		0.213	0.200				0.21986	6.8		
Pentachlorophenol	*	0.163	0.153				0.14838	11.4	*	
Phenanthrene		0.914	0.833				0.99809	11.5		
Anthracene		0.916	0.833				0.99561	11.3		
Di-n-butylphthalate		1.183	1.058				1.26599	10.4		
Fluoranthene	*	0.888	0.814				0.95424	10.2	*	
Pyrene		1.449	1.422				1.39735	5.7		
Butylbenzylphthalate		0.842	0.823				0.77688	8.5		
3,3'-Dichlorobenzidine		0.443	0.426				0.42267	7.2		
Benzo(a)anthracene		1.271	1.233				1.21096	6.6		
Chrysene		1.124	1.103				1.11071	6.6		
bis(2-ethylhexyl)phthalate		1.109	1.060				1.05766	6.6		
Di-n-octylphthalate	*	1.925	1.844				1.80548	8	*	
Benzo(b)fluoranthene		1.164	1.062				1.15393	6.4		
Benzo(k)fluoranthene		0.965	0.905				1.03542	9.4		
Benzo(a)pyrene	*	1.016	0.927				1.00005	5.7	*	
Indeno(1,2,3-cd)pyrene		1.168	1.112				1.09807	14.4		
Dibenz(a,h)anthracene		0.988	0.912				1.00419	6.9		
Benzo(g,h,i)perylene		1.025	0.967				1.01693	6.5		
Acetophenone		1.435					1.68736	11		
1,2,4,5-Tetrachlorobenzene		0.506	0.462				0.54629	9.6		
Carbazole		0.934	0.860				0.9913	9.9		
Caprolactam		0.180	0.168				0.1741	11.4		
Biphenyl		1.281	1.134				1.4781	17.3		<-
Atrazine		0.231	0.209				0.2296	10.2		
Benzaldehyde		0.979					1.13958	13.4		
==========										
2-Fluorophenol(SURR)		1.208	1.073				1.27936	10.5		

270204 1740

FORM VI

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SMSD01 Calibration Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time: 2018

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF75 =75STD.D RRF100 =100STD.D

COMPOUND	RRF75	RRF100				$\overline{RRF}$	%RSD OR R^2	
Phenol-d5(SURR)						1.42899	15.9	<-
Nitrobenzene-d5(SURR)	0.330	0.303				0.33978	7.8	
2-Fluorobiphenyl(SURR)	1.118	1.038				1.217	10.8	
2,4,6-Tribromophenol(SURR)	0.110	0.099				0.11584	8.8	
p-Terphenyl-d14(SURR)	0.622	0.567				0.6797	11.6	

Average Used: 9.6

270204 1740

FORM VI

7SSC

SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SMSD01 CalibrationDate: 02/10/04 Time: 1805

CCV ID: SSC160629 Lab File ID: 45SEC.D Init. Calib. Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND		$\overline{RRF}$	RRF	%D		
Bis(2-Chloroethyl)ether		1.3963	1.344	3.7		
Phenol	*	1.57774	1.314	16.7	*	
2-Chlorophenol		1.33715	1.261	5.7		
2,2-Oxybis(1-chloropropane)		1.94139	2.042	5.2		
2-Methylphenol (o-Cresol)		1.13746	1.058	7.0		
Hexachloroethane		0.54074	0.51965	3.9		
N-Nitroso-di-n-propylamine	#	0.84243	0.8227	2.3	#	
4-Methylphenol		1.19444	1.096	8.2		
Nitrobenzene		0.31584	0.30194	4.4		
Isophorone		0.51753	0.63375	22.5		<-
2-Nitrophenol	*	0.21379	0.20448	4.4	*	
2,4-Dimethylphenol		0.28759	0.28902	0.5		
Bis(2-Chloroethoxy)methane		0.40554	0.40763	0.5		
2,4-Dichlorophenol	*	0.2892	0.27575	4.7	*	
Naphthalene		0.90854	0.83704	7.9		
4-Chloroaniline		0.42496	0.44225	4.1		
2-Methylnaphthalene		0.59245	0.56587	4.5		
Hexachlorobutadiene	*	0.14468	0.14971	3.5	*	
4-Chloro-3-methylphenol	*	0.25815	0.2442	5.4	*	
Hexachlorocyclopentadiene	#	0.26819	0.30467	13.6	#	
2,4,6-Trichlorophenol	*	0.36958	0.3421	7.4	*	
2,4,5-Trichlorophenol		0.38617	0.36375	5.8		
2-Chloronaphthalene		1.07456	1.024	4.7		
2-Nitroaniline		0.30863	0.33486	8.5		
Acenaphthylene		1.68677	1.551	8.0		
Dimethyl-phthalate		1.28494	1.249	2.8		
2,6-Dinitrotoluene		0.29258	0.28871	1.3		
Acenaphthene	*	0.98652	0.91056	7.7	*	
3-Nitroaniline		0.3839	0.4121	7.3		
2,4-Dinitrophenol	#	0.19849	0.22026	11.0	#	
Dibenzofuran		1.49822	1.434	4.3		
2,4-Dinitrotoluene		0.29258	0.28871	1.3		
4-Nitrophenol	#	0.14042	0.13889	1.1	#	
Fluorene		1.15891	1.094	5.6		
4-Chlorophenyl-phenylether		0.50985	0.50989	0.0		
Diethylphthalate		1.22506	1.237	1.0		

270204 1740

FORM VII

7SSC

SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SMSD01 CalibrationDate: 02/10/04 Time: 1805

CCV ID: SSC160629 Lab File ID: 45SEC.D Init. Calib. Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND		$\overline{RRF}$	RRF	%D	
4-Nitroaniline		0.39122	0.42148	7.7	
2-Methyl-4,6-dinitrophenol		0.15806	0.16051	1.6	
N-Nitrosodiphenylamine	*	0.4836	0.49416	2.2	*
4-Bromophenyl-phenylether		0.17954	0.1625	9.5	
Hexachlorobenzene		0.21986	0.20994	4.5	
Pentachlorophenol	*	0.14838	0.14658	1.2	*
Phenanthrene		0.99809	0.92365	7.5	
Anthracene		0.99561	0.93159	6.4	
Di-n-butylphthalate		1.26599	1.276	0.8	
Fluoranthene	*	0.95424	0.89792	5.9	*
Pyrene		1.39735	1.295	7.3	
Butylbenzylphthalate		0.77688	0.8125	4.6	
3,3'-Dichlorobenzidine		0.42267	0.41426	2.0	
Benzo(a)anthracene		1.21096	1.087	10.2	
Chrysene		1.11071	1.027	7.5	
bis(2-ethylhexyl)phthalate		1.05766	1.07	1.2	
Di-n-octylphthalate	*	1.80548	1.825	1.1	*
Benzo(b)fluoranthene		1.15393	1.031	10.7	
Benzo(k)fluoranthene		1.03542	1.02	1.5	
Benzo(a)pyrene	*	1.00005	0.98098	1.9	*
Indeno(1,2,3-cd)pyrene		1.09807	1.009	8.1	
Dibenz(a,h)anthracene		1.00419	0.96404	4.0	
Benzo(g,h,i)perylene		1.01693	0.94778	6.8	
Carbazole		0.9913	1.056	6.5	
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2-Fluorophenol(SURR)		1.27936	1.194	6.7	
Phenol-d5(SURR)		1.42899	1.221	14.6	
Nitrobenzene-d5(SURR)		0.33978	0.3167	6.8	
2-Fluorobiphenyl(SURR)		1.217	1.163	4.4	
2,4,6-Tribromophenol(SURR)		0.11584	0.11282	2.6	
p-Terphenyl-d14(SURR)		0.6797	0.58868	13.4	

Average Used: 5.7

270204 1740

FORM VII

7SSC

SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SMSD01 CalibrationDate: 02/10/04 Time: 2326

CCV ID: SSC160492 Lab File ID: 45SOWSEC.D Init. Calib. Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	$\overline{RRF}$	RRF	%D
Acetophenone	1.68736	1.529	9.4
Caprolactam	0.1741	0.16344	6.1
Biphenyl	1.4781	1.323	10.5
Atrazine	0.2296	0.19027	17.1
Benzaldehyde	1.13958	1.025	10.1

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FORM VII

7SSC

SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SMSD01 CalibrationDate: 02/12/04 Time: 1719

CCV ID: SSC160510 Lab File ID: 45AP9SEC.D Init. Calib. Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	$\overline{RRF}$	RRF	%D
1,2,4,5-Tetrachlorobenzene	0.54629	0.51037	6.6

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FORM VII

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SMSD01 CalibrationDate: 02/19/04 Time: 0838

CCV ID: CCV162225 Lab File ID: 45CCV.D Init. Calib. Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND		$\overline{RRF}$	RRF45	%D	
Bis(2-Chloroethyl)ether		1.3963	1.419	1.6	
Phenol	*	1.57774	1.536	2.6	*
2-Chlorophenol		1.33715	1.39	4.0	
2,2-Oxybis(1-chloropropane)		1.94139	1.948	0.3	
2-Methylphenol (o-Cresol)		1.13746	1.177	3.5	
Hexachloroethane		0.54074	0.57747	6.8	
N-Nitroso-di-n-propylamine	#	0.84243	0.87454	3.8	#
4-Methylphenol		1.19444	1.222	2.3	
Nitrobenzene		0.31584	0.32402	2.6	
Isophorone		0.51753	0.53685	3.7	
2-Nitrophenol	*	0.21379	0.22413	4.8	*
2,4-Dimethylphenol		0.28759	0.29951	4.1	
Bis(2-Chloroethoxy)methane		0.40554	0.42017	3.6	
2,4-Dichlorophenol	*	0.2892	0.3019	4.4	*
Naphthalene		0.90854	0.95074	4.6	
4-Chloroaniline		0.42496	0.41942	1.3	
2-Methylnaphthalene		0.59245	0.61749	4.2	
Hexachlorobutadiene	*	0.14468	0.14879	2.8	*
4-Chloro-3-methylphenol	*	0.25815	0.26174	1.4	*
Hexachlorocyclopentadiene	#	0.26819	0.26886	0.2	#
2,4,6-Trichlorophenol	*	0.36958	0.37823	2.3	*
2,4,5-Trichlorophenol		0.38617	0.40166	4.0	
2-Chloronaphthalene		1.07456	1.102	2.6	
2-Nitroaniline		0.30863	0.319	3.4	
Acenaphthylene		1.68677	1.714	1.6	
Dimethyl-phthalate		1.28494	1.309	1.9	
2,6-Dinitrotoluene		0.29258	0.31561	7.9	
Acenaphthene	*	0.98652	1.021	3.5	*
3-Nitroaniline		0.3839	0.40069	4.4	
2,4-Dinitrophenol	#	0.19849	0.2219	11.8	#
Dibenzofuran		1.49822	1.533	2.3	
2,4-Dinitrotoluene		0.29258	0.31561	7.9	
4-Nitrophenol	#	0.14042	0.14283	1.7	#
Fluorene		1.15891	1.203	3.8	
4-Chlorophenyl-phenylether		0.50985	0.53176	4.3	
Diethylphthalate		1.22506	1.246	1.7	

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FORM VII

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SMSD01 CalibrationDate: 02/19/04 Time: 0838

CCV ID: CCV162225 Lab File ID: 45CCV.D Init. Calib. Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND		$\overline{RRF}$	RRF45	%D	
4-Nitroaniline		0.39122	0.39871	1.9	
2-Methyl-4,6-dinitrophenol		0.15806	0.18037	14.1	
N-Nitrosodiphenylamine	*	0.4836	0.50355	4.1	*
4-Bromophenyl-phenylether		0.17954	0.1886	5.0	
Hexachlorobenzene		0.21986	0.22838	3.9	
Pentachlorophenol	*	0.14838	0.15778	6.3	*
Phenanthrene		0.99809	1.019	2.1	
Anthracene		0.99561	1.026	3.1	
Di-n-butylphthalate		1.26599	1.29	1.9	
Fluoranthene	*	0.95424	0.98419	3.1	*
Pyrene		1.39735	1.43	2.3	
Butylbenzylphthalate		0.77688	0.79666	2.5	
3,3'-Dichlorobenzidine		0.42267	0.459	8.6	
Benzo(a)anthracene		1.21096	1.242	2.6	
Chrysene		1.11071	1.146	3.2	
bis(2-ethylhexyl)phthalate		1.05766	1.1	4.0	
Di-n-octylphthalate	*	1.80548	1.945	7.7	*
Benzo(b)fluoranthene		1.15393	1.163	0.8	
Benzo(k)fluoranthene		1.03542	1.08	4.3	
Benzo(a)pyrene	*	1.00005	1.042	4.2	*
Indeno(1,2,3-cd)pyrene		1.09807	1.291	17.6	
Dibenz(a,h)anthracene		1.00419	1.128	12.3	
Benzo(g,h,i)perylene		1.01693	1.173	15.3	
Carbazole		0.9913	1.006	1.5	
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2-Fluorophenol(SURR)		1.27936	1.344	5.1	
Phenol-d5(SURR)		1.42899	1.333	6.7	
Nitrobenzene-d5(SURR)		0.33978	0.35234	3.7	
2-Fluorobiphenyl(SURR)		1.217	1.251	2.8	
2,4,6-Tribromophenol(SURR)		0.11584	0.12535	8.2	
p-Terphenyl-d14(SURR)		0.6797	0.70192	3.3	

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SMSD01 CalibrationDate: 02/19/04 Time: 0909

CCV ID: CCV162224 Lab File ID: 45AP9CCV.D Init. Calib. Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	$\overline{RRF}$	RRF45	%D
1,2,4,5-Tetrachlorobenzene	0.54629	0.57697	5.6

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SMSD01 CalibrationDate: 02/19/04 Time: 0941

CCV ID: CCV162227 Lab File ID: 45SOWCCV.D Init. Calib. Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	$\overline{RRF}$	RRF45	%D
Acetophenone	1.68736	1.73	2.5
Caprolactam	0.1741	0.17281	0.7
Biphenyl	1.4781	1.521	2.9
Atrazine	0.2296	0.2298	0.1
Benzaldehyde	1.13958	1.099	3.6

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SMSD01 CalibrationDate: 02/19/04 Time: 1320

CCV ID: CCV162226 Lab File ID: 45CCV1.D Init. Calib. Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND		$\overline{RRF}$	RRF45	%D	
Bis(2-Chloroethyl)ether		1.3963	1.438	3.0	
Phenol	*	1.57774	1.476	6.4	*
2-Chlorophenol		1.33715	1.415	5.8	
2,2-Oxybis(1-chloropropane)		1.94139	1.945	0.2	
2-Methylphenol (o-Cresol)		1.13746	1.284	12.9	
Hexachloroethane		0.54074	0.57473	6.3	
N-Nitroso-di-n-propylamine	#	0.84243	0.87655	4.1	#
4-Methylphenol		1.19444	1.281	7.2	
Nitrobenzene		0.31584	0.32986	4.4	
Isophorone		0.51753	0.53865	4.1	
2-Nitrophenol	*	0.21379	0.22815	6.7	*
2,4-Dimethylphenol		0.28759	0.30102	4.7	
Bis(2-Chloroethoxy)methane		0.40554	0.41521	2.4	
2,4-Dichlorophenol	*	0.2892	0.30627	5.9	*
Naphthalene		0.90854	0.9275	2.1	
4-Chloroaniline		0.42496	0.42132	0.9	
2-Methylnaphthalene		0.59245	0.6108	3.1	
Hexachlorobutadiene	*	0.14468	0.15314	5.8	*
4-Chloro-3-methylphenol	*	0.25815	0.28274	9.5	*
Hexachlorocyclopentadiene	#	0.26819	0.26793	0.1	#
2,4,6-Trichlorophenol	*	0.36958	0.37709	2.0	*
2,4,5-Trichlorophenol		0.38617	0.39961	3.5	
2-Chloronaphthalene		1.07456	1.093	1.7	
2-Nitroaniline		0.30863	0.37374	21.1	<-
Acenaphthylene		1.68677	1.681	0.3	
Dimethyl-phthalate		1.28494	1.293	0.6	
2,6-Dinitrotoluene		0.29258	0.31168	6.5	
Acenaphthene	*	0.98652	1.006	2.0	*
3-Nitroaniline		0.3839	0.40024	4.3	
2,4-Dinitrophenol	#	0.19849	0.23265	17.2	#
Dibenzofuran		1.49822	1.533	2.3	
2,4-Dinitrotoluene		0.29258	0.31168	6.5	
4-Nitrophenol	#	0.14042	0.14643	4.3	#
Fluorene		1.15891	1.181	1.9	
4-Chlorophenyl-phenylether		0.50985	0.53008	4.0	
Diethylphthalate		1.22506	1.235	0.8	

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FORM VII

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SMSD01 CalibrationDate: 02/19/04 Time: 1320

CCV ID: CCV162226 Lab File ID: 45CCV1.D Init. Calib. Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND		$\overline{RRF}$	RRF45	%D	
4-Nitroaniline		0.39122	0.39925	2.1	
2-Methyl-4,6-dinitrophenol		0.15806	0.18474	16.9	
N-Nitrosodiphenylamine	*	0.4836	0.49929	3.2	*
4-Bromophenyl-phenylether		0.17954	0.18893	5.2	
Hexachlorobenzene		0.21986	0.23188	5.5	
Pentachlorophenol	*	0.14838	0.15765	6.2	*
Phenanthrene		0.99809	1.021	2.3	
Anthracene		0.99561	1.012	1.6	
Di-n-butylphthalate		1.26599	1.293	2.1	
Fluoranthene	*	0.95424	0.97203	1.9	*
Pyrene		1.39735	1.432	2.5	
Butylbenzylphthalate		0.77688	0.81578	5.0	
3,3'-Dichlorobenzidine		0.42267	0.45387	7.4	
Benzo(a)anthracene		1.21096	1.273	5.1	
Chrysene		1.11071	1.131	1.8	
bis(2-ethylhexyl)phthalate		1.05766	1.1	4.0	
Di-n-octylphthalate	*	1.80548	1.964	8.8	*
Benzo(b)fluoranthene		1.15393	1.188	3.0	
Benzo(k)fluoranthene		1.03542	1.061	2.5	
Benzo(a)pyrene	*	1.00005	1.063	6.3	*
Indeno(1,2,3-cd)pyrene		1.09807	1.37	24.8	<-
Dibenz(a,h)anthracene		1.00419	1.174	16.9	
Benzo(g,h,i)perylene		1.01693	1.234	21.3	<-
Carbazole		0.9913	1.016	2.5	
==========					
2-Fluorophenol(SURR)		1.27936	1.347	5.3	
Phenol-d5(SURR)		1.42899	1.284	10.1	
Nitrobenzene-d5(SURR)		0.33978	0.35778	5.3	
2-Fluorobiphenyl(SURR)		1.217	1.255	3.1	
2,4,6-Tribromophenol(SURR)		0.11584	0.12321	6.4	
p-Terphenyl-d14(SURR)		0.6797	0.69685	2.5	

Average Used: 5.5

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FORM VII

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SMSD01 CalibrationDate: 02/19/04 Time: 1351

CCV ID: CCV162215 Lab File ID: 45AP9CV1.D Init. Calib. Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	$\overline{RRF}$	RRF45	%D
1,2,4,5-Tetrachlorobenzene	0.54629	0.58548	7.2

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SMSD01 CalibrationDate: 02/19/04 Time: 1423

CCV ID: CCV162228 Lab File ID: 45SOWCV1.D Init. Calib. Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	$\overline{RRF}$	RRF45	%D
Acetophenone	1.68736	1.732	2.6
Caprolactam	0.1741	0.17404	0.0
Biphenyl	1.4781	1.524	3.1
Atrazine	0.2296	0.23208	1.1
Benzaldehyde	1.13958	1.108	2.8

Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402125

METHOD: 8270 **MATRIX:** S

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
1,2,4,5-Tetrachlorobenzene	43-93	30	43-93	30			
2,2-Oxybis(1-chloropropane)	60-132	28	21-119	28			
2,4,5-Trichlorophenol	60-127	24	33-124	24			
2,4,6-Tribromophenol							19-122
2,4,6-Trichlorophenol	54-126	21	36-118	21			
2,4-Dichlorophenol	59-122	19	63-130	19			
2,4-Dimethylphenol	47-107	34	31-93	34			
2,4-Dinitrophenol	10-123	84	D-137	84			
2,4-Dinitrotoluene	61-144	29	46-123	29			
2,6-Dinitrotoluene	65-140	23	53-135	23			
2-Chloronaphthalene	59-135	23	28-125	23			
2-Chlorophenol	51-118	19	30-109	19			
2-Fluorobiphenyl							30-115
2-Fluorophenol							25-121
2-Methyl-4,6-dinitrophenol	46-129	46	6-135	46			
2-Methylnaphthalene	63-135	21	30-129	21			
2-Methylphenol (o-Cresol)	59-119	18	29-109	18			
2-Nitroaniline	61-144	20	64-131	20			
2-Nitrophenol	56-124	25	D-144	25			
3,3'-Dichlorobenzidine	43-139	16	13-104	16			
3-Nitroaniline	62-129	23	38-130	23			
4-Bromophenyl-phenylether	62-106	22	32-115	22			
4-Chloro-3-methylphenol	60-128	21	35-116	21			
4-Chloroaniline	59-130	21	18-131	21			
4-Chlorophenyl-phenylether	64-131	27	38-124	27			
4-Methylphenol	58-125	21	22-103	21			
4-Nitroaniline	60-135	31	51-127	31			
4-Nitrophenol	42-135	30	D-149	30			
Acenaphthene	61-130	21	28-126	21			
Acenaphthylene	60-134	21	36-126	21			
Acetophenone	2-135	30	2-135	30			
Anthracene	68-115	28	50-128	28			
Atrazine	60-130	30	60-130	30			
Benzaldehyde	60-130	30	60-130	30			
Benzo(a)anthracene	63-127	31	40-109	31			
Benzo(a)pyrene	60-128	33	3-126	33			
Benzo(b)fluoranthene	56-113	21	9-132	21			
Benzo(g,h,i)perylene	54-142	28	22-133	28			
Benzo(k)fluoranthene	52-126	33	19-105	33			

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Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402125

METHOD: 8270 **MATRIX:** S

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
Biphenyl	60-130	30	60-130	30			
Bis(2-Chloroethoxy)methane	71-133	27	49-133	27			
Bis(2-Chloroethyl)ether	57-123	22	52-123	22			
bis(2-ethylhexyl)phthalate	66-138	19	D-157	19			
Butylbenzylphthalate	65-149	29	21-148	29			
Caprolactam	60-130	30	60-130	30			
Carbazole	27-155	30	55-123	30			
Chrysene	61-133	33	40-113	33			
Dibenz(a,h)anthracene	28-147	32	25-136	32			
Dibenzofuran	64-138	20	23-140	20			
Diethylphthalate	70-127	20	43-135	20			
Dimethyl-phthalate	63-128	25	48-123	25			
Di-n-butylphthalate	64-135	31	42-133	31			
Di-n-octylphthalate	63-124	34	41-122	34			
Fluoranthene	67-124	30	58-103	30			
Fluorene	67-130	25	52-131	25			
Hexachlorobenzene	67-126	35	40-124	35			
Hexachlorobutadiene	65-142	22	10-97	22			
Hexachlorocyclopentadiene	24-119	48	D-89	48			
Hexachloroethane	61-136	22	28-90	22			
Indeno(1,2,3-cd)pyrene	50-163	50	24-135	50			
Isophorone	63-144	20	60-140	20			
Naphthalene	64-120	21	42-108	21			
Nitrobenzene	62-122	20	53-127	20			
Nitrobenzene-d5							23-120
N-Nitroso-di-n-propylamine	48-82	30	48-82	30			
N-Nitrosodiphenylamine	64-140	30	64-140	30			
Pentachlorophenol	53-113	31	6-138	31			
Phenanthrene	65-121	30	12-137	30			
Phenol	47-105	31	13-69	31			
Phenol-d5							24-113
p-Terphenyl-d14							18-137
Pyrene	67-125	38	56-103	38			

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GC/ECD PESTICIDE ORGANICS

METHOD 8081

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CASE NARRATIVE
GC/ECD SEMIVOLATILE ORGANIC

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

EPA SW846 8081.

IV. PREPARATION

Soil samples were prepared by SW846 EPA 3550 for 8081 semi-volatile analysis.

V. ANALYSIS

A. Calibration:

Continuing calibration TCCV12 failed criteria; however, the primary column passed criteria. Method SW846 does not require confirmation for toxaphene.

Continuing calibration TCCV3 failed criteria; however, the primary column passed criteria. Method SW846 does not require confirmation for toxaphene. Sample matrix affected continuings and retention times.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met with the exception of:
LCS 6894LCS was analyzed with the soil samples extracted on 02/16/04. The following analyte(s) were recovered below criteria: Endrin ketone at 71.5 % with criteria of (72-127), gamma-Chlordane at 61.6 % with criteria of (65-120).

LCS 6894LCS3 was analyzed with the soil samples extracted on 02/16/04. The following analyte(s) were recovered below criteria: Endrin

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

ketone at 66.2 % with criteria of (72-127), gamma-Chlordane at 64.9 % with criteria of (65-120).

Since recoveries were slightly low and no target analytes were detected in the sample, no further action was taken.

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

A client requested MS/SD set was analyzed.
All percent recovery and relative percent difference(RPD) criteria were met with the exception of:
MS - 57285TS040212MS was analyzed with the soil samples extracted on 02/17/04. The following analyte(s) were recovered below criteria: 4,4'-DDT at 7 % with criteria of (24-152), Aldrin at 30.3 % with criteria of (46-102), alpha-BHC at 39.1 % with criteria of (44-85) and the following analyte(s) were recovered above criteria: gamma-Chlordane at 1094 % with criteria of (31-139).

SD - 57285TS040212MSD was analyzed with the soil samples extracted on 02/17/04. The following analyte(s) were recovered below criteria: Aldrin at 36.8 % with criteria of (46-102), alpha-BHC at 42.9 % with criteria of (44-85) and the following analyte(s) were recovered above criteria: Methoxychlor at 195 % with criteria of (12-152). The following analyte(s) exceeded rpd criteria: 4,4'-DDD at 35.5 % with criteria of (30), 4,4'-DDT at 149.8 % with criteria of (45), Dieldrin at 40.2 % with criteria of (30), Endosulfan I at 36.1 % with criteria of (30), Endosulfan II at 48.3 % with criteria of (30), Endrin aldehyde at 142.4 % with criteria of (30), Endrin ketone at 31.2 % with criteria of (30), gamma-Chlordane at 187.2 % with criteria of (30), Methoxychlor at 148.8 % with criteria of (30).

Sample matrix caused retention time shifts and high breakdown. Maintenance was required after analysis of the sample.

E. Internal Standards:

This method does not require the use of internal standards.

F. Samples:

Sample analysis proceeded normally.

Data was collected using dual column analysis. Please note that the higher value of the two columns is reported, unless the %D between the two columns is >40%, in which case the lower of the two values is reported. Project specific Reporting Limits were used per client request.

CASE NARRATIVE
GC/ECD SEMIVOLATILE ORGANIC

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

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

SIGNED:_____ **DATE:** 2-20-04

PESTICIDE ORGANIC CROSS REFERENCE TABLE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Method: 8081

EPA Sample No	Lab Sample ID
57285TS040212	240212501

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Sample Data

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1

PESTICIDE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 240212501 Lab File ID: 125-01.D

Sample wt/vol: 33.29 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 10 Date Extracted: 02/17/04

Level:(low/med) LOW Date Analyzed: 02/19/04 Time: 2351

PercentSolids: 33.1 decanted : Dilution Factor: 1

Extraction: SONC Station ID: Waste Character Method: 8081

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
319-84-6	alpha-BHC	4.5	U
319-85-7	beta-BHC	4.5	U
319-86-8	delta-BHC	4.5	U
58-89-9	gamma-BHC (Lindane)	4.5	U
76-44-8	Heptachlor	4.5	U
309-00-2	Aldrin	4.5	U
1024-57-3	Heptachlor epoxide	4.5	U
959-98-8	Endosulfan I	4.5	U
60-57-1	Dieldrin	4.5	U
72-55-9	4,4'-DDE	4.5	U
72-20-8	Endrin	4.5	U
33213-65-9	Endosulfan II	4.5	U
72-54-8	4,4'-DDD	4.5	U
1031-07-8	Endosulfan sulfate	4.5	U
50-29-3	4,4'-DDT	4.5	U
72-43-5	Methoxychlor	4.5	U
7421-93-4	Endrin aldehyde	4.5	U
5103-74-2	gamma-Chlordane	4.5	U
5103-71-9	alpha-Chlordane	4.5	U
53494-70-5	Endrin ketone	4.5	U
8001-35-2	Toxaphene	450	U

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

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Form I

QC Summary

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1

PESTICIDE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

6894BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 129792 Lab File ID: 6894BLK.D

Sample wt/vol: 33.04 Units: G Date Received: 02/16/04

Concentrated Extract Volume: 10 Date Extracted: 02/16/04

Level:(low/med) LOW Date Analyzed: 02/19/04 Time: 1457

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: SONC Station ID: Method: 8081

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
319-84-6	alpha-BHC	1.5	U
319-85-7	beta-BHC	1.5	U
319-86-8	delta-BHC	1.5	U
58-89-9	gamma-BHC (Lindane)	1.5	U
76-44-8	Heptachlor	1.5	U
309-00-2	Aldrin	1.5	U
1024-57-3	Heptachlor epoxide	1.5	U
959-98-8	Endosulfan I	1.5	U
60-57-1	Dieldrin	1.5	U
72-55-9	4,4'-DDE	1.5	U
72-20-8	Endrin	1.5	U
33213-65-9	Endosulfan II	1.5	U
72-54-8	4,4'-DDD	1.5	U
1031-07-8	Endosulfan sulfate	1.5	U
50-29-3	4,4'-DDT	1.5	U
72-43-5	Methoxychlor	1.5	U
7421-93-4	Endrin aldehyde	1.5	U
5103-74-2	gamma-Chlordane	1.5	U
5103-71-9	alpha-Chlordane	1.5	U
53494-70-5	Endrin ketone	1.5	U
8001-35-2	Toxaphene	150	U

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

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Form I

PESTICIDE ORGANIC METHOD BLANK SUMMARY

EPA Sample No.: 6894BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID: 6894BLK.D Lab Sample ID: 129792

Instrument ID: SECD02 Date Extracted: 02/16/04

Matrix: SOIL Date Analyzed: 02/19/04

Level:(low/med) LOW Time Analyzed: 1457

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	6894LCS	129793	6894LCS.D	02/19/04	1523
2	6894LCS3	129795	6894LCS3.D	02/19/04	1614
3	6894TLCS	129796	6894TLCS.D	02/19/04	1639
4	57285TS040212	240212501	125-01.D	02/19/04	2351
5	57285TS040212MS	129797	125-01MS.D	02/20/04	0016
6	57285TS040212MSD	129798	125-01SD.D	02/20/04	0042

COMMENTS:

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Form IV

2A

SOIL PESTICIDE ORGANIC SURROGATE RECOVERY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402125

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
57285TS040212	71.8	44.7					0
57285TS040212MS	39.2	46.1					0
57285TS040212MSD	59.5	67.0					0
6894BLK	52.8	90.4					0
6894LCS	57.9	67.9					0
6894LCS3	60.3	67.5					0
6894TLCS	59.4	66.7					0

Control Limits

S1	=	2,4,5,6-tetrachloro-m-xylene	35	-	135
S2	=	Decachlorobiphenyl	25	-	143

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

Control limit source: (lab/method) METHOD

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Form II

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PESTICIDE ORGANIC ANALYTICAL SEQUENCE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

GC Column: STX-CLP1 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

Instrument ID: SECD02

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 4.16 S2 : 16.14

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
1	EVA160591	1859	PEMA.D	02/13/04	0525		
2	STD160580	1757	PCAL8.D	02/13/04	0550	4.17	16.14
3	STD160578	1758	PCAL7.D	02/13/04	0616	4.17	16.14
4	STD160576	1759	PCAL6.D	02/13/04	0641	4.16	16.14
5	STD160574	1760	PCAL5.D	02/13/04	0707	4.16	16.14
6	STD160572	1756	PCAL4.D	02/13/04	0732	4.16	16.14
7	STD160570	1761	PCAL3.D	02/13/04	0758	4.16	16.14
8	STD160568	1762	PCAL2.D	02/13/04	0823	4.16	16.14
9	STD160566	1763	PCAL1.D	02/13/04	0849	4.16	16.14
10	SSC160593	1590	PSEC1.D	02/13/04	1032	4.18	16.14
11	STD160595	1764	TCAL4.D	02/13/04	1123		
12	STD160527	1765	CCAL4.D	02/13/04	1149		
13	EVA161991	1859	PEM1.D	02/19/04	0850		
14	CCV161985	1756	PCCV12.D	02/19/04	1130	4.09	16.06
15	CCV161995	1764	TCCV12.D	02/19/04	1221		
16	CCV161978	1765	CCCV12.D	02/19/04	1350		
17	6894BLK	129792	6894BLK.D	02/19/04	1457	4.12	16.07
18	6894LCS	129793	6894LCS.D	02/19/04	1523	4.09	16.06
19	6894LCS3	129795	6894LCS3.D	02/19/04	1614	4.09	16.06
20	6894TLCS	129796	6894TLCS.D	02/19/04	1639	4.09	16.06
21	EVA161993	1859	PEM22.D	02/19/04	1917		
22	CCV161987	1756	PCCV22.D	02/19/04	2034	4.09	16.06
23	CCV161997	1764	TCCV21.D	02/19/04	2117		
24	CCV161980	1765	CCCV21.D	02/19/04	2208		
25	57285TS040212	240212501	125-01.D	02/19/04	2351	4.15	16.12
26	57285TS040212MS	129797	125-01MS.D	02/20/04	0016	4.27 *	16.19

			QC LIMITS
S1	=	2,4,5,6-tetrachloro-m-xylene	(+/- 0.1 MINUTES)
S2	=	Decachlorobiphenyl	(+/- 0.2 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

270204 1531 FORM VIII

PESTICIDE ORGANIC ANALYTICAL SEQUENCE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

GC Column: STX-CLP1 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

Instrument ID: SECD02

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 4.16 S2 : 16.14

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	S2 RT	#
27	57285TS040212MSD	129798	125-01SD.D	02/20/04	0042	4.57	*	16.53	*
28	EVA161962	1859	PEM3.D	02/20/04	0640	0	*	16.06	
29	CCV161989	1756	PCCV3.D	02/20/04	0713	4.07		16.03	
30	CCV161999	1764	TCCV3.D	02/20/04	0747				
31	CCV161982	1765	CCCV3.D	02/20/04	0852				

			QC LIMITS
S1	=	2,4,5,6-tetrachloro-m-xylene	(+/- 0.1 MINUTES)
S2	=	Decachlorobiphenyl	(+/- 0.2 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

PESTICIDE ORGANIC ANALYTICAL SEQUENCE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

GC Column: STX-CLP2 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

Instrument ID: SECD02

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 4.21 S2 : 16.83

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
1	EVA160592	1859	PEMA.D	02/13/04	0525		
2	STD160581	1757	PCAL8.D	02/13/04	0550	4.21	16.83
3	STD160579	1758	PCAL7.D	02/13/04	0616	4.21	16.83
4	STD160577	1759	PCAL6.D	02/13/04	0641	4.21	16.83
5	STD160575	1760	PCAL5.D	02/13/04	0707	4.2	16.83
6	STD160573	1756	PCAL4.D	02/13/04	0732	4.21	16.83
7	STD160571	1761	PCAL3.D	02/13/04	0758	4.21	16.83
8	STD160569	1762	PCAL2.D	02/13/04	0823	4.21	16.83
9	STD160567	1763	PCAL1.D	02/13/04	0849	4.21	16.83
10	SSC160594	1590	PSEC1.D	02/13/04	1032	4.21	16.83
11	STD160596	1764	TCAL4.D	02/13/04	1123		
12	STD160528	1765	CCAL4.D	02/13/04	1149		
13	EVA161992	1859	PEM1.D	02/19/04	0850		
14	CCV161986	1756	PCCV12.D	02/19/04	1130	4.14	16.75
15	CCV161996	1764	TCCV12.D	02/19/04	1221		
16	CCV161979	1765	CCCV12.D	02/19/04	1350		
17	6894BLK	129792	6894BLK.D	02/19/04	1457	4.14	16.75
18	6894LCS	129793	6894LCS.D	02/19/04	1523	4.14	16.75
19	6894LCS3	129795	6894LCS3.D	02/19/04	1614	4.14	16.75
20	6894TLCS	129796	6894TLCS.D	02/19/04	1639	4.14	16.75
21	EVA161994	1859	PEM22.D	02/19/04	1917		
22	CCV161988	1756	PCCV22.D	02/19/04	2034	4.14	16.74
23	CCV161998	1764	TCCV21.D	02/19/04	2117		
24	CCV161981	1765	CCCV21.D	02/19/04	2208		
25	57285TS040212	240212501	125-01.D	02/19/04	2351	4.2	16.8
26	57285TS040212MS	129797	125-01MS.D	02/20/04	0016	4.31	16.86

QC LIMITS

S1 = 2,4,5,6-tetrachloro-m-xylene (+/- 0.2 MINUTES)
S2 = Decachlorobiphenyl (+/- 0.2 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

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PESTICIDE ORGANIC ANALYTICAL SEQUENCE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

GC Column: STX-CLP2 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

Instrument ID: SECD02

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 4.21 S2 : 16.83

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	S2 RT	#
27	57285TS040212MSD	129798	125-01SD.D	02/20/04	0042	4.62	*	17.21	*
28	EVA161963	1859	PEM3.D	02/20/04	0640	0	*	16.72	
29	CCV161990	1756	PCCV3.D	02/20/04	0713	4.1		16.72	
30	CCV162000	1764	TCCV3.D	02/20/04	0747				
31	CCV161983		CCCV3.D	02/20/04	0852				

			QC LIMITS
S1	=	2,4,5,6-tetrachloro-m-xylene	(+/- 0.2 MINUTES)
S2	=	Decachlorobiphenyl	(+/- 0.2 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

10

PESTICIDE ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

6894BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab Sample ID: 129792 Date(s) Analyzed: 02/19/04 02/19/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

COMPOUND		COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
2,4,5,6-tetrachloro-m-xylene	*	1	4.117	4.177	0.060	59648	0.053	16	
		2	4.142	4.213	0.070	143489	0.050	15.2	5.13
Decachlorobiphenyl	*	1	16.067	16.137	0.070	147603	0.090	27.4	
		2	16.749	16.828	0.079	174205	0.081	24.5	11.18

* Column used for quantitation

270204 1531

Form X

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PESTICIDE ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

6894LCS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab Sample ID: 129793 Date(s) Analyzed: 02/19/04 02/19/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

COMPOUND		COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
alpha-BHC	*	1	5.707	5.787	0.080	29116	0.026	8	
		2	5.897	5.971	0.074	98171	0.027	8.2	2.47
beta-BHC	*	1	6.783	6.860	0.077	25788	0.034	10.3	
		2	7.052	7.121	0.069	59361	0.031	9.4	9.14
delta-BHC	*	1	7.203	7.280	0.077	28524	0.032	9.7	
		2	7.732	7.802	0.070	95271	0.033	10	3.05
gamma-BHC (Lindane)	*	1	6.530	6.610	0.080	37539	0.030	9.2	
		2	6.808	6.881	0.073	100333	0.029	8.8	4.44
Heptachlor	*	1	7.680	7.757	0.077	42754	0.028	8.6	
		2	7.829	7.903	0.073	100617	0.027	8.3	3.55
Aldrin	*	1	8.360	8.437	0.077	29752	0.026	7.9	
		2	8.544	8.618	0.074	87297	0.029	8.8	10.78
Heptachlor epoxide	*	1	9.697	9.773	0.076	40050	0.030	9.1	
		2	9.783	9.859	0.076	91682	0.030	9.1	0.00
Endosulfan I	*	1	10.510	10.587	0.077	38232	0.031	9.5	
		2	10.582	10.657	0.075	95061	0.034	10.3	8.08
Dieldrin	*	1	11.003	11.077	0.074	34734	0.030	9	
		2	11.138	11.213	0.075	91463	0.032	9.8	8.51
4,4'-DDE	*	1	10.423	10.493	0.070	31401	0.030	9.2	
		2	10.854	10.927	0.073	89620	0.034	10.1	9.33
Endrin	*	1	11.467	11.543	0.076	35756	0.032	9.8	
		2	11.740	11.818	0.078	101312	0.038	11.6	16.82
Endosulfan II	*	1	11.920	11.997	0.077	43761	0.039	11.8	
		2	12.166	12.243	0.076	97772	0.037	11.3	4.33
4,4'-DDD	*	1	11.627	11.700	0.073	25982	0.030	9.1	
		2	12.002	12.074	0.072	73483	0.034	10.3	12.37
Endosulfan sulfate	*	1	13.607	13.687	0.080	33212	0.036	10.8	
		2	13.363	13.441	0.078	74603	0.035	10.5	2.82
4,4'-DDT	*	1	12.177	12.250	0.073	40403	0.046	13.8	
		2	12.608	12.682	0.074	78925	0.038	11.6	17.32
Methoxychlor	*	1	13.140	13.213	0.073	26240	0.040	12	
		2	13.954	14.029	0.075	52601	0.038	11.6	3.39
Endrin aldehyde	*	1	12.753	12.830	0.077	24124	0.025	7.5	
		2	12.829	12.907	0.078	51384	0.026	7.7	2.63

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Form X

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PESTICIDE ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

6894LCS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab Sample ID: 129793 Date(s) Analyzed: 02/19/04 02/19/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

gamma-Chlordane	*	1	9.960	10.037	0.077	43618	0.031	9.3	
		2	10.179	10.253	0.074	102602	0.034	10.1	8.25
alpha-Chlordane	*	1	10.237	10.310	0.073	39916	0.029	8.7	
		2	10.479	10.553	0.074	103099	0.034	10.3	16.84
Endrin ketone	*	1	14.143	14.220	0.077	41947	0.036	10.8	
		2	14.393	14.473	0.080	97882	0.037	11.3	4.52
2,4,5,6-tetrachloro-m-xylene	*	1	4.090	4.177	0.087	65344	0.058	17.5	
		2	4.136	4.213	0.076	115167	0.040	12.2	35.69
Decachlorobiphenyl	*	1	16.060	16.137	0.077	110728	0.068	20.5	
		2	16.748	16.828	0.080	144478	0.067	20.3	0.98

* Column used for quantitation

10

PESTICIDE ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

6894LCS3

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab Sample ID: 129795 Date(s) Analyzed: 02/19/04 02/19/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

COMPOUND		COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
alpha-BHC	*	1	5.703	5.787	0.084	34659	0.032	9.6	
		2	5.897	5.971	0.074	119681	0.033	10	4.08
beta-BHC	*	1	6.783	6.860	0.077	27649	0.036	11	
		2	7.052	7.121	0.069	66526	0.035	11	0.00
delta-BHC	*	1	7.200	7.280	0.080	31683	0.036	11	
		2	7.731	7.802	0.071	105984	0.037	11	0.00
gamma-BHC (Lindane)	*	1	6.530	6.610	0.080	43147	0.035	11	
		2	6.808	6.881	0.073	120645	0.035	11	0.00
Heptachlor	*	1	7.680	7.757	0.077	49430	0.033	10	
		2	7.828	7.903	0.074	122514	0.033	10	0.00
Aldrin	*	1	8.357	8.437	0.080	34917	0.031	9.3	
		2	8.543	8.618	0.075	103703	0.034	10	7.25
Heptachlor epoxide	*	1	9.697	9.773	0.076	44351	0.033	10	
		2	9.783	9.859	0.077	103447	0.034	10	0.00
Endosulfan I	*	1	10.510	10.587	0.077	38761	0.032	9.6	
		2	10.581	10.657	0.076	103353	0.037	11	13.59
Dieldrin	*	1	11.000	11.077	0.077	36718	0.032	9.6	
		2	11.136	11.213	0.077	97999	0.035	10	4.08
4,4'-DDE	*	1	10.420	10.493	0.073	30564	0.030	9	
		2	10.853	10.927	0.074	96396	0.036	11	20.00
Endrin	*	1	11.463	11.543	0.080	37838	0.034	10	
		2	11.739	11.818	0.079	104895	0.040	12	18.18
Endosulfan II	*	1	11.917	11.997	0.080	42384	0.038	11	
		2	12.165	12.243	0.077	99778	0.038	12	8.70
4,4'-DDD	*	1	11.627	11.700	0.073	26281	0.030	9.2	
		2	12.001	12.074	0.073	75047	0.035	11	17.82
Endosulfan sulfate	*	1	13.607	13.687	0.080	35557	0.038	12	
		2	13.362	13.441	0.079	80111	0.037	11	8.70
4,4'-DDT	*	1	12.177	12.250	0.073	33202	0.038	11	
		2	12.607	12.682	0.075	81114	0.040	12	8.70
Methoxychlor	*	1	13.140	13.213	0.073	26647	0.040	12	
		2	13.953	14.029	0.076	54022	0.039	12	0.00
Endrin aldehyde	*	1	12.753	12.830	0.077	22650	0.023	7	
		2	12.828	12.907	0.079	54468	0.027	8.2	15.79

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Form X

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PESTICIDE ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

6894LCS3

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab Sample ID: 129795 Date(s) Analyzed: 02/19/04 02/19/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

gamma-Chlordane	*	1	9.960	10.037	0.077	46058	0.032	9.8	
		2	10.178	10.253	0.075	110491	0.036	11	11.54
alpha-Chlordane	*	1	10.233	10.310	0.077	42792	0.031	9.3	
		2	10.478	10.553	0.075	110788	0.036	11	16.75
Endrin ketone	*	1	14.140	14.220	0.080	40574	0.034	10	
		2	14.392	14.473	0.080	99957	0.038	12	18.18
2,4,5,6-tetrachloro-m-xylene	*	1	4.090	4.177	0.087	68041	0.060	18.2	
		2	4.136	4.213	0.076	150994	0.053	16	12.87
Decachlorobiphenyl	*	1	16.060	16.137	0.077	110209	0.068	20.4	
		2	16.748	16.828	0.080	144410	0.067	20.3	0.49

* Column used for quantitation

10

PESTICIDE ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

6894TLCS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab Sample ID: 129796 Date(s) Analyzed: 02/19/04 02/19/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

COMPOUND		COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
2,4,5,6-tetrachloro-m-xylene	*	1	4.090	4.177	0.087	67009	0.059	18	
		2	4.136	4.213	0.076	124577	0.044	13.2	30.77
Decachlorobiphenyl	*	1	16.060	16.137	0.077	108752	0.067	20.2	
		2	16.746	16.828	0.082	142271	0.066	20	1.00

* Column used for quantitation

270204 1531

Form X

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PESTICIDE ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

57285TS040212MS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab Sample ID: 129797 Date(s) Analyzed: 02/20/04 02/20/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

COMPOUND		COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
alpha-BHC	*	1	5.887	5.787	0.100	21465	0.020	17.9	
		2	6.070	5.971	0.099	58238	0.016	14.8	18.96
beta-BHC	*	1	6.963	6.860	0.103	16334	0.022	19.8	
		2	7.219	7.121	0.098	29107	0.015	14	34.32
delta-BHC	*	1	7.380	7.280	0.100	21933	0.024	22.5	
		2	7.896	7.802	0.094	53631	0.018	17	27.85
gamma-BHC (Lindane)	*	1	6.710	6.610	0.100	20415	0.016	15.1	
		2	6.977	6.881	0.096	52624	0.015	13.9	8.28
Heptachlor	*	1	7.853	7.757	0.096	23359	0.016	14.2	
		2	7.995	7.903	0.093	50884	0.014	12.7	11.15
Aldrin	*	1	8.533	8.437	0.096	17250	0.015	13.9	
		2	8.709	8.618	0.091	50139	0.017	15.2	8.93
Heptachlor epoxide	*	1	9.860	9.773	0.087	23075	0.017	15.9	
		2	9.942	9.859	0.083	49457	0.016	14.9	6.49
Endosulfan I	*	1	10.673	10.587	0.086	17809	0.015	13.4	
		2	10.633	10.657	0.024	88206	0.032	28.9	73.29
Dieldrin	*	1	11.160	11.077	0.083	19095	0.016	15.1	
		2	11.288	11.213	0.075	50667	0.018	16.4	8.25
4,4'-DDE	*	1	10.577	10.493	0.084	20525	0.020	18.2	
		2	11.001	10.927	0.074	65526	0.024	22.4	20.69
Endrin	*	1	11.623	11.543	0.080	16527	0.015	13.8	
		2	11.888	11.818	0.070	47075	0.018	16.4	17.22
Endosulfan II	*	1	12.073	11.997	0.076	17935	0.016	14.6	
		2	12.310	12.243	0.068	48178	0.018	16.8	14.01
4,4'-DDD	*	1	11.780	11.700	0.080	19877	0.023	21.1	
		2	12.141	12.074	0.067	57949	0.027	24.6	15.32
Endosulfan sulfate	*	1	13.750	13.687	0.063	25220	0.027	24.9	
		2	13.498	13.441	0.057	40484	0.019	17.3	36.02
4,4'-DDT	*	1	12.320	12.250	0.070	3113	0.0035	3.2	
		2	12.749	12.682	0.067	24767	0.012	11.1	110.49
Methoxychlor	*	1	13.293	13.213	0.080	9473	0.014	13.1	
		2	14.000	14.029	0.029	21588	0.016	14.4	9.45
Endrin aldehyde	*	1	12.903	12.830	0.073	8486	0.0087	8	
		2	12.968	12.907	0.061	28165	0.014	12.8	46.15

270204 1531

Form X

10

PESTICIDE ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

57285TS040212MS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab Sample ID: 129797 Date(s) Analyzed: 02/20/04 02/20/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

gamma-Chlordane	*	1	10.103	10.037	0.066	776968	0.55	501	
		2	10.420	10.253	0.167	1195438	0.39	358	33.29
alpha-Chlordane	*	1	10.400	10.310	0.090	30870	0.022	20.3	
		2	10.633	10.553	0.080	88206	0.029	26.6	26.87
Endrin ketone	*	1	14.283	14.220	0.063	26077	0.022	20.3	
		2	14.523	14.473	0.051	38782	0.015	13.5	40.24
2,4,5,6-tetrachloro-m-xylene	*	1	4.270	4.177	0.093	44309	0.039	35.9	
		2	4.313	4.213	0.100	76099	0.027	24.4	38.14
Decachlorobiphenyl	*	1	16.187	16.137	0.050	75282	0.046	42.2	
		2	16.864	16.828	0.036	72610	0.034	30.9	30.92

* Column used for quantitation

10

PESTICIDE ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

57285TS040212MSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab Sample ID: 129798 Date(s) Analyzed: 02/20/04 02/20/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

COMPOUND		COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
alpha-BHC	*	1	6.217	5.787	0.430	23533	0.021	19.6	
		2	6.395	5.971	0.424	56624	0.016	14.4	30.59
beta-BHC	*	1	7.303	6.860	0.443	14529	0.019	17.6	
		2	7.551	7.121	0.430	27746	0.014	13.3	27.83
delta-BHC	*	1	7.727	7.280	0.447	21268	0.024	21.8	
		2	8.233	7.802	0.431	56062	0.019	17.7	20.76
gamma-BHC (Lindane)	*	1	7.050	6.610	0.440	20729	0.017	15.3	
		2	7.309	6.881	0.428	50966	0.015	13.5	12.50
Heptachlor	*	1	8.207	7.757	0.450	22377	0.015	13.6	
		2	8.338	7.903	0.436	48470	0.013	12.1	11.67
Aldrin	*	1	8.890	8.437	0.453	20832	0.018	16.8	
		2	9.059	8.618	0.441	48516	0.016	14.7	13.33
Heptachlor epoxide	*	1	10.223	9.773	0.450	30940	0.023	21.3	
		2	10.291	9.859	0.432	49073	0.016	14.7	36.67
Endosulfan I	*	1	11.037	10.587	0.450	25664	0.021	19.3	
		2	11.088	10.657	0.431	55178	0.020	18	6.97
Dieldrin	*	1	11.523	11.077	0.446	28743	0.025	22.7	
		2	11.638	11.213	0.425	51079	0.018	16.6	31.04
4,4'-DDE	*	1	10.930	10.493	0.437	26616	0.026	23.6	
		2	11.338	10.927	0.411	62197	0.023	21.3	10.24
Endrin	*	1	11.987	11.543	0.444	18718	0.017	15.6	
		2	12.238	11.818	0.420	46648	0.018	16.2	3.77
Endosulfan II	*	1	12.437	11.997	0.440	29351	0.026	23.9	
		2	12.658	12.243	0.416	53021	0.020	18.5	25.47
4,4'-DDD	*	1	12.127	11.700	0.427	28526	0.033	30.2	
		2	12.474	12.074	0.400	58340	0.027	24.8	19.64
Endosulfan sulfate	*	1	14.643	13.687	0.956	33798	0.036	33.4	
		2	13.840	13.441	0.399	32670	0.015	13.9	82.45
4,4'-DDT	*	1	13.260	12.250	1.010	21565	0.024	22.3	
		2	13.081	12.682	0.399	12994	0.0063	5.8	117.44
Methoxychlor	*	1	14.513	13.213	1.300	64652	0.098	89.2	
		2	14.303	14.029	0.274	20297	0.015	13.5	147.42
Endrin aldehyde	*	1	14.107	12.830	1.277	50739	0.052	47.6	
		2	13.312	12.907	0.405	20131	0.010	9.2	135.21

270204 1531

Form X

10

PESTICIDE ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

57285TS040212MSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab Sample ID: 129798 Date(s) Analyzed: 02/20/04 02/20/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

gamma-Chlordane		1	10.457	10.037	0.420	501217	0.35	323	
	*	2	10.683	10.253	0.430	55045	0.018	16.5	180.56
alpha-Chlordane	*	1	10.757	10.310	0.447	40426	0.029	26.6	
		2	10.981	10.553	0.428	66609	0.022	20.1	27.84
Endrin ketone	*	1	15.723	14.220	1.503	35752	0.030	27.8	
		2	14.869	14.473	0.397	31851	0.012	11.1	85.86
2,4,5,6-tetrachloro-m-xylene	*	1	4.567	4.177	0.390	67176	0.059	54.4	
		2	4.615	4.213	0.403	76501	0.027	24.5	75.79
Decachlorobiphenyl	*	1	16.530	16.137	0.393	109360	0.067	61.3	
		2	17.212	16.828	0.384	75376	0.035	32	62.81

* Column used for quantitation

10

PESTICIDE ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab Sample ID: 240212501 Date(s) Analyzed: 02/19/04 02/19/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

COMPOUND		COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
2,4,5,6-tetrachloro-m-xylene	*	1	4.147	4.177	0.030	81055	0.072	65.2	
		2	4.200	4.213	0.012	84695	0.030	26.9	83.17
Decachlorobiphenyl	*	1	16.120	16.137	0.017	72904	0.045	40.6	
		2	16.801	16.828	0.027	81988	0.038	34.6	15.96

* Column used for quantitation

270204 1531

Form X

PESTICIDE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

6894LCS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
alpha-BHC	15.1	8	53.0		41.0	32 - 115
beta-BHC	15.1	10.3	68.2		20.0	35 - 126
delta-BHC	15.1	9.7	64.2		22.0	22 - 134
gamma-BHC (Lindane)	15.1	9.2	60.9		40.0	5 - 124
Heptachlor	15.1	8.6	57.0		38.0	12 - 131
Aldrin	15.1	7.9	52.3		40.0	13 - 122
Heptachlor epoxide	15.1	9.1	60.3		26.0	38 - 116
Endosulfan I	15.1	9.5	62.9		32.0	38 - 143
Dieldrin	15.1	9	59.6		26.0	43 - 117
4,4'-DDE	15.1	9.2	60.9		25.0	42 - 119
Endrin	15.1	9.8	64.9		30.0	48 - 126
Endosulfan II	15.1	11.8	78.1		19.0	58 - 130
4,4'-DDD	15.1	9.1	60.3		23.0	47 - 128
Endosulfan sulfate	15.1	10.8	71.5		20.0	45 - 151
4,4'-DDT	15.1	13.8	91.4		34.0	48 - 159
Methoxychlor	15.1	12	79.5		25.0	49 - 146
Endrin aldehyde	15.1	7.5	49.7		20.0	31 - 102
gamma-Chlordane	15.1	9.3	61.6 *		20.0	65 - 120
alpha-Chlordane	15.1	8.7	57.6		24.0	39 - 106
Endrin ketone	15.1	10.8	71.5 *		32.0	72 - 127

Spike Recovery: 2 out of 20 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1531

Form III

3

PESTICIDE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

6894LCS3

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
alpha-BHC	15.1	9.6	63.6	18.2	41.0	32 - 115
beta-BHC	15.1	11	72.8	6.6	20.0	35 - 126
delta-BHC	15.1	11	72.8	12.6	22.0	22 - 134
gamma-BHC (Lindane)	15.1	11	72.8	17.8	40.0	5 - 124
Heptachlor	15.1	10	66.2	15.1	38.0	12 - 131
Aldrin	15.1	9.3	61.6	16.3	40.0	13 - 122
Heptachlor epoxide	15.1	10	66.2	9.4	26.0	38 - 116
Endosulfan I	15.1	9.6	63.6	1.0	32.0	38 - 143
Dieldrin	15.1	9.6	63.6	6.5	26.0	43 - 117
4,4'-DDE	15.1	9	59.6	2.2	25.0	42 - 119
Endrin	15.1	10	66.2	2.0	30.0	48 - 126
Endosulfan II	15.1	11	72.8	7.0	19.0	58 - 130
4,4'-DDD	15.1	9.2	60.9	1.1	23.0	47 - 128
Endosulfan sulfate	15.1	12	79.5	10.5	20.0	45 - 151
4,4'-DDT	15.1	11	72.8	22.6	34.0	48 - 159
Methoxychlor	15.1	12	79.5	0.0	25.0	49 - 146
Endrin aldehyde	15.1	7	46.4	6.9	20.0	31 - 102
gamma-Chlordane	15.1	9.8	64.9 *	5.2	20.0	65 - 120
alpha-Chlordane	15.1	9.3	61.6	6.7	24.0	39 - 106
Endrin ketone	15.1	10	66.2 *	7.7	32.0	72 - 127

Spike Recovery: 2 out of 20 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1531

Form III

3

PESTICIDE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

6894TLCS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Toxaphene	303	212	70.0		38.0	70 - 130

Spike Recovery: 0 out of 1 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1531

Form III

3

PESTICIDE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

57285TS040212MS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	SAMPLE CONCENTRATION UG/KG	MS CONCENTRATION UG/KG	MS % REC #	QC LIMITS REC.
alpha-BHC	45.8	0	17.9	39.1 *	44 - 85
beta-BHC	45.8	0	19.8	43.2	29 - 134
delta-BHC	45.8	0	22.5	49.1	32 - 132
gamma-BHC (Lindane)	45.8	0	15.1	33.0	16 - 133
Heptachlor	45.8	0	14.2	31.0	17 - 143
Aldrin	45.8	0	13.9	30.3 *	46 - 102
Heptachlor epoxide	45.8	0	15.9	34.7	26 - 147
Endosulfan I	45.8	0	13.4	29.3	27 - 114
Dieldrin	45.8	0	15.1	33.0	16 - 125
4,4'-DDE	45.8	0	18.2	39.7	22 - 142
Endrin	45.8	0	13.8	30.1	27 - 107
Endosulfan II	45.8	0	14.6	31.9	26 - 108
4,4'-DDD	45.8	0	21.1	46.1	25 - 131
Endosulfan sulfate	45.8	0	24.9	54.4	24 - 154
4,4'-DDT	45.8	0	3.2	7.0 *	24 - 152
Methoxychlor	45.8	0	13.1	28.6	12 - 152
Endrin aldehyde	45.8	0	8	17.5	-85 - 208
gamma-Chlordane	45.8	0	501	1094.0 *	31 - 139
alpha-Chlordane	45.8	0	20.3	44.3	44 - 113
Endrin ketone	45.8	0	20.3	44.3	22 - 154

Spike Recovery: 4 out of 20 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

270204 1531

3

PESTICIDE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

57285TS040212MSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. _____ SAS No: _____ SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	MSD CONCENTRATION UG/KG	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
alpha-BHC	45.7	19.6	42.9 *	9.1	36	44 - 85
beta-BHC	45.7	17.6	38.5	11.8	30	29 - 134
delta-BHC	45.7	21.8	47.7	3.2	30	32 - 132
gamma-BHC (Lindane)	45.7	15.3	33.5	1.3	30	16 - 133
Heptachlor	45.7	13.6	29.8	4.3	30	17 - 143
Aldrin	45.7	16.8	36.8 *	18.9	41	46 - 102
Heptachlor epoxide	45.7	21.3	46.6	29.0	30	26 - 147
Endosulfan I	45.7	19.3	42.2	36.1 *	30	27 - 114
Dieldrin	45.7	22.7	49.7	40.2 *	30	16 - 125
4,4'-DDE	45.7	23.6	51.6	25.8	30	22 - 142
Endrin	45.7	15.6	34.1	12.2	30	27 - 107
Endosulfan II	45.7	23.9	52.3	48.3 *	30	26 - 108
4,4'-DDD	45.7	30.2	66.1	35.5 *	30	25 - 131
Endosulfan sulfate	45.7	33.4	73.1	29.2	30	24 - 154
4,4'-DDT	45.7	22.3	48.8	149.8 *	45	24 - 152
Methoxychlor	45.7	89.2	195.0 *	148.8 *	30	12 - 152
Endrin aldehyde	45.7	47.6	104.0	142.4 *	30	-85 - 208
gamma-Chlordane	45.7	16.5	36.1	187.2 *	30	31 - 139
alpha-Chlordane	45.7	26.6	58.2	26.9	40	44 - 113
Endrin ketone	45.7	27.8	60.8	31.2 *	30	22 - 154

RPD: 9 out of 20 outside limits

Spike Recovery: 3 out of 20 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS: _____

Form III

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Standards Data

270204 1531

PESTICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1123

LAB FILE ID: RRF0.005 =PCAL1.D RRF0.01 =PCAL2.D
RRF0.02 =PCAL3.D RRF0.04 =PCAL4.D RRF0.06 =PCAL5.D

COMPOUND	RRF0.005	RRF0.01	RRF0.02	RRF0.04	RRF0.06
alpha-BHC	864600	946800	932100	1020925	1135316.667
beta-BHC	702400	760400	729500	743875	772283.333
delta-BHC	679200	761000	767650	836775	893566.667
gamma-BHC (Lindane)	1278600	1184400	1082700	1127125	1222450
Heptachlor	1532200	1566200	1448100	1441550	1493783.333
Aldrin	1003600	1070700	1023350	1077300	1162366.667
Heptachlor epoxide	1336400	1370500	1271650	1271750	1325383.333
Endosulfan I	1167800	1247400	1166700	1176250	1226900
Dieldrin	1072400	1123700	1065000	1099325	1178066.667
4,4'-DDE	883400	976500	930350	978625	1058866.667
Endrin	992200	1063700	1013050	1055375	1113633.333
Endosulfan II	1067600	1146700	1075800	1088800	1127983.333
4,4'-DDD	729000	799700	774250	827400	901616.667
Endosulfan sulfate	834400	934500	889200	912750	915933.333
4,4'-DDT	720400	818400	816000	875675	898000
Methoxychlor	626000	679200	647200	666950	665616.667
Endrin aldehyde	908600	1005700	963300	955425	973566.667
gamma-Chlordane	1400400	1474400	1370050	1370525	1398266.667
alpha-Chlordane	1334800	1449700	1342950	1349775	1404300
Endrin ketone	1020200	1147800	1104400	1144300	1189166.667
Toxaphene-1				251690	
Toxaphene-2				228260	
Toxaphene-3				203740	
Toxaphene-4				217310	
Toxaphene-5				218790	
==========					
2,4,5,6-tetrachloro-m-xylene(SURR)	1019400	1097000	1057600	1128400	1175400
Decachlorobiphenyl(SURR)	1810000	1854600	1539150	1635125	1614550

270204 1532

FORM VI

PESTICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1123

LAB FILE ID: RRF0.08 =PCAL6.D RRF0.1 =PCAL7.D
RRF0.15 =PCAL8.D

COMPOUND	RRF0.08	RRF0.1	RRF0.15		
alpha-BHC	1247437.5	1268530	1357426.667		
beta-BHC	795575	776420	763133.333		
delta-BHC	1026937.5	1051110	1120366.667		
gamma-BHC (Lindane)	1311412.5	1324390	1355886.667		
Heptachlor	1533375	1500620	1482200		
Aldrin	1228487.5	1229880	1270380		
Heptachlor epoxide	1367012.5	1340610	1334600		
Endosulfan I	1267925	1247600	1243520		
Dieldrin	1242712.5	1235410	1260880		
4,4'-DDE	1123212.5	1127580	1171340		
Endrin	1176737.5	1167680	1193493.333		
Endosulfan II	1174825	1153880	1155626.667		
4,4'-DDD	947675	947990	973080		
Endosulfan sulfate	982800	967570	964133.333		
4,4'-DDT	976100	965810	991493.333		
Methoxychlor	697600	671340	650626.667		
Endrin aldehyde	1017412.5	1000230	973140		
gamma-Chlordane	1472600	1439540	1420886.667		
alpha-Chlordane	1439337.5	1410140	1394346.667		
Endrin ketone	1271662.5	1259410	1263146.667		
Toxaphene-1					
Toxaphene-2					
Toxaphene-3					
Toxaphene-4					
Toxaphene-5					
==========					
2,4,5,6-tetrachloro-m-xylene(SURR)	1206675	1181050	1171006.667		
Decachlorobiphenyl(SURR)	1619650	1540950	1439673.333		

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FORM VI

PESTICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1123

COMPOUND	CURVE	COEFFICIENTS AO	COEFFICIENTS A1	%RSD OR R^2
alpha-BHC	AVRG		1096641.9792	16.6
beta-BHC	AVRG		755448.33333	3.9
delta-BHC	AVRG		892075.72917	17.8
gamma-BHC (Lindane)	AVRG		1235870.5208	8
Heptachlor	AVRG		1499753.5417	2.9
Aldrin	AVRG		1133258.0208	9.1
Heptachlor epoxide	AVRG		1327238.2292	2.8
Endosulfan I	AVRG		1218011.875	3.4
Dieldrin	AVRG		1159686.7708	6.9
4,4'-DDE	AVRG		1031234.2708	10.1
Endrin	AVRG		1096983.6458	7
Endosulfan II	AVRG		1123901.875	3.6
4,4'-DDD	AVRG		862588.95833	10.7
Endosulfan sulfate	AVRG		925160.83333	5.2
4,4'-DDT	AVRG		882734.79167	10.7
Methoxychlor	AVRG		663066.66667	3.3
Endrin aldehyde	AVRG		974671.77083	3.5
gamma-Chlordane	AVRG		1418333.5417	2.9
alpha-Chlordane	AVRG		1390668.6458	3.2
Endrin ketone	AVRG		1175010.7292	7.5
Toxaphene-1	AVRG		251690	0
Toxaphene-2	AVRG		228260	0
Toxaphene-3	AVRG		203740	0
Toxaphene-4	AVRG		217310	0
Toxaphene-5	AVRG		218790	0
==========				
2,4,5,6-tetrachloro-m-xylene(SURR)	AVRG		1129566.4583	5.9
Decachlorobiphenyl(SURR)	AVRG		1631712.2917	8.5

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FORM VI

PESTICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1123

LAB FILE ID: RT1: PCAL1.D RT2: PCAL2.D
RT3: PCAL3.D RT4: PCAL4.D RT5: PCAL5.D

COMPOUND	RT1	RT2	RT3	RT4	RT5	MIDCAL RT	RT WINDOW FROM	RT WINDOW TO
alpha-BHC	5.773	5.777	5.777	5.777	5.777			
beta-BHC	6.853	6.853	6.853	6.853	6.853			
delta-BHC	7.270	7.270	7.270	7.270	7.270			
gamma-BHC (Lindane)	6.600	6.600	6.600	6.603	6.600			
Heptachlor	7.750	7.750	7.750	7.750	7.750			
Aldrin	8.430	8.430	8.430	8.430	8.430			
Heptachlor epoxide	9.770	9.770	9.770	9.770	9.770			
Endosulfan I	10.583	10.583	10.583	10.583	10.583			
Dieldrin	11.077	11.077	11.077	11.077	11.077			
4,4'-DDE	10.490	10.490	10.490	10.493	10.493			
Endrin	11.540	11.540	11.540	11.540	11.540			
Endosulfan II	11.993	11.993	11.993	11.993	11.997			
4,4'-DDD	11.697	11.697	11.697	11.700	11.700			
Endosulfan sulfate	13.683	13.683	13.683	13.687	13.687			
4,4'-DDT	12.247	12.247	12.247	12.250	12.250			
Methoxychlor	13.210	13.210	13.210	13.210	13.210			
Endrin aldehyde	12.830	12.830	12.830	12.830	12.830			
gamma-Chlordane	10.030	10.030	10.030	10.033	10.030			
alpha-Chlordane	10.307	10.307	10.307	10.307	10.307			
Endrin ketone	14.220	14.220	14.220	14.220	14.220			
Toxaphene-1				11.970				
Toxaphene-2				12.210				
Toxaphene-3				12.643				
Toxaphene-4				13.277				
Toxaphene-5				13.473				
==========								
2,4,5,6-tetrachloro-m-xylene(SURR)	4.163	4.163	4.163	4.163	4.160			
Decachlorobiphenyl(SURR)	16.137	16.137	16.137	16.137	16.137			

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FORM VI

PESTICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1123

LAB FILE ID: RT6: PCAL6.D RT7: PCAL7.D
RT8: PCAL8.D

COMPOUND	RT6	RT7	RT8			MIDCAL RT	RT WINDOW FROM	TO
alpha-BHC	5.777	5.780	5.780					
beta-BHC	6.853	6.853	6.857					
delta-BHC	7.273	7.273	7.273					
gamma-BHC (Lindane)	6.603	6.603	6.607					
Heptachlor	7.750	7.750	7.753					
Aldrin	8.430	8.433	8.433					
Heptachlor epoxide	9.770	9.770	9.773					
Endosulfan I	10.583	10.583	10.587					
Dieldrin	11.077	11.077	11.080					
4,4'-DDE	10.493	10.493	10.493					
Endrin	11.540	11.540	11.543					
Endosulfan II	11.997	11.993	11.997					
4,4'-DDD	11.700	11.700	11.703					
Endosulfan sulfate	13.687	13.687	13.687					
4,4'-DDT	12.250	12.250	12.250					
Methoxychlor	13.210	13.210	13.213					
Endrin aldehyde	12.830	12.830	12.833					
gamma-Chlordane	10.033	10.033	10.033					
alpha-Chlordane	10.307	10.307	10.310					
Endrin ketone	14.220	14.220	14.223					
Toxaphene-1								
Toxaphene-2								
Toxaphene-3								
Toxaphene-4								
Toxaphene-5								
==========								
2,4,5,6-tetrachloro-m-xylene(SURR)	4.163	4.167	4.167					
Decachlorobiphenyl(SURR)	16.137	16.137	16.137					

270204 1532

FORM VI

PESTICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1123

LAB FILE ID: RRF0.005 =PCAL1.D RRF0.01 =PCAL2.D
RRF0.02 =PCAL3.D RRF0.04 =PCAL4.D RRF0.06 =PCAL5.D

COMPOUND	RRF0.005	RRF0.01	RRF0.02	RRF0.04	RRF0.06
alpha-BHC	3140200	3424600	3423050	3655875	3838466.667
beta-BHC	2074000	2165000	1963750	1898325	1880883.333
delta-BHC	2814000	2860000	2679250	2885275	2900800
gamma-BHC (Lindane)	3158400	3455400	3383150	3514550	3617016.667
Heptachlor	4007400	4052100	3603900	3641450	3664933.333
Aldrin	2848600	3067000	2950950	3036625	3135166.667
Heptachlor epoxide	3281800	3324800	3064100	3013625	3061816.667
Endosulfan I	3014000	3082800	2829450	2773750	2773883.333
Dieldrin	2824800	2951600	2792100	2833225	2878583.333
4,4'-DDE	2612800	2711500	2587150	2689200	2765083.333
Endrin	2605000	2745700	2604750	2645025	2681866.667
Endosulfan II	2823600	2904100	2666400	2596125	2579650
4,4'-DDD	2016800	2168100	2101050	2167825	2240783.333
Endosulfan sulfate	2265800	2406200	2192450	2137775	2080033.333
4,4'-DDT	1967200	2125700	2038200	2101700	2065016.667
Methoxychlor	1516400	1572700	1432100	1384650	1332050
Endrin aldehyde	2163600	2287300	2084600	2004075	1969566.667
gamma-Chlordane	3370800	3406600	3095200	3014825	3015850
alpha-Chlordane	3455200	3436500	3090150	2975675	2953033.333
Endrin ketone	2550800	2792900	2651700	2649075	2646433.333
Toxaphene-1				322660	
Toxaphene-2				506610	
Toxaphene-3				791210	
Toxaphene-4				538780	
Toxaphene-5				461040	
==========					
2,4,5,6-tetrachloro-m-xylene(SURR)	3179000	3214000	2822850	2812925	2825816.667
Decachlorobiphenyl(SURR)	2686400	2617700	2345150	2099575	2012166.667

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FORM VI

PESTICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1123

LAB FILE ID: RRF0.08 =PCAL6.D RRF0.1 =PCAL7.D
RRF0.15 =PCAL8.D

COMPOUND	RRF0.08	RRF0.1	RRF0.15		
alpha-BHC	3918800	3789190	3642393.333		
beta-BHC	1853625	1759360	1632773.333		
delta-BHC	3093862.5	2999440	2892946.667		
gamma-BHC (Lindane)	3657525	3519530	3336953.333		
Heptachlor	3640825	3470040	3250966.667		
Aldrin	3146975	3025510	2863753.333		
Heptachlor epoxide	3030512.5	2892750	2695353.333		
Endosulfan I	2777362.5	2645560	2474286.667		
Dieldrin	2894600	2768130	2598726.667		
4,4'-DDE	2791937.5	2676040	2527753.333		
Endrin	2710387.5	2597040	2454153.333		
Endosulfan II	2584637.5	2457080	2309680		
4,4'-DDD	2268437.5	2174550	2066346.667		
Endosulfan sulfate	2133012.5	2039360	1907433.333		
4,4'-DDT	2131300	2035900	1921913.333		
Methoxychlor	1327512.5	1252780	1151366.667		
Endrin aldehyde	1968812.5	1859030	1728560		
gamma-Chlordane	3006862.5	2864860	2680920		
alpha-Chlordane	2949175	2798480	2618306.667		
Endrin ketone	2695012.5	2568420	2414840		
Toxaphene-1					
Toxaphene-2					
Toxaphene-3					
Toxaphene-4					
Toxaphene-5					
==========					
2,4,5,6-tetrachloro-m-xylene(SURR)	2802400	2674080	2507360		
Decachlorobiphenyl(SURR)	1957912.5	1828390	1659833.333		

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FORM VI

PESTICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1123

COMPOUND	CURVE	COEFFICIENTS AO	COEFFICIENTS A1	%RSD OR R^2
alpha-BHC	AVRG		3604071.875	7.2
beta-BHC	AVRG		1903464.5833	8.8
delta-BHC	AVRG		2890696.7708	4.2
gamma-BHC (Lindane)	AVRG		3455315.625	4.7
Heptachlor	AVRG		3666451.875	7.2
Aldrin	AVRG		3009322.5	3.8
Heptachlor epoxide	AVRG		3045594.6875	6.6
Endosulfan I	AVRG		2796386.5625	6.9
Dieldrin	AVRG		2817720.625	3.8
4,4'-DDE	AVRG		2670183.0208	3.4
Endrin	AVRG		2630490.3125	3.4
Endosulfan II	AVRG		2615159.0625	7.2
4,4'-DDD	AVRG		2150486.5625	4
Endosulfan sulfate	AVRG		2145258.0208	7
4,4'-DDT	AVRG		2048366.25	3.6
Methoxychlor	AVRG		1371194.8958	10
Endrin aldehyde	AVRG		2008193.0208	8.7
gamma-Chlordane	AVRG		3056989.6875	7.9
alpha-Chlordane	AVRG		3034565	9.6
Endrin ketone	AVRG		2621147.6042	4.3
Toxaphene-1	AVRG		322660	0
Toxaphene-2	AVRG		506610	0
Toxaphene-3	AVRG		791210	0
Toxaphene-4	AVRG		538780	0
Toxaphene-5	AVRG		461040	0
==========				
2,4,5,6-tetrachloro-m-xylene(SURR)	AVRG		2854803.9583	8.3
Decachlorobiphenyl(SURR)	AVRG		2150890.9375	17.1

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FORM VI

PESTICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1123

LAB FILE ID: RT1: PCAL1.D RT2: PCAL2.D
RT3: PCAL3.D RT4: PCAL4.D RT5: PCAL5.D

COMPOUND	RT1	RT2	RT3	RT4	RT5	MIDCAL RT	RT WINDOW FROM	RT WINDOW TO
alpha-BHC	5.969	5.969	5.968	5.968	5.966			
beta-BHC	7.120	7.120	7.119	7.118	7.117			
delta-BHC	7.803	7.801	7.800	7.800	7.798			
gamma-BHC (Lindane)	6.879	6.879	6.879	6.878	6.877			
Heptachlor	7.902	7.902	7.902	7.901	7.900			
Aldrin	8.618	8.618	8.618	8.618	8.618			
Heptachlor epoxide	9.859	9.858	9.858	9.858	9.858			
Endosulfan I	10.658	10.657	10.657	10.657	10.657			
Dieldrin	11.213	11.213	11.213	11.213	11.213			
4,4'-DDE	10.927	10.925	10.926	10.926	10.927			
Endrin	11.818	11.818	11.818	11.817	11.818			
Endosulfan II	12.243	12.243	12.243	12.243	12.243			
4,4'-DDD	12.075	12.073	12.074	12.074	12.074			
Endosulfan sulfate	13.442	13.441	13.441	13.441	13.442			
4,4'-DDT	12.683	12.681	12.682	12.682	12.682			
Methoxychlor	14.030	14.029	14.029	14.028	14.029			
Endrin aldehyde	12.908	12.907	12.907	12.907	12.907			
gamma-Chlordane	10.253	10.253	10.253	10.253	10.253			
alpha-Chlordane	10.554	10.553	10.553	10.553	10.553			
Endrin ketone	14.473	14.473	14.473	14.473	14.473			
Toxaphene-1				12.150				
Toxaphene-2				12.213				
Toxaphene-3				12.407				
Toxaphene-4				12.920				
Toxaphene-5				13.906				
==========								
2,4,5,6-tetrachloro-m-xylene(SURR)	4.210	4.210	4.209	4.208	4.203			
Decachlorobiphenyl(SURR)	16.829	16.828	16.828	16.828	16.828			

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FORM VI

PESTICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1123

LAB FILE ID: RT6: PCAL6.D RT7: PCAL7.D
RT8: PCAL8.D

COMPOUND	RT6	RT7	RT8			MIDCAL RT	RT WINDOW FROM	TO
alpha-BHC	5.968	5.968	5.968					
beta-BHC	7.118	7.118	7.118					
delta-BHC	7.799	7.798	7.799					
gamma-BHC (Lindane)	6.878	6.878	6.878					
Heptachlor	7.901	7.900	7.901					
Aldrin	8.617	8.617	8.618					
Heptachlor epoxide	9.858	9.858	9.858					
Endosulfan I	10.657	10.656	10.657					
Dieldrin	11.213	11.212	11.213					
4,4'-DDE	10.926	10.925	10.926					
Endrin	11.817	11.817	11.817					
Endosulfan II	12.242	12.242	12.243					
4,4'-DDD	12.074	12.073	12.074					
Endosulfan sulfate	13.440	13.440	13.441					
4,4'-DDT	12.681	12.681	12.682					
Methoxychlor	14.028	14.028	14.028					
Endrin aldehyde	12.906	12.905	12.906					
gamma-Chlordane	10.253	10.252	10.253					
alpha-Chlordane	10.553	10.552	10.553					
Endrin ketone	14.473	14.473	14.473					
Toxaphene-1								
Toxaphene-2								
Toxaphene-3								
Toxaphene-4								
Toxaphene-5								
==========								
2,4,5,6-tetrachloro-m-xylene(SURR)	4.208	4.208	4.208					
Decachlorobiphenyl(SURR)	16.827	16.827	16.827					

270204 1532

FORM VI

7SSC

PESTICIDE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 CalibrationDate: 02/13/04 Time: 1032

CCV ID: SSC160593 Lab File ID: PSEC1.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF	%D	
alpha-BHC	1096642	1058725	3.5	
beta-BHC	755448.33	771050	2.1	
delta-BHC	892075.73	830875	6.9	
gamma-BHC (Lindane)	1235870.5	1158325	6.3	
Heptachlor	1499753.5	1487300	0.8	
Aldrin	1133258	1126100	0.6	
Heptachlor epoxide	1327238.2	1377950	3.8	
Endosulfan I	1218011.9	1285675	5.6	
Dieldrin	1159686.8	1153100	0.6	
4,4'-DDE	1031234.3	1067925	3.6	
Endrin	1096983.6	1168925	6.6	
Endosulfan II	1123901.9	1195100	6.3	
4,4'-DDD	862588.96	892725	3.5	
Endosulfan sulfate	925160.83	1031050	11.4	
4,4'-DDT	882734.79	1005475	13.9	
Methoxychlor	663066.67	773775	16.7	<-
Endrin aldehyde	974671.77	919650	5.6	
gamma-Chlordane	1418333.6	1459100	2.9	
alpha-Chlordane	1390668.6	1455700	4.7	
Endrin ketone	1175010.7	1303775	11.0	
==========				
2,4,5,6-tetrachloro-m-xylene(SURR)	1129566.5	1239325	9.7	
Decachlorobiphenyl(SURR)	1631712.3	1864925	14.3	

Average Used: 6.4

270204 1532

FORM VII

7SSC

PESTICIDE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 CalibrationDate: 02/13/04 Time: 1032

CCV ID: SSC160594 Lab File ID: PSEC1.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF	%D
alpha-BHC	3604071.9	3999975	11.0
beta-BHC	1903464.6	2081975	9.4
delta-BHC	2890696.8	3061075	5.9
gamma-BHC (Lindane)	3455315.6	3836425	11.0
Heptachlor	3666451.9	3966625	8.2
Aldrin	3009322.5	3363350	11.8
Heptachlor epoxide	3045594.7	3356475	10.2
Endosulfan I	2796386.6	3085750	10.3
Dieldrin	2817720.6	3021225	7.2
4,4'-DDE	2670183	2984450	11.8
Endrin	2630490.3	2933850	11.5
Endosulfan II	2615159.1	2882125	10.2
4,4'-DDD	2150486.6	2352525	9.4
Endosulfan sulfate	2145258	2341825	9.2
4,4'-DDT	2048366.3	2342525	14.4
Methoxychlor	1371194.9	1549800	13.0
Endrin aldehyde	2008193	1905350	5.1
gamma-Chlordane	3056989.7	3330325	8.9
alpha-Chlordane	3034565	3286200	8.3
Endrin ketone	2621147.6	2838725	8.3
==========			
2,4,5,6-tetrachloro-m-xylene(SURR)	2854804	3135400	9.8
Decachlorobiphenyl(SURR)	2150890.9	2378575	10.6

270204 1532

FORM VII

PESTICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 CalibrationDate: 02/19/04 Time: 1130

CCV ID: CCV161985 Lab File ID: PCCV12.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.04	%D	
alpha-BHC	1096642	1032175	5.9	
beta-BHC	755448.33	689325	8.8	
delta-BHC	892075.73	921250	3.3	
gamma-BHC (Lindane)	1235870.5	1149975	7.0	
Heptachlor	1499753.5	1370850	8.6	
Aldrin	1133258	1010475	10.8	
Heptachlor epoxide	1327238.2	1204375	9.3	
Endosulfan I	1218011.9	1128575	7.3	
Dieldrin	1159686.8	960275	17.2	<-
4,4'-DDE	1031234.3	855725	17.0	<-
Endrin	1096983.6	975100	11.1	
Endosulfan II	1123901.9	1014550	9.7	
4,4'-DDD	862588.96	724575	16.0	<-
Endosulfan sulfate	925160.83	923875	0.1	
4,4'-DDT	882734.79	905625	2.6	
Methoxychlor	663066.67	650250	1.9	
Endrin aldehyde	974671.77	897100	8.0	
gamma-Chlordane	1418333.6	1215275	14.3	
alpha-Chlordane	1390668.6	1177650	15.3	<-
Endrin ketone	1175010.7	1148825	2.2	
==========				
2,4,5,6-tetrachloro-m-xylene(SURR)	1129566.5	1117600	1.1	
Decachlorobiphenyl(SURR)	1631712.3	1672575	2.5	

Average Used: 8.2

270204 1532

FORM VII

7

PESTICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 CalibrationDate: 02/19/04 Time: 1130

CCV ID: CCV161986 Lab File ID: PCCV12.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.04	%D
alpha-BHC	3604071.9	3343925	7.2
beta-BHC	1903464.6	1780925	6.4
delta-BHC	2890696.8	3045100	5.3
gamma-BHC (Lindane)	3455315.6	3220775	6.8
Heptachlor	3666451.9	3312075	9.7
Aldrin	3009322.5	2792050	7.2
Heptachlor epoxide	3045594.7	2717425	10.8
Endosulfan I	2796386.6	2538800	9.2
Dieldrin	2817720.6	2521500	10.5
4,4'-DDE	2670183	2574825	3.6
Endrin	2630490.3	2488200	5.4
Endosulfan II	2615159.1	2362225	9.7
4,4'-DDD	2150486.6	1837875	14.5
Endosulfan sulfate	2145258	1983425	7.5
4,4'-DDT	2048366.3	1950500	4.8
Methoxychlor	1371194.9	1196575	12.7
Endrin aldehyde	2008193	1761600	12.3
gamma-Chlordane	3056989.7	2758175	9.8
alpha-Chlordane	3034565	3025525	0.3
Endrin ketone	2621147.6	2415000	7.9
==========			
2,4,5,6-tetrachloro-m-xylene(SURR)	2854804	2496550	12.5
Decachlorobiphenyl(SURR)	2150890.9	2127100	1.1

270204 1532

FORM VII

7

PESTICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 CalibrationDate: 02/19/04 Time: 1221

CCV ID: CCV161995 Lab File ID: TCCV12.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.1	%D
Toxaphene-1	251690	222140	11.7
Toxaphene-2	228260	206870	9.4
Toxaphene-3	203740	186810	8.3
Toxaphene-4	217310	201840	7.1
Toxaphene-5	218790	199380	8.9

PESTICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 CalibrationDate: 02/19/04 Time: 1221

CCV ID: CCV161996 Lab File ID: TCCV12.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.1	%D	
Toxaphene-1	322660	254160	21.2	<-
Toxaphene-2	506610	401350	20.8	<-
Toxaphene-3	791210	741580	6.3	
Toxaphene-4	538780	420950	21.9	<-
Toxaphene-5	461040	353830	23.3	<-

Average Used: 18.7

270204 1532

FORM VII

7

PESTICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 CalibrationDate: 02/19/04 Time: 2034

CCV ID: CCV161987 Lab File ID: PCCV22.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.04	%D
alpha-BHC	1096642	1064425	2.9
beta-BHC	755448.33	718225	4.9
delta-BHC	892075.73	974900	9.3
gamma-BHC (Lindane)	1235870.5	1147975	7.1
Heptachlor	1499753.5	1446950	3.5
Aldrin	1133258	1077225	4.9
Heptachlor epoxide	1327238.2	1258500	5.2
Endosulfan I	1218011.9	1187775	2.5
Dieldrin	1159686.8	1011200	12.8
4,4'-DDE	1031234.3	916400	11.1
Endrin	1096983.6	1031800	5.9
Endosulfan II	1123901.9	1101375	2.0
4,4'-DDD	862588.96	767625	11.0
Endosulfan sulfate	925160.83	1014750	9.7
4,4'-DDT	882734.79	958125	8.5
Methoxychlor	663066.67	694400	4.7
Endrin aldehyde	974671.77	966900	0.8
gamma-Chlordane	1418333.6	1295250	8.7
alpha-Chlordane	1390668.6	1223075	12.1
Endrin ketone	1175010.7	1244425	5.9
==========			
2,4,5,6-tetrachloro-m-xylene(SURR)	1129566.5	1142250	1.1
Decachlorobiphenyl(SURR)	1631712.3	1773300	8.7

270204 1532

FORM VII

7

PESTICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 CalibrationDate: 02/19/04 Time: 2034

CCV ID: CCV161988 Lab File ID: PCCV22.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.04	%D	
alpha-BHC	3604071.9	3679400	2.1	
beta-BHC	1903464.6	1931825	1.5	
delta-BHC	2890696.8	3330475	15.2	<-
gamma-BHC (Lindane)	3455315.6	3514875	1.7	
Heptachlor	3666451.9	3592725	2.0	
Aldrin	3009322.5	3039775	1.0	
Heptachlor epoxide	3045594.7	2814275	7.6	
Endosulfan I	2796386.6	2762925	1.2	
Dieldrin	2817720.6	2748075	2.5	
4,4'-DDE	2670183	2773450	3.9	
Endrin	2630490.3	2762350	5.0	
Endosulfan II	2615159.1	2614025	0.0	
4,4'-DDD	2150486.6	2044425	4.9	
Endosulfan sulfate	2145258	2243350	4.6	
4,4'-DDT	2048366.3	2166675	5.8	
Methoxychlor	1371194.9	1282425	6.5	
Endrin aldehyde	2008193	1944350	3.2	
gamma-Chlordane	3056989.7	2990400	2.2	
alpha-Chlordane	3034565	3221100	6.1	
Endrin ketone	2621147.6	2659950	1.5	
==========				
2,4,5,6-tetrachloro-m-xylene(SURR)	2854804	2709375	5.1	
Decachlorobiphenyl(SURR)	2150890.9	2317700	7.8	

Average Used: 4.2

270204 1532

FORM VII

7

PESTICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 CalibrationDate: 02/19/04 Time: 2117

CCV ID: CCV161997 Lab File ID: TCCV21.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.1	%D
Toxaphene-1	251690	289320	15.0
Toxaphene-2	228260	222290	2.6
Toxaphene-3	203740	201280	1.2
Toxaphene-4	217310	224310	3.2
Toxaphene-5	218790	215950	1.3

7

PESTICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 CalibrationDate: 02/19/04 Time: 2117

CCV ID: CCV161998 Lab File ID: TCCV21.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.1	%D
Toxaphene-1	322660	309120	4.2
Toxaphene-2	506610	473790	6.5
Toxaphene-3	791210	865560	9.4
Toxaphene-4	538780	498940	7.4
Toxaphene-5	461040	412250	10.6

7

PESTICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 CalibrationDate: 02/20/04 Time: 0713

CCV ID: CCV161989 Lab File ID: PCCV3.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.04	%D	
alpha-BHC	1096642	1095150	0.1	
beta-BHC	755448.33	719000	4.8	
delta-BHC	892075.73	950025	6.5	
gamma-BHC (Lindane)	1235870.5	1248550	1.0	
Heptachlor	1499753.5	1389425	7.4	
Aldrin	1133258	1038500	8.4	
Heptachlor epoxide	1327238.2	1190850	10.3	
Endosulfan I	1218011.9	1106900	9.1	
Dieldrin	1159686.8	988300	14.8	
4,4'-DDE	1031234.3	870550	15.6	<-
Endrin	1096983.6	983275	10.4	
Endosulfan II	1123901.9	989700	11.9	
4,4'-DDD	862588.96	733900	14.9	
Endosulfan sulfate	925160.83	864125	6.6	
4,4'-DDT	882734.79	870425	1.4	
Methoxychlor	663066.67	628375	5.2	
Endrin aldehyde	974671.77	832050	14.6	
gamma-Chlordane	1418333.6	1252675	11.7	
alpha-Chlordane	1390668.6	1255200	9.7	
Endrin ketone	1175010.7	1091975	7.1	
==========				
2,4,5,6-tetrachloro-m-xylene(SURR)	1129566.5	1181250	4.6	
Decachlorobiphenyl(SURR)	1631712.3	1410050	13.6	

Average Used: 8.6

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FORM VII

PESTICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 CalibrationDate: 02/20/04 Time: 0713

CCV ID: CCV161990 Lab File ID: PCCV3.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.04	%D	
alpha-BHC	3604071.9	3246875	9.9	
beta-BHC	1903464.6	1634325	14.1	
delta-BHC	2890696.8	2836175	1.9	
gamma-BHC (Lindane)	3455315.6	3077825	10.9	
Heptachlor	3666451.9	3100825	15.4	<-
Aldrin	3009322.5	2689300	10.6	
Heptachlor epoxide	3045594.7	2629250	13.7	
Endosulfan I	2796386.6	2341575	16.3	<-
Dieldrin	2817720.6	2429950	13.8	
4,4'-DDE	2670183	2308700	13.5	
Endrin	2630490.3	2317025	11.9	
Endosulfan II	2615159.1	2248625	14.0	
4,4'-DDD	2150486.6	1839625	14.5	
Endosulfan sulfate	2145258	1944725	9.3	
4,4'-DDT	2048366.3	1914500	6.5	
Methoxychlor	1371194.9	1221875	10.9	
Endrin aldehyde	2008193	1715875	14.6	
gamma-Chlordane	3056989.7	2648275	13.4	
alpha-Chlordane	3034565	2557100	15.7	<-
Endrin ketone	2621147.6	2399900	8.4	
==========				
2,4,5,6-tetrachloro-m-xylene(SURR)	2854804	2396050	16.1	<-
Decachlorobiphenyl(SURR)	2150890.9	1859100	13.6	

Average Used: 12.2

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FORM VII

7

PESTICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 CalibrationDate: 02/20/04 Time: 0747

CCV ID: CCV161999 Lab File ID: TCCV3.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.1	%D
Toxaphene-1	251690	229510	8.8
Toxaphene-2	228260	218290	4.4
Toxaphene-3	203740	195460	4.1
Toxaphene-4	217310	198330	8.7
Toxaphene-5	218790	195320	10.7

PESTICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 CalibrationDate: 02/20/04 Time: 0747

CCV ID: CCV162000 Lab File ID: TCCV3.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.1	%D	
Toxaphene-1	322660	244350	24.3	<-
Toxaphene-2	506610	389460	23.1	<-
Toxaphene-3	791210	612870	22.5	<-
Toxaphene-4	538780	414260	23.1	<-
Toxaphene-5	461040	343070	25.6	<-

Average Used: 23.7

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FORM VII

PESTICIDE ORGANIC CALIBRATION VERIFICATION SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

GC Column: STX-CLP1 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

EPA Sample No. (EVA): EVA160591 Date Analyzed: 02/13/04

Lab File ID (EVA): PEMA.D Time Analyzed: 0525

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	% BREAK-DOWN
endrin	11.55	11.44	11.64	0.00
4,4'-DDT	12.26	12.15	12.35	0.00
		Combined % breakdown:		0.00

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%

Endrin breakdown must be less than or equal to 15.0%

Combined breakdown must be less than or equal to 30.0%

PESTICIDE ORGANIC CALIBRATION VERIFICATION SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

GC Column: STX-CLP2 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

EPA Sample No. (EVA): EVA160592 Date Analyzed: 02/13/04

Lab File ID (EVA): PEMA.D Time Analyzed: 0525

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	% BREAK-DOWN
endrin	11.82	11.72	11.92	0.00
4,4'-DDT	12.69	12.58	12.78	0.00
		Combined % breakdown:		0.00

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%

Endrin breakdown must be less than or equal to 15.0%

Combined breakdown must be less than or equal to 30.0%

PESTICIDE ORGANIC CALIBRATION VERIFICATION SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

GC Column: STX-CLP1 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

EPA Sample No. (EVA): EVA161991 Date Analyzed: 02/19/04

Lab File ID (EVA): PEM1.D Time Analyzed: 0850

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	% BREAK-DOWN
endrin	11.47	11.44	11.64	1.36
4,4'-DDT	12.18	12.15	12.35	1.33
		Combined % breakdown:		2.69

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%

Endrin breakdown must be less than or equal to 15.0%

Combined breakdown must be less than or equal to 30.0%

PESTICIDE ORGANIC CALIBRATION VERIFICATION SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

GC Column: STX-CLP2 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

EPA Sample No. (EVA): EVA161992 Date Analyzed: 02/19/04

Lab File ID (EVA): PEM1.D Time Analyzed: 0850

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	% BREAK-DOWN
endrin	11.74	11.72	11.92	0.00
4,4'-DDT	12.61	12.58	12.78	2.27
		Combined % breakdown:		2.27

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%

Endrin breakdown must be less than or equal to 15.0%

Combined breakdown must be less than or equal to 30.0%

PESTICIDE ORGANIC CALIBRATION VERIFICATION SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

GC Column: STX-CLP1 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

EPA Sample No. (EVA): EVA161993 Date Analyzed: 02/19/04

Lab File ID (EVA): PEM22.D Time Analyzed: 1917

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	% BREAK-DOWN
endrin	11.46	11.44	11.64	6.58
4,4'-DDT	12.18	12.15	12.35	2.23
		Combined % breakdown:		8.81

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%

Endrin breakdown must be less than or equal to 15.0%

Combined breakdown must be less than or equal to 30.0%

PESTICIDE ORGANIC CALIBRATION VERIFICATION SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

GC Column: STX-CLP2 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

EPA Sample No. (EVA): EVA161994 Date Analyzed: 02/19/04

Lab File ID (EVA): PEM22.D Time Analyzed: 1917

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	% BREAK-DOWN
endrin	11.74	11.72	11.92	0.47
4,4'-DDT	12.61	12.58	12.78	1.47
		Combined % breakdown:		1.94

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%

Endrin breakdown must be less than or equal to 15.0%

Combined breakdown must be less than or equal to 30.0%

PESTICIDE ORGANIC CALIBRATION VERIFICATION SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

GC Column: STX-CLP1 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

EPA Sample No. (EVA): EVA161962 Date Analyzed: 02/20/04

Lab File ID (EVA): PEM3.D Time Analyzed: 0640

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	% BREAK-DOWN
endrin	11.42	11.44	11.64	
4,4'-DDT	0.00	12.15	12.35	

Combined % breakdown:

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%

Endrin breakdown must be less than or equal to 15.0%

Combined breakdown must be less than or equal to 30.0%

PESTICIDE ORGANIC CALIBRATION VERIFICATION SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

GC Column: STX-CLP2 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

EPA Sample No. (EVA): EVA161963 Date Analyzed: 02/20/04

Lab File ID (EVA): PEM3.D Time Analyzed: 0640

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	% BREAK-DOWN
endrin	11.70	11.72	11.92	
4,4'-DDT	12.57	12.58	12.78	

Combined % breakdown:

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%

Endrin breakdown must be less than or equal to 15.0%

Combined breakdown must be less than or equal to 30.0%

Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402125

METHOD: 8081 **MATRIX:** S

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
2,4,5,6-tetrachloro-m-xylene							35-135
4,4'-DDD	47-128	23	25-131	30			
4,4'-DDE	42-119	25	22-142	30			
4,4'-DDT	48-159	34	24-152	45			
Aldrin	13-122	40	46-102	41			
alpha-BHC	32-115	41	44-85	36			
alpha-Chlordane	39-106	24	44-113	40			
beta-BHC	35-126	20	29-134	30			
Decachlorobiphenyl							25-143
delta-BHC	22-134	22	32-132	30			
Dieldrin	43-117	26	16-125	30			
Endosulfan I	38-143	32	27-114	30			
Endosulfan II	58-130	19	26-108	30			
Endosulfan sulfate	45-151	20	24-154	30			
Endrin	48-126	30	27-107	30			
Endrin aldehyde	31-102	20	-85-208	30			
Endrin ketone	72-127	32	22-154	30			
gamma-BHC (Lindane)	5-124	40	16-133	30			
gamma-Chlordane	65-120	20	31-139	30			
Heptachlor	12-131	38	17-143	30			
Heptachlor epoxide	38-116	26	26-147	30			
Methoxychlor	49-146	25	12-152	30			
Toxaphene	70-130	38	70-130	38			

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GC/ECD PCB ORGANICS

METHOD 8082

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CASE NARRATIVE
POLYCHLORINATED BIPHENYLS (PCB) SEMIVOLATILE ORGANIC

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

EPA SW846 8082 for Aroclor analysis.

IV. PREPARATION

Soil samples were prepared by SW846 EPA 3550 for 8082 semi-volatile analysis.

V. ANALYSIS

A. Calibration:

Continuing calibration 166CCV3 failed method criteria due to sample matrix. Maintenance was performed on the instrument before continuing calibration was analyzed; however, %D's were exceeded. SW846 does not require confirmation for pcb analysis.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met with the exception of:
Sample 57285TS040212MS was recovered below criteria for the following surrogate(s): Decachlorobiphenyl at 32.6 % with criteria of (33-140).

Sample 57285TS040212MSD was recovered below criteria for the following surrogate(s): Decachlorobiphenyl at 18.8 % with criteria of (33-140).

Sample matrix caused high breakdown and retention time shift resulting in poor recoveries of surrogate. Since the blank and qc indicated acceptable recoveries, no further action was taken.

D. Spikes:

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

1. Laboratory Control Spikes (LCS)

CASE NARRATIVE
POLYCHLORINATED BIPHENYLS (PCB) SEMIVOLATILE ORGANIC

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

All acceptance criteria were met.

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

A client requested MS/SD set was analyzed.
All percent recovery and relative percent difference(RPD) criteria were met with the exception of:
MS - 57285TS040212MS was analyzed with the soil samples extracted on 02/17/04. The following analyte(s) were recovered below criteria: Aroclor-1260 at 32.8 % with criteria of (41-134).

SD - 57285TS040212MSD was analyzed with the soil samples extracted on 02/17/04. The following analyte(s) were recovered below criteria: Aroclor-1016 at 8.5 % with criteria of (32-142), Aroclor-1260 at 10.7 % with criteria of (41-134). The following analyte(s) exceeded rpd criteria: Aroclor-1016 at 125.6 % with criteria of (30), Aroclor-1260 at 101.3 % with criteria of (30).

Sample matrix caused high breakdown and retention time shifts. The matrix spike recoveries are exceeded due to the matrix of the sample. Since the qc indicated acceptable recoveries, no further action was taken.

E. Internal Standards:

This method does not require the use of internal standards.

F. Samples:

Sample analysis proceeded normally.

Data was collected using dual column analysis, however only the primary column results were reported since there were no positive values above the MDL. Project specific RLs were used per client request.

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

SIGNED: _____ **DATE:** 2-23-04

W:\SV Naratives\Cecil Narratives\2402125_8082.doc

PCB ORGANIC CROSS REFERENCE TABLE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Method: 8082

EPA Sample No	Lab Sample ID
57285TS040212	240212501

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Sample Data

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1

PCB ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 240212501 Lab File ID: 125-01.D

Sample wt/vol: 33.24 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 10 Date Extracted: 02/17/04

Level:(low/med) LOW Date Analyzed: 02/19/04 Time: 2351

PercentSolids: 33.1 decanted : Dilution Factor: 1

Extraction: SONC Station ID: Waste Character Method: 8082

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
12674-11-2	Aroclor-1016	45	U
11096-82-5	Aroclor-1260	45	U
11104-28-2	Aroclor-1221	450	U
11141-16-5	Aroclor-1232	450	U
53469-21-9	Aroclor-1242	450	U
12672-29-6	Aroclor-1248	450	U
11097-69-1	Aroclor-1254	450	U

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

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Form I

QC Summary

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PCB ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

6894BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 129792 Lab File ID: 6894BLK.D

Sample wt/vol: 33.04 Units: G Date Received: 02/16/04

Concentrated Extract Volume: 10 Date Extracted: 02/16/04

Level:(low/med) LOW Date Analyzed: 02/19/04 Time: 1457

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: SONC Station ID: Method: 8082

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
12674-11-2	Aroclor-1016	15	U
11096-82-5	Aroclor-1260	15	U
11104-28-2	Aroclor-1221	150	U
11141-16-5	Aroclor-1232	150	U
53469-21-9	Aroclor-1242	150	U
12672-29-6	Aroclor-1248	150	U
11097-69-1	Aroclor-1254	150	U

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

270204 1532

Form I

PCB ORGANIC METHOD BLANK SUMMARY

EPA Sample No.: 6894BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID: 6894BLK.D Lab Sample ID: 129792

Instrument ID: SECD02 Date Extracted: 02/16/04

Matrix: SOIL Date Analyzed: 02/19/04

Level:(low/med) LOW Time Analyzed: 1457

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	6895LCS	129800	6895LCS.D	02/19/04	1731
2	6895LCS3	129802	6895LCS3.D	02/19/04	1822
3	57285TS040212	240212501	125-01.D	02/19/04	2351
4	57285TS040212MS	129803	125-01PS.D	02/20/04	0107
5	57285TS040212MSD	129804	125-01PD.D	02/20/04	0133

COMMENTS:

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270204 1532

Form IV

2A

SOIL PCB ORGANIC SURROGATE RECOVERY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402125

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
57285TS040212	46.8						0
57285TS040212MS	32.6 *						1
57285TS040212MSD	18.8 *						1
6894BLK	88.8						0
6895LCS	82.8						0
6895LCS3	83.2						0

Control Limits

S1 = Decachlorobiphenyl 33 - 140

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

Control limit source: (lab/method) METHOD

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Form II

270204 1532

PCB ORGANIC ANALYTICAL SEQUENCE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

GC Column: STX-CLP1 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

Instrument ID: SECD02

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 16.13 S2 :

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
1	STD161691	1962	166CAL62.D	02/13/04	1240	16.13	
2	STD161693	1963	166CAL5.D	02/13/04	1306	16.13	
3	STD161695	1964	166CAL4.D	02/13/04	1331	16.13	
4	STD161697	1965	166CAL3.D	02/13/04	1357	16.13	
5	STD161699	1966	166CAL2.D	02/13/04	1422	16.14	
6	STD161701	1967	166CAL1.D	02/13/04	1448	16.14	
7	STD161703	1968	21CAL3.D	02/13/04	1721		
8	STD161705	1969	32CAL3.D	02/13/04	1747		
9	STD161707	1970	42CAL3.D	02/13/04	1812		
10	STD161709	1971	48CAL3.D	02/13/04	1838		
11	STD161711	1972	54CAL3.D	02/13/04	1903		
12	CCV162086	1965	166CCV1.D	02/19/04	1423	16.06	
13	6894BLK	129792	6894BLK.D	02/19/04	1457	16.07	
14	6895LCS	129800	6895LCS.D	02/19/04	1731	16.06	
15	6895LCS3	129802	6895LCS3.D	02/19/04	1822	16.06	
16	CCV162088	1965	166CCV21.D	02/19/04	2300	16.06	
17	57285TS040212	240212501	125-01.D	02/19/04	2351	16.12	
18	57285TS040212MS	129803	125-01PS.D	02/20/04	0107	18.74 *	
19	57285TS040212MSD	129804	125-01PD.D	02/20/04	0133	18.87 *	
20	CCV162090	1965	166CCV3.D	02/20/04	0920	16.03	

QC LIMITS
S1 = Decachlorobiphenyl (+/- 0.2 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

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270204 1532 FORM VIII

PCB ORGANIC ANALYTICAL SEQUENCE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

GC Column: STX-CLP2 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

Instrument ID: SECD02

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 16.83 S2 :

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	S2 RT	#
1	STD161692	1962	166CAL62.D	02/13/04	1240	16.83			
2	STD161694	1963	166CAL5.D	02/13/04	1306	16.83			
3	STD161696	1964	166CAL4.D	02/13/04	1331	16.83			
4	STD161698	1965	166CAL3.D	02/13/04	1357	16.83			
5	STD161700	1966	166CAL2.D	02/13/04	1422	16.83			
6	STD161702	1967	166CAL1.D	02/13/04	1448	16.83			
7	STD161704	1968	21CAL3.D	02/13/04	1721				
8	STD161706	1969	32CAL3.D	02/13/04	1747				
9	STD161708	1970	42CAL3.D	02/13/04	1812				
10	STD161710	1971	48CAL3.D	02/13/04	1838				
11	STD161712	1972	54CAL3.D	02/13/04	1903				
12	CCV162087	1965	166CCV1.D	02/19/04	1423	16.75			
13	6894BLK	129792	6894BLK.D	02/19/04	1457	16.75			
14	6895LCS	129800	6895LCS.D	02/19/04	1731	16.75			
15	6895LCS3	129802	6895LCS3.D	02/19/04	1822	16.75			
16	CCV162089	1965	166CCV21.D	02/19/04	2300	16.74			
17	57285TS040212	240212501	125-01.D	02/19/04	2351	16.8			
18	57285TS040212MS	129803	125-01PS.D	02/20/04	0107	19.58	*		
19	57285TS040212MSD	129804	125-01PD.D	02/20/04	0133	19.71	*		
20	CCV162091	1965	166CCV3.D	02/20/04	0920	16.71			

QC LIMITS

S1 = Decachlorobiphenyl (+/- 0.2 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

Page 1 of 1

270204 1532 FORM VIII

10

PCB ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

6894BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab Sample ID: 129792 Date(s) Analyzed: 02/19/04 02/19/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

COMPOUND		COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
Decachlorobiphenyl	*	1	16.067	16.137	0.070	136965	0.089	26.9	
		2	16.749	16.828	0.079	175015	0.10	32	17.32

* Column used for quantitation

270204 1532

Form X

10

PCB ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

6895LCS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab Sample ID: 129800 Date(s) Analyzed: 02/19/04 02/19/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

COMPOUND		COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
Aroclor-1016	*	1	8.000	8.000	0.000	194595	0.63	190	
		2	8.000	8.000	0.000	328822	0.61	184	3.21
Aroclor-1260	*	1	17.000	17.000	0.000	313041	0.67	201	
		2	17.000	17.000	0.000	425270	0.63	191	5.10
Decachlorobiphenyl	*	1	16.060	16.137	0.077	127716	0.083	25	
		2	16.748	16.828	0.080	157555	0.095	28.8	14.13

* Column used for quantitation

270204 1532

Form X

10

PCB ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

6895LCS3

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab Sample ID: 129802 Date(s) Analyzed: 02/19/04 02/19/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

COMPOUND		COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
Aroclor-1016	*	1	8.000	8.000	0.000	179996	0.59	180	
		2	8.000	8.000	0.000	296394	0.55	160	11.76
Aroclor-1260	*	1	17.000	17.000	0.000	318306	0.68	210	
		2	17.000	17.000	0.000	428237	0.64	190	10.00
Decachlorobiphenyl	*	1	16.057	16.137	0.080	128079	0.083	25.2	
		2	16.747	16.828	0.081	156783	0.095	28.7	12.99

* Column used for quantitation

270204 1532

Form X

10

PCB ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

57285TS040212MS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab Sample ID: 129803 Date(s) Analyzed: 02/20/04 02/20/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

COMPOUND		COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
Aroclor-1016	*	1	8.000	8.000	0.000	112647	0.37	339	
		2	8.000	8.000	0.000	164767	0.30	272	21.93
Aroclor-1260	*	1	17.000	17.000	0.000	155733	0.33	298	
		2	17.000	17.000	0.000	258422	0.38	344	14.33
Decachlorobiphenyl	*	1	18.743	16.137	2.606	50230	0.032	29.6	
		2	19.576	16.828	2.748	61835	0.037	34	13.84

* Column used for quantitation

10

PCB ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

57285TS040212MSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab Sample ID: 129804 Date(s) Analyzed: 02/20/04 02/20/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

COMPOUND		COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
Aroclor-1016	*	1	8.000	8.000	0.000	26796	0.085	77.4	
		2	8.000	8.000	0.000	41856	0.074	67.4	13.81
Aroclor-1260	*	1	17.000	17.000	0.000	50396	0.11	97.6	
		2	17.000	17.000	0.000	81000	0.12	110	11.95
Decachlorobiphenyl	*	1	18.867	16.137	2.730	28931	0.019	17.1	
		2	19.712	16.828	2.884	38710	0.023	21.3	21.88

* Column used for quantitation

270204 1532

Form X

10

PCB ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab Sample ID: 240212501 Date(s) Analyzed: 02/19/04 02/19/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

COMPOUND		COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
Decachlorobiphenyl	*	1	16.120	16.137	0.017	72059	0.047	42.5	
		2	16.801	16.828	0.027	85370	0.052	46.8	9.63

* Column used for quantitation

270204 1532

Form X

3

PCB ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 6895LCS

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	302	190	62.9		30.0	32 - 142
Aroclor-1260	302	201	66.6		30.0	41 - 134

Spike Recovery: 0 out of 2 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1532

Form III

3

PCB ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

6895LCS3

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	303	180	59.4	5.4	30.0	32 - 142
Aroclor-1260	303	210	69.3	4.4	30.0	41 - 134

Spike Recovery: 0 out of 2 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1532

Form III

3

PCB ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

57285TS040212MS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	SAMPLE CONCENTRATION UG/KG	MS CONCENTRATION UG/KG	MS % REC #	QC LIMITS REC.
Aroclor-1016	909	0	339	37.3	32 - 142
Aroclor-1260	909	0	298	32.8 *	41 - 134

Spike Recovery: 1 out of 2 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS: _____

Form III

270204 1532

3

PCB ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

57285TS040212MSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	MSD CONCENTRATION UG/KG	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	910	77.4	8.5 *	125.6 *	30	32 - 142
Aroclor-1260	910	97.6	10.7 *	101.3 *	30	41 - 134

RPD: 2 out of 2 outside limits

Spike Recovery: 2 out of 2 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

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Standards Data

270204 1532

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RRF0.01 =166CAL1.D RRF0.02 =166CAL2.D
RRF0.1 =166CAL3.D RRF0.2 =166CAL4.D RRF0.4 =166CAL5.D

COMPOUND	RRF0.01	RRF0.02	RRF0.1	RRF0.2	RRF0.4
1016-1	723400	654400	618530	580920	572940
1016-2	309600	302050	291820	258795	259800
1016-3	155300	149800	145860	138845	137452.5
1016-4	320100	303300	282510	263600	252387.5
1016-5	220900	209050	196740	182940	173095
1260-1	526700	465150	428970	386495	382337.5
1260-2	777900	682300	642590	589405	574130
1260-3	775400	694800	667760	640650	646775
1260-4	359700	373800	354120	330090	321172.5
1260-5	362600	325800	335380	316385	311802.5
1221-1			77730		
1221-2			54210		
1221-3			210310		
1221-4			49390		
1221-5			36830		
1232-1			170850		
1232-2			138530		
1232-3			228620		
1232-4			105500		
1232-5			100560		
1242-1			239700		
1242-2			397000		
1242-3			180960		
1242-4			189930		
1242-5			150620		
1248-1			181150		
1248-2			299940		
1248-3			237820		
1248-4			257040		
1248-5			221870		
1254-1			243730		
1254-2			442150		
1254-3			459970		

270204 1532

FORM VI

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RRF0.01 =166CAL1.D RRF0.02 =166CAL2.D
RRF0.1 =166CAL3.D RRF0.2 =166CAL4.D RRF0.4 =166CAL5.D

COMPOUND	RRF0.01	RRF0.02	RRF0.1	RRF0.2	RRF0.4
1254-4			351810		
1254-5			318660		
==========					
Decachlorobiphenyl(SURR)	1881840	1693540	1521276	1412074	1367158.5

270204 1532

FORM VI

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RRF0.5 =166CAL62.D

COMPOUND	RRF0.5				
1016-1	579506				
1016-2	250930				
1016-3	142518				
1016-4	255978				
1016-5	168056				
1260-1	367220				
1260-2	556544				
1260-3	639488				
1260-4	310684				
1260-5	306198				
1221-1					
1221-2					
1221-3					
1221-4					
1221-5					
1232-1					
1232-2					
1232-3					
1232-4					
1232-5					
1242-1					
1242-2					
1242-3					
1242-4					
1242-5					
1248-1					
1248-2					
1248-3					
1248-4					
1248-5					
1254-1					
1254-2					
1254-3					

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID:	RRF0.5 =166CAL62.D				
COMPOUND	RRF0.5				
1254-4					
1254-5					
==========					
Decachlorobiphenyl(SURR)	1371314.8				

270204 1532

FORM VI

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1903

COMPOUND	CURVE	COEFFICIENTS AO	COEFFICIENTS A1	%RSD OR R^2
1016-1	AVRG		621616	9.4
1016-2	AVRG		278832.5	9.1
1016-3	AVRG		144962.58333	4.7
1016-4	AVRG		279645.91667	9.8
1016-5	AVRG		191796.83333	10.8
1260-1	AVRG		426145.41667	14.3
1260-2	AVRG		637144.83333	13.1
1260-3	AVRG		677478.83333	7.7
1260-4	AVRG		341594.41667	7.2
1260-5	AVRG		326360.91667	6.3
1221-1	AVRG		77730	0
1221-2	AVRG		54210	0
1221-3	AVRG		210310	0
1221-4	AVRG		49390	0
1221-5	AVRG		36830	0
1232-1	AVRG		170850	0
1232-2	AVRG		138530	0
1232-3	AVRG		228620	0
1232-4	AVRG		105500	0
1232-5	AVRG		100560	0
1242-1	AVRG		239700	0
1242-2	AVRG		397000	0
1242-3	AVRG		180960	0
1242-4	AVRG		189930	0
1242-5	AVRG		150620	0
1248-1	AVRG		181150	0
1248-2	AVRG		299940	0
1248-3	AVRG		237820	0
1248-4	AVRG		257040	0
1248-5	AVRG		221870	0
1254-1	AVRG		243730	0
1254-2	AVRG		442150	0
1254-3	AVRG		459970	0

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1903

COMPOUND	CURVE	COEFFICIENTS AO	COEFFICIENTS A1	%RSD OR R^2
1254-4	AVRG		351810	0
1254-5	AVRG		318660	0
==========				
Decachlorobiphenyl(SURR)	AVRG		1541200.55	13.5

270204 1532

FORM VI

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RT1: 166CAL1.D RT2: 166CAL2.D
RT3: 166CAL3.D RT4: 166CAL4.D RT5: 166CAL5.D

COMPOUND	RT1	RT2	RT3	RT4	RT5	MIDCAL RT	RT WINDOW FROM	RT WINDOW TO
1016-1	7.317	7.317	7.317	7.320	7.320			
1016-2	7.623	7.627	7.623	7.623	7.627			
1016-3	7.767	7.767	7.767	7.767	7.770			
1016-4	8.540	8.540	8.540	8.540	8.540			
1016-5	9.893	9.897	9.893	9.893	9.897			
1260-1	11.077	11.077	11.077	11.077	11.077			
1260-2	11.627	11.630	11.627	11.627	11.630			
1260-3	12.183	12.183	12.183	12.183	12.183			
1260-4	12.403	12.403	12.403	12.403	12.403			
1260-5	12.887	12.890	12.887	12.887	12.890			
1221-1			4.710					
1221-2			5.137					
1221-3			5.250					
1221-4			6.510					
1221-5			7.320					
1232-1			5.250					
1232-2			6.190					
1232-3			7.320					
1232-4			7.627					
1232-5			8.540					
1242-1			6.190					
1242-2			7.317					
1242-3			7.623					
1242-4			8.540					
1242-5			9.500					
1248-1			8.047					
1248-2			8.537					
1248-3			9.440					
1248-4			9.500					
1248-5			9.907					
1254-1			9.357					
1254-2			9.893					
1254-3			10.710					
1254-4			11.267					
1254-5			11.633					

270204 1532

FORM VI

6

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RT1: 166CAL1.D RT2: 166CAL2.D
RT3: 166CAL3.D RT4: 166CAL4.D RT5: 166CAL5.D

COMPOUND	RT1	RT2	RT3	RT4	RT5	MIDCAL RT	RT WINDOW FROM	RT WINDOW TO
Decachlorobiphenyl(SURR)	16.137	16.137	16.133	16.133	16.133			

270204 1532

FORM VI

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RT6: 166CAL62.D

COMPOUND	RT6					MIDCAL RT	RT WINDOW FROM	TO
1016-1	7.320							
1016-2	7.627							
1016-3	7.770							
1016-4	8.540							
1016-5	9.897							
1260-1	11.077							
1260-2	11.630							
1260-3	12.183							
1260-4	12.403							
1260-5	12.887							
1221-1								
1221-2								
1221-3								
1221-4								
1221-5								
1232-1								
1232-2								
1232-3								
1232-4								
1232-5								
1242-1								
1242-2								
1242-3								
1242-4								
1242-5								
1248-1								
1248-2								
1248-3								
1248-4								
1248-5								
1254-1								
1254-2								
1254-3								
1254-4								
1254-5								

270204 1532

FORM VI

6

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RT6: 166CAL62.D

COMPOUND	RT6					MIDCAL RT	RT WINDOW FROM	TO
Decachlorobiphenyl(SURR)	16.133							

270204 1532

FORM VI

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RRF0.01 =166CAL1.D RRF0.02 =166CAL2.D
RRF0.1 =166CAL3.D RRF0.2 =166CAL4.D RRF0.4 =166CAL5.D

COMPOUND	RRF0.01	RRF0.02	RRF0.1	RRF0.2	RRF0.4
1016-1	1489200	1295250	1172260	1088780	1007255
1016-2	643900	560500	519400	479750	437450
1016-3	361200	350000	320390	302875	286260
1016-4	509700	448600	386450	359460	325167.5
1016-5	322800	294950	280020	258350	234437.5
1260-1	1005000	821850	677750	596920	532725
1260-2	1128600	955850	772910	685630	617997.5
1260-3	1087800	965700	831060	775120	710445
1260-4	671000	586550	490020	453820	409565
1260-5	751000	649000	589010	529005	486482.5
1221-1			168030		
1221-2			122560		
1221-3			412170		
1221-4			59310		
1221-5			68240		
1232-1			328750		
1232-2			267680		
1232-3			458820		
1232-4			210930		
1232-5			150660		
1242-1			432760		
1242-2			777580		
1242-3			353200		
1242-4			269550		
1242-5			287350		
1248-1			446860		
1248-2			508590		
1248-3			482310		
1248-4			539040		
1248-5			554650		
1254-1			481620		
1254-2			542300		
1254-3			429440		

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RRF0.01 =166CAL1.D RRF0.02 =166CAL2.D
RRF0.1 =166CAL3.D RRF0.2 =166CAL4.D RRF0.4 =166CAL5.D

COMPOUND	RRF0.01	RRF0.02	RRF0.1	RRF0.2	RRF0.4
1254-4			793490		
1254-5			586030		
==========					
Decachlorobiphenyl(SURR)	2364080	1985740	1584148	1427909	1297732

270204 1532

FORM VI

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RRF0.5 =166CAL62.D

COMPOUND	RRF0.5				
1016-1	991718				
1016-2	428452				
1016-3	283172				
1016-4	316992				
1016-5	226524				
1260-1	519266				
1260-2	603480				
1260-3	700898				
1260-4	405944				
1260-5	476814				
1221-1					
1221-2					
1221-3					
1221-4					
1221-5					
1232-1					
1232-2					
1232-3					
1232-4					
1232-5					
1242-1					
1242-2					
1242-3					
1242-4					
1242-5					
1248-1					
1248-2					
1248-3					
1248-4					
1248-5					
1254-1					
1254-2					
1254-3					

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID:	RRF0.5 =166CAL62.D				
COMPOUND	RRF0.5				
1254-4					
1254-5					
==========					
Decachlorobiphenyl(SURR)	1276907.6				

270204 1532

FORM VI

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1903

COMPOUND	CURVE	COEFFICIENTS AO	COEFFICIENTS A1	%RSD OR R^2	
1016-1	AVRG		1174077.1667	16.3	
1016-2	AVRG		511575.33333	16	
1016-3	AVRG		317316.16667	10.3	
1016-4	AVRG		391061.58333	19.2	
1016-5	AVRG		269513.58333	13.7	
1260-1	AVRG		692251.83333	27.4	<-
1260-2	AVRG		794077.91667	26.3	<-
1260-3	AVRG		845170.5	18.1	
1260-4	AVRG		502816.5	21	<-
1260-5	AVRG		580218.58333	18.3	
1221-1	AVRG		168030	0	
1221-2	AVRG		122560	0	
1221-3	AVRG		412170	0	
1221-4	AVRG		59310	0	
1221-5	AVRG		68240	0	
1232-1	AVRG		328750	0	
1232-2	AVRG		267680	0	
1232-3	AVRG		458820	0	
1232-4	AVRG		210930	0	
1232-5	AVRG		150660	0	
1242-1	AVRG		432760	0	
1242-2	AVRG		777580	0	
1242-3	AVRG		353200	0	
1242-4	AVRG		269550	0	
1242-5	AVRG		287350	0	
1248-1	AVRG		446860	0	
1248-2	AVRG		508590	0	
1248-3	AVRG		482310	0	
1248-4	AVRG		539040	0	
1248-5	AVRG		554650	0	
1254-1	AVRG		481620	0	
1254-2	AVRG		542300	0	
1254-3	AVRG		429440	0	

270204 1532

FORM VI

6

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1903

COMPOUND	CURVE	COEFFICIENTS AO	COEFFICIENTS A1	%RSD OR R^2	
1254-4	AVRG		793490	0	
1254-5	AVRG		586030	0	
==========					
Decachlorobiphenyl(SURR)	AVRG		1656086.1	26.2	<-

Average Used: 5.9

270204 1532

FORM VI

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RT1: 166CAL1.D RT2: 166CAL2.D
RT3: 166CAL3.D RT4: 166CAL4.D RT5: 166CAL5.D

COMPOUND	RT1	RT2	RT3	RT4	RT5	MIDCAL RT	RT WINDOW FROM	RT WINDOW TO
1016-1	7.701	7.702	7.701	7.700	7.701			
1016-2	7.998	7.999	7.998	7.997	7.998			
1016-3	8.224	8.225	8.224	8.223	8.223			
1016-4	9.011	9.012	9.010	9.009	9.010			
1016-5	9.883	9.884	9.884	9.883	9.883			
1260-1	11.577	11.577	11.576	11.575	11.576			
1260-2	11.982	11.983	11.981	11.980	11.981			
1260-3	12.684	12.685	12.684	12.683	12.683			
1260-4	12.856	12.857	12.856	12.854	12.855			
1260-5	13.430	13.431	13.430	13.428	13.429			
1221-1			5.081					
1221-2			5.463					
1221-3			5.621					
1221-4			6.773					
1221-5			7.702					
1232-1			5.621					
1232-2			6.640					
1232-3			7.702					
1232-4			7.999					
1232-5			9.012					
1242-1			6.639					
1242-2			7.700					
1242-3			7.997					
1242-4			9.009					
1242-5			9.891					
1248-1			9.009					
1248-2			9.265					
1248-3			9.795					
1248-4			9.889					
1248-5			10.354					
1254-1			9.883					
1254-2			10.266					
1254-3			10.961					
1254-4			11.191					
1254-5			11.636					

270204 1532

FORM VI

6

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RT1: 166CAL1.D RT2: 166CAL2.D
RT3: 166CAL3.D RT4: 166CAL4.D RT5: 166CAL5.D

COMPOUND	RT1	RT2	RT3	RT4	RT5	MIDCAL RT	RT WINDOW FROM	RT WINDOW TO
Decachlorobiphenyl(SURR)	16.828	16.828	16.828	16.826	16.827			

270204 1532

FORM VI

6

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RT6: 166CAL62.D

COMPOUND	RT6					MIDCAL RT	RT WINDOW FROM	TO
1016-1	7.701							
1016-2	7.998							
1016-3	8.223							
1016-4	9.009							
1016-5	9.883							
1260-1	11.575							
1260-2	11.980							
1260-3	12.683							
1260-4	12.854							
1260-5	13.428							
1221-1								
1221-2								
1221-3								
1221-4								
1221-5								
1232-1								
1232-2								
1232-3								
1232-4								
1232-5								
1242-1								
1242-2								
1242-3								
1242-4								
1242-5								
1248-1								
1248-2								
1248-3								
1248-4								
1248-5								
1254-1								
1254-2								
1254-3								
1254-4								
1254-5								

270204 1532

FORM VI

6

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RT6: 166CAL62.D

COMPOUND	RT6					MIDCAL RT	RT WINDOW FROM	TO
Decachlorobiphenyl(SURR)	16.827							

270204 1532

FORM VI

7

PCB ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 CalibrationDate: 02/19/04 Time: 1423

CCV ID: CCV162086 Lab File ID: 166CCV1.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.1	%D	
1016-1	621616	600470	3.4	
1016-2	278832.5	259730	6.9	
1016-3	144962.58	130950	9.7	
1016-4	279645.92	255110	8.8	
1016-5	191796.83	178050	7.2	
1260-1	426145.42	391890	8.0	
1260-2	637144.83	598780	6.0	
1260-3	677478.83	609100	10.1	
1260-4	341594.42	322800	5.5	
1260-5	326360.92	301590	7.6	
==========				
Decachlorobiphenyl(SURR)	1541200.6	1276422	17.2	<-

Average Used: 8.2

270204 1532

FORM VII

7

PCB ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 CalibrationDate: 02/19/04 Time: 1423

CCV ID: CCV162087 Lab File ID: 166CCV1.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.1	%D	
1016-1	1174077.2	1104930	5.9	
1016-2	511575.33	448670	12.3	
1016-3	317316.17	279450	11.9	
1016-4	391061.58	337330	13.7	
1016-5	269513.58	244870	9.1	
1260-1	692251.83	580440	16.2	<-
1260-2	794077.92	685790	13.6	
1260-3	845170.5	730180	13.6	
1260-4	502816.5	445580	11.4	
1260-5	580218.58	498100	14.2	
==========				
Decachlorobiphenyl(SURR)	1656086.1	1369396	17.3	<-

Average Used: 12.7

270204 1532

FORM VII

7

PCB ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 CalibrationDate: 02/19/04 Time: 2300

CCV ID: CCV162088 Lab File ID: 166CCV21.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.1	%D	
1016-1	621616	571410	8.1	
1016-2	278832.5	266060	4.6	
1016-3	144962.58	147660	1.9	
1016-4	279645.92	261700	6.4	
1016-5	191796.83	193350	0.8	
1260-1	426145.42	365690	14.2	
1260-2	637144.83	649530	1.9	
1260-3	677478.83	552290	18.5	<-
1260-4	341594.42	300970	11.9	
1260-5	326360.92	280730	14.0	
==========				
Decachlorobiphenyl(SURR)	1541200.6	1234640	19.9	<-

Average Used: 9.3

270204 1532

FORM VII

7

PCB ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 CalibrationDate: 02/19/04 Time: 2300

CCV ID: CCV162089 Lab File ID: 166CCV21.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.1	%D	
1016-1	1174077.2	1056350	10.0	
1016-2	511575.33	462310	9.6	
1016-3	317316.17	280490	11.6	
1016-4	391061.58	343670	12.1	
1016-5	269513.58	240740	10.7	
1260-1	692251.83	575480	16.9	<-
1260-2	794077.92	664210	16.4	<-
1260-3	845170.5	722260	14.5	
1260-4	502816.5	440960	12.3	
1260-5	580218.58	490360	15.5	<-
==========				
Decachlorobiphenyl(SURR)	1656086.1	1387248	16.2	<-

Average Used: 13.3

270204 1532

FORM VII

PCB ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 CalibrationDate: 02/20/04 Time: 0920

CCV ID: CCV162090 Lab File ID: 166CCV3.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.1	%D	
1016-1	621616	569390	8.4	
1016-2	278832.5	244050	12.5	
1016-3	144962.58	123300	14.9	
1016-4	279645.92	242720	13.2	
1016-5	191796.83	166270	13.3	
1260-1	426145.42	356750	16.3	<-
1260-2	637144.83	551610	13.4	
1260-3	677478.83	578850	14.6	
1260-4	341594.42	288190	15.6	<-
1260-5	326360.92	263970	19.1	<-
==========				
Decachlorobiphenyl(SURR)	1541200.6	1241510	19.4	<-

Average Used: 14.6

270204 1532

FORM VII

7

PCB ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD02 CalibrationDate: 02/20/04 Time: 0920

CCV ID: CCV162091 Lab File ID: 166CCV3.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.1	%D	
1016-1	1174077.2	967110	17.6	<-
1016-2	511575.33	416340	18.6	<-
1016-3	317316.17	257700	18.8	<-
1016-4	391061.58	305460	21.9	<-
1016-5	269513.58	151860	43.7	<-
1260-1	692251.83	562170	18.8	<-
1260-2	794077.92	667160	16.0	<-
1260-3	845170.5	681820	19.3	<-
1260-4	502816.5	394080	21.6	<-
1260-5	580218.58	470010	19.0	<-
==========				
Decachlorobiphenyl(SURR)	1656086.1	1331844	19.6	<-

Average Used: 21.4

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FORM VII

Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402125

METHOD: 8082 **MATRIX:** S

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
Aroclor-1016	32-142	30	32-142	30			
Aroclor-1221	70-130	30	70-130	30			
Aroclor-1232	70-130	30	70-130	30			
Aroclor-1242	70-130	30	70-130	30			
Aroclor-1248	70-130	30	70-130	30			
Aroclor-1254	70-130	30	70-130	30			
Aroclor-1260	41-134	30	41-134	30			
Decachlorobiphenyl							33-140

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GC/ECD HERBICIDE ORGANICS

METHOD 8151

270204 1532

CASE NARRATIVE
GC/ECD SEMIVOLATILE ORGANIC

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

EPA SW846 8151.

IV. PREPARATION

Soil samples were prepared by SW846 EPA 3550 for 8151 semi-volatile analysis.

V. ANALYSIS

A. Calibration:

Continuing calibration standards HCCV12 and HCCV22 failed method criteria due to MCPP failing high for %difference. No MCPP was detected in the sample.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

Sample had low surrogate recovery in the first extract. The sample was re-extracted and similar results were found. Sample matrix might have contributed to the low surrogate recoveries.

Sample 57285TS040212 was recovered below criteria for the following surrogate(s): DCAA at 18.9 % with criteria of (60-130).

Sample 57285TS040212RE1 was recovered below criteria for the following surrogate(s): DCAA at 24.2 % with criteria of (60-130).

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met with the exception of:

CASE NARRATIVE
GC/ECD SEMIVOLATILE ORGANIC

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

LCS 6933LCS1 was analyzed with the soil samples extracted on 02/24/04. The following analyte(s) were recovered below criteria: MCPP at 47.9 % with criteria of (50-125).

LCS 6933LCS2 was analyzed with the soil samples extracted on 02/24/04. All criteria were met. The following analyte(s) exceeded rpd criteria: Dalapon at 88.2 % with criteria of (40), MCPA at 47.6 % with criteria of (40).

These analytes were not detected in the sample.

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

No spikes requested by client.

E. Internal Standards:

All acceptance criteria were met.

F. Samples:

Sample analysis proceeded normally.

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

SIGNED:_____ **DATE:** 2-27-04

W:\SV Naratives\Cecil Narratives\2402125_8151redo.doc

HERBICIDE ORGANIC CROSS REFERENCE TABLE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Method: 8151

EPA Sample No	Lab Sample ID
57285TS040212	240212501
57285TS040212RE1	240212501RE1

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Sample Data

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1

HERBICIDE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 240212501 Lab File ID: 125-1.D

Sample wt/vol: 33.03 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 10 Date Extracted: 02/19/04

Level:(low/med) LOW Date Analyzed: 02/20/04 Time: 2339

PercentSolids: 33.1 decanted : Dilution Factor: 1

Extraction: SONC Station ID: Waste Character Method: 8151

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
1918-00-9	Dicamba	23	U
75-99-0	Dalapon	23	U
93-65-2	MCPP	2290	U
94-74-6	MCPA	2290	U
120-36-5	Dichloroprop	23	U
94-75-7	2,4'-D	23	U
93-72-1	2,4,5-TP (Silvex)	23	U
93-76-5	2,4,5-T	23	U
94-82-6	2,4-DB	23	U
88-85-7	Dinoseb	23	U

1

HERBICIDE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212RE1

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 240212501RE1 Lab File ID: 125-1.D

Sample wt/vol: 33.15 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 10 Date Extracted: 02/19/04

Level:(low/med) LOW Date Analyzed: 02/26/04 Time: 0829

PercentSolids: 33.1 decanted : Dilution Factor: 1

Extraction: SONC Station ID: Waste Character Method: 8151

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
1918-00-9	Dicamba	23	U
75-99-0	Dalapon	23	U
93-65-2	MCPP	2280	U
94-74-6	MCPA	2280	U
120-36-5	Dichloroprop	23	U
94-75-7	2,4'-D	23	U
93-72-1	2,4,5-TP (Silvex)	23	U
93-76-5	2,4,5-T	23	U
94-82-6	2,4-DB	23	U
88-85-7	Dinoseb	23	U

QC Summary

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1

HERBICIDE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

219BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 130096 Lab File ID: 219BLK.D

Sample wt/vol: 33.02 Units: G Date Received: 02/19/04

Concentrated Extract Volume: 10 Date Extracted: 02/19/04

Level:(low/med) LOW Date Analyzed: 02/20/04 Time: 2106

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: SONC Station ID: Method: 8151

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
1918-00-9	Dicamba	7.6	U
75-99-0	Dalapon	7.6	U
93-65-2	MCPP	760	U
94-74-6	MCPA	760	U
120-36-5	Dichloroprop	7.6	U
94-75-7	2,4'-D	7.6	U
93-72-1	2,4,5-TP (Silvex)	7.6	U
93-76-5	2,4,5-T	7.6	U
94-82-6	2,4-DB	7.6	U
88-85-7	Dinoseb	7.6	U

1

HERBICIDE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

6933BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 130693 Lab File ID: 6933BLK.D

Sample wt/vol: 33.21 Units: G Date Received: 02/24/04

Concentrated Extract Volume: 10 Date Extracted: 02/24/04

Level:(low/med) LOW Date Analyzed: 02/26/04 Time: 0556

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: SONC Station ID: Method: 8151

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
1918-00-9	Dicamba	7.6	U
75-99-0	Dalapon	7.6	U
93-65-2	MCPP	755	U
94-74-6	MCPA	755	U
120-36-5	Dichloroprop	7.6	U
94-75-7	2,4'-D	7.6	U
93-72-1	2,4,5-TP (Silvex)	7.6	U
93-76-5	2,4,5-T	7.6	U
94-82-6	2,4-DB	7.6	U
88-85-7	Dinoseb	7.6	U

HERBICIDE ORGANIC METHOD BLANK SUMMARY

EPA Sample No.: 219BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID: 219BLK.D Lab Sample ID: 130096

Instrument ID: SECD01 Date Extracted: 02/19/04

Matrix: SOIL Date Analyzed: 02/20/04

Level:(low/med) LOW Time Analyzed: 2106

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	219LCS2	130098	219LCS2.D	02/20/04	2223
2	219LCS3	130099	219LCS3.D	02/20/04	2301
3	57285TS040212	240212501	125-1.D	02/20/04	2339

COMMENTS:

HERBICIDE ORGANIC METHOD BLANK SUMMARY

EPA Sample No.: 6933BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID: 6933BLK.D Lab Sample ID: 130693

Instrument ID: SECD01 Date Extracted: 02/24/04

Matrix: SOIL Date Analyzed: 02/26/04

Level:(low/med) LOW Time Analyzed: 0556

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	6933LCS1	130694	6933LCS1.D	02/26/04	0634
2	6933LCS2	130695	6933LCS2.D	02/26/04	0713
3	57285TS040212RE1	240212501RE1	125-1.D	02/26/04	0829

COMMENTS:

2A

SOIL HERBICIDE ORGANIC SURROGATE RECOVERY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402125

Column(1): STX-CLP1 ID: 0.32 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
219BLK	63.1						0
219LCS2	80.7						0
219LCS3	83.2						0
57285TS040212	18.9 *						1
57285TS040212RE1	24.2 *						1
6933BLK	66.1						0
6933LCS1	80.7						0
6933LCS2	91.3						0

Control Limits

S1 = DCAA 60 - 130

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

Control limit source: (lab/method) METHOD

Form II

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8A

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID (Standard): HCAL4.D Date Analyzed: 2/18/2004

Instrument ID: SECD01 Time Analyzed: 17:25

GC Column: STX-CLP1 ID: 0.32 (mm)

		IS1 AREA	#	RT	IS2 AREA	#	RT	IS3 AREA	#	RT
	MID CAL STD	652197		13.69						
	UPPER LIMIT	1304394		14.19						
	LOWER LIMIT	326098.5		13.19						
	EPA SAMPLE NO.									
1	219BLK	720333		13.69						
2	219LCS2	837548		13.69						
3	219LCS3	823147		13.69						
4	57285TS040212	638381		13.70						

IS1 = DBOB

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

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FORM VIII

8A

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID (Standard): HCAL4.D Date Analyzed: 2/26/2004

Instrument ID: SECD01 Time Analyzed: 2:44

GC Column: STX-CLP1 ID: 0.32 (mm)

		IS1 AREA	#	RT	IS2 AREA	#	RT	IS3 AREA	#	RT
	MID CAL STD	816780		13.69						
	UPPER LIMIT	1633560		14.19						
	LOWER LIMIT	408390		13.19						
	EPA SAMPLE NO.									
1	6933BLK	775886		13.69						
2	6933LCS1	863154		13.69						
3	6933LCS2	930934		13.69						
4	57285TS040212RE1	743277		13.69						

IS1 = DBOB

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

270204 1532

FORM VIII

HERBICIDE ORGANIC ANALYTICAL SEQUENCE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

GC Column: STX-CLP1 ID: 0.32 (mm) Init. Calib. Date: 02/18/04

Instrument ID: SECD01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 11.32 S2 :

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
1	STD162321	300	HCAL72.D	02/18/04	1530	11.32	
2	STD162320	250	HCAL6.D	02/18/04	1608	11.32	
3	STD162319	200	HCAL5.D	02/18/04	1646	11.32	
4	STD162318	150	HCAL4.D	02/18/04	1725	11.32	
5	STD162317	100	HCAL3.D	02/18/04	1803	11.32	
6	STD162316	50	HCAL2.D	02/18/04	1841	11.32	
7	STD162315	25	HCAL1.D	02/18/04	1920	11.32	
8	SSC162325	150	HSEC.D	02/18/04	1958	11.32	
9	CCV162322	150	HCCV12.D	02/20/04	2028	11.32	
10	219BLK	130096	219BLK.D	02/20/04	2106	11.32	
11	219LCS2	130098	219LCS2.D	02/20/04	2223	11.32	
12	219LCS3	130099	219LCS3.D	02/20/04	2301	11.32	
13	57285TS040212	240212501	125-1.D	02/20/04	2339	11.33	
14	CCV162323	150	HCCV22.D	02/21/04	0524	11.32	

QC LIMITS
S1 = DCAA (+/- 0.2 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

Page 1 of 2

270204 1532 FORM VIII

HERBICIDE ORGANIC ANALYTICAL SEQUENCE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

GC Column: STX-CLP1 ID: 0.32 (mm) Init. Calib. Date: 02/26/04

Instrument ID: SECD01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 11.32 S2 :

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
1	STD163835	300	HCAL72.D	02/26/04	0049	11.32	
2	STD163834	250	HCAL6.D	02/26/04	0128	11.32	
3	STD163833	200	HCAL5.D	02/26/04	0206	11.32	
4	STD163832	150	HCAL4.D	02/26/04	0244	11.32	
5	STD163831	100	HCAL3.D	02/26/04	0323	11.32	
6	STD163830	50	HCAL2.D	02/26/04	0401	11.32	
7	STD163829	25	HCAL1.D	02/26/04	0439	11.32	
8	SSC163837	150	HSECCCV.D	02/26/04	0518	11.32	
9	6933BLK	130693	6933BLK.D	02/26/04	0556	11.32	
10	6933LCS1	130694	6933LCS1.D	02/26/04	0634	11.32	
11	6933LCS2	130695	6933LCS2.D	02/26/04	0713	11.32	
12	57285TS040212RE1	240212501RE1	125-1.D	02/26/04	0829	11.32	
13	CCV163836	150	HCCV11.D	02/26/04	1024	11.32	

S1 = DCAA

QC LIMITS
(+/- 0.2 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

270204 1532

FORM VIII

HERBICIDE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.: 219LCS2

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dicamba	30.3	24.8	81.8		40.0	52 - 148
Dalapon	30.3	15.5	51.2		40.0	37 - 138
MCPP	3030	1570	51.8		40.0	50 - 125
MCPA	3030	2230	73.6		40.0	43 - 139
Dichloroprop	30.3	22.7	74.9		40.0	44 - 148
2,4'-D	30.3	27.2	89.8		40.0	43 - 161
2,4,5-TP (Silvex)	30.3	25.8	85.1		40.0	54 - 150
2,4,5-T	30.3	24.5	80.9		40.0	55 - 155
2,4-DB	30.3	17.7	58.4		40.0	41 - 174
Dinoseb	30.3	26.2	86.5		40.0	18 - 149

Spike Recovery: 0 out of 10 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1532

Form III

HERBICIDE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.: 219LCS3

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dicamba	30.2	27	89.4	8.5	40.0	52 - 148
Dalapon	30.2	15	49.7	3.3	40.0	37 - 138
MCPP	3020	1700	56.3	8.0	40.0	50 - 125
MCPA	3020	2210	73.2	0.9	40.0	43 - 139
Dichloroprop	30.2	21	69.5	7.8	40.0	44 - 148
2,4'-D	30.2	28	92.7	2.9	40.0	43 - 161
2,4,5-TP (Silvex)	30.2	26	86.1	0.8	40.0	54 - 150
2,4,5-T	30.2	24	79.5	2.1	40.0	55 - 155
2,4-DB	30.2	18	59.6	1.7	40.0	41 - 174
Dinoseb	30.2	29	96.0	10.1	40.0	18 - 149

Spike Recovery: 0 out of 10 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1532

Form III

3

HERBICIDE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

6933LCS1

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dicamba	30.3	26	85.8		40.0	52 - 148
Dalapon	30.3	12.8	42.2		40.0	37 - 138
MCPP	3030	1450	47.9 *		40.0	50 - 125
MCPA	3030	2180	71.9		40.0	43 - 139
Dichloroprop	30.3	26.4	87.1		40.0	44 - 148
2,4'-D	30.3	29.8	98.3		40.0	43 - 161
2,4,5-TP (Silvex)	30.3	24.5	80.9		40.0	54 - 150
2,4,5-T	30.3	24.6	81.2		40.0	55 - 155
2,4-DB	30.3	24	79.2		40.0	41 - 174
Dinoseb	30.3	26.3	86.8		40.0	18 - 149

Spike Recovery: 1 out of 10 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1532

Form III

HERBICIDE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.: 6933LCS2

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dicamba	30.3	30	99.0	14.3	40.0	52 - 148
Dalapon	30.3	33	109.0	88.2 *	40.0	37 - 138
MCPP	3030	2040	67.3	33.8	40.0	50 - 125
MCPA	3030	3540	117.0	47.6 *	40.0	43 - 139
Dichloroprop	30.3	32	106.0	19.2	40.0	44 - 148
2,4'-D	30.3	40	132.0	29.2	40.0	43 - 161
2,4,5-TP (Silvex)	30.3	27	89.1	9.7	40.0	54 - 150
2,4,5-T	30.3	26	85.8	5.5	40.0	55 - 155
2,4-DB	30.3	24	79.2	0.0	40.0	41 - 174
Dinoseb	30.3	27	89.1	2.6	40.0	18 - 149

Spike Recovery: 0 out of 10 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1532

Form III

Standards Data

270204 1532

HERBICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD01 Calibration Date: 02/18/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1920

LAB FILE ID: RRF0.025 =HCAL1.D RRF0.05 =HCAL2.D
RRF0.1 =HCAL3.D RRF0.15 =HCAL4.D RRF0.2 =HCAL5.D

COMPOUND	RRF0.025	RRF0.05	RRF0.1	RRF0.15	RRF0.2
Dicamba	0.43728	0.44389	0.41469	0.42305	0.41074
Dalapon	0.18062	0.17946	0.16321	0.16352	0.15649
MCPP	0.00019	0.0003	0.00032	0.00044	0.00044
MCPA	0.00108	0.00093	0.00077	0.0007	0.00065
Dichloroprop	0.25793	0.21613	0.17633	0.16982	0.15731
2,4'-D	0.2083	0.1989	0.18023	0.17666	0.1699
2,4,5-TP (Silvex)	0.64026	0.68068	0.66188	0.68831	0.6779
2,4,5-T	0.70611	0.73439	0.68895	0.69805	0.67721
2,4-DB	0.15336	0.14671	0.12281	0.11406	0.1078
Dinoseb	0.4844	0.47253	0.45239	0.45345	0.45151
==========					
DCAA(SURR)	0.15903	0.15412	0.13854	0.13601	0.12932

270204 1532

FORM VI

HERBICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD01 Calibration Date: 02/18/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1920

LAB FILE ID: RRF0.25 =HCAL6.D RRF0.3 =HCAL72.D

COMPOUND	RRF0.25	RRF0.3			
Dicamba	0.41752	0.3891			
Dalapon	0.16202	0.15005			
MCPP	0.00055	0.00038			
MCPA	0.0007	0.00057			
Dichloroprop	0.15255	0.1283			
2,4'-D	0.17932	0.14737			
2,4,5-TP (Silvex)	0.6899	0.64977			
2,4,5-T	0.68333	0.64162			
2,4-DB	0.10695	0.09855			
Dinoseb	0.43443				
==========					
DCAA(SURR)	0.13267	0.12407			

270204 1532

FORM VI

HERBICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD01 Calibration Date: 02/18/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1920

COMPOUND	CURVE	COEFFICIENTS AO	COEFFICIENTS A1	%RSD OR R^2	
Dicamba	AVRG		0.419467043	4.3	
Dalapon	AVRG		0.165051966	6.8	
MCPP	AVRG		0.000371934	31.1	<-
MCPA	AVRG		0.000771258	23	<-
Dichloroprop	AVRG		0.179768063	24.3	<-
2,4'-D	AVRG		0.180097661	11	
2,4,5-TP (Silvex)	AVRG		0.669813323	2.9	
2,4,5-T	AVRG		0.689951078	4.1	
2,4-DB	AVRG		0.121462563	17.2	
Dinoseb	AVRG		0.45811801	3.9	
==========					
DCAA(SURR)	AVRG		0.139107899	9.3	

Average Used: 12.5

270204 1532

FORM VI

HERBICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD01 Calibration Date: 02/26/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 0439

LAB FILE ID: RRF0.025 =HCAL1.D RRF0.05 =HCAL2.D
RRF0.1 =HCAL3.D RRF0.15 =HCAL4.D RRF0.2 =HCAL5.D

COMPOUND	RRF0.025	RRF0.05	RRF0.1	RRF0.15	RRF0.2
Dicamba	0.38398	0.36984	0.35301	0.36593	0.35243
Dalapon	0.13542	0.1286	0.12042	0.12461	0.11846
MCPP	0.00042	0.0003	0.00048	0.00042	0.00041
MCPA	0.00113	0.00091	0.00067	0.00073	0.00066
Dichloroprop	0.16753	0.14278	0.13014	0.12661	0.11983
2,4'-D	0.17514	0.15788	0.14769	0.14727	0.14127
2,4,5-TP (Silvex)	0.56164	0.55014	0.55474	0.58331	0.56386
2,4,5-T	0.61438	0.59617	0.57216	0.58738	0.5653
2,4-DB	0.08829	0.08218	0.09944	0.09201	0.08863
Dinoseb	0.4587	0.39842	0.38372	0.39068	0.37247
==========					
DCAA(SURR)	0.13302	0.12548	0.11995	0.11789	0.11251

270204 1532

FORM VI

HERBICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD01 Calibration Date: 02/26/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 0439

LAB FILE ID: RRF0.25 =HCAL6.D RRF0.3 =HCAL72.D

COMPOUND	RRF0.25	RRF0.3			
Dicamba	0.35031	0.34108			
Dalapon	0.11856	0.11901			
MCPP	0.00049	0.00033			
MCPA	0.00063	0.00051			
Dichloroprop	0.11402	0.111			
2,4'-D	0.14011	0.13439			
2,4,5-TP (Silvex)	0.56201	0.55487			
2,4,5-T	0.56434	0.55398			
2,4-DB	0.08632	0.08133			
Dinoseb	0.35627				
==========					
DCAA(SURR)	0.11123	0.10816			

270204 1532

FORM VI

HERBICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD01 Calibration Date: 02/26/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 0439

COMPOUND	CURVE	COEFFICIENTS AO	COEFFICIENTS A1	%RSD OR R^2	
Dicamba	AVRG		0.359511356	4	
Dalapon	AVRG		0.123584098	5.2	
MCPP	AVRG		0.000405779	17.3	
MCPA	AVRG		0.000748013	27.8	<-
Dichloroprop	AVRG		0.130273719	15	
2,4'-D	AVRG		0.149108115	9.2	
2,4,5-TP (Silvex)	AVRG		0.561511702	1.9	
2,4,5-T	AVRG		0.579099994	3.7	
2,4-DB	AVRG		0.088312347	7	
Dinoseb	AVRG		0.393375133	9	
DCAA(SURR)	AVRG		0.118320556	7.4	

Average Used: 9.8

270204 1532

FORM VI

HERBICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD01 Calibration Date: 02/18/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1920

LAB FILE ID: RT1: HCAL1.D RT2: HCAL2.D
RT3: HCAL3.D RT4: HCAL4.D RT5: HCAL5.D

COMPOUND	RT1	RT2	RT3	RT4	RT5	MIDCAL RT	RT WINDOW FROM	TO
Dicamba	11.603	11.603	11.603	11.603	11.603			
Dalapon	3.403	3.403	3.403	3.400	3.400			
MCPP	11.913	11.913	11.913	11.913	11.913			
MCPA	12.143	12.140	12.140	12.140	12.140			
Dichloroprop	12.680	12.677	12.677	12.677	12.673			
2,4'-D	13.003	13.003	13.000	13.000	12.997			
2,4,5-TP (Silvex)	14.127	14.127	14.127	14.123	14.123			
2,4,5-T	14.497	14.490	14.490	14.487	14.483			
2,4-DB	15.173	15.170	15.170	15.167	15.163			
Dinoseb	16.487	16.487	16.483	16.483	16.483			
==========								
DCAA(SURR)	11.323	11.323	11.323	11.320	11.320			

270204 1532

FORM VI

6

HERBICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD01 Calibration Date: 02/18/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1920

LAB FILE ID: RT6: HCAL6.D RT7: HCAL72.D

COMPOUND	RT6	RT7				MIDCAL RT	RT WINDOW FROM	TO
Dicamba	11.603	11.603						
Dalapon	3.403	3.400						
MCPP	11.913	11.913						
MCPA	12.140	12.140						
Dichloroprop	12.677	12.677						
2,4'-D	12.997	12.997						
2,4,5-TP (Silvex)	14.123	14.123						
2,4,5-T	14.483	14.483						
2,4-DB	15.163	15.163						
Dinoseb	16.483							
DCAA(SURR)	11.320	11.320						

270204 1532

FORM VI

HERBICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD01 Calibration Date: 02/26/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 0439

LAB FILE ID: RT1: HCAL1.D RT2: HCAL2.D
RT3: HCAL3.D RT4: HCAL4.D RT5: HCAL5.D

COMPOUND	RT1	RT2	RT3	RT4	RT5	MIDCAL RT	RT WINDOW FROM	TO
Dicamba	11.600	11.600	11.600	11.600	11.597			
Dalapon	3.420	3.420	3.420	3.420	3.417			
MCPP	11.917	11.910	11.910	11.907	11.907			
MCPA	12.140	12.137	12.133	12.133	12.133			
Dichloroprop	12.677	12.673	12.673	12.673	12.670			
2,4'-D	13.007	13.003	13.000	12.997	12.993			
2,4,5-TP (Silvex)	14.127	14.123	14.120	14.120	14.120			
2,4,5-T	14.497	14.490	14.487	14.487	14.483			
2,4-DB	15.177	15.170	15.167	15.167	15.160			
Dinoseb	16.483	16.480	16.480	16.480	16.477			
DCAA(SURR)	11.323	11.320	11.320	11.317	11.317			

270204 1532

FORM VI

HERBICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD01 Calibration Date: 02/26/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 0439

LAB FILE ID: RT6: HCAL6.D RT7: HCAL72.D

COMPOUND	RT6	RT7				MIDCAL RT	RT WINDOW FROM	TO
Dicamba	11.597	11.597						
Dalapon	3.420	3.417						
MCPP	11.910	11.910						
MCPA	12.137	12.137						
Dichloroprop	12.670	12.670						
2,4'-D	12.993	12.993						
2,4,5-TP (Silvex)	14.120	14.117						
2,4,5-T	14.480	14.480						
2,4-DB	15.160	15.157						
Dinoseb	16.477							
DCAA(SURR)	11.317	11.317						

270204 1532

FORM VI

7SSC

HERBICIDE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD01 CalibrationDate: 02/18/04 Time: 1958

CCV ID: SSC162325 Lab File ID: HSEC.D Init. Calib. Date: 02/18/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF	%D	
Dicamba	0.41947	0.39267	6.4	
Dalapon	0.16505	0.14984	9.2	
MCPP	0.00037	0.00045	21.6	<-
MCPA	0.00077	0.00077	0.0	
Dichloroprop	0.17976	0.16045	10.7	
2,4'-D	0.1801	0.16924	6.0	
2,4,5-TP (Silvex)	0.66981	0.62769	6.3	
2,4,5-T	0.68995	0.6339	8.1	
2,4-DB	0.12146	0.10292	15.3	<-
Dinoseb	0.45812	0.39826	13.1	
DCAA(SURR)	0.13911	0.13712	1.4	

Average Used: 8.9

270204 1532

FORM VII

7

HERBICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD01 CalibrationDate: 02/20/04 Time: 2028

CCV ID: CCV162322 Lab File ID: HCCV12.D Init. Calib. Date: 02/18/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.15	%D	
Dicamba	0.41947	0.37566	10.4	
Dalapon	0.16505	0.13951	15.5	<-
MCPP	0.00037	0.00062	67.6	<-
MCPA	0.00077	0.0009	16.9	<-
Dichloroprop	0.17976	0.15287	15.0	
2,4'-D	0.1801	0.16031	11.0	
2,4,5-TP (Silvex)	0.66981	0.60331	9.9	
2,4,5-T	0.68995	0.59758	13.4	
2,4-DB	0.12146	0.08725	28.2	<-
Dinoseb	0.45812	0.46914	2.4	
==========				
DCAA(SURR)	0.13911	0.12869	7.5	

Average Used: 18

270204 1532

FORM VII

7

HERBICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD01 CalibrationDate: 02/21/04 Time: 0524

CCV ID: CCV162323 Lab File ID: HCCV22.D Init. Calib. Date: 02/18/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.15	%D	
Dicamba	0.41947	0.38153	9.0	
Dalapon	0.16505	0.14333	13.2	
MCPP	0.00037	0.00078	110.8	<-
MCPA	0.00077	0.00089	15.6	<-
Dichloroprop	0.17976	0.14795	17.7	<-
2,4'-D	0.1801	0.15661	13.0	
2,4,5-TP (Silvex)	0.66981	0.60212	10.1	
2,4,5-T	0.68995	0.59984	13.1	
2,4-DB	0.12146	0.09206	24.2	<-
Dinoseb	0.45812	0.46167	0.8	
==========				
DCAA(SURR)	0.13911	0.12697	8.7	

Average Used: 21.5

270204 1532

FORM VII

7SSC

HERBICIDE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD01 CalibrationDate: 02/26/04 Time: 0518

CCV ID: SSC163837 Lab File ID: HSECCCV.D Init. Calib. Date: 02/26/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF	%D	
Dicamba	0.35951	0.34011	5.4	
Dalapon	0.12358	0.11792	4.6	
MCPP	0.0004	0.00035	12.5	
MCPA	0.00075	0.00061	18.7	<-
Dichloroprop	0.13027	0.11566	11.2	
2,4'-D	0.14911	0.13556	9.1	
2,4,5-TP (Silvex)	0.56151	0.53687	4.4	
2,4,5-T	0.5791	0.5418	6.4	
2,4-DB	0.08831	0.09432	6.8	
Dinoseb	0.39338	0.35271	10.3	
DCAA(SURR)	0.11832	0.11617	1.8	

Average Used: 8.3

270204 1532

FORM VII

7

HERBICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SECD01 CalibrationDate: 02/26/04 Time: 1024

CCV ID: CCV163836 Lab File ID: HCCV11.D Init. Calib. Date: 02/26/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.15	%D
Dicamba	0.35951	0.35824	0.4
Dalapon	0.12358	0.12642	2.3
MCPP	0.0004	0.00041	2.5
MCPA	0.00075	0.00071	5.3
Dichloroprop	0.13027	0.12553	3.6
2,4'-D	0.14911	0.14477	2.9
2,4,5-TP (Silvex)	0.56151	0.57678	2.7
2,4,5-T	0.5791	0.57504	0.7
2,4-DB	0.08831	0.09217	4.4
Dinoseb	0.39338	0.43002	9.3
==========			
DCAA(SURR)	0.11832	0.11251	4.9

270204 1532

FORM VII

Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402125

METHOD: 8151 **MATRIX:** S

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
2,4,5-T	55-155	40	55-155	40			
2,4,5-TP (Silvex)	54-150	40	54-150	40			
2,4'-D	43-161	40	43-161	40			
2,4-DB	41-174	40	41-174	40			
Dalapon	37-138	40	37-138	40			
DCAA							60-130
Dicamba	52-148	40	52-148	40			
Dichloroprop	44-148	40	44-148	40			
Dinoseb	18-149	40	18-149	40			
MCPA	43-139	40	43-139	40			
MCPP	50-125	40	50-125	40			

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GC FL-PRO ORGANICS

METHOD FL-PRO

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

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

Florida DEP/FL PRO

IV. PREPARATION

Soil samples were prepared by FL PRO for semi-volatile analysis. A re-extraction was necessary due to failing QC in the first batch.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met with the exception of:
Sample 021804SBLK was recovered below criteria for the following surrogate(s): C39 Surrogate at 42.9 % with criteria of (60-118), o-Terphenyl Surrogate at 55 % with criteria of (62-109). The batch was re-extracted with a new set of QC due to surrogate and spike failures.

Sample 021804SLCS was recovered below criteria for the following surrogate(s): C39 Surrogate at 42.5 % with criteria of (60-118). The batch was re-extracted with a new set of QC due to surrogate and spike failures.

The following samples had surrogates that were diluted out: 57285TS040212 57285TS040212MS 57285TS040212MSD

D. Spikes:

1. Laboratory Control Spikes (LCS)

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

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

All acceptance criteria were met.

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

A client requested MS/SD set was analyzed.
All percent recovery and relative percent difference (RPD) criteria were met.

E. Internal Standards:

This method does not require the use of internal standards.

F. Samples:

Sample analysis proceeded normally.
Sample 57285TS040212 required a 1:20 dilution due to high concentration of the TPH analyte.

The following sample(s) had concentration changes between Prelims and final report.
57285TS040212, C39 Surrogate old value: 20 new value: 0 MG/KG
57285TS040212, o-Terphenyl Surrogate old value: 7.3 new value: 0 MG/KG
57285TS040212, TPH old value: 4500 new value: 13200 MG/KG

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

SIGNED: _____ **DATE:** 2-26-04

W:\SV Naratives\Cecil Narratives\2402125_FL-PRO.doc

FL-PRO ORGANIC CROSS REFERENCE TABLE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Method: FL-PRO

EPA Sample No	Lab Sample ID
57285TS040212	240212501

270204 1532

Sample Data

270204 1532

1

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 240212501 Lab File ID: 125-1D20.D

Sample wt/vol: 25.19 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 2 Date Extracted: 02/19/04

Level:(low/med) LOW Date Analyzed: 02/25/04 Time: 1726

PercentSolids: 33.1 decanted : Dilution Factor: 20

Extraction: SONC Station ID: Waste Character Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: MG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
5289290-40-0	TPH	13200	

270204 1532

Form I

QC Summary

270204 1533

1

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

021804SBLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 130035 Lab File ID: 0218BLK.D

Sample wt/vol: 25.23 Units: G Date Received: 02/19/04

Concentrated Extract Volume: 2 Date Extracted: 02/19/04

Level:(low/med) LOW Date Analyzed: 02/19/04 Time: 1700

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: SONC Station ID: Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: MG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
5289290-40-0	TPH	13.9	U

270204 1533

Form I

1

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

022304SBLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 130552 Lab File ID: 0223BLK.D

Sample wt/vol: 25.35 Units: G Date Received: 02/23/04

Concentrated Extract Volume: 2 Date Extracted: 02/23/04

Level:(low/med) LOW Date Analyzed: 02/25/04 Time: 1528

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: SONC Station ID: Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: MG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
5289290-40-0	TPH	13.8	U

270204 1533

Form I

FL-PRO ORGANIC METHOD BLANK SUMMARY

EPA Sample No.: 021804SBLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID: 0218BLK.D Lab Sample ID: 130035

Instrument ID: SFID02 Date Extracted: 02/19/04

Matrix: SOIL Date Analyzed: 02/19/04

Level:(low/med) LOW Time Analyzed: 1700

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	021804SLCS	130036	0218LCS.D	02/19/04	1729

COMMENTS:

FL-PRO ORGANIC METHOD BLANK SUMMARY

EPA Sample No.

022304SBLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Lab File ID: 0223BLK.D Lab Sample ID: 130552

Instrument ID: SFID02 Date Extracted: 02/23/04

Matrix: SOIL Date Analyzed: 02/25/04

Level:(low/med) LOW Time Analyzed: 1528

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	022304SLCS2	130554	0223LCS2.D	02/25/04	1627
2	022304SLCSD	130555	0223LCSD.D	02/25/04	1656
3	57285TS040212	240212501	125-1D20.D	02/25/04	1726
4	57285TS040212MS	130556	125-SD20.D	02/25/04	1755
5	57285TS040212MSD	130557	125-DD20.D	02/25/04	1824

COMMENTS:

2A

SOIL FL-PRO ORGANIC SURROGATE RECOVERY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402125

Column(1): RTX-5 ID: 0.53 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
021804SBLK	55.0 *	42.9 *					2
021804SLCS	85.0	42.5 *					1
022304SBLK	82.1	22.9 *					1
022304SLCS2	95.0	70.8					0
022304SLCSD	85.0	65.5					0
57285TS040212	0.0 D	0.0 D					0
57285TS040212MS	0.0 D	0.0 D					0
57285TS040212MSD	0.0 D	0.0 D					0

Control Limits

S1	=	o-Terphenyl Surrogate	62 - 109
S2	=	C39 Surrogate	60 - 118

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out
Control limit source: (lab/method) METHOD

Form II

270204 1533

FL-PRO ORGANIC ANALYTICAL SEQUENCE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

GC Column: RTX-5 ID: 0.53 (mm) Init. Calib. Date: 02/07/04

Instrument ID: SFID02

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : S2 :

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
1	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/06/04	1818		
2	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/06/04	1916		
3	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/06/04	2014		
4	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/06/04	2113		
5	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/06/04	2211		
6	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/06/04	2310		
7	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/07/04	0008		
8	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/19/04	1503		
9	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/19/04	1532		
10	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/19/04	1601		
11	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/19/04	1631		
12	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/19/04	1700		
13	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/19/04	1729		
14	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/19/04	1759		
15	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/19/04	1828		
16	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/19/04	1858		
17	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/19/04	1927		
18	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/19/04	1956		
19	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/19/04	2025		
20	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/19/04	2054		
21	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/19/04	2123		
22	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/19/04	2152		
23	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/19/04	2221		
24	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/19/04	2250		
25	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/19/04	2319		
26	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/19/04	2348		

			QC LIMITS
S1	=	o-Terphenyl Surrogate	(+/- 0.07 MINUTES)
S2	=	C39 Surrogate	(+/- 0.3 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

FL-PRO ORGANIC ANALYTICAL SEQUENCE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

GC Column: RTX-5 ID: 0.53 (mm) Init. Calib. Date: 02/07/04

Instrument ID: SFID02

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : S2 :

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	S2 RT	#
27	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/20/04	0017				
28	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/20/04	0046				
29	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/20/04	0116				
30	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/20/04	0145				
31	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/20/04	0214				
32	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/20/04	0243				
33	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/20/04	0313				
34	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/20/04	0342				
35	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/20/04	0411				
36	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/20/04	0440				
37	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/20/04	0509				
38	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/20/04	0538				
39	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/20/04	0607				
40	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/20/04	0636				
41	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/20/04	0705				
42	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/20/04	0734				
43	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/20/04	0803				
44	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/20/04	0832				
45	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/20/04	0901				
46	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/20/04	0930				

			QC LIMITS
S1	=	o-Terphenyl Surrogate	(+/- 0.07 MINUTES)
S2	=	C39 Surrogate	(+/- 0.3 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

FL-PRO ORGANIC ANALYTICAL SEQUENCE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

GC Column: RTX-5 ID: 0.53 (mm) Init. Calib. Date: 02/24/04

Instrument ID: SFID02

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 4.74 S2 : 12.64

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	S2 RT	#
1	STD163479	SV2054	CAL6.D	02/24/04	1542	4.74		12.71	
2	STD163478	SV2053	CAL5.D	02/24/04	1611	4.74		12.67	
3	STD163477	SV2052	CAL4.D	02/24/04	1641	4.73		12.68	
4	STD163485	SV2069	CAL3.D	02/24/04	1710	4.74		12.64	
5	STD163476	SV2050	CAL2.D	02/24/04	1740	4.77		12.78	
6	STD163475	SV2049	CAL1.D	02/24/04	1809	4.74		12.67	
7	STD163480	SV2055	SECCCV.D	02/24/04	1838	4.76		12.77	
8	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	1400				
9	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	1429				
10	CCV163482	SV2055	CCV12.D	02/25/04	1459	4.75		12.71	
11	022304SBLK	130552	0223BLK.D	02/25/04	1528	4.73		12.59	
12	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	1557				
13	022304SLCS2	130554	0223LCS2.D	02/25/04	1627	4.74		12.67	
14	022304SLCSD	130555	0223LCSD.D	02/25/04	1656	4.74		12.63	
15	57285TS040212	240212501	125-1D20.D	02/25/04	1726	0	*	0	*
16	57285TS040212MS	130556	125-SD20.D	02/25/04	1755	0	*	0	*
17	57285TS040212MSD	130557	125-DD20.D	02/25/04	1824	0	*	0	*
18	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	1853				
19	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	1923				
20	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	1952				
21	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	2021				
22	CCV163484	SV2055	CCV22.D	02/25/04	2050	4.74		12.67	
23	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	2120				
24	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	2149				
25	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	2218				
26	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	2248				

QC LIMITS

S1 = o-Terphenyl Surrogate (+/- 0.07 MINUTES)
S2 = C39 Surrogate (+/- 0.3 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

FL-PRO ORGANIC ANALYTICAL SEQUENCE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

GC Column: RTX-5 ID: 0.53 (mm) Init. Calib. Date: 02/24/04

Instrument ID: SFID02

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 4.74 S2 : 12.64

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	S2 RT	#
27	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	2317				
28	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	2346				
29	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/26/04	0015				
30	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/26/04	0045				
31	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/26/04	0114				
32	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/26/04	0143				
33	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/26/04	0212				
34	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/26/04	0242				
35	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/26/04	0311				
36	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/26/04	0340				
37	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/26/04	0409				
38	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/26/04	0438				
39	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/26/04	0507				
40	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/26/04	0536				
41	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/26/04	0606				
42	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/26/04	0635				
43	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/26/04	0704				
44	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/26/04	0733				
45	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/26/04	0802				
46	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/26/04	0831				
47	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/26/04	0900				
48	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/26/04	0930				

			QC LIMITS
S1	=	o-Terphenyl Surrogate	(+/- 0.07 MINUTES)
S2	=	C39 Surrogate	(+/- 0.3 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

FL-PRO ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021804SLCS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED MG/KG	LCS CONCENTRATION MG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
TPH	136	94	69.1		25.0	63 - 153

Spike Recovery: 0 out of 1 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

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Form III

FL-PRO ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

022304SLCS2

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED MG/KG	LCS CONCENTRATION MG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
TPH	136	120	88.2		25.0	63 - 153

Spike Recovery: 0 out of 1 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

270204 1533

Form III

FL-PRO ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

022304SLCSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED MG/KG	LCS CONCENTRATION MG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
TPH	135	112	83.0	6.9	25.0	63 - 153

Spike Recovery: 0 out of 1 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

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Form III

3

FL-PRO ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

57285TS040212MS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG No.: 2402125

COMPOUND	SPIKE ADDED MG/KG	SAMPLE CONCENTRATION MG/KG	MS CONCENTRATION MG/KG	MS % REC #	QC LIMITS REC.
TPH	407	13200	13800	147.0	62 - 204

Spike Recovery: 0 out of 1 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS: _____

Form III

270204 1533

3

FL-PRO ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

57285TS040212MSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. _____ SAS No: _____ SDG No.: 2402125

COMPOUND	SPIKE ADDED MG/KG	MSD CONCENTRATION MG/KG	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
TPH	405	11800	-345.7 *	15.6	25	62 - 204

RPD: 0 out of 1 outside limits

Spike Recovery: 1 out of 1 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS: _____

Form III

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Standards Data

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FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SFID02 Calibration Date: 02/24/04

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time: 1838

LAB FILE ID: RRF0.17 =CAL1.D RRF0.85 =CAL2.D
RRF1.7 =CAL3.D RRF2.55 =CAL4.D RRF5.1 =CAL5.D

COMPOUND	RRF0.17	RRF0.85	RRF1.7	RRF2.55	RRF5.1
TPH	27675952.941	29533282.353	27820738.824	25630030.98	28915992.353
==========					
o-Terphenyl Surrogate(SURR)	30740150	31688360	32684480	27763310	33312910
C39 Surrogate(SURR)	26074246.667	26722266.667	24591980	23501080	25908713.333

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FORM VI

FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SFID02 Calibration Date: 02/24/04

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time: 1838

LAB FILE ID: RRF6.8 =CAL6.D					
COMPOUND	RRF6.8				
TPH					
==========					
o-Terphenyl Surrogate(SURR)	31568620				
C39 Surrogate(SURR)	22959986.667				

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FORM VI

FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SFID02 Calibration Date: 02/24/04

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time: 1838

COMPOUND	CURVE	COEFFICIENTS AO	COEFFICIENTS A1	%RSD OR R^2
TPH	LINR		3.532885E-08	0.99506
==========				
o-Terphenyl Surrogate(SURR)	AVRG		31292971.667	6.2
C39 Surrogate(SURR)	AVRG		24959712.222	6.1

FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SFID02 Calibration Date: 02/24/04

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time: 1838

LAB FILE ID: RT1: CAL1.D RT2: CAL2.D
RT3: CAL3.D RT4: CAL4.D RT5: CAL5.D

COMPOUND	RT1	RT2	RT3	RT4	RT5	MIDCAL RT	RT WINDOW FROM	RT WINDOW TO
TPH	7.950	7.950	7.950	7.950	7.950			
==========								
o-Terphenyl Surrogate(SURR)	4.737	4.770	4.763	4.733	4.737			
C39 Surrogate(SURR)	12.673	12.780	12.773	12.677	12.673			

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FORM VI

6

FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SFID02 Calibration Date: 02/24/04

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time: 1838

LAB FILE ID: RT6: CAL6.D

COMPOUND	RT6					MIDCAL RT	RT WINDOW FROM	TO
TPH								
==========								
o-Terphenyl Surrogate(SURR)	4.743							
C39 Surrogate(SURR)	12.713							

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FORM VI

FL-PRO ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SFID02 CalibrationDate: 02/25/04 Time: 1459

Lab File ID: CCV12.D Init. Calib. Date: 02/24/04

GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND	SAMPLE AMOUNT	1.7 AMOUNT	CURVE	%D	MAX %D
TPH	1.73	1.7	LINR	1.8	25.0
==========					
o-Terphenyl Surrogate(SURR)	0.0966	0.1	AVRG	3.4	25.0
C39 Surrogate(SURR)	0.151	0.15	AVRG	0.7	25.0

FL-PRO ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID: SFID02 CalibrationDate: 02/25/04 Time: 2050

Lab File ID: CCV22.D Init. Calib. Date: 02/24/04

GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND	SAMPLE AMOUNT	1.7 AMOUNT	CURVE	%D	MAX %D
TPH	1.96	1.7	LINR	15.3	25.0
==========					
C39 Surrogate(SURR)	0.165	0.15	AVRG	10.0	25.0
o-Terphenyl Surrogate(SURR)	0.106	0.1	AVRG	6.0	25.0

Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402125

METHOD: FL-PRO **MATRIX:** S

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
C39 Surrogate							60-118
o-Terphenyl Surrogate							62-109
TPH	63-153	25	62-204	25			

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Inorganics

270204 1533

Inorganic Data Qualifiers

C (Concentration) Qualifier - Entries and their meanings are:

B The reported value obtained was less than the RL but greater than or equal to the MDL.

E The reported value obtained was over calibration or linear range.

U The reported value obtained was less than the MDL or was not detected.

Q Qualifier - Entries and their meanings are:

U The reported value is estimated because of interference. An explanatory comment must be included under "Comments" on the Cover Page if the problem applies to all samples in this data package or on the individual FORM 1 if it is an isolated problem.

M Duplicate injection precision was not met (two analyses of the same sample did not agree).

N Spiked sample recovery not within control limits.

E Serial Dilution percent difference not within control limits.

S The reported value was determined by the Method of Standard Additions (MSA).

W Post-digestion spike for Furnace AA analysis is out of control limits (85-115%) while sample absorbance is less than 50% of spike absorbance.

***** Duplicate analysis not within control limits.

+ Correlation coefficient for the MSA is less than 0.995.

X The data is flagged as rejected by analyst utilizing analytical judgement.

Entering "S", "W", or "+" is mutually exclusive. No combination of these qualifiers can apear in the same field.

M (Method) Qualifier - Enter one of the following:

P ICP
A Flame AA
F Furnace AA
CV Manual Cold Vapor AA
TC Total Organic Carbon
AS Semi-Automated Spectrophotometric
CA Midi-Distillation Spectrophotometric
T Titrimetric
C Manual Spectrophotometric
GR Gravimetric
NR Analyte was not required by your lab

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Inorganic Sample ID Qualifiers

The qualifiers that may be appended to the lab sample ID and/or the client sample ID for inorganic analysis are defined below:

DL Diluted reanalysis. Indicates that the results of the original analysis of the sample contained compounds that exceeded the calibration range. The sample was diluted and reanalyzed. May be followed by a digit to indicate multiple dilutions of the sample. The results of more than one diluted reanalysis may be reported.

R Reanalysis. The extract was reanalyzed without re-extraction. The "R" is not used if the sample was also re-extracted. May be followed by a digit to indicate multiple reanalysis of the sample at the same dilution.

RE Re-extracted. The extract was reanalyzed with re-extraction. May be followed by a digit to indicate multiple re-extraction of the same sample at the same dilution.

MS Matrix spike (may be followed by a digit to indicate multiple matrix within a sample set).

SD Matrix spike duplicate (may be followed by a digit to indicate multiple matrix spike duplicate within a sample set).

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METALS DATA PACKAGE
TOTALS

270204 1533

CASE NARRATIVE
METALS

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHOD

Analyses were performed according to PEL Laboratory's Standard Operating Procedures and EPA Method 6010B for ICP metals.

IV. PREPARATION

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

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

1. Calibration Blanks:

All acceptance criteria were met. No action required. The following ICB/CCBs had element concentrations below the RL:

ICB130143 was analyzed on 02/19/04 15:45. The following analytes were detected below RL: Aluminum at -27.2 ug/L, Antimony at -1.41 ug/L, Cadmium at -0.216 ug/L, Iron at -21 ug/L, Magnesium at -22.2 ug/L, Sodium at 27.1 ug/L, Thallium at 1.89 ug/L.

CCB130176 was analyzed on 02/19/04 22:19. The following analytes were detected below RL: Cadmium at -0.265 ug/L, Iron at -34.7 ug/L, Magnesium at -30.1 ug/L, Nickel at -0.658 ug/L, Sodium at 27.1 ug/L, Zinc at 0.79 ug/L.

CCB130177 was analyzed on 02/19/04 23:31. The following analytes were detected below RL: Aluminum at -30 ug/L, Antimony at -1.42 ug/L, Cadmium at -0.241 ug/L, Iron at -32.3 ug/L, Magnesium at -29 ug/L, Sodium at 22.5 ug/L, Zinc at 9.43 ug/L.

CASE NARRATIVE
METALS

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

CCB130178 was analyzed on 02/20/04 00:21. The following analytes were detected below RL: Aluminum at -32.3 ug/L, Antimony at -1.22 ug/L, Calcium at -33.3 ug/L, Iron at -36.6 ug/L, Magnesium at -28.9 ug/L, Sodium at 22.5 ug/L, Thallium at 1.69 ug/L.

ICB130649 was analyzed on 02/23/04 11:15. The following analytes were detected below RL: Aluminum at 24 ug/L, Barium at 0.182 ug/L, Iron at 18.3 ug/L, Magnesium at 19 ug/L, Potassium at -42.2 ug/L, Selenium at 2.57 ug/L, Sodium at 37.4 ug/L, Zinc at 0.831 ug/L.

CCB130656 was analyzed on 02/23/04 13:30. The following analytes were detected below RL: Aluminum at 63 ug/L, Barium at 0.263 ug/L, Cadmium at 0.302 ug/L, Calcium at 64.3 ug/L, Iron at 25.2 ug/L, Magnesium at 55.7 ug/L, Manganese at 0.285 ug/L, Selenium at 3.33 ug/L, Silver at 0.304 ug/L, Sodium at 71.9 ug/L.

CCB130657 was analyzed on 02/23/04 15:33. The following analytes were detected below RL: Antimony at 1.25 ug/L, Potassium at -96.9 ug/L.

2. **Method Blanks:**

All acceptance criteria were met with the exception of:
Blank 129948BLK was analyzed with the soil samples on 02/19/04. The following analyte was detected below RL: Sodium at 1.88 MG/KG.
Samples coded accordingly.

C. **Spikes:**

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

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

2. **Post Digestion Spike:**
All acceptance criteria were met.

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

No spikes requested by client.

D. **Duplicate:**

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

CASE NARRATIVE
METALS

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

E. Serial Dilution:

All acceptance criteria were met with the exception of:
Serial Dilution R04674-101L was analyzed with the soil samples on 02/19/04. The following analytes exceeded criteria: Calcium at 16 % with criteria of (10), Magnesium at 11 % with criteria of (10), Zinc at 43 % with criteria of (10). No samples coded. Parent sample was taken from a separate sample delivery group.

F. ICP Interference Check Samples:

All acceptance criteria were met.

G. Samples:

Sample analysis proceeded normally.
Sample 57285TS040212 required a 1:10 dilution due to high concentration of the following analytes: Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc.

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

SIGNED: John B Jinks **DATE:** 2/24/04

CASE NARRATIVE
MERCURY

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

Samples were analyzed according to PEL Laboratory's Standard Operating Procedures and EPA Method 7471A.

IV. PREPARATION

Soil samples were prepared according to PEL Laboratory's Standard Operating Procedures and EPA Method 7471A.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

1. Calibration Blanks:

All acceptance criteria were met.

2. Method Blanks:

All acceptance criteria were met.

C. Spikes:

1. Laboratory Control Spikes (LCS):

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

2. Post Digestion Spike:

All acceptance criteria were met.

CASE NARRATIVE
MERCURY

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

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

No spikes requested by client.

D. Duplicate:

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

E. Serial Dilution:

All acceptance criteria were met.

F. Samples:

Sample analysis proceeded normally.

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

SIGNED: John B Jones **DATE:** 02/24/04

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CASE NARRATIVE
CYANIDE

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

Analyses were performed according to PEL Laboratory's Standard Operating Procedures and EPA Method 9012.

IV. PREPARATION

Soil samples were prepared according to PEL Laboratory's Standard Operating Procedures and EPA Method 9012.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

1. Calibration Blanks:

All acceptance criteria were met.

2. Method Blanks:

All acceptance criteria were met.

C. Spikes:

1. Laboratory Control Spikes (LCS):

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

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

No spikes requested by client.

CASE NARRATIVE
CYANIDE

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

D. Duplicate:

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

E. Samples:

Sample analysis proceeded normally.

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

SIGNED: _____ **DATE:** 2/24/04

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SDG No.: 2402125

SOW No.:

EPA Sample No	Lab Sample ID
57285TS040212	240212501
57285TS040212DL1	240212501DL1

Were ICP interelement corrections applied?	Yes/No	Yes
Were ICP background corrections applied?	Yes/No	Yes
If yes - were raw data generated before application of background corrections?	Yes/No	No

Comments:

270204 1533

Sample Data

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 240212501

Level:(low/med) LOW Date Received: 2/13/2004

PercentSolids: 33.1 Station ID: Waste Character

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M
7429-90-5	Aluminum	5030			P
7440-36-0	Antimony	0.362			P
7440-38-2	Arsenic	0.743			P
7440-39-3	Barium	63.2			P
7440-41-7	Beryllium	0.147			P
7440-43-9	Cadmium	6.55			P
7440-70-2	Calcium	19000			P
7440-47-3	Chromium	13.3			P
7440-48-4	Cobalt	0.773			P
7440-50-8	Copper	188			P
5955-70-0	Cyanide	0.4	U		CA
7439-89-6	Iron	5190			P
7439-92-1	Lead	101			P
7439-95-4	Magnesium	749			P
7439-96-5	Manganese	57.2			P
7439-97-6	Mercury	0.594			CV
7440-02-0	Nickel	9.44			P
7440-09-7	Potassium	213			P
7782-49-2	Selenium	1.67			P
7440-22-4	Silver	0.705			P
7440-23-5	Sodium	111			P
7440-28-0	Thallium	0.0694	U		P
7440-62-2	Vanadium	5.93			P

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

270204 1533

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212DL1

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 240212501DL1

Level:(low/med) LOW Date Received: 2/13/2004

PercentSolids: 33.1 Station ID: Waste Character

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M
7429-90-5	Aluminum	5240			P
7440-36-0	Antimony	0.756	B		P
7440-38-2	Arsenic	0.792	U		P
7440-39-3	Barium	67.3			P
7440-41-7	Beryllium	0.122	B		P
7440-43-9	Cadmium	7.31			P
7440-70-2	Calcium	22100			P
7440-47-3	Chromium	14.6			P
7440-48-4	Cobalt	0.813	B		P
7440-50-8	Copper	197			P
7439-89-6	Iron	5770			P
7439-92-1	Lead	110			P
7439-95-4	Magnesium	861			P
7439-96-5	Manganese	62.7			P
7440-02-0	Nickel	9.83			P
7440-09-7	Potassium	186	B		P
7782-49-2	Selenium	2.22	B		P
7440-22-4	Silver	0.641	B		P
7440-23-5	Sodium	123	B		P
7440-28-0	Thallium	0.694	U		P
7440-62-2	Vanadium	5.53			P
7440-66-6	Zinc	1480			P

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

270204 1533

QC Summary

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Initial Calibration Source: IS2836-37001
MET-38307
MET-37702

Continuing Calibration Source: IS2786-33501
MET-38305
MET-38203

Concentration Units: (ug/L)

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R (1)	True	Found	%R (1)	Found	%R (1)	M
Aluminum	40000	39000.000	97.5	125000	126000.000	100.8	126000.000	100.8	P
Antimony	400	413.000	103.2	500	531.000	106.2	529.000	105.8	P
Arsenic	400	385.000	96.2	500	533.000	106.6	532.000	106.4	P
Barium	400	389.000	97.2	500	503.000	100.6	511.000	102.2	P
Beryllium	400	405.000	101.2	500	512.000	102.4	507.000	101.4	P
Cadmium	400	399.000	99.8	500	492.000	98.4	479.000	95.8	P
Calcium	40000	41900.000	104.8	125000	129000.000	103.2	127000.000	101.6	P
Chromium	400	390.000	97.5	500	488.000	97.6	483.000	96.6	P
Cobalt	400	393.000	98.2	500	490.000	98.0	485.000	97.0	P
Copper	400	386.000	96.5	500	501.000	100.2	510.000	102.0	P
Cyanide	250	251.000	100.4	250	251.000	100.4			CA
Iron	40000	41300.000	103.2	50000	51200.000	102.4	50600.000	101.2	P
Lead	400	396.000	99.0	500	490.000	98.0	480.000	96.0	P
Magnesium	40000	39500.000	98.8	125000	125000.000	100.0	123000.000	98.4	P
Manganese	400	391.000	97.8	500	488.000	97.6	484.000	96.8	P
Mercury	3	3.080	102.7	5	5.260	105.2	5.150	103.0	CV
Nickel	400	385.000	96.2	500	476.000	95.2	469.000	93.8	P
Potassium	40000	41400.000	103.5	125000	128000.000	102.4	131000.000	104.8	P
Selenium	400	416.000	104.0	500	537.000	107.4	532.000	106.4	P
Silver	400	391.000	97.8	500	512.000	102.4	516.000	103.2	P
Sodium	40000	38900.000	97.2	126000	127000.000	100.8	129000.000	102.4	P
Thallium	400	408.000	102.0	500	514.000	102.8	501.000	100.2	P
Vanadium	400	403.000	100.8	500	500.000	100.0	497.000	99.4	P
Zinc	400	410.000	102.5	500	524.000	104.8	526.000	105.2	P

(1) Control Limits: Mercury 80-120; Cyanide 85-115; Other Metals 90-110

ICV is Second Source

270204 1533

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Initial Calibration Source:

Continuing Calibration Source: MET-38305
MET-38203

Concentration Units: (ug/L)

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R (1)	True	Found	%R (1)	Found	%R (1)	M
Aluminum				125000	125000.000	100.0	126000.000	100.8	P
Antimony				500	529.000	105.8	533.000	106.6	P
Arsenic				500	528.000	105.6	532.000	106.4	P
Barium				500	505.000	101.0	508.000	101.6	P
Beryllium				500	508.000	101.6	513.000	102.6	P
Cadmium				500	486.000	97.2	492.000	98.4	P
Calcium				125000	128000.000	102.4	129000.000	103.2	P
Chromium				500	484.000	96.8	488.000	97.6	P
Cobalt				500	486.000	97.2	491.000	98.2	P
Copper				500	502.000	100.4	503.000	100.6	P
Cyanide									CA
Iron				50000	50900.000	101.8	51300.000	102.6	P
Lead				500	487.000	97.4	490.000	98.0	P
Magnesium				125000	124000.000	99.2	125000.000	100.0	P
Manganese				500	485.000	97.0	489.000	97.8	P
Mercury				5	5.180	103.6	5.140	102.8	CV
Nickel				500	470.000	94.0	476.000	95.2	P
Potassium				125000	128000.000	102.4	128000.000	102.4	P
Selenium				500	533.000	106.6	538.000	107.6	P
Silver				500	514.000	102.8	515.000	103.0	P
Sodium				126000	129000.000	102.4	129000.000	102.4	P
Thallium				500	505.000	101.0	511.000	102.2	P
Vanadium				500	497.000	99.4	499.000	99.8	P
Zinc				500	523.000	104.6	526.000	105.2	P

(1) Control Limits: Mercury 80-120; Cyanide 85-115; Other Metals 90-110

ICV is Second Source

270204 1533

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Initial Calibration Source:

Continuing Calibration Source: MET-38305
MET-38203

Concentration Units: (ug/L)

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R (1)	True	Found	%R (1)	Found	%R (1)	M
Aluminum				125000	126000.000	100.8	126000.000	100.8	P
Antimony				500	538.000	107.6	535.000	107.0	P
Arsenic				500	538.000	107.6	539.000	107.8	P
Barium				500	506.000	101.2	506.000	101.2	P
Beryllium				500	518.000	103.6	514.000	102.8	P
Cadmium				500	497.000	99.4	496.000	99.2	P
Calcium				125000	131000.000	104.8	129000.000	103.2	P
Chromium				500	493.000	98.6	490.000	98.0	P
Cobalt				500	498.000	99.6	494.000	98.8	P
Copper				500	502.000	100.4	502.000	100.4	P
Cyanide									CA
Iron				50000	51800.000	103.6	51600.000	103.2	P
Lead				500	498.000	99.6	496.000	99.2	P
Magnesium				125000	126000.000	100.8	125000.000	100.0	P
Manganese				500	494.000	98.8	490.000	98.0	P
Mercury				5	5.150	103.0	5.220	104.4	CV
Nickel				500	481.000	96.2	479.000	95.8	P
Potassium				125000	128000.000	102.4	128000.000	102.4	P
Selenium				500	543.000	108.6	546.000	109.2	P
Silver				500	519.000	103.8	516.000	103.2	P
Sodium				126000	129000.000	102.4	129000.000	102.4	P
Thallium				500	517.000	103.4	512.000	102.4	P
Vanadium				500	503.000	100.6	501.000	100.2	P
Zinc				500	531.000	106.2	529.000	105.8	P

(1) Control Limits: Mercury 80-120; Cyanide 85-115; Other Metals 90-110

ICV is Second Source

270204 1533

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Initial Calibration Source:

Continuing Calibration Source: MET-38203

Concentration Units: (ug/L)

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R (1)	True	Found	%R (1)	Found	%R (1)	M
Aluminum				125000	124000.000	99.2	125000.000	100.0	P
Antimony				500	536.000	107.2	538.000	107.6	P
Arsenic				500	539.000	107.8	541.000	108.2	P
Barium				500	503.000	100.6	503.000	100.6	P
Beryllium				500	518.000	103.6	519.000	103.8	P
Cadmium				500	500.000	100.0	499.000	99.8	P
Calcium				125000	132000.000	105.6	132000.000	105.6	P
Chromium				500	493.000	98.6	494.000	98.8	P
Cobalt				500	499.000	99.8	498.000	99.6	P
Copper				500	501.000	100.2	503.000	100.6	P
Cyanide									CA
Iron				50000	51800.000	103.6	51900.000	103.8	P
Lead				500	503.000	100.6	502.000	100.4	P
Magnesium				125000	126000.000	100.8	126000.000	100.8	P
Manganese				500	493.000	98.6	494.000	98.8	P
Mercury									CV
Nickel				500	483.000	96.6	484.000	96.8	P
Potassium				125000	128000.000	102.4	129000.000	103.2	P
Selenium				500	550.000	110.0	546.000	109.2	P
Silver				500	517.000	103.4	518.000	103.6	P
Sodium				126000	128000.000	101.6	128000.000	101.6	P
Thallium				500	516.000	103.2	517.000	103.4	P
Vanadium				500	502.000	100.4	504.000	100.8	P
Zinc				500	533.000	106.6	541.000	108.2	P

(1) Control Limits: Mercury 80-120; Cyanide 85-115; Other Metals 90-110

ICV is Second Source

270204 1533

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Initial Calibration Source: MET-37702

Continuing Calibration Source: MET-38203

Concentration Units: (ug/L)

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R (1)	True	Found	%R (1)	Found	%R (1)	M
Aluminum	40000	39500.000	98.8	125000	124000.000	99.2	127000.000	101.6	P
Antimony	400	403.000	100.8	500	517.000	103.4	528.000	105.6	P
Arsenic	400	385.000	96.2	500	519.000	103.8	531.000	106.2	P
Barium	400	394.000	98.5	500	487.000	97.4	495.000	99.0	P
Beryllium	400	416.000	104.0	500	495.000	99.0	505.000	101.0	P
Cadmium	400	407.000	101.8	500	480.000	96.0	492.000	98.4	P
Calcium	40000	43000.000	107.5	125000	128000.000	102.4	131000.000	104.8	P
Chromium	400	400.000	100.0	500	476.000	95.2	486.000	97.2	P
Cobalt	400	400.000	100.0	500	475.000	95.0	485.000	97.0	P
Copper	400	394.000	98.5	500	497.000	99.4	505.000	101.0	P
Cyanide									CA
Iron	40000	42500.000	106.2	50000	50600.000	101.2	51800.000	103.6	P
Lead	400	400.000	100.0	500	476.000	95.2	487.000	97.4	P
Magnesium	40000	40300.000	100.8	125000	125000.000	100.0	127000.000	101.6	P
Manganese	400	400.000	100.0	500	479.000	95.8	489.000	97.8	P
Mercury									CV
Nickel	400	392.000	98.0	500	466.000	93.2	475.000	95.0	P
Potassium	40000	40800.000	102.0	125000	128000.000	102.4	131000.000	104.8	P
Selenium	400	400.000	100.0	500	525.000	105.0	534.000	106.8	P
Silver	400	392.000	98.0	500	506.000	101.2	515.000	103.0	P
Sodium	40000	38600.000	96.5	126000	126000.000	100.0	127000.000	100.8	P
Thallium	400	407.000	101.8	500	499.000	99.8	511.000	102.2	P
Vanadium	400	411.000	102.8	500	487.000	97.4	498.000	99.6	P
Zinc	400	410.000	102.5	500	510.000	102.0	521.000	104.2	P

(1) Control Limits: Mercury 80-120; Cyanide 85-115; Other Metals 90-110

ICV is Second Source

270204 1533

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Initial Calibration Source:

Continuing Calibration Source: MET-38203

Concentration Units: (ug/L)

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R (1)	True	Found	%R (1)	Found	%R (1)	M
Aluminum				125000	124000.000	99.2			P
Antimony				500	520.000	104.0			P
Arsenic				500	519.000	103.8			P
Barium				500	471.000	94.2			P
Beryllium				500	498.000	99.6			P
Cadmium				500	483.000	96.6			P
Calcium				125000	130000.000	104.0			P
Chromium				500	466.000	93.2			P
Cobalt				500	477.000	95.4			P
Copper				500	491.000	98.2			P
Cyanide									CA
Iron				50000	51000.000	102.0			P
Lead				500	484.000	96.8			P
Magnesium				125000	125000.000	100.0			P
Manganese				500	481.000	96.2			P
Mercury									CV
Nickel				500	465.000	93.0			P
Potassium				125000	128000.000	102.4			P
Selenium				500	525.000	105.0			P
Silver				500	502.000	100.4			P
Sodium				126000	123000.000	97.6			P
Thallium				500	499.000	99.8			P
Vanadium				500	488.000	97.6			P
Zinc				500	514.000	102.8			P

(1) Control Limits: Mercury 80-120; Cyanide 85-115; Other Metals 90-110

ICV is Second Source

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2B

CRDL STANDARD FOR AA AND ICP

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

AA CRDL Standard Source:

ICP CRDL Standard Source: MET-38901

Concentration Units: UG/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				250	147.32	58.9		
Antimony				62.5	50.69	81.1		
Arsenic				37.5	28.62	76.3		
Barium				12.5	9.77	78.1		
Beryllium				5	4.16	83.3		
Cadmium				6.25	4.89	78.2		
Calcium				1250	1069.79	85.6		
Chromium				12.5	10.35	82.8		
Cobalt				12.5	10.14	81.1		
Copper				12.5	10.91	87.3		
Cyanide								
Iron				62.5	30.15	48.2		
Lead				31.3	26.99	86.2		
Magnesium				1250	961.14	76.9		
Manganese				12.5	10.17	81.3		
Mercury								
Nickel				25	19.53	78.1		
Potassium				1250	1014.13	81.1		
Selenium				37.5	28.93	77.1		
Silver				12.5	10.19	81.5		
Sodium				1250	1039.46	83.2		
Thallium				75	59.75	79.7		
Vanadium				12.5	9.98	79.8		
Zinc				25	24.42	97.7		

Control Limits: No limits have been established by EPA at this time

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BLANKS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Preparation Blank Matrix (water/soil): SOIL

Preparation Blank Concentration Units (ug/L or mg/Kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	-27.2	B	-20	B	-29.3	B	18.4	B	1.73	U	P
Antimony	-1.41	B	1.11	U	1.11	U	1.11	U	0.111	U	P
Arsenic	1.62	U	1.62	U	1.62	U	1.62	U	0.162	U	P
Barium	0.107	U	0.107	U	0.107	U	0.207	B	0.0107	U	P
Beryllium	0.169	U	0.169	U	0.169	U	0.247	B	0.0169	U	P
Cadmium	-0.216	B	0.148	U	-0.167	B	0.148	U	0.0148	U	P
Calcium	32.8	U	32.8	U	-35.9	B	32.8	U	3.28	U	P
Chromium	0.475	U	0.475	U	0.475	U	0.475	U	0.0475	U	P
Cobalt	0.384	U	0.384	U	0.384	U	0.384	U	0.0384	U	P
Copper	0.753	U	0.753	U	0.753	U	0.753	U	0.0753	U	P
Cyanide	2.72	U	2.72	U					0.136	U	CA
Iron	-21	B	-19.4	B	-35.9	B	13.4	U	1.34	U	P
Lead	2.21	U	2.21	U	2.21	U	2.21	U	0.221	U	P
Magnesium	-22.2	B	-16.6	B	-31.7	B	26.1	B	1.32	U	P
Manganese	0.239	U	0.239	U	0.239	U	0.239	U	0.0239	U	P
Mercury	0.0211	U	0.0211	U	0.0211	U	0.0211	U	0.00211	U	CV
Nickel	0.653	U	0.653	U	-0.679	B	0.653	U	0.0653	U	P
Potassium	32.4	U	32.4	U	32.4	U	76.1	B	3.24	U	P
Selenium	2.32	U	2.32	U	2.32	U	2.32	U	0.232	U	P
Silver	0.281	U	0.281	U	0.281	U	0.281	U	0.0281	U	P
Sodium	27.1	B	21.2	B	21.2	B	80.4	B	1.88	B	P
Thallium	1.89	B	1.42	U	1.42	U	2.19	B	0.142	U	P
Vanadium	0.424	U	0.424	U	0.424	U	0.424	U	0.0424	U	P
Zinc	0.754	U	0.754	U	0.754	U	0.754	U	0.0754	U	P

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BLANKS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Preparation Blank Matrix (water/soil):

Preparation Blank Concentration Units (ug/L or mg/Kg):

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 4	C	5	C	6	C	Prepa-ration Blank	C	M
Aluminum			-29.5	B	-18.7	B	17.3	U			P
Antimony			-1.36	B	1.11	U	1.11	U			P
Arsenic			1.62	U	1.62	U	1.62	U			P
Barium			0.107	U	0.107	U	0.107	U			P
Beryllium			0.169	U	0.169	U	0.169	U			P
Cadmium			-0.303	B	-0.199	B	-0.265	B			P
Calcium			32.8	U	32.8	U	32.8	U			P
Chromium			0.475	U	0.475	U	0.475	U			P
Cobalt			0.384	U	0.384	U	0.384	U			P
Copper			0.753	U	0.753	U	0.753	U			P
Cyanide											CA
Iron			-31.1	B	-30.2	B	-34.7	B			P
Lead			2.21	U	2.21	U	2.21	U			P
Magnesium			-29.9	B	-27	B	-30.1	B			P
Manganese			0.239	U	0.239	U	0.239	U			P
Mercury			0.0211	U	0.0211	U	0.0211	U			CV
Nickel			0.653	U	0.653	U	-0.658	B			P
Potassium			32.4	U	32.4	U	32.4	U			P
Selenium			2.32	U	2.32	U	2.32	U			P
Silver			0.281	U	0.281	U	0.281	U			P
Sodium			25.3	B	29.4	B	27.1	B			P
Thallium			1.63	B	1.42	U	1.42	U			P
Vanadium			0.424	U	0.424	U	0.424	U			P
Zinc			0.754	U	0.754	U	0.79	B			P

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BLANKS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Preparation Blank Matrix (water/soil):

Preparation Blank Concentration Units (ug/L or mg/Kg):

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 7	C	8	C	9	C	Prepa-ration Blank	C	M
Aluminum			-30	B	-32.3	B					P
Antimony			-1.42	B	-1.22	B					P
Arsenic			1.62	U	1.62	U					P
Barium			0.107	U	0.107	U					P
Beryllium			0.169	U	0.169	U					P
Cadmium			-0.241	B	0.148	U					P
Calcium			32.8	U	-33.3	B					P
Chromium			0.475	U	0.475	U					P
Cobalt			0.384	U	0.384	U					P
Copper			0.753	U	0.753	U					P
Cyanide											CA
Iron			-32.3	B	-36.6	B					P
Lead			2.21	U	2.21	U					P
Magnesium			-29	B	-28.9	B					P
Manganese			0.239	U	0.239	U					P
Mercury											CV
Nickel			0.653	U	0.653	U					P
Potassium			32.4	U	32.4	U					P
Selenium			2.32	U	2.32	U					P
Silver			0.281	U	0.281	U					P
Sodium			22.5	B	22.5	B					P
Thallium			1.42	U	1.69	B					P
Vanadium			0.424	U	0.424	U					P
Zinc			9.43	B	0.754	U					P

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BLANKS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Preparation Blank Matrix (water/soil):

Preparation Blank Concentration Units (ug/L or mg/Kg):

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 10	C	11	C	12	C	Prepa-ration Blank	C	M
Aluminum	24	B	17.3	U	63	B	17.3	U			P
Antimony	1.11	U	1.11	U	1.11	U	1.25	B			P
Arsenic	1.62	U	1.62	U	1.62	U	1.62	U			P
Barium	0.182	B	0.107	U	0.263	B	0.107	U			P
Beryllium	0.169	U	0.169	U	0.169	U	0.169	U			P
Cadmium	0.148	U	0.148	U	0.302	B	0.148	U			P
Calcium	32.8	U	32.8	U	64.3	B	32.8	U			P
Chromium	0.475	U	0.475	U	0.475	U	0.475	U			P
Cobalt	0.384	U	0.384	U	0.384	U	0.384	U			P
Copper	0.753	U	0.753	U	0.753	U	0.753	U			P
Cyanide											CA
Iron	18.3	B	13.4	U	25.2	B	13.4	U			P
Lead	2.21	U	2.21	U	2.21	U	2.21	U			P
Magnesium	19	B	13.2	U	55.7	B	13.2	U			P
Manganese	0.239	U	0.239	U	0.285	B	0.239	U			P
Mercury											CV
Nickel	0.653	U	0.653	U	0.653	U	0.653	U			P
Potassium	-42.2	B	-94.4	B	32.4	U	-96.9	B			P
Selenium	2.57	B	2.32	U	3.33	B	2.32	U			P
Silver	0.281	U	0.281	U	0.304	B	0.281	U			P
Sodium	37.4	B	18.4	U	71.9	B	18.4	U			P
Thallium	1.42	U	1.42	U	1.42	U	1.42	U			P
Vanadium	0.424	U	0.424	U	0.424	U	0.424	U			P
Zinc	0.831	B	0.754	U	0.754	U	0.754	U			P

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ICP INTERFERENCE CHECK SAMPLE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

ICP ID#: ICAP ICSA Source: MET-34305

ICSAB Source: MET-37401

Concentration Units: UG/L

	True		Initial Found			Final Found		
Analyte	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Aluminum	250000	250000	251930.81	250952.44	100.4			
Antimony	0	600		622.5	103.8			
Arsenic	0	100		100.814	100.8			
Barium	0	500		489.315	97.9			
Beryllium	0	500		503.221	100.6			
Cadmium	0	1000		953.191	95.3			
Calcium	250000	250000	255871.91	254088.83	101.6			
Chromium	0	500		477.925	95.6			
Cobalt	0	500		474.235	94.8			
Copper	0	500		506.489	101.3			
Iron	225000	225000	231609.61	229108.56	101.8			
Lead	0	50		48.855	97.7			
Magnesium	250000	250000	259135.91	257065.38	102.8			
Manganese	0	500		480.07	96.0			
Nickel	0	1000		907.007	90.7			
Potassium	0	0						
Selenium	0	50		51.465	102.9			
Silver	0	200		206.633	103.3			
Sodium	0	0						
Thallium	0	100		95.7	95.7			
Vanadium	0	500		500.717	100.1			
Zinc	0	1000		1041.964	104.2			

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ICP INTERFERENCE CHECK SAMPLE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

ICP ID#: ICAP ICSA Source: MET-34305

ICSAB Source: MET-37401

Concentration Units: UG/L

	True		Initial Found			Final Found		
Analyte	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Aluminum	250000	250000	248663.59	242685.23	97.1			
Antimony	0	600		598.693	99.8			
Arsenic	0	100		97.773	97.8			
Barium	0	500		477.093	95.4			
Beryllium	0	500		488.544	97.7			
Cadmium	0	1000		943.217	94.3			
Calcium	250000	250000	255218.31	249066.53	99.6			
Chromium	0	500		466.439	93.3			
Cobalt	0	500		463.198	92.6			
Copper	0	500		493.712	98.7			
Iron	225000	225000	230678.02	224099.16	99.6			
Lead	0	50		42.866	85.7			
Magnesium	250000	250000	258602.78	252232.95	100.9			
Manganese	0	500		467.369	93.5			
Nickel	0	1000		889.397	88.9			
Potassium	0	0						
Selenium	0	50		51.334	102.7			
Silver	0	200		201.507	100.8			
Sodium	0	0						
Thallium	0	100		87.206	87.2			
Vanadium	0	500		488.194	97.6			
Zinc	0	1000		1017.674	101.8			

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POST DIGEST SPIKE SAMPLE RECOVERY

EPA Sample No.

CGW1SS42-R01A

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Level:(low/med) LOW

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Control Limit %R	Spiked Sample	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Mercury	80 - 120	3.37		0.13	B	3	107.8		CV

Comments:

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5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA Sample No.

R04674-101A

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Level:(low/med) LOW

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Control Limit %R	Spiked Sample	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	80 - 120	82392.27		30342.18		50000	104.1		P
Antimony	80 - 120	485.40		4.48	B	500	96.2		P
Arsenic	80 - 120	470.42		2.03	B	500	93.7		P
Barium	80 - 120	532.10		56.61		500	95.1		P
Beryllium	80 - 120	493.73		0.68	B	500	98.6		P
Cadmium	80 - 120	492.65		0.66	B	500	98.4		P
Calcium	80 - 120	64068.14		8083.92		50000	112.0		P
Chromium	80 - 120	509.63		27.73		500	96.4		P
Cobalt	80 - 120	491.13		1.62	B	500	97.9		P
Copper	80 - 120	504.25		22.73		500	96.3		P
Iron	80 - 120	59301.20		3854.36		50000	110.9		P
Lead	80 - 120	580.87		99.93		500	96.2		P
Magnesium	80 - 120	53746.52		959.13		50000	105.6		P
Manganese	80 - 120	504.52		21.31		500	96.6		P
Nickel	80 - 120	484.24		10.85		500	94.7		P
Potassium	80 - 120	57911.11		483.18	B	50000	114.9		P
Selenium	80 - 120	505.21		2.32	U	500	101.0		P
Silver	80 - 120	490.83		0.28	U	500	98.2		P
Sodium	80 - 120	53248.43		145.43	B	50000	106.2		P
Thallium	80 - 120	493.87		1.42	U	500	98.8		P
Vanadium	80 - 120	507.71		14.07		500	98.7		P
Zinc	80 - 120	590.49		81.97		500	101.7		P

Comments:

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DUPLICATES

EPA Sample No.

129949LCSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Level:(low/med) LOW

% Solids for Sample: 100 % Solids for Duplicate: 100

Concentration Units (mg/L or mg/kg): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	20	4960		4970		0.2		P
Antimony	20	51.8		52.7		1.7		P
Arsenic	20	49.7		49.6		0.2		P
Barium	20	50.4		50.5		0.2		P
Beryllium	20	51.2		51		0.4		P
Cadmium	20	51.2		51.2		0.0		P
Calcium	20	5370		5380		0.2		P
Chromium	20	50.3		50.2		0.2		P
Cobalt	20	50.7		50.7		0.0		P
Copper	20	50		50.1		0.2		P
Iron	20	5320		5310		0.2		P
Lead	20	50.6		50.6		0.0		P
Magnesium	20	4990		5000		0.2		P
Manganese	20	50.3		50.3		0.0		P
Nickel	20	49.3		49.3		0.0		P
Potassium	20	5370		5430		1.1		P
Selenium	20	52.1		52.2		0.2		P
Silver	20	49.4		49.3		0.2		P
Sodium	20	5070		5090		0.4		P
Thallium	20	51.8		51.8		0.0		P
Vanadium	20	52		51.9		0.2		P
Zinc	20	52.6		52.8		0.4		P

Comments:

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DUPLICATES

EPA Sample No.

130106LCSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Level:(low/med) LOW

% Solids for Sample: 100 % Solids for Duplicate: 100

Concentration Units (mg/L or mg/kg): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Mercury	20	0.305		0.308		1.0		CV

Comments:

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DUPLICATES

EPA Sample No.

130637LCSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Level:(low/med) LOW

% Solids for Sample: 100 % Solids for Duplicate: 100

Concentration Units (mg/L or mg/kg): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Cyanide	13	12.5		12.6		0.8		CA

Comments:

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LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 129949LCS

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Solid LCS Source: MET-38701, MET-3670

Aqueous LCS Source:

	Aqueous			Solid (MG/KG)						
Analyte	True	Found	%R	True	Found	C	Limits			%R
Aluminum				5000	4960		80	-	120	99.2
Antimony				50	51.8		80	-	120	103.6
Arsenic				50	49.7		80	-	120	99.4
Barium				50	50.4		80	-	120	100.8
Beryllium				50	51.2		80	-	120	102.4
Cadmium				50	51.2		80	-	120	102.4
Calcium				5000	5370		80	-	120	107.4
Chromium				50	50.3		80	-	120	100.6
Cobalt				50	50.7		80	-	120	101.4
Copper				50	50		80	-	120	100.0
Iron				5000	5320		80	-	120	106.4
Lead				50	50.6		80	-	120	101.2
Magnesium				5000	4990		80	-	120	99.8
Manganese				50	50.3		80	-	120	100.6
Nickel				50	49.3		80	-	120	98.6
Potassium				5000	5370		80	-	120	107.4
Selenium				50	52.1		80	-	120	104.2
Silver				50	49.4		80	-	120	98.8
Sodium				5000	5070		80	-	120	101.4
Thallium				50	51.8		80	-	120	103.6
Vanadium				50	52		80	-	120	104.0
Zinc				50	52.6		80	-	120	105.2

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LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 129949LCSD

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Solid LCS Source: MET-38701, MET-3670

Aqueous LCS Source:

	Aqueous			Solid (MG/KG)					
Analyte	True	Found	%R	True	Found	C	Limits		%R
Aluminum				5000	4970		80	- 120	99.4
Antimony				50	52.7		80	- 120	105.4
Arsenic				50	49.6		80	- 120	99.2
Barium				50	50.5		80	- 120	101.0
Beryllium				50	51		80	- 120	102.0
Cadmium				50	51.2		80	- 120	102.4
Calcium				5000	5380		80	- 120	107.6
Chromium				50	50.2		80	- 120	100.4
Cobalt				50	50.7		80	- 120	101.4
Copper				50	50.1		80	- 120	100.2
Iron				5000	5310		80	- 120	106.2
Lead				50	50.6		80	- 120	101.2
Magnesium				5000	5000		80	- 120	100.0
Manganese				50	50.3		80	- 120	100.6
Nickel				50	49.3		80	- 120	98.6
Potassium				5000	5430		80	- 120	108.6
Selenium				50	52.2		80	- 120	104.4
Silver				50	49.3		80	- 120	98.6
Sodium				5000	5090		80	- 120	101.8
Thallium				50	51.8		80	- 120	103.6
Vanadium				50	51.9		80	- 120	103.8
Zinc				50	52.8		80	- 120	105.6

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LABORATORY CONTROL SAMPLE

EPA Sample No.

130106LCS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Solid LCS Source: MET-38307

Aqueous LCS Source:

Analyte	Aqueous True	Aqueous Found	Aqueous %R	Solid (MG/KG) True	Solid (MG/KG) Found	C	Limits	%R
Mercury				0.3	0.305		80 - 120	101.7

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LABORATORY CONTROL SAMPLE

EPA Sample No.

130106LCSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Solid LCS Source: MET-38307

Aqueous LCS Source:

	Aqueous			Solid (MG/KG)				
Analyte	True	Found	%R	True	Found	C	Limits	%R
Mercury				0.3	0.308		80 - 120	102.7

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LABORATORY CONTROL SAMPLE

EPA Sample No.

130637LCS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Solid LCS Source: IS2786-33501

Aqueous LCS Source:

	Aqueous			Solid (MG/KG)				
Analyte	True	Found	%R	True	Found	C	Limits	%R
Cyanide				12.5	12.5		75 - 106	100.0

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LABORATORY CONTROL SAMPLE

EPA Sample No.

130637LCSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Solid LCS Source: IS2786-33501

Aqueous LCS Source:

	Aqueous			Solid (MG/KG)				
Analyte	True	Found	%R	True	Found	C	Limits	%R
Cyanide				12.5	12.6		75 - 106	100.8

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SERIAL DILUTIONS

EPA Sample No.

CGW1SS42-R01L

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Level:(low/med) LOW

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ-ence	Q	M
Mercury	0.13	B	0.11	U			CV

Comments:

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SERIAL DILUTIONS

EPA Sample No.

R04674-101L

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Level:(low/med) LOW

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ-ence	Q	M
Aluminum	30342.18		30236.35		0.35		P
Antimony	4.48	B	5.55	U			P
Arsenic	2.03	B	8.10	U			P
Barium	56.61		57.68		1.9		P
Beryllium	0.68	B	0.85	U			P
Cadmium	0.66	B	0.74	U			P
Calcium	8083.92		9352.97		16	E	P
Chromium	27.73		28.38		2.3		P
Cobalt	1.62	B	1.92	U			P
Copper	22.73		24.11	B	6.0		P
Iron	3854.36		3876.39		0.57		P
Lead	99.93		105.19		5.3		P
Magnesium	959.13		853.05		11	E	P
Manganese	21.31		22.28		4.6		P
Nickel	10.85		9.91	B	8.7		P
Potassium	483.18	B	509.36	B	5.4		P
Selenium	2.32	U	11.60	U			P
Silver	0.28	U	1.41	U			P
Sodium	145.43	B	221.21	B	52		P
Thallium	1.42	U	7.10	U			P
Vanadium	14.07		12.99	B	7.7		P
Zinc	81.97		116.97		43	E	P

Comments:

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METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

ICP ID Number : ICAP Date: 4/30/2003

Furnace AA ID Number :

Analyte	Wave-length (nm)	Back-ground	CRDL (MG/KG)	MDL (MG/KG)	M
Aluminum	308.2		10	1.73	P
Antimony	206.8		0.5	0.111	P
Arsenic	189		0.5	0.162	P
Barium	493.4		0.2	0.0107	P
Beryllium	313		0.1	0.0169	P
Cadmium	226.5		0.1	0.0148	P
Calcium	315.8		10	3.28	P
Chromium	267.7		0.2	0.0475	P
Cobalt	228.6		0.5	0.0384	P
Copper	324.7		0.5	0.0753	P
Iron	271.4		5	1.34	P
Lead	220.3		0.5	0.221	P
Magnesium	279		10	1.32	P
Manganese	257.6		0.2	0.0239	P
Nickel	231.6		0.5	0.0653	P
Potassium	766.4		50	3.24	P
Selenium	196		0.5	0.232	P
Silver	328		0.2	0.0281	P
Sodium	330.2		30	1.84	P
Thallium	190.8		0.6	0.142	P
Vanadium	292.4		0.3	0.0424	P
Zinc	213.8		1	0.0754	P

Comments:

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METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

ICP ID Number : Date: 5/1/2003

Furnace AA ID Number : FIMS

Analyte	Wave-length (nm)	Back-ground	CRDL (MG/KG)	MDL (MG/KG)	M
Mercury	253.7		0.02	0.00211	CV

Comments:

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METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

ICP ID Number : Date: 6/30/2003

Furnace AA ID Number : LACHAT

Analyte	Wave-length (nm)	Back-ground	CRDL (MG/KG)	MDL (MG/KG)	M
Cyanide	570		0.5	0.136	CA

Comments:

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11A

INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No.: _____ SDG No.: 2402125

ICP ID Number : ICAP Date: 8/22/2003

Analyte	Wave-length		Interelement Correction Factors for: Al	Ca	Cr	Fe	Mg
Aluminum	308.2				-0.000242		
Antimony	206.8		0.000018	-0.000007	0.014009	0.000032	
Arsenic	189		0.000008		0.000133	-0.000097	
Barium	493.4					0.000004	
Beryllium	313						
Cadmium	226.5		-0.000003			0.000069	
Calcium	315.8				-0.003359		
Chromium	267.7					-0.000025	
Cobalt	228.6					0.000015	
Copper	324.7				-0.000139	-0.000051	
Iron	271.4			-0.000027	0.001199		-0.001414
Lead	220.3		0.000551	-0.000028		0.000076	
Magnesium	279			-0.000010		-0.000264	
Manganese	257.6		0.000006			0.000017	0.000016
Nickel	231.6					0.000012	
Selenium	196		-0.000008	-0.000008		-0.000031	
Silver	328		-0.000002				
Thallium	190.8			0.000003	0.000325	-0.000365	
Vanadium	292.4					0.000021	
Zinc	213.8					0.000088	0.000068

Comments:

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INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No.: _____ SDG No.: 2402125

ICP ID Number : ICAP Date: 8/22/2003

Analyte	Wave-length		Interelement Correction Factors for: Mn	Mo	Sb	V	
Aluminum	308.2			0.015255		0.008710	
Antimony	206.8			-0.003241		-0.007207	
Arsenic	189			0.000270			
Barium	493.4						
Beryllium	313					0.000327	
Cadmium	226.5						
Calcium	315.8			0.001535			
Chromium	267.7		0.000279			0.000065	
Cobalt	228.6						
Copper	324.7			0.000368			
Iron	271.4			0.000700		0.009557	
Lead	220.3			-0.000582		-0.000193	
Magnesium	279			-0.006491			
Manganese	257.6						
Nickel	231.6		-0.000174				
Selenium	196		0.000402				
Silver	328			-0.000317		0.000052	
Thallium	190.8		0.000338	-0.000282			
Vanadium	292.4			-0.014646			
Zinc	213.8						

Comments:

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ICP LINEAR RANGES (SEMI-ANNUALLY)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

ICP ID NUMBER ICAP DATE : 9/5/2003

Analyte	Integ. Time (sec.)	Concentration UG/L	M
Aluminum	15	500000	P
Antimony	15	25000	P
Arsenic	15	15000	P
Barium	15	5000	P
Beryllium	15	2500	P
Cadmium	15	5000	P
Calcium	15	500000	P
Chromium	15	20000	P
Cobalt	15	20000	P
Copper	15	25000	P
Iron	15	500000	P
Lead	15	20000	P
Magnesium	15	500000	P
Manganese	15	5000	P
Nickel	15	10000	P
Potassium	15	250000	P
Selenium	15	25000	P
Silver	15	5000	P
Sodium	15	750000	P
Thallium	15	25000	P
Vanadium	15	25000	P
Zinc	15	5000	P

Comments:

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PREPARATION LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Method : 6010

EPA Sample No:	Preparation Date	Weight (gram)	Volume (mL)
129948BLK	18 Feb 04	0.5	
129949LCS	18 Feb 04	0.5	
129949LCSD	18 Feb 04	0.5	
57285TS040212	18 Feb 04	3.09	
R04674-101	18 Feb 04	0.54	

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PREPARATION LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Method : 7471

EPA Sample No:	Preparation Date	Weight (gram)	Volume (mL)
130105BLK	19 Feb 04	0.25	
130106LCS	19 Feb 04	0.25	
130106LCSD	19 Feb 04	0.25	
57285TS040212	19 Feb 04	1.29	
CGW1SS42-R01	19 Feb 04	0.348	

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PREPARATION LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Method : 9012

EPA Sample No:	Preparation Date	Weight (gram)	Volume (mL)
130636BLK	23 Feb 04	1	
130637LCS	23 Feb 04	1	
130637LCSD	23 Feb 04	1	
57285TS040212	23 Feb 04	1.028	

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ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID Number : ICAP Method : P

Start Date : 2/18/2004 End Date : 2/18/2004

EPA Sample No.	D/F	Time	%R	Analytes																										
				AG	AL	AS	BA	BE	CA	CD	CN	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SN	SR	TI	TL	V	ZN
STD1-B	1	8:23		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
STD3	1	8:28		X		X	X	X		X		X	X	X					X		X	X	X		X				X	X	X
STD2	1	8:33			X				X						X		X	X			X										

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ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID Number : ICAP Method : P

Start Date : 2/19/2004 End Date : 2/20/2004

EPA Sample No.	D/F	Time	%R	Analytes																										
				AG	AL	AS	BA	BE	CA	CD	CN	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SN	SR	TI	TL	V	ZN
STD1-B	1	15:18																													
STD3	1	15:23																													
STD2	1	15:28																													
ICV	1	15:33		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	15:38																													
ICB	1	15:45		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
CRDL	1	15:55		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ICSA	1	16:04		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ICSAB	1	16:18		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
CCV	1	16:23		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	16:29																													
CCB	1	16:34		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	16:40																													
ZZZZZZ	1	16:45																													
ZZZZZZ	1	16:51																													
ZZZZZZ	20	17:02																													
ZZZZZZ	100	17:08																													
ZZZZZZ	20	17:13																													
ZZZZZZ	20	17:19																													
ZZZZZZ	20	17:24																													
ZZZZZZ	1	17:30																													
ZZZZZZ	1	17:50																													
CCV	1	17:55		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	18:01																													
CCB	1	18:06		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	18:12																													
ZZZZZZ	1	18:17																													
ZZZZZZ	1	18:23																													
ZZZZZZ	1	18:28																													
ZZZZZZ	1	18:34																													
ZZZZZZ	1	18:39																													
ZZZZZZ	1	18:45																													
ZZZZZZ	1	18:50																													
ZZZZZZ	1	18:56																													
ZZZZZZ	1	19:01																													
CCV	1	19:07		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X

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ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID Number : ICAP Method : P

Start Date : 2/19/2004 End Date : 2/20/2004

EPA Sample No.	D/F	Time	%R	Analytes																										
				AG	AL	AS	BA	BE	CA	CD	CN	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SN	SR	TI	TL	V	ZN
CCB	1	19:12		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	19:18																													
ZZZZZZ	1	19:23																													
ZZZZZZ	1	19:29																													
ZZZZZZ	1	19:34																													
ZZZZZZ	1	19:40																													
ZZZZZZ	1	19:45																													
ZZZZZZ	1	19:45																													
ZZZZZZ	1	19:51																													
CCV	1	19:56		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	20:02																													
CCB	1	20:07		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	20:13																													
ZZZZZZ	1	20:18																													
ZZZZZZ	1	20:24																													
ZZZZZZ	1	20:29																													
ZZZZZZ	1	20:29																													
ZZZZZZ	5	20:35																													
ZZZZZZ	1	20:40																													
ZZZZZZ	1	20:40																													
ZZZZZZ	1	20:46																													
ZZZZZZ	1	20:46																													
ZZZZZZ	1	20:51																													
ZZZZZZ	1	20:51																													
ZZZZZZ	1	20:57																													
ZZZZZZ	1	21:02																													
CCV	1	21:08		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	21:13																													
CCB	1	21:19		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	21:24																													
ZZZZZZ	1	21:30																													
ZZZZZZ	1	21:35																													
ZZZZZZ	1	21:35																													
ZZZZZZ	1	21:41																													
ZZZZZZ	1	21:46																													
ZZZZZZ	1	21:52																													

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ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID Number : ICAP Method : P

Start Date : 2/19/2004 End Date : 2/20/2004

EPA Sample No.	D/F	Time	%R	Analytes																										
				AG	AL	AS	BA	BE	CA	CD	CN	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SN	SR	TI	TL	V	ZN
ZZZZZZ	1	21:57																													
ZZZZZZ	1	22:03																													
CCV	1	22:08		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	22:14																													
CCB	1	22:19		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
129948BLK	1	22:25		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
129949LCS	1	22:30		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
129949LCSD	1	22:36		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
R04674-101	1	22:41		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
R04674-101L	5	22:47		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	22:52																													
ZZZZZZ	1	22:58																													
R04674-101A	1	23:03		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	23:09																													
ZZZZZZ	1	23:14																													
CCV	1	23:20		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	23:25																													
CCB	1	23:31		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	23:36																													
ZZZZZZ	1	23:42																													
ZZZZZZ	1	23:47																													
57285TS040212	1	23:53		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	
ZZZZZZ	1	23:59																													
ZZZZZZ	1	0:04																													
CCV	1	0:10		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	0:15																													
CCB	1	0:21		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X

270204 1533

U.S. EPA - CLP

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ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID Number : ICAP Method : P

Start Date : 2/23/2004 End Date : 2/23/2004

EPA Sample No.	D/F	Time	%R	Analytes																												
				AG	AL	AS	BA	BE	CA	CD	CN	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SN	SR	TI	TL	V	ZN
STD1-B	1	10:48		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
STD3	1	10:55		X		X	X	X		X		X	X	X					X		X	X	X		X				X	X	X
STD2	1	11:02			X				X						X		X	X			X										
ICV	1	11:07		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ICB	1	11:15		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	11:22																													
ICSA	1	11:29		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ICSAB	1	11:36		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
CCV	1	11:44		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	11:51																													
CCB	1	11:58		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
CCV	1	13:22		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
CCB	1	13:30		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	13:55																													
57285TS040212DL1	10	14:16		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	15:06																													
CCV	1	15:18		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	15:25																													
CCB	1	15:33		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X

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U.S. EPA - CLP

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ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID Number : FIMS Method : CV

Start Date : 2/20/2004 End Date : 2/20/2004

EPA Sample No.	D/F	Time	%R	Analytes																									
				AG	AL	AS	BA	BE	CA	CD	CN	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SN	SR	TI	TL	V	ZN
IICAL1	1	15:05														X															
IICAL2	1	15:07														X															
IICAL3	1	15:09														X															
IICAL4	1	15:11														X															
IICAL5	1	15:13														X															
IICAL6	1	15:14														X															
ICV	1	15:17														X															
ICB	1	15:19														X															
ZZZZZZ	1	15:21																													
ZZZZZZ	1	15:22																													
ZZZZZZ	1	15:24																													
ZZZZZZ	1	15:26																													
ZZZZZZ	1	15:28																													
ZZZZZZ	1	15:30																													
ZZZZZZ	1	15:32																													
ZZZZZZ	1	15:33																													
ZZZZZZ	1	15:35																													
ZZZZZZ	1	15:37																													
CCV	1	15:39														X															
CCB	1	15:41														X															
ZZZZZZ	1	15:43																													
ZZZZZZ	1	15:45																													
ZZZZZZ	1	15:46																													
ZZZZZZ	1	15:48																													
ZZZZZZ	1	15:50																													
ZZZZZZ	1	15:52																													
ZZZZZZ	1	15:54																													
ZZZZZZ	1	15:55																													
ZZZZZZ	1	15:57																													
CCV	1	15:59														X															
CCB	1	16:01														X															
ZZZZZZ	1	16:03																													
ZZZZZZ	1	16:05																													
ZZZZZZ	1	16:07																													
ZZZZZZ	1	16:08																													
ZZZZZZ	1	16:10																													

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U.S. EPA - CLP

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ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID Number : FIMS Method : CV

Start Date : 2/20/2004 End Date : 2/20/2004

EPA Sample No.	D/F	Time	%R	Analytes																									
				AG	AL	AS	BA	BE	CA	CD	CN	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SN	SR	TI	TL	V	ZN
ZZZZZZ	5	16:12																													
ZZZZZZ	1	16:14																													
130105BLK	1	16:16														X															
130106LCS	1	16:18														X															
CCV	1	16:19														X															
CCB	1	16:21														X															
130106LCSD	1	16:23														X															
CGW1SS42-R01	1	16:25														X															
ZZZZZZ	1	16:27																													
ZZZZZZ	1	16:28																													
ZZZZZZ	1	16:30																													
ZZZZZZ	1	16:32																													
ZZZZZZ	1	16:34																													
ZZZZZZ	1	16:36																													
ZZZZZZ	1	16:38																													
CCV	1	16:39														X															
CCB	1	16:41														X															
ZZZZZZ	1	16:43																													
ZZZZZZ	1	16:45																													
ZZZZZZ	1	16:47																													
ZZZZZZ	1	16:49																													
ZZZZZZ	1	16:51																													
ZZZZZZ	1	16:52																													
ZZZZZZ	1	16:54																													
ZZZZZZ	1	16:56																													
ZZZZZZ	1	16:58																													
CCV	1	17:00														X															
CCB	1	17:01														X															
ZZZZZZ	1	17:03																													
57285TS040212	1	17:05														X															
ZZZZZZ	1	17:07																													
ZZZZZZ	1	17:09																													
CGW1SS42-R01L	5	17:11														X															
CGW1SS42-R01A	1	17:12														X															
CCV	1	17:14														X															
CCB	1	17:16														X															

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U.S. EPA - CLP

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ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID Number : LACHAT Method : CA

Start Date : 2/12/2004 End Date : 2/12/2004

EPA Sample No.	D/F	Time	%R	Analytes																									
				AG	AL	AS	BA	BE	CA	CD	CN	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SN	SR	TI	TL	V	ZN
IICAL1	1	10:01									X																				
IICAL2	1	10:02									X																				
IICAL3	1	10:03									X																				
IICAL4	1	10:04									X																				
IICAL5	1	10:05									X																				
IICAL6	1	10:06									X																				
IICAL7	1	10:07									X																				

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ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID Number : LACHAT Method : CA

Start Date : 2/24/2004 End Date : 2/24/2004

EPA Sample No.	D/F	Time	%R	Analytes																									
				AG	AL	AS	BA	BE	CA	CD	CN	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SN	SR	TI	TL	V	ZN
ICV	1	10:01									X																				
ICB	1	10:02									X																				
130636BLK	1	10:03									X																				
130637LCS	1	10:04									X																				
130637LCSD	1	10:05									X																				
57285TS040212	1	10:06									X																				
ZZZZZZ	1	10:07																													
ZZZZZZ	1	10:08																													
ZZZZZZ	1	10:09																													
ZZZZZZ	1	10:10																													
ZZZZZZ	1	10:11																													
CCV	1	10:12									X																				
CCB	1	10:13									X																				

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Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402125

METHOD: 6010 **MATRIX:** S

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
Mercury	80-120	20	75-125	20	80-120	10	

METHOD: 9012 **MATRIX:** S

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
Cyanide	75-106	13	75-106	13			
Cyanide	75-106	13	75-106	13			

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WET CHEMISTRY DATA PACKAGE
pH

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CASE NARRATIVE
INORGANICS-pH

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

Sample Analysis: Holding times are not established for this method.

III. METHODS

Analyses were performed according to PEL Laboratory's Standard Operating Procedures and EPA Method 9045.

IV. ANALYSIS

A. Duplicate:

No sample duplicates are reported with this method.

B. Samples:

Sample analysis proceeded normally.

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

SIGNED: _____ **DATE:** 2/24/04

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SDG No.: 2402125

SOW No.:

EPA Sample No	Lab Sample ID
57285TS040212	240212501

Comments:

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Sample Data

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 240212501

Level:(low/med) LOW Date Received: 2/13/2004

PercentSolids: 0 Station ID: Waste Character

CONCENTRATION UNITS: pH

CAS NO.	ANALYTE	Concentration	C	Q	M
1-00-6	pH	6.39			N/A

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

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QC Summary

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ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID Number : FISHER Method : 9045

Start Date : 2/23/2004 End Date : 2/23/2004

EPA Sample No.	D/F	Time	%R	Analytes: pH
ZZZZZZ	1	9:01		
ZZZZZZ	1	9:02		
ZZZZZZ	1	9:03		
ZZZZZZ	1	9:04		
57285TS040212	1	9:05		X
ZZZZZZ	1	9:06		
ZZZZZZ	1	9:07		
ZZZZZZ	1	9:08		
ZZZZZZ	1	9:09		
ZZZZZZ	1	9:10		
ZZZZZZ	1	9:11		

270204 1533

Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402125

METHOD: 9045 **MATRIX:** S

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
pH							

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WET CHEMISTRY DATA PACKAGE
TOTALS

270204 1533

CASE NARRATIVE
FLASH POIINT/IGNITABILITY

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

Sample Analysis: All holding times were met.

III. METHODS

Analyses were performed according to PEL Laboratory's Standard Operating Procedures and SW846 Method 1010.

IV. ANALYSIS

A. Duplicate:

No sample duplicates are reported with this method.

B. Samples:

Sample analysis proceeded normally.

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

SIGNED: _____ **DATE:** 2/24/04

W:\InorgNarratives\Feb04\2402125_1010.doc

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SDG No.: 2402125

SOW No.:

EPA Sample No	Lab Sample ID
57285TS040212	240212501

Comments:

270204 1533

Sample Data

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 240212501

Level:(low/med) LOW Date Received: 2/13/2004

PercentSolids: 0 Station ID: Waste Character

CONCENTRATION UNITS: Fahrenheit

CAS NO.	ANALYTE	Concentration	C	Q	M
1-01-3	Flash Point	160	>		N/A

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

270204 1533

QC Summary

270204 1533

U.S. EPA - CLP

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ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID Number : CLOCUP Method : 1010

Start Date : 2/20/2004 End Date : 2/20/2004

EPA Sample No.	D/F	Time	%R	Analytes: Flash Point
ZZZZZZ	1	13:01		
ZZZZZZ	1	13:02		
57285TS040212	1	13:03		X
ZZZZZZ	1	13:04		
ZZZZZZ	1	13:05		

270204 1533

Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402125

METHOD: 1010 **MATRIX:** S

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
Flash Point							

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WET CHEMISTRY DATA PACKAGE
TOTALS

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CASE NARRATIVE
SULFIDE

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

Sample Analysis: All holding times were met.

III. METHODS

Analyses were performed according to PEL Laboratory's Standard Operating Procedures and EPA Method 376.1.

IV. PREPARATION

Soil samples were prepared by according to PEL Laboratory's Standard Operating Procedures and EPA Method 376.1.

V. ANALYSIS

A. Blanks:

Method Blanks:

All acceptance criteria were met with the exception of:
Blank 129902BLK was analyzed with the soil samples on 02/18/04. The following analyte(s) were detected below RL: Sulfide at 16 MG/KG. Samples coded accordingly.

B. Spikes:

1. Laboratory Control Spikes (LCS):

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

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

No spikes requested by client.

C. Duplicate:

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

CASE NARRATIVE
SULFIDE

PEL Lab Reference No./SDG: 2402125

Client: CH2M Hill

D. Samples:

Sample analysis proceeded normally.

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

SIGNED: _____ **DATE:** 2/24/04

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SDG No.: 2402125

SOW No.:

EPA Sample No	Lab Sample ID
57285TS040212	240212501

Comments:

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Sample Data

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID: 240212501

Level:(low/med) LOW Date Received: 2/13/2004

PercentSolids: 33.1 Station ID: Waste Character

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M
18496-25-8	Sulfide	216	B		T

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

270204 1534

QC Summary

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U.S. EPA - CLP

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BLANKS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Preparation Blank Matrix (water/soil): SOIL

Preparation Blank Concentration Units (ug/L or mg/Kg): MG/KG

Analyte	Initial Calib. Blank (mg/L)	C	Continuing Calibration Blank (mg/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Sulfide									16	B	T

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BLANKS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Preparation Blank Matrix (water/soil): SOIL

Preparation Blank Concentration Units (ug/L or mg/Kg): MG/KG

Analyte	Initial Calib. Blank (mg/L)	C	Continuing Calibration Blank (mg/L) 4	C	5	C	6	C	Prepa-ration Blank	C	M
Sulfide									8	U	T

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DUPLICATES

EPA Sample No.

129903LCSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Level:(low/med) LOW

% Solids for Sample: 100 % Solids for Duplicate: 100

Concentration Units (mg/L or mg/kg): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Sulfide		520		512		1.6		T

Comments:

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U.S. EPA - CLP

7-CC

LABORATORY CONTROL SAMPLE

EPA Sample No.

129903LCS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: (soil/water) SOIL

Concentration Units: (MG/KG)

PARAMETER	LCS SOURCE	M	LIMITS LOWER	LIMITS UPPER	TRUE	FOUND	%R	C
Sulfide	IS 1290-18501	T			500	520	104	

Comments:

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7-CC

LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 129903LCSD

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: (soil/water) SOIL

Concentration Units: (MG/KG)

PARAMETER	LCS SOURCE	M	LIMITS LOWER	LIMITS UPPER	TRUE	FOUND	%R	C
Sulfide	IS 1290-18501	T			500	512	102.4	

Comments:

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METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: Soil

Concentration Units: MG/KG

PARAMETER	M	INSTRUMENT ID	DATE	CRDL	MDL
Sulfide	T	TITRAT	1/15/2004	200	8

Comments:

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PREPARATION LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Method : 376.1

EPA Sample No:	Preparation Date	Weight (gram)	Volume (mL)
129902BLK	18 Feb 04	1	
129903LCS	18 Feb 04	1	
129903LCSD	18 Feb 04	1	
129907BLK	18 Feb 04	1	
57285TS040212	18 Feb 04	1.0067	

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ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Instrument ID Number : TITRAT Method : 376.1

Start Date : 2/18/2004 End Date : 2/18/2004

EPA Sample No.	D/F	Time	%R	Analytes: Sulfide
ZZZZZZ	1	10:31		
129902BLK	1	10:32		X
129903LCS	1	10:33		X
129903LCSD	1	10:34		X
57285TS040212	1	10:35		X
ZZZZZZ	1	10:36		
ZZZZZZ	1	10:37		
129907BLK	1	10:38		X

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Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402125

METHOD: 376.1 **MATRIX:** S

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
Sulfide							

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Chain of Custody Documentation

270204 1534

CH2M Hill Constructors, Inc.
115 Perimeter Center Place, Suite 700
Atlanta, GA 30346-1278
Tel No (770) 604-9182 ; Fax No (770) 604-9282

CHAIN-OF-CUSTODY RECORD

2402125 RM

COC NUMBER: 163231-14

PROJECT NAME:	PROJECT NUMBER:	LAB NAME AND CONTACT:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 1 (Name and Company)	RECIPIENT 1 (Address, Tel No. , and Fax No.):
Former NAS Cecil Field	163231	PEL Laboratories, Inc. Darcy Wiesman	Jeff Marks J.A. Jones Env.	6219 Authority Avenue, Jacksonville, FL 32215 PH: 904-777-4812 FAX: 904-777-4262
PROJECT PHASE/SITE/TASK:	CTO OR DO NUMBER:	LAB PO NUMBER:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (Address, Tel No. , and Fax No.):
Tank 285 Waste Characterization Solids Totals	CTO 057		Bonnie Hogue CH2M Hill Constuctors, Inc.	115 Perimeter Center Place, N.E. Suite 700 Atlanta, GA 30346 (770)604-9182 Ext.561 FAX:604-9282
PROJECT CONTACT:	PROJECT TEL NO AND FAX NO:		FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 3 (Name and Company)	RECIPIENT 3 (Address, Tel No. , and Fax No.):
Jeff Marks J.A. Jones Env.	PH (904) 777-4812 FAX (904) 777-4262	Ph:(813) 247-2805		

ANALYSES REQUIRED (Include Method Numbers)

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on back)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see codes on back)	TAT (calendar days)	TCL Volatiles 5035/8260B (GRAB)	TCL Semi-Volatiles 8270C, TPH FL-PRO,TCL Pest. 8081A, TCL Herb. 8151A, PCBs 8082	TAL Metals 6010B/7470	pH 9045B	Corr. 9045A, Cyanide (Total) 9010, Sulfide (Total) 9030, Reactivity, Chapt 7.3	SAMPLE TYPE (see codes on back)	COMMENTS/ SCREENING READINGS	LAB ID
1	57285TS040212	Waste Characterization Tank Solids (Totals)	S	02/12/04	15:00	B	7	4	1	1	1	1	Grab/Comp		01
2	57TB1W040212	Trip Blank #1	W	NA	NA	B	7	2 RM 02/13/04					Grab	Prepared by Lab	02
3															
4															
5															
6															
7															
8														Temp: 3.5C	
9														P-W-Vis Reid	
10															

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	
~~Randy Dumaop~~ / Jeff Marks J.A. Jones Environmental Services	UPS Tracking No. 1Z2AE0480140328785.	**TCL Volatiles are GRAB Samples**

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature:			Printed Name and Signature:		
Randy Dumaop	2/12/2004	18:00	UPS Tracking No. 1Z2AE0480140328785.	2/12/2004	18:00
Printed Name and Signature:			Printed Name and Signature:		
			Ryan Moore Ryan Moore /PEL	02/13/04	10:00

Distribution: [ ] Original - Laboratory (To be returned with Analytical Report); [ ] Copy 1 - Project File; [ ] Copy 2 - PMO

Form CCI001, Rev 02/00

2402125

SAMPLE RECEIPT CONFIRMATION SHEET

Client Information

SDG:	2402125	**Req:**	47410
Client:	CH2M Hill	**Project:**	CTO 057/R3 Tank 285
Level:	4	**Date Rec'd:**	2/13/04 10:00:00 AM
Rec'd via:	UPS	**Due Date:**	02/27/04

Sample Verification

Samples/Cooler Secure?	Yes	**All Samples on COC accounted For?**	Yes
Temperature of Samples(Celsius)	3.5	**All Samples Rec'd Intact?**	Yes
pH Verified?	No	**Sample Vol. Stuff. For Analysis?**	Yes
pH WNL?	No	**Samples Rec'd W/I Hold Time?**	Yes
Soil Origin (Domestic/Foreign):	Domestic	**Are All Samples to be Analyzed?**	Yes
Site Location/Project on COC?	Yes	**Correct Sample Containers?**	Yes
Client Project # on COC?	Yes	**COC Comments written on COC?**	Yes
Project Mgr. Indicated on COC?	Yes	**Samplers Initials on COC?**	Yes
COC relinquished/Dated by Client?	Yes	**Sample Date/Time Indicated?**	Yes
COC Received/Dated by PEL?	Yes	**TAT Requested:**	RUSH
Specific Subcontract Indicated?	No	**Client Requests Verbal Results?**	Yes
Samples Received By	UPS	**Client Requests Faxed Results?**	Yes
PEL to Conduct ALL Analyses?	Yes		

Subcontract Analysis

Parameter	Due Date	Via	Lab Name	Comments

PEER REVIEW **PM REVIEW:**

Client: CH2M Hill

WONo: 2402125 **Profile Name:** Cecil Field **Profile #:** 47410

MATRIX ***S***

Sample #	Parameter		Relinquished	Received	Date	Time
01	9045	Corosivity - pH	J.KS	JC	2-23-04	17:01
01	9045	Corosivity - pH	JC	J.KS	2-23-04	18:52
01	376.1	Sulfide	J.KS	SAC	2-18-04	1000
01	376.1	Sulfide	SAC	J.KS	2-18-04	1200
01	9012	Total Cyanide	J.KS	SAC	2-23-04	1415
01	9012	Total Cyanide	SAC	J.KS	2-23-04	1600
01	FL-PRO	Petroleum Hydrocarbons	J.KS	DM	2-18-04	6:30 p.m.
01	FL-PRO	Petroleum Hydrocarbons	DM	J.KS	2-18-04	12:00 a.m.
01	8151	Herbicides	J.KS	AJ	2-18-04	2:35 pm
01	8151	Herbicides	AJ	J.KS	2-18-04	4:15 pm
01	1010	Flashpoint	J.KS	JC	2-20-04	12:15
01	1010	Flashpoint	JC	J.KS	2-20-04	15:40
01	8082	PCB	J.KS	SC	2/16/04	4:43 p.m
01	8082	PCB	DM	J.KS	↓	11:30 p.m.
01	8081	Pesticides	J.KS	SC	2/16/04	4:43 p.m
01	8081	Pesticides	DM	J.KS	↓	11:30 p.m.
01	8270	GCMS semivolatile	J.KS	SC	2/17/04	9:38 Am
01	8270	GCMS semivolatile	SC	J.KS	2/17/04	11:23 Am
01	8260	Volatile Organic Compounds	J.KS	MWJ	2/13/04	12:00
01	8260	Volatile Organic Compounds	consumed			
01	6010	Metals	J.KS	JK	2/17/4	1830
01	6010	Metals	JK	J.KS	2/17/4	1900
01	7471	Mercury	J.KS	JK	2/19/4	1500
01	7471	Mercury	JK	J.KS	2/19/4	1700

2/13/04 11:02:50 AM

WONo: 2402125 **Profile Name:** Cecil Field **Profile #:** 47410

01	Dry Weight	Dry Weight	J.KS ~~LMC~~	LMC	2-17-04	1030
01	Dry Weight	Dry Weight	LMC	J.KS	2-17-04	1200

Additional:

1	8151	Re-extract	J.KS	L	2-24-04	11:00
1	8151	Re-extract	JMB	LM	2/24/04	3:10pm

MATRIX ***W***

Sample #	Parameter		Relinquished	Received	Date	Time
02	8260	Volatile Organic Compounds	J.KS	[illegible]	2/13/04	1600
02	8260	Volatile Organic Compounds				

Additional:

1	FL-Pro		J.KS	SS	2/23/04	5:00pm
1	Fl. Pro		SS	J.KS	2 23-04	1:20pm

Comments:

Addendum

270204 1534

Letter of Acceptance

Customer Name:	CH2M Hill
Date and Time Received:	2/13/04 10:00:00 AM
Date to be Reported:	2/20/04
Laboratory Submission Number/SDG:	2402125
Project:	Former NAS Cecil Field

Samples: The submission consisted of 2 samples with sample identification shown in the attached data tables.

Tests: The Samples will be analyzed for EPA methods: 376.1, 6010, 7471, 8081, 8082, 8151, 8260, 8270, 9012, 9045, FL-PRO.

Sample Custody/COC discrepancies:

Please note that PEL will report Total Cyanide and Total Sulfide for Reactivity (noted in variance letter prior to start date of project). PEL reports Cyanide by method 9012 (noted in variance letter prior to start date of project). PEL reports Sulfide by method 376.1 (noted in variance letter prior to start date of project).

Notes:

Ignitability was not requested on the COC. Unless otherwise requested, PEL will not report Method 1010.

Distribution of Report to:

CH2M Hill
Attn: Melissa Osborne
Phone: W 770-604-9182
F 770-604-9282

Note: Submitted material will be retained for 30 days unless otherwise requested by client or consumed in analysis. PEL letters and reports are for the exclusive use of the client to whom they are addressed. Our Letters and reports apply to the sample tested and are not necessarily indicative of the qualities of apparently identical or similar materials

Log-in Report

Level: 3

Total of: 12 analyses on 2 samples (including QC) *16-Feb-04*

Report/SDG #: 2402125

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
57285TS040212	240212501	Waste Character	S	2/12/04 3:00:00 PM	2/13/04 10:00:00 AM

Method		
376.1	Sulfide	376.1
6010	Metals	6010
7471	Mercury	7471
8081	Pesticides	8081
8082	PCB	8082
8151	Herbicides	8151
8260	Volatile Organic Compounds	8260
8270	GCMS semivolatile	8270
9012	Total Cyanide	9012
9045	Corosivity - pH	9045
FL-PRO	Petroleum Hydrocarbons	FL-PRO

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
57TB1W040212	240212502	Trip Blank #1	WQ	2/13/04	2/13/04 10:00:00 AM

Method		
8260	Volatile Organic Compounds	8260

FAX MESSAGE

1010000 1000101 1100110
PEL Laboratories, Inc.

4420 Pendola Point Road
Tampa, Florida 33619
Phone: (813) 247-2805
Fax: (813) 248-1537

Date: 2/23/04

To: Bonnie Hogue

Company: CCI

Number: via email

From: Darcy Weisman

This transmittal consists of ____ page(s), exclusive of the cover sheet.

Notes:
prelims for SDG 2402-125
metals
8081
8082
8260/8270
8151 - being re-extracted
PRO - being re-extracted
Flash/sulfide

4420 Pendola Point Road • Tampa, Florida 33619
(813) 247-2805 • FAX: (813) 248-1537

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1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 240212501

Level:(low/med) LOW Date Received: 2/13/04

PercentSolids: 33.1 Station ID: Waste Character

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M
7429-90-5	Aluminum	5030			P
7440-36-0	Antimony	0.362			P
7440-38-2	Arsenic	0.743			P
7440-39-3	Barium	63.2			P
7440-41-7	Beryllium	0.147			P
7440-43-9	Cadmium	6.55			P
7440-70-2	Calcium	19000			P
7440-47-3	Chromium	13.3			P
7440-48-4	Cobalt	0.773			P
7440-50-8	Copper	188			P
7439-89-6	Iron	5190			P
7439-92-1	Lead	101			P
7439-95-4	Magnesium	749			P
7439-96-5	Manganese	57.2			P
7439-97-6	Mercury	0.594			CV
7440-02-0	Nickel	9.44			P
7440-09-7	Potassium	213			P
7782-49-2	Selenium	1.67			P
7440-22-4	Silver	0.705			P
7440-23-5	Sodium	111			P
7440-28-0	Thallium	0.0694	U		P
7440-62-2	Vanadium	5.93			P

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

230204 1200

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3

BLANKS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Preparation Blank Matrix (water/soil): SOIL

Preparation Blank Concentration Units (ug/L or mg/Kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	-27.2	B	-20	B	-29.3	B	18.4	B	1.73	U	P
Antimony	-1.41	B	1.11	U	1.11	U	1.11	U	0.111	U	P
Arsenic	1.62	U	1.62	U	1.62	U	1.62	U	0.162	U	P
Barium	0.107	U	0.107	U	0.107	U	0.207	B	0.0107	U	P
Beryllium	0.169	U	0.169	U	0.169	U	0.247	B	0.0169	U	P
Cadmium	-0.216	B	0.148	U	-0.167	B	0.148	U	0.0148	U	P
Calcium	32.8	U	32.8	U	-35.9	B	32.8	U	3.28	U	P
Chromium	0.475	U	0.475	U	0.475	U	0.475	U	0.0475	U	P
Cobalt	0.384	U	0.384	U	0.384	U	0.384	U	0.0384	U	P
Copper	0.753	U	0.753	U	0.753	U	0.753	U	0.0753	U	P
Iron	-21	B	-19.4	B	-35.9	B	13.4	U	1.34	U	P
Lead	2.21	U	2.21	U	2.21	U	2.21	U	0.221	U	P
Magnesium	-22.2	B	-16.6	B	-31.7	B	26.1	B	1.32	U	P
Manganese	0.239	U	0.239	U	0.239	U	0.239	U	0.0239	U	P
Mercury	0.0211	U	0.0211	U	0.0211	U	0.0211	U	0.00211	U	CV
Nickel	0.653	U	0.653	U	-0.679	B	0.653	U	0.0653	U	P
Potassium	32.4	U	32.4	U	32.4	U	76.1	B	3.24	U	P
Selenium	2.32	U	2.32	U	2.32	U	2.32	U	0.232	U	P
Silver	0.281	U	0.281	U	0.281	U	0.281	U	0.0281	U	P
Sodium	27.1	B	21.2	B	21.2	B	80.4	B	1.88	B	P
Thallium	1.89	B	1.42	U	1.42	U	2.19	B	0.142	U	P
Vanadium	0.424	U	0.424	U	0.424	U	0.424	U	0.0424	U	P
Zinc	0.754	U	0.754	U	0.754	U	0.754	U	0.0754	U	P

230204 1201

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LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 129949LCS

Lab Code: PEL Case No. SAS No: SDG No.: 2402125

Solid LCS Source: MET-38701, MET-3670

Aqueous LCS Source:

Analyte	Aqueous True	Aqueous Found	Aqueous %R	Solid (MG/KG) True	Solid Found	C	Limits	%R
Aluminum				5000	4960		80 - 120	99.2
Antimony				50	51.8		80 - 120	103.6
Arsenic				50	49.7		80 - 120	99.4
Barium				50	50.4		80 - 120	100.8
Beryllium				50	51.2		80 - 120	102.4
Cadmium				50	51.2		80 - 120	102.4
Calcium				5000	5370		80 - 120	107.4
Chromium				50	50.3		80 - 120	100.6
Cobalt				50	50.7		80 - 120	101.4
Copper				50	50		80 - 120	100.0
Iron				5000	5320		80 - 120	106.4
Lead				50	50.6		80 - 120	101.2
Magnesium				5000	4990		80 - 120	99.8
Manganese				50	50.3		80 - 120	100.6
Nickel				50	49.3		80 - 120	98.6
Potassium				5000	5370		80 - 120	107.4
Selenium				50	52.1		80 - 120	104.2
Silver				50	49.4		80 - 120	98.8
Sodium				5000	5070		80 - 120	101.4
Thallium				50	51.8		80 - 120	103.6
Vanadium				50	52		80 - 120	104.0
Zinc				50	52.6		80 - 120	105.2

230204 1202

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7

LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 129949LCSD

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Solid LCS Source: MET-38701, MET-3670

Aqueous LCS Source:

Analyte	Aqueous True	Aqueous Found	Aqueous %R	Solid (MG/KG) True	Solid Found	C	Limits	%R
Aluminum				5000	4970		80 - 120	99.4
Antimony				50	52.7		80 - 120	105.4
Arsenic				50	49.6		80 - 120	99.2
Barium				50	50.5		80 - 120	101.0
Beryllium				50	51		80 - 120	102.0
Cadmium				50	51.2		80 - 120	102.4
Calcium				5000	5380		80 - 120	107.6
Chromium				50	50.2		80 - 120	100.4
Cobalt				50	50.7		80 - 120	101.4
Copper				50	50.1		80 - 120	100.2
Iron				5000	5310		80 - 120	106.2
Lead				50	50.6		80 - 120	101.2
Magnesium				5000	5000		80 - 120	100.0
Manganese				50	50.3		80 - 120	100.6
Nickel				50	49.3		80 - 120	98.6
Potassium				5000	5430		80 - 120	108.6
Selenium				50	52.2		80 - 120	104.4
Silver				50	49.3		80 - 120	98.6
Sodium				5000	5090		80 - 120	101.8
Thallium				50	51.8		80 - 120	103.6
Vanadium				50	51.9		80 - 120	103.8
Zinc				50	52.8		80 - 120	105.6

230204 1202

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LABORATORY CONTROL SAMPLE

EPA Sample No.

130106LCS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Solid LCS Source: MET-38307

Aqueous LCS Source:

Analyte	Aqueous True	Aqueous Found	Aqueous %R	Solid (MG/KG) True	Solid (MG/KG) Found	C	Limits	%R
Mercury				0.3	0.305		80 - 120	101.7

230204 1202

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LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 130106LCSD

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Solid LCS Source: MET-38307

Aqueous LCS Source:

Analyte	Aqueous True	Aqueous Found	Aqueous %R	Solid (MG/KG) True	Solid (MG/KG) Found	C	Limits	%R
Mercury				0.3	0.308		80 - 120	102.7

230204 1202

PESTICIDE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 240212501 Lab File ID 125-01.D

Sample wt/vol: 33.29 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 10 Date Extracted: 02/17/04

Level:(low/med) LOW Date Analyzed: 02/19/04 Time: 2351

PercentSolids: 33.1 decanted : Dilution Factor: 1

Extraction: SONC Station ID Waste Character Method: 8081

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
319-84-6	alpha-BHC	4.5	U
319-85-7	beta-BHC	4.5	U
319-86-8	delta-BHC	4.5	U
58-89-9	gamma-BHC (Lindane)	4.5	U
76-44-8	Heptachlor	4.5	U
309-00-2	Aldrin	4.5	U
1024-57-3	Heptachlor epoxide	4.5	U
959-98-8	Endosulfan I	4.5	U
60-57-1	Dieldrin	4.5	U
72-55-9	4,4'-DDE	4.5	U
72-20-8	Endrin	4.5	U
33213-65-9	Endosulfan II	4.5	U
72-54-8	4,4'-DDD	4.5	U
1031-07-8	Endosulfan sulfate	4.5	U
50-29-3	4,4'-DDT	4.5	U
72-43-5	Methoxychlor	4.5	U
7421-93-4	Endrin aldehyde	4.5	U
5103-74-2	gamma-Chlordane	4.5	U
5103-71-9	alpha-Chlordane	4.5	U
53494-70-5	Endrin ketone	4.5	U
8001-35-2	Toxaphene	450	U

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

230204 1202

Form I

1

PESTICIDE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

6894BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 129792 Lab File ID 6894BLK.D

Sample wt/vol: 33.04 Units: G Date Received: 02/16/04

Concentrated Extract Volume: 10 Date Extracted: 02/16/04

Level:(low/med) LOW Date Analyzed: 02/19/04 Time: 1457

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: SONC Station ID Method: 8081

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
319-84-6	alpha-BHC	1.5	U
319-85-7	beta-BHC	1.5	U
319-86-8	delta-BHC	1.5	U
58-89-9	gamma-BHC (Lindane)	1.5	U
76-44-8	Heptachlor	1.5	U
309-00-2	Aldrin	1.5	U
1024-57-3	Heptachlor epoxide	1.5	U
959-98-8	Endosulfan I	1.5	U
60-57-1	Dieldrin	1.5	U
72-55-9	4,4'-DDE	1.5	U
72-20-8	Endrin	1.5	U
33213-65-9	Endosulfan II	1.5	U
72-54-8	4,4'-DDD	1.5	U
1031-07-8	Endosulfan sulfate	1.5	U
50-29-3	4,4'-DDT	1.5	U
72-43-5	Methoxychlor	1.5	U
7421-93-4	Endrin aldehyde	1.5	U
5103-74-2	gamma-Chlordane	1.5	U
5103-71-9	alpha-Chlordane	1.5	U
53494-70-5	Endrin ketone	1.5	U
8001-35-2	Toxaphene	150	U

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

230204 1203

Form I

PESTICIDE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Fiel 57285TS040212MS

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	SAMPLE CONCENTRATION UG/KG	MS CONCENTRATION UG/KG	MS % REC #	QC LIMITS REC.
alpha-BHC	45.8	0	17.9	39.1 *	44 - 85
beta-BHC	45.8	0	19.8	43.2	29 - 134
delta-BHC	45.8	0	22.5	49.1	32 - 132
gamma-BHC (Lindane)	45.8	0	15.1	33.0	16 - 133
Heptachlor	45.8	0	14.2	31.0	17 - 143
Aldrin	45.8	0	13.9	30.3 *	46 - 102
Heptachlor epoxide	45.8	0	15.9	34.7	26 - 147
Endosulfan I	45.8	0	13.4	29.3	27 - 114
Dieldrin	45.8	0	15.1	33.0	16 - 125
4,4'-DDE	45.8	0	18.2	39.7	22 - 142
Endrin	45.8	0	13.8	30.1	27 - 107
Endosulfan II	45.8	0	14.6	31.9	26 - 108
4,4'-DDD	45.8	0	21.1	46.1	25 - 131
Endosulfan sulfate	45.8	0	24.9	54.4	24 - 154
4,4'-DDT	45.8	0	3.2	7.0 *	24 - 152
Methoxychlor	45.8	0	13.1	28.6	12 - 152
Endrin aldehyde	45.8	0	8	17.5	-85 - 208
gamma-Chlordane	45.8	0	501	1094.0 *	31 - 139
alpha-Chlordane	45.8	0	20.3	44.3	44 - 113
Endrin ketone	45.8	0	20.3	44.3	22 - 154

Spike Recovery: 4 out of 20 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

230204 1203

PESTICIDE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil 57285TS040212MSD

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	MSD CONCENTRATION UG/KG	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
alpha-BHC	45.7	19.6	42.9 *	9.1	36	44 - 85
beta-BHC	45.7	17.6	38.5	11.8	30	29 - 134
delta-BHC	45.7	21.8	47.7	3.2	30	32 - 132
gamma-BHC (Lindane)	45.7	15.3	33.5	1.3	30	16 - 133
Heptachlor	45.7	13.6	29.8	4.3	30	17 - 143
Aldrin	45.7	16.8	36.8 *	18.9	41	46 - 102
Heptachlor epoxide	45.7	21.3	46.6	29.0	30	26 - 147
Endosulfan I	45.7	19.3	42.2	36.1 *	30	27 - 114
Dieldrin	45.7	22.7	49.7	40.2 *	30	16 - 125
4,4'-DDE	45.7	23.6	51.6	25.8	30	22 - 142
Endrin	45.7	15.6	34.1	12.2	30	27 - 107
Endosulfan II	45.7	23.9	52.3	48.3 *	30	26 - 108
4,4'-DDD	45.7	30.2	66.1	35.5 *	30	25 - 131
Endosulfan sulfate	45.7	33.4	73.1	29.2	30	24 - 154
4,4'-DDT	45.7	22.3	48.8	149.8 *	45	24 - 152
Methoxychlor	45.7	89.2	195.0 *	148.8 *	30	12 - 152
Endrin aldehyde	45.7	47.6	104.0	142.4 *	30	-85 - 208
gamma-Chlordane	45.7	16.5	36.1	187.2 *	30	31 - 139
alpha-Chlordane	45.7	26.6	58.2	26.9	40	44 - 113
Endrin ketone	45.7	27.8	60.8	31.2 *	30	22 - 154

RPD 9 out of 20 outside limits

Spike Recovery: 3 out of 20 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

230204 1203

PESTICIDE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 6894LCS

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
alpha-BHC	15.1	8	53.0		41.0	32 - 115
beta-BHC	15.1	10.3	68.2		20.0	35 - 126
delta-BHC	15.1	9.7	64.2		22.0	22 - 134
gamma-BHC (Lindane)	15.1	9.2	60.9		40.0	5 - 124
Heptachlor	15.1	8.6	57.0		38.0	12 - 131
Aldrin	15.1	7.9	52.3		40.0	13 - 122
Heptachlor epoxide	15.1	9.1	60.3		26.0	38 - 116
Endosulfan I	15.1	9.5	62.9		32.0	38 - 143
Dieldrin	15.1	9	59.6		26.0	43 - 117
4,4'-DDE	15.1	9.2	60.9		25.0	42 - 119
Endrin	15.1	9.8	64.9		30.0	48 - 126
Endosulfan II	15.1	11.8	78.1		19.0	58 - 130
4,4'-DDD	15.1	9.1	60.3		23.0	47 - 128
Endosulfan sulfate	15.1	10.8	71.5		20.0	45 - 151
4,4'-DDT	15.1	13.8	91.4		34.0	48 - 159
Methoxychlor	15.1	12	79.5		25.0	49 - 146
Endrin aldehyde	15.1	7.5	49.7		20.0	31 - 102
gamma-Chlordane	15.1	9.3	61.6 *		20.0	65 - 120
alpha-Chlordane	15.1	8.7	57.6		24.0	39 - 106
Endrin ketone	15.1	10.8	71.5 *		32.0	72 - 127

Spike Recovery: 2 out of 20 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1203

Form III

PESTICIDE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 6894LCS3

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
alpha-BHC	15.1	9.6	63.6	18.2	41.0	32 - 115
beta-BHC	15.1	11	72.8	6.6	20.0	35 - 126
delta-BHC	15.1	11	72.8	12.6	22.0	22 - 134
gamma-BHC (Lindane)	15.1	11	72.8	17.8	40.0	5 - 124
Heptachlor	15.1	10	66.2	15.1	38.0	12 - 131
Aldrin	15.1	9.3	61.6	16.3	40.0	13 - 122
Heptachlor epoxide	15.1	10	66.2	9.4	26.0	38 - 116
Endosulfan I	15.1	9.6	63.6	1.0	32.0	38 - 143
Dieldrin	15.1	9.6	63.6	6.5	26.0	43 - 117
4,4'-DDE	15.1	9	59.6	2.2	25.0	42 - 119
Endrin	15.1	10	66.2	2.0	30.0	48 - 126
Endosulfan II	15.1	11	72.8	7.0	19.0	58 - 130
4,4'-DDD	15.1	9.2	60.9	1.1	23.0	47 - 128
Endosulfan sulfate	15.1	12	79.5	10.5	20.0	45 - 151
4,4'-DDT	15.1	11	72.8	22.6	34.0	48 - 159
Methoxychlor	15.1	12	79.5	0.0	25.0	49 - 146
Endrin aldehyde	15.1	7	46.4	6.9	20.0	31 - 102
gamma-Chlordane	15.1	9.8	64.9 *	5.2	20.0	65 - 120
alpha-Chlordane	15.1	9.3	61.6	6.7	24.0	39 - 106
Endrin ketone	15.1	10	66.2 *	7.7	32.0	72 - 127

Spike Recovery: 2 out of 20 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1203

Form III

PESTICIDE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 6894TLCS

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Toxaphene	303	212	70.0		38.0	70 - 130

Spike Recovery: 0 out of 1 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1203

Form III

1

PCB ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 240212501 Lab File ID 125-01.D

Sample wt/vol: 33.24 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 10 Date Extracted: 02/17/04

Level:(low/med) LOW Date Analyzed: 02/19/04 Time: 2351

PercentSolids: 33.1 decanted : Dilution Factor: 1

Extraction: SONC Station ID Waste Character Method: 8082

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
12674-11-2	Aroclor-1016	45	U
11096-82-5	Aroclor-1260	45	U
11104-28-2	Aroclor-1221	450	U
11141-16-5	Aroclor-1232	450	U
53469-21-9	Aroclor-1242	450	U
12672-29-6	Aroclor-1248	450	U
11097-69-1	Aroclor-1254	450	U

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

230204 1204

Form I

1

PCB ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

6894BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 129792 Lab File ID 6894BLK.D

Sample wt/vol: 33.04 Units: G Date Received: 02/16/04

Concentrated Extract Volume: 10 Date Extracted: 02/16/04

Level:(low/med) LOW Date Analyzed: 02/19/04 Time: 1457

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: SONC Station ID Method: 8082

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
12674-11-2	Aroclor-1016	15	U
11096-82-5	Aroclor-1260	15	U
11104-28-2	Aroclor-1221	150	U
11141-16-5	Aroclor-1232	150	U
53469-21-9	Aroclor-1242	150	U
12672-29-6	Aroclor-1248	150	U
11097-69-1	Aroclor-1254	150	U

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

230204 1204

Form I

3

PCB ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Fiel 57285TS040212MS

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	SAMPLE CONCENTRATION UG/KG	MS CONCENTRATION UG/KG	MS % REC #	QC LIMITS REC.
Aroclor-1016	909	0	339	37.3	32 - 142
Aroclor-1260	909	0	298	32.8 *	41 - 134

Spike Recovery: 1 out of 2 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

230204 1205

PCB ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil 57285TS040212MSD

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	MSD CONCENTRATION UG/KG	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	910	77.4	8.5 *	125.6 *	30	32 - 142
Aroclor-1260	910	97.6	10.7 *	101.3 *	30	41 - 134

RPD 2 out of 2 outside limits

Spike Recovery: 2 out of 2 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

230204 1205

PCB ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 6895LCS

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	302	190	62.9		30.0	32 - 142
Aroclor-1260	302	201	66.6		30.0	41 - 134

Spike Recovery: 0 out of 2 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1205

Form III

PCB ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 6895LCS3

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	303	180	59.4	5.4	30.0	32 - 142
Aroclor-1260	303	210	69.3	4.4	30.0	41 - 134

Spike Recovery: 0 out of 2 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1205

Form III

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 240212501 Lab File ID 12501.D

Sample wt/vol: 6.5 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 1322

PercentSolids: 33.1 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID Waste Character Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
75-71-8	Dichlorodifluoromethane	4.6	U
74-87-3	Chloromethane	4.6	U
75-01-4	Vinyl chloride	4.6	U
74-83-9	Bromomethane	4.6	U
75-00-3	Chloroethane	4.6	U
75-69-4	Trichlorofluoromethane	4.6	U
75-35-4	1,1-Dichloroethene	4.6	U
75-15-0	Carbon disulfide	4.6	U
75-09-2	Methylene chloride	4.6	U
156-60-5	trans-1,2-Dichloroethene	4.6	U
75-34-3	1,1-Dichloroethane	4.6	U
67-64-1	Acetone	42.2	
156-59-2	cis-1,2-Dichloroethene	4.6	U
74-97-5	Bromochloromethane	4.6	U
78-93-3	2-Butanone	9.3	U
67-66-3	Chloroform	4.6	U
71-55-6	1,1,1-Trichloroethane	4.6	U
56-23-5	Carbon tetrachloride	4.6	U
71-43-2	Benzene	4.6	U
107-06-2	1,2-Dichloroethane	4.6	U
79-01-6	Trichloroethene	4.6	U
78-87-5	1,2-Dichloropropane	4.6	U
75-27-4	Bromodichloromethane	4.6	U
10061-01-5	cis-1,3-Dichloropropene	4.6	U
108-10-1	4-Methyl-2-pentanone	9.3	U
108-88-3	Toluene	4.6	U
10061-02-6	trans-1,3-Dichloropropene	4.6	U

230204 1206

Form I

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 240212501 Lab File ID 12501.D

Sample wt/vol: 6.5 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 1322

PercentSolids: 33.1 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID Waste Character Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
79-00-5	1,1,2-Trichloroethane	4.6	U
127-18-4	Tetrachloroethene	4.6	U
591-78-6	2-Hexanone	9.3	U
124-48-1	Dibromochloromethane	4.6	U
106-93-4	1,2-Dibromoethane(EDB)	4.6	U
108-90-7	Chlorobenzene	4.6	U
100-41-4	Ethylbenzene	4.6	U
100-42-5	Styrene	4.6	U
75-25-2	Bromoform	4.6	U
98-82-8	Isopropylbenzene (Cumene)	4.6	U
79-34-5	1,1,2,2-Tetrachloroethane	4.6	U
541-73-1	1,3-Dichlorobenzene	4.6	U
106-46-7	1,4-Dichlorobenzene	193	E
95-50-1	1,2-Dichlorobenzene	4.6	U
96-12-8	1,2-Dibromo-3-chloropropane	4.6	U
120-82-1	1,2,4-Trichlorobenzene	4.6	U
87-61-6	1,2,3-Trichlorobenzene	4.6	U
1330-20-7	Xylene (total)	13.9	U
1634-04-4	MTBE	4.6	U
110-82-7	Cyclohexane	4.6	U
76-13-1	1,1,2-Trichlorotrifluoroethane	4.6	U
79-20-9	Methyl Acetate	9.7	
108-87-2	Methyl Cyclohexane	4.6	U

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 57285TS040212DL1

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 240212501DL1 Lab File ID 12501MR.D

Sample wt/vol: 5.59 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 10 Date Extracted:

Level:(low/med) HIGH Date Analyzed: 02/16/04 Time: 1619

PercentSolids: 33.1 decanted : Dilution Factor: 50

Extraction: PURGETRAP Station ID Waste Character Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
75-71-8	Dichlorodifluoromethane	270	U
74-87-3	Chloromethane	270	U
75-01-4	Vinyl chloride	270	U
74-83-9	Bromomethane	270	U
75-00-3	Chloroethane	270	U
75-69-4	Trichlorofluoromethane	270	U
75-35-4	1,1-Dichloroethene	270	U
75-15-0	Carbon disulfide	270	U
75-09-2	Methylene chloride	270	U
156-60-5	trans-1,2-Dichloroethene	270	U
75-34-3	1,1-Dichloroethane	270	U
67-64-1	Acetone	1080	U
156-59-2	cis-1,2-Dichloroethene	270	U
74-97-5	Bromochloromethane	270	U
78-93-3	2-Butanone	1080	U
67-66-3	Chloroform	270	U
71-55-6	1,1,1-Trichloroethane	270	U
56-23-5	Carbon tetrachloride	270	U
71-43-2	Benzene	270	U
107-06-2	1,2-Dichloroethane	270	U
79-01-6	Trichloroethene	270	U
78-87-5	1,2-Dichloropropane	270	U
75-27-4	Bromodichloromethane	270	U
10061-01-5	cis-1,3-Dichloropropene	270	U
108-10-1	4-Methyl-2-pentanone	1080	U
108-88-3	Toluene	270	U
10061-02-6	trans-1,3-Dichloropropene	270	U

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212DL1

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 240212501DL1 Lab File ID 12501MR.D

Sample wt/vol: 5.59 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 10 Date Extracted:

Level:(low/med) HIGH Date Analyzed: 02/16/04 Time: 1619

PercentSolids: 33.1 decanted : Dilution Factor: 50

Extraction: PURGETRAP Station ID Waste Character Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
79-00-5	1,1,2-Trichloroethane	270	U
127-18-4	Tetrachloroethene	270	U
591-78-6	2-Hexanone	1080	U
124-48-1	Dibromochloromethane	270	U
106-93-4	1,2-Dibromoethane(EDB)	270	U
108-90-7	Chlorobenzene	270	U
100-41-4	Ethylbenzene	270	U
100-42-5	Styrene	270	U
75-25-2	Bromoform	270	U
98-82-8	Isopropylbenzene (Cumene)	270	U
79-34-5	1,1,2,2-Tetrachloroethane	270	U
541-73-1	1,3-Dichlorobenzene	270	U
106-46-7	1,4-Dichlorobenzene	6820	
95-50-1	1,2-Dichlorobenzene	270	U
96-12-8	1,2-Dibromo-3-chloropropane	459	U
120-82-1	1,2,4-Trichlorobenzene	270	U
87-61-6	1,2,3-Trichlorobenzene	270	U
1330-20-7	Xylene (total)	811	U
1634-04-4	MTBE	270	U
76-13-1	1,1,2-Trichlorotrifluoroethane	270	U
110-82-7	Cyclohexane	270	U
79-20-9	Methyl Acetate	768	
108-87-2	Methyl Cyclohexane	270	U

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57TB1W040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: WATER Lab Sample ID 240212502 Lab File ID 12502.D

Sample wt/vol: 5 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 1351

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID Trip Blank #1 Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-15-0	Carbon disulfide	1	U
75-09-2	Methylene chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
67-64-1	Acetone	4	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	Bromochloromethane	1	U
78-93-3	2-Butanone	2	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-10-1	4-Methyl-2-pentanone	2	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U

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Form I

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57TB1W040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: WATER Lab Sample ID 240212502 Lab File ID 12502.D

Sample wt/vol: 5 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 1351

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID Trip Blank #1 Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
591-78-6	2-Hexanone	2	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane(EDB)	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene (Cumene)	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U
1330-20-7	Xylene (total)	3	U
1634-04-4	MTBE	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
108-87-2	Methyl Cyclohexane	1	U
79-20-9	Methyl Acetate	1	U
110-82-7	Cyclohexane	1	U

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021304BLKA32

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: WATER Lab Sample ID 021304BLKA32 Lab File ID BLK32.D

Sample wt/vol: 5 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 0829

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-15-0	Carbon disulfide	1	U
75-09-2	Methylene chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
67-64-1	Acetone	4	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	Bromochloromethane	1	U
78-93-3	2-Butanone	2	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-10-1	4-Methyl-2-pentanone	2	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U

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Form I

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021304BLKA32

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: WATER Lab Sample ID 021304BLKA32 Lab File ID BLK32.D

Sample wt/vol: 5 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 0829

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
591-78-6	2-Hexanone	2	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane(EDB)	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene (Cumene)	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U
1330-20-7	Xylene (total)	3	U
1634-04-4	MTBE	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
108-87-2	Methyl Cyclohexane	1	U
79-20-9	Methyl Acetate	1	U
110-82-7	Cyclohexane	1	U

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VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 021304BLKS11

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 021304BLKS11 Lab File ID BLK11.D

Sample wt/vol: 5 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 0932

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
75-71-8	Dichlorodifluoromethane	2	U
74-87-3	Chloromethane	2	U
75-01-4	Vinyl chloride	2	U
74-83-9	Bromomethane	2	U
75-00-3	Chloroethane	2	U
75-69-4	Trichlorofluoromethane	2	U
75-35-4	1,1-Dichloroethene	2	U
75-15-0	Carbon disulfide	2	U
75-09-2	Methylene chloride	2	U
156-60-5	trans-1,2-Dichloroethene	2	U
75-34-3	1,1-Dichloroethane	2	U
67-64-1	Acetone	10	U
156-59-2	cis-1,2-Dichloroethene	2	U
74-97-5	Bromochloromethane	2	U
78-93-3	2-Butanone	4	U
67-66-3	Chloroform	2	U
71-55-6	1,1,1-Trichloroethane	2	U
56-23-5	Carbon tetrachloride	2	U
71-43-2	Benzene	2	U
107-06-2	1,2-Dichloroethane	2	U
79-01-6	Trichloroethene	2	U
78-87-5	1,2-Dichloropropane	2	U
75-27-4	Bromodichloromethane	2	U
10061-01-5	cis-1,3-Dichloropropene	2	U
108-10-1	4-Methyl-2-pentanone	4	U
108-88-3	Toluene	2	U
10061-02-6	trans-1,3-Dichloropropene	2	U

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Form I

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 021304BLKS11

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 021304BLKS11 Lab File ID BLK11.D

Sample wt/vol: 5 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 0932

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
79-00-5	1,1,2-Trichloroethane	2	U
127-18-4	Tetrachloroethene	2	U
591-78-6	2-Hexanone	4	U
124-48-1	Dibromochloromethane	2	U
106-93-4	1,2-Dibromoethane(EDB)	2	U
108-90-7	Chlorobenzene	2	U
100-41-4	Ethylbenzene	2	U
100-42-5	Styrene	2	U
75-25-2	Bromoform	2	U
98-82-8	Isopropylbenzene (Cumene)	2	U
79-34-5	1,1,2,2-Tetrachloroethane	2	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	2	U
95-50-1	1,2-Dichlorobenzene	2	U
96-12-8	1,2-Dibromo-3-chloropropane	2	U
120-82-1	1,2,4-Trichlorobenzene	2	U
87-61-6	1,2,3-Trichlorobenzene	2	U
1330-20-7	Xylene (total)	6	U
1634-04-4	MTBE	2	U
110-82-7	Cyclohexane	2	U
76-13-1	1,1,2-Trichlorotrifluoroethane	2	U
79-20-9	Methyl Acetate	2	U
108-87-2	Methyl Cyclohexane	2	U

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 021604MBLKS22

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 021604MBLKS22 Lab File ID MBLK22.D

Sample wt/vol: 5 Units: G Date Received: 02/16/04

Concentrated Extract Volume: 10 Date Extracted:

Level:(low/med) HIGH Date Analyzed: 02/16/04 Time: 1106

PercentSolids: 100 decanted : Dilution Factor: 50

Extraction: PURGETRAP Station ID Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
75-71-8	Dichlorodifluoromethane	100	U
74-87-3	Chloromethane	100	U
75-01-4	Vinyl chloride	100	U
74-83-9	Bromomethane	100	U
75-00-3	Chloroethane	100	U
75-69-4	Trichlorofluoromethane	100	U
75-35-4	1,1-Dichloroethene	100	U
75-15-0	Carbon disulfide	100	U
75-09-2	Methylene chloride	100	U
156-60-5	trans-1,2-Dichloroethene	100	U
75-34-3	1,1-Dichloroethane	100	U
67-64-1	Acetone	400	U
156-59-2	cis-1,2-Dichloroethene	100	U
74-97-5	Bromochloromethane	100	U
78-93-3	2-Butanone	400	U
67-66-3	Chloroform	100	U
71-55-6	1,1,1-Trichloroethane	100	U
56-23-5	Carbon tetrachloride	100	U
71-43-2	Benzene	100	U
107-06-2	1,2-Dichloroethane	100	U
79-01-6	Trichloroethene	100	U
78-87-5	1,2-Dichloropropane	100	U
75-27-4	Bromodichloromethane	100	U
10061-01-5	cis-1,3-Dichloropropene	100	U
108-10-1	4-Methyl-2-pentanone	400	U
108-88-3	Toluene	100	U
10061-02-6	trans-1,3-Dichloropropene	100	U

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Form I

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

021604MBLKS22

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 021604MBLKS22 Lab File ID MBLK22.D

Sample wt/vol: 5 Units: G Date Received: 02/16/04

Concentrated Extract Volume: 10 Date Extracted:

Level:(low/med) HIGH Date Analyzed: 02/16/04 Time: 1106

PercentSolids: 100 decanted : Dilution Factor: 50

Extraction: PURGETRAP Station ID Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
79-00-5	1,1,2-Trichloroethane	100	U
127-18-4	Tetrachloroethene	100	U
591-78-6	2-Hexanone	400	U
124-48-1	Dibromochloromethane	100	U
106-93-4	1,2-Dibromoethane(EDB)	100	U
108-90-7	Chlorobenzene	100	U
100-41-4	Ethylbenzene	100	U
100-42-5	Styrene	100	U
75-25-2	Bromoform	100	U
98-82-8	Isopropylbenzene (Cumene)	100	U
79-34-5	1,1,2,2-Tetrachloroethane	100	U
541-73-1	1,3-Dichlorobenzene	100	U
106-46-7	1,4-Dichlorobenzene	100	U
95-50-1	1,2-Dichlorobenzene	100	U
96-12-8	1,2-Dibromo-3-chloropropane	170	U
120-82-1	1,2,4-Trichlorobenzene	100	U
87-61-6	1,2,3-Trichlorobenzene	100	U
1330-20-7	Xylene (total)	300	U
1634-04-4	MTBE	100	U
76-13-1	1,1,2-Trichlorotrifluoroethane	100	U
110-82-7	Cyclohexane	100	U
79-20-9	Methyl Acetate	190	U
108-87-2	Methyl Cyclohexane	100	U

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Form I

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021304LCSA32

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	20	19.8	99.0		21.0	56 - 144
Chloromethane	20	19.4	97.0		18.0	48 - 149
Vinyl chloride	20	16.7	83.5		24.0	66 - 128
Bromomethane	20	19.3	96.5		20.0	55 - 159
Chloroethane	20	19.2	96.0		12.0	77 - 144
Trichlorofluoromethane	20	18.4	92.0		14.0	65 - 190
1,1-Dichloroethene	20	21	105.0		14.0	75 - 150
Carbon disulfide	20	19.5	97.5		17.0	72 - 142
Methylene chloride	20	20.2	101.0		9.0	81 - 129
trans-1,2-Dichloroethene	20	20.8	104.0		14.0	84 - 135
1,1-Dichloroethane	20	20.7	104.0		10.0	88 - 127
Acetone	60	68.4	114.0		19.0	70 - 135
cis-1,2-Dichloroethene	20	21.4	107.0		11.0	88 - 127
Bromochloromethane	20	21	105.0		12.0	80 - 124
2-Butanone	60	61.2	102.0		20.0	83 - 127
Chloroform	20	20.1	100.0		13.0	83 - 127
1,1,1-Trichloroethane	20	21.4	107.0		12.0	83 - 132
Carbon tetrachloride	20	22.8	114.0		15.0	74 - 140
Benzene	20	20.6	103.0		10.0	82 - 129
1,2-Dichloroethane	20	21.4	107.0		8.0	86 - 120
Trichloroethene	20	20.9	104.0		13.0	82 - 127
1,2-Dichloropropane	20	20.6	103.0		11.0	83 - 126
Bromodichloromethane	20	20.5	102.0		13.0	84 - 127
cis-1,3-Dichloropropene	20	21.8	109.0		13.0	67 - 133
4-Methyl-2-pentanone	60	57	95.0		15.0	64 - 140
Toluene	20	20.6	103.0		13.0	82 - 128
trans-1,3-Dichloropropene	20	24.3	122.0		10.0	62 - 137
1,1,2-Trichloroethane	20	21.2	106.0		13.0	86 - 117
Tetrachloroethene	20	21.2	106.0		11.0	87 - 124
2-Hexanone	60	69.8	116.0		19.0	58 - 136
Dibromochloromethane	20	21.2	106.0		12.0	87 - 123
1,2-Dibromoethane(EDB)	20	20.9	104.0		11.0	79 - 117

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1206

Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No. 021304LCSA32

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Chlorobenzene	20	20.9	104.0		12.0	87 - 117
Ethylbenzene	20	21.2	106.0		13.0	89 - 121
Styrene	20	21.2	106.0		13.0	80 - 127
Bromoform	20	23.7	118.0		10.0	67 - 129
Isopropylbenzene (Cumene)	20	19.8	99.0		10.0	96 - 118
1,1,2,2-Tetrachloroethane	20	19.5	97.5		9.0	87 - 116
1,3-Dichlorobenzene	20	20.5	102.0		13.0	88 - 121
1,4-Dichlorobenzene	20	20.3	102.0		11.0	88 - 118
1,2-Dichlorobenzene	20	21	105.0		13.0	91 - 116
1,2-Dibromo-3-chloropropane	20	22.6	113.0		17.0	82 - 127
1,2,4-Trichlorobenzene	20	23.9	120.0		11.0	84 - 124
1,2,3-Trichlorobenzene	20	24.7	124.0 *		11.0	91 - 122
Xylene (total)	60	62.6	104.0		9.0	82 - 124
MTBE	20	21.3	106.0		17.0	83 - 131
1,1,2-Trichlorotrifluoroethane	20	20.6	103.0		30.0	70 - 130
Methyl Cyclohexane	20	21.2	106.0		30.0	70 - 130
Methyl Acetate	20	21.3	106.0		30.0	70 - 130
Cyclohexane	20	21.2	106.0		30.0	70 - 130

Spike Recovery: 1 out of 50 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

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Form III

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021304LCSA32D

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	20	18.6	93.0	6.2	21.0	56 - 144
Chloromethane	20	19	95.0	2.1	18.0	48 - 149
Vinyl chloride	20	16.2	81.0	3.0	24.0	66 - 128
Bromomethane	20	18.4	92.0	4.8	20.0	55 - 159
Chloroethane	20	17.8	89.0	7.6	12.0	77 - 144
Trichlorofluoromethane	20	17.2	86.0	6.7	14.0	65 - 190
1,1-Dichloroethene	20	19.8	99.0	5.9	14.0	75 - 150
Carbon disulfide	20	18.3	91.5	6.3	17.0	72 - 142
Methylene chloride	20	19.9	99.5	1.5	9.0	81 - 129
trans-1,2-Dichloroethene	20	20.1	100.0	3.4	14.0	84 - 135
1,1-Dichloroethane	20	20.1	100.0	2.9	10.0	88 - 127
Acetone	60	64.7	108.0	5.6	19.0	70 - 135
cis-1,2-Dichloroethene	20	20.9	104.0	2.4	11.0	88 - 127
Bromochloromethane	20	20.5	102.0	2.4	12.0	80 - 124
2-Butanone	60	66.3	110.0	8.0	20.0	83 - 127
Chloroform	20	19.7	98.5	2.0	13.0	83 - 127
1,1,1-Trichloroethane	20	20.3	102.0	5.3	12.0	83 - 132
Carbon tetrachloride	20	21.7	108.0	4.9	15.0	74 - 140
Benzene	20	20.1	100.0	2.5	10.0	82 - 129
1,2-Dichloroethane	20	20.6	103.0	3.8	8.0	86 - 120
Trichloroethene	20	20.4	102.0	2.4	13.0	82 - 127
1,2-Dichloropropane	20	19.7	98.5	4.5	11.0	83 - 126
Bromodichloromethane	20	19.9	99.5	3.0	13.0	84 - 127
cis-1,3-Dichloropropene	20	21.5	108.0	1.4	13.0	67 - 133
4-Methyl-2-pentanone	60	55.6	92.7	2.5	15.0	64 - 140
Toluene	20	20	100.0	3.0	13.0	82 - 128
trans-1,3-Dichloropropene	20	23.6	118.0	2.9	10.0	62 - 137
1,1,2-Trichloroethane	20	20.8	104.0	1.9	13.0	86 - 117
Tetrachloroethene	20	20.6	103.0	2.9	11.0	87 - 124
2-Hexanone	60	66.2	110.0	5.3	19.0	58 - 136
Dibromochloromethane	20	20.8	104.0	1.9	12.0	87 - 123
1,2-Dibromoethane(EDB)	20	20.8	104.0	0.5	11.0	79 - 117

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1206

Form III

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021304LCSA32D

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Chlorobenzene	20	19.8	99.0	5.4	12.0	87 - 117
Ethylbenzene	20	20.3	102.0	4.3	13.0	89 - 121
Styrene	20	20.7	104.0	2.4	13.0	80 - 127
Bromoform	20	22	110.0	7.4	10.0	67 - 129
Isopropylbenzene (Cumene)	20	18.8	94.0 *	5.2	10.0	96 - 118
1,1,2,2-Tetrachloroethane	20	18.3	91.5	6.3	9.0	87 - 116
1,3-Dichlorobenzene	20	20	100.0	2.5	13.0	88 - 121
1,4-Dichlorobenzene	20	20	100.0	1.5	11.0	88 - 118
1,2-Dichlorobenzene	20	20.4	102.0	2.9	13.0	91 - 116
1,2-Dibromo-3-chloropropane	20	21	105.0	7.3	17.0	82 - 127
1,2,4-Trichlorobenzene	20	23.2	116.0	3.0	11.0	84 - 124
1,2,3-Trichlorobenzene	20	22.4	112.0	9.8	11.0	91 - 122
Xylene (total)	60	60.1	100.0	4.1	9.0	82 - 124
MTBE	20	21.4	107.0	0.5	17.0	83 - 131
1,1,2-Trichlorotrifluoroethane	20	19.5	97.5	5.5	30.0	70 - 130
Methyl Cyclohexane	20	19.9	99.5	6.3	30.0	70 - 130
Methyl Acetate	20	22.1	110.0	3.7	30.0	70 - 130
Cyclohexane	20	19.8	99.0	6.8	30.0	70 - 130

Spike Recovery: 1 out of 50 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1206

Form III

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021304LCSS11

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	20	23.1	116.0		29.0	33 - 126
Chloromethane	20	17.3	86.5		38.0	40 - 142
Vinyl chloride	20	20.4	102.0		37.0	49 - 139
Bromomethane	20	19.9	99.5		29.0	51 - 140
Chloroethane	20	19.7	98.5		30.0	60 - 139
Trichlorofluoromethane	20	21.6	108.0		30.0	75 - 141
1,1-Dichloroethene	20	20.7	104.0		33.0	68 - 135
Carbon disulfide	20	19.8	99.0		34.0	60 - 134
Methylene chloride	20	20	100.0		29.0	54 - 136
trans-1,2-Dichloroethene	20	19.6	98.0		32.0	74 - 123
1,1-Dichloroethane	20	19.6	98.0		34.0	67 - 126
Acetone	60	65.6	109.0		40.0	59 - 132
cis-1,2-Dichloroethene	20	18.6	93.0		38.0	70 - 120
Bromochloromethane	20	19.1	95.5		47.0	72 - 119
2-Butanone	60	61	102.0		36.0	59 - 133
Chloroform	20	21.8	109.0		29.0	65 - 120
1,1,1-Trichloroethane	20	21.3	106.0		45.0	68 - 128
Carbon tetrachloride	20	21.1	106.0		38.0	68 - 130
Benzene	20	18.5	92.5		37.0	68 - 126
1,2-Dichloroethane	20	21.8	109.0		34.0	67 - 119
Trichloroethene	20	19.7	98.5		37.0	76 - 116
1,2-Dichloropropane	20	18.4	92.0		44.0	68 - 120
Bromodichloromethane	20	20.6	103.0		33.0	67 - 121
cis-1,3-Dichloropropene	20	20	100.0		36.0	69 - 120
4-Methyl-2-pentanone	60	58.7	97.8		31.0	65 - 125
Toluene	20	19.6	98.0		32.0	71 - 124
trans-1,3-Dichloropropene	20	20.4	102.0		37.0	62 - 122
1,1,2-Trichloroethane	20	19	95.0		40.0	63 - 123
Tetrachloroethene	20	19.4	97.0		29.0	67 - 118
2-Hexanone	60	65.8	110.0		39.0	59 - 131
Dibromochloromethane	20	19.6	98.0		37.0	63 - 118
1,2-Dibromoethane(EDB)	20	18.6	93.0		36.0	62 - 118

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1206

Form III

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021304LCSS11

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Chlorobenzene	20	19.2	96.0		36.0	64 - 122
Ethylbenzene	20	18.2	91.0		33.0	65 - 124
Styrene	20	19.6	98.0		32.0	60 - 125
Bromoform	20	20.1	100.0		29.0	59 - 119
Isopropylbenzene (Cumene)	20	17.3	86.5		35.0	73 - 122
1,1,2,2-Tetrachloroethane	20	17.5	87.5		33.0	64 - 113
1,3-Dichlorobenzene	20	18.4	92.0		42.0	64 - 117
1,4-Dichlorobenzene	20	19	95.0		38.0	62 - 116
1,2-Dichlorobenzene	20	18.4	92.0		40.0	64 - 120
1,2-Dibromo-3-chloropropane	20	19.8	99.0		32.0	53 - 118
1,2,4-Trichlorobenzene	20	20.2	101.0		46.0	60 - 114
1,2,3-Trichlorobenzene	20	20.6	103.0		50.0	66 - 130
Xylene (total)	60	57.1	95.2		29.0	65 - 121
MTBE	20	22.6	113.0		26.0	68 - 125
Cyclohexane	20	17.7	88.5		30.0	62 - 130
1,1,2-Trichlorotrifluoroethane	20	20	100.0		33.0	62 - 131
Methyl Acetate	20	20.4	102.0		30.0	59 - 126
Methyl Cyclohexane	20	17.8	89.0		30.0	67 - 126

Spike Recovery: 0 out of 50 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1206

Form III

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021304LCSS11D

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	20	20.4	102.0	12.4	29.0	33 - 126
Chloromethane	20	15.6	78.0	10.3	38.0	40 - 142
Vinyl chloride	20	18.2	91.0	11.4	37.0	49 - 139
Bromomethane	20	20.5	102.0	3.0	29.0	51 - 140
Chloroethane	20	20.6	103.0	4.5	30.0	60 - 139
Trichlorofluoromethane	20	21.1	106.0	2.3	30.0	75 - 141
1,1-Dichloroethene	20	19.4	97.0	6.5	33.0	68 - 135
Carbon disulfide	20	19.2	96.0	3.1	34.0	60 - 134
Methylene chloride	20	19.9	99.5	0.5	29.0	54 - 136
trans-1,2-Dichloroethene	20	18.7	93.5	4.7	32.0	74 - 123
1,1-Dichloroethane	20	18.8	94.0	4.2	34.0	67 - 126
Acetone	60	59.6	99.3	9.6	40.0	59 - 132
cis-1,2-Dichloroethene	20	18.4	92.0	1.1	38.0	70 - 120
Bromochloromethane	20	18.8	94.0	1.6	47.0	72 - 119
2-Butanone	60	59.6	99.3	2.3	36.0	59 - 133
Chloroform	20	20.1	100.0	8.1	29.0	65 - 120
1,1,1-Trichloroethane	20	20.8	104.0	2.4	45.0	68 - 128
Carbon tetrachloride	20	19.2	96.0	9.4	38.0	68 - 130
Benzene	20	17.5	87.5	5.6	37.0	68 - 126
1,2-Dichloroethane	20	21.4	107.0	1.9	34.0	67 - 119
Trichloroethene	20	18.3	91.5	7.4	37.0	76 - 116
1,2-Dichloropropane	20	18	90.0	2.2	44.0	68 - 120
Bromodichloromethane	20	20	100.0	3.0	33.0	67 - 121
cis-1,3-Dichloropropene	20	19.3	96.5	3.6	36.0	69 - 120
4-Methyl-2-pentanone	60	52.7	87.8	10.8	31.0	65 - 125
Toluene	20	18.4	92.0	6.3	32.0	71 - 124
trans-1,3-Dichloropropene	20	19.4	97.0	5.0	37.0	62 - 122
1,1,2-Trichloroethane	20	18.8	94.0	1.1	40.0	63 - 123
Tetrachloroethene	20	17	85.0	13.2	29.0	67 - 118
2-Hexanone	60	58.5	97.5	11.7	39.0	59 - 131
Dibromochloromethane	20	18.5	92.5	5.8	37.0	63 - 118
1,2-Dibromoethane(EDB)	20	19	95.0	2.1	36.0	62 - 118

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1206

Form III

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021304LCSS11D

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Chlorobenzene	20	19	95.0	1.0	36.0	64 - 122
Ethylbenzene	20	17.4	87.0	4.5	33.0	65 - 124
Styrene	20	17.9	89.5	9.1	32.0	60 - 125
Bromoform	20	19.4	97.0	3.5	29.0	59 - 119
Isopropylbenzene (Cumene)	20	15.8	79.0	9.1	35.0	73 - 122
1,1,2,2-Tetrachloroethane	20	16.9	84.5	3.5	33.0	64 - 113
1,3-Dichlorobenzene	20	17.2	86.0	6.7	42.0	64 - 117
1,4-Dichlorobenzene	20	17.4	87.0	8.8	38.0	62 - 116
1,2-Dichlorobenzene	20	17.9	89.5	2.8	40.0	64 - 120
1,2-Dibromo-3-chloropropane	20	18	90.0	9.5	32.0	53 - 118
1,2,4-Trichlorobenzene	20	18.4	92.0	9.3	46.0	60 - 114
1,2,3-Trichlorobenzene	20	17.8	89.0	14.6	50.0	66 - 130
Xylene (total)	60	53.9	89.8	5.8	29.0	65 - 121
MTBE	20	22.6	113.0	0.0	26.0	68 - 125
Cyclohexane	20	16.6	83.0	6.4	30.0	62 - 130
1,1,2-Trichlorotrifluoroethane	20	19.4	97.0	3.0	33.0	62 - 131
Methyl Acetate	20	19.2	96.0	6.1	30.0	59 - 126
Methyl Cyclohexane	20	17.7	88.5	0.6	30.0	67 - 126

Spike Recovery: 0 out of 50 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1206

Form III

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021604MLCSS22

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	2000	2180	109.0		29.0	33 - 126
Chloromethane	2000	2110	106.0		38.0	40 - 142
Vinyl chloride	2000	2110	106.0		37.0	49 - 139
Bromomethane	2000	2080	104.0		29.0	51 - 140
Chloroethane	2000	2050	102.0		30.0	60 - 139
Trichlorofluoromethane	2000	1940	97.0		30.0	75 - 141
1,1-Dichloroethene	2000	1940	97.0		33.0	68 - 135
Carbon disulfide	2000	1730	86.5		34.0	60 - 134
Methylene chloride	2000	2000	100.0		29.0	54 - 136
trans-1,2-Dichloroethene	2000	2050	102.0		32.0	74 - 123
1,1-Dichloroethane	2000	2050	102.0		34.0	67 - 126
Acetone	6000	5380	89.7		40.0	59 - 132
cis-1,2-Dichloroethene	2000	2020	101.0		38.0	70 - 120
Bromochloromethane	2000	2220	111.0		47.0	72 - 119
2-Butanone	6000	6110	102.0		36.0	59 - 133
Chloroform	2000	2070	104.0		29.0	65 - 120
1,1,1-Trichloroethane	2000	2080	104.0		45.0	68 - 128
Carbon tetrachloride	2000	2050	102.0		38.0	68 - 130
Benzene	2000	2020	101.0		37.0	68 - 126
1,2-Dichloroethane	2000	2160	108.0		34.0	67 - 119
Trichloroethene	2000	1940	97.0		37.0	76 - 116
1,2-Dichloropropane	2000	2140	107.0		44.0	68 - 120
Bromodichloromethane	2000	2170	108.0		33.0	67 - 121
cis-1,3-Dichloropropene	2000	2140	107.0		36.0	69 - 120
4-Methyl-2-pentanone	6000	6040	101.0		31.0	65 - 125
Toluene	2000	2020	101.0		32.0	71 - 124
trans-1,3-Dichloropropene	2000	2060	103.0		37.0	62 - 122
1,1,2-Trichloroethane	2000	2030	102.0		40.0	63 - 123
Tetrachloroethene	2000	1800	90.0		29.0	67 - 118
2-Hexanone	6000	5920	98.7		39.0	59 - 131
Dibromochloromethane	2000	2000	100.0		37.0	63 - 118
1,2-Dibromoethane(EDB)	2000	2130	106.0		36.0	62 - 118

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1206

Form III

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021604MLCSS22

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Chlorobenzene	2000	1980	99.0		36.0	64 - 122
Ethylbenzene	2000	2020	101.0		33.0	65 - 124
Styrene	2000	2080	104.0		32.0	60 - 125
Bromoform	2000	1790	89.5		29.0	59 - 119
Isopropylbenzene (Cumene)	2000	2070	104.0		35.0	73 - 122
1,1,2,2-Tetrachloroethane	2000	2200	110.0		33.0	64 - 113
1,3-Dichlorobenzene	2000	2070	104.0		42.0	64 - 117
1,4-Dichlorobenzene	2000	2050	102.0		38.0	62 - 116
1,2-Dichlorobenzene	2000	2080	104.0		40.0	64 - 120
1,2-Dibromo-3-chloropropane	2000	2090	104.0		32.0	53 - 118
1,2,4-Trichlorobenzene	2000	1910	95.5		46.0	60 - 114
1,2,3-Trichlorobenzene	2000	1840	92.0		50.0	66 - 130
Xylene (total)	6000	6050	101.0		29.0	65 - 121
MTBE	2000	2810	140.0 *		26.0	68 - 125
1,1,2-Trichlorotrifluoroethane	2000	1960	98.0		33.0	62 - 131
Cyclohexane	2000	1780	89.0		30.0	62 - 130
Methyl Acetate	2000	2250	112.0		30.0	59 - 126
Methyl Cyclohexane	2000	1720	86.0		30.0	67 - 126

Spike Recovery: 1 out of 50 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1206

Form III

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021604MLCSS22D

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	2000	2450	122.0	11.7	29.0	33 - 126
Chloromethane	2000	2220	111.0	5.1	38.0	40 - 142
Vinyl chloride	2000	2250	112.0	6.4	37.0	49 - 139
Bromomethane	2000	2210	110.0	6.1	29.0	51 - 140
Chloroethane	2000	2220	111.0	8.0	30.0	60 - 139
Trichlorofluoromethane	2000	2010	100.0	3.5	30.0	75 - 141
1,1-Dichloroethene	2000	2080	104.0	7.0	33.0	68 - 135
Carbon disulfide	2000	1700	85.0	1.7	34.0	60 - 134
Methylene chloride	2000	2340	117.0	15.7	29.0	54 - 136
trans-1,2-Dichloroethene	2000	2100	105.0	2.4	32.0	74 - 123
1,1-Dichloroethane	2000	2090	104.0	1.9	34.0	67 - 126
Acetone	6000	5270	87.8	2.1	40.0	59 - 132
cis-1,2-Dichloroethene	2000	2120	106.0	4.8	38.0	70 - 120
Bromochloromethane	2000	2270	114.0	2.2	47.0	72 - 119
2-Butanone	6000	6250	104.0	2.3	36.0	59 - 133
Chloroform	2000	2170	108.0	4.7	29.0	65 - 120
1,1,1-Trichloroethane	2000	2240	112.0	7.4	45.0	68 - 128
Carbon tetrachloride	2000	2130	106.0	3.8	38.0	68 - 130
Benzene	2000	2130	106.0	5.3	37.0	68 - 126
1,2-Dichloroethane	2000	2240	112.0	3.6	34.0	67 - 119
Trichloroethene	2000	2000	100.0	3.0	37.0	76 - 116
1,2-Dichloropropane	2000	2210	110.0	3.2	44.0	68 - 120
Bromodichloromethane	2000	2210	110.0	1.8	33.0	67 - 121
cis-1,3-Dichloropropene	2000	2110	106.0	1.4	36.0	69 - 120
4-Methyl-2-pentanone	6000	6380	106.0	5.5	31.0	65 - 125
Toluene	2000	2080	104.0	2.9	32.0	71 - 124
trans-1,3-Dichloropropene	2000	2150	108.0	4.3	37.0	62 - 122
1,1,2-Trichloroethane	2000	2090	104.0	2.9	40.0	63 - 123
Tetrachloroethene	2000	1920	96.0	6.5	29.0	67 - 118
2-Hexanone	6000	6100	102.0	3.0	39.0	59 - 131
Dibromochloromethane	2000	2030	102.0	1.5	37.0	63 - 118
1,2-Dibromoethane(EDB)	2000	2140	107.0	0.5	36.0	62 - 118

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1206

Form III

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021604MLCSS22D

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Chlorobenzene	2000	2070	104.0	4.4	36.0	64 - 122
Ethylbenzene	2000	2020	101.0	0.0	33.0	65 - 124
Styrene	2000	2120	106.0	1.9	32.0	60 - 125
Bromoform	2000	1810	90.5	1.1	29.0	59 - 119
Isopropylbenzene (Cumene)	2000	2190	110.0	5.6	35.0	73 - 122
1,1,2,2-Tetrachloroethane	2000	2280	114.0 *	3.6	33.0	64 - 113
1,3-Dichlorobenzene	2000	2120	106.0	2.4	42.0	64 - 117
1,4-Dichlorobenzene	2000	2150	108.0	4.8	38.0	62 - 116
1,2-Dichlorobenzene	2000	2130	106.0	2.4	40.0	64 - 120
1,2-Dibromo-3-chloropropane	2000	2270	114.0	8.3	32.0	53 - 118
1,2,4-Trichlorobenzene	2000	1950	97.5	2.1	46.0	60 - 114
1,2,3-Trichlorobenzene	2000	1910	95.5	3.7	50.0	66 - 130
Xylene (total)	6000	6300	105.0	4.0	29.0	65 - 121
MTBE	2000	2740	137.0 *	2.5	26.0	68 - 125
1,1,2-Trichlorotrifluoroethane	2000	2150	108.0	9.2	33.0	62 - 131
Cyclohexane	2000	1920	96.0	7.6	30.0	62 - 130
Methyl Acetate	2000	2240	112.0	0.4	30.0	59 - 126
Methyl Cyclohexane	2000	1850	92.5	7.3	30.0	67 - 126

Spike Recovery: 2 out of 50 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1206

Form III

1

HERBICIDE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 2402125-01 Lab File ID 125-1.D

Sample wt/vol: 33.03 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 10 Date Extracted: 02/19/04

Level:(low/med) LOW Date Analyzed: 02/20/04 Time: 2339

PercentSolids: 33.1 decanted : Dilution Factor: 1

Extraction: SONC Station ID Waste Character Method: 8151

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
1918-00-9	Dicamba	23	U
75-99-0	Dalapon	23	U
93-65-2	MCPP	2290	U
94-74-6	MCPA	2290	U
120-36-5	Dichloroprop	23	U
94-75-7	2,4'-D	23	U
93-72-1	2,4,5-TP (Silvex)	23	U
93-76-5	2,4,5-T	23	U
94-82-6	2,4-DB	23	U
88-85-7	Dinoseb	23	U

HERBICIDE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 219BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code: PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 130096 Lab File ID 219BLK D

Sample wt/vol: 33.02 Units: G Date Received: 02/19/04

Concentrated Extract Volume: 10 Date Extracted: 02/19/04

Level:(low/med) LOW Date Analyzed: 02/20/04 Time: 2106

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: SONC Station ID Method: 8151

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
1918-00-9	Dicamba	7.6	U
75-99-0	Dalapon	7.6	U
93-65-2	MCPP	760	U
94-74-6	MCPA	760	U
120-36-5	Dichloroprop	7.6	U
94-75-7	2,4'-D	7.6	U
93-72-1	2,4,5-TP (Silvex)	7.6	U
93-76-5	2,4,5-T	7.6	U
94-82-6	2,4-DB	7.6	U
88-85-7	Dinoseb	7.6	U

HERBICIDE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

219LCS2

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No. SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dicamba	30.3	24.8	81.8		40.0	52 - 148
Dalapon	30.3	15.5	51.2		40.0	37 - 138
MCPP	3030	1570	51.8		40.0	50 - 125
MCPA	3030	2230	73.6		40.0	43 - 139
Dichloroprop	30.3	22.7	74.9		40.0	44 - 148
2,4'-D	30.3	27.2	89.8		40.0	43 - 161
2,4,5-TP (Silvex)	30.3	25.8	85.1		40.0	54 - 150
2,4,5-T	30.3	24.5	80.9		40.0	55 - 155
2,4-DB	30.3	17.7	58.4		40.0	41 - 174
Dinoseb	30.3	26.2	86.5		40.0	18 - 149

Spike Recovery: 0 out of 10 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1245

Form III

HERBICIDE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

219LCS3

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No. SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dicamba	30.2	27	89.4	8.5	40.0	52 - 148
Dalapon	30.2	15	49.7	3.3	40.0	37 - 138
MCPP	3020	1700	56.3	8.0	40.0	50 - 125
MCPA	3020	2210	73.2	0.9	40.0	43 - 139
Dichloroprop	30.2	21	69.5	7.8	40.0	44 - 148
2,4'-D	30.2	28	92.7	2.9	40.0	43 - 161
2,4,5-TP (Silvex)	30.2	26	86.1	0.8	40.0	54 - 150
2,4,5-T	30.2	24	79.5	2.1	40.0	55 - 155
2,4-DB	30.2	18	59.6	1.7	40.0	41 - 174
Dinoseb	30.2	29	96.0	10.1	40.0	18 - 149

Spike Recovery: 0 out of 10 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1245

Form III

1

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 24021250 1 Lab File ID 125-1D10.D

Sample wt/vol: 25 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 2 Date Extracted: 02/19/04

Level:(low/med) LOW Date Analyzed: 02/19/04 Time: 1858

PercentSolids: 33.1 decanted : Dilution Factor: 10

Extraction: SONC Station ID Waste Character Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: MG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
5289290-40-0	TPH	4500	

230204 1241

Form I

1

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 021804SBLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 130035 Lab File ID 0218BLK D

Sample wt/vol: 25.23 Units: G Date Received: 02/19/04

Concentrated Extract Volume: 2 Date Extracted: 02/19/04

Level:(low/med) LOW Date Analyzed: 02/19/04 Time: 1700

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: SONC Station ID Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: MG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
5289290-40-0	TPH	13.9	U

230204 1241

Form I

FL-PRO ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021804SLCS

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED MG/KG	LCS CONCENTRATION MG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
TPH	136	94	69.1		25.0	63 - 153

Spike Recovery: 0 out of 1 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1245

Form III

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 240212501

Level:(low/med) LOW Date Received: 2/13/04

PercentSolids: 0 Station ID: Waste Character

CONCENTRATION UNITS: Fahrenheit

CAS NO.	ANALYTE	Concentration	C	Q	M
1-01-3	Flash Point	160	>		N/A

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

230204 1314

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 240212501

Level:(low/med) LOW Date Received: 2/13/04

PercentSolids: 33.1 Station ID: Waste Character

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M
18496-25-8	Sulfide	216	B		T

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

230204 1314

U.S. EPA - CLP

3

BLANKS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Preparation Blank Matrix (water/soil): SOIL

Preparation Blank Concentration Units (ug/L or mg/Kg): MG/KG

Analyte	Initial Calib. Blank (mg/L)	C	Continuing Calibration Blank (mg/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Sulfide									16	B	T

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U.S. EPA - CLP

3

BLANKS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Preparation Blank Matrix (water/soil): SOIL

Preparation Blank Concentration Units (ug/L or mg/Kg): MG/KG

Analyte	Initial Calib. Blank (mg/L)	C	Continuing Calibration Blank (mg/L) 4	C	5	C	6	C	Prepa-ration Blank	C	M
Sulfide									8	U	T

230204 1314

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 240212501 Lab File ID 125-1D5.D

Sample wt/vol: 15.07 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 1 Date Extracted: 02/17/04

Level:(low/med) LOW Date Analyzed: 02/19/04 Time: 1804

PercentSolids: 33.1 decanted : Dilution Factor: 5

Extraction: OTHER Station ID Waste Character Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
111-44-4	Bis(2-Chloroethyl)ether	4060	U
108-95-2	Phenol	4060	U
95-57-8	2-Chlorophenol	4060	U
108-60-1	2,2-Oxybis(1-chloropropane)	4060	U
95-48-7	2-Methylphenol (o-Cresol)	4060	U
67-72-1	Hexachloroethane	4060	U
621-64-7	N-Nitroso-di-n-propylamine	4060	U
106-44-5	4-Methylphenol	4060	U
98-95-3	Nitrobenzene	4060	U
78-59-1	Isophorone	4060	U
88-75-5	2-Nitrophenol	4060	U
105-67-9	2,4-Dimethylphenol	4060	U
111-91-1	Bis(2-Chloroethoxy)methane	4060	U
120-83-2	2,4-Dichlorophenol	4060	U
91-20-3	Naphthalene	4060	U
106-47-8	4-Chloroaniline	4060	U
91-57-6	2-Methylnaphthalene	4820	
87-68-3	Hexachlorobutadiene	4060	U
59-50-7	4-Chloro-3-methylphenol	4060	U
77-47-4	Hexachlorocyclopentadiene	4060	U
88-06-2	2,4,6-Trichlorophenol	4060	U
95-95-4	2,4,5-Trichlorophenol	4060	U
91-58-7	2-Chloronaphthalene	4060	U
88-74-4	2-Nitroaniline	4060	U
208-96-8	Acenaphthylene	4060	U
131-11-3	Dimethyl-phthalate	4060	U
606-20-2	2,6-Dinitrotoluene	4060	U

230204 1315

Form I

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 240212501 Lab File ID 125-1D5.D

Sample wt/vol: 15.07 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 1 Date Extracted: 02/17/04

Level:(low/med) LOW Date Analyzed: 02/19/04 Time: 1804

PercentSolids: 33.1 decanted : Dilution Factor: 5

Extraction: OTHER Station ID Waste Character Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
83-32-9	Acenaphthene	4060	U
99-09-2	3-Nitroaniline	4060	U
51-28-5	2,4-Dinitrophenol	10100	U
132-64-9	Dibenzofuran	4060	U
121-14-2	2,4-Dinitrotoluene	4060	U
100-02-7	4-Nitrophenol	4060	U
86-73-7	Fluorene	4060	U
7005-72-3	4-Chlorophenyl-phenylether	4060	U
84-66-2	Diethylphthalate	4060	U
100-01-6	4-Nitroaniline	4060	U
534-52-1	2-Methyl-4,6-dinitrophenol	4060	U
86-30-6	N-Nitrosodiphenylamine	4060	U
101-55-3	4-Bromophenyl-phenylether	4060	U
118-74-1	Hexachlorobenzene	4060	U
87-86-5	Pentachlorophenol	4060	U
85-01-8	Phenanthrene	4060	U
120-12-7	Anthracene	4060	U
84-74-2	Di-n-butylphthalate	4060	U
206-44-0	Fluoranthene	4060	U
129-00-0	Pyrene	4060	U
85-68-7	Butylbenzylphthalate	4060	U
91-94-1	3,3'-Dichlorobenzidine	4060	U
56-55-3	Benzo(a)anthracene	4060	U
218-01-9	Chrysene	4060	U
117-81-7	bis(2-ethylhexyl)phthalate	846	J
117-84-0	Di-n-octylphthalate	4060	U
205-99-2	Benzo(b)fluoranthene	4060	U

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Form I

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 57285TS040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 240212501 Lab File ID 125-1D5.D

Sample wt/vol: 15.07 Units: G Date Received: 02/13/04

Concentrated Extract Volume: 1 Date Extracted: 02/17/04

Level:(low/med) LOW Date Analyzed: 02/19/04 Time: 1804

PercentSolids: 33.1 decanted : Dilution Factor: 5

Extraction: OTHER Station ID Waste Character Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
207-08-9	Benzo(k)fluoranthene	4060	U
50-32-8	Benzo(a)pyrene	4060	U
193-39-5	Indeno(1,2,3-cd)pyrene	4060	U
53-70-3	Dibenz(a,h)anthracene	4060	U
191-24-2	Benzo(g,h,i)perylene	4060	U
98-86-2	Acetophenone	4060	U
95-94-3	1,2,4,5-Tetrachlorobenzene	4060	U
86-74-8	Carbazole	4060	U
105-60-2	Caprolactam	4060	U
92-52-4	Biphenyl	4060	U
1912-24-9	Atrazine	4060	U
100-52-7	Benzaldehyde	4060	U

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 021704BLKS01

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 129814 Lab File ID 0217BLK.D

Sample wt/vol: 15.02 Units: G Date Received: 02/17/04

Concentrated Extract Volume: 1 Date Extracted: 02/17/04

Level:(low/med) LOW Date Analyzed: 02/19/04 Time: 1012

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: OTHER Station ID Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
111-44-4	Bis(2-Chloroethyl)ether	270	U
108-95-2	Phenol	270	U
95-57-8	2-Chlorophenol	270	U
108-60-1	2,2-Oxybis(1-chloropropane)	270	U
95-48-7	2-Methylphenol (o-Cresol)	270	U
67-72-1	Hexachloroethane	270	U
621-64-7	N-Nitroso-di-n-propylamine	270	U
106-44-5	4-Methylphenol	270	U
98-95-3	Nitrobenzene	270	U
78-59-1	Isophorone	270	U
88-75-5	2-Nitrophenol	270	U
105-67-9	2,4-Dimethylphenol	270	U
111-91-1	Bis(2-Chloroethoxy)methane	270	U
120-83-2	2,4-Dichlorophenol	270	U
91-20-3	Naphthalene	270	U
106-47-8	4-Chloroaniline	270	U
91-57-6	2-Methylnaphthalene	270	U
87-68-3	Hexachlorobutadiene	270	U
59-50-7	4-Chloro-3-methylphenol	270	U
77-47-4	Hexachlorocyclopentadiene	270	U
88-06-2	2,4,6-Trichlorophenol	270	U
95-95-4	2,4,5-Trichlorophenol	270	U
91-58-7	2-Chloronaphthalene	270	U
88-74-4	2-Nitroaniline	270	U
208-96-8	Acenaphthylene	270	U
131-11-3	Dimethyl-phthalate	270	U
606-20-2	2,6-Dinitrotoluene	270	U

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021704BLKS01

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 129814 Lab File ID 0217BLK.D

Sample wt/vol: 15.02 Units: G Date Received: 02/17/04

Concentrated Extract Volume: 1 Date Extracted: 02/17/04

Level:(low/med) LOW Date Analyzed: 02/19/04 Time: 1012

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: OTHER Station ID Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
83-32-9	Acenaphthene	270	U
99-09-2	3-Nitroaniline	270	U
51-28-5	2,4-Dinitrophenol	669	U
132-64-9	Dibenzofuran	270	U
121-14-2	2,4-Dinitrotoluene	270	U
100-02-7	4-Nitrophenol	270	U
86-73-7	Fluorene	270	U
7005-72-3	4-Chlorophenyl-phenylether	270	U
84-66-2	Diethylphthalate	270	U
100-01-6	4-Nitroaniline	270	U
534-52-1	2-Methyl-4,6-dinitrophenol	270	U
86-30-6	N-Nitrosodiphenylamine	270	U
101-55-3	4-Bromophenyl-phenylether	270	U
118-74-1	Hexachlorobenzene	270	U
87-86-5	Pentachlorophenol	270	U
85-01-8	Phenanthrene	270	U
120-12-7	Anthracene	270	U
84-74-2	Di-n-butylphthalate	270	U
206-44-0	Fluoranthene	270	U
129-00-0	Pyrene	270	U
85-68-7	Butylbenzylphthalate	270	U
91-94-1	3,3'-Dichlorobenzidine	270	U
56-55-3	Benzo(a)anthracene	270	U
218-01-9	Chrysene	270	U
117-81-7	bis(2-ethylhexyl)phthalate	270	U
117-84-0	Di-n-octylphthalate	270	U
205-99-2	Benzo(b)fluoranthene	270	U

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Form I

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 021704BLKS01

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

Matrix: SOIL Lab Sample ID 129814 Lab File ID 0217BLK.D

Sample wt/vol: 15.02 Units: G Date Received: 02/17/04

Concentrated Extract Volume: 1 Date Extracted: 02/17/04

Level:(low/med) LOW Date Analyzed: 02/19/04 Time: 1012

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: OTHER Station ID Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*
207-08-9	Benzo(k)fluoranthene	270	U
50-32-8	Benzo(a)pyrene	270	U
193-39-5	Indeno(1,2,3-cd)pyrene	270	U
53-70-3	Dibenz(a,h)anthracene	270	U
191-24-2	Benzo(g,h,i)perylene	270	U
98-86-2	Acetophenone	270	U
95-94-3	1,2,4,5-Tetrachlorobenzene	270	U
86-74-8	Carbazole	270	U
105-60-2	Caprolactam	270	U
92-52-4	Biphenyl	270	U
1912-24-9	Atrazine	270	U
100-52-7	Benzaldehyde	270	U

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Fiel 57285TS040212MS

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	SAMPLE CONCENTRATION UG/KG	MS CONCENTRATION UG/KG	MS % REC #	QC LIMITS REC.
Bis(2-Chloroethyl)ether	2660	0	1500	56.4	52 - 123
Phenol	2660	0	2040	76.7 *	13 - 69
2-Chlorophenol	2660	0	1780	66.9	30 - 109
2,2-Oxybis(1-chloropropane)	2660	0	1710	64.3	21 - 119
2-Methylphenol (o-Cresol)	2660	0	1800	67.7	29 - 109
Hexachloroethane	2660	0	557	20.9 *	28 - 90
N-Nitroso-di-n-propylamine	2660	0	1900	71.4	48 - 82
4-Methylphenol	2660	0	1710	64.3	22 - 103
Nitrobenzene	2660	0	1940	72.9	53 - 127
Isophorone	2660	0	2610	98.1	60 - 140
2-Nitrophenol	2660	0	2160	81.2	0 - 144
2,4-Dimethylphenol	2660	0	1990	74.8	31 - 93
Bis(2-Chloroethoxy)methane	2660	0	2680	101.0	49 - 133
2,4-Dichlorophenol	2660	0	2180	82.0	63 - 130
Naphthalene	2660	0	1870	70.3	42 - 108
4-Chloroaniline	2660	0	1410	53.0	18 - 131
2-Methylnaphthalene	2660	4820	2700	-79.7 *	30 - 129
Hexachlorobutadiene	2660	0	1590	59.8	10 - 97
4-Chloro-3-methylphenol	2660	0	1540	57.9	35 - 116
Hexachlorocyclopentadiene	2660	0	0	0.0	0 - 89
2,4,6-Trichlorophenol	2660	0	2080	78.2	36 - 118
2,4,5-Trichlorophenol	2660	0	2000	75.2	33 - 124
2-Chloronaphthalene	2660	0	1760	66.2	28 - 125
2-Nitroaniline	2660	0	1890	71.1	64 - 131
Acenaphthylene	2660	0	1880	70.7	36 - 126
Dimethyl-phthalate	2660	0	2060	77.4	48 - 123
2,6-Dinitrotoluene	2660	0	2200	82.7	53 - 135
Acenaphthene	2660	0	1960	73.7	28 - 126
3-Nitroaniline	2660	0	1910	71.8	38 - 130
2,4-Dinitrophenol	2660	0	0	0.0	0 - 137

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

230204 1315

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Fiel 57285TS040212MS

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	SAMPLE CONCENTRATION UG/KG	MS CONCENTRATION UG/KG	MS % REC #	QC LIMITS REC.
Dibenzofuran	2660	0	2150	80.8	23 - 140
2,4-Dinitrotoluene	2660	0	2200	82.7	46 - 123
4-Nitrophenol	2660	0	2100	78.9	0 - 149
Fluorene	2660	0	2250	84.6	52 - 131
4-Chlorophenyl-phenylether	2660	0	2210	83.1	38 - 124
Diethylphthalate	2660	0	2100	78.9	43 - 135
4-Nitroaniline	2660	0	2360	88.7	51 - 127
2-Methyl-4,6-dinitrophenol	2660	0	0	0.0 *	6 - 135
N-Nitrosodiphenylamine	2660	0	2340	88.0	64 - 140
4-Bromophenyl-phenylether	2660	0	1760	66.2	32 - 115
Hexachlorobenzene	2660	0	1890	71.1	40 - 124
Pentachlorophenol	2660	0	1670	62.8	6 - 138
Phenanthrene	2660	0	2200	82.7	12 - 137
Anthracene	2660	0	2150	80.8	50 - 128
Di-n-butylphthalate	2660	0	2280	85.7	42 - 133
Fluoranthene	2660	0	2450	92.1	58 - 103
Pyrene	2660	0	1740	65.4	56 - 103
Butylbenzylphthalate	2660	0	1930	72.6	21 - 148
3,3'-Dichlorobenzidine	2660	0	854	32.1	13 - 104
Benzo(a)anthracene	2660	0	1980	74.4	40 - 109
Chrysene	2660	0	2090	78.6	40 - 113
bis(2-ethylhexyl)phthalate	2660	846	2100	47.1	0 - 157
Di-n-octylphthalate	2660	0	2200	82.7	41 - 122
Benzo(b)fluoranthene	2660	0	2110	79.3	9 - 132
Benzo(k)fluoranthene	2660	0	2430	91.4	19 - 105
Benzo(a)pyrene	2660	0	2300	86.5	3 - 126
Indeno(1,2,3-cd)pyrene	2660	0	1330	50.0	24 - 135
Dibenz(a,h)anthracene	2660	0	1530	57.5	25 - 136
Benzo(g,h,i)perylene	2660	0	1090	41.0	22 - 133
Acetophenone	5320	0	2990	56.2	2 - 135

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

230204 1315

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Fiel 57285TS040212MS

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	SAMPLE CONCENTRATION UG/KG	MS CONCENTRATION UG/KG	MS % REC #	QC LIMITS REC.
1,2,4,5-Tetrachlorobenzene	2660	0	1620	60.9	43 - 93
Carbazole	2660	0	2400	90.2	55 - 123
Caprolactam	2660	0	4680	176.0 *	60 - 130
Biphenyl	2660	0	1880	70.7	60 - 130
Atrazine	2660	0	1750	65.8	60 - 130
Benzaldehyde	2660	0	0	0.0 *	60 - 130

Spike Recovery: 6 out of 66 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

230204 1315

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil 57285TS040212sd

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	MSD CONCENTRATION UG/KG	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Bis(2-Chloroethyl)ether	2660	1280	48.1 *	15.8	22	52 - 123
Phenol	2660	1640	61.7	21.7	31	13 - 69
2-Chlorophenol	2660	1320	49.6	29.7 *	19	30 - 109
2,2-Oxybis(1-chloropropane)	2660	1420	53.4	18.5	28	21 - 119
2-Methylphenol (o-Cresol)	2660	1340	50.4	29.3 *	18	29 - 109
Hexachloroethane	2660	533	20.0 *	4.4	22	28 - 90
N-Nitroso-di-n-propylamine	2660	1440	54.1	27.5	30	48 - 82
4-Methylphenol	2660	1270	47.7	29.5 *	21	22 - 103
Nitrobenzene	2660	1370	51.5 *	34.4 *	20	53 - 127
Isophorone	2660	1970	74.1	27.9 *	20	60 - 140
2-Nitrophenol	2660	1700	63.9	23.8	25	0 - 144
2,4-Dimethylphenol	2660	1540	57.9	25.5	34	31 - 93
Bis(2-Chloroethoxy)methane	2660	2140	80.5	22.4	27	49 - 133
2,4-Dichlorophenol	2660	1580	59.4 *	31.9 *	19	63 - 130
Naphthalene	2660	1500	56.4	22.0 *	21	42 - 108
4-Chloroaniline	2660	1280	48.1	9.7	21	18 - 131
2-Methylnaphthalene	2660	2080	-103.0 *	25.9 *	21	30 - 129
Hexachlorobutadiene	2660	1420	53.4	11.3	22	10 - 97
4-Chloro-3-methylphenol	2660	1200	45.1	24.8 *	21	35 - 116
Hexachlorocyclopentadiene	2660	0	0.0		48	0 - 89
2,4,6-Trichlorophenol	2660	1720	64.7	18.9	21	36 - 118
2,4,5-Trichlorophenol	2660	1670	62.8	18.0	24	33 - 124
2-Chloronaphthalene	2660	1340	50.4	27.1 *	23	28 - 125
2-Nitroaniline	2660	1560	58.6 *	19.1	20	64 - 131
Acenaphthylene	2660	1370	51.5	31.4 *	21	36 - 126
Dimethyl-phthalate	2660	1390	52.3	38.8 *	25	48 - 123
2,6-Dinitrotoluene	2660	1530	57.5	35.9 *	23	53 - 135
Acenaphthene	2660	1480	55.6	27.9 *	21	28 - 126
3-Nitroaniline	2660	1330	50.0	35.8 *	23	38 - 130
2,4-Dinitrophenol	2660	0	0.0		84	0 - 137

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

230204 1315

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil 57285TS040212sd

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	MSD CONCENTRATION UG/KG	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dibenzofuran	2660	1600	60.2	29.3 *	20	23 - 140
2,4-Dinitrotoluene	2660	1530	57.5	35.9 *	29	46 - 123
4-Nitrophenol	2660	1170	44.0	56.9 *	30	0 - 149
Fluorene	2660	1580	59.4	35.0 *	25	52 - 131
4-Chlorophenyl-phenylether	2660	1510	56.8	37.6 *	27	38 - 124
Diethylphthalate	2660	1470	55.3	35.3 *	20	43 - 135
4-Nitroaniline	2660	1530	57.5	42.7 *	31	51 - 127
2-Methyl-4,6-dinitrophenol	2660	0	0.0 *		46	6 - 135
N-Nitrosodiphenylamine	2660	1620	60.9 *	36.4 *	30	64 - 140
4-Bromophenyl-phenylether	2660	1190	44.7	38.6 *	22	32 - 115
Hexachlorobenzene	2660	1400	52.6	29.8	35	40 - 124
Pentachlorophenol	2660	1070	40.2	43.8 *	31	6 - 138
Phenanthrene	2660	1720	64.7	24.5	30	12 - 137
Anthracene	2660	1560	58.6	31.8 *	28	50 - 128
Di-n-butylphthalate	2660	1590	59.8	35.7 *	31	42 - 133
Fluoranthene	2660	1860	69.9	27.4	30	58 - 103
Pyrene	2660	1320	49.6 *	27.5	38	56 - 103
Butylbenzylphthalate	2660	1370	51.5	33.9 *	29	21 - 148
3,3'-Dichlorobenzidine	2660	817	30.7	4.4	16	13 - 104
Benzo(a)anthracene	2660	1500	56.4	27.6	31	40 - 109
Chrysene	2660	1500	56.4	32.9	33	40 - 113
bis(2-ethylhexyl)phthalate	2660	1490	24.2	34.0 *	19	0 - 157
Di-n-octylphthalate	2660	1520	57.1	36.6 *	34	41 - 122
Benzo(b)fluoranthene	2660	1720	64.7	20.4	21	9 - 132
Benzo(k)fluoranthene	2660	1520	57.1	46.1 *	33	19 - 105
Benzo(a)pyrene	2660	1650	62.0	32.9	33	3 - 126
Indeno(1,2,3-cd)pyrene	2660	1010	38.0	27.4	50	24 - 135
Dibenz(a,h)anthracene	2660	1080	40.6	34.5 *	32	25 - 136
Benzo(g,h,i)perylene	2660	898	33.8	19.3	28	22 - 133
Acetophenone	5330	2410	45.2	21.5	30	2 - 135

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

230204 1315

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil 57285TS040212sd

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	MSD CONCENTRATION UG/KG	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,2,4,5-Tetrachlorobenzene	2660	1190	44.7	30.6 *	30	43 - 93
Carbazole	2660	1680	63.2	35.3 *	30	55 - 123
Caprolactam	2660	4290	161.0 *	8.7	30	60 - 130
Biphenyl	2660	1400	52.6 *	29.3	30	60 - 130
Atrazine	2660	1120	42.1 *	43.9 *	30	60 - 130
Benzaldehyde	2660	0	0.0 *		30	60 - 130

RPD 35 out of 66 outside limits

Spike Recovery: 13 out of 66 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

Form III

230204 1315

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021704LCS

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Bis(2-Chloroethyl)ether	2660	1740	65.4		22.0	57 - 123
Phenol	2660	1610	60.5		31.0	47 - 105
2-Chlorophenol	2660	1810	68.0		19.0	51 - 118
2,2-Oxybis(1-chloropropane)	2660	1770	66.5		28.0	60 - 132
2-Methylphenol (o-Cresol)	2660	1660	62.4		18.0	59 - 119
Hexachloroethane	2660	1720	64.7		22.0	61 - 136
N-Nitroso-di-n-propylamine	2660	1590	59.8		30.0	48 - 82
4-Methylphenol	2660	1580	59.4		21.0	58 - 125
Nitrobenzene	2660	1810	68.0		20.0	62 - 122
Isophorone	2660	2310	86.8		20.0	63 - 144
2-Nitrophenol	2660	1790	67.3		25.0	56 - 124
2,4-Dimethylphenol	2660	2020	75.9		34.0	47 - 107
Bis(2-Chloroethoxy)methane	2660	2420	91.0		27.0	71 - 133
2,4-Dichlorophenol	2660	1810	68.0		19.0	59 - 122
Naphthalene	2660	1870	70.3		21.0	64 - 120
4-Chloroaniline	2660	1600	60.2		21.0	59 - 130
2-Methylnaphthalene	2660	1900	71.4		21.0	63 - 135
Hexachlorobutadiene	2660	2020	75.9		22.0	65 - 142
4-Chloro-3-methylphenol	2660	1940	72.9		21.0	60 - 128
Hexachlorocyclopentadiene	2660	1840	69.2		48.0	24 - 119
2,4,6-Trichlorophenol	2660	1840	69.2		21.0	54 - 126
2,4,5-Trichlorophenol	2660	1940	72.9		24.0	60 - 127
2-Chloronaphthalene	2660	1840	69.2		23.0	59 - 135
2-Nitroaniline	2660	2230	83.8		20.0	61 - 144
Acenaphthylene	2660	1950	73.3		21.0	60 - 134
Dimethyl-phthalate	2660	1850	69.5		25.0	63 - 128
2,6-Dinitrotoluene	2660	2140	80.5		23.0	65 - 140
Acenaphthene	2660	1900	71.4		21.0	61 - 130
3-Nitroaniline	2660	1870	70.3		23.0	62 - 129
2,4-Dinitrophenol	2660	1680	63.2		84.0	10 - 123
Dibenzofuran	2660	1940	72.9		20.0	64 - 138
2,4-Dinitrotoluene	2660	2140	80.5		29.0	61 - 144

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1315

Form III

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021704LCS

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
4-Nitrophenol	2660	1590	59.8		30.0	42 - 135
Fluorene	2660	1990	74.8		25.0	67 - 130
4-Chlorophenyl-phenylether	2660	1960	73.7		27.0	64 - 131
Diethylphthalate	2660	2010	75.6		20.0	70 - 127
4-Nitroaniline	2660	1900	71.4		31.0	60 - 135
2-Methyl-4,6-dinitrophenol	2660	1990	74.8		46.0	46 - 129
N-Nitrosodiphenylamine	2660	2240	84.2		30.0	64 - 140
4-Bromophenyl-phenylether	2660	1820	68.4		22.0	62 - 106
Hexachlorobenzene	2660	2050	77.1		35.0	67 - 126
Pentachlorophenol	2660	1700	63.9		31.0	53 - 113
Phenanthrene	2660	2090	78.6		30.0	65 - 121
Anthracene	2660	2110	79.3		28.0	68 - 115
Di-n-butylphthalate	2660	2170	81.6		31.0	64 - 135
Fluoranthene	2660	2100	78.9		30.0	67 - 124
Pyrene	2660	2110	79.3		38.0	67 - 125
Butylbenzylphthalate	2660	2250	84.6		29.0	65 - 149
3,3'-Dichlorobenzidine	2660	1960	73.7		16.0	43 - 139
Benzo(a)anthracene	2660	2020	75.9		31.0	63 - 127
Chrysene	2660	2090	78.6		33.0	61 - 133
bis(2-ethylhexyl)phthalate	2660	2190	82.3		19.0	66 - 138
Di-n-octylphthalate	2660	2160	81.2		34.0	63 - 124
Benzo(b)fluoranthene	2660	2030	76.3		21.0	56 - 113
Benzo(k)fluoranthene	2660	2080	78.2		33.0	52 - 126
Benzo(a)pyrene	2660	2190	82.3		33.0	60 - 128
Indeno(1,2,3-cd)pyrene	2660	2130	80.1		50.0	50 - 163
Dibenz(a,h)anthracene	2660	2350	88.3		32.0	28 - 147
Benzo(g,h,i)perylene	2660	2380	89.5		28.0	54 - 142
Acetophenone	5330	2680	50.3		30.0	2 - 135
1,2,4,5-Tetrachlorobenzene	2660	1760	66.2		30.0	43 - 93
Carbazole	2660	2110	79.3		30.0	27 - 155
Caprolactam	2660	1940	72.9		30.0	60 - 130
Biphenyl	2660	1680	63.2		30.0	60 - 130

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1315

Form III

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021704LCS

Lab Code : PEL Case No. SAS No: SDG No.: 2402125

COMPOUND	SPIKE ADDED UG/KG	LCS CONCENTRATION UG/KG	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Atrazine	2660	1670	62.8		30.0	60 - 130
Benzaldehyde	2660	0	0.0 *		30.0	60 - 130

Spike Recovery: 1 out of 66 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1315

Form III

PEL Laboratories, Inc.

Customer Name:	CH2M Hill
Date and Time Received:	4/1/2004 10:15:00 AM
Date Reported:	4/8/2004
Laboratory Submission Number/SDG:	2403256
Project:	Former NAS Cecil Field

Samples: The submission consisted of 1 samples with sample identification shown in the attached data tables.

Tests: The samples were analyzed for the methods listed on the attached table of contents.

Results: See the attached data tables for results.

Distribution of Report to:

CH2M Hill
Attn: Melissa Osborne
Phone: W 770-604-9182
F 770-604-9282

Respectfully Submitted,

Brian Spann
Laboratory Manager
PEL Laboratories, Inc.

Note: Submitted material will be retained for 30 days unless otherwise requested by client or consumed in analysis. PEL letters and reports are for the exclusive use of the client to whom they are addressed. Our Letters and reports apply to the sample tested and are n necessarily indicative of the qualities of apparently identical or similar materials

4420 Pendola Point Road • Tampa, Florida 33619
(813)247-2805 • FAX: (813)248-1537
Website: www.pelab.com

Inorganics **1**
METALS DATA PACKAGE TCLP 4
Sample Data 8
QC Summary 10

Chain of Custody Documentation **31**

Addendum **35**

Appendix **38**
Raw Data Inorganics/Metals AI-1

Inorganics

080404 1401

Inorganic Data Qualifiers

C (Concentration) Qualifier - Entries and their meanings are:

B The reported value obtained was less than the RL but greater than or equal to the MDL.

E The reported value obtained was over calibration or linear range.

U The reported value obtained was less than the MDL or was not detected.

Q Qualifier - Entries and their meanings are:

U The reported value is estimated because of interference. An explanatory comment must be included under "Comments" on the Cover Page if the problem applies to all samples in this data package or on the individual FORM 1 if it is an isolated problem.

M Duplicate injection precision was not met (two analyses of the same sample did not agree).

N Spiked sample recovery not within control limits.

E Serial Dilution percent difference not within control limits.

S The reported value was determined by the Method of Standard Additions (MSA).

W Post-digestion spike for Furnace AA analysis is out of control limits (85-115%) while sample absorbance is less than 50% of spike absorbance.

***** Duplicate analysis not within control limits.

+ Correlation coefficient for the MSA is less than 0.995.

X The data is flagged as rejected by analyst utilizing analytical judgement.

Entering "S", "W", or "+" is mutually exclusive. No combination of these qualifiers can apear in the same field.

M (Method) Qualifier - Enter one of the following:

P ICP
A Flame AA
F Furnace AA
CV Manual Cold Vapor AA
TC Total Organic Carbon
AS Semi-Automated Spectrophotometric
CA Midi-Distillation Spectrophotometric
T Titrimetric
C Manual Spectrophotometric
GR Gravimetric
NR Analyte was not required by your lab

080404 1401

Inorganic Sample ID Qualifiers

The qualifiers that may be appended to the lab sample ID and/or the client sample ID for inorganic analysis are defined below:

DL Diluted reanalysis. Indicates that the results of the original analysis of the sample contained compounds that exceeded the calibration range. The sample was diluted and reanalyzed. May be followed by a digit to indicate multiple dilutions of the sample. The results of more than one diluted reanalysis may be reported.

R Reanalysis. The extract was reanalyzed without re-extraction. The "R" is not used if the sample was also re-extracted. May be followed by a digit to indicate multiple reanalysis of the sample at the same dilution.

RE Re-extracted. The extract was reanalyzed with re-extraction. May be followed by a digit to indicate multiple re-extraction of the same sample at the same dilution.

MS Matrix spike (may be followed by a digit to indicate multiple matrix within a sample set).

SD Matrix spike duplicate (may be followed by a digit to indicate multiple matrix spike duplicate within a sample set).

080404 1401

METALS DATA PACKAGE
TCLP

080404 1401

CASE NARRATIVE
TCLP_METALS

PEL Lab Reference No./SDG: 2403256

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

Analyses were performed according to PEL Laboratory's Standard Operating Procedures and EPA Method 6010B for ICP metals.

IV. PREPARATION

Samples were prepared according to PEL Laboratory's Standard Operating Procedures and EPA Methods 1311 and 3010A.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

1. Calibration Blanks:

All acceptance criteria were met.

2. Method Blanks:

All acceptance criteria were met.

C. Spikes:

1. Laboratory Control Spikes (LCS):

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

2. Post Digestion Spike:

All acceptance criteria were met.

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

No spikes requested by client.

CASE NARRATIVE
TCLP_METALS

PEL Lab Reference No./SDG: 2403256

Client: CH2M Hill

D. Duplicate:

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

E. Serial Dilution:

All acceptance criteria were met.

F. ICP Interference Check Samples:

All acceptance criteria were met.

G. Samples:

Sample analysis proceeded normally.

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

SIGNED: John B Jinto **DATE:** 04/08/04

W:\InorgNarratives\Mar04\2403256_6010_TCLP.doc

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SDG No.: 2403256

SOW No.:

EPA Sample No	Lab Sample ID
57285TS040331	240325601

Were ICP interelement corrections applied?	Yes/No	Yes
Were ICP background corrections applied?	Yes/No	Yes
If yes - were raw data generated before application of background corrections?	Yes/No	No

Comments:

080404 1401

Sample Data

080404 1401

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285TS040331

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2403256

Matrix: SOIL Lab Sample ID: 240325601

Level:(low/med) LOW Date Received: 4/1/2004

PercentSolids: 0 Station ID:

TCLP Analysis

CONCENTRATION UNITS: MG/L

CAS NO.	ANALYTE	Concentration	C	Q	M
7439-92-1	Lead	0.0176	U		P

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

080404 1401

QC Summary

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2403256

Initial Calibration Source: MET-39701

Continuing Calibration Source: MET-40001

Concentration Units: (MG/L)

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R (1)	True	Found	%R (1)	Found	%R (1)	M
Lead	0.4	400.000	100.0	0.5	495.000	99.0	482.000	96.4	P

(1) Control Limits: Mercury 80-120; Cyanide 85-115; Other Metals 90-110

ICV is Second Source

080404 1401

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2403256

Initial Calibration Source:

Continuing Calibration Source: MET-40001

Concentration Units: (MG/L)

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R (1)	True	Found	%R (1)	Found	%R (1)	M
Lead				0.5	488.000	97.6	481.000	96.2	P

(1) Control Limits: Mercury 80-120; Cyanide 85-115; Other Metals 90-110

ICV is Second Source

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2403256

Initial Calibration Source:

Continuing Calibration Source: MET-40001

Concentration Units: (MG/L)

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R (1)	True	Found	%R (1)	Found	%R (1)	M
Lead				0.5	488.000	97.6	482.000	96.4	P

(1) Control Limits: Mercury 80-120; Cyanide 85-115; Other Metals 90-110

ICV is Second Source

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3

BLANKS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2403256

Preparation Blank Matrix (water/soil): WATER

Preparation Blank Concentration Units (ug/L or mg/Kg): mg/L

Analyte	Initial Calib. Blank (MG/L)	C	Continuing Calibration Blank (MG/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Lead	0.0176	U	0.0176	U	0.0176	U	0.0176	U	0.0176	U	P

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3

BLANKS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2403256

Preparation Blank Matrix (water/soil):

Preparation Blank Concentration Units (ug/L or mg/Kg):

Analyte	Initial Calib. Blank (MG/L)	C	Continuing Calibration Blank (MG/L) 4	C	5	C	6	C	Prepa-ration Blank	C	M
Lead			0.0176	U	0.0176	U	0.0176	U			P

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ICP INTERFERENCE CHECK SAMPLE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2403256

ICP ID#: ICAP ICSA Source: MET-40101

ICSAB Source: MET-37401

Concentration Units: MG/L

	True		Initial Found			Final Found		
Analyte	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Lead	0	0.05		0.052	104.4			

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5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA Sample No.

Field SampleA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2403256

Matrix: WATER Level:(low/med) LOW

TCLP Analysis

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Control Limit %R	Spiked Sample	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Lead	80 - 120	487.00		17.60	U	500	97.4		P

Comments:

080404 1401

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DUPLICATES

EPA Sample No.

135230LCSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2403256

Matrix: WATER Level:(low/med) LOW

% Solids for Sample: 0 % Solids for Duplicate: 0

TCLP Analysis

Concentration Units (mg/L or mg/kg): mg/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Lead	20	4.86		4.92		1.2		P

Comments:

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LABORATORY CONTROL SAMPLE

EPA Sample No.

135230LCS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2403256

Solid LCS Source:

Aqueous LCS Source: MET-38701, MET-40002

TCLP Analysis

	Aqueous (mg/L)			Solid				
Analyte	True	Found	%R	True	Found	C	Limits	%R
Lead	5	4.86	97.2				-	

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LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 135230LCSD

Lab Code : PEL Case No. SAS No: SDG No.: 2403256

Solid LCS Source:

Aqueous LCS Source: MET-38701, MET-40002

TCLP Analysis

	Aqueous (mg/L)			Solid				
Analyte	True	Found	%R	True	Found	C	Limits	%R
Lead	5	4.92	98.4				-	

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SERIAL DILUTIONS

EPA Sample No.

Field SampleL

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2403256

Matrix: WATER Level:(low/med) LOW

TCLP Analysis

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ-ence	Q	M
Lead	17.60	U	88.00	U			P

Comments:

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METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2403256

ICP ID Number : ICAP Date: 5/5/2003

Furnace AA ID Number :

Analyte	Wave-length (nm)	Back-ground	CRDL (MG/L)	MDL (MG/L)	M
Lead	220.3		0.05	0.0176	P

Comments:

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11A

INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No.: _____ SDG No.: 2403256

ICP ID Number : ICAP Date: 8/22/2003

Analyte	Wave-length		Interelement Correction Factors for:				
			Al	Ca	Cr	Fe	Mg
Lead	220.3		0.000551	-0.000028		0.000076	

Comments:

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11B

INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No.: _____ SDG No.: 2403256

ICP ID Number : ICAP Date: 8/22/2003

Analyte	Wave-length		Interelement Correction Factors for: Mn	Mo	Sb	V	
Lead	220.3			-0.000582		-0.000193	

Comments:

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ICP LINEAR RANGES (SEMI-ANNUALLY)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2403256

ICP ID NUMBER ICAP DATE : 9/5/2003

Analyte	Integ. Time (sec.)	Concentration MG/L	M
Lead	15	20	P

Comments:

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PREPARATION LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2403256

Method : 6010 TCLP

EPA Sample No:	Preparation Date	Weight (gram)	Volume (mL)
135229BLK	6 Apr 04		5
135230LCS	6 Apr 04		5
135230LCSD	6 Apr 04		5
57285TS040331	6 Apr 04		5
Field Sample	6 Apr 04		5

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ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2403256

Instrument ID Number : ICAP Method : P

Start Date : 4/6/2004 End Date : 4/6/2004

EPA Sample No.	D/F	Time	%R	Analytes																									
				AG	AL	AS	BA	BE	CA	CD	CN	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SN	SR	TI	TL	V	ZN
STD1-B	1	16:00																					X								
STD3	1	16:06																					X								
STD2	1	16:11																													
ICV	1	16:15																					X								
ICB	1	16:21																					X								
ZZZZZZ	1	16:28																													
ICSA	1	16:33																					X								
ICSAB	1	16:39																					X								
CCV	1	16:44																					X								
CCB	1	16:50																					X								
ZZZZZZ	1	16:55																													
ZZZZZZ	1	17:01																													
ZZZZZZ	1	17:06																													
ZZZZZZ	1	17:23																													
ZZZZZZ	5	17:28																													
ZZZZZZ	1	17:33																													
ZZZZZZ	1	17:39																													
ZZZZZZ	1	17:44																													
ZZZZZZ	1	17:50																													
ZZZZZZ	1	17:55																													
CCV	1	18:01																					X								
ZZZZZZ	1	18:06																													
CCB	1	18:12																					X								
ZZZZZZ	1	18:17																													
ZZZZZZ	1	18:23																													
ZZZZZZ	1	18:28																													
ZZZZZZ	1	18:34																													
ZZZZZZ	5	18:39																													
ZZZZZZ	1	18:45																													
ZZZZZZ	1	18:50																													
ZZZZZZ	1	18:56																													
ZZZZZZ	1	19:01																													
ZZZZZZ	1	19:07																													
CCV	1	19:12																					X								
ZZZZZZ	1	19:18																													
CCB	1	19:23																					X								

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ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2403256

Instrument ID Number : ICAP Method : P

Start Date : 4/6/2004 End Date : 4/6/2004

EPA Sample No.	D/F	Time	%R	Analytes																								
				AG	AL	AS	BA	BE	CA	CD	CN	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SN	SR	TI	TL	V	ZN
ZZZZZZ	1	19:29																													
ZZZZZZ	1	19:34																													
ZZZZZZ	1	19:40																													
ZZZZZZ	1	19:45																													
ZZZZZZ	1	19:51																													
ZZZZZZ	1	19:56																													
ZZZZZZ	1	20:02																													
CCV	1	20:07																					X								
ZZZZZZ	1	20:13																													
CCB	1	20:18																					X								
135229BLK	1	20:24																					X								
ZZZZZZ	1	20:29																													
135230LCS	1	20:35																					X								
135230LCSD	1	20:40																					X								
Field Sample	5	20:46																					X								
Field SampleL	1	20:51																					X								
ZZZZZZ	1	20:57																													
ZZZZZZ	1	21:02																													
Field SampleA	1	21:08																					X								
ZZZZZZ	1	21:13																													
CCV	1	21:19																					X								
ZZZZZZ	1	21:24																													
CCB	1	21:30																					X								
ZZZZZZ	1	21:35																													
ZZZZZZ	1	21:41																													
ZZZZZZ	1	21:46																													
57285TS040331	1	21:52																					X								
ZZZZZZ	1	21:57																													
CCV	1	22:03																					X								
CCB	1	22:08																					X								

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14

ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2403256

Instrument ID Number : ICAP Method : P

Start Date : 4/7/2004 End Date : 4/7/2004

EPA Sample No.	D/F	Time	%R	Analytes																								
				AG	AL	AS	BA	BE	CA	CD	CN	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SN	SR	TI	TL	V	ZN
ZZZZZZ	1	10:51																													
ZZZZZZ	1	10:57																													
ZZZZZZ	1	11:02																													
ZZZZZZ	1	11:06																													
ZZZZZZ	1	11:12																													
ZZZZZZ	1	11:30																													
ZZZZZZ	1	11:35																													
ZZZZZZ	1	11:46																													
ZZZZZZ	1	11:59																													
ZZZZZZ	1	12:05																													
ZZZZZZ	1	12:10																													
ZZZZZZ	1	12:16																													
ZZZZZZ	1	12:22																													
ZZZZZZ	1	12:32																													
ZZZZZZ	1	12:37																													
ZZZZZZ	1	12:43																													
ZZZZZZ	5	12:50																													
ZZZZZZ	5	12:56																													
ZZZZZZ	25	13:01																													
ZZZZZZ	10	13:07																													
ZZZZZZ	5	13:13																													
ZZZZZZ	5	13:19																													
ZZZZZZ	1	13:24																													
ZZZZZZ	1	13:30																													
ZZZZZZ	1	13:35																													

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Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2403256

METHOD: 6010 **MATRIX:** S

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
Lead	80-120	20	75-125	20	80-120	10	

METHOD: 6010 **MATRIX:** W

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
Lead	80-120	20	75-125	20	80-120	10	

080404 1401

Chain of Custody Documentation

080404 1401

CH2M Hill Constructors, Inc.
115 Perimeter Center Place, Suite 700
Atlanta, GA 30346-1278
Tel No (770) 604-9182 ; Fax No (770) 604-9282

CHAIN-OF-CUSTODY RECORD

2403-256

COC NUMBER: **163231-16**

PROJECT NAME:	PROJECT NUMBER:	LAB NAME AND CONTACT:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 1 (Name and Company)	RECIPIENT 1 (Address, Tel No. , and Fax No.):
Former NAS Cecil Field	163231	PEL Laboratories, Inc. Darcy Wiesman	Jeff Marks CH2M HILL Constructors	6219 Authority Avenue, Jacksonville, FL 32215 PH: 904-777-4812 FAX: 904-777-4262
PROJECT PHASE/SITE/TASK:	CTO OR DO NUMBER:	LAB PO NUMBER:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (Address, Tel No. , and Fax No.):
Tank 285 Waste Characterization Solids Totals	CTO 057	800437	Bonnie Hogue CH2M Hill Constuctors, Inc.	115 Perimeter Center Place, N.E. Suite 700 Atlanta, GA 30346 (770)604-9182 Ext.561 FAX:604-9282
PROJECT CONTACT:	PROJECT TEL NO AND FAX NO:		FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 3 (Name and Company)	RECIPIENT 3 (Address, Tel No. , and Fax No.):
Jeff Marks CH2M HILL	PH (904) 777-4812 FAX (904) 777-4262	Ph:(813) 247-2805		

ANALYSES REQUIRED (Include Method Numbers)

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on back)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see codes on back)	TAT (calendar days)	TCL Volatiles 5035/8260B (GRAB)	TCL Semi-Volatiles 8270C, TPH FL-PRO,TCL Pest. 8081A, TCL Herb. 8151A, PCBs 8082	TAL Metals 6010B/7470	pH 9045B	Corr. 9045A, Cyanide (Total) 9010, Sulfide (Total) 9030, Reactivity, Chapt 7.3	SAMPLE TYPE (see codes on back)	COMMENTS/ SCREENING READINGS	LAB ID
1	57285TS040331	Waste Characterization Tank Solids (Totals)	S	03/31/04	11:00	B	7			1			Comp		01
2	57TB2W040331	Trip Blank	W	NA	NA	B	7			1			Grab	Prepared by Lab	
3	57TP2W040331	Temperature Blank								1					
4															
5															
6															
7									* Run TCLP Pb per JM/4-1-04/1400						
8															
9															
10															

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	
Randy Dumaop / Jeff Marks CH2M HILL Constructors, Inc.	Fed-Ex Tracking No. 791196682856.	Rec'd @ 3.4C

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature:			Printed Name and Signature:		
Jeff Marks	03/31/2004	18:00	Fed-Ex Tracking No. 791196682856.	03/31/2004	18:00
Printed Name and Signature:			Printed Name and Signature:		
			Mariano Menardat / PEL	04/01/04	10:15

Distribution: [ ] **Original** - Laboratory (To be returned with Analytical Report); [ ] **Copy 1** - Project File; [ ] **Copy 2** - PMO

Form CCI001, Rev 02/00

2403256

SAMPLE RECEIPT CONFIRMATION SHEET

Client Information

SDG:	2403256	**Req:**	47410
Client:	CH2M Hill	**Project:**	CTO 057/R3 Tank 285
Level:	4	**Date Rec'd:**	4/1/04 10:15:00 AM
Rec'd via:	Fed-Ex	**Due Date:**	04/01/04

Sample Verification

Samples/Cooler Secure?	Yes	**All Samples on COC accounted For?**	Yes
Temperature of Samples(Celsius)	3.4	**All Samples Rec'd Intact?**	Yes
pH Verified?	No	**Sample Vol. Stuff. For Analysis?**	Yes
pH WNL?	No	**Samples Rec'd W/I Hold Time?**	Yes
Soil Origin (Domestic/Foreign):	Domestic	**Are All Samples to be Analyzed?**	Yes
Site Location/Project on COC?	Yes	**Correct Sample Containers?**	Yes
Client Project # on COC?	Yes	**COC Comments written on COC?**	Yes
Project Mgr. Indicated on COC?	Yes	**Samplers Initials on COC?**	Yes
COC relinquished/Dated by Client?	Yes	**Sample Date/Time Indicated?**	Yes
COC Received/Dated by PEL?	Yes	**TAT Requested:**	STD
Specific Subcontract Indicated?	No	**Client Requests Verbal Results?**	Yes
Samples Received By	Fed-Ex	**Client Requests Faxed Results?**	Yes
PEL to Conduct ALL Analyses?	Yes		

Subcontract Analysis

Parameter	Due Date	Via	Lab Name	Comments

PEER REVIEW **PM REVIEW:**

Client: CH2M Hill

WONo: 2403256 **Profile Name:** Cecil Field **Profile #:** 47410

MATRIX ***S***

Sample #	Parameter		Relinquished	Received	Date	Time
01	6010_TCLP	TCLP Metals by 1311/6010	[illegible]	[illegible]	04/06/04	17:00
01	6010_TCLP	TCLP Metals by 1311/6010	LLM	[illegible]	04/06/04	19:00
01	TCLP_Tumble	TCLP Tumble	RM	SS	4/5/04	17:25
01	TCLP_Tumble	TCLP Tumble	SS	RM	4/5/04	12:00
01	Dry Weight	Dry Weight	[illegible]	JC	4-05-04	9:47
01	Dry Weight	Dry Weight	BKP		4/5/04	17:25

Additional:

Comments:

4/1/04 1:10:03 PM

Addendum

080404 1401

Letter of Acceptance

Customer Name:	CH2M Hill
Date and Time Received:	4/1/04 10:15:00 AM
Date to be Reported:	4/8/04
Laboratory Submission Number/SDG:	2403256
Project:	Former NAS Cecil Field

Samples: The submission consisted of 1 samples with sample identification shown in the attached data tables.

Tests: The Samples will be analyzed for EPA methods: 6010_TCLP.

Sample Custody/COC discrepancies:

None.

Notes:

None.

Distribution of Report to:

CH2M Hill
Attn: Melissa Osborne
Phone: W 770-604-9182
F 770-604-9282

Note: Submitted material will be retained for 30 days unless otherwise requested by client or consumed in analysis. PEL letters and reports are for the exclusive use of the client to whom they are addressed. Our Letters and reports apply to the sample tested and are not necessarily indicative of the qualities of apparently identical or similar materials

Log-in Report

Level: 4

Total of: 1 analyses on 1 samples (including QC) *01-Apr-04*

Report/SDG #: 2403256

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
57285TS040331	240325601		S	3/31/04 11:00:00 AM	4/1/04 10:15:00 AM

Method		
6010_TCLP	TCLP Metals by 1311/6010	6010

Appendix

101003 726

Raw Data Inorganics/Metals

Metals Digestion Log

Prepared by: JK

Date Prepared: 3/30/4

Reagents: PM#
HNO_3 154
HCl 153
H_2O_2 N/A

MAJORS Spike: MET# 38701
MINORS Spike: MET# 36701

LCS/MS/SD Spike amount: 1.00 mL Each
Water Bath Temperature: 92 °C
Thermometer ID:
Dig Tube:

Method (Circle one)
Water: 3010A = ICP
3020 = Furnace
3005A = Total Recoverable
200.7 = 200.7
ILMO5.2 = CLP
Soil:
3050B = ICP or Furnace
ILMO5.2 = CLP

PREP ID # 033004B
Start Time:
Stop Time:

	Sample ID	ID	Initial Weight (g) or Volume (mL) 3 SigFig	Final volume (mL)	Spike Verification	Comment or Notification: BATCH#: 4535
	BLKW033004B	BLK	50.0	50.0 mL		HSN# 134254
	LCSW	LCS				HSN# 55
	LCDW	LCSD				HSN# 56
1	2403 125 02					
1	03	MS				HSN#
1	04	SD				HSN#
2	05					
3	06	MS				
4	07	SD				
5	08					
6	09					
7	2403 155 03					
8	04					
9	05					
10	2403 179 08					
11	09					
12	10					
13	2403 196 01					
14	2403 211 02					
15	2403 224 01					
16	02					
17						
18	JK 3/30/4					
19						
20						

W:\metals\LogBooks\MetDigLog.xls
REV 02/04

PAGE # 49

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1-Blank	40104B	SM041103	04/01/04	15:19		X	IR
2	STD3	40104B	SM041103	04/01/04	15:24		X	IR
3	STD2	40104B	SM041103	04/01/04	15:29		X	IR
4	ICV	40104B	SM041103	04/01/04	15:34		Q	CONC
5	ICB	40104B	SM041103	04/01/04	15:39		Q	CONC
6	CRI	40104B	SM041103	04/01/04	15:47		Q	CONC
7	CRI	40104B	SM041103	04/01/04	15:56		Q	CONC
8	STD1-Blank	40104B	SM041103	04/01/04	16:15		X	IR
9	STD3	40104B	SM041103	04/01/04	16:20		X	IR
10	STD2	40104B	SM041103	04/01/04	16:25		X	IR
11	ICV	40104B	SM041103	04/01/04	16:30		Q	CONC
12	ICV	40104B	SM041103	04/01/04	16:37		Q	CONC
13	ICB	40104B	SM041103	04/01/04	16:42		Q	CONC
14	CRI	40104B	SM041103	04/01/04	16:51		Q	CONC
15	ICSA	40104B	SM041103	04/01/04	16:57		Q	CONC
16	ICSA	40104B	SM041103	04/01/04	17:05		Q	CONC
17	ICSAB	40104B	SM041103	04/01/04	17:11		Q	CONC
18	CCV	40104B	SM041103	04/01/04	17:16		S	CONC
19	CCB	40104B	SM041103	04/01/04	17:22		S	CONC
20	CCB	40104B	SM041103	04/01/04	17:35		S	CONC
21	BLKW032404A	40104B	SM041103	04/01/04	17:41		S	CONC
22	LCSW032404A	40104B	SM041103	04/01/04	17:46		S	CONC
23	LCDW032404A	40104B	SM041103	04/01/04	17:52		S	CONC
24	240316408	40104B	SM041103	04/01/04	17:57		S	CONC
25	240316408L	40104B	SM041103	04/01/04	18:02		S	CONC
26	240316409MS	40104B	SM041103	04/01/04	18:08		S	CONC
27	240316410SD	40104B	SM041103	04/01/04	18:13		S	CONC
28	240316408A	40104B	SM041103	04/01/04	18:19		S	CONC
29	240316403	40104B	SM041103	04/01/04	18:24		S	CONC
30	240316406	40104B	SM041103	04/01/04	18:30		S	CONC
31	CCV	40104B	SM041103	04/01/04	18:35		S	CONC
32	CCB	40104B	SM041103	04/01/04	18:41		S	CONC
33	CCB	40104B	SM041103	04/01/04	18:46		S	CONC
34	240312104 X10	40104B	SM041103	04/01/04	18:52		S	CONC
35	240310101	40104B	SM041103	04/01/04	18:57		S	CONC
36	240310101L	40104B	SM041103	04/01/04	19:03		S	CONC
37	240310102	40104B	SM041103	04/01/04	19:08		S	CONC
38	240310112	40104B	SM041103	04/01/04	19:14		S	CONC
39	240310113	40104B	SM041103	04/01/04	19:19		S	CONC
40	240310114	40104B	SM041103	04/01/04	19:25		S	CONC
41	CCV	40104B	SM041103	04/01/04	19:30		S	CONC
42	CCB	40104B	SM041103	04/01/04	19:36		S	CONC
43	CCB	40104B	SM041103	04/01/04	19:41		S	CONC
44	BLKW033004B	40104B	SM041103	04/01/04	19:47		S	CONC
45	LCSW033004B	40104B	SM041103	04/01/04	19:52		S	CONC
46	LCDW033004B	40104B	SM041103	04/01/04	19:58		S	CONC
47	240312502	40104B	SM041103	04/01/04	20:03		S	CONC
48	240312502L	40104B	SM041103	04/01/04	20:09		S	CONC
49	240312503MS	40104B	SM041103	04/01/04	20:14		S	CONC
50	240312504SD	40104B	SM041103	04/01/04	20:20		S	CONC
51	240312502A	40104B	SM041103	04/01/04	20:25		S	CONC
52	240312505	40104B	SM041103	04/01/04	20:30		S	CONC
53	240312506MS	40104B	SM041103	04/01/04	20:36		S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	CCV	40104B	SM041103	04/01/04	20:41		S	CONC
55	CCB	40104B	SM041103	04/01/04	20:47		S	CONC
56	CCB	40104B	SM041103	04/01/04	20:52		S	CONC
57	240312507SD	40104B	SM041103	04/01/04	20:58		S	CONC
58	240312508	40104B	SM041103	04/01/04	21:03		S	CONC
59	240312509	40104B	SM041103	04/01/04	21:09		S	CONC
60	240315503	40104B	SM041103	04/01/04	21:14		S	CONC
61	240315504	40104B	SM041103	04/01/04	21:20		S	CONC
62	240315505	40104B	SM041103	04/01/04	21:25		S	CONC
63	240317908	40104B	SM041103	04/01/04	21:31		S	CONC
64	240317909	40104B	SM041103	04/01/04	21:36		S	CONC
65	240317910	40104B	SM041103	04/01/04	21:42		S	CONC
66	240319601	40104B	SM041103	04/01/04	21:47		S	CONC
67	CCV	40104B	SM041103	04/01/04	21:53		S	CONC
68	CCB	40104B	SM041103	04/01/04	21:58		S	CONC
69	CCB	40104B	SM041103	04/01/04	22:04		S	CONC
70	240321102	40104B	SM041103	04/01/04	22:09		S	CONC
71	240322401	40104B	SM041103	04/01/04	22:15		S	CONC
72	240322402	40104B	SM041103	04/01/04	22:20		S	CONC
73	CCV	40104B	SM041103	04/01/04	22:26		S	CONC
74	CCB	40104B	SM041103	04/01/04	22:31		S	CONC
75	CCB	40104B	SM041103	04/01/04	22:37		S	CONC

#	Sample Name	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3158
1	STD1-Blank	-.01165	.00026	-.00053	.00008	-.02085	.00023
2	STD3	2.5186		1.04909	34.6586	40.3322	
3	STD2		1.76599				6.32532
4	ICV	395.2	39670.	383.3	386.3	397.7	41980.
5	ICB	1.054	224.2	-3.894	.1470	-2.646	25.25
6	CRI	10.62	Q394.1	20.17	9.473	Q1.251	1166.
7	CRI	10.66	Q387.9	21.87	9.409	Q1.187	1055.
8	STD1-Blank	-.00909	.00173	-.00709	.00142	-.13263	.00032
9	STD3	2.48419		1.02813	34.0186	39.6406	
10	STD2		1.737				6.20572
11	ICV	Q109.3	Q11220.	Q115.7	Q111.4	Q120.6	Q12670.
12	ICV	394.2	39350.	390.3	386.2	399.5	41880.
13	ICB	-.4128	8.899	-.2590	.0574	.0686	11.59
14	CRI	9.689	188.2	26.39	9.608	4.075	1078.
15	ICSA	-.3984	238700.	-4.447	-.2421	-.0803	243900.
16	ICSA	-.5226	238700.	-3.884	-.2455	-.1076	243200.
17	ICSAB	204.7	245800.	93.33	476.2	487.2	249100.
18	CCV	524.3	126200.	535.6	498.2	514.6	130000.
19	CCB	-.2126	43.79	.6898	.1699	.4166	79.82
20	CCB	-.2919	-4.945	.5582	.0348	.2089	17.75
21	BLKW032404A	-.1740	-10.65	1.303	.0385	.1903	46.95
22	LCSW032404A	512.6	51120.	503.8	497.6	508.0	53580.
23	LCDW032404A	505.7	50410.	495.7	492.9	506.2	52750.
24	240316408	.1606	44.51	.3268	42.53	.5564	3725.
25	240316408L	-.3620	-.9952	1.085	8.452	.1840	754.2
26	240316409MS	508.0	50760.	499.9	536.1	501.0	56390.
27	240316410SD	505.0	50320.	491.6	533.2	506.2	56220.
28	240316408A	470.6	50730.	480.7	517.2	484.2	56040.
29	240316403	.1401	221.5	1.250	13.21	.1470	13130.
30	240316406	.0245	18.73	2.161	61.35	.1565	5875.
31	CCV	519.6	125200.	532.6	495.0	508.5	128800.
32	CCB	-.0056	36.49	2.122	.1433	.2333	44.93
33	CCB	-.0811	11.62	.3471	.0047	.1091	9.039
34	240312104 X10	-.3189	7415.	1.081	42.43	.9021	1159.
35	240310101	-.0970	80.44	2.764	4.108	.0541	13660.
36	240310101L	-.0501	20.87	-.5242	.8030	-.0022	2751.
37	240310102	.1547	106.5	.3302	4.197	-.0336	13180.
38	240310112	-.1618	43.63	.8223	21.50	.0468	48410.
39	240310113	-.0763	84.08	-.3867	14.21	-.0334	38920.
40	240310114	.2005	109.2	.8537	15.85	-.0111	3051.
41	CCV	517.7	124800.	536.5	495.9	507.3	128600.
42	CCB	.0990	29.35	-.1072	.1266	.2404	39.03
43	CCB	.0256	17.90	1.410	.0231	.0390	9.872
44	BLKW033004B	-.0813	26.59	-.0226	.0306	.0025	H103.7
45	LCSW033004B	460.8	43850.	436.1	432.4	442.8	46060.
46	LCDW033004B	444.0	41560.	421.4	410.2	423.2	44020.
47	240312502	-.0030	13920.	1.195	179.3	.9886	2073.
48	240312502L	.2750	2766.	1.145	36.24	.2037	427.2
49	240312503MS	458.8	54770.	434.0	566.4	439.6	47380.
50	240312504SD	436.8	55200.	410.5	569.4	415.1	45100.
51	240312502A	470.2	H63140.	478.6	H653.9	496.5	53660.
52	240312505	.2015	80.67	-1.617	21.38	.2163	7270.
53	240312506MS	456.2	42160.	426.5	437.7	428.1	51780.

#	Sample Name	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3158
54	CCV	517.5	124600.	536.6	495.2	508.6	129500.
55	CCB	.0975	49.75	1.488	.1547	.1307	41.05
56	CCB	.0416	16.71	-1.323	.0040	.0878	10.53
57	240312507SD	476.5	46270.	457.4	476.8	467.6	56460.
58	240312508	.0271	9559.	1.121	98.55	1.105	3405.
59	240312509	-.1141	1003.	.7501	17.41	-.1103	173.9
60	240315503	.2262	21770.	4.848	135.4	.5015	5688.
61	240315504	.0571	10910.	1.648	120.6	.4490	4226.
62	240315505	.0148	30.04	.7812	.3198	.0417	22.68
63	240317908	-.0506	61.74	-.4123	30.33	-.1193	50110.
64	240317909	-.0887	16.52	-.1922	64.10	-.0499	28300.
65	240317910	.0658	36.87	.4866	13.47	-.1553	31610.
66	240319601	-.1482	3282.	2.855	11.18	.0565	43570.
67	CCV	519.1	125000.	536.4	495.6	509.3	129100.
68	CCB	.1216	43.24	-.5200	.1534	.2021	49.96
69	CCB	-.1330	18.91	-.4143	.0083	.0161	17.32
70	240321102	.0099	7529.	1.756	133.7	.6613	46000.
71	240322401	-.0431	238.5	2.266	14.91	.0156	74190.
72	240322402	-.2255	35.40	-.1812	3.385	-.0399	48300.
73	CCV	518.3	125200.	539.7	496.0	510.9	129900.
74	CCB	.0768	42.27	-.4306	.1201	.1987	43.46
75	CCB	-.0945	3.850	-.1829	-.0057	.1479	12.13

#	Sample Name	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
1	STD1-Blank	-.00057	-.001	.00011	-.00208	.00002	-.01349
2	STD3	8.82343	2.14595	2.91012	3.50983		
3	STD2					7.54513	29.365
4	ICV	400.4	391.0	389.1	391.5	41580.	41180.
5	ICB	-.0232	-.9743	.5185	3.252	54.36	-547.2
6	CRI	4.862	8.736	10.24	12.68	42.51	684.8
7	CRI	4.827	8.985	10.52	13.27	Q87.72	711.8
8	STD1-Blank	-.00119	-.00263	.00099	.00871	.00121	-.03841
9	STD3	8.62105	2.10477	2.85011	3.44418		
10	STD2					7.42394	28.9766
11	ICV	Q119.9	Q118.0	Q117.0	Q109.4	Q12370.	Q12350.
12	ICV	402.1	392.1	389.3	388.5	41480.	41160.
13	ICB	.0964	.0847	-.0887	-.0171	4.425	-9.377
14	CRI	5.014	9.784	10.24	9.978	70.22	996.4
15	ICSA	Q3.250	.7946	.2876	2.550	222400.	2.856
16	ICSA	.2481	.6623	.4843	2.331	221600.	3.598
17	ICSAB	954.8	467.6	469.9	501.0	224500.	-.9266
18	CCV	495.5	494.5	490.8	510.2	51290.	127700.
19	CCB	.4422	.6222	.3279	.8394	H63.28	62.12
20	CCB	.0813	.2773	.2828	.5295	23.93	12.60
21	BLKW032404A	.0414	.3230	.4363	1.161	43.62	35.12
22	LCSW032404A	512.2	504.3	497.8	506.2	52910.	54410.
23	LCDW032404A	503.7	497.7	491.6	502.7	52140.	53020.
24	240316408	1.362	3.902	983.8	6.257	83.84	1614.
25	240316408L	.3785	.7165	198.1	1.454	5.859	336.4
26	240316409MS	506.8	501.0	H1453.	506.7	52140.	55850.
27	240316410SD	503.1	499.9	H1453.	506.7	51930.	54590.
28	240316408A	489.2	485.3	H1398.	490.3	52100.	55700.

#	Sample Name	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
29	240316403	1.154	10.09	1324.	6.197	101.0	4173.
30	240316406	.0836	1.607	810.2	2.167	134.4	1971.
31	CCV	491.6	490.2	484.9	506.1	50860.	126600.
32	CCB	.1781	.4824	.5912	.7266	H115.4	80.09
33	CCB	.0892	.3013	.1150	.4887	H277.2	9.388
34	240312104 X10	.0148	16.98	7.102	9.561	9857.	1474.
35	240310101	.1043	.2905	.6266	.9378	2682.	969.9
36	240310101L	.1053	.4377	.3225	.2428	533.6	189.8
37	240310102	-.0814	.0879	.8420	.2667	2611.	941.8
38	240310112	.1116	.0874	.7856	.7877	118.6	1390.
39	240310113	.0546	.1390	.9554	.6538	-14.88	673.3
40	240310114	.0227	.2219	.9997	.1228	2030.	604.4
41	CCV	496.6	490.7	485.3	503.8	51030.	125800.
42	CCB	.1474	.4807	.3525	.6512	27.57	76.32
43	CCB	.1328	.2754	.3779	.0814	19.04	39.12
44	BLKW033004B	.0827	.2570	.3512	.0527	-24.96	31.89
45	LCSW033004B	449.4	435.7	428.2	438.2	45650.	46740.
46	LCDW033004B	433.5	416.1	409.3	415.6	43770.	44200.
47	240312502	.1928	10.19	53.95	24.21	18440.	6154.
48	240312502L	-.0750	2.054	11.12	4.744	3747.	1274.
49	240312503MS	449.0	438.9	464.2	451.5	58590.	50570.
50	240312504SD	425.9	417.6	449.2	430.6	H60350.	49720.
51	240312502A	500.4	497.6	532.3	512.4	H68550.	57400.
52	240312505	1.449	.5141	3.066	3.039	827.1	2157.
53	240312506MS	442.9	421.2	416.1	426.4	44920.	47270.
54	CCV	499.4	491.9	487.3	502.3	51290.	125500.
55	CCB	.1776	.6629	.6363	.1278	H120.0	62.46
56	CCB	.0146	.1363	.2221	-.2877	17.62	26.50
57	240312507SD	473.2	459.2	455.4	466.0	49040.	50990.
58	240312508	-.0001	11.24	21.42	17.20	12500.	4184.
59	240312509	.1546	3.081	9.753	10.35	2899.	831.8
60	240315503	.2933	19.24	79.89	18.61	25520.	3033.
61	240315504	.1366	8.205	66.82	28.61	13900.	2452.
62	240315505	.0470	.2632	.7960	.4226	-19.67	31.92
63	240317908	.3437	10.40	.4365	4.241	142.6	6041.
64	240317909	-.0760	.7877	.6357	.6844	1016.	3727.
65	240317910	.1847	30.80	.3891	1.247	59.73	4474.
66	240319601	-.0068	.2276	7.677	3.721	864.3	11640.
67	CCV	498.1	492.0	487.2	504.1	51180.	126300.
68	CCB	.2452	.4606	.4592	.3827	32.26	69.58
69	CCB	.0435	.1562	.5849	.0921	15.02	41.59
70	240321102	-.2897	3.731	62.18	12.44	35920.	3824.
71	240322401	-.0008	-.0588	1.891	9.349	359.3	4211.
72	240322402	-.0152	.0820	1.015	.4164	-27.52	551.8
73	CCV	502.9	494.1	490.1	502.8	51450.	126100.
74	CCB	.2761	.1646	.6006	.4308	H195.2	52.80
75	CCB	.1092	.3914	.3664	.7251	H165.7	37.98

#	Sample Name	Mg2790	Mn2576	Mo2020	Na_	Ni2316	2203-1
1	STD1-Blank	-.00023	.00003	.00044	-.00098	-.00129	.00287
2	STD3		1.43957	.66004	8.5367	2.72578	2.45121
3	STD2	56.6559			3.37844		
4	ICV	39970.	392.4	398.8	39900.	387.2	400.9
5	ICB	16.76	.6081	1.908	64.72	.2365	2.607
6	CRI	974.4	9.823	15.54	992.6	19.06	29.15
7	CRI	975.8	10.47	15.68	1020.	19.26	26.30
8	STD1-Blank	-.00079	.00059	.00082	-.00018	-.00255	.00488
9	STD3		1.41292	.64724	8.4259	2.6733	2.40858
10	STD2	55.8247			3.32473		
11	ICV	Q11700.	Q115.7	Q116.8	Q12230.	Q112.3	32.32
12	ICV	39890.	392.2	397.5	39820.	387.7	397.3
13	ICB	9.144	.0144	.8584	35.92	.3269	-.5356
14	CRI	993.5	10.28	15.03	1038.	20.04	25.88
15	ICSA	247200.	-.0066	-1.228	35.30	.6138	3.422
16	ICSA	246900.	-.0215	-1.697	33.16	.3885	2.232
17	ICSAB	253200.	473.0	491.8	36.28	904.9	47.03
18	CCV	126600.	495.2	516.0	127100.	484.6	490.8
19	CCB	71.59	.1728	1.503	62.80	.5840	2.710
20	CCB	11.39	.0139	.6530	30.84	.2053	1.465
21	BLKW032404A	2.140	.4326	.9465	29.73	-.2152	2.627
22	LCSW032404A	51150.	503.0	510.1	52030.	495.8	506.9
23	LCDW032404A	50420.	497.2	504.9	51320.	490.2	503.4
24	240316408	1863.	239.0	1.626	6681.	1.232	3.501
25	240316408L	373.3	47.96	.5226	1283.	-.3207	1.072
26	240316409MS	52250.	H727.8	504.3	57970.	489.9	507.3
27	240316410SD	52010.	H727.8	505.3	57310.	487.8	500.3
28	240316408A	52150.	H703.5	486.8	57390.	474.6	500.4
29	240316403	5304.	3029.	23.04	218700.	3.117	2.428
30	240316406	2500.	147.1	.7615	11000.	.6382	3.614
31	CCV	125400.	489.6	508.9	127200.	479.4	491.8
32	CCB	40.09	.5710	.9873	76.26	.2252	1.765
33	CCB	7.126	1.827	.2827	32.62	-.1360	.6221
34	240312104 X10	1776.	370.6	.7394	8314.	6.199	6.686
35	240310101	1456.	10.65	.8407	7549.	.2833	3.149
36	240310101L	291.4	1.880	.6425	1435.	.0837	1.337
37	240310102	1462.	10.39	.5671	7591.	-.1117	1.266
38	240310112	859.2	8.743	1.557	6749.	-.2370	2.876
39	240310113	892.1	4.032	.8960	8449.	-.2511	2.957
40	240310114	963.8	8.959	.4920	6508.	.0226	2.380
41	CCV	125500.	488.3	506.6	127800.	480.1	484.1
42	CCB	33.99	.1994	1.054	61.66	.1100	1.616
43	CCB	9.536	-.0026	.6388	29.22	-.0871	1.063
44	BLKW033004B	1.554	-.2850	.6233	33.44	.0625	1.651
45	LCSW033004B	44070.	434.7	440.8	45380.	429.2	447.4
46	LCDW033004B	42080.	415.8	421.5	43300.	409.5	430.4
47	240312502	5557.	153.2	6.186	2439.	31.89	9.105
48	240312502L	1129.	30.82	1.970	505.9	6.656	3.672
49	240312503MS	47810.	553.8	439.8	46930.	450.4	449.4
50	240312504SD	46790.	539.6	417.1	44630.	431.1	426.3
51	240312502A	55000.	H629.1	495.9	52750.	509.8	500.5
52	240312505	1882.	26.40	2.050	5869.	5.034	60.05
53	240312506MS	44550.	446.2	427.9	49610.	419.5	499.4

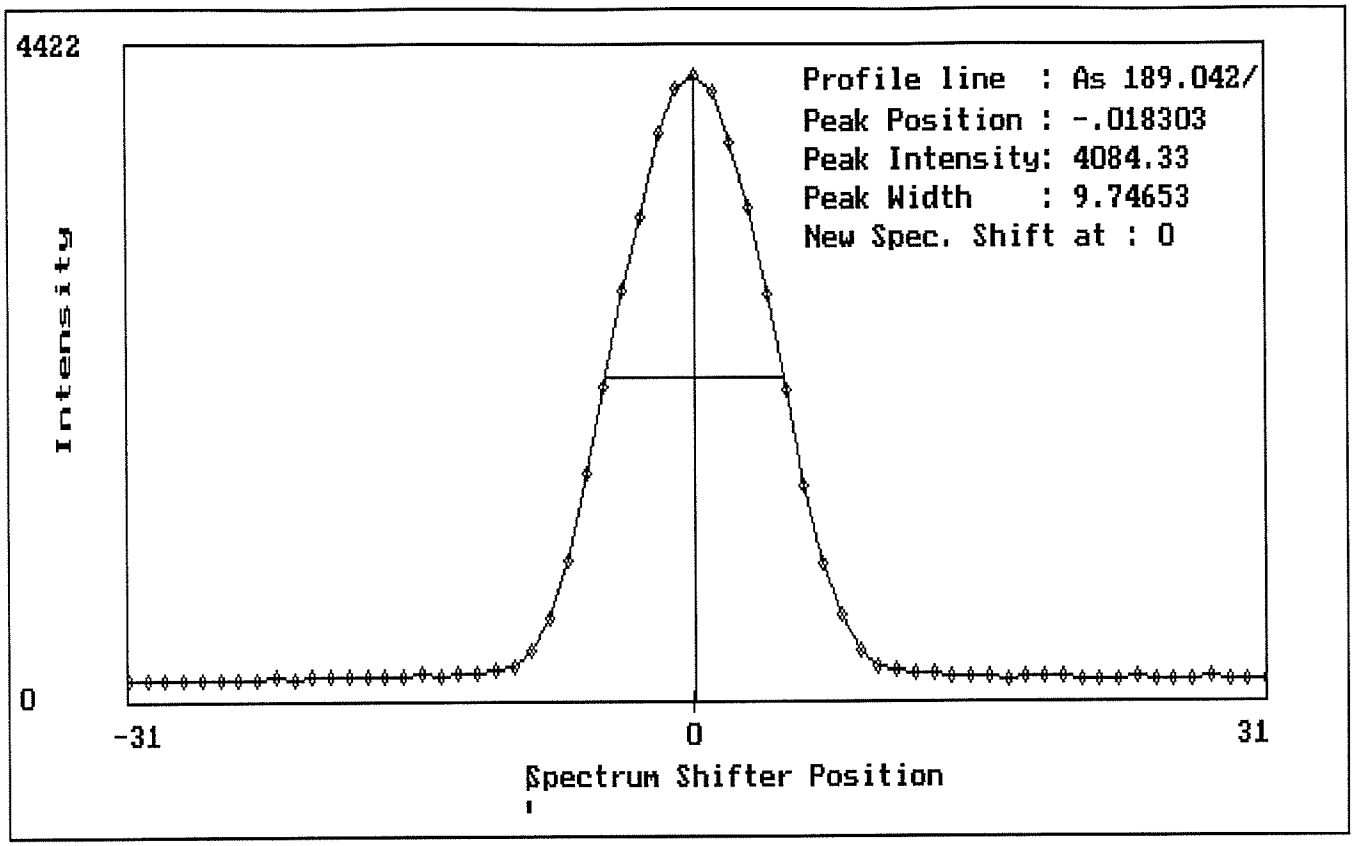
#	Sample Name	Mg2790	Mn2576	Mo2020	Na_	Ni2316	2203-1
54	CCV	126300.	489.8	506.9	127800.	483.6	487.6
55	CCB	39.62	.7839	1.307	66.43	.0775	2.329
56	CCB	9.848	-.0044	.5719	31.24	-.2024	.1454
57	240312507SD	48580.	486.2	464.0	53290.	457.1	534.7
58	240312508	3550.	400.9	2.014	3361.	17.70	8.270
59	240312509	148.6	408.2	2.677	155800.	15.95	3.822
60	240315503	2341.	514.7	1.272	13580.	12.48	18.63
61	240315504	2069.	790.8	6.302	12770.	36.56	14.71
62	240315505	1.632	3.978	.3364	65.32	.2441	1.118
63	240317908	16550.	678.0	.5117	85910.	17.16	3.722
64	240317909	10360.	102.7	.5640	20080.	5.815	1.714
65	240317910	12110.	1981.	.4657	100900.	3.532	4.629
66	240319601	8022.	85.49	.5683	2695.	1.018	2.613
67	CCV	126300.	488.9	507.1	127800.	482.5	487.4
68	CCB	42.16	.1004	1.063	72.80	-.1577	1.155
69	CCB	10.59	.0348	.6850	39.98	.1943	.1706
70	240321102	28950.	78.98	11.80	51580.	70.86	14.09
71	240322401	4013.	6.278	4.631	9801.	5.491	4.075
72	240322402	3867.	-.1037	.9404	2732.	.4146	2.364
73	CCV	126900.	490.9	508.2	127800.	484.7	492.1
74	CCB	35.29	1.269	.8156	62.86	.0896	.0079
75	CCB	7.950	1.000	.1675	31.35	.3448	2.628

#	Sample Name	2203-2	Pb2203	Se1960	Sb2068	2068-1	2068-2
1	STD1-Blank	-.00068	.00005	.00005	.00005	-.00068	-.00013
2	STD3	3.76292				2.48846	2.1433
3	STD2						
4	ICV	393.7	398.5	411.8	409.9	409.8	410.0
5	ICB	.3724	1.863	-8.354	.7349	.3565	1.492
6	CRI	22.92	27.07	22.62	49.44	48.96	50.40
7	CRI	24.27	25.62	21.52	49.07	49.34	48.53
8	STD1-Blank	.00161	.00026	.00026	.00026	-.0014	.0001
9	STD3	3.7017				2.44667	2.11279
10	STD2						
11	ICV	133.4	Q65.97	Q62.76	Q99.16	145.0	7.291
12	ICV	394.1	396.2	417.2	410.5	411.0	409.6
13	ICB	-.6474	-.5725	-1.170	-.5218	-1.252	.9405
14	CRI	23.55	25.10	27.12	52.55	52.85	51.94
15	ICSA	-2.385	1.489	-.0058	-1.387	-1.887	-.3871
16	ICSA	-.5810	1.295	-1.374	-.5019	-1.111	.7171
17	ICSAB	47.75	47.27	53.33	614.6	615.5	612.9
18	CCV	510.8	497.5	538.1	533.5	533.5	533.5
19	CCB	-1.453	1.324	.5324	-.1712	-.9354	1.359
20	CCB	-1.024	.6368	-.5900	.1187	-.0624	.4807
21	BLKW032404A	-1.149	1.370	-2.649	-.5804	-1.493	1.247
22	LCSW032404A	507.4	507.1	539.5	531.1	531.4	530.6
23	LCDW032404A	501.9	502.9	532.8	524.6	524.6	524.5
24	240316408	-.7941	2.071	-2.637	-1.448	-2.131	-.0808
25	240316408L	-.6714	.4918	-.3700	-.0901	-.1186	-.0338
26	240316409MS	500.8	505.1	533.0	522.9	524.0	520.6
27	240316410SD	497.4	499.3	528.2	521.0	521.4	520.1
28	240316408A	469.3	490.1	519.0	493.3	483.1	513.7

#	Sample Name	2203-2	Pb2203	Se1960	Sb2068	2068-1	2068-2
29	240316403	-.4140	1.482	.1007	-2.700	-3.245	-1.608
30	240316406	.4375	2.556	-3.414	-2.454	-3.034	-1.294
31	CCV	506.9	496.8	541.9	527.9	526.0	531.7
32	CCB	-.9324	.8669	-2.444	.0273	-.9146	1.913
33	CCB	-1.656	-.1363	-.9752	-.1248	-1.030	1.688
34	240312104 X10	3.384	5.587	-.8829	.2602	.1540	.4722
35	240310101	-1.517	1.595	-.4412	1.127	.6443	2.094
36	240310101L	-.8631	.6044	-.5394	.4348	-.3049	1.916
37	240310102	-.7469	.5960	-2.047	.4515	-.1297	1.615
38	240310112	-.8450	1.637	.2215	.9271	.6113	1.559
39	240310113	-.4326	1.828	-.2388	-.0148	-.8776	1.712
40	240310114	-1.571	1.064	-2.976	.9598	.4517	1.977
41	CCV	508.8	492.3	545.8	527.7	527.6	527.8
42	CCB	-.5836	.8841	-2.216	-.2245	-1.061	1.451
43	CCB	-.5557	.5240	-1.505	.2269	.1513	.3776
44	BLKW033004B	-.4510	.9515	-2.329	.2437	-.1282	.9878
45	LCSW033004B	445.5	446.8	476.0	460.9	461.1	460.5
46	LCDW033004B	427.2	429.4	454.4	438.5	439.0	437.3
47	240312502	4.668	7.628	-.9262	2.289	2.489	1.887
48	240312502L	-.0337	2.438	-1.904	.9152	.8542	1.036
49	240312503MS	445.7	448.2	466.6	451.5	451.8	450.7
50	240312504SD	424.0	425.5	451.5	422.7	422.2	423.8
51	240312502A	494.4	498.5	526.3	505.8	505.6	506.2
52	240312505	60.95	60.35	-2.006	1.049	.8512	1.443
53	240312506MS	493.8	497.5	460.0	441.9	439.7	446.2
54	CCV	510.9	495.3	546.1	527.7	527.2	528.8
55	CCB	-1.025	1.212	-2.022	-.0409	-.9682	1.816
56	CCB	-.2543	.0125	-1.089	-.3560	-1.167	1.267
57	240312507SD	530.4	533.3	495.2	481.3	479.6	484.7
58	240312508	5.300	7.281	-1.563	1.108	.5209	2.283
59	240312509	.0297	2.560	-3.559	.0547	-.7089	1.583
60	240315503	13.80	17.02	.5005	-.0949	-.2556	.2261
61	240315504	10.41	13.28	-2.617	1.578	1.618	1.497
62	240315505	-1.809	.1436	-.7446	-.4554	-1.605	1.846
63	240317908	-.3291	2.373	1.344	.3288	-1.222	3.435
64	240317909	-.5431	.9626	.1190	-.1139	-.9810	1.622
65	240317910	1.714	3.659	-.8500	.4511	.2894	.7742
66	240319601	3.293	2.840	.7175	.1518	-.1358	.7271
67	CCV	512.2	495.7	546.1	529.7	528.7	531.6
68	CCB	-1.118	.3986	.5368	-.2090	-.6805	.7344
69	CCB	-1.689	-.4484	-.8183	-.0125	-.8095	1.583
70	240321102	1.014	9.738	.3509	.3024	-.1971	1.302
71	240322401	.8096	2.988	-1.898	3.096	2.759	3.771
72	240322402	-1.094	1.213	-1.065	-.0189	-.7739	1.493
73	CCV	514.1	499.4	548.1	529.2	527.1	533.5
74	CCB	-.6833	-.2220	-.9287	1.097	.7196	1.851
75	CCB	-1.008	1.417	1.367	-.3374	-1.381	1.753

#	Sample Name	1960-1	1960-2	Sn1899	Tl1908	V_2924	Zn2138
1	STD1-Blank	-.00225	.00241	.00002	-.00142	0	.00065
2	STD3	.48588	.79745	.38081	.32935	.57216	1.29246
3	STD2						
4	ICV	407.4	420.5	378.2	402.1	399.9	421.4
5	ICB	-16.01	6.973	-.5788	-8.602	.2242	.5227
6	CRI	15.34	37.19	6.896	48.14	10.09	23.27
7	CRI	13.72	37.15	10.08	48.73	10.43	22.35
8	STD1-Blank	-.00671	.0061	-.00003	-.00402	.00009	.00112
9	STD3	.47838	.78163	.37446	.32449	.55943	1.27009
10	STD2						
11	ICV	18.49	151.4	Q109.6	Q123.9	Q117.0	Q122.5
12	ICV	416.4	418.8	377.3	404.8	400.9	412.2
13	ICB	-3.552	3.601	-1.793	1.564	-.2900	-.0460
14	CRI	23.65	34.06	11.17	57.09	10.51	22.62
15	ICSA	1.629	-3.282	-2.047	Q-19.68	.1251	.8280
16	ICSA	.3814	-4.890	-3.593	3.211	.0103	.8045
17	ICSAB	56.93	46.11	494.4	97.04	489.1	1010.
18	CCV	539.5	535.3	522.2	512.9	498.6	528.3
19	CCB	-1.371	4.345	3.001	1.693	-.1134	1.043
20	CCB	-3.185	4.607	4.333	-.4484	-.0241	1.240
21	BLKW032404A	-5.732	3.527	.1987	.1093	-.1212	.1649
22	LCSW032404A	537.9	542.7	482.0	527.8	514.5	529.3
23	LCDW032404A	531.8	534.7	478.9	518.0	509.3	522.4
24	240316408	-4.441	.9740	1.319	1.054	.4262	13.69
25	240316408L	-2.235	3.364	.4529	.3475	-.1937	3.419
26	240316409MS	532.5	533.9	480.3	519.6	509.3	540.0
27	240316410SD	529.4	525.9	476.9	517.8	507.5	533.4
28	240316408A	527.8	501.2	461.6	507.2	491.3	521.0
29	240316403	-1.969	4.246	.9904	-.3986	1.940	28.82
30	240316406	-5.865	1.494	-1.025	-.7071	-.1594	14.63
31	CCV	544.4	536.9	515.3	509.6	494.0	524.6
32	CCB	-4.473	1.620	.2956	-.1304	-.1557	1.391
33	CCB	-1.596	.2681	-.3682	-.4019	-.1694	.7476
34	240312104 X10	-2.192	1.738	.3891	1.234	15.37	28.47
35	240310101	-2.062	2.804	.3463	.2166	.2266	.5355
36	240310101L	-2.980	4.348	-.0260	-1.012	-.1694	.5748
37	240310102	-4.633	3.132	.3985	-.3004	-.1131	.4764
38	240310112	-2.178	5.027	.8634	-1.190	1.851	.7776
39	240310113	-1.530	2.347	-.1500	-2.013	1.702	4.899
40	240310114	-6.183	3.447	-.6399	-.5133	2.592	1.388
41	CCV	547.6	542.0	511.6	514.5	494.8	526.8
42	CCB	-3.879	1.113	3.500	1.710	-.1194	.9863
43	CCB	-3.376	2.243	1.922	-1.357	-.1588	.8059
44	BLKW033004B	-5.025	3.071	2.059	-1.444	-.1581	7.898
45	LCSW033004B	476.7	474.5	417.0	469.0	444.7	458.2
46	LCDW033004B	454.5	454.3	L396.4	451.2	424.0	452.2
47	240312502	-1.718	.6584	-2.570	2.546	43.49	81.81
48	240312502L	-3.316	.9247	.1834	.6123	9.376	17.03
49	240312503MS	464.9	470.2	410.5	463.8	472.0	515.5
50	240312504SD	453.3	448.1	L386.2	444.2	459.8	512.0
51	240312502A	528.3	522.1	464.2	513.9	540.2	593.9
52	240312505	-5.269	4.529	2.041	.2490	1.249	H12640.
53	240312506MS	461.6	456.9	404.4	461.4	431.8	H13160.

#	Sample Name	1960-1	1960-2	Sn1899	Tl1908	V_2924	Zn2138
54	CCV	546.3	545.6	509.9	514.3	496.2	549.0
55	CCB	-4.018	1.974	3.782	1.232	-.1511	2.603
56	CCB	-2.791	2.319	1.559	.0284	-.1597	1.458
57	240312507SD	494.2	497.2	439.9	485.7	470.1	H14030.
58	240312508	-4.408	4.137	-1.587	3.426	23.52	57.46
59	240312509	-6.906	3.143	.9230	.4221	2.206	104.2
60	240315503	-1.209	3.925	-1.246	1.367	55.51	108.6
61	240315504	-4.190	.5322	-1.024	.8174	14.53	135.8
62	240315505	-2.312	2.394	-1.565	-.0533	-.1624	5.511
63	240317908	-.2609	4.558	3.321	-1.011	-.2319	71.47
64	240317909	-1.776	3.914	.0053	.9130	-.0797	81.30
65	240317910	-2.580	2.613	.9720	1.079	-.1621	25.70
66	240319601	-.9217	4.000	.9766	-.1615	3.562	5.736
67	CCV	549.1	540.2	512.5	512.2	495.3	537.7
68	CCB	-.1503	1.912	3.520	-.3329	.7769	1.045
69	CCB	-2.412	2.372	2.917	1.327	.3403	1.436
70	240321102	-2.073	5.205	-2.182	2.417	27.53	8.734
71	240322401	-4.994	4.301	-.0160	-1.658	1.648	15.06
72	240322402	-3.599	4.008	.3545	-.9246	.9542	2.951
73	CCV	547.6	549.2	516.8	523.1	498.2	537.8
74	CCB	-3.022	3.263	1.951	1.745	.2771	.9813
75	CCB	-.0626	4.229	3.734	.4950	-.1687	.9678


4422
Intensity
0
-31
0
31
Spectrum Shifter Position
Profile line : As 189.042/
Peak Position : -.018303
Peak Intensity: 4084.33
Peak Width : 9.74653
New Spec. Shift at : 0

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1-Blank	40704A	SM041103	04/07/04	10:51		X	IR
2	STD3	40704A	SM041103	04/07/04	10:57		X	IR
3	STD2	40704A	SM041103	04/07/04	11:02		X	IR
4	ICV	40704A	SM041103	04/07/04	11:06		Q	CONC
5	ICB	40704A	SM041103	04/07/04	11:12		Q	CONC
6	CRI	40704A	SM041103	04/07/04	11:30		Q	CONC
7	ICSA	40704A	SM041103	04/07/04	11:35		Q	CONC
8	ICSA	40704A	SM041103	04/07/04	11:46		Q	CONC
9	ICSA	40704A	SM041103	04/07/04	11:59		Q	CONC
10	ICSAB	40704A	SM041103	04/07/04	12:05		Q	CONC
11	CCV	40704A	SM041103	04/07/04	12:10		S	CONC
12	CCB	40704A	SM041103	04/07/04	12:16		S	CONC
13	CCB	40704A	SM041103	04/07/04	12:22		S	CONC
14	BLKFOR289	40704A	SM041103	04/07/04	12:32		S	CONC
15	240328901	40704A	SM041103	04/07/04	12:37		S	CONC
16	240328902	40704A	SM041103	04/07/04	12:43		S	CONC
17	240312506MS X5	40704A	SM041103	04/07/04	12:50		S	CONC
18	240312507SD X5	40704A	SM041103	04/07/04	12:56		S	CONC
19	240322806 X25	40704A	SM041103	04/07/04	13:01		S	CONC
20	240322807 X10	40704A	SM041103	04/07/04	13:07		S	CONC
21	240322806D X5	40704A	SM041103	04/07/04	13:13		S	CONC
22	240312505 X5	40704A	SM041103	04/07/04	13:19		S	CONC
23	CCV	40704A	SM041103	04/07/04	13:24		S	CONC
24	CCB	40704A	SM041103	04/07/04	13:30		S	CONC
25	CCB	40704A	SM041103	04/07/04	13:35		S	CONC

#	Sample Name	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3158
1	STD1-Blank	-.00674	.00207	-.00902	.00146	-.12709	.00033
2	STD3	2.48669		1.06625	34.6398	40.0707	
3	STD2		1.70366				6.70289
4	ICV	402.1	38790.	382.1	388.8	411.6	42120.
5	ICB	-.0979	11.76	1.307	.1792	.0672	34.95
6	CRI	9.931	161.6	28.76	9.798	3.928	1088.
7	ICSA	-.4508	240100.	-5.782	-.1610	-.4034	245000.
8	ICSA	-.4663	240000.	-8.096	-.1781	-.3516	244200.
9	ICSA	-.4889	235000.	-7.379	-.1522	-.3669	240400.
10	ICSAB	206.3	243600.	90.03	480.9	487.8	247800.
11	CCV	512.6	121600.	518.8	492.4	501.5	126300.
12	CCB	.0133	69.05	-.4111	.2167	.1599	91.10
13	CCB	-.3987	5.085	-1.863	.0079	-.0515	18.04
14	BLKFOR289	-.3286	7.804	-1.757	.9806	-.2456	H418.4
15	240328901	-.1598	10.47	-1.751	12.21	-.2818	80940.
16	240328902	-.0559	15.30	-2.550	1.647	-.3587	568.7
17	240312506MS X5	L103.7	L9941.	L103.2	L109.5	L108.4	L12990.
18	240312507SD X5	L99.68	L9462.	L96.19	L104.7	L102.7	L12340.
19	240322806 X25	-.4621	2379.	3.703	12.38	.7851	1023.
20	240322807 X10	-.4744	3276.	.5476	10.72	.3022	4709.
21	240322806D X5	-.3311	1956.	.8868	11.17	.4636	1967.
22	240312505 X5	-.4253	-17.26	-.4375	5.396	-.1820	1764.
23	CCV	515.7	122000.	526.4	493.8	506.5	126900.
24	CCB	-.1933	18.73	.1875	.1551	.0276	50.68
25	CCB	-.0032	-7.305	-.5292	.0219	-.0687	9.253

#	Sample Name	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
1	STD1-Blank	-.00258	-.00219	.00163	.00286	-.00049	-.03984
2	STD3	9.35083	2.17886	2.99909	3.42299		
3	STD2					7.89387	30.426
4	ICV	402.5	396.8	393.3	396.3	41700.	40550.
5	ICB	.2825	-.0543	.0874	.5832	25.54	35.85
6	CRI	5.302	9.666	10.15	10.51	51.57	935.5
7	ICSA	Q-3.244	.8977	-.0282	-.3286	225800.	-66.15
8	ICSA	-.4397	.7746	-.3978	-1.209	225300.	-45.94
9	ICSA	-.0711	.9952	.1755	-1.200	221200.	-25.26
10	ICSAB	959.5	469.7	472.2	500.4	225400.	-47.43
11	CCV	489.9	484.9	482.8	499.0	50290.	123800.
12	CCB	.3789	.1340	.0876	.4013	H58.95	34.82
13	CCB	-.0140	.0300	.1891	.2703	5.731	-33.73
14	BLKFOR289	-.0021	-.1999	.1827	.3242	-2.489	265.5
15	240328901	.0737	-.2659	.1729	.1504	-5.644	545.6
16	240328902	.0653	-.0487	.1842	.8214	-1.642	564.2
17	240312506MS X5	L107.7	L106.4	L106.6	L105.9	L11410.	L10880.
18	240312507SD X5	L103.6	L101.8	L101.7	L100.5	L10880.	L10390.
19	240322806 X25	.3077	2.007	5.895	3.334	3507.	541.9
20	240322807 X10	.4419	2.089	5.597	3.228	10200.	481.7
21	240322806D X5	.3129	1.512	5.353	2.828	2577.	739.2
22	240312505 X5	.2964	-.0018	.6447	1.444	201.7	512.9
23	CCV	495.0	489.4	486.6	501.1	50680.	124600.
24	CCB	.1485	-.0670	.2333	.8492	14.64	48.80

#	Sample Name	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
25	CCB	.2119	-.1103	.1218	.3519	-.1447	-5.829

#	Sample Name	Mg2790	Mn2576	Mo2020	Na_	Ni2316	2203-1
1	STD1-Blank	.00171	.00019	.00104	-.00015	-.00385	.01137
2	STD3		1.43992	.64603	8.4907	2.77204	2.40128
3	STD2	59.9867			3.39702		
4	ICV	39820.	401.5	408.9	38370.	390.8	417.4
5	ICB	30.95	.1882	.8367	55.90	-.0308	.4834
6	CRI	983.3	10.19	15.43	1013.	20.02	25.41
7	ICSA	250000.	.4527	-2.654	40.26	.5053	11.03
8	ICSA	249700.	.4620	-2.761	37.76	.4043	4.962
9	ICSA	245100.	.4200	-2.184	30.46	.4860	1.797
10	ICSAB	253100.	477.4	495.7	24.71	907.6	50.74
11	CCV	123000.	486.7	508.1	123100.	474.2	489.6
12	CCB	82.47	.2134	.9559	60.07	.1673	3.528
13	CCB	11.55	-.0155	.5863	23.16	-.4194	1.271
14	BLKFOR289	93.74	.1121	.1193	H139000.	.0069	.7845
15	240328901	532.2	8.960	.2908	142500.	-.0253	-.3803
16	240328902	131.1	7.256	.2668	140200.	.5248	1.953
17	240312506MS X5	L10900.	L114.3	L107.6	L11570.	L106.8	123.5
18	240312507SD X5	L10400.	L108.6	L102.9	L10970.	L101.8	117.1
19	240322806 X25	404.0	208.3	.6179	401.1	12.92	3.530
20	240322807 X10	864.4	324.2	.4446	776.8	10.72	3.259
21	240322806D X5	574.4	162.3	.0381	926.7	9.496	2.057
22	240312505 X5	442.4	6.685	.2096	1140.	1.002	16.58
23	CCV	123600.	490.7	512.3	122700.	478.6	494.2
24	CCB	35.70	.1595	.7328	71.77	.3835	2.094
25	CCB	6.064	.0250	.7606	27.71	-.0496	.2282

#	Sample Name	2203-2	Pb2203	Se1960	Sb2068	2068-1	2068-2
1	STD1-Blank	-.00086	.00027	.00027	.00027	.00466	.00221
2	STD3	3.88051				2.42681	2.14598
3	STD2						
4	ICV	397.1	410.6	421.0	415.6	417.4	412.0
5	ICB	.3144	.4274	-.4464	-.6357	-2.297	2.691
6	CRI	25.97	25.60	28.24	51.00	50.69	51.62
7	ICSA	-1.311	Q6.923	-6.115	-.7883	-.1362	-2.095
8	ICSA	-2.024	2.636	Q-10.76	.8639	.6800	1.231
9	ICSA	-1.957	.5472	3.413	1.738	3.265	-1.321
10	ICSAB	47.17	49.55	53.18	616.5	617.3	615.0
11	CCV	499.6	492.9	532.2	520.7	520.5	521.0
12	CCB	.1374	2.399	1.209	-.6742	-1.561	1.100
13	CCB	-.5475	.6655	.6600	-1.350	-2.104	.1576
14	BLKFOR289	.7027	.7575	1.961	.7062	.6452	.8276
15	240328901	.8744	.0378	-.3945	.0054	-.3395	.6954
16	240328902	.9083	1.605	1.044	-.5780	-.9067	.0793
17	240312506MS X5	119.3	L122.1	L108.1	L106.6	107.1	105.6
18	240312507SD X5	114.8	L116.4	L103.0	L102.2	101.4	103.9
19	240322806 X25	2.730	3.264	1.116	.1492	-.4757	1.400
20	240322807 X10	2.175	2.898	1.052	-.2689	-.2395	-.3287

#	Sample Name	2203-2	Pb2203	Se1960	Sb2068	2068-1	2068-2
21	240322806D X5	1.444	1.853	.6849	-.1673	-.8297	1.159
22	240312505 X5	15.38	16.19	-.5555	.7789	1.262	-.1891
23	CCV	505.5	497.9	538.0	528.1	528.9	526.5
24	CCB	.2441	1.479	-.2463	-.3612	-1.469	1.857
25	CCB	.2476	.2349	-.8854	1.017	1.053	.9435

#	Sample Name	1960-1	1960-2	Sn1899	Tl1908	V_2924	Zn2138
1	STD1-Blank	-.00841	.00922	-.00031	-.00472	.00005	-.00027
2	STD3	.48514	.8157	.37606	.33695	.58617	1.3641
3	STD2						
4	ICV	424.0	415.1	378.0	419.8	405.1	408.2
5	ICB	-.0886	-1.164	-1.345	.4302	.2078	.1273
6	CRI	28.77	27.17	7.923	61.32	10.28	23.19
7	ICSA	-1.408	-15.54	-6.051	Q19.29	1.528	.0708
8	ICSA	-5.988	-20.31	-6.982	1.688	1.632	.0185
9	ICSA	4.309	1.618	-3.011	3.822	1.783	-.9697
10	ICSAB	54.06	51.41	491.6	101.0	497.0	1008.
11	CCV	534.1	528.6	504.7	513.9	493.8	516.2
12	CCB	1.707	.2112	1.618	1.580	.4066	.4947
13	CCB	.7893	.4003	.8893	1.019	-.1238	.1184
14	BLKFOR289	2.859	.1605	3.557	-1.094	.0034	2.771
15	240328901	-.0135	-1.158	3.258	-.9215	.2109	4.299
16	240328902	1.498	.1346	3.441	-.0141	.0722	3.049
17	240312506MS X5	106.1	111.9	L98.19	L107.6	L108.5	H3713.
18	240312507SD X5	102.2	104.5	L97.07	L104.3	L103.5	H3569.
19	240322806 X25	1.810	-.2743	3.580	-1.563	8.209	55.08
20	240322807 X10	1.284	.5886	-.2359	-.5617	8.768	37.37
21	240322806D X5	.9661	.1210	2.200	1.410	6.879	40.10
22	240312505 X5	-.8786	.0910	1.037	2.103	.2899	3606.
23	CCV	539.5	535.2	511.2	515.0	497.1	524.2
24	CCB	.1148	-.9704	-.1439	1.315	.0091	1.605
25	CCB	-.7387	-1.180	-.0920	1.034	.0098	.2180

STANDARDS LOG

STANDARD LOT	ID	MFG LOT	MANUFACTURER	EXPIRATION DATE	FINAL VOLUME	CREATED/RECEIVED	BY
MET - 33201	6010_PDSWRK			10/8/04 9:56:00 AM	50 mL	7/6/03 7:50:00 AM	RHOL

12500 ug/L: Lead, Manganese, Molybdenum, Nickel, Silver, Strontium, Thallium, Tin, Titanium, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Vanadium, Zinc, Selenium
1250000 ug/L: Aluminum, Iron, Magnesium, Potassium, Sodium, Calcium

COMPOSED OF:

6010_MAJMSIC MET-32409: 25 mL 6010_MINICSA MET-36701: 25 mL

STANDARD LOT	ID	MFG LOT	MANUFACTURER	EXPIRATION DATE	FINAL VOLUME	CREATED/RECEIVED	BY
MET - 37401	6010_ICSABC			12/18/04 3:00:00 PM	1000 mL	12/18/03 2:35:41 PM	RHOL

100 ug/L: Thallium, Arsenic
1000 ug/L: Nickel, Cadmium, Zinc
200 ug/L: Silver
225000 ug/L: Iron
250000 ug/L: Aluminum, Magnesium, Calcium
50 ug/L: Lead, Selenium
500 ug/L: Manganese, Molybdenum, Strontium, Tin, Titanium, Barium, Beryllium, Chromium, Cobalt, Copper, Vanadium
600 ug/L: Antimony

COMPOSED OF:

6010_CLPICSA MET-24417: 10 mL 6010_FE@10K MET-37103: 12.5 mL 6010_MAJICSA MET-35801: 50 mL 6010_MO@1K MET-24410: 0.5 mL 6010_SN@1K MET-21604: 0.5 mL 6010_SR@1K MET-18402: 0.5 mL 6010_Ti@1K MET-18401: 0.5 mL HCL_36.5-38 MET-18902: 50 mL HNO3_69-70 MET-18903: 60 mL

STANDARD LOT	ID	MFG LOT	MANUFACTURER	EXPIRATION DATE	FINAL VOLUME	CREATED/RECEIVED	BY
MET - 38701	6010_MAJMSIC	4AM156	CPI	2/9/05 9:54:32 AM	1000 mL	2/10/04 9:52:51 AM	LLMC

2500 mg/L: Aluminum, Iron, Magnesium, Potassium, Sodium, Calcium

STANDARDS LOG

STANDARD LOT	ID	MFG LOT	MANUFACTURER	EXPIRATION DATE	FINAL VOLUME	CREATED/RECEIVED	BY
MET - 39602	AFCEE_CRIWRK			3/10/05 12:17:00 PM	250 mL	3/10/04 12:17:00 PM	LLMC

10 ug/L: Manganese, Silver, Tin, Barium, Chromium, Cobalt, Copper, Vanadium
1000 ug/L: Magnesium, Potassium, Sodium, Calcium
15 ug/L: Molybdenum
20 ug/L: Nickel, Zinc
200 ug/L: Aluminum
25 ug/L: Lead
30 ug/L: Arsenic, Selenium
4 ug/L: Beryllium
5 ug/L: Strontium, Titanium, Cadmium
50 ug/L: Iron, Antimony
60 ug/L: Thallium

COMPOSED OF:

AFCEE_CRIINT MET-38501: 2.5 mL HCL_36.5-38 MET-38602: 6 mL HNO3_69-70 MET-38601: 5 mL

STANDARD LOT	ID	MFG LOT	MANUFACTURER	EXPIRATION DATE	FINAL VOLUME	CREATED/RECEIVED	BY
MET - 39701	6010_ICVWRK			3/15/05 8:15:00 AM	500 mL	3/15/04 8:15:00 AM	LLMC

400 ug/L: Lead, Manganese, Molybdenum, Nickel, Silver, Strontium, Thallium, Tin, Titanium, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Vanadium, Zinc, Selenium
40000 ug/L: Aluminum, Iron, Magnesium, Potassium, Sodium, Calcium

COMPOSED OF:

6010_MAJMSIC MET-32409: 8 mL 6010_MINICSA MET-36701: 8 mL

STANDARD LOT	ID	MFG LOT	MANUFACTURER	EXPIRATION DATE	FINAL VOLUME	CREATED/RECEIVED	BY
MET - 39902	6010_Std2			3/29/05 11:34:00 AM	1000 mL	3/29/04 11:34:23 AM	LLMC

100000 ug/L: Iron
250000 ug/L: Aluminum, Magnesium, Potassium, Sodium, Calcium

COMPOSED OF:

6010_K@10K MET-37102: 25 mL 6010_MAJICSA MET-37701: 50 mL 6010_Na@10K MET-39901: 25 mL HCL_36.5-38 MET-18902: 50 mL HNO3_69-70 MET-18903: 60 mL

STANDARD LOT	ID	MFG LOT	MANUFACTURER	EXPIRATION DATE	FINAL VOLUME	CREATED/RECEIVED	BY
MET - 39903	6010_Std3			3/29/05 11:42:13 AM	1000 mL	3/29/04 11:42:02 AM	LLMC

1000 ug/L: Lead, Manganese, Molybdenum, Nickel, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Vanadium, Zinc, Selenium

STANDARDS LOG

STANDARD LOT	ID	MFG LOT	MANUFACTURER	EXPIRATION DATE	FINAL VOLUME	CREATED/RECEIVED	BY
MET - 40001	6010_CCVWRK			3/29/05 11:34:00 AM	200 mL	3/29/04 1:01:00 PM	LLMC

125000 ug/L: Aluminum, Magnesium, Potassium, Calcium
125500 ug/L: Sodium
500 ug/L: Lead, Manganese, Molybdenum, Nickel, Silver, Strontium, Thallium, Tin, Titanium, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Vanadium, Zinc, Selenium
50000 ug/L: Iron

COMPOSED OF:

6010_Std2 MET-39902: 100 mL 6010_Std3 MET-39903: 100 mL

STANDARD LOT	ID	MFG LOT	MANUFACTURER	EXPIRATION DATE	FINAL VOLUME	CREATED/RECEIVED	BY
MET - 40002	6010_MINICSA	3JF133	CPI	3/29/05 8:55:00 AM	500	3/25/04 8:54:00 AM	LLMC

25 mg/L: Lead, Manganese, Molybdenum, Nickel, Silver, Strontium, Thallium, Tin, Titanium, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Vanadium, Zinc, Selenium

STANDARD LOT	ID	MFG LOT	MANUFACTURER	EXPIRATION DATE	FINAL VOLUME	CREATED/RECEIVED	BY
MET - 40101	6010_ICSA			3/30/05 1:39:00 PM	1000 mL	3/30/04 10:38:00 AM	LLMC

525000 ug/L: Iron
62500 ug/L: Aluminum, Magnesium, Calcium

COMPOSED OF:

6010_FE@10K MET-39001: 50 mL 6010_MAJICSA MET-37701: 12.5 mL HCL_36.5-38 MET-18902: 50 mL HNO3_69-70 MET-18903: 60 mL

PEL Laboratories, Inc.

Customer Name:	CH2M Hill
Date and Time Received:	2/13/2004 10:00:00 AM
Date Reported:	3/1/2004
Laboratory Submission Number/SDG:	2402126
Project:	Former NAS Cecil Field

Samples: The submission consisted of 2 samples with sample identification shown in the attached data tables.

Tests: The samples were analyzed for the methods listed on the attached table of contents.

Results: See the attached data tables for results.

Distribution of Report to:

CH2M Hill
Attn: Melissa Osborne
Phone: W 770-604-9182
F 770-604-9282

Respectfully Submitted,

Brian Spann
Laboratory Manager
PEL Laboratories, Inc.

Note: Submitted material will be retained for 30 days unless otherwise requested by client or consumed in analysis. PEL letters and reports are for the exclusive use of the client to whom they are addressed. Our Letters and reports apply to the sample tested and are n necessarily indicative of the qualities of apparently identical or similar materials

4420 Pendola Point Road • Tampa, Florida 33619
(813)247-2805 • FAX: (813)248-1537
Website: www.pelab.com

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Organics

010304 1120

Organic Data Qualifiers

U Indicates the analyte was analyzed for but not detected. The number adjacent to the "U" qualifier indicates the reporting limit for that analyte. The reporting limit can vary from sample to sample depending on dilution factors or the percent moisture adjustment when indicated.

J Indicates estimated value. It is used when the data indicates the presence of an analyte above the method detection limit (MDL) yet lower than the reporting limit.

B Indicates the analyte was found in the associated blank as well as in the sample. The notation indicates possible contamination of the sample.

E Indicates the value reported is above the highest calibration standard for that analyte. The sample should be analyzed at an appropriate dilution. "E" qualified values are estimations and the diluted result may be reported on another Form 1.

D Indicates the analyte has been identified in a dilution reanalysis. "D" qualifiers are used for samples that have been analyzed at a lesser dilution than required for accurate quantitation.

C The "C" qualifier indicates the presence of this analyte has been confirmed by GC/MS analysis.

P This qualifier is used for pesticide / Aroclor target analytes where there is greater than 25% difference for the detected concentration between the two GC columns.

N This qualifier indicates presumptive evidence of an analyte. This qualifier is only used for tentatively identified compounds (TIC), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the "N" qualifier is not used.

A This qualifier indicates that a TIC is a suspected aldol-condensation product.

X Data flagged as rejected by analyst utilizing analytical judgement.

010304 1120

Organic Sample ID Qualifiers

The qualifiers that may be appended to the lab sample ID and/or the client sample ID for organic analysis are defined below:

DL Diluted reanalysis. Indicates that the results of the original analysis of the sample contained compounds that exceeded the calibration range. The sample was diluted and reanalyzed. May be followed by a digit to indicate multiple dilutions of the sample. The results of more than one diluted reanalysis may be reported.

R Reanalysis. The extract was reanalyzed without re-extraction. The "R" is not used if the sample was also re-extracted. May be followed by a digit to indicate multiple reanalysis of the sample at the same dilution.

RE Re-extracted. The extract was reanalyzed with re-extraction. May be followed by a digit to indicate multiple re-extraction of the same sample at the same dilution.

MS Matrix spike (may be followed by a digit to indicate multiple matrix within a sample set).

SD Matrix spike duplicate (may be followed by a digit to indicate multiple matrix spike duplicate within a sample set).

010304 1120

GC/MS VOLATILE ORGANICS

METHOD 8260

010304 1120

CASE NARRATIVE
GC/MS VOLATILE ORGANICS

PEL Lab Reference No./SDG: 2402126

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

EPA 8260B/SW846

IV. PREPARATION

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

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS/LCSD)

All acceptance criteria were met with the exception of:

LCS 021304LCSA32 was analyzed with the water samples on 02/13/04. The following analyte was recovered above criteria: 1,2,3-Trichlorobenzene at 124 % with criteria of (91-122).

LCS 021304LCSA32D was analyzed with the water samples on 02/13/04. The following analyte was recovered below criteria: Isopropylbenzene (Cumene) at 94 % with criteria of (96-118).

No further action was necessary. These results are within the PEL 10% limits. Samples coded accordingly.

CASE NARRATIVE
GC/MS VOLATILE ORGANICS

PEL Lab Reference No./SDG: 2402126

Client: CH2M Hill

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

No spikes requested by client.

E. Internal Standards:

All acceptance criteria were met.

F. Samples:

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

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

SIGNED: _____ **DATE:** 2-19-04

W:\volsnarratives\2402126_8260.doc

VOLATILE ORGANIC CROSS REFERENCE TABLE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Method: 8260

EPA Sample No	Lab Sample ID
57285LW040212	240212601
57TB2W040212	240212602

010304 1120

Sample Data

010304 1120

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 240212601 Lab File ID: 12601.D

Sample wt/vol: 5 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 1415

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Waste Character Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-15-0	Carbon disulfide	1	U
75-09-2	Methylene chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
67-64-1	Acetone	4	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	Bromochloromethane	1	U
78-93-3	2-Butanone	2	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-10-1	4-Methyl-2-pentanone	2	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U

010304 1120

Form I

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 240212601 Lab File ID: 12601.D

Sample wt/vol: 5 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 1415

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Waste Character Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
591-78-6	2-Hexanone	2	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane(EDB)	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene (Cumene)	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U
1330-20-7	Xylene (total)	3	U
1634-04-4	MTBE	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
108-87-2	Methyl Cyclohexane	1	U
79-20-9	Methyl Acetate	1	U
110-82-7	Cyclohexane	1	U

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57TB2W040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 240212602 Lab File ID: 12602.D

Sample wt/vol: 5 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 1438

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Trip Blank #2 Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-15-0	Carbon disulfide	1	U
75-09-2	Methylene chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
67-64-1	Acetone	4	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	Bromochloromethane	1	U
78-93-3	2-Butanone	2	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-10-1	4-Methyl-2-pentanone	2	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U

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Form I

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57TB2W040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 240212602 Lab File ID: 12602.D

Sample wt/vol: 5 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 1438

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Trip Blank #2 Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
591-78-6	2-Hexanone	2	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane(EDB)	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene (Cumene)	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U
1330-20-7	Xylene (total)	3	U
1634-04-4	MTBE	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
108-87-2	Methyl Cyclohexane	1	U
79-20-9	Methyl Acetate	1	U
110-82-7	Cyclohexane	1	U

QC Summary

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1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

021304BLKA32

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 021304BLKA32 Lab File ID: BLK32.D

Sample wt/vol: 5 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 0829

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-15-0	Carbon disulfide	1	U
75-09-2	Methylene chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
67-64-1	Acetone	4	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	Bromochloromethane	1	U
78-93-3	2-Butanone	2	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-10-1	4-Methyl-2-pentanone	2	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

021304BLKA32

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 021304BLKA32 Lab File ID: BLK32.D

Sample wt/vol: 5 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 0829

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID: Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
591-78-6	2-Hexanone	2	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane(EDB)	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene (Cumene)	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U
1330-20-7	Xylene (total)	3	U
1634-04-4	MTBE	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
108-87-2	Methyl Cyclohexane	1	U
79-20-9	Methyl Acetate	1	U
110-82-7	Cyclohexane	1	U

VOLATILE ORGANIC METHOD BLANK SUMMARY

EPA Sample No.

021304BLKA32

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab File ID: BLK32.D Lab Sample ID: 021304BLKA32

Instrument ID: VMS03 Date Extracted:

Matrix: WATER Date Analyzed: 02/13/04

Level:(low/med) LOW Time Analyzed: 0829

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	021304LCSA32	021304LCSA32	LCS32.D	02/13/04	0534
2	021304LCSA32D	021304LCSA32D	LCS32D.D	02/13/04	0558
3	57285LW040212	240212601	12601.D	02/13/04	1415
4	57TB2W040212	240212602	12602.D	02/13/04	1438

COMMENTS:

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Form IV

2A

WATER VOLATILE ORGANIC SURROGATE RECOVERY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402126

Column(1): DB-624 ID: 0.18 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
021304BLKA32	100.0	98.8	96.0	104.0			0
021304LCSA32	98.0	98.2	93.6	104.0			0
021304LCSA32D	99.6	100.0	93.2	106.0			0
57285LW040212	101.0	102.0	97.4	107.0			0
57TB2W040212	101.0	101.0	97.8	107.0			0

Control Limits

S1	=	Dibromofluoromethane	86	-	118
S2	=	Toluene d8	88	-	110
S3	=	4-Bromofluorobenzene	86	-	115
S4	=	1,2-Dichloroethane-d4	80	-	120

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

Control limit source: (lab/method) METHOD

Form II

010304 1120

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab File ID: BFB31R.D BFB Injection Date: 01/29/04

Instrument ID: VMS03 BFB Injection Time: 0336

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	16.5	
75	30.0 - 60.0% of mass 95	44.3	
95	Base Peak, 100% relative abundance	100	
96	5.0 - 9.0% of mass 95	6.5	
173	Less than 2.0% of mass 174	0.3	(0.4)1
174	50.0 - 100.0% of mass 95	77.4	
175	5.0 - 9.0% of mass 174	5.7	(7.4)1
176	Greater than 95.0%, but less than 101.0% of mass 174	75.9	(98.1)1
177	5.0 - 9.0% of mass 176	4.4	(5.8)2

1-Value is % of mass 174

2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	STD156467	1PPBCAL	1PPB.D	01/29/04	0453
2	STD156509	2PPBCAL	2PPB.D	01/29/04	0518
3	STD156515	80PPBCAL	80PPB.D	01/29/04	0542
4	STD156514	60PPBCAL	60PPB.D	01/29/04	0610
5	STD156512	50PPBCAL	50PPB.D	01/29/04	0638
6	STD156468	20PPBCAL	20PPB.D	01/29/04	0706
7	STD156466	10PPBCAL	10PPB.D	01/29/04	0734
8	STD156513	5PPBCAL	5PPB.D	01/29/04	0801
9	SSC156529	SEC32	SEC32.D	01/29/04	0858

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab File ID: BFB31.D BFB Injection Date: 02/13/04

Instrument ID: VMS03 BFB Injection Time: 0423

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	16.3	
75	30.0 - 60.0% of mass 95	45	
95	Base Peak, 100% relative abundance	100	
96	5.0 - 9.0% of mass 95	7.1	
173	Less than 2.0% of mass 174	0.4	(0.4)1
174	50.0 - 100.0% of mass 95	81.4	
175	5.0 - 9.0% of mass 174	6.3	(7.7)1
176	Greater than 95.0%, but less than 101.0% of mass 174	78.2	(96)1
177	5.0 - 9.0% of mass 176	4.8	(6.1)2

1-Value is % of mass 174

2-Value is % of mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCV160331	021304CCVA31	50CCV31.D	02/13/04	0447
2	021304LCSA32	021304LCSA32	LCS32.D	02/13/04	0534
3	021304LCSA32D	021304LCSA32	LCS32D.D	02/13/04	0558
4	021304BLKA32	021304BLKA32	BLK32.D	02/13/04	0829
5	57285LW040212	240212601	12601.D	02/13/04	1415
6	57TB2W040212	240212602	12602.D	02/13/04	1438

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab File ID (Standard): 5PPB.D Date Analyzed: 1/29/2004

Instrument ID: VMS03 Time Analyzed: 8:01

GC Column: DB-624 ID: 0.18 (mm)

Matrix: (soil/water) W Heated Purge: (Y/N) No

		IS1 AREA	#	RT	IS2 AREA	#	RT	IS3 AREA	#	RT
	MID CAL STD	686629		11.08	340987		13.50	829650		7.79
	UPPER LIMIT	1373258		11.58	681974		14.00	1659300		8.29
	LOWER LIMIT	343314.5		10.58	170493.5		13.00	414825		7.29
	EPA SAMPLE NO.									
1	021304LCSA32	711653		11.08	405687		13.50	855530		7.80
2	021304LCSA32D	719413		11.08	410567		13.50	853467		7.79
3	021304BLKA32	705997		11.08	375488		13.50	835327		7.80
4	57285LW040212	683052		11.08	365232		13.50	801735		7.80
5	57TB2W040212	681199		11.08	364090		13.50	813721		7.80

IS1 = Chlorobenzene d5

IS2 = 1,4-Dichlorobenzene-d4

IS3 = Fluorobenzene

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

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FORM VIII

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021304LCSA32

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	20	19.8	99.0		21.0	56 - 144
Chloromethane	20	19.4	97.0		18.0	48 - 149
Vinyl chloride	20	16.7	83.5		24.0	66 - 128
Bromomethane	20	19.3	96.5		20.0	55 - 159
Chloroethane	20	19.2	96.0		12.0	77 - 144
Trichlorofluoromethane	20	18.4	92.0		14.0	65 - 190
1,1-Dichloroethene	20	21	105.0		14.0	75 - 150
Carbon disulfide	20	19.5	97.5		17.0	72 - 142
Methylene chloride	20	20.2	101.0		9.0	81 - 129
trans-1,2-Dichloroethene	20	20.8	104.0		14.0	84 - 135
1,1-Dichloroethane	20	20.7	104.0		10.0	88 - 127
Acetone	60	68.4	114.0		19.0	70 - 135
cis-1,2-Dichloroethene	20	21.4	107.0		11.0	88 - 127
Bromochloromethane	20	21	105.0		12.0	80 - 124
2-Butanone	60	61.2	102.0		20.0	83 - 127
Chloroform	20	20.1	100.0		13.0	83 - 127
1,1,1-Trichloroethane	20	21.4	107.0		12.0	83 - 132
Carbon tetrachloride	20	22.8	114.0		15.0	74 - 140
Benzene	20	20.6	103.0		10.0	82 - 129
1,2-Dichloroethane	20	21.4	107.0		8.0	86 - 120
Trichloroethene	20	20.9	104.0		13.0	82 - 127
1,2-Dichloropropane	20	20.6	103.0		11.0	83 - 126
Bromodichloromethane	20	20.5	102.0		13.0	84 - 127
cis-1,3-Dichloropropene	20	21.8	109.0		13.0	67 - 133
4-Methyl-2-pentanone	60	57	95.0		15.0	64 - 140
Toluene	20	20.6	103.0		13.0	82 - 128
trans-1,3-Dichloropropene	20	24.3	122.0		10.0	62 - 137
1,1,2-Trichloroethane	20	21.2	106.0		13.0	86 - 117
Tetrachloroethene	20	21.2	106.0		11.0	87 - 124
2-Hexanone	60	69.8	116.0		19.0	58 - 136
Dibromochloromethane	20	21.2	106.0		12.0	87 - 123
1,2-Dibromoethane(EDB)	20	20.9	104.0		11.0	79 - 117

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

010304 1120

Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021304LCSA32

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Chlorobenzene	20	20.9	104.0		12.0	87 - 117
Ethylbenzene	20	21.2	106.0		13.0	89 - 121
Styrene	20	21.2	106.0		13.0	80 - 127
Bromoform	20	23.7	118.0		10.0	67 - 129
Isopropylbenzene (Cumene)	20	19.8	99.0		10.0	96 - 118
1,1,2,2-Tetrachloroethane	20	19.5	97.5		9.0	87 - 116
1,3-Dichlorobenzene	20	20.5	102.0		13.0	88 - 121
1,4-Dichlorobenzene	20	20.3	102.0		11.0	88 - 118
1,2-Dichlorobenzene	20	21	105.0		13.0	91 - 116
1,2-Dibromo-3-chloropropane	20	22.6	113.0		17.0	82 - 127
1,2,4-Trichlorobenzene	20	23.9	120.0		11.0	84 - 124
1,2,3-Trichlorobenzene	20	24.7	124.0 *		11.0	91 - 122
Xylene (total)	60	62.6	104.0		9.0	82 - 124
MTBE	20	21.3	106.0		17.0	83 - 131
1,1,2-Trichlorotrifluoroethane	20	20.6	103.0		30.0	70 - 130
Methyl Cyclohexane	20	21.2	106.0		30.0	70 - 130
Methyl Acetate	20	21.3	106.0		30.0	70 - 130
Cyclohexane	20	21.2	106.0		30.0	70 - 130

Spike Recovery: 1 out of 50 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

010304 1120

Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021304LCSA32D

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	20	18.6	93.0	6.2	21.0	56 - 144
Chloromethane	20	19	95.0	2.1	18.0	48 - 149
Vinyl chloride	20	16.2	81.0	3.0	24.0	66 - 128
Bromomethane	20	18.4	92.0	4.8	20.0	55 - 159
Chloroethane	20	17.8	89.0	7.6	12.0	77 - 144
Trichlorofluoromethane	20	17.2	86.0	6.7	14.0	65 - 190
1,1-Dichloroethene	20	19.8	99.0	5.9	14.0	75 - 150
Carbon disulfide	20	18.3	91.5	6.3	17.0	72 - 142
Methylene chloride	20	19.9	99.5	1.5	9.0	81 - 129
trans-1,2-Dichloroethene	20	20.1	100.0	3.4	14.0	84 - 135
1,1-Dichloroethane	20	20.1	100.0	2.9	10.0	88 - 127
Acetone	60	64.7	108.0	5.6	19.0	70 - 135
cis-1,2-Dichloroethene	20	20.9	104.0	2.4	11.0	88 - 127
Bromochloromethane	20	20.5	102.0	2.4	12.0	80 - 124
2-Butanone	60	66.3	110.0	8.0	20.0	83 - 127
Chloroform	20	19.7	98.5	2.0	13.0	83 - 127
1,1,1-Trichloroethane	20	20.3	102.0	5.3	12.0	83 - 132
Carbon tetrachloride	20	21.7	108.0	4.9	15.0	74 - 140
Benzene	20	20.1	100.0	2.5	10.0	82 - 129
1,2-Dichloroethane	20	20.6	103.0	3.8	8.0	86 - 120
Trichloroethene	20	20.4	102.0	2.4	13.0	82 - 127
1,2-Dichloropropane	20	19.7	98.5	4.5	11.0	83 - 126
Bromodichloromethane	20	19.9	99.5	3.0	13.0	84 - 127
cis-1,3-Dichloropropene	20	21.5	108.0	1.4	13.0	67 - 133
4-Methyl-2-pentanone	60	55.6	92.7	2.5	15.0	64 - 140
Toluene	20	20	100.0	3.0	13.0	82 - 128
trans-1,3-Dichloropropene	20	23.6	118.0	2.9	10.0	62 - 137
1,1,2-Trichloroethane	20	20.8	104.0	1.9	13.0	86 - 117
Tetrachloroethene	20	20.6	103.0	2.9	11.0	87 - 124
2-Hexanone	60	66.2	110.0	5.3	19.0	58 - 136
Dibromochloromethane	20	20.8	104.0	1.9	12.0	87 - 123
1,2-Dibromoethane(EDB)	20	20.8	104.0	0.5	11.0	79 - 117

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

010304 1120

Form III

3

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021304LCSA32D

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Chlorobenzene	20	19.8	99.0	5.4	12.0	87 - 117
Ethylbenzene	20	20.3	102.0	4.3	13.0	89 - 121
Styrene	20	20.7	104.0	2.4	13.0	80 - 127
Bromoform	20	22	110.0	7.4	10.0	67 - 129
Isopropylbenzene (Cumene)	20	18.8	94.0 *	5.2	10.0	96 - 118
1,1,2,2-Tetrachloroethane	20	18.3	91.5	6.3	9.0	87 - 116
1,3-Dichlorobenzene	20	20	100.0	2.5	13.0	88 - 121
1,4-Dichlorobenzene	20	20	100.0	1.5	11.0	88 - 118
1,2-Dichlorobenzene	20	20.4	102.0	2.9	13.0	91 - 116
1,2-Dibromo-3-chloropropane	20	21	105.0	7.3	17.0	82 - 127
1,2,4-Trichlorobenzene	20	23.2	116.0	3.0	11.0	84 - 124
1,2,3-Trichlorobenzene	20	22.4	112.0	9.8	11.0	91 - 122
Xylene (total)	60	60.1	100.0	4.1	9.0	82 - 124
MTBE	20	21.4	107.0	0.5	17.0	83 - 131
1,1,2-Trichlorotrifluoroethane	20	19.5	97.5	5.5	30.0	70 - 130
Methyl Cyclohexane	20	19.9	99.5	6.3	30.0	70 - 130
Methyl Acetate	20	22.1	110.0	3.7	30.0	70 - 130
Cyclohexane	20	19.8	99.0	6.8	30.0	70 - 130

Spike Recovery: 1 out of 50 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

010304 1120

Form III

Standards Data

010304 1120

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: VMS03 Calibration Date: 01/29/04

GC Column: DB-624 ID: 0.18 (mm) Calibration Time: 0801

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF1 =1PPB.D RRF2 =2PPB.D
RRF5 =5PPB.D RRF10 =10PPB.D RRF20 =20PPB.D

COMPOUND		RRF1	RRF2	RRF5	RRF10	RRF20	$\overline{RRF}$	%RSD OR R^2
Dichlorodifluoromethane		0.366	0.426	0.402	0.370	0.375		
Chloromethane	#	0.364	0.399	0.437	0.334	0.364		#
Vinyl chloride	*	0.389	0.433	0.419	0.340	0.330		*
Bromomethane		0.262	0.301	0.261	0.226	0.233		
Chloroethane		0.302	0.272	0.263	0.241	0.230		
Trichlorofluoromethane		0.432	0.482	0.490	0.444	0.441		
1,1-Dichloroethene	*	0.488	0.470	0.486	0.406	0.460		*
Carbon disulfide		1.222	1.141	1.201	1.034	1.118		
Methylene chloride		0.522	0.466	0.491	0.427	0.461		
trans-1,2-Dichloroethene		0.451	0.492	0.484	0.402	0.450		
1,1-Dichloroethane	#	0.652	0.605	0.589	0.509	0.572		#
Acetone			0.110	0.092	0.085	0.068		
cis-1,2-Dichloroethene		0.378	0.393	0.390	0.333	0.360		
Bromochloromethane		0.160	0.174	0.194	0.163	0.176		
2-Butanone		0.120	0.103	0.103	0.100	0.106		
Chloroform	*	0.653	0.598	0.650	0.554	0.595		*
1,1,1-Trichloroethane		0.480	0.458	0.483	0.437	0.470		
Carbon tetrachloride		0.387	0.394	0.408	0.345	0.398		
Benzene		1.424	1.380	1.451	1.279	1.358		
1,2-Dichloroethane		0.442	0.426	0.462	0.400	0.428		
Trichloroethene		0.400	0.391	0.407	0.340	0.377		
1,2-Dichloropropane	*	0.381	0.350	0.379	0.326	0.356		*
Bromodichloromethane		0.496	0.439	0.453	0.410	0.443		
cis-1,3-Dichloropropene		0.485	0.432	0.485	0.447	0.507		
4-Methyl-2-pentanone		0.565	0.539	0.581	0.525	0.534		
Toluene	*	0.919	0.872	0.922	0.789	0.871		*
trans-1,3-Dichloropropene		0.365	0.321	0.376	0.349	0.405		
1,1,2-Trichloroethane		0.298	0.293	0.322	0.283	0.301		
Tetrachloroethene		0.348	0.345	0.348	0.298	0.325		
2-Hexanone		0.167	0.181	0.158	0.166	0.174		
Dibromochloromethane		0.412	0.401	0.405	0.376	0.390		
1,2-Dibromoethane(EDB)		0.364	0.311	0.354	0.317	0.332		
Chlorobenzene	#	1.379	1.297	1.298	1.141	1.197		#
Ethylbenzene	*	0.635	0.605	0.666	0.553	0.573		*

010304 1120

FORM VI

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: VMS03 Calibration Date: 01/29/04

GC Column: DB-624 ID: 0.18 (mm) Calibration Time: 0801

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF1 =1PPB.D RRF2 =2PPB.D
RRF5 =5PPB.D RRF10 =10PPB.D RRF20 =20PPB.D

COMPOUND	RRF1	RRF2	RRF5	RRF10	RRF20	$\overline{RRF}$	%RSD OR R^2
Styrene	1.286	1.240	1.346	1.194	1.268		
Bromoform #	0.222	0.210	0.238	0.217	0.233		#
Isopropylbenzene (Cumene)	3.168	3.340	3.619	2.991	3.367		
1,1,2,2-Tetrachloroethane #	0.980	0.906	0.974	0.795	0.831		#
1,3-Dichlorobenzene	1.885	1.782	1.802	1.590	1.721		
1,4-Dichlorobenzene	1.985	1.764	1.857	1.589	1.717		
1,2-Dichlorobenzene	1.651	1.630	1.725	1.477	1.596		
1,2-Dibromo-3-chloropropane	0.092	0.081	0.118	0.103	0.122		
1,2,4-Trichlorobenzene	0.701	0.722	0.776	0.712	0.771		
1,2,3-Trichlorobenzene	0.719	0.618	0.734	0.657	0.699		
MTBE	0.654	0.620	0.637	0.633	0.679		
1,1,2-Trichlorotrifluoroethane	0.345	0.366	0.335	0.312	0.315		
Methyl Cyclohexane	0.319	0.333	0.342	0.283	0.324		
Methyl Acetate	0.220	0.197	0.200	0.180	0.188		
Cyclohexane	0.517	0.468	0.533	0.408	0.483		
o-Xylene	1.517	1.508	1.570	1.401	1.462		
p,m-Xylene	0.781	0.775	0.814	0.699	0.736		
Dibromofluoromethane(SURR)		0.318	0.321	0.324	0.335		
Toluene d8(SURR)		1.186	1.226	1.215	1.342		
4-Bromofluorobenzene(SURR)		1.027	1.067	1.038	1.099		
1,2-Dichloroethane-d4(SURR)		0.073	0.073	0.076	0.079		

010304 1120 FORM VI

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: VMS03 Calibration Date: 01/29/04

GC Column: DB-624 ID: 0.18 (mm) Calibration Time: 0801

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF50 =50PPB.D RRF60 =60PPB.D
RRF80 =80PPB.D

COMPOUND		RRF50	RRF60	RRF80			$\overline{RRF}$	%RSD OR R^2	
Dichlorodifluoromethane		0.410	0.407	0.405			0.39526	5.5	
Chloromethane	#	0.376	0.381	0.360			0.37692	8.2	#
Vinyl chloride	*	0.322	0.321	0.319			0.35917	13.1	*
Bromomethane		0.247	0.244	0.243			0.25208	9.3	
Chloroethane		0.245	0.245	0.244			0.25518	9	
Trichlorofluoromethane		0.476	0.481	0.480			0.46572	4.9	
1,1-Dichloroethene	*	0.473	0.472	0.476			0.46621	5.6	*
Carbon disulfide		1.134	1.160	1.156			1.14567	5	
Methylene chloride		0.480	0.473	0.471			0.474	5.7	
trans-1,2-Dichloroethene		0.479	0.478	0.470			0.46345	6.2	
1,1-Dichloroethane	#	0.593	0.598	0.595			0.58899	6.8	#
Acetone		0.070	0.067	0.064			0.07925	1	
cis-1,2-Dichloroethene		0.391	0.387	0.388			0.37732	5.6	
Bromochloromethane		0.194	0.195	0.191			0.18092	8	
2-Butanone		0.108	0.112	0.106			0.1073	5.9	
Chloroform	*	0.620	0.619	0.608			0.61208	5.2	*
1,1,1-Trichloroethane		0.506	0.516	0.509			0.48236	5.7	
Carbon tetrachloride		0.429	0.441	0.453			0.40693	8.4	
Benzene		1.397	1.421	1.398			1.38849	3.8	
1,2-Dichloroethane		0.462	0.451	0.451			0.44036	4.8	
Trichloroethene		0.407	0.411	0.401			0.39172	6	
1,2-Dichloropropane	*	0.372	0.373	0.368			0.36318	5	*
Bromodichloromethane		0.477	0.477	0.473			0.45825	6	
cis-1,3-Dichloropropene		0.568	0.574	0.567			0.50828	11.1	
4-Methyl-2-pentanone		0.559	0.550	0.536			0.54862	3.4	
Toluene	*	0.920	0.922	0.898			0.88899	5.1	*
trans-1,3-Dichloropropene		0.476	0.479	0.477			0.40589	15.6	<-
1,1,2-Trichloroethane		0.318	0.313	0.307			0.3042	4.4	
Tetrachloroethene		0.339	0.359	0.346			0.33828	5.6	
2-Hexanone		0.191	0.196	0.186			0.17734	7.5	
Dibromochloromethane		0.441	0.449	0.446			0.41512	6.6	
1,2-Dibromoethane(EDB)		0.360	0.367	0.358			0.3454	6.4	
Chlorobenzene	#	1.262	1.291	1.238			1.26287	5.7	#
Ethylbenzene	*	0.620	0.649	0.611			0.61395	6.1	*

010304 1120

FORM VI

VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: VMS03 Calibration Date: 01/29/04

GC Column: DB-624 ID: 0.18 (mm) Calibration Time: 0801

Min RRF for SPCC(#) = 0.1 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF50 =50PPB.D RRF60 =60PPB.D
RRF80 =80PPB.D

COMPOUND		RRF50	RRF60	RRF80			$\overline{RRF}$	%RSD OR R^2	
Styrene		1.363	1.397	1.356			1.30623	5.4	
Bromoform	#	0.256	0.259	0.254			0.2361	8.1	#
Isopropylbenzene (Cumene)		3.439	3.428	3.408			3.34501	5.7	
1,1,2,2-Tetrachloroethane	#	0.851	0.840	0.822			0.87492	8	#
1,3-Dichlorobenzene		1.771	1.797	1.745			1.76156	4.8	
1,4-Dichlorobenzene		1.759	1.771	1.733			1.77198	6.4	
1,2-Dichlorobenzene		1.668	1.653	1.632			1.62898	4.4	
1,2-Dibromo-3-chloropropane		0.134	0.131	0.131			0.11396	1	
1,2,4-Trichlorobenzene		0.846	0.851	0.844			0.77764	8.1	
1,2,3-Trichlorobenzene		0.751	0.752	0.742			0.70888	6.8	
MTBE		0.732	0.711	0.729			0.67447	6.7	
1,1,2-Trichlorotrifluoroethane		0.333	0.350	0.339			0.33681	5.3	
Methyl Cyclohexane		0.347	0.363	0.359			0.3337	7.7	
Methyl Acetate		0.207	0.199	0.201			0.199	6	
Cyclohexane		0.506	0.531	0.518			0.49549	8.4	
o-Xylene		1.571	1.639	1.546			1.52687	4.8	
p,m-Xylene		0.789	0.812	0.768			0.77172	5	
Dibromofluoromethane(SURR)		0.348	0.338	0.329			0.3306	3.2	
Toluene d8(SURR)		1.351	1.333	1.289			1.27749	5.3	
4-Bromofluorobenzene(SURR)		1.088	1.058	1.025			1.05746	2.8	
1,2-Dichloroethane-d4(SURR)		0.081	0.081	0.080			0.07752	4.6	

Average Used: 6.2

010304 1120

FORM VI

7SSC

VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: VMS03 CalibrationDate: 01/29/04 Time: 0858

CCV ID: SSC156529 Lab File ID: SEC32.D Init. Calib. Date: 01/29/04

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND		$\overline{RRF}$	RRF	%D	
Dichlorodifluoromethane		0.39526	0.38514	2.6	
Chloromethane	#	0.37692	0.35481	5.9	#
Vinyl chloride	*	0.35917	0.31842	11.3	*
Bromomethane		0.25208	0.23671	6.1	
Chloroethane		0.25518	0.23248	8.9	
Trichlorofluoromethane		0.46572	0.46845	0.6	
1,1-Dichloroethene	*	0.46621	0.46014	1.3	*
Carbon disulfide		1.14567	1.098	4.2	
Methylene chloride		0.474	0.464	2.1	
trans-1,2-Dichloroethene		0.46345	0.46555	0.5	
1,1-Dichloroethane	#	0.58899	0.57508	2.4	#
Acetone		0.07925	0.0651	8.4	
cis-1,2-Dichloroethene		0.37732	0.37783	0.1	
Bromochloromethane		0.18092	0.18818	4.0	
2-Butanone		0.1073	0.10297	4.0	
Chloroform	*	0.61208	0.59236	3.2	*
1,1,1-Trichloroethane		0.48236	0.4979	3.2	
Carbon tetrachloride		0.40693	0.42193	3.7	
Benzene		1.38849	1.365	1.7	
1,2-Dichloroethane		0.44036	0.43506	1.2	
Trichloroethene		0.39172	0.38583	1.5	
1,2-Dichloropropane	*	0.36318	0.36035	0.8	*
Bromodichloromethane		0.45825	0.45911	0.2	
cis-1,3-Dichloropropene		0.50828	0.54597	7.4	
4-Methyl-2-pentanone		0.54862	0.56312	2.6	
Toluene	*	0.88899	0.87838	1.2	*
trans-1,3-Dichloropropene		0.40589	0.45231	11.4	
1,1,2-Trichloroethane		0.3042	0.30766	1.1	
Tetrachloroethene		0.33828	0.33474	1.0	
2-Hexanone		0.17734	0.1898	7.0	
Dibromochloromethane		0.41512	0.42734	2.9	
1,2-Dibromoethane(EDB)		0.3454	0.35654	3.2	
Chlorobenzene	#	1.26287	1.216	3.7	#
Ethylbenzene	*	0.61395	0.60325	1.7	*
Styrene		1.30623	1.319	1.0	
Bromoform	#	0.2361	0.24937	5.6	#

010304 1120

FORM VII

7SSC

VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: VMS03 CalibrationDate: 01/29/04 Time: 0858

CCV ID: SSC156529 Lab File ID: SEC32.D Init. Calib. Date: 01/29/04

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND	$\overline{RRF}$	RRF	%D
Isopropylbenzene (Cumene)	3.34501	3.384	1.2
1,1,2,2-Tetrachloroethane #	0.87492	0.85172	2.7 #
1,3-Dichlorobenzene	1.76156	1.763	0.1
1,4-Dichlorobenzene	1.77198	1.748	1.4
1,2-Dichlorobenzene	1.62898	1.681	3.2
1,2-Dibromo-3-chloropropane	0.11396	0.13017	0.6
1,2,4-Trichlorobenzene	0.77764	0.84954	9.2
1,2,3-Trichlorobenzene	0.70888	0.75805	6.9
MTBE	0.67447	0.70827	5.0
1,1,2-Trichlorotrifluoroethane	0.33681	0.33032	1.9
Methyl Cyclohexane	0.3337	0.34646	3.8
Methyl Acetate	0.199	0.19818	0.4
Cyclohexane	0.49549	0.51091	3.1
o-Xylene	1.52687	1.555	1.8
p,m-Xylene	0.77172	0.76338	1.1
==========			
Dibromofluoromethane(SURR)	0.3306	0.33668	1.8
Toluene d8(SURR)	1.27749	1.337	4.7
4-Bromofluorobenzene(SURR)	1.05746	1.1	4.0
1,2-Dichloroethane-d4(SURR)	0.07752	0.08149	5.1

7

VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: VMS03 CalibrationDate: 02/13/04 Time: 0447

CCV ID: CCV160331 Lab File ID: 50CCV31.D Init. Calib. Date: 01/29/04

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND		$\overline{RRF}$	RRF50	%D	
Dichlorodifluoromethane		0.39526	0.42799	8.3	
Chloromethane	#	0.37692	0.38817	3.0	#
Vinyl chloride	*	0.35917	0.30152	16.1	*
Bromomethane		0.25208	0.2535	0.6	
Chloroethane		0.25518	0.2499	2.1	
Trichlorofluoromethane		0.46572	0.42863	8.0	
1,1-Dichloroethene	*	0.46621	0.48206	3.4	*
Carbon disulfide		1.14567	1.133	1.1	
Methylene chloride		0.474	0.47053	0.7	
trans-1,2-Dichloroethene		0.46345	0.46043	0.7	
1,1-Dichloroethane	#	0.58899	0.59059	0.3	#
Acetone		0.07925	0.07886	17.0	
cis-1,2-Dichloroethene		0.37732	0.3846	1.9	
Bromochloromethane		0.18092	0.18979	4.9	
2-Butanone		0.1073	0.12239	14.1	
Chloroform	*	0.61208	0.60528	1.1	*
1,1,1-Trichloroethane		0.48236	0.50771	5.3	
Carbon tetrachloride		0.40693	0.46598	14.5	
Benzene		1.38849	1.373	1.1	
1,2-Dichloroethane		0.44036	0.4444	0.9	
Trichloroethene		0.39172	0.41021	4.7	
1,2-Dichloropropane	*	0.36318	0.36117	0.6	*
Bromodichloromethane		0.45825	0.46574	1.6	
cis-1,3-Dichloropropene		0.50828	0.56412	11.0	
4-Methyl-2-pentanone		0.54862	0.53471	2.5	
Toluene	*	0.88899	0.86	3.3	*
trans-1,3-Dichloropropene		0.40589	0.47856	17.9	
1,1,2-Trichloroethane		0.3042	0.30555	0.4	
Tetrachloroethene		0.33828	0.35351	4.5	
2-Hexanone		0.17734	0.20618	16.3	
Dibromochloromethane		0.41512	0.44837	8.0	
1,2-Dibromoethane(EDB)		0.3454	0.3707	7.3	
Chlorobenzene	#	1.26287	1.241	1.7	#
Ethylbenzene	*	0.61395	0.6245	1.7	*
Styrene		1.30623	1.367	4.7	
Bromoform	#	0.2361	0.27364	15.9	#

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FORM VII

7

VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: VMS03 CalibrationDate: 02/13/04 Time: 0447

CCV ID: CCV160331 Lab File ID: 50CCV31.D Init. Calib. Date: 01/29/04

GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) NO

Min RRF for SPCC(#) = 0.1 Max %D for CCC(*) = 20 %

COMPOUND	$\overline{RRF}$	RRF50	%D
Isopropylbenzene (Cumene)	3.34501	3.195	4.5
1,1,2,2-Tetrachloroethane #	0.87492	0.7979	8.8 #
1,3-Dichlorobenzene	1.76156	1.742	1.1
1,4-Dichlorobenzene	1.77198	1.745	1.5
1,2-Dichlorobenzene	1.62898	1.646	1.0
1,2-Dibromo-3-chloropropane	0.11396	0.14113	7.6
1,2,4-Trichlorobenzene	0.77764	0.9137	17.5
1,2,3-Trichlorobenzene	0.70888	0.81194	14.5
MTBE	0.67447	0.73981	9.7
1,1,2-Trichlorotrifluoroethane	0.33681	0.3736	10.9
Methyl Cyclohexane	0.3337	0.35109	5.2
Methyl Acetate	0.199	0.20722	4.1
Cyclohexane	0.49549	0.51034	3.0
o-Xylene	1.52687	1.56	2.2
p,m-Xylene	0.77172	0.77062	0.1
==========			
Dibromofluoromethane(SURR)	0.3306	0.31848	3.7
Toluene d8(SURR)	1.27749	1.246	2.5
4-Bromofluorobenzene(SURR)	1.05746	0.99656	5.8
1,2-Dichloroethane-d4(SURR)	0.07752	0.07973	2.9

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FORM VII

Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402126

METHOD: 8260 **MATRIX:** W

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
1,1,1-Trichloroethane	83-132	12	79-134	12			
1,1,2,2-Tetrachloroethane	87-116	9	88-117	9			
1,1,2-Trichloroethane	86-117	13	77-126	13			
1,1,2-Trichlorotrifluoroethane	70-130	30	70-130	30			
1,1-Dichloroethane	88-127	10	79-135	10			
1,1-Dichloroethene	75-150	14	84-129	14			
1,2,3-Trichlorobenzene	91-122	11	75-138	11			
1,2,4-Trichlorobenzene	84-124	11	75-133	11			
1,2-Dibromo-3-chloropropane	82-127	17	81-123	17			
1,2-Dibromoethane(EDB)	79-117	11	75-124	11			
1,2-Dichlorobenzene	91-116	13	81-126	13			
1,2-Dichloroethane	86-120	8	80-133	8			
1,2-Dichloroethane-d4							80-120
1,2-Dichloropropane	83-126	11	79-128	11			
1,3-Dichlorobenzene	88-121	13	81-130	13			
1,4-Dichlorobenzene	88-118	11	80-125	11			
2-Butanone	83-127	20	82-119	20			
2-Hexanone	58-136	19	77-126	19			
4-Bromofluorobenzene							86-115
4-Methyl-2-pentanone	64-140	15	88-123	15			
Acetone	70-135	19	60-117	19			
Benzene	82-129	10	51-141	10			
Bromochloromethane	80-124	12	76-130	12			
Bromodichloromethane	84-127	13	79-130	13			
Bromoform	67-129	10	78-121	10			
Bromomethane	55-159	20	88-117	20			
Carbon disulfide	72-142	17	64-169	17			
Carbon tetrachloride	74-140	15	75-132	15			
Chlorobenzene	87-117	12	82-123	12			
Chloroethane	77-144	12	90-117	12			
Chloroform	83-127	13	76-134	13			
Chloromethane	48-149	18	74-113	18			
cis-1,2-Dichloroethene	88-127	11	77-128	11			
cis-1,3-Dichloropropene	67-133	13	81-123	13			
Cyclohexane	70-130	30	70-130	30			
Dibromochloromethane	87-123	12	80-128	12			
Dibromofluoromethane							86-118
Dichlorodifluoromethane	56-144	21	54-127	21			
Ethylbenzene	89-121	13	77-124	13			

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Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402126

METHOD: 8260 **MATRIX:** W

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
Isopropylbenzene (Cumene)	96-118	10	81-128	10			
Methyl Acetate	70-130	30	70-130	30			
Methyl Cyclohexane	70-130	30	70-130	30			
Methylene chloride	81-129	9	75-133	9			
MTBE	83-131	17	78-140	17			
Styrene	80-127	13	83-127	13			
Tetrachloroethene	87-124	11	86-120	11			
Toluene	82-128	13	75-132	13			
Toluene d8							88-110
trans-1,2-Dichloroethene	84-135	14	73-141	14			
trans-1,3-Dichloropropene	62-137	10	81-126	10			
Trichloroethene	82-127	13	76-128	13			
Trichlorofluoromethane	65-190	14	65-162	14			
Vinyl chloride	66-128	24	60-118	24			
Xylene (total)	82-124	9	86-129	9			

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GC/MS SEMI-VOLATILE ORGANICS

METHOD 8270

010304 1120

CASE NARRATIVE
GC/MS SEMIVOLATILE ORGANICS

PEL Lab Reference No./SDG: 2402126

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

EPA SW846 8270

IV. PREPARATION

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

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met with the exception of:
LCS 021704ALCS was analyzed with the water samples extracted on 02/17/04. The following analyte(s) were recovered below criteria: Caprolactam at 37.2 % with criteria of (70-130) and the following analyte(s) were recovered above criteria: Hexachlorocyclopentadiene at 85.2 % with criteria of (13-80).

LCS 021704ALCSD was analyzed with the water samples extracted on 02/17/04. The following analyte(s) were recovered below criteria: Caprolactam at 43 % with criteria of (70-130). and the following analyte(s) were recovered above criteria: Hexachlorobutadiene at 93 % with criteria of (48-92), Hexachlorocyclopentadiene at 96.5 % with

PEL Lab Reference No./SDG: 2402126

Client: CH2M Hill

criteria of (13-80). The following analyte(s) exceeded rpd criteria: Benzaldehyde at 35 % with criteria of (30).

No further action was taken.

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

No spikes requested by client.

E. Internal Standards:

All acceptance criteria were met.

F. Samples:

Sample analysis proceeded normally.

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

SIGNED: _____ **DATE:** 2-23-04

W:\SV Narratives\Cecil Narratives\2402126_8270.doc

SEMI-VOLATILE ORGANIC CROSS REFERENCE TABLE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Method: 8270

EPA Sample No	Lab Sample ID
57285LW040212	240212601

010304 1120

Sample Data

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1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 240212601 Lab File ID: 126-1.D

Sample wt/vol: 1000 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 1 Date Extracted: 02/13/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 1255

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Waste Character Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
111-44-4	Bis(2-Chloroethyl)ether	4	U
108-95-2	Phenol	4	U
95-57-8	2-Chlorophenol	4	U
108-60-1	2,2-Oxybis(1-chloropropane)	4	U
95-48-7	2-Methylphenol (o-Cresol)	4	U
67-72-1	Hexachloroethane	4	U
621-64-7	N-Nitroso-di-n-propylamine	4	U
106-44-5	4-Methylphenol	6.1	U
98-95-3	Nitrobenzene	4	U
78-59-1	Isophorone	4	U
88-75-5	2-Nitrophenol	4	U
105-67-9	2,4-Dimethylphenol	4	U
111-91-1	Bis(2-Chloroethoxy)methane	4	U
120-83-2	2,4-Dichlorophenol	4	U
91-20-3	Naphthalene	4	U
106-47-8	4-Chloroaniline	4	U
91-57-6	2-Methylnaphthalene	4	U
87-68-3	Hexachlorobutadiene	4	U
59-50-7	4-Chloro-3-methylphenol	4	U
77-47-4	Hexachlorocyclopentadiene	4	U
88-06-2	2,4,6-Trichlorophenol	4	U
95-95-4	2,4,5-Trichlorophenol	4	U
91-58-7	2-Chloronaphthalene	4	U
88-74-4	2-Nitroaniline	4	U
208-96-8	Acenaphthylene	4	U
131-11-3	Dimethyl-phthalate	4	U
606-20-2	2,6-Dinitrotoluene	4	U

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 240212601 Lab File ID: 126-1.D

Sample wt/vol: 1000 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 1 Date Extracted: 02/13/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 1255

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Waste Character Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
83-32-9	Acenaphthene	4	U
99-09-2	3-Nitroaniline	4	U
51-28-5	2,4-Dinitrophenol	10	U
132-64-9	Dibenzofuran	4	U
121-14-2	2,4-Dinitrotoluene	4	U
100-02-7	4-Nitrophenol	4	U
86-73-7	Fluorene	4	U
7005-72-3	4-Chlorophenyl-phenylether	4	U
84-66-2	Diethylphthalate	4	U
100-01-6	4-Nitroaniline	4	U
534-52-1	2-Methyl-4,6-dinitrophenol	4	U
86-30-6	N-Nitrosodiphenylamine	4	U
101-55-3	4-Bromophenyl-phenylether	4	U
118-74-1	Hexachlorobenzene	4	U
87-86-5	Pentachlorophenol	4	U
85-01-8	Phenanthrene	4	U
120-12-7	Anthracene	4	U
84-74-2	Di-n-butylphthalate	4	U
206-44-0	Fluoranthene	4	U
129-00-0	Pyrene	4	U
85-68-7	Butylbenzylphthalate	4	U
91-94-1	3,3'-Dichlorobenzidine	4	U
56-55-3	Benzo(a)anthracene	4	U
218-01-9	Chrysene	4	U
117-81-7	bis(2-ethylhexyl)phthalate	4.4	U
117-84-0	Di-n-octylphthalate	4	U
205-99-2	Benzo(b)fluoranthene	4	U

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 240212601 Lab File ID: 126-1.D

Sample wt/vol: 1000 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 1 Date Extracted: 02/13/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 1255

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Waste Character Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
207-08-9	Benzo(k)fluoranthene	4	U
50-32-8	Benzo(a)pyrene	4	U
193-39-5	Indeno(1,2,3-cd)pyrene	4	U
53-70-3	Dibenz(a,h)anthracene	4	U
191-24-2	Benzo(g,h,i)perylene	4	U
98-86-2	Acetophenone	4	U
95-94-3	1,2,4,5-Tetrachlorobenzene	4	U
86-74-8	Carbazole	4	U
105-60-2	Caprolactam	4	U
92-52-4	Biphenyl	4	U
1912-24-9	Atrazine	4	U
100-52-7	Benzaldehyde	4	U

QC Summary

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

0217BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 129889 Lab File ID: 0217BLK.D

Sample wt/vol: 1000 Units: ML Date Received: 02/17/04

Concentrated Extract Volume: 1 Date Extracted: 02/17/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 1018

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
111-44-4	Bis(2-Chloroethyl)ether	4	U
108-95-2	Phenol	4	U
95-57-8	2-Chlorophenol	4	U
108-60-1	2,2-Oxybis(1-chloropropane)	4	U
95-48-7	2-Methylphenol (o-Cresol)	4	U
67-72-1	Hexachloroethane	4	U
621-64-7	N-Nitroso-di-n-propylamine	4	U
106-44-5	4-Methylphenol	6.1	U
98-95-3	Nitrobenzene	4	U
78-59-1	Isophorone	4	U
88-75-5	2-Nitrophenol	4	U
105-67-9	2,4-Dimethylphenol	4	U
111-91-1	Bis(2-Chloroethoxy)methane	4	U
120-83-2	2,4-Dichlorophenol	4	U
91-20-3	Naphthalene	4	U
106-47-8	4-Chloroaniline	4	U
91-57-6	2-Methylnaphthalene	4	U
87-68-3	Hexachlorobutadiene	4	U
59-50-7	4-Chloro-3-methylphenol	4	U
77-47-4	Hexachlorocyclopentadiene	4	U
88-06-2	2,4,6-Trichlorophenol	4	U
95-95-4	2,4,5-Trichlorophenol	4	U
91-58-7	2-Chloronaphthalene	4	U
88-74-4	2-Nitroaniline	4	U
208-96-8	Acenaphthylene	4	U
131-11-3	Dimethyl-phthalate	4	U
606-20-2	2,6-Dinitrotoluene	4	U

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

0217BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 129889 Lab File ID: 0217BLK.D

Sample wt/vol: 1000 Units: ML Date Received: 02/17/04

Concentrated Extract Volume: 1 Date Extracted: 02/17/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 1018

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
83-32-9	Acenaphthene	4	U
99-09-2	3-Nitroaniline	4	U
51-28-5	2,4-Dinitrophenol	10	U
132-64-9	Dibenzofuran	4	U
121-14-2	2,4-Dinitrotoluene	4	U
100-02-7	4-Nitrophenol	4	U
86-73-7	Fluorene	4	U
7005-72-3	4-Chlorophenyl-phenylether	4	U
84-66-2	Diethylphthalate	4	U
100-01-6	4-Nitroaniline	4	U
534-52-1	2-Methyl-4,6-dinitrophenol	4	U
86-30-6	N-Nitrosodiphenylamine	4	U
101-55-3	4-Bromophenyl-phenylether	4	U
118-74-1	Hexachlorobenzene	4	U
87-86-5	Pentachlorophenol	4	U
85-01-8	Phenanthrene	4	U
120-12-7	Anthracene	4	U
84-74-2	Di-n-butylphthalate	4	U
206-44-0	Fluoranthene	4	U
129-00-0	Pyrene	4	U
85-68-7	Butylbenzylphthalate	4	U
91-94-1	3,3'-Dichlorobenzidine	4	U
56-55-3	Benzo(a)anthracene	4	U
218-01-9	Chrysene	4	U
117-81-7	bis(2-ethylhexyl)phthalate	4.4	U
117-84-0	Di-n-octylphthalate	4	U
205-99-2	Benzo(b)fluoranthene	4	U

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

0217BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 129889 Lab File ID: 0217BLK.D

Sample wt/vol: 1000 Units: ML Date Received: 02/17/04

Concentrated Extract Volume: 1 Date Extracted: 02/17/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 1018

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
207-08-9	Benzo(k)fluoranthene	4	U
50-32-8	Benzo(a)pyrene	4	U
193-39-5	Indeno(1,2,3-cd)pyrene	4	U
53-70-3	Dibenz(a,h)anthracene	4	U
191-24-2	Benzo(g,h,i)perylene	4	U
98-86-2	Acetophenone	4	U
95-94-3	1,2,4,5-Tetrachlorobenzene	4	U
86-74-8	Carbazole	4	U
105-60-2	Caprolactam	4	U
92-52-4	Biphenyl	4	U
1912-24-9	Atrazine	4	U
100-52-7	Benzaldehyde	4	U

SEMI-VOLATILE ORGANIC METHOD BLANK SUMMARY

EPA Sample No.: 0217BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab File ID: 0217BLK.D Lab Sample ID: 129889

Instrument ID: SMSD01 Date Extracted: 02/17/04

Matrix: WATER Date Analyzed: 02/18/04

Level:(low/med) LOW Time Analyzed: 1018

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	021704ALCS	129890	0217ALCS.D	02/18/04	1121
2	021704ALCSD	129891	0217ALCSD.D	02/18/04	1152
3	57285LW040212	240212601	126-1.D	02/18/04	1255

COMMENTS:

Page 1 of 1

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Form IV

2A

WATER SEMI-VOLATILE ORGANIC SURROGATE RECOVERY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402126

Column(1): HPMS-5 ID: 0.25 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
021704ALCS	58.5	39.4	83.9	79.7	86.0	81.1	0
021704ALCSD	65.0	43.6	90.7	84.7	90.0	83.9	0
0217BLK	55.5	39.6	80.6	78.8	85.5	81.1	0
57285LW040212	54.0	40.5	80.0	76.8	82.0	76.8	0

Control Limits

S1	=	2-Fluorophenol	21 -	120
S2	=	Phenol-d5	10 -	94
S3	=	Nitrobenzene-d5	35 -	114
S4	=	2-Fluorobiphenyl	43 -	116
S5	=	2,4,6-Tribromophenol	10 -	122
S6	=	p-Terphenyl-d14	33 -	141

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

Control limit source: (lab/method) METHOD

Form II

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab File ID: DFTPP8270.D DFTPP Injection Date: 02/10/04

Instrument ID: SMSD01 DFTPP Injection Time: 0839

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0% of mass 198	37.9	
68	Less than 2.0% of mass 69	0.3	(0.7)1
69	Less than 100.0% of mass 198	46.9	
70	Less than 2.0% of mass 69	0.1	(0.3)1
127	40.0 - 60.0% of mass 198	46.6	
197	Less than 1.0% of mass 198	0	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	6.4	
275	10.0 - 30.0% of mass 198	19.7	
365	1.0 - 100.0% of mass 198	2	
441	0.0 - 100.0% of mass 443	8.3	(73)2
442	40.0 - 100.0% of mass 198	58.8	
443	17.0 - 23.0% of mass 442	11.4	(19.4)3

1-Value is % of mass 69

2-Value is % of mass 443

3-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	STD160493	SV1941	100STD.D	02/10/04	0859
2	STD160494	SV1942	75STD.D	02/10/04	0931
3	STD160495	SV1943	60STD.D	02/10/04	1003
4	STD160496	SV1944	45STD.D	02/10/04	1035
5	STD160500	SV1947	4STD.D	02/10/04	1211
6	STD160498	SV1945	20STD.D	02/10/04	1244
7	STD160499	SV1946	10STD.D	02/10/04	1524
8	SSC160629	SV1948	45SEC.D	02/10/04	1805

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab File ID: DFTPPsow.D DFTPP Injection Date: 02/10/04

Instrument ID: SMSD01 DFTPP Injection Time: 1922

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0% of mass 198	39	
68	Less than 2.0% of mass 69	0	(0)1
69	Less than 100.0% of mass 198	48.8	
70	Less than 2.0% of mass 69	0	(0)1
127	40.0 - 60.0% of mass 198	47.2	
197	Less than 1.0% of mass 198	0	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	6.7	
275	10.0 - 30.0% of mass 198	19.6	
365	1.0 - 100.0% of mass 198	1.9	
441	0.0 - 100.0% of mass 443	8	(76.2)2
442	40.0 - 100.0% of mass 198	53.7	
443	17.0 - 23.0% of mass 442	10.5	(19.5)3

1-Value is % of mass 69

2-Value is % of mass 443

3-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	STD160485	SV1703	100SOW.D	02/10/04	1941
2	STD160486	SV1704	75SOW.D	02/10/04	2014
3	STD160487	SV1705	60SOW.D	02/10/04	2046
4	STD160488	SV1706	45SOW.D	02/10/04	2118
5	STD160489	SV1707	20SOW.D	02/10/04	2150
6	STD160490	SV1708	10SOW.D	02/10/04	2222
7	STD160491	SV1709	4SOW.D	02/10/04	2254
8	SSC160492	SV1768	45SOWSEC.	02/10/04	2326

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab File ID: DFTPPap9.D DFTPP Injection Date: 02/11/04

Instrument ID: SMSD01 DFTPP Injection Time: 1646

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0% of mass 198	37.1	
68	Less than 2.0% of mass 69	0	(0)1
69	Less than 100.0% of mass 198	46.5	
70	Less than 2.0% of mass 69	0.1	(0.2)1
127	40.0 - 60.0% of mass 198	46.2	
197	Less than 1.0% of mass 198	0	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	6.6	
275	10.0 - 30.0% of mass 198	19.7	
365	1.0 - 100.0% of mass 198	2.2	
441	0.0 - 100.0% of mass 443	8.6	(73.1)2
442	40.0 - 100.0% of mass 198	60.8	
443	17.0 - 23.0% of mass 442	11.7	(19.3)3

1-Value is % of mass 69

2-Value is % of mass 443

3-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	STD160502	SV1950	100AP9.D	02/11/04	1705
2	STD160503	SV1951	75AP9.D	02/11/04	1737
3	STD160504	SV1952	60AP9.D	02/11/04	1809
4	STD160505	SV1953	45AP9.D	02/11/04	1842
5	STD160507	SV1954	20AP9.D	02/11/04	1914
6	STD160508	SV1955	10AP9.D	02/11/04	1946
7	STD160509	SV1956	4AP9.D	02/11/04	2018

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab File ID: DFTPPap9sec.D DFTPP Injection Date: 02/12/04

Instrument ID: SMSD01 DFTPP Injection Time: 1331

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0% of mass 198	35.4	
68	Less than 2.0% of mass 69	0	(0)1
69	Less than 100.0% of mass 198	44.5	
70	Less than 2.0% of mass 69	0	(0)1
127	40.0 - 60.0% of mass 198	46.2	
197	Less than 1.0% of mass 198	0	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	6.6	
275	10.0 - 30.0% of mass 198	20.7	
365	1.0 - 100.0% of mass 198	2.3	
441	0.0 - 100.0% of mass 443	9.4	(74.7)2
442	40.0 - 100.0% of mass 198	65.1	
443	17.0 - 23.0% of mass 442	12.5	(19.2)3

1-Value is % of mass 69

2-Value is % of mass 443

3-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSC160510	SV1982	45AP9SEC.D	02/12/04	1719

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab File ID: DFTPP2.D DFTPP Injection Date: 02/18/04

Instrument ID: SMSD01 DFTPP Injection Time: 0825

GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0% of mass 198	35.4	
68	Less than 2.0% of mass 69	0	(0)1
69	Less than 100.0% of mass 198	43.8	
70	Less than 2.0% of mass 69	0.2	(0.4)1
127	40.0 - 60.0% of mass 198	45.5	
197	Less than 1.0% of mass 198	0	
198	Base Peak, 100% relative abundance	100	
199	5.0 - 9.0% of mass 198	6.6	
275	10.0 - 30.0% of mass 198	19	
365	1.0 - 100.0% of mass 198	1.7	
441	0.0 - 100.0% of mass 443	6.6	(70.4)2
442	40.0 - 100.0% of mass 198	45.7	
443	17.0 - 23.0% of mass 442	9.4	(20.6)3

1-Value is % of mass 69

2-Value is % of mass 443

3-Value is % of mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCV161904	SV1944	45CCV.D	02/18/04	0843
2	CCV161905	SV1953	45AP9CCV.D	02/18/04	0915
3	CCV161916	SV1706	45SOWCCV.	02/18/04	0946
4	0217BLK	129889	0217BLK.D	02/18/04	1018
5	021704ALCS	129890	0217ALCS.D	02/18/04	1121
6	021704ALCSD	129891	0217ALCSD.	02/18/04	1152
7	57285LW040212	240212601	126-1.D	02/18/04	1255

8A

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab File ID (Standard): 45STD.D Date Analyzed: 2/10/2004

Instrument ID: SMSD01 Time Analyzed: 10:35

GC Column: HPMS-5 ID: 0.25 (mm)

		IS1 AREA	#	RT	IS2 AREA	#	RT	IS3 AREA	#	RT
	MID CAL STD	335510		6.05	1221175		7.44	636486		9.98
	UPPER LIMIT	671020		6.55	2442350		7.94	1272972		10.48
	LOWER LIMIT	167755		5.55	610587.5		6.94	318243		9.48
	EPA SAMPLE NO.									
1	0217BLK	331447		6.02	1150504		7.40	591673		9.93
2	021704ALCS	325097		6.02	1143884		7.40	598990		9.93
3	021704ALCSD	311798		6.02	1098968		7.40	577636		9.93
4	57285LW040212	335820		6.01	1159337		7.40	601317		9.93

IS1 = 1,4-Dichlorobenzene-d4

IS2 = Naphthalene-d8

IS3 = Acenaphthene-d10

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

010304 1120

FORM VIII

8A

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab File ID (Standard): 45STD.D Date Analyzed: 2/10/2004

Instrument ID: SMSD01 Time Analyzed: 10:35

GC Column: HPMS-5 ID: 0.25 (mm)

		IS4 AREA #	RT	IS5 AREA #	RT	IS6 AREA #	RT
	MID CAL STD	985906	12.62	713629	17.81	736854	20.44
	UPPER LIMIT	1971812	13.12	1427258	18.31	1473708	20.94
	LOWER LIMIT	492953	12.12	356814.5	17.31	368427	19.94
	EPA SAMPLE NO.						
1	0217BLK	921567	12.56	721633	17.74	703574	20.37
2	021704ALCS	924220	12.57	687016	17.75	717347	20.38
3	021704ALCSD	900520	12.57	659128	17.75	692117	20.38
4	57285LW040212	933978	12.56	733239	17.75	727993	20.37

IS4 = Phenanthrene-d10

IS5 = Chrysene-d12

IS6 = Perylene-d12

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

010304 1120

FORM VIII

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021704ALCS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Bis(2-Chloroethyl)ether	40	33.9	84.8		30.0	36 - 129
Phenol	40	17.1	42.8		49.0	9 - 65
2-Chlorophenol	40	33.7	84.2		72.0	37 - 98
2,2-Oxybis(1-chloropropane)	40	34.4	86.0		24.0	41 - 133
2-Methylphenol (o-Cresol)	40	31.3	78.2		43.0	6 - 114
Hexachloroethane	40	29.5	73.8		33.0	22 - 96
N-Nitroso-di-n-propylamine	40	30.4	76.0		27.0	36 - 112
4-Methylphenol	40	23.7	59.2		77.0	6 - 104
Nitrobenzene	40	35.1	87.8		21.0	37 - 136
Isophorone	40	46.4	116.0		17.0	35 - 153
2-Nitrophenol	40	35	87.5		18.0	11 - 129
2,4-Dimethylphenol	40	38	95.0		44.0	4 - 116
Bis(2-Chloroethoxy)methane	40	47.6	119.0		24.0	42 - 143
2,4-Dichlorophenol	40	36	90.0		18.0	7 - 128
Naphthalene	40	34	85.0		23.0	36 - 114
4-Chloroaniline	40	33.3	83.2		55.0	41 - 102
2-Methylnaphthalene	40	35.1	87.8		25.0	33 - 127
Hexachlorobutadiene	40	33.3	83.2		42.0	48 - 92
4-Chloro-3-methylphenol	40	37.6	94.0		72.0	33 - 116
Hexachlorocyclopentadiene	40	34.1	85.2 *		45.0	13 - 80
2,4,6-Trichlorophenol	40	37	92.5		18.0	8 - 130
2,4,5-Trichlorophenol	40	35.8	89.5		52.0	9 - 131
2-Chloronaphthalene	40	32.6	81.5		20.0	37 - 128
2-Nitroaniline	40	36.1	90.2		18.0	53 - 114
Acenaphthylene	40	36.4	91.0		19.0	45 - 125
Dimethyl-phthalate	40	34.9	87.2		69.0	16 - 139
2,6-Dinitrotoluene	40	39.5	98.8		18.0	40 - 145
Acenaphthene	40	35.8	89.5		17.0	44 - 124
3-Nitroaniline	40	36.4	91.0		25.0	34 - 130
2,4-Dinitrophenol	40	42	105.0		87.0	2 - 125
Dibenzofuran	40	36.2	90.5		20.0	42 - 137
2,4-Dinitrotoluene	40	39.5	98.8		18.0	39 - 144

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

010304 1120

Form III

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021704ALCS

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
4-Nitrophenol	40	17.4	43.5		17.0	0 - 82
Fluorene	40	37.2	93.0		21.0	47 - 127
4-Chlorophenyl-phenylether	40	36.4	91.0		25.0	45 - 128
Diethylphthalate	40	36.6	91.5		42.0	25 - 145
4-Nitroaniline	40	35.9	89.8		19.0	35 - 134
2-Methyl-4,6-dinitrophenol	40	39.6	99.0		19.0	7 - 129
N-Nitrosodiphenylamine	40	40.6	102.0		20.0	66 - 145
4-Bromophenyl-phenylether	40	32.6	81.5		20.0	41 - 114
Hexachlorobenzene	40	37.6	94.0		18.0	35 - 135
Pentachlorophenol	40	37.3	93.2		108.0	17 - 131
Phenanthrene	40	37.2	93.0		17.0	49 - 125
Anthracene	40	37.6	94.0		15.0	47 - 124
Di-n-butylphthalate	40	38.3	95.8		15.0	48 - 137
Fluoranthene	40	37	92.5		18.0	44 - 132
Pyrene	40	34.9	87.2		21.0	45 - 129
Butylbenzylphthalate	40	38.2	95.5		18.0	42 - 150
3,3'-Dichlorobenzidine	40	36.7	91.8		55.0	32 - 108
Benzo(a)anthracene	40	34.8	87.0		22.0	34 - 138
Chrysene	40	35.8	89.5		25.0	36 - 140
bis(2-ethylhexyl)phthalate	40	38.4	96.0		28.0	31 - 155
Di-n-octylphthalate	40	37.4	93.5		32.0	25 - 154
Benzo(b)fluoranthene	40	36.6	91.5		23.0	32 - 139
Benzo(k)fluoranthene	40	35.4	88.5		24.0	32 - 138
Benzo(a)pyrene	40	38.4	96.0		21.0	30 - 138
Indeno(1,2,3-cd)pyrene	40	37.2	93.0		29.0	32 - 143
Dibenz(a,h)anthracene	40	39	97.5		24.0	41 - 106
Benzo(g,h,i)perylene	40	38.4	96.0		26.0	32 - 138
Acetophenone	80	60	75.0		26.0	23 - 119
1,2,4,5-Tetrachlorobenzene	40	33.4	83.5		28.0	22 - 113
Carbazole	40	37.3	93.2		26.0	33 - 140
Caprolactam	40	14.9	37.2 *		30.0	70 - 130
Biphenyl	40	34	85.0		30.0	70 - 130

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

010304 1120

Form III

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021704ALCS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Atrazine	40	33.3	83.2		30.0	70 - 130
Benzaldehyde	40	25	62.5		30.0	40 - 100

Spike Recovery: 2 out of 66 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

010304 1120

Form III

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021704ALCSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Bis(2-Chloroethyl)ether	40	38.5	96.2	12.7	30.0	36 - 129
Phenol	40	19.4	48.5	12.6	49.0	9 - 65
2-Chlorophenol	40	38.3	95.8	12.8	72.0	37 - 98
2,2-Oxybis(1-chloropropane)	40	38	95.0	9.9	24.0	41 - 133
2-Methylphenol (o-Cresol)	40	34.7	86.8	10.3	43.0	6 - 114
Hexachloroethane	40	32.5	81.2	9.7	33.0	22 - 96
N-Nitroso-di-n-propylamine	40	33	82.5	8.2	27.0	36 - 112
4-Methylphenol	40	26.2	65.5	10.0	77.0	6 - 104
Nitrobenzene	40	38.7	96.8	9.8	21.0	37 - 136
Isophorone	40	50.7	127.0	8.9	17.0	35 - 153
2-Nitrophenol	40	39.8	99.5	12.8	18.0	11 - 129
2,4-Dimethylphenol	40	43.2	108.0	12.8	44.0	4 - 116
Bis(2-Chloroethoxy)methane	40	51.4	128.0	7.7	24.0	42 - 143
2,4-Dichlorophenol	40	40	100.0	10.5	18.0	7 - 128
Naphthalene	40	37.5	93.8	9.8	23.0	36 - 114
4-Chloroaniline	40	36.3	90.8	8.6	55.0	41 - 102
2-Methylnaphthalene	40	38.2	95.5	8.5	25.0	33 - 127
Hexachlorobutadiene	40	37.2	93.0 *	11.1	42.0	48 - 92
4-Chloro-3-methylphenol	40	41.2	103.0	9.1	72.0	33 - 116
Hexachlorocyclopentadiene	40	38.6	96.5 *	12.4	45.0	13 - 80
2,4,6-Trichlorophenol	40	39.5	98.8	6.5	18.0	8 - 130
2,4,5-Trichlorophenol	40	40.6	102.0	12.6	52.0	9 - 131
2-Chloronaphthalene	40	35.8	89.5	9.4	20.0	37 - 128
2-Nitroaniline	40	39.4	98.5	8.7	18.0	53 - 114
Acenaphthylene	40	39.3	98.2	7.7	19.0	45 - 125
Dimethyl-phthalate	40	37.1	92.8	6.1	69.0	16 - 139
2,6-Dinitrotoluene	40	43.2	108.0	8.9	18.0	40 - 145
Acenaphthene	40	38.7	96.8	7.8	17.0	44 - 124
3-Nitroaniline	40	39.6	99.0	8.4	25.0	34 - 130
2,4-Dinitrophenol	40	48.4	121.0	14.2	87.0	2 - 125
Dibenzofuran	40	39.1	97.8	7.7	20.0	42 - 137
2,4-Dinitrotoluene	40	43.2	108.0	8.9	18.0	39 - 144

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

010304 1120

Form III

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021704ALCSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
4-Nitrophenol	40	18.2	45.5	4.5	17.0	0 - 82
Fluorene	40	40.5	101.0	8.5	21.0	47 - 127
4-Chlorophenyl-phenylether	40	39.5	98.8	8.2	25.0	45 - 128
Diethylphthalate	40	40.2	100.0	9.4	42.0	25 - 145
4-Nitroaniline	40	38.7	96.8	7.5	19.0	35 - 134
2-Methyl-4,6-dinitrophenol	40	44.3	111.0	11.2	19.0	7 - 129
N-Nitrosodiphenylamine	40	43.2	108.0	6.2	20.0	66 - 145
4-Bromophenyl-phenylether	40	35.4	88.5	8.2	20.0	41 - 114
Hexachlorobenzene	40	40.1	100.0	6.4	18.0	35 - 135
Pentachlorophenol	40	40.2	100.0	7.5	108.0	17 - 131
Phenanthrene	40	39.9	99.8	7.0	17.0	49 - 125
Anthracene	40	40.2	100.0	6.7	15.0	47 - 124
Di-n-butylphthalate	40	40.8	102.0	6.3	15.0	48 - 137
Fluoranthene	40	39.9	99.8	7.5	18.0	44 - 132
Pyrene	40	38.7	96.8	10.3	21.0	45 - 129
Butylbenzylphthalate	40	42.1	105.0	9.7	18.0	42 - 150
3,3'-Dichlorobenzidine	40	42.5	106.0	14.6	55.0	32 - 108
Benzo(a)anthracene	40	38.2	95.5	9.3	22.0	34 - 138
Chrysene	40	39.4	98.5	9.6	25.0	36 - 140
bis(2-ethylhexyl)phthalate	40	41.7	104.0	8.2	28.0	31 - 155
Di-n-octylphthalate	40	41.2	103.0	9.7	32.0	25 - 154
Benzo(b)fluoranthene	40	35.3	88.2	3.6	23.0	32 - 139
Benzo(k)fluoranthene	40	39.3	98.2	10.4	24.0	32 - 138
Benzo(a)pyrene	40	41.6	104.0	8.0	21.0	30 - 138
Indeno(1,2,3-cd)pyrene	40	40.1	100.0	7.5	29.0	32 - 143
Dibenz(a,h)anthracene	40	42.1	105.0	7.6	24.0	41 - 106
Benzo(g,h,i)perylene	40	41.8	104.0	8.5	26.0	32 - 138
Acetophenone	80	66.7	83.4	10.6	26.0	23 - 119
1,2,4,5-Tetrachlorobenzene	40	37.2	93.0	10.8	28.0	22 - 113
Carbazole	40	39.7	99.2	6.2	26.0	33 - 140
Caprolactam	40	17.2	43.0 *	14.3	30.0	70 - 130
Biphenyl	40	36.3	90.8	6.5	30.0	70 - 130

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

010304 1120

Form III

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021704ALCSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Atrazine	40	36.1	90.2	8.1	30.0	70 - 130
Benzaldehyde	40	35.6	89.0	35.0 *	30.0	40 - 100

Spike Recovery: 3 out of 66 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

010304 1120

Form III

Standards Data

010304 1120

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SMSD01 Calibration Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time: 2018

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF4 =4STD.D RRF10 =10STD.D
RRF20 =20STD.D RRF45 =45STD.D RRF60 =60STD.D

COMPOUND		RRF4	RRF10	RRF20	RRF45	RRF60	$\overline{RRF}$	%RSD OR R^2
Bis(2-Chloroethyl)ether		1.538	1.427	1.289	1.450	1.368		
Phenol	*	1.903	1.737	1.484	1.481	1.284		*
2-Chlorophenol		1.419	1.392	1.211	1.425	1.341		
2,2-Oxybis(1-chloropropane)		2.298	2.111	1.854	2.072	1.845		
2-Methylphenol (o-Cresol)		1.261	1.201	1.065	1.220	1.102		
Hexachloroethane		0.595	0.566	0.499	0.578	0.549		
N-Nitroso-di-n-propylamine	#	0.914	0.884	0.784	0.895	0.827		#
4-Methylphenol		1.335	1.277	1.109	1.282	1.153		
Nitrobenzene		0.371	0.345	0.300	0.326	0.311		
Isophorone		0.546	0.520	0.461	0.539	0.521		
2-Nitrophenol	*	0.220	0.213	0.191	0.228	0.225		*
2,4-Dimethylphenol		0.330	0.306	0.269	0.301	0.286		
Bis(2-Chloroethoxy)methane		0.482	0.450	0.384	0.418	0.395		
2,4-Dichlorophenol	*	0.320	0.304	0.268	0.302	0.291		*
Naphthalene		1.080	1.039	0.875	0.954	0.875		
4-Chloroaniline		0.486	0.455	0.401	0.445	0.422		
2-Methylnaphthalene		0.710	0.664	0.568	0.616	0.573		
Hexachlorobutadiene	*	0.161	0.159	0.136	0.147	0.143		*
4-Chloro-3-methylphenol	*	0.294	0.272	0.241	0.272	0.256		*
Hexachlorocyclopentadiene	#	0.242	0.261	0.232	0.291	0.295		#
2,4,6-Trichlorophenol	*	0.378	0.377	0.344	0.386	0.371		*
2,4,5-Trichlorophenol		0.412	0.386	0.353	0.421	0.392		
2-Chloronaphthalene		1.236	1.176	1.010	1.108	1.058		
2-Nitroaniline		0.313	0.306	0.289	0.332	0.316		
Acenaphthylene		2.006	1.933	1.653	1.744	1.600		
Dimethyl-phthalate		1.490	1.386	1.193	1.297	1.253		
2,6-Dinitrotoluene		0.304	0.316	0.277	0.305	0.294		
Acenaphthene	*	1.145	1.096	0.950	1.019	0.957		*
3-Nitroaniline		0.395	0.391	0.349	0.409	0.395		
2,4-Dinitrophenol	#		0.135	0.135	0.219	0.227		#
Dibenzofuran		1.748	1.664	1.430	1.543	1.452		
2,4-Dinitrotoluene		0.304	0.316	0.277	0.305	0.294		
4-Nitrophenol	#	0.133	0.134	0.127	0.148	0.149		#
Fluorene		1.393	1.315	1.150	1.206	1.104		

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SMSD01 Calibration Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time: 2018

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF4 =4STD.D RRF10 =10STD.D
RRF20 =20STD.D RRF45 =45STD.D RRF60 =60STD.D

COMPOUND		RRF4	RRF10	RRF20	RRF45	RRF60	$\overline{RRF}$	%RSD OR R^2
4-Chlorophenyl-phenylether		0.599	0.564	0.487	0.533	0.496		
Diethylphthalate		1.441	1.321	1.145	1.272	1.192		
4-Nitroaniline		0.411	0.383	0.340	0.409	0.400		
2-Methyl-4,6-dinitrophenol		0.096	0.144	0.131	0.182	0.185		
N-Nitrosodiphenylamine	*	0.534	0.519	0.447	0.500	0.485		*
4-Bromophenyl-phenylether		0.190	0.186	0.164	0.189	0.186		
Hexachlorobenzene		0.239	0.233	0.203	0.228	0.223		
Pentachlorophenol	*	0.123	0.145	0.128	0.162	0.164		*
Phenanthrene		1.165	1.115	0.954	1.028	0.978		
Anthracene		1.164	1.090	0.940	1.042	0.984		
Di-n-butylphthalate		1.437	1.368	1.186	1.357	1.274		
Fluoranthene	*	1.094	1.031	0.893	1.010	0.949		*
Pyrene		1.439	1.386	1.222	1.427	1.437		
Butylbenzylphthalate		0.745	0.728	0.664	0.811	0.826		
3,3'-Dichlorobenzidine		0.402	0.411	0.371	0.454	0.452		
Benzo(a)anthracene		1.232	1.178	1.043	1.257	1.262		
Chrysene		1.194	1.127	0.958	1.136	1.133		
bis(2-ethylhexyl)phthalate		1.039	1.019	0.930	1.127	1.120		
Di-n-octylphthalate	*	1.686	1.683	1.608	1.976	1.916		*
Benzo(b)fluoranthene		1.281	1.157	1.075	1.196	1.143		
Benzo(k)fluoranthene		1.150	1.104	0.941	1.117	1.067		
Benzo(a)pyrene	*	1.041	1.019	0.910	1.048	1.040		*
Indeno(1,2,3-cd)pyrene		1.144	0.959	0.823	1.304	1.177		
Dibenz(a,h)anthracene		1.051	1.023	0.912	1.069	1.076		
Benzo(g,h,i)perylene		1.026	1.014	0.906	1.076	1.104		
Acetophenone		1.834	1.906	1.767	1.676	1.505		
1,2,4,5-Tetrachlorobenzene		0.560	0.613	0.588	0.572	0.522		
Carbazole		1.147	1.064	0.915	1.032	0.989		
Caprolactam		0.132	0.191	0.188	0.180	0.179		
Biphenyl		1.479	1.856	1.754	1.488	1.355		
Atrazine		0.191	0.260	0.251	0.237	0.230		
Benzaldehyde		1.068	1.371	1.278	1.116	1.026		
2-Fluorophenol(SURR)		1.468	1.391	1.216	1.365	1.235		

010304 1121

FORM VI

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SMSD01 Calibration Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time: 2018

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF4 =4STD.D RRF10 =10STD.D
RRF20 =20STD.D RRF45 =45STD.D RRF60 =60STD.D

COMPOUND	RRF4	RRF10	RRF20	RRF45	RRF60	$\overline{RRF}$	%RSD OR R^2
Phenol-d5(SURR)	1.688	1.623	1.371	1.333	1.129		
Nitrobenzene-d5(SURR)	0.378	0.357	0.312	0.355	0.343		
2-Fluorobiphenyl(SURR)	1.415	1.350	1.156	1.251	1.192		
2,4,6-Tribromophenol(SURR)	0.121	0.127	0.109	0.125	0.121		
p-Terphenyl-d14(SURR)	0.805	0.736	0.640	0.709	0.678		

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SMSD01 Calibration Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time: 2018

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF75 =75STD.D RRF100 =100STD.D

COMPOUND		RRF75	RRF100				$\overline{RRF}$	%RSD OR R^2		
Bis(2-Chloroethyl)ether		1.379	1.323				1.3963	6		
Phenol	*						1.57774	15.4	*	<-
2-Chlorophenol		1.338	1.234				1.33715	6.4		
2,2-Oxybis(1-chloropropane)		1.803	1.607				1.94139	11.9		
2-Methylphenol (o-Cresol)		1.114	1.000				1.13746	8.2		
Hexachloroethane		0.531	0.467				0.54074	8.4		
N-Nitroso-di-n-propylamine	#	0.840	0.753				0.84243	7.1	#	
4-Methylphenol		1.155	1.050				1.19444	8.7		
Nitrobenzene		0.298	0.260				0.31584	11.3		
Isophorone							0.51753	6.5		
2-Nitrophenol	*	0.219	0.201				0.21379	6.3	*	
2,4-Dimethylphenol		0.274	0.247				0.28759	9.5		
Bis(2-Chloroethoxy)methane		0.375	0.335				0.40554	12.1		
2,4-Dichlorophenol	*	0.282	0.257				0.2892	7.6	*	
Naphthalene		0.817	0.721				0.90854	13.8		
4-Chloroaniline		0.405	0.360				0.42496	9.7		
2-Methylnaphthalene		0.541	0.476				0.59245	13.2		
Hexachlorobutadiene	*	0.140	0.128				0.14468	8.3	*	
4-Chloro-3-methylphenol	*	0.248	0.224				0.25815	9	*	
Hexachlorocyclopentadiene	#	0.285	0.272				0.26819	9	#	
2,4,6-Trichlorophenol	*	0.382	0.350				0.36958	4.4	*	
2,4,5-Trichlorophenol		0.372	0.369				0.38617	6.3		
2-Chloronaphthalene		1.000	0.933				1.07456	9.9		
2-Nitroaniline		0.307	0.298				0.30863	4.4		
Acenaphthylene		1.494	1.378				1.68677	13.4		
Dimethyl-phthalate		1.213	1.162				1.28494	9.1		
2,6-Dinitrotoluene		0.282	0.269				0.29258	5.9		
Acenaphthene	*	0.904	0.835				0.98652	11	*	
3-Nitroaniline		0.382	0.366				0.3839	5.2		
2,4-Dinitrophenol	#	0.236	0.239				0.19849	25.1	#	<-
Dibenzofuran		1.372	1.278				1.49822	11		
2,4-Dinitrotoluene		0.282	0.269				0.29258	5.9		
4-Nitrophenol	#	0.146	0.146				0.14042	6.2	#	
Fluorene		1.026	0.918				1.15891	14.1		

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SMSD01 Calibration Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time: 2018

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF75 =75STD.D RRF100 =100STD.D

COMPOUND		RRF75	RRF100				$\overline{RRF}$	%RSD OR R^2	
4-Chlorophenyl-phenylether		0.463	0.427				0.50985	11.7	
Diethylphthalate		1.145	1.059				1.22506	10.5	
4-Nitroaniline		0.401	0.395				0.39122	6.3	
2-Methyl-4,6-dinitrophenol		0.187	0.182				0.15806	22.2	<-
N-Nitrosodiphenylamine	*	0.462	0.438				0.4836	7.5	*
4-Bromophenyl-phenylether		0.177	0.165				0.17954	6.2	
Hexachlorobenzene		0.213	0.200				0.21986	6.8	
Pentachlorophenol	*	0.163	0.153				0.14838	11.4	*
Phenanthrene		0.914	0.833				0.99809	11.5	
Anthracene		0.916	0.833				0.99561	11.3	
Di-n-butylphthalate		1.183	1.058				1.26599	10.4	
Fluoranthene	*	0.888	0.814				0.95424	10.2	*
Pyrene		1.449	1.422				1.39735	5.7	
Butylbenzylphthalate		0.842	0.823				0.77688	8.5	
3,3'-Dichlorobenzidine		0.443	0.426				0.42267	7.2	
Benzo(a)anthracene		1.271	1.233				1.21096	6.6	
Chrysene		1.124	1.103				1.11071	6.6	
bis(2-ethylhexyl)phthalate		1.109	1.060				1.05766	6.6	
Di-n-octylphthalate	*	1.925	1.844				1.80548	8	*
Benzo(b)fluoranthene		1.164	1.062				1.15393	6.4	
Benzo(k)fluoranthene		0.965	0.905				1.03542	9.4	
Benzo(a)pyrene	*	1.016	0.927				1.00005	5.7	*
Indeno(1,2,3-cd)pyrene		1.168	1.112				1.09807	14.4	
Dibenz(a,h)anthracene		0.988	0.912				1.00419	6.9	
Benzo(g,h,i)perylene		1.025	0.967				1.01693	6.5	
Acetophenone		1.435					1.68736	11	
1,2,4,5-Tetrachlorobenzene		0.506	0.462				0.54629	9.6	
Carbazole		0.934	0.860				0.9913	9.9	
Caprolactam		0.180	0.168				0.1741	11.4	
Biphenyl		1.281	1.134				1.4781	17.3	<-
Atrazine		0.231	0.209				0.2296	10.2	
Benzaldehyde		0.979					1.13958	13.4	
==========									
2-Fluorophenol(SURR)		1.208	1.073				1.27936	10.5	

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FORM VI

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SMSD01 Calibration Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time: 2018

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF75 =75STD.D RRF100 =100STD.D

COMPOUND	RRF75	RRF100				$\overline{RRF}$	%RSD OR R^2	
Phenol-d5(SURR)						1.42899	15.9	<-
Nitrobenzene-d5(SURR)	0.330	0.303				0.33978	7.8	
2-Fluorobiphenyl(SURR)	1.118	1.038				1.217	10.8	
2,4,6-Tribromophenol(SURR)	0.110	0.099				0.11584	8.8	
p-Terphenyl-d14(SURR)	0.622	0.567				0.6797	11.6	

Average Used: 9.6

7SSC

SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SMSD01 CalibrationDate: 02/10/04 Time: 1805

CCV ID: SSC160629 Lab File ID: 45SEC.D Init. Calib. Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND		$\overline{RRF}$	RRF	%D		
Bis(2-Chloroethyl)ether		1.3963	1.344	3.7		
Phenol	*	1.57774	1.314	16.7	*	
2-Chlorophenol		1.33715	1.261	5.7		
2,2-Oxybis(1-chloropropane)		1.94139	2.042	5.2		
2-Methylphenol (o-Cresol)		1.13746	1.058	7.0		
Hexachloroethane		0.54074	0.51965	3.9		
N-Nitroso-di-n-propylamine	#	0.84243	0.8227	2.3	#	
4-Methylphenol		1.19444	1.096	8.2		
Nitrobenzene		0.31584	0.30194	4.4		
Isophorone		0.51753	0.63375	22.5		<-
2-Nitrophenol	*	0.21379	0.20448	4.4	*	
2,4-Dimethylphenol		0.28759	0.28902	0.5		
Bis(2-Chloroethoxy)methane		0.40554	0.40763	0.5		
2,4-Dichlorophenol	*	0.2892	0.27575	4.7	*	
Naphthalene		0.90854	0.83704	7.9		
4-Chloroaniline		0.42496	0.44225	4.1		
2-Methylnaphthalene		0.59245	0.56587	4.5		
Hexachlorobutadiene	*	0.14468	0.14971	3.5	*	
4-Chloro-3-methylphenol	*	0.25815	0.2442	5.4	*	
Hexachlorocyclopentadiene	#	0.26819	0.30467	13.6	#	
2,4,6-Trichlorophenol	*	0.36958	0.3421	7.4	*	
2,4,5-Trichlorophenol		0.38617	0.36375	5.8		
2-Chloronaphthalene		1.07456	1.024	4.7		
2-Nitroaniline		0.30863	0.33486	8.5		
Acenaphthylene		1.68677	1.551	8.0		
Dimethyl-phthalate		1.28494	1.249	2.8		
2,6-Dinitrotoluene		0.29258	0.28871	1.3		
Acenaphthene	*	0.98652	0.91056	7.7	*	
3-Nitroaniline		0.3839	0.4121	7.3		
2,4-Dinitrophenol	#	0.19849	0.22026	11.0	#	
Dibenzofuran		1.49822	1.434	4.3		
2,4-Dinitrotoluene		0.29258	0.28871	1.3		
4-Nitrophenol	#	0.14042	0.13889	1.1	#	
Fluorene		1.15891	1.094	5.6		
4-Chlorophenyl-phenylether		0.50985	0.50989	0.0		
Diethylphthalate		1.22506	1.237	1.0		

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FORM VII

7SSC

SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SMSD01 CalibrationDate: 02/10/04 Time: 1805

CCV ID: SSC160629 Lab File ID: 45SEC.D Init. Calib. Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND		$\overline{RRF}$	RRF	%D	
4-Nitroaniline		0.39122	0.42148	7.7	
2-Methyl-4,6-dinitrophenol		0.15806	0.16051	1.6	
N-Nitrosodiphenylamine	*	0.4836	0.49416	2.2	*
4-Bromophenyl-phenylether		0.17954	0.1625	9.5	
Hexachlorobenzene		0.21986	0.20994	4.5	
Pentachlorophenol	*	0.14838	0.14658	1.2	*
Phenanthrene		0.99809	0.92365	7.5	
Anthracene		0.99561	0.93159	6.4	
Di-n-butylphthalate		1.26599	1.276	0.8	
Fluoranthene	*	0.95424	0.89792	5.9	*
Pyrene		1.39735	1.295	7.3	
Butylbenzylphthalate		0.77688	0.8125	4.6	
3,3'-Dichlorobenzidine		0.42267	0.41426	2.0	
Benzo(a)anthracene		1.21096	1.087	10.2	
Chrysene		1.11071	1.027	7.5	
bis(2-ethylhexyl)phthalate		1.05766	1.07	1.2	
Di-n-octylphthalate	*	1.80548	1.825	1.1	*
Benzo(b)fluoranthene		1.15393	1.031	10.7	
Benzo(k)fluoranthene		1.03542	1.02	1.5	
Benzo(a)pyrene	*	1.00005	0.98098	1.9	*
Indeno(1,2,3-cd)pyrene		1.09807	1.009	8.1	
Dibenz(a,h)anthracene		1.00419	0.96404	4.0	
Benzo(g,h,i)perylene		1.01693	0.94778	6.8	
Carbazole		0.9913	1.056	6.5	
==========					
2-Fluorophenol(SURR)		1.27936	1.194	6.7	
Phenol-d5(SURR)		1.42899	1.221	14.6	
Nitrobenzene-d5(SURR)		0.33978	0.3167	6.8	
2-Fluorobiphenyl(SURR)		1.217	1.163	4.4	
2,4,6-Tribromophenol(SURR)		0.11584	0.11282	2.6	
p-Terphenyl-d14(SURR)		0.6797	0.58868	13.4	

Average Used: 5.7

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FORM VII

7SSC

SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SMSD01 CalibrationDate: 02/10/04 Time: 2326

CCV ID: SSC160492 Lab File ID: 45SOWSEC.D Init. Calib. Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	$\overline{RRF}$	RRF	%D
Acetophenone	1.68736	1.529	9.4
Caprolactam	0.1741	0.16344	6.1
Biphenyl	1.4781	1.323	10.5
Atrazine	0.2296	0.19027	17.1
Benzaldehyde	1.13958	1.025	10.1

7SSC

SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SMSD01 CalibrationDate: 02/12/04 Time: 1719

CCV ID: SSC160510 Lab File ID: 45AP9SEC.D Init. Calib. Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	$\overline{RRF}$	RRF	%D
1,2,4,5-Tetrachlorobenzene	0.54629	0.51037	6.6

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FORM VII

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SMSD01 CalibrationDate: 02/18/04 Time: 0843

CCV ID: CCV161904 Lab File ID: 45CCV.D Init. Calib. Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND		$\overline{RRF}$	RRF45	%D	
Bis(2-Chloroethyl)ether		1.3963	1.425	2.1	
Phenol	*	1.57774	1.526	3.3	*
2-Chlorophenol		1.33715	1.384	3.5	
2,2-Oxybis(1-chloropropane)		1.94139	1.963	1.1	
2-Methylphenol (o-Cresol)		1.13746	1.182	3.9	
Hexachloroethane		0.54074	0.56445	4.4	
N-Nitroso-di-n-propylamine	#	0.84243	0.88426	5.0	#
4-Methylphenol		1.19444	1.245	4.2	
Nitrobenzene		0.31584	0.32762	3.7	
Isophorone		0.51753	0.53483	3.3	
2-Nitrophenol	*	0.21379	0.22757	6.4	*
2,4-Dimethylphenol		0.28759	0.29924	4.1	
Bis(2-Chloroethoxy)methane		0.40554	0.42214	4.1	
2,4-Dichlorophenol	*	0.2892	0.30082	4.0	*
Naphthalene		0.90854	0.94251	3.7	
4-Chloroaniline		0.42496	0.42211	0.7	
2-Methylnaphthalene		0.59245	0.6178	4.3	
Hexachlorobutadiene	*	0.14468	0.14899	3.0	*
4-Chloro-3-methylphenol	*	0.25815	0.2666	3.3	*
Hexachlorocyclopentadiene	#	0.26819	0.27415	2.2	#
2,4,6-Trichlorophenol	*	0.36958	0.37541	1.6	*
2,4,5-Trichlorophenol		0.38617	0.39718	2.9	
2-Chloronaphthalene		1.07456	1.087	1.2	
2-Nitroaniline		0.30863	0.31961	3.6	
Acenaphthylene		1.68677	1.688	0.1	
Dimethyl-phthalate		1.28494	1.287	0.2	
2,6-Dinitrotoluene		0.29258	0.31017	6.0	
Acenaphthene	*	0.98652	1.003	1.7	*
3-Nitroaniline		0.3839	0.39217	2.2	
2,4-Dinitrophenol	#	0.19849	0.2125	7.1	#
Dibenzofuran		1.49822	1.519	1.4	
2,4-Dinitrotoluene		0.29258	0.31017	6.0	
4-Nitrophenol	#	0.14042	0.14345	2.2	#
Fluorene		1.15891	1.204	3.9	
4-Chlorophenyl-phenylether		0.50985	0.52921	3.8	
Diethylphthalate		1.22506	1.232	0.6	

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FORM VII

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SMSD01 CalibrationDate: 02/18/04 Time: 0843

CCV ID: CCV161904 Lab File ID: 45CCV.D Init. Calib. Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND		$\overline{RRF}$	RRF45	%D	
4-Nitroaniline		0.39122	0.39617	1.3	
2-Methyl-4,6-dinitrophenol		0.15806	0.18417	16.5	
N-Nitrosodiphenylamine	*	0.4836	0.49684	2.7	*
4-Bromophenyl-phenylether		0.17954	0.18664	4.0	
Hexachlorobenzene		0.21986	0.2261	2.8	
Pentachlorophenol	*	0.14838	0.15725	6.0	*
Phenanthrene		0.99809	1.024	2.6	
Anthracene		0.99561	1.031	3.6	
Di-n-butylphthalate		1.26599	1.304	3.0	
Fluoranthene	*	0.95424	0.98386	3.1	*
Pyrene		1.39735	1.402	0.3	
Butylbenzylphthalate		0.77688	0.79676	2.6	
3,3'-Dichlorobenzidine		0.42267	0.45794	8.3	
Benzo(a)anthracene		1.21096	1.252	3.4	
Chrysene		1.11071	1.126	1.4	
bis(2-ethylhexyl)phthalate		1.05766	1.084	2.5	
Di-n-octylphthalate	*	1.80548	1.927	6.7	*
Benzo(b)fluoranthene		1.15393	1.175	1.8	
Benzo(k)fluoranthene		1.03542	1.097	5.9	
Benzo(a)pyrene	*	1.00005	1.049	4.9	*
Indeno(1,2,3-cd)pyrene		1.09807	1.151	4.8	
Dibenz(a,h)anthracene		1.00419	1.079	7.4	
Benzo(g,h,i)perylene		1.01693	1.095	7.7	
Carbazole		0.9913	1.014	2.3	
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2-Fluorophenol(SURR)		1.27936	1.343	5.0	
Phenol-d5(SURR)		1.42899	1.333	6.7	
Nitrobenzene-d5(SURR)		0.33978	0.35703	5.1	
2-Fluorobiphenyl(SURR)		1.217	1.229	1.0	
2,4,6-Tribromophenol(SURR)		0.11584	0.12347	6.6	
p-Terphenyl-d14(SURR)		0.6797	0.7074	4.1	

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SMSD01 CalibrationDate: 02/18/04 Time: 0915

CCV ID: CCV161905 Lab File ID: 45AP9CCV.D Init. Calib. Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	$\overline{RRF}$	RRF45	%D
Acetophenone	1.68736	1.68	0.4
1,2,4,5-Tetrachlorobenzene	0.54629	0.5785	5.9

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SMSD01 CalibrationDate: 02/18/04 Time: 0946

CCV ID: CCV161916 Lab File ID: 45SOWCCV.D Init. Calib. Date: 02/11/04

GC Column: HPMS-5 ID: 0.25 (mm)

Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	$\overline{RRF}$	RRF45	%D
Acetophenone	1.68736	1.757	4.1
Caprolactam	0.1741	0.17099	1.8
Biphenyl	1.4781	1.518	2.7
Atrazine	0.2296	0.22873	0.4
Benzaldehyde	1.13958	1.112	2.4

Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402126

METHOD: 8270 **MATRIX:** W

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
1,2,4,5-Tetrachlorobenzene	22-113	28	22-113	28			
2,2-Oxybis(1-chloropropane)	41-133	24	41-133	24			
2,4,5-Trichlorophenol	9-131	52	9-131	52			
2,4,6-Tribromophenol							10-122
2,4,6-Trichlorophenol	8-130	18	8-130	18			
2,4-Dichlorophenol	7-128	18	7-128	18			
2,4-Dimethylphenol	4-116	44	4-116	44			
2,4-Dinitrophenol	2-125	87	2-125	87			
2,4-Dinitrotoluene	39-144	18	39-144	18			
2,6-Dinitrotoluene	40-145	18	40-145	18			
2-Chloronaphthalene	37-128	20	37-128	20			
2-Chlorophenol	37-98	72	37-98	72			
2-Fluorobiphenyl							43-116
2-Fluorophenol							21-120
2-Methyl-4,6-dinitrophenol	7-129	19	7-129	19			
2-Methylnaphthalene	33-127	25	33-127	25			
2-Methylphenol (o-Cresol)	6-114	43	6-114	43			
2-Nitroaniline	53-114	18	53-114	18			
2-Nitrophenol	11-129	18	11-129	18			
3,3'-Dichlorobenzidine	32-108	55	32-108	55			
3-Nitroaniline	34-130	25	34-130	25			
4-Bromophenyl-phenylether	41-114	20	41-114	20			
4-Chloro-3-methylphenol	33-116	72	33-116	72			
4-Chloroaniline	41-102	55	41-102	55			
4-Chlorophenyl-phenylether	45-128	25	45-128	25			
4-Methylphenol	6-104	77	6-104	77			
4-Nitroaniline	35-134	19	35-134	19			
4-Nitrophenol	D-82	17	D-82	17			
Acenaphthene	44-124	17	44-124	17			
Acenaphthylene	45-125	19	45-125	19			
Acetophenone	23-119	26	23-119	26			
Anthracene	47-124	15	47-124	15			
Atrazine	70-130	30	70-130	30			
Benzaldehyde	40-100	30	40-100	30			
Benzo(a)anthracene	34-138	22	34-138	22			
Benzo(a)pyrene	30-138	21	30-138	21			
Benzo(b)fluoranthene	32-139	23	32-139	23			
Benzo(g,h,i)perylene	32-138	26	32-138	26			
Benzo(k)fluoranthene	32-138	24	32-138	24			

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Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402126

METHOD: 8270 **MATRIX:** W

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
Biphenyl	70-130	30	70-130	30			
Bis(2-Chloroethoxy)methane	42-143	24	42-143	24			
Bis(2-Chloroethyl)ether	36-129	30	36-129	30			
bis(2-ethylhexyl)phthalate	31-155	28	31-155	28			
Butylbenzylphthalate	42-150	18	42-150	18			
Caprolactam	70-130	30	70-130	30			
Carbazole	33-140	26	33-140	26			
Chrysene	36-140	25	36-140	25			
Dibenz(a,h)anthracene	41-106	24	41-106	24			
Dibenzofuran	42-137	20	42-137	20			
Diethylphthalate	25-145	42	25-145	42			
Dimethyl-phthalate	16-139	69	16-139	69			
Di-n-butylphthalate	48-137	15	48-137	15			
Di-n-octylphthalate	25-154	32	25-154	32			
Fluoranthene	44-132	18	44-132	18			
Fluorene	47-127	21	47-127	21			
Hexachlorobenzene	35-135	18	35-135	18			
Hexachlorobutadiene	48-92	42	48-92	42			
Hexachlorocyclopentadiene	13-80	45	13-80	45			
Hexachloroethane	22-96	33	22-96	33			
Indeno(1,2,3-cd)pyrene	32-143	29	32-143	29			
Isophorone	35-153	17	35-153	17			
Naphthalene	36-114	23	36-114	23			
Nitrobenzene	37-136	21	37-136	21			
Nitrobenzene-d5							35-114
N-Nitroso-di-n-propylamine	36-112	27	36-112	27			
N-Nitrosodiphenylamine	66-145	20	66-145	30			
Pentachlorophenol	17-131	108	17-131	108			
Phenanthrene	49-125	17	49-125	17			
Phenol	9-65	49	9-65	49			
Phenol-d5							10-94
p-Terphenyl-d14							33-141
Pyrene	45-129	21	45-129	21			

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GC/ECD PESTICIDE ORGANICS

METHOD 8081

010304 1121

CASE NARRATIVE
GC/ECD SEMIVOLATILE ORGANIC

PEL Lab Reference No./SDG: 2402126

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

EPA SW846 8081.

IV. PREPARATION

Water samples were prepared by SW846 EPA 3510 for 8081 semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All calibration criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met.

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

No spikes requested by client.

E. Internal Standards:

This method does not require the use of internal standards.

CASE NARRATIVE
GC/ECD SEMIVOLATILE ORGANIC

PEL Lab Reference No./SDG: 2402126

Client: CH2M Hill

F. Samples:

Sample analysis proceeded normally.

Data was collected using dual column analysis. Please note that the higher value of the two columns is reported, unless the %D between the two columns is >40%, in which case the lower of the two values is reported. Project specific Reporting Limits were used per client request.

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

SIGNED: _____ **DATE:** 2-20-04

PESTICIDE ORGANIC CROSS REFERENCE TABLE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Method: 8081

EPA Sample No	Lab Sample ID
57285LW040212	240212601

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Sample Data

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1

PESTICIDE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 240212601 Lab File ID: 126-01.D

Sample wt/vol: 990 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 10 Date Extracted: 02/16/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 1023

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Waste Character Method: 8081

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.058	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.05	U
72-55-9	4,4'-DDE	0.056	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.05	U
72-54-8	4,4'-DDD	0.05	U
1031-07-8	Endosulfan sulfate	0.05	U
50-29-3	4,4'-DDT	0.05	U
72-43-5	Methoxychlor	0.05	U
7421-93-4	Endrin aldehyde	0.052	U
5103-74-2	gamma-Chlordane	0.05	U
5103-71-9	alpha-Chlordane	0.05	U
53494-70-5	Endrin ketone	0.05	U
8001-35-2	Toxaphene	5	U

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

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Form I

QC Summary

010304 1121

1

PESTICIDE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

6891BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 129710 Lab File ID: 6891BLK.D

Sample wt/vol: 1000 Units: ML Date Received: 02/16/04

Concentrated Extract Volume: 10 Date Extracted: 02/16/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 0659

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8081

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.058	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.05	U
72-55-9	4,4'-DDE	0.056	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.05	U
72-54-8	4,4'-DDD	0.05	U
1031-07-8	Endosulfan sulfate	0.05	U
50-29-3	4,4'-DDT	0.05	U
72-43-5	Methoxychlor	0.05	U
7421-93-4	Endrin aldehyde	0.051	U
5103-74-2	gamma-Chlordane	0.05	U
5103-71-9	alpha-Chlordane	0.05	U
53494-70-5	Endrin ketone	0.05	U
8001-35-2	Toxaphene	5	U

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

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Form I

PESTICIDE ORGANIC METHOD BLANK SUMMARY

EPA Sample No.: 6891BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab File ID: 6891BLK.D Lab Sample ID: 129710

Instrument ID: SECD02 Date Extracted: 02/16/04

Matrix: WATER Date Analyzed: 02/18/04

Level:(low/med) LOW Time Analyzed: 0659

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	6891LCS2	129712	6891LCS2.D	02/18/04	0750
2	6891LCS3	129713	6891LCS3.D	02/18/04	0815
3	6891TLCS	129714	6891TLCS.D	02/18/04	0841
4	57285LW040212	240212601	126-01.D	02/18/04	1023

COMMENTS:

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Form IV

2A

WATER PESTICIDE ORGANIC SURROGATE RECOVERY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402126

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
57285LW040212	62.0	57.0					0
6891BLK	58.0	39.0					0
6891LCS2	61.0	56.0					0
6891LCS3	53.0	64.0					0
6891TLCS	62.0	38.0					0

Control Limits

S1	=	2,4,5,6-tetrachloro-m-xylene	45	-	125
S2	=	Decachlorobiphenyl	34	-	133

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

Control limit source: (lab/method) METHOD

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Form II

010304 1121

PESTICIDE ORGANIC ANALYTICAL SEQUENCE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

GC Column: STX-CLP1 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

Instrument ID: SECD02

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 4.16 S2 : 16.14

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
1	EVA160591	1859	PEMA.D	02/13/04	0525		
2	STD160580	1757	PCAL8.D	02/13/04	0550	4.17	16.14
3	STD160578	1758	PCAL7.D	02/13/04	0616	4.17	16.14
4	STD160576	1759	PCAL6.D	02/13/04	0641	4.16	16.14
5	STD160574	1760	PCAL5.D	02/13/04	0707	4.16	16.14
6	STD160572	1756	PCAL4.D	02/13/04	0732	4.16	16.14
7	STD160570	1761	PCAL3.D	02/13/04	0758	4.16	16.14
8	STD160568	1762	PCAL2.D	02/13/04	0823	4.16	16.14
9	STD160566	1763	PCAL1.D	02/13/04	0849	4.16	16.14
10	SSC160593	1590	PSEC1.D	02/13/04	1032	4.18	16.14
11	STD160595	1764	TCAL4.D	02/13/04	1123		
12	STD160527	1765	CCAL4.D	02/13/04	1149		
13	EVA161487	1859	PEM31.D	02/18/04	0349		
14	CCV161486	1756	PCCV31.D	02/18/04	0440	4.12	16.09
15	CCV161468	1764	TCCV3.D	02/18/04	0531		
16	CCV161454	1765	CCCV3.D	02/18/04	0557		
17	6891BLK	129710	6891BLK.D	02/18/04	0659	4.15	16.09
18	6891LCS2	129712	6891LCS2.D	02/18/04	0750	4.13	16.09
19	6891LCS3	129713	6891LCS3.D	02/18/04	0815	4.12	16.09
20	6891TLCS	129714	6891TLCS.D	02/18/04	0841	4.12	16.09
21	57285LW040212	240212601	126-01.D	02/18/04	1023	4.13	16.09
22	EVA161898	1859	PEM11.D	02/18/04	1104		
23	CCV161896	1756	PCCV11.D	02/18/04	1155	4.12	16.08
24	CCV161900	1764	TCCV12.D	02/18/04	1312		
25	CCV161894	1765	CCCV11.D	02/18/04	1337		

			QC LIMITS
S1	=	2,4,5,6-tetrachloro-m-xylene	(+/- 0.1 MINUTES)
S2	=	Decachlorobiphenyl	(+/- 0.2 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

Page 1 of 1

010304 1121 FORM VIII

PESTICIDE ORGANIC ANALYTICAL SEQUENCE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

GC Column: STX-CLP2 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

Instrument ID: SECD02

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 4.21 S2 : 16.83

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
1	EVA160592	1859	PEMA.D	02/13/04	0525		
2	STD160581	1757	PCAL8.D	02/13/04	0550	4.21	16.83
3	STD160579	1758	PCAL7.D	02/13/04	0616	4.21	16.83
4	STD160577	1759	PCAL6.D	02/13/04	0641	4.21	16.83
5	STD160575	1760	PCAL5.D	02/13/04	0707	4.2	16.83
6	STD160573	1756	PCAL4.D	02/13/04	0732	4.21	16.83
7	STD160571	1761	PCAL3.D	02/13/04	0758	4.21	16.83
8	STD160569	1762	PCAL2.D	02/13/04	0823	4.21	16.83
9	STD160567	1763	PCAL1.D	02/13/04	0849	4.21	16.83
10	SSC160594	1590	PSEC1.D	02/13/04	1032	4.21	16.83
11	STD160596	1764	TCAL4.D	02/13/04	1123		
12	STD160528	1765	CCAL4.D	02/13/04	1149		
13	EVA161464	1859	PEM31.D	02/18/04	0349		
14	CCV161459	1756	PCCV31.D	02/18/04	0440	4.17	16.78
15	CCV161469	1764	TCCV3.D	02/18/04	0531		
16	CCV161455	1765	CCCV3.D	02/18/04	0557		
17	6891BLK	129710	6891BLK.D	02/18/04	0659	4.18	16.78
18	6891LCS2	129712	6891LCS2.D	02/18/04	0750	4.17	16.78
19	6891LCS3	129713	6891LCS3.D	02/18/04	0815	4.17	16.78
20	6891TLCS	129714	6891TLCS.D	02/18/04	0841	4.17	16.78
21	57285LW040212	240212601	126-01.D	02/18/04	1023	4.17	16.78
22	EVA161899	1859	PEM11.D	02/18/04	1104		
23	CCV161897	1756	PCCV11.D	02/18/04	1155	4.17	16.78
24	CCV161901	1764	TCCV12.D	02/18/04	1312		
25	CCV161895	1765	CCCV11.D	02/18/04	1337		

			QC LIMITS
S1	=	2,4,5,6-tetrachloro-m-xylene	(+/- 0.2 MINUTES)
S2	=	Decachlorobiphenyl	(+/- 0.2 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

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010304 1121 FORM VIII

10

PESTICIDE ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

6891BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab Sample ID: 129710 Date(s) Analyzed: 02/18/04 02/18/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

COMPOUND		COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
2,4,5,6-tetrachloro-m-xylene	*	1	4.150	4.177	0.027	65161	0.058	0.58	
		2	4.175	4.213	0.037	131012	0.046	0.46	23.08
Decachlorobiphenyl	*	1	16.093	16.137	0.044	63064	0.039	0.39	
		2	16.778	16.828	0.050	78797	0.037	0.37	5.26

* Column used for quantitation

010304 1121

Form X

10

PESTICIDE ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

6891LCS2

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab Sample ID: 129712 Date(s) Analyzed: 02/18/04 02/18/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

COMPOUND		COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
alpha-BHC	*	1	5.733	5.787	0.054	33996	0.031	0.31	
		2	5.925	5.971	0.046	133122	0.037	0.37	17.65
beta-BHC	*	1	6.810	6.860	0.050	25686	0.034	0.34	
		2	7.077	7.121	0.044	71002	0.037	0.37	8.45
delta-BHC	*	1	7.227	7.280	0.053	32727	0.037	0.37	
		2	7.757	7.802	0.045	119670	0.041	0.41	10.26
gamma-BHC (Lindane)	*	1	6.560	6.610	0.050	36760	0.030	0.3	
		2	6.834	6.881	0.047	130669	0.038	0.38	23.53
Heptachlor	*	1	7.707	7.757	0.050	47531	0.032	0.32	
		2	7.855	7.903	0.047	127160	0.035	0.35	8.96
Aldrin	*	1	8.387	8.437	0.050	33783	0.030	0.3	
		2	8.571	8.618	0.047	107941	0.036	0.36	18.18
Heptachlor epoxide	*	1	9.723	9.773	0.050	46535	0.035	0.35	
		2	9.810	9.859	0.049	114021	0.037	0.37	5.56
Endosulfan I	*	1	10.537	10.587	0.050	44170	0.036	0.36	
		2	10.608	10.657	0.049	108698	0.039	0.39	8.00
Dieldrin	*	1	11.027	11.077	0.050	40281	0.035	0.35	
		2	11.164	11.213	0.049	104360	0.037	0.37	5.56
4,4'-DDE	*	1	10.447	10.493	0.046	35033	0.034	0.34	
		2	10.880	10.927	0.047	99910	0.037	0.37	8.45
Endrin	*	1	11.490	11.543	0.053	40734	0.037	0.37	
		2	11.768	11.818	0.050	101908	0.039	0.39	5.26
Endosulfan II	*	1	11.947	11.997	0.050	44004	0.039	0.39	
		2	12.193	12.243	0.049	104553	0.040	0.4	2.53
4,4'-DDD	*	1	11.653	11.700	0.047	32732	0.038	0.38	
		2	12.028	12.074	0.046	83833	0.039	0.39	2.60
Endosulfan sulfate	*	1	13.633	13.687	0.054	42385	0.046	0.46	
		2	13.391	13.441	0.050	91965	0.043	0.43	6.74
4,4'-DDT	*	1	12.203	12.250	0.047	33956	0.038	0.38	
		2	12.634	12.682	0.048	78173	0.038	0.38	0.00
Methoxychlor	*	1	13.167	13.213	0.046	25956	0.039	0.39	
		2	13.983	14.029	0.047	52851	0.038	0.38	2.60
Endrin aldehyde	*	1	12.780	12.830	0.050	30082	0.031	0.31	
		2	12.857	12.907	0.050	63202	0.031	0.31	0.00

10

PESTICIDE ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

6891LCS2

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab Sample ID: 129712 Date(s) Analyzed: 02/18/04 02/18/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

gamma-Chlordane	*	1	9.987	10.037	0.050	49877	0.035	0.35	
		2	10.206	10.253	0.047	116608	0.038	0.38	8.22
alpha-Chlordane	*	1	10.260	10.310	0.050	48962	0.035	0.35	
		2	10.505	10.553	0.048	115306	0.038	0.38	8.22
Endrin ketone	*	1	14.170	14.220	0.050	53362	0.045	0.45	
		2	14.423	14.473	0.050	110524	0.042	0.42	6.90
2,4,5,6-tetrachloro-m-xylene	*	1	4.127	4.177	0.050	68791	0.061	0.61	
		2	4.169	4.213	0.043	165118	0.058	0.58	5.04
Decachlorobiphenyl	*	1	16.087	16.137	0.050	92093	0.056	0.56	
		2	16.778	16.828	0.050	112350	0.052	0.52	7.41

* Column used for quantitation

10

PESTICIDE ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

6891LCS3

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab Sample ID: 129713 Date(s) Analyzed: 02/18/04 02/18/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

COMPOUND		COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
alpha-BHC	*	1	5.733	5.787	0.054	35260	0.032	0.32	
		2	5.924	5.971	0.047	137539	0.038	0.38	17.14
beta-BHC	*	1	6.810	6.860	0.050	27084	0.036	0.36	
		2	7.076	7.121	0.045	74502	0.039	0.39	8.00
delta-BHC	*	1	7.227	7.280	0.053	34244	0.038	0.38	
		2	7.756	7.802	0.046	124384	0.043	0.43	12.35
gamma-BHC (Lindane)	*	1	6.557	6.610	0.053	38101	0.031	0.31	
		2	6.833	6.881	0.048	135783	0.039	0.39	22.86
Heptachlor	*	1	7.703	7.757	0.054	49310	0.033	0.33	
		2	7.854	7.903	0.048	131910	0.036	0.36	8.70
Aldrin	*	1	8.383	8.437	0.054	35143	0.031	0.31	
		2	8.570	8.618	0.048	111394	0.037	0.37	17.65
Heptachlor epoxide	*	1	9.720	9.773	0.053	48650	0.037	0.37	
		2	9.810	9.859	0.049	116939	0.038	0.38	2.67
Endosulfan I	*	1	10.533	10.587	0.054	46461	0.038	0.38	
		2	10.608	10.657	0.049	112812	0.040	0.4	5.13
Dieldrin	*	1	11.027	11.077	0.050	42099	0.036	0.36	
		2	11.164	11.213	0.049	108417	0.038	0.38	5.41
4,4'-DDE	*	1	10.447	10.493	0.046	36120	0.035	0.35	
		2	10.880	10.927	0.047	103545	0.039	0.39	10.81
Endrin	*	1	11.490	11.543	0.053	42017	0.038	0.38	
		2	11.768	11.818	0.050	106902	0.041	0.41	7.59
Endosulfan II	*	1	11.943	11.997	0.054	46104	0.041	0.41	
		2	12.193	12.243	0.049	111184	0.042	0.42	2.41
4,4'-DDD	*	1	11.653	11.700	0.047	33484	0.039	0.39	
		2	12.028	12.074	0.046	88196	0.041	0.41	5.00
Endosulfan sulfate	*	1	13.633	13.687	0.054	44191	0.048	0.48	
		2	13.392	13.441	0.049	95710	0.045	0.45	6.45
4,4'-DDT	*	1	12.200	12.250	0.050	35732	0.040	0.4	
		2	12.635	12.682	0.047	81278	0.040	0.4	0.00
Methoxychlor	*	1	13.163	13.213	0.050	27358	0.041	0.41	
		2	13.983	14.029	0.047	55045	0.040	0.4	2.47
Endrin aldehyde	*	1	12.780	12.830	0.050	31168	0.032	0.32	
		2	12.857	12.907	0.050	66485	0.033	0.33	3.08

010304 1121

Form X

10

PESTICIDE ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

6891LCS3

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab Sample ID: 129713 Date(s) Analyzed: 02/18/04 02/18/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

gamma-Chlordane	*	1	9.983	10.037	0.054	51981	0.037	0.37	
		2	10.205	10.253	0.048	121229	0.040	0.4	7.79
alpha-Chlordane	*	1	10.260	10.310	0.050	50720	0.036	0.36	
		2	10.505	10.553	0.048	119395	0.039	0.39	8.00
Endrin ketone	*	1	14.170	14.220	0.050	55839	0.048	0.48	
		2	14.422	14.473	0.050	115237	0.044	0.44	8.70
2,4,5,6-tetrachloro-m-xylene	*	1	4.120	4.177	0.057	60319	0.053	0.53	
		2	4.167	4.213	0.045	154517	0.054	0.54	1.87
Decachlorobiphenyl	*	1	16.087	16.137	0.050	103859	0.064	0.64	
		2	16.778	16.828	0.050	125337	0.058	0.58	9.84

* Column used for quantitation

10

PESTICIDE ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

6891TLCS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab Sample ID: 129714 Date(s) Analyzed: 02/18/04 02/18/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

COMPOUND		COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
2,4,5,6-tetrachloro-m-xylene	*	1	4.123	4.177	0.054	69878	0.062	0.62	
		2	4.170	4.213	0.042	150250	0.053	0.53	15.65
Decachlorobiphenyl	*	1	16.087	16.137	0.050	61383	0.038	0.38	
		2	16.779	16.828	0.049	75149	0.035	0.35	8.22

* Column used for quantitation

010304 1121

Form X

10

PESTICIDE ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab Sample ID: 240212601 Date(s) Analyzed: 02/18/04 02/18/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

COMPOUND		COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
2,4,5,6-tetrachloro-m-xylene	*	1	4.127	4.177	0.050	68984	0.061	0.62	
		2	4.170	4.213	0.042	190596	0.067	0.67	7.75
Decachlorobiphenyl	*	1	16.087	16.137	0.050	92567	0.057	0.57	
		2	16.778	16.828	0.050	110867	0.052	0.52	9.17

* Column used for quantitation

010304 1121

Form X

3

PESTICIDE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

6891LCS2

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
alpha-BHC	0.5	0.31	62.0		42.0	27 - 118
beta-BHC	0.5	0.34	68.0		36.0	33 - 130
delta-BHC	0.5	0.37	74.0		42.0	35 - 102
gamma-BHC (Lindane)	0.5	0.3	60.0		39.0	28 - 127
Heptachlor	0.5	0.32	64.0		31.0	25 - 123
Aldrin	0.5	0.3	60.0		42.0	55 - 117
Heptachlor epoxide	0.5	0.35	70.0		31.0	45 - 114
Endosulfan I	0.5	0.36	72.0		34.0	30 - 126
Dieldrin	0.5	0.35	70.0		31.0	35 - 116
4,4'-DDE	0.5	0.34	68.0		36.0	35 - 121
Endrin	0.5	0.37	74.0		31.0	37 - 121
Endosulfan II	0.5	0.39	78.0		31.0	36 - 121
4,4'-DDD	0.5	0.38	76.0		39.0	30 - 129
Endosulfan sulfate	0.5	0.46	92.0		34.0	34 - 125
4,4'-DDT	0.5	0.38	76.0		32.0	19 - 149
Methoxychlor	0.5	0.39	78.0		30.0	63 - 151
Endrin aldehyde	0.5	0.31	62.0		42.0	37 - 117
gamma-Chlordane	0.5	0.35	70.0		40.0	48 - 124
alpha-Chlordane	0.5	0.35	70.0		40.0	47 - 122
Endrin ketone	0.5	0.45	90.0		40.0	57 - 132

Spike Recovery: 0 out of 20 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

010304 1121

Form III

3

PESTICIDE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

6891LCS3

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
alpha-BHC	0.5	0.32	64.0	3.2	42.0	27 - 118
beta-BHC	0.5	0.36	72.0	5.7	36.0	33 - 130
delta-BHC	0.5	0.38	76.0	2.7	42.0	35 - 102
gamma-BHC (Lindane)	0.5	0.31	62.0	3.3	39.0	28 - 127
Heptachlor	0.5	0.33	66.0	3.1	31.0	25 - 123
Aldrin	0.5	0.31	62.0	3.3	42.0	55 - 117
Heptachlor epoxide	0.5	0.37	74.0	5.6	31.0	45 - 114
Endosulfan I	0.5	0.38	76.0	5.4	34.0	30 - 126
Dieldrin	0.5	0.36	72.0	2.8	31.0	35 - 116
4,4'-DDE	0.5	0.35	70.0	2.9	36.0	35 - 121
Endrin	0.5	0.38	76.0	2.7	31.0	37 - 121
Endosulfan II	0.5	0.41	82.0	5.0	31.0	36 - 121
4,4'-DDD	0.5	0.39	78.0	2.6	39.0	30 - 129
Endosulfan sulfate	0.5	0.48	96.0	4.3	34.0	34 - 125
4,4'-DDT	0.5	0.4	80.0	5.1	32.0	19 - 149
Methoxychlor	0.5	0.41	82.0	5.0	30.0	63 - 151
Endrin aldehyde	0.5	0.32	64.0	3.2	42.0	37 - 117
gamma-Chlordane	0.5	0.37	74.0	5.6	40.0	48 - 124
alpha-Chlordane	0.5	0.36	72.0	2.8	40.0	47 - 122
Endrin ketone	0.5	0.48	96.0	6.5	40.0	57 - 132

Spike Recovery: 0 out of 20 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

010304 1121

Form III

3

PESTICIDE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 6891TLCS

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Toxaphene	10	7.5	75.0		38.0	70 - 130

Spike Recovery: 0 out of 1 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

010304 1121

Form III

Standards Data

010304 1121

PESTICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1123

LAB FILE ID: RRF0.005 =PCAL1.D RRF0.01 =PCAL2.D
RRF0.02 =PCAL3.D RRF0.04 =PCAL4.D RRF0.06 =PCAL5.D

COMPOUND	RRF0.005	RRF0.01	RRF0.02	RRF0.04	RRF0.06
alpha-BHC	864600	946800	932100	1020925	1135316.667
beta-BHC	702400	760400	729500	743875	772283.333
delta-BHC	679200	761000	767650	836775	893566.667
gamma-BHC (Lindane)	1278600	1184400	1082700	1127125	1222450
Heptachlor	1532200	1566200	1448100	1441550	1493783.333
Aldrin	1003600	1070700	1023350	1077300	1162366.667
Heptachlor epoxide	1336400	1370500	1271650	1271750	1325383.333
Endosulfan I	1167800	1247400	1166700	1176250	1226900
Dieldrin	1072400	1123700	1065000	1099325	1178066.667
4,4'-DDE	883400	976500	930350	978625	1058866.667
Endrin	992200	1063700	1013050	1055375	1113633.333
Endosulfan II	1067600	1146700	1075800	1088800	1127983.333
4,4'-DDD	729000	799700	774250	827400	901616.667
Endosulfan sulfate	834400	934500	889200	912750	915933.333
4,4'-DDT	720400	818400	816000	875675	898000
Methoxychlor	626000	679200	647200	666950	665616.667
Endrin aldehyde	908600	1005700	963300	955425	973566.667
gamma-Chlordane	1400400	1474400	1370050	1370525	1398266.667
alpha-Chlordane	1334800	1449700	1342950	1349775	1404300
Endrin ketone	1020200	1147800	1104400	1144300	1189166.667
Toxaphene-1				251690	
Toxaphene-2				228260	
Toxaphene-3				203740	
Toxaphene-4				217310	
Toxaphene-5				218790	
==========					
2,4,5,6-tetrachloro-m-xylene(SURR)	1019400	1097000	1057600	1128400	1175400
Decachlorobiphenyl(SURR)	1810000	1854600	1539150	1635125	1614550

010304 1121

FORM VI

PESTICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1123

LAB FILE ID: RRF0.08 =PCAL6.D RRF0.1 =PCAL7.D
RRF0.15 =PCAL8.D

COMPOUND	RRF0.08	RRF0.1	RRF0.15		
alpha-BHC	1247437.5	1268530	1357426.667		
beta-BHC	795575	776420	763133.333		
delta-BHC	1026937.5	1051110	1120366.667		
gamma-BHC (Lindane)	1311412.5	1324390	1355886.667		
Heptachlor	1533375	1500620	1482200		
Aldrin	1228487.5	1229880	1270380		
Heptachlor epoxide	1367012.5	1340610	1334600		
Endosulfan I	1267925	1247600	1243520		
Dieldrin	1242712.5	1235410	1260880		
4,4'-DDE	1123212.5	1127580	1171340		
Endrin	1176737.5	1167680	1193493.333		
Endosulfan II	1174825	1153880	1155626.667		
4,4'-DDD	947675	947990	973080		
Endosulfan sulfate	982800	967570	964133.333		
4,4'-DDT	976100	965810	991493.333		
Methoxychlor	697600	671340	650626.667		
Endrin aldehyde	1017412.5	1000230	973140		
gamma-Chlordane	1472600	1439540	1420886.667		
alpha-Chlordane	1439337.5	1410140	1394346.667		
Endrin ketone	1271662.5	1259410	1263146.667		
Toxaphene-1					
Toxaphene-2					
Toxaphene-3					
Toxaphene-4					
Toxaphene-5					
==========					
2,4,5,6-tetrachloro-m-xylene(SURR)	1206675	1181050	1171006.667		
Decachlorobiphenyl(SURR)	1619650	1540950	1439673.333		

010304 1121

FORM VI

PESTICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1123

COMPOUND	CURVE	COEFFICIENTS AO	COEFFICIENTS A1	%RSD OR R^2
alpha-BHC	AVRG		1096641.9792	16.6
beta-BHC	AVRG		755448.33333	3.9
delta-BHC	AVRG		892075.72917	17.8
gamma-BHC (Lindane)	AVRG		1235870.5208	8
Heptachlor	AVRG		1499753.5417	2.9
Aldrin	AVRG		1133258.0208	9.1
Heptachlor epoxide	AVRG		1327238.2292	2.8
Endosulfan I	AVRG		1218011.875	3.4
Dieldrin	AVRG		1159686.7708	6.9
4,4'-DDE	AVRG		1031234.2708	10.1
Endrin	AVRG		1096983.6458	7
Endosulfan II	AVRG		1123901.875	3.6
4,4'-DDD	AVRG		862588.95833	10.7
Endosulfan sulfate	AVRG		925160.83333	5.2
4,4'-DDT	AVRG		882734.79167	10.7
Methoxychlor	AVRG		663066.66667	3.3
Endrin aldehyde	AVRG		974671.77083	3.5
gamma-Chlordane	AVRG		1418333.5417	2.9
alpha-Chlordane	AVRG		1390668.6458	3.2
Endrin ketone	AVRG		1175010.7292	7.5
Toxaphene-1	AVRG		251690	0
Toxaphene-2	AVRG		228260	0
Toxaphene-3	AVRG		203740	0
Toxaphene-4	AVRG		217310	0
Toxaphene-5	AVRG		218790	0
==========				
2,4,5,6-tetrachloro-m-xylene(SURR)	AVRG		1129566.4583	5.9
Decachlorobiphenyl(SURR)	AVRG		1631712.2917	8.5

010304 1121

FORM VI

PESTICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1123

LAB FILE ID: RT1: PCAL1.D RT2: PCAL2.D
RT3: PCAL3.D RT4: PCAL4.D RT5: PCAL5.D

COMPOUND	RT1	RT2	RT3	RT4	RT5	MIDCAL RT	RT WINDOW FROM	RT WINDOW TO
alpha-BHC	5.773	5.777	5.777	5.777	5.777			
beta-BHC	6.853	6.853	6.853	6.853	6.853			
delta-BHC	7.270	7.270	7.270	7.270	7.270			
gamma-BHC (Lindane)	6.600	6.600	6.600	6.603	6.600			
Heptachlor	7.750	7.750	7.750	7.750	7.750			
Aldrin	8.430	8.430	8.430	8.430	8.430			
Heptachlor epoxide	9.770	9.770	9.770	9.770	9.770			
Endosulfan I	10.583	10.583	10.583	10.583	10.583			
Dieldrin	11.077	11.077	11.077	11.077	11.077			
4,4'-DDE	10.490	10.490	10.490	10.493	10.493			
Endrin	11.540	11.540	11.540	11.540	11.540			
Endosulfan II	11.993	11.993	11.993	11.993	11.997			
4,4'-DDD	11.697	11.697	11.697	11.700	11.700			
Endosulfan sulfate	13.683	13.683	13.683	13.687	13.687			
4,4'-DDT	12.247	12.247	12.247	12.250	12.250			
Methoxychlor	13.210	13.210	13.210	13.210	13.210			
Endrin aldehyde	12.830	12.830	12.830	12.830	12.830			
gamma-Chlordane	10.030	10.030	10.030	10.033	10.030			
alpha-Chlordane	10.307	10.307	10.307	10.307	10.307			
Endrin ketone	14.220	14.220	14.220	14.220	14.220			
Toxaphene-1				11.970				
Toxaphene-2				12.210				
Toxaphene-3				12.643				
Toxaphene-4				13.277				
Toxaphene-5				13.473				
==========								
2,4,5,6-tetrachloro-m-xylene(SURR)	4.163	4.163	4.163	4.163	4.160			
Decachlorobiphenyl(SURR)	16.137	16.137	16.137	16.137	16.137			

010304 1121

FORM VI

PESTICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1123

LAB FILE ID: RT6: PCAL6.D RT7: PCAL7.D
RT8: PCAL8.D

COMPOUND	RT6	RT7	RT8			MIDCAL RT	RT WINDOW FROM	TO
alpha-BHC	5.777	5.780	5.780					
beta-BHC	6.853	6.853	6.857					
delta-BHC	7.273	7.273	7.273					
gamma-BHC (Lindane)	6.603	6.603	6.607					
Heptachlor	7.750	7.750	7.753					
Aldrin	8.430	8.433	8.433					
Heptachlor epoxide	9.770	9.770	9.773					
Endosulfan I	10.583	10.583	10.587					
Dieldrin	11.077	11.077	11.080					
4,4'-DDE	10.493	10.493	10.493					
Endrin	11.540	11.540	11.543					
Endosulfan II	11.997	11.993	11.997					
4,4'-DDD	11.700	11.700	11.703					
Endosulfan sulfate	13.687	13.687	13.687					
4,4'-DDT	12.250	12.250	12.250					
Methoxychlor	13.210	13.210	13.213					
Endrin aldehyde	12.830	12.830	12.833					
gamma-Chlordane	10.033	10.033	10.033					
alpha-Chlordane	10.307	10.307	10.310					
Endrin ketone	14.220	14.220	14.223					
Toxaphene-1								
Toxaphene-2								
Toxaphene-3								
Toxaphene-4								
Toxaphene-5								
==========								
2,4,5,6-tetrachloro-m-xylene(SURR)	4.163	4.167	4.167					
Decachlorobiphenyl(SURR)	16.137	16.137	16.137					

010304 1121

FORM VI

PESTICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1123

LAB FILE ID: RRF0.005 =PCAL1.D RRF0.01 =PCAL2.D
RRF0.02 =PCAL3.D RRF0.04 =PCAL4.D RRF0.06 =PCAL5.D

COMPOUND	RRF0.005	RRF0.01	RRF0.02	RRF0.04	RRF0.06
alpha-BHC	3140200	3424600	3423050	3655875	3838466.667
beta-BHC	2074000	2165000	1963750	1898325	1880883.333
delta-BHC	2814000	2860000	2679250	2885275	2900800
gamma-BHC (Lindane)	3158400	3455400	3383150	3514550	3617016.667
Heptachlor	4007400	4052100	3603900	3641450	3664933.333
Aldrin	2848600	3067000	2950950	3036625	3135166.667
Heptachlor epoxide	3281800	3324800	3064100	3013625	3061816.667
Endosulfan I	3014000	3082800	2829450	2773750	2773883.333
Dieldrin	2824800	2951600	2792100	2833225	2878583.333
4,4'-DDE	2612800	2711500	2587150	2689200	2765083.333
Endrin	2605000	2745700	2604750	2645025	2681866.667
Endosulfan II	2823600	2904100	2666400	2596125	2579650
4,4'-DDD	2016800	2168100	2101050	2167825	2240783.333
Endosulfan sulfate	2265800	2406200	2192450	2137775	2080033.333
4,4'-DDT	1967200	2125700	2038200	2101700	2065016.667
Methoxychlor	1516400	1572700	1432100	1384650	1332050
Endrin aldehyde	2163600	2287300	2084600	2004075	1969566.667
gamma-Chlordane	3370800	3406600	3095200	3014825	3015850
alpha-Chlordane	3455200	3436500	3090150	2975675	2953033.333
Endrin ketone	2550800	2792900	2651700	2649075	2646433.333
Toxaphene-1				322660	
Toxaphene-2				506610	
Toxaphene-3				791210	
Toxaphene-4				538780	
Toxaphene-5				461040	
==========					
2,4,5,6-tetrachloro-m-xylene(SURR)	3179000	3214000	2822850	2812925	2825816.667
Decachlorobiphenyl(SURR)	2686400	2617700	2345150	2099575	2012166.667

010304 1121

FORM VI

PESTICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1123

LAB FILE ID: RRF0.08 =PCAL6.D RRF0.1 =PCAL7.D
RRF0.15 =PCAL8.D

COMPOUND	RRF0.08	RRF0.1	RRF0.15		
alpha-BHC	3918800	3789190	3642393.333		
beta-BHC	1853625	1759360	1632773.333		
delta-BHC	3093862.5	2999440	2892946.667		
gamma-BHC (Lindane)	3657525	3519530	3336953.333		
Heptachlor	3640825	3470040	3250966.667		
Aldrin	3146975	3025510	2863753.333		
Heptachlor epoxide	3030512.5	2892750	2695353.333		
Endosulfan I	2777362.5	2645560	2474286.667		
Dieldrin	2894600	2768130	2598726.667		
4,4'-DDE	2791937.5	2676040	2527753.333		
Endrin	2710387.5	2597040	2454153.333		
Endosulfan II	2584637.5	2457080	2309680		
4,4'-DDD	2268437.5	2174550	2066346.667		
Endosulfan sulfate	2133012.5	2039360	1907433.333		
4,4'-DDT	2131300	2035900	1921913.333		
Methoxychlor	1327512.5	1252780	1151366.667		
Endrin aldehyde	1968812.5	1859030	1728560		
gamma-Chlordane	3006862.5	2864860	2680920		
alpha-Chlordane	2949175	2798480	2618306.667		
Endrin ketone	2695012.5	2568420	2414840		
Toxaphene-1					
Toxaphene-2					
Toxaphene-3					
Toxaphene-4					
Toxaphene-5					
==========					
2,4,5,6-tetrachloro-m-xylene(SURR)	2802400	2674080	2507360		
Decachlorobiphenyl(SURR)	1957912.5	1828390	1659833.333		

010304 1121

FORM VI

PESTICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1123

COMPOUND	CURVE	COEFFICIENTS AO	COEFFICIENTS A1	%RSD OR R^2
alpha-BHC	AVRG		3604071.875	7.2
beta-BHC	AVRG		1903464.5833	8.8
delta-BHC	AVRG		2890696.7708	4.2
gamma-BHC (Lindane)	AVRG		3455315.625	4.7
Heptachlor	AVRG		3666451.875	7.2
Aldrin	AVRG		3009322.5	3.8
Heptachlor epoxide	AVRG		3045594.6875	6.6
Endosulfan I	AVRG		2796386.5625	6.9
Dieldrin	AVRG		2817720.625	3.8
4,4'-DDE	AVRG		2670183.0208	3.4
Endrin	AVRG		2630490.3125	3.4
Endosulfan II	AVRG		2615159.0625	7.2
4,4'-DDD	AVRG		2150486.5625	4
Endosulfan sulfate	AVRG		2145258.0208	7
4,4'-DDT	AVRG		2048366.25	3.6
Methoxychlor	AVRG		1371194.8958	10
Endrin aldehyde	AVRG		2008193.0208	8.7
gamma-Chlordane	AVRG		3056989.6875	7.9
alpha-Chlordane	AVRG		3034565	9.6
Endrin ketone	AVRG		2621147.6042	4.3
Toxaphene-1	AVRG		322660	0
Toxaphene-2	AVRG		506610	0
Toxaphene-3	AVRG		791210	0
Toxaphene-4	AVRG		538780	0
Toxaphene-5	AVRG		461040	0
==========				
2,4,5,6-tetrachloro-m-xylene(SURR)	AVRG		2854803.9583	8.3
Decachlorobiphenyl(SURR)	AVRG		2150890.9375	17.1

010304 1121

FORM VI

PESTICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1123

LAB FILE ID: RT1: PCAL1.D RT2: PCAL2.D
RT3: PCAL3.D RT4: PCAL4.D RT5: PCAL5.D

COMPOUND	RT1	RT2	RT3	RT4	RT5	MIDCAL RT	RT WINDOW FROM	RT WINDOW TO
alpha-BHC	5.969	5.969	5.968	5.968	5.966			
beta-BHC	7.120	7.120	7.119	7.118	7.117			
delta-BHC	7.803	7.801	7.800	7.800	7.798			
gamma-BHC (Lindane)	6.879	6.879	6.879	6.878	6.877			
Heptachlor	7.902	7.902	7.902	7.901	7.900			
Aldrin	8.618	8.618	8.618	8.618	8.618			
Heptachlor epoxide	9.859	9.858	9.858	9.858	9.858			
Endosulfan I	10.658	10.657	10.657	10.657	10.657			
Dieldrin	11.213	11.213	11.213	11.213	11.213			
4,4'-DDE	10.927	10.925	10.926	10.926	10.927			
Endrin	11.818	11.818	11.818	11.817	11.818			
Endosulfan II	12.243	12.243	12.243	12.243	12.243			
4,4'-DDD	12.075	12.073	12.074	12.074	12.074			
Endosulfan sulfate	13.442	13.441	13.441	13.441	13.442			
4,4'-DDT	12.683	12.681	12.682	12.682	12.682			
Methoxychlor	14.030	14.029	14.029	14.028	14.029			
Endrin aldehyde	12.908	12.907	12.907	12.907	12.907			
gamma-Chlordane	10.253	10.253	10.253	10.253	10.253			
alpha-Chlordane	10.554	10.553	10.553	10.553	10.553			
Endrin ketone	14.473	14.473	14.473	14.473	14.473			
Toxaphene-1				12.150				
Toxaphene-2				12.213				
Toxaphene-3				12.407				
Toxaphene-4				12.920				
Toxaphene-5				13.906				
==========								
2,4,5,6-tetrachloro-m-xylene(SURR)	4.210	4.210	4.209	4.208	4.203			
Decachlorobiphenyl(SURR)	16.829	16.828	16.828	16.828	16.828			

010304 1121 FORM VI

PESTICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1123

LAB FILE ID: RT6: PCAL6.D RT7: PCAL7.D
RT8: PCAL8.D

COMPOUND	RT6	RT7	RT8			MIDCAL RT	RT WINDOW FROM	TO
alpha-BHC	5.968	5.968	5.968					
beta-BHC	7.118	7.118	7.118					
delta-BHC	7.799	7.798	7.799					
gamma-BHC (Lindane)	6.878	6.878	6.878					
Heptachlor	7.901	7.900	7.901					
Aldrin	8.617	8.617	8.618					
Heptachlor epoxide	9.858	9.858	9.858					
Endosulfan I	10.657	10.656	10.657					
Dieldrin	11.213	11.212	11.213					
4,4'-DDE	10.926	10.925	10.926					
Endrin	11.817	11.817	11.817					
Endosulfan II	12.242	12.242	12.243					
4,4'-DDD	12.074	12.073	12.074					
Endosulfan sulfate	13.440	13.440	13.441					
4,4'-DDT	12.681	12.681	12.682					
Methoxychlor	14.028	14.028	14.028					
Endrin aldehyde	12.906	12.905	12.906					
gamma-Chlordane	10.253	10.252	10.253					
alpha-Chlordane	10.553	10.552	10.553					
Endrin ketone	14.473	14.473	14.473					
Toxaphene-1								
Toxaphene-2								
Toxaphene-3								
Toxaphene-4								
Toxaphene-5								
==========								
2,4,5,6-tetrachloro-m-xylene(SURR)	4.208	4.208	4.208					
Decachlorobiphenyl(SURR)	16.827	16.827	16.827					

010304 1121 FORM VI

7SSC

PESTICIDE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 CalibrationDate: 02/13/04 Time: 1032

CCV ID: SSC160593 Lab File ID: PSEC1.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF	%D	
alpha-BHC	1096642	1058725	3.5	
beta-BHC	755448.33	771050	2.1	
delta-BHC	892075.73	830875	6.9	
gamma-BHC (Lindane)	1235870.5	1158325	6.3	
Heptachlor	1499753.5	1487300	0.8	
Aldrin	1133258	1126100	0.6	
Heptachlor epoxide	1327238.2	1377950	3.8	
Endosulfan I	1218011.9	1285675	5.6	
Dieldrin	1159686.8	1153100	0.6	
4,4'-DDE	1031234.3	1067925	3.6	
Endrin	1096983.6	1168925	6.6	
Endosulfan II	1123901.9	1195100	6.3	
4,4'-DDD	862588.96	892725	3.5	
Endosulfan sulfate	925160.83	1031050	11.4	
4,4'-DDT	882734.79	1005475	13.9	
Methoxychlor	663066.67	773775	16.7	<-
Endrin aldehyde	974671.77	919650	5.6	
gamma-Chlordane	1418333.6	1459100	2.9	
alpha-Chlordane	1390668.6	1455700	4.7	
Endrin ketone	1175010.7	1303775	11.0	
==========				
2,4,5,6-tetrachloro-m-xylene(SURR)	1129566.5	1239325	9.7	
Decachlorobiphenyl(SURR)	1631712.3	1864925	14.3	

Average Used: 6.4

010304 1121

FORM VII

7SSC

PESTICIDE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 CalibrationDate: 02/13/04 Time: 1032

CCV ID: SSC160594 Lab File ID: PSEC1.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF	%D
alpha-BHC	3604071.9	3999975	11.0
beta-BHC	1903464.6	2081975	9.4
delta-BHC	2890696.8	3061075	5.9
gamma-BHC (Lindane)	3455315.6	3836425	11.0
Heptachlor	3666451.9	3966625	8.2
Aldrin	3009322.5	3363350	11.8
Heptachlor epoxide	3045594.7	3356475	10.2
Endosulfan I	2796386.6	3085750	10.3
Dieldrin	2817720.6	3021225	7.2
4,4'-DDE	2670183	2984450	11.8
Endrin	2630490.3	2933850	11.5
Endosulfan II	2615159.1	2882125	10.2
4,4'-DDD	2150486.6	2352525	9.4
Endosulfan sulfate	2145258	2341825	9.2
4,4'-DDT	2048366.3	2342525	14.4
Methoxychlor	1371194.9	1549800	13.0
Endrin aldehyde	2008193	1905350	5.1
gamma-Chlordane	3056989.7	3330325	8.9
alpha-Chlordane	3034565	3286200	8.3
Endrin ketone	2621147.6	2838725	8.3
==========			
2,4,5,6-tetrachloro-m-xylene(SURR)	2854804	3135400	9.8
Decachlorobiphenyl(SURR)	2150890.9	2378575	10.6

010304 1121

FORM VII

PESTICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 CalibrationDate: 02/18/04 Time: 0440

CCV ID: CCV161459 Lab File ID: PCCV31.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.04	%D	
alpha-BHC	3604071.9	3917750	8.7	
beta-BHC	1903464.6	1979025	4.0	
delta-BHC	2890696.8	3620250	25.2	<-
gamma-BHC (Lindane)	3455315.6	3755375	8.7	
Heptachlor	3666451.9	3735500	1.9	
Aldrin	3009322.5	3225725	7.2	
Heptachlor epoxide	3045594.7	2977400	2.2	
Endosulfan I	2796386.6	2909875	4.1	
Dieldrin	2817720.6	2908225	3.2	
4,4'-DDE	2670183	2711075	1.5	
Endrin	2630490.3	2814650	7.0	
Endosulfan II	2615159.1	2738900	4.7	
4,4'-DDD	2150486.6	2277600	5.9	
Endosulfan sulfate	2145258	2445650	14.0	
4,4'-DDT	2048366.3	2100950	2.6	
Methoxychlor	1371194.9	1305725	4.8	
Endrin aldehyde	2008193	1944175	3.2	
gamma-Chlordane	3056989.7	3108225	1.7	
alpha-Chlordane	3034565	3070975	1.2	
Endrin ketone	2621147.6	2882800	10.0	
==========				
2,4,5,6-tetrachloro-m-xylene(SURR)	2854804	2920875	2.3	
Decachlorobiphenyl(SURR)	2150890.9	2080000	3.3	

Average Used: 5.8

010304 1121

FORM VII

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PESTICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 CalibrationDate: 02/18/04 Time: 0440

CCV ID: CCV161486 Lab File ID: PCCV31.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.04	%D	
alpha-BHC	1096642	1022475	6.8	
beta-BHC	755448.33	731550	3.2	
delta-BHC	892075.73	1007225	12.9	
gamma-BHC (Lindane)	1235870.5	1090250	11.8	
Heptachlor	1499753.5	1370550	8.6	
Aldrin	1133258	1037475	8.5	
Heptachlor epoxide	1327238.2	1273975	4.0	
Endosulfan I	1218011.9	1208775	0.8	
Dieldrin	1159686.8	1130000	2.6	
4,4'-DDE	1031234.3	975900	5.4	
Endrin	1096983.6	1126150	2.7	
Endosulfan II	1123901.9	1238675	10.2	
4,4'-DDD	862588.96	930250	7.8	
Endosulfan sulfate	925160.83	1142600	23.5	<-
4,4'-DDT	882734.79	982375	11.3	
Methoxychlor	663066.67	704725	6.3	
Endrin aldehyde	974671.77	990975	1.7	
gamma-Chlordane	1418333.6	1380100	2.7	
alpha-Chlordane	1390668.6	1329975	4.4	
Endrin ketone	1175010.7	1412475	20.2	<-
==========				
2,4,5,6-tetrachloro-m-xylene(SURR)	1129566.5	1154350	2.2	
Decachlorobiphenyl(SURR)	1631712.3	1739100	6.6	

Average Used: 7.5

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FORM VII

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PESTICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 CalibrationDate: 02/18/04 Time: 0531

CCV ID: CCV161468 Lab File ID: TCCV3.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.1	%D
Toxaphene-1	251690	240650	4.4
Toxaphene-2	228260	223420	2.1
Toxaphene-3	203740	204430	0.3
Toxaphene-4	217310	221080	1.7
Toxaphene-5	218790	215500	1.5

7

PESTICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 CalibrationDate: 02/18/04 Time: 0531

CCV ID: CCV161469 Lab File ID: TCCV3.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.1	%D
Toxaphene-1	322660	288800	10.5
Toxaphene-2	506610	464450	8.3
Toxaphene-3	791210	706330	10.7
Toxaphene-4	538780	481900	10.6
Toxaphene-5	461040	408860	11.3

7

PESTICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 CalibrationDate: 02/18/04 Time: 1155

CCV ID: CCV161896 Lab File ID: PCCV11.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.04	%D	
alpha-BHC	1096642	1030825	6.0	
beta-BHC	755448.33	742275	1.7	
delta-BHC	892075.73	1010125	13.2	
gamma-BHC (Lindane)	1235870.5	1100500	11.0	
Heptachlor	1499753.5	1421975	5.2	
Aldrin	1133258	1087825	4.0	
Heptachlor epoxide	1327238.2	1312875	1.1	
Endosulfan I	1218011.9	1249350	2.6	
Dieldrin	1159686.8	1187050	2.4	
4,4'-DDE	1031234.3	999350	3.1	
Endrin	1096983.6	1132150	3.2	
Endosulfan II	1123901.9	1207900	7.5	
4,4'-DDD	862588.96	923800	7.1	
Endosulfan sulfate	925160.83	1160825	25.5	<-
4,4'-DDT	882734.79	940000	6.5	
Methoxychlor	663066.67	712800	7.5	
Endrin aldehyde	974671.77	1016525	4.3	
gamma-Chlordane	1418333.6	1420400	0.1	
alpha-Chlordane	1390668.6	1413650	1.7	
Endrin ketone	1175010.7	1460400	24.3	<-
==========				
2,4,5,6-tetrachloro-m-xylene(SURR)	1129566.5	1110600	1.7	
Decachlorobiphenyl(SURR)	1631712.3	1625625	0.4	

Average Used: 6.4

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FORM VII

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PESTICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 CalibrationDate: 02/18/04 Time: 1155

CCV ID: CCV161897 Lab File ID: PCCV11.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.04	%D	
alpha-BHC	3604071.9	3953125	9.7	
beta-BHC	1903464.6	2010950	5.6	
delta-BHC	2890696.8	3659700	26.6	<-
gamma-BHC (Lindane)	3455315.6	3801200	10.0	
Heptachlor	3666451.9	3827800	4.4	
Aldrin	3009322.5	3307700	9.9	
Heptachlor epoxide	3045594.7	3232925	6.2	
Endosulfan I	2796386.6	3027900	8.3	
Dieldrin	2817720.6	3030475	7.6	
4,4'-DDE	2670183	2811950	5.3	
Endrin	2630490.3	2819500	7.2	
Endosulfan II	2615159.1	2872475	9.8	
4,4'-DDD	2150486.6	2376450	10.5	
Endosulfan sulfate	2145258	2569625	19.8	<-
4,4'-DDT	2048366.3	2190850	7.0	
Methoxychlor	1371194.9	1440975	5.1	
Endrin aldehyde	2008193	2037725	1.5	
gamma-Chlordane	3056989.7	3250925	6.3	
alpha-Chlordane	3034565	3214025	5.9	
Endrin ketone	2621147.6	3058800	16.7	<-
==========				
2,4,5,6-tetrachloro-m-xylene(SURR)	2854804	2882900	1.0	
Decachlorobiphenyl(SURR)	2150890.9	2252750	4.7	

Average Used: 8.6

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FORM VII

7

PESTICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 CalibrationDate: 02/18/04 Time: 1312

CCV ID: CCV161900 Lab File ID: TCCV12.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.1	%D
Toxaphene-1	251690	254200	1.0
Toxaphene-2	228260	220940	3.2
Toxaphene-3	203740	202950	0.4
Toxaphene-4	217310	215170	1.0
Toxaphene-5	218790	210130	4.0

7

PESTICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 CalibrationDate: 02/18/04 Time: 1312

CCV ID: CCV161901 Lab File ID: TCCV12.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.1	%D
Toxaphene-1	322660	309860	4.0
Toxaphene-2	506610	501620	1.0
Toxaphene-3	791210	754350	4.7
Toxaphene-4	538780	523720	2.8
Toxaphene-5	461040	447680	2.9

PESTICIDE ORGANIC CALIBRATION VERIFICATION SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

GC Column: STX-CLP1 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

EPA Sample No. (EVA): EVA160591 Date Analyzed: 02/13/04

Lab File ID (EVA): PEMA.D Time Analyzed: 0525

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	% BREAK-DOWN
endrin	11.55	11.44	11.64	0.00
4,4'-DDT	12.26	12.15	12.35	0.00
		Combined % breakdown:		0.00

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%

Endrin breakdown must be less than or equal to 15.0%

Combined breakdown must be less than or equal to 30.0%

PESTICIDE ORGANIC CALIBRATION VERIFICATION SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

GC Column: STX-CLP2 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

EPA Sample No. (EVA): EVA160592 Date Analyzed: 02/13/04

Lab File ID (EVA): PEMA.D Time Analyzed: 0525

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	% BREAK-DOWN
endrin	11.82	11.72	11.92	0.00
4,4'-DDT	12.69	12.58	12.78	0.00
		Combined % breakdown:		0.00

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%

Endrin breakdown must be less than or equal to 15.0%

Combined breakdown must be less than or equal to 30.0%

PESTICIDE ORGANIC CALIBRATION VERIFICATION SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

GC Column: STX-CLP2 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

EPA Sample No. (EVA): EVA161464 Date Analyzed: 02/18/04

Lab File ID (EVA): PEM31.D Time Analyzed: 0349

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	% BREAK-DOWN
endrin	11.77	11.72	11.92	1.93
4,4'-DDT	12.64	12.58	12.78	5.80
		Combined % breakdown:		7.73

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%

Endrin breakdown must be less than or equal to 15.0%

Combined breakdown must be less than or equal to 30.0%

PESTICIDE ORGANIC CALIBRATION VERIFICATION SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

GC Column: STX-CLP1 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

EPA Sample No. (EVA): EVA161487 Date Analyzed: 02/18/04

Lab File ID (EVA): PEM31.D Time Analyzed: 0349

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	% BREAK-DOWN
endrin	11.49	11.44	11.64	2.53
4,4'-DDT	12.20	12.15	12.35	6.44
		Combined % breakdown:		8.97

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%

Endrin breakdown must be less than or equal to 15.0%

Combined breakdown must be less than or equal to 30.0%

PESTICIDE ORGANIC CALIBRATION VERIFICATION SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

GC Column: STX-CLP1 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

EPA Sample No. (EVA): EVA161898 Date Analyzed: 02/18/04

Lab File ID (EVA): PEM11.D Time Analyzed: 1104

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	% BREAK-DOWN
endrin	11.50	11.44	11.64	3.78
4,4'-DDT	12.21	12.15	12.35	5.11
		Combined % breakdown:		8.89

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%

Endrin breakdown must be less than or equal to 15.0%

Combined breakdown must be less than or equal to 30.0%

PESTICIDE ORGANIC CALIBRATION VERIFICATION SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

GC Column: STX-CLP2 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

EPA Sample No. (EVA): EVA161899 Date Analyzed: 02/18/04

Lab File ID (EVA): PEM11.D Time Analyzed: 1104

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	% BREAK-DOWN
endrin	11.77	11.72	11.92	2.66
4,4'-DDT	12.64	12.58	12.78	5.04
		Combined % breakdown:		7.70

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%

Endrin breakdown must be less than or equal to 15.0%

Combined breakdown must be less than or equal to 30.0%

Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402126

METHOD: 8081 **MATRIX:** W

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
2,4,5,6-tetrachloro-m-xylene							45-125
4,4'-DDD	30-129	39	30-129	39			
4,4'-DDE	35-121	36	35-121	36			
4,4'-DDT	19-149	32	19-149	32			
Aldrin	55-117	42	55-117	42			
alpha-BHC	27-118	42	27-118	42			
alpha-Chlordane	47-122	40	47-122	40			
beta-BHC	33-130	36	33-130	36			
Decachlorobiphenyl							34-133
delta-BHC	35-102	42	35-102	42			
Dieldrin	35-116	31	35-116	31			
Endosulfan I	30-126	34	30-126	34			
Endosulfan II	36-121	31	36-121	31			
Endosulfan sulfate	34-125	34	34-125	34			
Endrin	37-121	31	37-121	31			
Endrin aldehyde	37-117	42	37-117	42			
Endrin ketone	57-132	40	57-132	40			
gamma-BHC (Lindane)	28-127	39	28-127	39			
gamma-Chlordane	48-124	40	48-124	40			
Heptachlor	25-123	31	25-123	31			
Heptachlor epoxide	45-114	31	45-114	31			
Methoxychlor	63-151	30	63-151	30			
Toxaphene	70-130	38	70-130	38			

010304 1121

GC/ECD PCB ORGANICS

METHOD 8082

010304 1121

CASE NARRATIVE
POLYCHLORINATED BIPHENYLS (PCB) SEMIVOLATILE ORGANIC

PEL Lab Reference No./SDG: 2402126

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

EPA SW846 8082 for Aroclor analysis.

IV. PREPARATION

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

V. ANALYSIS

A. Calibration:

All calibration criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

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

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met.

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

No spikes requested by client.

E. Internal Standards:

This method does not require the use of internal standards.

CASE NARRATIVE
POLYCHLORINATED BIPHENYLS (PCB) SEMIVOLATILE ORGANIC

PEL Lab Reference No./SDG: 2402126

Client: CH2M Hill

F. Samples:

Sample analysis proceeded normally.

Data was collected using dual column analysis, however only the primary column results were reported since there were no positive values above the MDL. Project specific RLs were used per client request.

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

SIGNED: _____ **DATE:** 2-20-04

W:\SV Naratives\Cecil Narratives\2402126_8082.doc

PCB ORGANIC CROSS REFERENCE TABLE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Method: 8082

EPA Sample No	Lab Sample ID
57285LW040212	240212601

010304 1121

Sample Data

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1

PCB ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 240212601 Lab File ID: 126-01.D

Sample wt/vol: 990 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 10 Date Extracted: 02/16/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 1023

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Waste Character Method: 8082

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
12674-11-2	Aroclor-1016	0.5	U
11096-82-5	Aroclor-1260	0.5	U
11104-28-2	Aroclor-1221	5	U
11141-16-5	Aroclor-1232	5	U
53469-21-9	Aroclor-1242	5	U
12672-29-6	Aroclor-1248	5	U
11097-69-1	Aroclor-1254	5	U

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

010304 1121

Form I

QC Summary

010304 1121

1

PCB ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

6891BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 129711 Lab File ID: 6891BLK.D

Sample wt/vol: 1000 Units: ML Date Received: 02/16/04

Concentrated Extract Volume: 10 Date Extracted: 02/16/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 0659

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8082

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
12674-11-2	Aroclor-1016	0.5	U
11096-82-5	Aroclor-1260	0.5	U
11104-28-2	Aroclor-1221	5	U
11141-16-5	Aroclor-1232	5	U
53469-21-9	Aroclor-1242	5	U
12672-29-6	Aroclor-1248	5	U
11097-69-1	Aroclor-1254	5	U

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

010304 1121

Form I

PCB ORGANIC METHOD BLANK SUMMARY

EPA Sample No.: 6891BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab File ID: 6891BLK.D Lab Sample ID: 129711

Instrument ID: SECD02 Date Extracted: 02/16/04

Matrix: WATER Date Analyzed: 02/18/04

Level:(low/med) LOW Time Analyzed: 0659

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	6892LCS2	129717	6892LCS2.D	02/18/04	0932
2	6892LCS3	129718	6892LCS3.D	02/18/04	0957
3	57285LW040212	240212601	126-01.D	02/18/04	1023

COMMENTS:

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Form IV

2A

WATER PCB ORGANIC SURROGATE RECOVERY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402126

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
57285LW040212	61.0						0
6891BLK	42.0						0
6892LCS2	65.0						0
6892LCS3	75.0						0

Control Limits

S1 = Decachlorobiphenyl 16 - 116

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

Control limit source: (lab/method) METHOD

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Form II

010304 1121

PCB ORGANIC ANALYTICAL SEQUENCE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

GC Column: STX-CLP1 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

Instrument ID: SECD02

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 16.13 S2 :

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
1	STD161691	1962	166CAL62.D	02/13/04	1240	16.13	
2	STD161693	1963	166CAL5.D	02/13/04	1306	16.13	
3	STD161695	1964	166CAL4.D	02/13/04	1331	16.13	
4	STD161697	1965	166CAL3.D	02/13/04	1357	16.13	
5	STD161699	1966	166CAL2.D	02/13/04	1422	16.14	
6	STD161701	1967	166CAL1.D	02/13/04	1448	16.14	
7	STD161703	1968	21CAL3.D	02/13/04	1721		
8	STD161705	1969	32CAL3.D	02/13/04	1747		
9	STD161707	1970	42CAL3.D	02/13/04	1812		
10	STD161709	1971	48CAL3.D	02/13/04	1838		
11	STD161711	1972	54CAL3.D	02/13/04	1903		
12	CCV161921	1773	166CCV3.D	02/18/04	0622	16.09	
13	6891BLK	129711	6891BLK.D	02/18/04	0659	16.09	
14	6892LCS2	129717	6892LCS2.D	02/18/04	0932	16.08	
15	6892LCS3	129718	6892LCS3.D	02/18/04	0957	16.08	
16	57285LW040212	240212601	126-01.D	02/18/04	1023	16.09	
17	CCV161912		166CCV11.D	02/18/04	1428	16.08	

QC LIMITS

S1 = Decachlorobiphenyl (+/- 0.2 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

Page 1 of 1

010304 1121 FORM VIII

PCB ORGANIC ANALYTICAL SEQUENCE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

GC Column: STX-CLP2 ID: 0.32 (mm) Init. Calib. Date: 02/13/04

Instrument ID: SECD02

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 16.83 S2 :

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
1	STD161692	1962	166CAL62.D	02/13/04	1240	16.83	
2	STD161694	1963	166CAL5.D	02/13/04	1306	16.83	
3	STD161696	1964	166CAL4.D	02/13/04	1331	16.83	
4	STD161698	1965	166CAL3.D	02/13/04	1357	16.83	
5	STD161700	1966	166CAL2.D	02/13/04	1422	16.83	
6	STD161702	1967	166CAL1.D	02/13/04	1448	16.83	
7	STD161704	1968	21CAL3.D	02/13/04	1721		
8	STD161706	1969	32CAL3.D	02/13/04	1747		
9	STD161708	1970	42CAL3.D	02/13/04	1812		
10	STD161710	1971	48CAL3.D	02/13/04	1838		
11	STD161712	1972	54CAL3.D	02/13/04	1903		
12	CCV161922	1773	166CCV3.D	02/18/04	0622	16.78	
13	6891BLK	129711	6891BLK.D	02/18/04	0659	16.78	
14	6892LCS2	129717	6892LCS2.D	02/18/04	0932	16.78	
15	6892LCS3	129718	6892LCS3.D	02/18/04	0957	16.78	
16	57285LW040212	240212601	126-01.D	02/18/04	1023	16.78	
17	CCV161913		166CCV11.D	02/18/04	1428	16.78	

QC LIMITS

S1 = Decachlorobiphenyl (+/- 0.2 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

Page 1 of 1

010304 1121 FORM VIII

10

PCB ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

6891BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab Sample ID: 129711 Date(s) Analyzed: 02/18/04 02/18/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

COMPOUND		COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
Decachlorobiphenyl	*	1	16.093	16.137	0.044	65246	0.042	0.42	
		2	16.778	16.828	0.050	79281	0.048	0.48	13.33

* Column used for quantitation

010304 1121

Form X

10

PCB ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

6892LCS2

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab Sample ID: 129717 Date(s) Analyzed: 02/18/04 02/18/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

COMPOUND		COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
Aroclor-1016	*	1	9.000	9.000	0.000	189154	0.62	6.2	
		2	8.000	8.000	0.000	335542	0.62	6.2	0.00
Aroclor-1260	*	1	17.000	17.000	0.000	326973	0.69	6.9	
		2	17.000	17.000	0.000	456286	0.68	6.8	1.46
Decachlorobiphenyl	*	1	16.083	16.137	0.054	100905	0.065	0.65	
		2	16.776	16.828	0.052	122672	0.074	0.74	12.95

* Column used for quantitation

10

PCB ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

6892LCS3

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab Sample ID: 129718 Date(s) Analyzed: 02/18/04 02/18/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

COMPOUND		COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
Aroclor-1016	*	1	9.000	9.000	0.000	188042	0.62	6.2	
		2	8.000	8.000	0.000	330624	0.61	6.1	1.63
Aroclor-1260	*	1	17.000	17.000	0.000	316697	0.67	6.7	
		2	17.000	17.000	0.000	450761	0.67	6.7	0.00
Decachlorobiphenyl	*	1	16.083	16.137	0.054	115936	0.075	0.75	
		2	16.776	16.828	0.052	139125	0.084	0.84	11.32

* Column used for quantitation

10

PCB ORGANIC DUAL COLUMN CONFIRMATION CHECK

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab Sample ID: 240212601 Date(s) Analyzed: 02/18/04 02/18/04

Instrumet ID (1): SECD02 Instrumet ID (2): SECD02

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

COMPOUND		COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
Decachlorobiphenyl	*	1	16.087	16.137	0.050	92674	0.060	0.61	
		2	16.778	16.828	0.050	111117	0.067	0.68	10.85

* Column used for quantitation

010304 1121

Form X

3

PCB ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 6892LCS2

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	10	6.2	62.0		30.0	37 - 100
Aroclor-1260	10	6.9	69.0		30.0	47 - 96

Spike Recovery: 0 out of 2 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

010304 1121

Form III

3

PCB ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 6892LCS3

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	10	6.2	62.0	0.0	30.0	37 - 100
Aroclor-1260	10	6.7	67.0	2.9	30.0	47 - 96

Spike Recovery: 0 out of 2 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

010304 1121

Form III

Standards Data

010304 1121

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RRF0.01 =166CAL1.D RRF0.02 =166CAL2.D
RRF0.1 =166CAL3.D RRF0.2 =166CAL4.D RRF0.4 =166CAL5.D

COMPOUND	RRF0.01	RRF0.02	RRF0.1	RRF0.2	RRF0.4
1016-1	723400	654400	618530	580920	572940
1016-2	309600	302050	291820	258795	259800
1016-3	155300	149800	145860	138845	137452.5
1016-4	320100	303300	282510	263600	252387.5
1016-5	220900	209050	196740	182940	173095
1260-1	526700	465150	428970	386495	382337.5
1260-2	777900	682300	642590	589405	574130
1260-3	775400	694800	667760	640650	646775
1260-4	359700	373800	354120	330090	321172.5
1260-5	362600	325800	335380	316385	311802.5
1221-1			77730		
1221-2			54210		
1221-3			210310		
1221-4			49390		
1221-5			36830		
1232-1			170850		
1232-2			138530		
1232-3			228620		
1232-4			105500		
1232-5			100560		
1242-1			239700		
1242-2			397000		
1242-3			180960		
1242-4			189930		
1242-5			150620		
1248-1			181150		
1248-2			299940		
1248-3			237820		
1248-4			257040		
1248-5			221870		
1254-1			243730		
1254-2			442150		
1254-3			459970		

010304 1121

FORM VI

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RRF0.01 =166CAL1.D RRF0.02 =166CAL2.D
RRF0.1 =166CAL3.D RRF0.2 =166CAL4.D RRF0.4 =166CAL5.D

COMPOUND	RRF0.01	RRF0.02	RRF0.1	RRF0.2	RRF0.4
1254-4			351810		
1254-5			318660		
==========					
Decachlorobiphenyl(SURR)	1881840	1693540	1521276	1412074	1367158.5

010304 1121

FORM VI

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RRF0.5 =166CAL62.D

COMPOUND	RRF0.5				
1016-1	579506				
1016-2	250930				
1016-3	142518				
1016-4	255978				
1016-5	168056				
1260-1	367220				
1260-2	556544				
1260-3	639488				
1260-4	310684				
1260-5	306198				
1221-1					
1221-2					
1221-3					
1221-4					
1221-5					
1232-1					
1232-2					
1232-3					
1232-4					
1232-5					
1242-1					
1242-2					
1242-3					
1242-4					
1242-5					
1248-1					
1248-2					
1248-3					
1248-4					
1248-5					
1254-1					
1254-2					
1254-3					

6

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RRF0.5 =166CAL62.D					
COMPOUND	RRF0.5				
1254-4					
1254-5					
==========					
Decachlorobiphenyl(SURR)	1371314.8				

010304 1121

FORM VI

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1903

COMPOUND	CURVE	COEFFICIENTS AO	COEFFICIENTS A1	%RSD OR R^2
1016-1	AVRG		621616	9.4
1016-2	AVRG		278832.5	9.1
1016-3	AVRG		144962.58333	4.7
1016-4	AVRG		279645.91667	9.8
1016-5	AVRG		191796.83333	10.8
1260-1	AVRG		426145.41667	14.3
1260-2	AVRG		637144.83333	13.1
1260-3	AVRG		677478.83333	7.7
1260-4	AVRG		341594.41667	7.2
1260-5	AVRG		326360.91667	6.3
1221-1	AVRG		77730	0
1221-2	AVRG		54210	0
1221-3	AVRG		210310	0
1221-4	AVRG		49390	0
1221-5	AVRG		36830	0
1232-1	AVRG		170850	0
1232-2	AVRG		138530	0
1232-3	AVRG		228620	0
1232-4	AVRG		105500	0
1232-5	AVRG		100560	0
1242-1	AVRG		239700	0
1242-2	AVRG		397000	0
1242-3	AVRG		180960	0
1242-4	AVRG		189930	0
1242-5	AVRG		150620	0
1248-1	AVRG		181150	0
1248-2	AVRG		299940	0
1248-3	AVRG		237820	0
1248-4	AVRG		257040	0
1248-5	AVRG		221870	0
1254-1	AVRG		243730	0
1254-2	AVRG		442150	0
1254-3	AVRG		459970	0

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1903

COMPOUND	CURVE	COEFFICIENTS AO	COEFFICIENTS A1	%RSD OR R^2
1254-4	AVRG		351810	0
1254-5	AVRG		318660	0
==========				
Decachlorobiphenyl(SURR)	AVRG		1541200.55	13.5

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RT1: 166CAL1.D RT2: 166CAL2.D
RT3: 166CAL3.D RT4: 166CAL4.D RT5: 166CAL5.D

COMPOUND	RT1	RT2	RT3	RT4	RT5	MIDCAL RT	RT WINDOW FROM	RT WINDOW TO
1016-1	7.317	7.317	7.317	7.320	7.320			
1016-2	7.623	7.627	7.623	7.623	7.627			
1016-3	7.767	7.767	7.767	7.767	7.770			
1016-4	8.540	8.540	8.540	8.540	8.540			
1016-5	9.893	9.897	9.893	9.893	9.897			
1260-1	11.077	11.077	11.077	11.077	11.077			
1260-2	11.627	11.630	11.627	11.627	11.630			
1260-3	12.183	12.183	12.183	12.183	12.183			
1260-4	12.403	12.403	12.403	12.403	12.403			
1260-5	12.887	12.890	12.887	12.887	12.890			
1221-1			4.710					
1221-2			5.137					
1221-3			5.250					
1221-4			6.510					
1221-5			7.320					
1232-1			5.250					
1232-2			6.190					
1232-3			7.320					
1232-4			7.627					
1232-5			8.540					
1242-1			6.190					
1242-2			7.317					
1242-3			7.623					
1242-4			8.540					
1242-5			9.500					
1248-1			8.047					
1248-2			8.537					
1248-3			9.440					
1248-4			9.500					
1248-5			9.907					
1254-1			9.357					
1254-2			9.893					
1254-3			10.710					
1254-4			11.267					
1254-5			11.633					

010304 1121

FORM VI

6

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RT1: 166CAL1.D RT2: 166CAL2.D
RT3: 166CAL3.D RT4: 166CAL4.D RT5: 166CAL5.D

COMPOUND	RT1	RT2	RT3	RT4	RT5	MIDCAL RT	RT WINDOW FROM	RT WINDOW TO
Decachlorobiphenyl(SURR)	16.137	16.137	16.133	16.133	16.133			

010304 1121

FORM VI

6

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RT6: 166CAL62.D

COMPOUND	RT6					MIDCAL RT	RT WINDOW FROM	TO
1016-1	7.320							
1016-2	7.627							
1016-3	7.770							
1016-4	8.540							
1016-5	9.897							
1260-1	11.077							
1260-2	11.630							
1260-3	12.183							
1260-4	12.403							
1260-5	12.887							
1221-1								
1221-2								
1221-3								
1221-4								
1221-5								
1232-1								
1232-2								
1232-3								
1232-4								
1232-5								
1242-1								
1242-2								
1242-3								
1242-4								
1242-5								
1248-1								
1248-2								
1248-3								
1248-4								
1248-5								
1254-1								
1254-2								
1254-3								
1254-4								
1254-5								

6

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RT6: 166CAL62.D

COMPOUND	RT6					MIDCAL RT	RT WINDOW FROM	TO
Decachlorobiphenyl(SURR)	16.133							

010304 1121

FORM VI

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RRF0.01 =166CAL1.D RRF0.02 =166CAL2.D
RRF0.1 =166CAL3.D RRF0.2 =166CAL4.D RRF0.4 =166CAL5.D

COMPOUND	RRF0.01	RRF0.02	RRF0.1	RRF0.2	RRF0.4
1016-1	1489200	1295250	1172260	1088780	1007255
1016-2	643900	560500	519400	479750	437450
1016-3	361200	350000	320390	302875	286260
1016-4	509700	448600	386450	359460	325167.5
1016-5	322800	294950	280020	258350	234437.5
1260-1	1005000	821850	677750	596920	532725
1260-2	1128600	955850	772910	685630	617997.5
1260-3	1087800	965700	831060	775120	710445
1260-4	671000	586550	490020	453820	409565
1260-5	751000	649000	589010	529005	486482.5
1221-1			168030		
1221-2			122560		
1221-3			412170		
1221-4			59310		
1221-5			68240		
1232-1			328750		
1232-2			267680		
1232-3			458820		
1232-4			210930		
1232-5			150660		
1242-1			432760		
1242-2			777580		
1242-3			353200		
1242-4			269550		
1242-5			287350		
1248-1			446860		
1248-2			508590		
1248-3			482310		
1248-4			539040		
1248-5			554650		
1254-1			481620		
1254-2			542300		
1254-3			429440		

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RRF0.01 =166CAL1.D RRF0.02 =166CAL2.D
RRF0.1 =166CAL3.D RRF0.2 =166CAL4.D RRF0.4 =166CAL5.D

COMPOUND	RRF0.01	RRF0.02	RRF0.1	RRF0.2	RRF0.4
1254-4			793490		
1254-5			586030		
==========					
Decachlorobiphenyl(SURR)	2364080	1985740	1584148	1427909	1297732

010304 1121

FORM VI

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RRF0.5 =166CAL62.D

COMPOUND	RRF0.5				
1016-1	991718				
1016-2	428452				
1016-3	283172				
1016-4	316992				
1016-5	226524				
1260-1	519266				
1260-2	603480				
1260-3	700898				
1260-4	405944				
1260-5	476814				
1221-1					
1221-2					
1221-3					
1221-4					
1221-5					
1232-1					
1232-2					
1232-3					
1232-4					
1232-5					
1242-1					
1242-2					
1242-3					
1242-4					
1242-5					
1248-1					
1248-2					
1248-3					
1248-4					
1248-5					
1254-1					
1254-2					
1254-3					

6

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RRF0.5 =166CAL62.D					
COMPOUND	RRF0.5				
1254-4					
1254-5					
==========					
Decachlorobiphenyl(SURR)	1276907.6				

010304 1121

FORM VI

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1903

COMPOUND	CURVE	COEFFICIENTS AO	COEFFICIENTS A1	%RSD OR R^2	
1016-1	AVRG		1174077.1667	16.3	
1016-2	AVRG		511575.33333	16	
1016-3	AVRG		317316.16667	10.3	
1016-4	AVRG		391061.58333	19.2	
1016-5	AVRG		269513.58333	13.7	
1260-1	AVRG		692251.83333	27.4	<-
1260-2	AVRG		794077.91667	26.3	<-
1260-3	AVRG		845170.5	18.1	
1260-4	AVRG		502816.5	21	<-
1260-5	AVRG		580218.58333	18.3	
1221-1	AVRG		168030	0	
1221-2	AVRG		122560	0	
1221-3	AVRG		412170	0	
1221-4	AVRG		59310	0	
1221-5	AVRG		68240	0	
1232-1	AVRG		328750	0	
1232-2	AVRG		267680	0	
1232-3	AVRG		458820	0	
1232-4	AVRG		210930	0	
1232-5	AVRG		150660	0	
1242-1	AVRG		432760	0	
1242-2	AVRG		777580	0	
1242-3	AVRG		353200	0	
1242-4	AVRG		269550	0	
1242-5	AVRG		287350	0	
1248-1	AVRG		446860	0	
1248-2	AVRG		508590	0	
1248-3	AVRG		482310	0	
1248-4	AVRG		539040	0	
1248-5	AVRG		554650	0	
1254-1	AVRG		481620	0	
1254-2	AVRG		542300	0	
1254-3	AVRG		429440	0	

010304 1121

FORM VI

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1903

COMPOUND	CURVE	COEFFICIENTS AO	COEFFICIENTS A1	%RSD OR R^2	
1254-4	AVRG		793490	0	
1254-5	AVRG		586030	0	
==========					
Decachlorobiphenyl(SURR)	AVRG		1656086.1	26.2	<-

Average Used: 5.9

010304 1121

FORM VI

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RT1: 166CAL1.D RT2: 166CAL2.D
RT3: 166CAL3.D RT4: 166CAL4.D RT5: 166CAL5.D

COMPOUND	RT1	RT2	RT3	RT4	RT5	MIDCAL RT	RT WINDOW FROM	RT WINDOW TO
1016-1	7.701	7.702	7.701	7.700	7.701			
1016-2	7.998	7.999	7.998	7.997	7.998			
1016-3	8.224	8.225	8.224	8.223	8.223			
1016-4	9.011	9.012	9.010	9.009	9.010			
1016-5	9.883	9.884	9.884	9.883	9.883			
1260-1	11.577	11.577	11.576	11.575	11.576			
1260-2	11.982	11.983	11.981	11.980	11.981			
1260-3	12.684	12.685	12.684	12.683	12.683			
1260-4	12.856	12.857	12.856	12.854	12.855			
1260-5	13.430	13.431	13.430	13.428	13.429			
1221-1			5.081					
1221-2			5.463					
1221-3			5.621					
1221-4			6.773					
1221-5			7.702					
1232-1			5.621					
1232-2			6.640					
1232-3			7.702					
1232-4			7.999					
1232-5			9.012					
1242-1			6.639					
1242-2			7.700					
1242-3			7.997					
1242-4			9.009					
1242-5			9.891					
1248-1			9.009					
1248-2			9.265					
1248-3			9.795					
1248-4			9.889					
1248-5			10.354					
1254-1			9.883					
1254-2			10.266					
1254-3			10.961					
1254-4			11.191					
1254-5			11.636					

010304 1121

FORM VI

6

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RT1: 166CAL1.D RT2: 166CAL2.D
RT3: 166CAL3.D RT4: 166CAL4.D RT5: 166CAL5.D

COMPOUND	RT1	RT2	RT3	RT4	RT5	MIDCAL RT	RT WINDOW FROM	RT WINDOW TO
Decachlorobiphenyl(SURR)	16.828	16.828	16.828	16.826	16.827			

010304 1121

FORM VI

6

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RT6: 166CAL62.D

COMPOUND	RT6					MIDCAL RT	RT WINDOW FROM	TO
1016-1	7.701							
1016-2	7.998							
1016-3	8.223							
1016-4	9.009							
1016-5	9.883							
1260-1	11.575							
1260-2	11.980							
1260-3	12.683							
1260-4	12.854							
1260-5	13.428							
1221-1								
1221-2								
1221-3								
1221-4								
1221-5								
1232-1								
1232-2								
1232-3								
1232-4								
1232-5								
1242-1								
1242-2								
1242-3								
1242-4								
1242-5								
1248-1								
1248-2								
1248-3								
1248-4								
1248-5								
1254-1								
1254-2								
1254-3								
1254-4								
1254-5								

6

PCB ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 Calibration Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm) Calibration Time: 1903

LAB FILE ID: RT6: 166CAL62.D

COMPOUND	RT6					MIDCAL RT	RT WINDOW FROM	TO
Decachlorobiphenyl(SURR)	16.827							

010304 1121

FORM VI

7

PCB ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 CalibrationDate: 02/18/04 Time: 0622

CCV ID: CCV161921 Lab File ID: 166CCV3.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.1	%D
1016-1	621616	605770	2.5
1016-2	278832.5	275290	1.3
1016-3	144962.58	143440	1.1
1016-4	279645.92	274570	1.8
1016-5	191796.83	219710	14.6
1260-1	426145.42	402150	5.6
1260-2	637144.83	644310	1.1
1260-3	677478.83	634560	6.3
1260-4	341594.42	347190	1.6
1260-5	326360.92	330520	1.3
==========			
Decachlorobiphenyl(SURR)	1541200.6	1359840	11.8

010304 1121

FORM VII

7

PCB ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 CalibrationDate: 02/18/04 Time: 0622

CCV ID: CCV161922 Lab File ID: 166CCV3.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.1	%D	
1016-1	1174077.2	1152750	1.8	
1016-2	511575.33	538590	5.3	
1016-3	317316.17	320370	1.0	
1016-4	391061.58	392580	0.4	
1016-5	269513.58	188100	30.2	<-
1260-1	692251.83	674620	2.5	
1260-2	794077.92	836110	5.3	
1260-3	845170.5	830740	1.7	
1260-4	502816.5	503920	0.2	
1260-5	580218.58	571730	1.5	
==========				
Decachlorobiphenyl(SURR)	1656086.1	1412124	14.7	

Average Used: 5.9

010304 1121

FORM VII

7

PCB ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 CalibrationDate: 02/18/04 Time: 1428

CCV ID: CCV161912 Lab File ID: 166CCV11.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.1	%D
1016-1	621616	610990	1.7
1016-2	278832.5	265040	4.9
1016-3	144962.58	135860	6.3
1016-4	279645.92	280800	0.4
1016-5	191796.83	206430	7.6
1260-1	426145.42	456510	7.1
1260-2	637144.83	682300	7.1
1260-3	677478.83	707750	4.5
1260-4	341594.42	373220	9.3
1260-5	326360.92	350810	7.5
==========			
Decachlorobiphenyl(SURR)	1541200.6	1451440	5.8

010304 1121

FORM VII

7

PCB ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD02 CalibrationDate: 02/18/04 Time: 1428

CCV ID: CCV161913 Lab File ID: 166CCV11.D Init. Calib. Date: 02/13/04

GC Column: STX-CLP2 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.1	%D	
1016-1	1174077.2	1237820	5.4	
1016-2	511575.33	540070	5.6	
1016-3	317316.17	255780	19.4	<-
1016-4	391061.58	407880	4.3	
1016-5	269513.58	278540	3.3	
1260-1	692251.83	714300	3.2	
1260-2	794077.92	819480	3.2	
1260-3	845170.5	868390	2.7	
1260-4	502816.5	518790	3.2	
1260-5	580218.58	616460	6.2	
==========				
Decachlorobiphenyl(SURR)	1656086.1	1520594	8.2	

Average Used: 5.9

010304 1121

FORM VII

Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402126

METHOD: 8082 **MATRIX:** W

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
Aroclor-1016	37-100	30	37-100	30			
Aroclor-1221	70-130	30	70-130	30			
Aroclor-1232	70-130	30	70-130	30			
Aroclor-1242	70-130	30	70-130	30			
Aroclor-1248	70-130	30	70-130	30			
Aroclor-1254	70-130	30	70-130	30			
Aroclor-1260	47-96	30	47-96	30			
Decachlorobiphenyl							16-116

010304 1121

GC/ECD HERBICIDE ORGANICS

METHOD 8151

010304 1122

CASE NARRATIVE
GC/ECD SEMIVOLATILE ORGANIC

PEL Lab Reference No./SDG: 2402126

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

EPA SW846 8151.

IV. PREPARATION

Water samples were prepared by EPA SW846 3510 for 8151 semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All calibration criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

A LCS/LCSD set was analyzed with samples extracted on 02/13/04 named 6882LCS2 and 6882LCSD3 respectively. All acceptance criteria were met.

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

No spikes requested by client.

E. Internal Standards:

All acceptance criteria were met.

CASE NARRATIVE
GC/ECD SEMIVOLATILE ORGANIC

PEL Lab Reference No./SDG: 2402126

Client: CH2M Hill

F. Samples:

Samples were initially analyzed and preliminary reports provided. However it was discovered that the GC/ECD was not at optimum working conditions. The system was brought under control and recalibrated. Samples and quality control were subsequently re-analyzed. Since the re-analyzed set of data met all acceptance criteria only that set was reported.

Data was collected using dual column analysis. Please note that the higher value of the two columns is reported, unless the %D between the two columns is >40%, in which case the lower of the two values is reported. However, since no target analytes were detected only one column was reported.

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

SIGNED: _____ **DATE:** 2-26-01

W:\SV Naratives\2402126_8151R1.doc

HERBICIDE ORGANIC CROSS REFERENCE TABLE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Method: 8151

EPA Sample No	Lab Sample ID
57285LW040212	240212601

010304 1122

Sample Data

010304 1122

1

HERBICIDE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 240212601 Lab File ID: 126-1.D

Sample wt/vol: 1000 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 10 Date Extracted: 02/14/04

Level:(low/med) LOW Date Analyzed: 02/24/04 Time: 1804

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Waste Character Method: 8151

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
1918-00-9	Dicamba	0.25	U
75-99-0	Dalapon	0.25	U
93-65-2	MCPP	25	U
94-74-6	MCPA	25	U
120-36-5	Dichloroprop	0.25	U
94-75-7	2,4'-D	0.25	U
93-72-1	2,4,5-TP (Silvex)	0.25	U
93-76-5	2,4,5-T	0.25	U
94-82-6	2,4-DB	0.25	U
88-85-7	Dinoseb	0.25	U

QC Summary

010304 1122

1

HERBICIDE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

6882BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 129521 Lab File ID: 6882BLK.D

Sample wt/vol: 1000 Units: ML Date Received: 02/14/04

Concentrated Extract Volume: 10 Date Extracted: 02/14/04

Level:(low/med) LOW Date Analyzed: 02/24/04 Time: 0829

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: 8151

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
1918-00-9	Dicamba	0.25	U
75-99-0	Dalapon	0.25	U
93-65-2	MCPP	25	U
94-74-6	MCPA	25	U
120-36-5	Dichloroprop	0.25	U
94-75-7	2,4'-D	0.25	U
93-72-1	2,4,5-TP (Silvex)	0.25	U
93-76-5	2,4,5-T	0.25	U
94-82-6	2,4-DB	0.25	U
88-85-7	Dinoseb	0.25	U

4

HERBICIDE ORGANIC METHOD BLANK SUMMARY

EPA Sample No.: 6882BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab File ID: 6882BLK.D Lab Sample ID: 129521

Instrument ID: SECD01 Date Extracted: 02/14/04

Matrix: WATER Date Analyzed: 02/24/04

Level:(low/med) LOW Time Analyzed: 0829

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	6882LCS2	129523	6882LCS2.D	02/24/04	0946
2	6882LCS3R1	129524	6882LCS3.D	02/24/04	1024
3	57285LW040212	240212601	126-1.D	02/24/04	1804

COMMENTS:

Page 1 of 1

010304 1122

Form IV

2A

WATER HERBICIDE ORGANIC SURROGATE RECOVERY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402126

Column(1): STX-CLP1 ID: 0.32 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
57285LW040212	84.0						0
6882BLK	76.0						0
6882LCS2	92.0						0
6882LCS3R1	84.0						0

Control Limits

S1 = DCAA 60 - 130

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

Control limit source: (lab/method) METHOD

Form II

010304 1122

8A

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab File ID (Standard): HCAL4.D Date Analyzed: 2/24/2004

Instrument ID: SECD01 Time Analyzed: 2:44

GC Column: STX-CLP1 ID: 0.32 (mm)

		IS1 AREA	#	RT	IS2 AREA	#	RT	IS3 AREA	#	RT
	MID CAL STD	815768		13.69						
	UPPER LIMIT	1631536		14.19						
	LOWER LIMIT	407884		13.19						
	EPA SAMPLE NO.									
1	6882BLK	803520		13.69						
2	6882LCS2	819832		13.69						
3	6882LCS3R1	802188		13.69						
4	57285LW040212	840601		13.69						

IS1 = DBOB

UPPER LIMIT = +100% of internal standard area.
LOWER LIMIT = -50% of internal standard area

Column used to flag internal standard area values with an asterisk

010304 1122

FORM VIII

HERBICIDE ORGANIC ANALYTICAL SEQUENCE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

GC Column: STX-CLP1 ID: 0.32 (mm) Init. Calib. Date: 02/24/04

Instrument ID: SECD01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 11.32 S2 :

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
1	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/23/04	2254		
2	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/23/04	2332		
3	STD163304	300	HCAL72.D	02/24/04	0049	11.32	
4	STD163303	250	HCAL6.D	02/24/04	0127	11.32	
5	STD163302	200	HCAL5.D	02/24/04	0205	11.32	
6	STD163301	150	HCAL4.D	02/24/04	0244	11.32	
7	STD163300	100	HCAL3.D	02/24/04	0322	11.32	
8	STD163299	50	HCAL2.D	02/24/04	0400	11.32	
9	STD163298	25	HCAL1.D	02/24/04	0439	11.32	
10	SSC163313	150	HSECCCV.D	02/24/04	0517	11.32	
11	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/24/04	0555		
12	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/24/04	0634		
13	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/24/04	0712		
14	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/24/04	0750		
15	6882BLK	129521	6882BLK.D	02/24/04	0829	11.32	
16	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/24/04	0907		
17	6882LCS2	129523	6882LCS2.D	02/24/04	0946	11.32	
18	6882LCS3R1	129524	6882LCS3.D	02/24/04	1024	11.32	
19	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/24/04	1102		
20	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/24/04	1141		
21	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/24/04	1219		
22	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/24/04	1257		
23	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/24/04	1336		
24	CCV163306	150	HCCV12.D	02/24/04	1414	11.32	
25	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/24/04	1453		
26	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/24/04	1531		

QC LIMITS
S1 = DCAA (+/- 0.2 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

010304 1122 FORM VIII

HERBICIDE ORGANIC ANALYTICAL SEQUENCE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

GC Column: STX-CLP1 ID: 0.32 (mm) Init. Calib. Date: 02/24/04

Instrument ID: SECD01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 11.32 S2 :

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
27	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/24/04	1609		
28	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/24/04	1648		
29	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/24/04	1726		
30	57285LW040212	240212601	126-1.D	02/24/04	1804	11.32	
31	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/24/04	1843		
32	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/24/04	1921		
33	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/24/04	1959		
34	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/24/04	2037		
35	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/24/04	2116		
36	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/24/04	2154		
37	CCV163307	150	HCCV21.D	02/24/04	2233	11.32	
38	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/24/04	2311		
39	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/24/04	2350		
40	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	0028		
41	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	0106		
42	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	0144		
43	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	0223		
44	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	0301		
45	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	0339		
46	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	0418		
47	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	0456		
48	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	0534		
49	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	0613		
50	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	0651		
51	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	0730		
52	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	0808		

QC LIMITS
S1 = DCAA (+/- 0.2 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

010304 1122 FORM VIII

HERBICIDE ORGANIC ANALYTICAL SEQUENCE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

GC Column: STX-CLP1 ID: 0.32 (mm) Init. Calib. Date: 02/24/04

Instrument ID: SECD01

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 11.32 S2 :

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
53	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	0846		
54	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	0925		
55	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	1003		
56	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	1042		
57	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/25/04	1120		

QC LIMITS
S1 = DCAA (+/- 0.2 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

010304 1122 FORM VIII

3

HERBICIDE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

6882LCS2

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dicamba	1	0.96	96.0		40.0	52 - 148
Dalapon	1	1.1	110.0		40.0	37 - 138
MCPP	100	56.1	56.1		40.0	52 - 125
MCPA	100	62	62.0		40.0	43 - 139
Dichloroprop	1	0.96	96.0		40.0	44 - 148
2,4'-D	1	0.98	98.0		40.0	43 - 161
2,4,5-TP (Silvex)	1	0.92	92.0		40.0	54 - 150
2,4,5-T	1	0.91	91.0		40.0	55 - 155
2,4-DB	1	0.78	78.0		40.0	41 - 174
Dinoseb	1	0.71	71.0		40.0	18 - 149

Spike Recovery: 0 out of 10 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

010304 1122

Form III

3

HERBICIDE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

6882LCS3R1

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dicamba	1	0.96	96.0	0.0	40.0	52 - 148
Dalapon	1	1.1	110.0	0.0	40.0	37 - 138
MCPP	100	52	52.0	7.6	40.0	52 - 125
MCPA	100	67	67.0	7.8	40.0	43 - 139
Dichloroprop	1	0.91	91.0	5.3	40.0	44 - 148
2,4'-D	1	0.95	95.0	3.1	40.0	43 - 161
2,4,5-TP (Silvex)	1	0.9	90.0	2.2	40.0	54 - 150
2,4,5-T	1	0.92	92.0	1.1	40.0	55 - 155
2,4-DB	1	0.78	78.0	0.0	40.0	41 - 174
Dinoseb	1	0.74	74.0	4.1	40.0	18 - 149

Spike Recovery: 0 out of 10 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

010304 1122

Form III

Standards Data

010304 1122

HERBICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD01 Calibration Date: 02/24/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 0439

LAB FILE ID: RRF0.025 =HCAL1.D RRF0.05 =HCAL2.D
RRF0.1 =HCAL3.D RRF0.15 =HCAL4.D RRF0.2 =HCAL5.D

COMPOUND	RRF0.025	RRF0.05	RRF0.1	RRF0.15	RRF0.2
Dicamba	0.37057	0.41321	0.37392	0.36439	0.36231
Dalapon	0.14385	0.14216	0.13615	0.12711	0.12832
MCPP	0.00022	0.00032	0.00035	0.0003	0.00037
MCPA	0.00079	0.00077	0.00061	0.00069	0.00066
Dichloroprop	0.17181	0.15946	0.1352	0.12629	0.12394
2,4'-D	0.18047	0.17593	0.15543	0.14637	0.14574
2,4,5-TP (Silvex)	0.57405	0.61846	0.60973	0.59825	0.59249
2,4,5-T	0.62035	0.64385	0.60862	0.59075	0.58616
2,4-DB	0.13243	0.11116	0.10576	0.10048	0.10394
Dinoseb	0.51056	0.49752	0.44873	0.42818	0.42754
==========					
DCAA(SURR)	0.14902	0.1318	0.12138	0.11933	0.11607

010304 1122

FORM VI

HERBICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD01 Calibration Date: 02/24/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 0439

LAB FILE ID: RRF0.25 =HCAL6.D RRF0.3 =HCAL72.D

COMPOUND	RRF0.25	RRF0.3			
Dicamba	0.34427	0.35204			
Dalapon	0.11972	0.12513			
MCPP	0.00036	0.00037			
MCPA	0.00057	0.00057			
Dichloroprop	0.11616	0.11767			
2,4'-D	0.1366	0.13908			
2,4,5-TP (Silvex)	0.56839	0.58871			
2,4,5-T	0.55674	0.57349			
2,4-DB	0.0927	0.09773			
Dinoseb	0.39144	0.40832			
==========					
DCAA(SURR)	0.11122	0.10947			

010304 1122

FORM VI

HERBICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD01 Calibration Date: 02/24/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 0439

COMPOUND	CURVE	COEFFICIENTS AO	COEFFICIENTS A1	%RSD OR R^2
Dicamba	AVRG		0.368672799	6
Dalapon	AVRG		0.131777994	6.9
MCPP	AVRG		0.000325998	16.8
MCPA	AVRG		0.000665375	13.3
Dichloroprop	AVRG		0.135790131	15.9
2,4'-D	AVRG		0.154231193	11.3
2,4,5-TP (Silvex)	AVRG		0.592868825	3
2,4,5-T	AVRG		0.597139737	4.9
2,4-DB	AVRG		0.106315203	12.2
Dinoseb	AVRG		0.444612894	10
==========				
DCAA(SURR)	AVRG		0.122612841	11.2

010304 1122

FORM VI

HERBICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD01 Calibration Date: 02/24/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 0439

LAB FILE ID: RT1: HCAL1.D RT2: HCAL2.D
RT3: HCAL3.D RT4: HCAL4.D RT5: HCAL5.D

COMPOUND	RT1	RT2	RT3	RT4	RT5	MIDCAL RT	RT WINDOW FROM	TO
Dicamba	11.603	11.603	11.600	11.600	11.600			
Dalapon	3.423	3.427	3.423	3.427	3.427			
MCPP	11.913	11.910	11.910	11.910	11.910			
MCPA	12.140	12.140	12.137	12.137	12.140			
Dichloroprop	12.677	12.677	12.677	12.673	12.673			
2,4'-D	13.003	13.003	13.000	12.997	12.997			
2,4,5-TP (Silvex)	14.127	14.123	14.123	14.123	14.123			
2,4,5-T	14.493	14.490	14.487	14.483	14.483			
2,4-DB	15.173	15.170	15.167	15.163	15.163			
Dinoseb	16.483	16.483	16.480	16.480	16.480			
==========								
DCAA(SURR)	11.323	11.323	11.320	11.320	11.320			

010304 1122

FORM VI

HERBICIDE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD01 Calibration Date: 02/24/04

GC Column: STX-CLP1 ID: 0.32 (mm) Calibration Time: 0439

LAB FILE ID: RT6: HCAL6.D RT7: HCAL72.D

COMPOUND	RT6	RT7				MIDCAL RT	RT WINDOW FROM	TO
Dicamba	11.600	11.600						
Dalapon	3.423	3.420						
MCPP	11.910	11.913						
MCPA	12.140	12.140						
Dichloroprop	12.673	12.673						
2,4'-D	12.997	12.997						
2,4,5-TP (Silvex)	14.123	14.120						
2,4,5-T	14.483	14.480						
2,4-DB	15.163	15.160						
Dinoseb	16.480	16.480						
DCAA(SURR)	11.320	11.320						

010304 1122

FORM VI

7SSC

HERBICIDE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD01 CalibrationDate: 02/24/04 Time: 0517

CCV ID: SSC163313 Lab File ID: HSECCCV.D Init. Calib. Date: 02/24/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF	%D
Dicamba	0.36867	0.34693	5.9
Dalapon	0.13178	0.12213	7.3
MCPP	0.00033	0.00032	3.0
MCPA	0.00066	0.00058	12.1
Dichloroprop	0.13579	0.12444	8.4
2,4'-D	0.15423	0.14097	8.6
2,4,5-TP (Silvex)	0.59287	0.5689	4.0
2,4,5-T	0.59714	0.56176	5.9
2,4-DB	0.10631	0.09682	8.9
Dinoseb	0.44461	0.41847	5.9
==========			
DCAA(SURR)	0.12261	0.10715	12.6

010304 1122

FORM VII

7

HERBICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD01 CalibrationDate: 02/24/04 Time: 1414

CCV ID: CCV163306 Lab File ID: HCCV12.D Init. Calib. Date: 02/24/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.15	%D
Dicamba	0.36867	0.35618	3.4
Dalapon	0.13178	0.13175	0.0
MCPP	0.00033	0.00035	6.1
MCPA	0.00066	0.00063	4.5
Dichloroprop	0.13579	0.12267	9.7
2,4'-D	0.15423	0.13946	9.6
2,4,5-TP (Silvex)	0.59287	0.58644	1.1
2,4,5-T	0.59714	0.5701	4.5
2,4-DB	0.10631	0.09385	11.7
Dinoseb	0.44461	0.42902	3.5
==========			
DCAA(SURR)	0.12261	0.11323	7.7

010304 1122

FORM VII

7

HERBICIDE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SECD01 CalibrationDate: 02/24/04 Time: 2233

CCV ID: CCV163307 Lab File ID: HCCV21.D Init. Calib. Date: 02/24/04

GC Column: STX-CLP1 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.15	%D
Dicamba	0.36867	0.35773	3.0
Dalapon	0.13178	0.12645	4.0
MCPP	0.00033	0.00032	3.0
MCPA	0.00066	0.0006	9.1
Dichloroprop	0.13579	0.12755	6.1
2,4'-D	0.15423	0.13989	9.3
2,4,5-TP (Silvex)	0.59287	0.58546	1.2
2,4,5-T	0.59714	0.55961	6.3
2,4-DB	0.10631	0.0983	7.5
Dinoseb	0.44461	0.43515	2.1
==========			
DCAA(SURR)	0.12261	0.11083	9.6

010304 1122

FORM VII

Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402126

METHOD: 8151 **MATRIX:** W

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
2,4,5-T	55-155	40	55-155	40			
2,4,5-TP (Silvex)	54-150	40	54-150	40			
2,4'-D	43-161	40	43-161	40			
2,4-DB	41-174	40	41-174	40			
Dalapon	37-138	40	37-138	40			
DCAA							60-130
Dicamba	52-148	40	52-148	40			
Dichloroprop	44-148	40	44-148	40			
Dinoseb	18-149	40	18-149	40			
MCPA	43-139	40	43-139	40			
MCPP	52-125	40	50-125	40			

010304 1122

GC FL-PRO ORGANICS

METHOD FL-PRO

010304 1122

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

PEL Lab Reference No./SDG: 2402126

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

Florida DEP/FL PRO

IV. PREPARATION

Water samples were prepared by FL PRO for semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met with the exception of:
Sample 57285LW040212 was recovered below criteria for the following surrogate(s): o-Terphenyl Surrogate at 69 % with criteria of (82-142). Since C-39 met all acceptance criteria, no further action was taken.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met.

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

A client sample was spiked, however the data was not usable as the spike amount was less than the amount found in the parent sample. Since the LCS met criteria no further action was taken and the spiked results were not reported.

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

PEL Lab Reference No./SDG: 2402126

Client: CH2M Hill

E. Samples:

Sample analysis proceeded normally.

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

SIGNED: _____ **DATE:** 2-24-01

W:\SV Naratives\Cecil Narratives\2402126_FL-PRO.doc

FL-PRO ORGANIC CROSS REFERENCE TABLE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Method: FL-PRO

EPA Sample No	Lab Sample ID
57285LW040212	240212601

010304 1122

Sample Data

010304 1122

1

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 240212601 Lab File ID: 126-1.D

Sample wt/vol: 985 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 2 Date Extracted: 02/13/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 1437

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Waste Character Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: MG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
5289290-40-0	TPH	0.17	J

010304 1122

Form I

QC Summary

010304 1122

1

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

021304WBLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 129491 Lab File ID: 0213BLK.D

Sample wt/vol: 1000 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 2 Date Extracted: 02/13/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 1211

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID: Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: MG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
5289290-40-0	TPH	0.34	U

010304 1122

Form I

4

FL-PRO ORGANIC METHOD BLANK SUMMARY

EPA Sample No.

021304WBLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Lab File ID: 0213BLK.D Lab Sample ID: 129491

Instrument ID: SFID02 Date Extracted: 02/13/04

Matrix: WATER Date Analyzed: 02/18/04

Level:(low/med) LOW Time Analyzed: 1211

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	021304WLCS	129492	0213LCS.D	02/18/04	1240
2	021304WLCSD	129494	0213LCSD.D	02/18/04	1339
3	57285LW040212	240212601	126-1.D	02/18/04	1437

COMMENTS:

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010304 1122

Form IV

2A

WATER FL-PRO ORGANIC SURROGATE RECOVERY

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402126

Column(1): RTX-5 ID: 0.53 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
021304WBLK	84.0	60.0					0
021304WLCS	92.0	53.3					0
021304WLCSD	88.0	73.3					0
57285LW040212	69.0 *	63.3					1

Control Limits

S1	=	o-Terphenyl Surrogate	82 -	142
S2	=	C39 Surrogate	42 -	193

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out
Control limit source: (lab/method) METHOD

Form II

010304 1122

FL-PRO ORGANIC ANALYTICAL SEQUENCE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

GC Column: RTX-5 ID: 0.53 (mm) Init. Calib. Date: 02/07/04

Instrument ID: SFID02

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION
S1 : 4.81 S2 : 13.07

	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	S2 RT	#
1	STD159298	SV1787	PCAL61.D	02/06/04	1818	4.81		13.07	
2	STD159297	SV1786	PCAL51.D	02/06/04	1916	4.79		13.05	
3	STD159296	SV1785	PCAL41.D	02/06/04	2014	4.78		13	
4	STD159295	SV1784	PCAL31.D	02/06/04	2113	4.78		13.02	
5	STD159294	SV1783	PCAL21.D	02/06/04	2211	4.78		13.01	
6	STD159293	SV1782	PCAL11.D	02/06/04	2310	4.78		12.98	
7	STD159300	SV1901	PSECCCV1.D	02/07/04	0008	4.79		13.02	
8	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/18/04	1015				
9	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/18/04	1044				
10	CCV161578	SV1901	CCV11.D	02/18/04	1113	4.73	*	12.6	*
11	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/18/04	1142				
12	021304WBLK	129491	0213BLK.D	02/18/04	1211	4.73	*	12.62	*
13	021304WLCS	129492	0213LCS.D	02/18/04	1240	4.74		12.64	*
14	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/18/04	1310				
15	021304WLCSD	129494	0213LCSD.D	02/18/04	1339	4.74		12.67	*
16	ZZZZZZ	ZZZZZZ	ZZZZZZ	02/18/04	1408				
17	57285LW040212	240212601	126-1.D	02/18/04	1437	4.75		12.67	*
18	CCV161580	SV1901	CCV21.D	02/18/04	1507	4.74		12.64	*

			QC LIMITS
S1	=	o-Terphenyl Surrogate	(+/- 0.07 MINUTES)
S2	=	C39 Surrogate	(+/- 0.3 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits

Page 1 of 1

010304 1122 FORM VIII

FL-PRO ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021304WLCS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED MG/L	LCS CONCENTRATION MG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
TPH	3.4	2.4	70.6		20.0	55 - 118

Spike Recovery: 0 out of 1 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

010304 1122

Form III

3

FL-PRO ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

021304WLCSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED MG/L	LCS CONCENTRATION MG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
TPH	3.4	2.4	70.6	0.0	20.0	55 - 118

Spike Recovery: 0 out of 1 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

010304 1122

Form III

Standards Data

010304 1122

FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SFID02 Calibration Date: 02/07/04

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time: 0008

LAB FILE ID: RRF0.17 =PCAL11.D RRF0.85 =PCAL21.D
RRF1.7 =PCAL31.D RRF2.55 =PCAL41.D RRF5.1 =PCAL51.D

COMPOUND	RRF0.17	RRF0.85	RRF1.7	RRF2.55	RRF5.1
TPH	30628129.412	27119420	30121428.235	30334355.686	30100586.275
==========					
o-Terphenyl Surrogate(SURR)	30426520	33954480	32416560	35815830	31077530
C39 Surrogate(SURR)	23876606.667	30949313.333	27897893.333	30676626.667	28042093.333

010304 1122

FORM VI

FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SFID02 Calibration Date: 02/07/04

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time: 0008

LAB FILE ID:	RRF6.8 =PCAL61.D				
COMPOUND	RRF6.8				
TPH	32024617.5				
==========					
o-Terphenyl Surrogate(SURR)	34273120				
C39 Surrogate(SURR)	39473026.667				

010304 1122

FORM VI

FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SFID02 Calibration Date: 02/07/04

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time: 0008

COMPOUND	CURVE	COEFFICIENTS AO	COEFFICIENTS A1	%RSD OR R^2
TPH	LINR		3.204518E-08	0.99743
==========				
o-Terphenyl Surrogate(SURR)	AVRG		32994006.667	6.2
C39 Surrogate(SURR)	AVRG		30152593.333	17.3

FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SFID02 Calibration Date: 02/07/04

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time: 0008

LAB FILE ID: RT1: PCAL11.D RT2: PCAL21.D
RT3: PCAL31.D RT4: PCAL41.D RT5: PCAL51.D

COMPOUND	RT1	RT2	RT3	RT4	RT5	MIDCAL RT	RT WINDOW FROM	RT WINDOW TO
TPH	7.950	7.950	7.950	7.950	7.950			
==========								
o-Terphenyl Surrogate(SURR)	4.783	4.777	4.783	4.783	4.793			
C39 Surrogate(SURR)	12.981	13.009	13.017	13.000	13.047			

010304 1122

FORM VI

FL-PRO ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SFID02 Calibration Date: 02/07/04

GC Column: RTX-5 ID: 0.53 (mm) Calibration Time: 0008

LAB FILE ID: RT6: PCAL61.D

COMPOUND	RT6					MIDCAL RT	RT WINDOW FROM	TO
TPH	7.950							
==========								
o-Terphenyl Surrogate(SURR)	4.810							
C39 Surrogate(SURR)	13.074							

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FORM VI

FL-PRO ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SFID02 CalibrationDate: 02/18/04 Time: 1113

Lab File ID: CCV11.D Init. Calib. Date: 02/07/04

GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND	SAMPLE AMOUNT	1.7 AMOUNT	CURVE	%D	MAX %D
TPH	1.65	1.7	LINR	2.9	25.0
==========					
o-Terphenyl Surrogate(SURR)	0.102	0.1	AVRG	2.0	25.0
C39 Surrogate(SURR)	0.154	0.15	AVRG	2.7	25.0

FL-PRO ORGANIC CONTINUING CALIBRATION DATA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID: SFID02 CalibrationDate: 02/18/04 Time: 1507

Lab File ID: CCV21.D Init. Calib. Date: 02/07/04

GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND	SAMPLE AMOUNT	1.7 AMOUNT	CURVE	%D	MAX %D
TPH	1.68	1.7	LINR	1.2	25.0
==========					
o-Terphenyl Surrogate(SURR)	0.102	0.1	AVRG	2.0	25.0
C39 Surrogate(SURR)	0.157	0.15	AVRG	4.7	25.0

Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402126

METHOD: FL-PRO **MATRIX:** W

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
C39 Surrogate							42-193
o-Terphenyl Surrogate							82-142
TPH	55-118	20	41-101	20			

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Inorganics

010304 1122

Inorganic Data Qualifiers

C (Concentration) Qualifier - Entries and their meanings are:

B The reported value obtained was less than the RL but greater than or equal to the MDL.

E The reported value obtained was over calibration or linear range.

U The reported value obtained was less than the MDL or was not detected.

Q Qualifier - Entries and their meanings are:

U The reported value is estimated because of interference. An explanatory comment must be included under "Comments" on the Cover Page if the problem applies to all samples in this data package or on the individual FORM 1 if it is an isolated problem.

M Duplicate injection precision was not met (two analyses of the same sample did not agree).

N Spiked sample recovery not within control limits.

E Serial Dilution percent difference not within control limits.

S The reported value was determined by the Method of Standard Additions (MSA).

W Post-digestion spike for Furnace AA analysis is out of control limits (85-115%) while sample absorbance is less than 50% of spike absorbance.

***** Duplicate analysis not within control limits.

+ Correlation coefficient for the MSA is less than 0.995.

X The data is flagged as rejected by analyst utilizing analytical judgement.

Entering "S", "W", or "+" is mutually exclusive. No combination of these qualifiers can apear in the same field.

M (Method) Qualifier - Enter one of the following:

P ICP
A Flame AA
F Furnace AA
CV Manual Cold Vapor AA
TC Total Organic Carbon
AS Semi-Automated Spectrophotometric
CA Midi-Distillation Spectrophotometric
T Titrimetric
C Manual Spectrophotometric
GR Gravimetric
NR Analyte was not required by your lab

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Inorganic Sample ID Qualifiers

The qualifiers that may be appended to the lab sample ID and/or the client sample ID for inorganic analysis are defined below:

DL Diluted reanalysis. Indicates that the results of the original analysis of the sample contained compounds that exceeded the calibration range. The sample was diluted and reanalyzed. May be followed by a digit to indicate multiple dilutions of the sample. The results of more than one diluted reanalysis may be reported.

R Reanalysis. The extract was reanalyzed without re-extraction. The "R" is not used if the sample was also re-extracted. May be followed by a digit to indicate multiple reanalysis of the sample at the same dilution.

RE Re-extracted. The extract was reanalyzed with re-extraction. May be followed by a digit to indicate multiple re-extraction of the same sample at the same dilution.

MS Matrix spike (may be followed by a digit to indicate multiple matrix within a sample set).

SD Matrix spike duplicate (may be followed by a digit to indicate multiple matrix spike duplicate within a sample set).

010304 1122

METALS DATA PACKAGE
TOTALS

010304 1122

CASE NARRATIVE
METALS

PEL Lab Reference No./SDG: 2402126

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHOD

Analyses were performed according to PEL Laboratory's Standard Operating Procedures and EPA Method 6010B for ICP metals.

IV. PREPARATION

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

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

1. Calibration Blanks:

All acceptance criteria were met. No action required. The following ICB had element concentrations below the RL:
ICB130143 was analyzed on 02/19/04 15:45. The following analytes were detected below RL: Beryllium at 0.125 UG/L, Iron at -21 UG/L, Magnesium at -22.2 UG/L, Potassium at -21.8 UG/L, Sodium at 27.1 UG/L.

2. Method Blanks:

All acceptance criteria were met with the exception of:
Blank 129777BLK was analyzed with the water samples on 02/19/04. The following analyte was detected below RL: Potassium at 12 UG/L.
Samples coded accordingly.

C. Spikes:

1. Laboratory Control Spikes (LCS):

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

2. Post Digestion Spike:

All acceptance criteria were met with the exception of:
Post Digestion Spike B-4 SWA was analyzed with the water samples on 02/19/04. The following analytes were recovered below criteria: Aluminum at 5.4 % with criteria of (80-120), Antimony at 5.5 % with criteria of (80-120), Arsenic at 5.4 % with criteria of (80-120), Barium at 5.2 % with criteria of (80-120), Beryllium at 5.4 % with criteria of (80-120), Cadmium at 5.3 % with criteria of (80-120), Calcium at 46.9 % with criteria of (80-120), Chromium at 5.2 % with criteria of (80-120), Cobalt at 5.3 % with criteria of (80-120), Copper at 5.4 % with criteria of (80-120), Iron at 5.3 % with criteria of (80-120), Lead at 5.5 % with criteria of (80-120), Manganese at 5.1 % with criteria of (80-120), Nickel at 5.1 % with criteria of (80-120), Potassium at 74.8 % with criteria of (80-120), Selenium at 5.9 % with criteria of (80-120), Silver at 5.4 % with criteria of (80-120), Thallium at 5.8 % with criteria of (80-120), Vanadium at 5.3 % with criteria of (80-120), Zinc at 5.1 % with criteria of (80-120). and the following analyte(s) were recovered above criteria: Magnesium at 129.3 % with criteria of (80-120), Sodium at 1001.4 % with criteria of (80-120). Matrix effect is suspected.

CASE NARRATIVE
METALS

PEL Lab Reference No./SDG: 2402126

Client: CH2M Hill

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

A client requested MS/SD set was analyzed.
All percent recovery and relative percent difference (RPD) criteria were met.

D. Duplicate:

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

E. Serial Dilution:

All acceptance criteria were met with the exception of:
Serial Dilution B-4 SWL was analyzed with the water samples on 02/19/04. The following analyte exceeded criteria: Potassium at 17 % with criteria of (10).

Samples coded accordingly.

F. ICP Interference Check Samples:

All acceptance criteria were met.

G. Samples:

Sample analysis proceeded normally.
Sample B-4 SW required a 1:20 dilution due to high concentration of the following analytes: Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc.

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

SIGNED: John B Jones **DATE:** 02/20/04

CASE NARRATIVE
MERCURY

PEL Lab Reference No./SDG: 2402126

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

Analyses were performed according to PEL Laboratory's Standard Operating Procedures and EPA Method 7470A.

IV. PREPARATION

Water samples were prepared according to PEL Laboratory's Standard Operating Procedures and EPA Method 7470A.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

1. Calibration Blanks:

All acceptance criteria were met.

2. Method Blanks:

All acceptance criteria were met.

C. Spikes:

1. Laboratory Control Spikes (LCS):

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

2. Post Digestion Spike:

All acceptance criteria were met.

CASE NARRATIVE
MERCURY

PEL Lab Reference No./SDG: 2402126

Client: CH2M Hill

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

No spikes requested by client.

D. Duplicate:

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

E. Serial Dilution:

All acceptance criteria were met.

F. Samples:

Sample analysis proceeded normally.

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

SIGNED: John B Jones **DATE:** 2/20/04

CASE NARRATIVE
CYANIDE

PEL Lab Reference No./SDG: 2402126

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHODS

Analyses were performed according to PEL Laboratory's Standard Operating Procedures and EPA Method 9012.

IV. PREPARATION

Water samples were prepared according to PEL Laboratory's Standard Operating Procedures and EPA Method 9012.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

1. Calibration Blanks:

All acceptance criteria were met.

2. Method Blanks:

All acceptance criteria were met.

C. Spikes:

1. Laboratory Control Spikes (LCS):

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

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

No spikes requested by client.

CASE NARRATIVE
CYANIDE

PEL Lab Reference No./SDG: 2402126

Client: CH2M Hill

D. Duplicate:

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

E. Samples:

Sample analysis proceeded normally.

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

SIGNED:_____ **DATE:** 2/24/04

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SDG No.: 2402126

SOW No.:

EPA Sample No	Lab Sample ID
57285LW040212	240212601

Were ICP interelement corrections applied?	Yes/No	Yes
Were ICP background corrections applied?	Yes/No	Yes
If yes - were raw data generated before application of background corrections?	Yes/No	No

Comments:

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Sample Data

010304 1122

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 240212601

Level:(low/med) LOW Date Received: 2/13/2004

PercentSolids: 0 Station ID: Waste Character

CONCENTRATION UNITS: UG/L

CAS NO.	ANALYTE	Concentration	C	Q	M
7429-90-5	Aluminum	27100			P
7440-36-0	Antimony	18.9			P
7440-38-2	Arsenic	4.92	B		P
7440-39-3	Barium	81.3			P
7440-41-7	Beryllium	0.494	B		P
7440-43-9	Cadmium	6.35			P
7440-70-2	Calcium	81700			P
7440-47-3	Chromium	33.1			P
7440-48-4	Cobalt	1.96	B		P
7440-50-8	Copper	238			P
5955-70-0	Cyanide	3.73	U		CA
7439-89-6	Iron	43800			P
7439-92-1	Lead	138			P
7439-95-4	Magnesium	13100			P
7439-96-5	Manganese	218			P
7439-97-6	Mercury	0.519			CV
7440-02-0	Nickel	14.8			P
7440-09-7	Potassium	2550			P
7782-49-2	Selenium	5.84			P
7440-22-4	Silver	0.472	U		P
7440-23-5	Sodium	7080			P
7440-28-0	Thallium	3.16	B		P
7440-62-2	Vanadium	23.7			P
7440-66-6	Zinc	4630			P

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

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QC Summary

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Initial Calibration Source: IS2836-37001
MET-38307
MET-37702

Continuing Calibration Source: IS2786-33501
MET-38305
MET-38203

Concentration Units: (UG/L)

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R (1)	True	Found	%R (1)	Found	%R (1)	M
Aluminum	40000	39000.000	97.5	125000	126000.000	100.8	126000.000	100.8	P
Antimony	400	413.000	103.2	500	531.000	106.2	529.000	105.8	P
Arsenic	400	385.000	96.2	500	533.000	106.6	532.000	106.4	P
Barium	400	389.000	97.2	500	503.000	100.6	511.000	102.2	P
Beryllium	400	405.000	101.2	500	512.000	102.4	507.000	101.4	P
Cadmium	400	399.000	99.8	500	492.000	98.4	479.000	95.8	P
Calcium	40000	41900.000	104.8	125000	129000.000	103.2	127000.000	101.6	P
Chromium	400	390.000	97.5	500	488.000	97.6	483.000	96.6	P
Cobalt	400	393.000	98.2	500	490.000	98.0	485.000	97.0	P
Copper	400	386.000	96.5	500	501.000	100.2	510.000	102.0	P
Cyanide	250	238.000	95.2	250	237.000	94.8	246.000	98.4	CA
Iron	40000	41300.000	103.2	50000	51200.000	102.4	50600.000	101.2	P
Lead	400	396.000	99.0	500	490.000	98.0	480.000	96.0	P
Magnesium	40000	39500.000	98.8	125000	125000.000	100.0	123000.000	98.4	P
Manganese	400	391.000	97.8	500	488.000	97.6	484.000	96.8	P
Mercury	3	3.140	104.7	5	5.170	103.4	5.270	105.4	CV
Nickel	400	385.000	96.2	500	476.000	95.2	469.000	93.8	P
Potassium	40000	41400.000	103.5	125000	128000.000	102.4	131000.000	104.8	P
Selenium	400	416.000	104.0	500	537.000	107.4	532.000	106.4	P
Silver	400	391.000	97.8	500	512.000	102.4	516.000	103.2	P
Sodium	40000	38900.000	97.2	126000	127000.000	100.8	129000.000	102.4	P
Thallium	400	408.000	102.0	500	514.000	102.8	501.000	100.2	P
Vanadium	400	403.000	100.8	500	500.000	100.0	497.000	99.4	P
Zinc	400	410.000	102.5	500	524.000	104.8	526.000	105.2	P

(1) Control Limits: Mercury 80-120; Cyanide 85-115; Other Metals 90-110

ICV is Second Source

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Initial Calibration Source:

Continuing Calibration Source: MET-38305

Concentration Units: (UG/L)

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R (1)	True	Found	%R (1)	Found	%R (1)	
Aluminum									P
Antimony									P
Arsenic									P
Barium									P
Beryllium									P
Cadmium									P
Calcium									P
Chromium									P
Cobalt									P
Copper									P
Cyanide									CA
Iron									P
Lead									P
Magnesium									P
Manganese									P
Mercury				5	5.360	107.2	5.420	108.4	CV
Nickel									P
Potassium									P
Selenium									P
Silver									P
Sodium									P
Thallium									P
Vanadium									P
Zinc									P

(1) Control Limits: Mercury 80-120; Cyanide 85-115; Other Metals 90-110

ICV is Second Source

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Initial Calibration Source:

Continuing Calibration Source: MET-38305

Concentration Units: (UG/L)

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R (1)	True	Found	%R (1)	Found	%R (1)	
Aluminum									P
Antimony									P
Arsenic									P
Barium									P
Beryllium									P
Cadmium									P
Calcium									P
Chromium									P
Cobalt									P
Copper									P
Cyanide									CA
Iron									P
Lead									P
Magnesium									P
Manganese									P
Mercury				5	5.400	108.0	5.390	107.8	CV
Nickel									P
Potassium									P
Selenium									P
Silver									P
Sodium									P
Thallium									P
Vanadium									P
Zinc									P

(1) Control Limits: Mercury 80-120; Cyanide 85-115; Other Metals 90-110

ICV is Second Source

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BLANKS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Preparation Blank Matrix (water/soil): WATER

Preparation Blank Concentration Units (ug/L or mg/Kg): UG/L

Analyte	Initial Calib. Blank (UG/L)	C	Continuing Calibration Blank (UG/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	35	U	35	U	35	U			35	U	P
Antimony	2.5	U	2.5	U	2.5	U			2.5	U	P
Arsenic	2.04	U	2.04	U	2.04	U			2.04	U	P
Barium	0.491	U	0.491	U	0.491	U			0.491	U	P
Beryllium	0.125	B	0.0945	U	0.0945	U			0.0945	U	P
Cadmium	0.356	U	0.356	U	0.356	U			0.356	U	P
Calcium	32.5	U	32.5	U	-35.9	B			32.5	U	P
Chromium	0.57	U	0.57	U	0.57	U			0.57	U	P
Cobalt	0.569	U	0.569	U	0.569	U			0.569	U	P
Copper	1.17	U	1.17	U	1.17	U			1.17	U	P
Cyanide	3.73	U	3.73	U	3.73	U			3.73	U	CA
Iron	-21	B	-19.4	B	-35.9	B			16.7	U	P
Lead	1.76	U	1.76	U	1.76	U			1.76	U	P
Magnesium	-22.2	B	-16.6	B	-31.7	B			5.23	U	P
Manganese	0.167	U	0.167	U	0.167	U			0.167	U	P
Mercury	0.0162	U	0.0162	U	0.0162	U	-0.0168	B	0.0162	U	CV
Nickel	0.997	U	0.997	U	0.997	U			0.997	U	P
Potassium	-21.8	B	11.5	U	-21.8	B			12	B	P
Selenium	2.1	U	2.1	U	2.1	U			2.1	U	P
Silver	0.472	U	0.472	U	0.472	U			0.472	U	P
Sodium	27.1	B	22.7	U	22.7	U			22.7	U	P
Thallium	2.54	U	2.54	U	2.54	U			2.54	U	P
Vanadium	0.447	U	0.447	U	0.447	U			0.447	U	P
Zinc	0.409	U	0.409	U	0.409	U			0.409	U	P

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BLANKS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Preparation Blank Matrix (water/soil): WATER

Preparation Blank Concentration Units (ug/L or mg/Kg): UG/L

Analyte	Initial Calib. Blank (UG/L)	C	Continuing Calibration Blank (UG/L) 4	C	5	C	6	C	Prepa-ration Blank	C	M
Aluminum											P
Antimony											P
Arsenic											P
Barium											P
Beryllium											P
Cadmium											P
Calcium											P
Chromium											P
Cobalt											P
Copper											P
Cyanide											CA
Iron											P
Lead											P
Magnesium											P
Manganese											P
Mercury			0.0162	U	0.0162	U	0.0162	U	0.0162	U	CV
Nickel											P
Potassium											P
Selenium											P
Silver											P
Sodium											P
Thallium											P
Vanadium											P
Zinc											P

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ICP INTERFERENCE CHECK SAMPLE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

ICP ID#: ICAP ICSA Source: MET-34305

ICSAB Source: MET-37401

Concentration Units: UG/L

	True		Initial Found			Final Found		
Analyte	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Aluminum	250000	250000	251930.81	250952.44	100.4			
Antimony	0	600		622.5	103.8			
Arsenic	0	100		100.814	100.8			
Barium	0	500		489.315	97.9			
Beryllium	0	500		503.221	100.6			
Cadmium	0	1000		953.191	95.3			
Calcium	250000	250000	255871.91	254088.83	101.6			
Chromium	0	500		477.925	95.6			
Cobalt	0	500		474.235	94.8			
Copper	0	500		506.489	101.3			
Iron	225000	225000	231609.61	229108.56	101.8			
Lead	0	50		48.855	97.7			
Magnesium	250000	250000	259135.91	257065.38	102.8			
Manganese	0	500		480.07	96.0			
Nickel	0	1000		907.007	90.7			
Potassium	0	0						
Selenium	0	50		51.465	102.9			
Silver	0	200		206.633	103.3			
Sodium	0	0						
Thallium	0	100		95.7	95.7			
Vanadium	0	500		500.717	100.1			
Zinc	0	1000		1041.964	104.2			

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5A

SPIKE SAMPLE RECOVERY

EPA Sample No.

B-4 SWMS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Level:(low/med) LOW

% Solids for Sample: 0

Concentration Units (mg/L or mg/kg): UG/L

Analyte	Control Limit %R	Spiked Sample	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75 - 125	54500		700	U	50000	109.0		P
Antimony	75 - 125	580		50	U	500	116.0		P
Arsenic	75 - 125	564		40.8	U	500	112.8		P
Barium	75 - 125	523		9.82	U	500	104.6		P
Beryllium	75 - 125	541		1.89	U	500	108.2		P
Cadmium	75 - 125	539		7.12	U	500	107.8		P
Calcium	-	518000		461000		50000	114.0		P
Chromium	75 - 125	521		11.4	U	500	104.2		P
Cobalt	75 - 125	540		11.4	U	500	108.0		P
Copper	75 - 125	534		23.4	U	500	106.8		P
Cyanide	-								NR
Iron	75 - 125	53600		334	U	50000	107.2		P
Lead	75 - 125	560		35.2	U	500	112.0		P
Magnesium	-	1440000		1380000		50000	120.0		P
Manganese	75 - 125	508		3.34	U	500	101.6		P
Mercury	-								NR
Nickel	75 - 125	515		19.9	U	500	103.0		P
Potassium	-	832000		755000		50000	154.0		P
Selenium	75 - 125	562		42	U	500	112.4		P
Silver	75 - 125	546		9.44	U	500	109.2		P
Sodium	-	11200000		11100000		50000	200.0		P
Thallium	75 - 125	601		50.8	U	500	120.2		P
Vanadium	75 - 125	539		8.94	U	500	107.8		P
Zinc	75 - 125	494		8.18	U	500	98.8		P

Comments:

010304 1122

U.S. EPA - CLP

5A

SPIKE SAMPLE RECOVERY

EPA Sample No.

B-4 SWSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Level:(low/med) LOW

% Solids for Sample: 0

Concentration Units (mg/L or mg/kg): UG/L

Analyte	Control Limit %R	Spiked Sample	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75 - 125	53600		700	U	50000	107.2		P
Antimony	75 - 125	560		50	U	500	112.0		P
Arsenic	75 - 125	546		40.8	U	500	109.2		P
Barium	75 - 125	513		9.82	U	500	102.6		P
Beryllium	75 - 125	534		1.89	U	500	106.8		P
Cadmium	75 - 125	535		7.12	U	500	107.0		P
Calcium	-	518000		461000		50000	114.0		P
Chromium	75 - 125	513		11.4	U	500	102.6		P
Cobalt	75 - 125	533		11.4	U	500	106.6		P
Copper	75 - 125	533		23.4	U	500	106.6		P
Cyanide	-								NR
Iron	75 - 125	52700		334	U	50000	105.4		P
Lead	75 - 125	540		35.2	U	500	108.0		P
Magnesium	-	1440000		1380000		50000	120.0		P
Manganese	75 - 125	500		3.34	U	500	100.0		P
Mercury	-								NR
Nickel	75 - 125	507		19.9	U	500	101.4		P
Potassium	-	830000		755000		50000	150.0		P
Selenium	75 - 125	623		42	U	500	124.6		P
Silver	75 - 125	534		9.44	U	500	106.8		P
Sodium	-	11200000		11100000		50000	200.0		P
Thallium	75 - 125	581		50.8	U	500	116.2		P
Vanadium	75 - 125	537		8.94	U	500	107.4		P
Zinc	75 - 125	491		8.18	U	500	98.2		P

Comments:

010304 1122

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5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA Sample No.

B-4 SWA

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Level:(low/med) LOW

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Control Limit %R	Spiked Sample	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	80 - 120	53900.00		700.00	U	1000000	5.4		P
Antimony	80 - 120	548.00		50.00	U	10000	5.5		P
Arsenic	80 - 120	538.00		40.80	U	10000	5.4		P
Barium	80 - 120	515.00		9.82	U	10000	5.2		P
Beryllium	80 - 120	540.00		1.89	U	10000	5.4		P
Cadmium	80 - 120	534.00		7.12	U	10000	5.3		P
Calcium	80 - 120	492000.00		461000.00		1000000	46.9		P
Chromium	80 - 120	522.00		11.40	U	10000	5.2		P
Cobalt	80 - 120	534.00		11.40	U	10000	5.3		P
Copper	80 - 120	536.00		23.40	U	10000	5.4		P
Iron	80 - 120	53300.00		334.00	U	1000000	5.3		P
Lead	80 - 120	545.00		35.20	U	10000	5.5		P
Magnesium	80 - 120	1360000.00		1380000.00		1000000	129.3		P
Manganese	80 - 120	507.00		3.34	U	10000	5.1		P
Nickel	80 - 120	512.00		19.90	U	10000	5.1		P
Potassium	80 - 120	786000.00		755000.00		1000000	74.8		P
Selenium	80 - 120	588.00		42.00	U	10000	5.9		P
Silver	80 - 120	537.00		9.44	U	10000	5.4		P
Sodium	80 - 120	10600000.00		11100000.00		1000000	1001.4		P
Thallium	80 - 120	583.00		50.80	U	10000	5.8		P
Vanadium	80 - 120	525.00		8.94	U	10000	5.3		P
Zinc	80 - 120	510.00		8.18	U	10000	5.1		P

Comments:

010304 1122

U.S. EPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA Sample No.

CGW1GW02-R01A

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Level:(low/med) LOW

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Control Limit %R	Spiked Sample	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Mercury	80 - 120	3.47		0.46		3	100.2		CV

Comments:

010304 1122

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6

DUPLICATES

EPA Sample No.

129778LCSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Level:(low/med) LOW

% Solids for Sample: 0 % Solids for Duplicate: 0

Concentration Units (mg/L or mg/kg): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	20	50500		50500		0.0		P
Antimony	20	527		527		0.0		P
Arsenic	20	494		494		0.0		P
Barium	20	500		499		0.2		P
Beryllium	20	515		515		0.0		P
Cadmium	20	502		502		0.0		P
Calcium	20	53100		53200		0.2		P
Chromium	20	495		496		0.2		P
Cobalt	20	500		500		0.0		P
Copper	20	501		500		0.2		P
Iron	20	52500		52600		0.2		P
Lead	20	498		497		0.2		P
Magnesium	20	50200		50300		0.2		P
Manganese	20	498		497		0.2		P
Nickel	20	487		487		0.0		P
Potassium	20	53500		53500		0.0		P
Selenium	20	523		527		0.8		P
Silver	20	503		503		0.0		P
Sodium	20	51000		51200		0.4		P
Thallium	20	515		516		0.2		P
Vanadium	20	514		514		0.0		P
Zinc	20	522		521		0.2		P

Comments:

010304 1122

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6

DUPLICATES

EPA Sample No.

129993LCSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Level:(low/med) LOW

% Solids for Sample: 0 % Solids for Duplicate: 0

Concentration Units (mg/L or mg/kg): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Mercury	20	3.34		3.25		2.7		CV

Comments:

010304 1122

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6

DUPLICATES

EPA Sample No.

130410LCSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Level:(low/med) LOW

% Solids for Sample: 0 % Solids for Duplicate: 0

Concentration Units (mg/L or mg/kg): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Cyanide	20	231		205		11.9		CA

Comments:

010304 1122

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6

DUPLICATES

EPA Sample No.

B-4 SWSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Level:(low/med) LOW

% Solids for Sample: 0 % Solids for Duplicate: 0

Concentration Units (mg/L or mg/kg): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	20	54500		53600		1.7		P
Antimony	20	580		560		3.5		P
Arsenic	20	564		546		3.2		P
Barium	20	523		513		1.9		P
Beryllium	20	541		534		1.3		P
Cadmium	20	539		535		0.7		P
Calcium	20	518000		518000		0.0		P
Chromium	20	521		513		1.5		P
Cobalt	20	540		533		1.3		P
Copper	20	534		533		0.2		P
Iron	20	53600		52700		1.7		P
Lead	20	560		540		3.6		P
Magnesium	20	1440000		1440000		0.0		P
Manganese	20	508		500		1.6		P
Nickel	20	515		507		1.6		P
Potassium	20	832000		830000		0.2		P
Selenium	20	562		623		10.3		P
Silver	20	546		534		2.2		P
Sodium	20	11200000		11200000		0.0		P
Thallium	20	601		581		3.4		P
Vanadium	20	539		537		0.4		P
Zinc	20	494		491		0.6		P

Comments:

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LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 129778LCS

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Solid LCS Source:

Aqueous LCS Source: MET-38701, MET-36701

	Aqueous (UG/L)			Solid				
Analyte	True	Found	%R	True	Found	C	Limits	%R
Aluminum	50000	50500	101.0				-	
Antimony	500	527	105.4				-	
Arsenic	500	494	98.8				-	
Barium	500	500	100.0				-	
Beryllium	500	515	103.0				-	
Cadmium	500	502	100.4				-	
Calcium	50000	53100	106.2				-	
Chromium	500	495	99.0				-	
Cobalt	500	500	100.0				-	
Copper	500	501	100.2				-	
Iron	50000	52500	105.0				-	
Lead	500	498	99.6				-	
Magnesium	50000	50200	100.4				-	
Manganese	500	498	99.6				-	
Nickel	500	487	97.4				-	
Potassium	50000	53500	107.0				-	
Selenium	500	523	104.6				-	
Silver	500	503	100.6				-	
Sodium	50000	51000	102.0				-	
Thallium	500	515	103.0				-	
Vanadium	500	514	102.8				-	
Zinc	500	522	104.4				-	

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LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 129778LCSD

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Solid LCS Source:

Aqueous LCS Source: MET-38701, MET-36701

	Aqueous (UG/L)			Solid				
Analyte	True	Found	%R	True	Found	C	Limits	%R
Aluminum	50000	50500	101.0				-	
Antimony	500	527	105.4				-	
Arsenic	500	494	98.8				-	
Barium	500	499	99.8				-	
Beryllium	500	515	103.0				-	
Cadmium	500	502	100.4				-	
Calcium	50000	53200	106.4				-	
Chromium	500	496	99.2				-	
Cobalt	500	500	100.0				-	
Copper	500	500	100.0				-	
Iron	50000	52600	105.2				-	
Lead	500	497	99.4				-	
Magnesium	50000	50300	100.6				-	
Manganese	500	497	99.4				-	
Nickel	500	487	97.4				-	
Potassium	50000	53500	107.0				-	
Selenium	500	527	105.4				-	
Silver	500	503	100.6				-	
Sodium	50000	51200	102.4				-	
Thallium	500	516	103.2				-	
Vanadium	500	514	102.8				-	
Zinc	500	521	104.2				-	

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LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 129993LCS

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Solid LCS Source:

Aqueous LCS Source: MET-38307

	Aqueous (UG/L)			Solid				
Analyte	True	Found	%R	True	Found	C	Limits	%R
Mercury	3	3.34	111.3				-	

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LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 129993LCSD

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Solid LCS Source:

Aqueous LCS Source: MET-38307

	Aqueous (UG/L)			Solid				
Analyte	True	Found	%R	True	Found	C	Limits	%R
Mercury	3	3.25	108.3				-	

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LABORATORY CONTROL SAMPLE

EPA Sample No.

130410LCS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Solid LCS Source:

Aqueous LCS Source: IS2786-33501

	Aqueous (UG/L)			Solid				
Analyte	True	Found	%R	True	Found	C	Limits	%R
Cyanide	250	231	92.4				-	

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LABORATORY CONTROL SAMPLE

EPA Sample No.

130410LCSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Solid LCS Source:

Aqueous LCS Source: IS2786-33501

	Aqueous (UG/L)			Solid				
Analyte	True	Found	%R	True	Found	C	Limits	%R
Cyanide	250	205	82.0				-	

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SERIAL DILUTIONS

EPA Sample No.

B-4 SWL

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Level:(low/med) LOW

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ-ence	Q	M
Aluminum	700.00	U	3500.00	U			P
Antimony	50.00	U	250.00	U			P
Arsenic	40.80	U	204.00	U			P
Barium	9.82	U	49.10	U			P
Beryllium	1.89	U	9.45	U			P
Cadmium	7.12	U	35.60	U			P
Calcium	461000.00		466000.00		1.1		P
Chromium	11.40	U	57.00	U			P
Cobalt	11.40	U	56.90	U			P
Copper	23.40	U	117.00	U			P
Iron	334.00	U	1670.00	U			P
Lead	35.20	U	176.00	U			P
Magnesium	1380000.00		1360000.00		1.4		P
Manganese	3.34	U	16.70	U			P
Nickel	19.90	U	99.70	U			P
Potassium	755000.00		628000.00		17	E	P
Selenium	42.00	U	210.00	U			P
Silver	9.44	U	47.20	U			P
Sodium	11100000.00		10700000.00		3.6		P
Thallium	50.80	U	254.00	U			P
Vanadium	8.94	U	44.70	U			P
Zinc	8.18	U	196.00	B			P

Comments:

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SERIAL DILUTIONS

EPA Sample No.

CGW1GW02-R01L

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Level:(low/med) LOW

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ-ence	Q	M
Mercury	0.46		0.10	B	78		CV

Comments:

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METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

ICP ID Number : ICAP Date: 5/5/2003

Furnace AA ID Number :

Analyte	Wave-length (nm)	Back-ground	CRDL (UG/L)	MDL (UG/L)	M
Aluminum	308.2		100	35	P
Antimony	206.8		5	2.5	P
Arsenic	189		5	2.04	P
Barium	493.4		2	0.491	P
Beryllium	313		1	0.0945	P
Cadmium	226.5		1	0.356	P
Calcium	315.8		100	32.5	P
Chromium	267.7		2	0.57	P
Cobalt	228.6		5	0.569	P
Copper	324.7		5	1.17	P
Iron	271.4		50	16.7	P
Lead	220.3		5	1.76	P
Magnesium	279		100	5.23	P
Manganese	257.6		2	0.167	P
Nickel	231.6		5	0.997	P
Potassium	766.4		500	11.5	P
Selenium	196		5	2.1	P
Silver	328		2	0.472	P
Sodium	330.2		300	22.7	P
Thallium	190.8		6	2.54	P
Vanadium	292.4		3	0.447	P
Zinc	213.8		10	0.409	P

Comments:

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METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

ICP ID Number : Date: 5/1/2003

Furnace AA ID Number : FIMS

Analyte	Wave-length (nm)	Back-ground	CRDL (UG/L)	MDL (UG/L)	M
Mercury	253.7		0.2	0.0162	CV

Comments:

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METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

ICP ID Number : Date: 12/1/2002

Furnace AA ID Number : LACHAT

Analyte	Wave-length (nm)	Back-ground	CRDL (UG/L)	MDL (UG/L)	M
Cyanide	570		10	3.73	CA

Comments:

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INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No.: _____ SDG No.: 2402126

ICP ID Number : ICAP Date: 8/22/2003

Analyte	Wave-length		Interelement Correction Factors for: Al	Ca	Cr	Fe	Mg
Aluminum	308.2				-0.000242		
Antimony	206.8		0.000018	-0.000007	0.014009	0.000032	
Arsenic	189		0.000008		0.000133	-0.000097	
Barium	493.4					0.000004	
Beryllium	313						
Cadmium	226.5		-0.000003			0.000069	
Calcium	315.8				-0.003359		
Chromium	267.7					-0.000025	
Cobalt	228.6					0.000015	
Copper	324.7				-0.000139	-0.000051	
Iron	271.4			-0.000027	0.001199		-0.001414
Lead	220.3		0.000551	-0.000028		0.000076	
Magnesium	279			-0.000010		-0.000264	
Manganese	257.6		0.000006			0.000017	0.000016
Nickel	231.6					0.000012	
Selenium	196		-0.000008	-0.000008		-0.000031	
Silver	328		-0.000002				
Thallium	190.8			0.000003	0.000325	-0.000365	
Vanadium	292.4					0.000021	
Zinc	213.8					0.000088	0.000068

Comments:

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INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No.: _____ SDG No.: 2402126

ICP ID Number : ICAP Date: 8/22/2003

Analyte	Wave-length		Interelement Correction Factors for: Mn	Mo	Sb	V	
Aluminum	308.2			0.015255		0.008710	
Antimony	206.8			-0.003241		-0.007207	
Arsenic	189			0.000270			
Barium	493.4						
Beryllium	313					0.000327	
Cadmium	226.5						
Calcium	315.8			0.001535			
Chromium	267.7		0.000279			0.000065	
Cobalt	228.6						
Copper	324.7			0.000368			
Iron	271.4			0.000700		0.009557	
Lead	220.3			-0.000582		-0.000193	
Magnesium	279			-0.006491			
Manganese	257.6						
Nickel	231.6		-0.000174				
Selenium	196		0.000402				
Silver	328			-0.000317		0.000052	
Thallium	190.8		0.000338	-0.000282			
Vanadium	292.4			-0.014646			
Zinc	213.8						

Comments:

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ICP LINEAR RANGES (SEMI-ANNUALLY)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

ICP ID NUMBER ICAP DATE : 9/5/2003

Analyte	Integ. Time (sec.)	Concentration UG/L	M
Aluminum	15	500000	P
Antimony	15	25000	P
Arsenic	15	15000	P
Barium	15	5000	P
Beryllium	15	2500	P
Cadmium	15	5000	P
Calcium	15	500000	P
Chromium	15	20000	P
Cobalt	15	20000	P
Copper	15	25000	P
Iron	15	500000	P
Lead	15	20000	P
Magnesium	15	500000	P
Manganese	15	5000	P
Nickel	15	10000	P
Potassium	15	250000	P
Selenium	15	25000	P
Silver	15	5000	P
Sodium	15	750000	P
Thallium	15	25000	P
Vanadium	15	25000	P
Zinc	15	5000	P

Comments:

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PREPARATION LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Method : 6010

EPA Sample No:	Preparation Date	Weight (gram)	Volume (mL)
129777BLK	16 Feb 04		50
129778LCS	16 Feb 04		50
129778LCSD	16 Feb 04		50
57285LW040212	16 Feb 04		50
B-4 SW	16 Feb 04		50
B-4 SWMS	16 Feb 04		50
B-4 SWSD	16 Feb 04		50

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PREPARATION LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Method : 7470

EPA Sample No:	Preparation Date	Weight (gram)	Volume (mL)
129992BLK	17 Feb 04		25
129993LCS	17 Feb 04		25
129993LCSD	17 Feb 04		25
129995BLK	17 Feb 04		25
57285LW040212	17 Feb 04		25
CGW1GW02-R01	17 Feb 04		25

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PREPARATION LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Method : 9012

EPA Sample No:	Preparation Date	Weight (gram)	Volume (mL)
130409BLK	18 Feb 04		50
130410LCS	18 Feb 04		50
130410LCSD	18 Feb 04		50
57285LW040212	18 Feb 04		50

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ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID Number : ICAP Method : P

Start Date : 2/18/2004 End Date : 2/18/2004

EPA Sample No.	D/F	Time	%R	Analytes																									
				AG	AL	AS	BA	BE	CA	CD	CN	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SN	SR	TI	TL	V	ZN
ZZZZZZ	1	8:23																													
ZZZZZZ	1	8:28																													
ZZZZZZ	1	8:33																													

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ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID Number : ICAP Method : P

Start Date : 2/19/2004 End Date : 2/20/2004

EPA Sample No.	D/F	Time	%R	Analytes																										
				AG	AL	AS	BA	BE	CA	CD	CN	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SN	SR	TI	TL	V	ZN
STD1-B	1	15:18																													
STD3	1	15:23																													
STD2	1	15:28																													
ICV	1	15:33		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	15:38		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ICB	1	15:45		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	15:55																													
ICSA	1	16:04		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ICSAB	1	16:18		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
CCV	1	16:23		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	16:29		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
CCB	1	16:34		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
129777BLK	1	16:40		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
129778LCS	1	16:45		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
129778LCSD	1	16:51		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
B-4 SW	20	17:02		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
B-4 SWL	100	17:08		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
B-4 SWMS	20	17:13		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
B-4 SWSD	20	17:19		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
B-4 SWA	20	17:24		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
57285LW040212	1	17:30		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	17:50																													
CCV	1	17:55		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	18:01																													
CCB	1	18:06		X	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X	X				X	X	X
ZZZZZZ	1	18:12																													
ZZZZZZ	1	18:17																													
ZZZZZZ	1	18:23																													
ZZZZZZ	1	18:28																													
ZZZZZZ	1	18:34																													
ZZZZZZ	1	18:39																													
ZZZZZZ	1	18:45																													
ZZZZZZ	1	18:50																													
ZZZZZZ	1	18:56																													
ZZZZZZ	1	19:01																													
ZZZZZZ	1	19:07																													

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ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID Number : ICAP Method : P

Start Date : 2/19/2004 End Date : 2/20/2004

EPA Sample No.	D/F	Time	%R	Analytes																								
				AG	AL	AS	BA	BE	CA	CD	CN	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SN	SR	TI	TL	V	ZN
ZZZZZZ	1	19:12																													
ZZZZZZ	1	19:18																													
ZZZZZZ	1	19:23																													
ZZZZZZ	1	19:29																													
ZZZZZZ	1	19:34																													
ZZZZZZ	1	19:40																													
ZZZZZZ	1	19:45																													
ZZZZZZ	1	19:45																													
ZZZZZZ	1	19:51																													
ZZZZZZ	1	19:56																													
ZZZZZZ	1	20:02																													
ZZZZZZ	1	20:07																													
ZZZZZZ	1	20:13																													
ZZZZZZ	1	20:18																													
ZZZZZZ	1	20:24																													
ZZZZZZ	1	20:29																													
ZZZZZZ	1	20:29																													
ZZZZZZ	5	20:35																													
ZZZZZZ	1	20:40																													
ZZZZZZ	1	20:40																													
ZZZZZZ	1	20:46																													
ZZZZZZ	1	20:46																													
ZZZZZZ	1	20:51																													
ZZZZZZ	1	20:51																													
ZZZZZZ	1	20:57																													
ZZZZZZ	1	21:02																													
ZZZZZZ	1	21:08																													
ZZZZZZ	1	21:13																													
ZZZZZZ	1	21:19																													
ZZZZZZ	1	21:24																													
ZZZZZZ	1	21:30																													
ZZZZZZ	1	21:35																													
ZZZZZZ	1	21:35																													
ZZZZZZ	1	21:41																													
ZZZZZZ	1	21:46																													
ZZZZZZ	1	21:52																													

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ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID Number : ICAP Method : P

Start Date : 2/19/2004 End Date : 2/20/2004

EPA Sample No.	D/F	Time	%R	Analytes																								
				AG	AL	AS	BA	BE	CA	CD	CN	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SN	SR	TI	TL	V	ZN
ZZZZZZ	1	21:57																													
ZZZZZZ	1	22:03																													
ZZZZZZ	1	22:08																													
ZZZZZZ	1	22:14																													
ZZZZZZ	1	22:19																													
ZZZZZZ	1	22:25																													
ZZZZZZ	1	22:30																													
ZZZZZZ	1	22:36																													
ZZZZZZ	1	22:41																													
ZZZZZZ	5	22:47																													
ZZZZZZ	1	22:52																													
ZZZZZZ	1	22:58																													
ZZZZZZ	1	23:03																													
ZZZZZZ	1	23:09																													
ZZZZZZ	1	23:14																													
ZZZZZZ	1	23:20																													
ZZZZZZ	1	23:25																													
ZZZZZZ	1	23:31																													
ZZZZZZ	1	23:36																													
ZZZZZZ	1	23:42																													
ZZZZZZ	1	23:47																													
ZZZZZZ	1	23:53																													
ZZZZZZ	1	23:59																													
ZZZZZZ	1	0:04																													
ZZZZZZ	1	0:10																													
ZZZZZZ	1	0:15																													
ZZZZZZ	1	0:21																													

010304 1122

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID Number : FIMS Method : CV

Start Date : 2/18/2004 End Date : 2/18/2004

EPA Sample No.	D/F	Time	%R	Analytes																								
				AG	AL	AS	BA	BE	CA	CD	CN	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SN	SR	TI	TL	V	ZN
IICAL1	1	15:20														X															
IICAL2	1	15:22														X															
IICAL3	1	15:23														X															
IICAL4	1	15:25														X															
IICAL5	1	15:27														X															
IICAL6	1	15:29														X															
ICV	1	15:32														X															
ICB	1	15:33														X															
ZZZZZZ	1	15:35																													
ZZZZZZ	1	15:37																													
ZZZZZZ	1	15:39																													
ZZZZZZ	1	15:41																													
ZZZZZZ	1	15:43																													
ZZZZZZ	1	15:44																													
ZZZZZZ	1	15:46																													
ZZZZZZ	1	15:48																													
ZZZZZZ	1	15:50																													
ZZZZZZ	1	15:52																													
CCV	1	15:54														X															
CCB	1	15:56														X															
ZZZZZZ	1	15:57																													
ZZZZZZ	1	15:59																													
ZZZZZZ	1	16:01																													
ZZZZZZ	1	16:03																													
ZZZZZZ	1	16:05																													
ZZZZZZ	1	16:06																													
ZZZZZZ	1	16:08																													
ZZZZZZ	1	16:10																													
ZZZZZZ	1	16:12																													
CCV	1	16:14														X															
CCB	1	16:16														X															
ZZZZZZ	1	16:17																													
ZZZZZZ	1	16:19																													
ZZZZZZ	1	16:21																													
ZZZZZZ	1	16:23																													
ZZZZZZ	1	16:25																													

010304 1122

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID Number : FIMS Method : CV

Start Date : 2/18/2004 End Date : 2/18/2004

EPA Sample No.	D/F	Time	%R	Analytes																									
				AG	AL	AS	BA	BE	CA	CD	CN	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SN	SR	TI	TL	V	ZN
ZZZZZZ	1	16:27																													
ZZZZZZ	5	16:29																													
ZZZZZZ	1	16:31																													
129992BLK	1	16:32														X															
CCV	1	16:34														X															
CCB	1	16:36														X															
129993LCS	1	16:38														X															
129993LCSD	1	16:40														X															
CGW1GW02-R01	1	16:41														X															
ZZZZZZ	1	16:43																													
ZZZZZZ	1	16:45																													
ZZZZZZ	1	16:47																													
ZZZZZZ	1	16:49																													
ZZZZZZ	1	16:51																													
ZZZZZZ	1	16:52																													
CCV	1	16:54														X															
CCB	1	16:56														X															
ZZZZZZ	1	16:58																													
ZZZZZZ	1	17:00																													
ZZZZZZ	1	17:02																													
ZZZZZZ	1	17:04																													
129995BLK	1	17:05														X															
ZZZZZZ	1	17:07																													
ZZZZZZ	1	17:09																													
ZZZZZZ	1	17:11																													
ZZZZZZ	1	17:13																													
CCV	1	17:14														X															
CCB	1	17:16														X															
ZZZZZZ	1	17:18																													
ZZZZZZ	1	17:20																													
ZZZZZZ	1	17:22																													
57285LW040212	1	17:23														X															
CGW1GW02-R01L	1	17:25														X															
CGW1GW02-R01A	1	17:27														X															
CCV	1	17:29														X															
CCB	1	17:31														X															

010304 1122

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14

ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID Number : LACHAT Method : CA

Start Date : 2/12/2004 End Date : 2/12/2004

EPA Sample No.	D/F	Time	%R	Analytes																									
				AG	AL	AS	BA	BE	CA	CD	CN	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SN	SR	TI	TL	V	ZN
IICAL1	1	10:01									X																				
IICAL2	1	10:02									X																				
IICAL3	1	10:03									X																				
IICAL4	1	10:04									X																				
IICAL5	1	10:05									X																				
IICAL6	1	10:06									X																				
IICAL7	1	10:07									X																				

010304 1122

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14

ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID Number : LACHAT Method : CA

Start Date : 2/19/2004 End Date : 2/19/2004

EPA Sample No.	D/F	Time	%R	Analytes																								
				AG	AL	AS	BA	BE	CA	CD	CN	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SN	SR	TI	TL	V	ZN
ICV	1	11:01									X																				
ICB	1	11:02									X																				
130409BLK	1	11:03									X																				
130410LCS	1	11:04									X																				
130410LCSD	1	11:05									X																				
ZZZZZZ	1	11:06																													
ZZZZZZ	1	11:07																													
ZZZZZZ	1	11:08																													
ZZZZZZ	1	11:09																													
ZZZZZZ	1	11:10																													
ZZZZZZ	1	11:11																													
ZZZZZZ	1	11:12																													
CCV	1	11:13									X																				
CCB	1	11:14									X																				
ZZZZZZ	1	11:15																													
ZZZZZZ	1	11:16																													
ZZZZZZ	1	11:17																													
ZZZZZZ	1	11:18																													
ZZZZZZ	1	11:19																													
ZZZZZZ	1	11:20																													
ZZZZZZ	1	11:21																													
57285LW040212	1	11:22									X																				
ZZZZZZ	1	11:23																													
ZZZZZZ	1	11:24																													
CCV	1	11:25									X																				
CCB	1	11:26									X																				

010304 1122

Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402126

METHOD: 6010 **MATRIX:** W

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
Mercury	80-120	20	75-125	20	80-120	10	

METHOD: 9012 **MATRIX:** W

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
Cyanide	74-108	20	74-108	5.7			
Cyanide	74-108	20	74-108	5.7			

010304 1122

WET CHEMISTRY DATA PACKAGE
pH

010304 1122

CASE NARRATIVE
INORGANICS-pH

PEL Lab Reference No./SDG: 2402126

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

Sample Analysis: All holding times were met.

III. METHODS

Analyses were performed according to PEL Laboratory's Standard Operating Procedures and EPA Method 150.1.

IV. ANALYSIS

A. Duplicate:

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

B. Samples:

Sample analysis proceeded normally.

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

SIGNED: _____ **DATE:** 2/24/04

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SDG No.: 2402126

SOW No.:

EPA Sample No	Lab Sample ID
57285LW040212	240212601

Comments:

010304 1122

Sample Data

010304 1122

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1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 240212601

Level:(low/med) LOW Date Received: 2/13/2004

PercentSolids: 0 Station ID: Waste Character

CONCENTRATION UNITS: pH

CAS NO.	ANALYTE	Concentration	C	Q	M
1-00-6	pH	7.6			N/A

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

010304 1122

QC Summary

010304 1122

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID Number : FISHER Method : 150.1

Start Date : 2/13/2004 End Date : 2/13/2004

EPA Sample No.	D/F	Time	%R	Analytes: pH
ZZZZZZ	1	11:45		
ZZZZZZ	1	11:46		
ZZZZZZ	1	11:47		
ZZZZZZ	1	11:48		
57285LW040212	1	11:49		X
ZZZZZZ	1	11:50		
ZZZZZZ	1	11:51		

010304 1122

Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402126

METHOD: 150.1 **MATRIX:** W

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
pH							

010304 1123

WET CHEMISTRY DATA PACKAGE
TOTALS

010304 1123

CASE NARRATIVE
FLASH POIINT/IGNITABILITY

PEL Lab Reference No./SDG: 2402126

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

Sample Analysis: The following samples were analyzed out of hold: 57285LW040212

III. METHODS

Analyses were performed according to PEL Laboratory's Standard Operating Procedures and SW846 Method 1010.
Water samples were prepared by

IV. ANALYSIS

A. Duplicate:

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

B. Samples:

Sample analysis proceeded normally.

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

SIGNED:_____ **DATE:** 2/24/04

W:\InorgNarratives\Feb04\2402126_1010.doc

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SDG No.: 2402126

SOW No.:

EPA Sample No	Lab Sample ID
57285LW040212	240212601

Comments:

010304 1123

Sample Data

010304 1123

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 240212601

Level:(low/med) LOW Date Received: 2/13/2004

PercentSolids: 0 Station ID: Waste Character

CONCENTRATION UNITS: Fahrenheit

CAS NO.	ANALYTE	Concentration	C	Q	M
1-01-3	Flash Point	160	>		N/A

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

010304 1123

QC Summary

010304 1123

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID Number : CLOCUP Method : 1010

Start Date : 2/20/2004 End Date : 2/20/2004

EPA Sample No.	D/F	Time	%R	Analytes: Flash Point
ZZZZZZ	1	13:01		
ZZZZZZ	1	13:02		
ZZZZZZ	1	13:03		
57285LW040212	1	13:04		X
ZZZZZZ	1	13:05		

010304 1123

Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402126

METHOD: 1010 **MATRIX:** W

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
Flash Point							

010304 1123

WET CHEMISTRY DATA PACKAGE
TOTALS

010304 1123

CASE NARRATIVE
SULFIDE

PEL Lab Reference No./SDG: 2402126

Client: CH2M Hill

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

Sample Analysis: All holding times were met.

III. METHODS

Analyses were performed according to PEL Laboratory's Standard Operating Procedures and EPA Method 376.1.

IV. ANALYSIS

A. Blanks:

1. Method Blanks:

All acceptance criteria were met with the exception of:
Blank 129915BLK was analyzed with the water samples on 02/18/04. The following analyte(s) were detected below RL: Sulfide at 0.16 MG/L.
Samples coded accordingly.

B. Spikes:

1. Laboratory Control Spikes (LCS):

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

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

No spikes requested by client.

C. Duplicate:

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

CASE NARRATIVE
SULFIDE

PEL Lab Reference No./SDG: 2402126

Client: CH2M Hill

D. Samples:

Sample analysis proceeded normally.

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

SIGNED:_____ **DATE:** 2/24/04

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SDG No.: 2402126

SOW No.:

EPA Sample No	Lab Sample ID
57285LW040212	240212601

Comments:

010304 1123

Sample Data

010304 1123

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID: 240212601

Level:(low/med) LOW Date Received: 2/13/2004

PercentSolids: 0 Station ID: Waste Character

CONCENTRATION UNITS: MG/L

CAS NO.	ANALYTE	Concentration	C	Q	M
18496-25-8	Sulfide	0.08	U		T

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

010304 1123

QC Summary

010304 1123

U.S. EPA - CLP

3

BLANKS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Preparation Blank Matrix (water/soil): WATER

Preparation Blank Concentration Units (ug/L or mg/Kg): MG/L

Analyte	Initial Calib. Blank (MG/L)	C	Continuing Calibration Blank (MG/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Sulfide									0.16	B	T

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3

BLANKS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Preparation Blank Matrix (water/soil): WATER

Preparation Blank Concentration Units (ug/L or mg/Kg): MG/L

Analyte	Initial Calib. Blank (MG/L)	C	Continuing Calibration Blank (MG/L) 4	C	5	C	6	C	Prepa-ration Blank	C	M
Sulfide									0.08	U	T

010304 1123

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6

DUPLICATES

EPA Sample No.

129910LCSD

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Level:(low/med) LOW

% Solids for Sample: 0 % Solids for Duplicate: 0

Concentration Units (mg/L or mg/kg): MG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Sulfide	20	5.04		5.12		1.6		T

Comments:

010304 1123

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7-CC

LABORATORY CONTROL SAMPLE

EPA Sample No.

129910LCS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: (soil/water) WATER

Concentration Units: (MG/L)

PARAMETER	LCS SOURCE	M	LIMITS LOWER	LIMITS UPPER	TRUE	FOUND	%R	C
Sulfide	IS 1290-18501	T	80	120	5	5.04	100.8	

Comments:

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7-CC

LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 129910LCSD

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: (soil/water) WATER

Concentration Units: (MG/L)

PARAMETER	LCS SOURCE	M	LIMITS LOWER	LIMITS UPPER	TRUE	FOUND	%R	C
Sulfide	IS 1290-18501	T	80	120	5	5.12	102.4	

Comments:

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10

METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: Water

Concentration Units: MG/L

PARAMETER	M	INSTRUMENT ID	DATE	CRDL	MDL
Sulfide	T	TITRAT	8/8/2003	2	0.08

Comments:

010304 1123

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14

ANALYSIS RUN LOG

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Instrument ID Number : TITRAT Method : 376.1

Start Date : 2/18/2004 End Date : 2/18/2004

EPA Sample No.	D/F	Time	%R	Analytes: Sulfide
ZZZZZZ	1	10:45		
129915BLK	1	10:46		X
129910LCS	1	10:47		X
129910LCSD	1	10:48		X
57285LW040212	1	10:49		X
ZZZZZZ	1	10:50		
ZZZZZZ	1	10:51		
129914BLK	1	10:52		X

010304 1123

Laboratory Control Limits

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. _____ SAS No: _____ SDG NO.: 2402126

METHOD: 376.1 **MATRIX:** W

ANALYTE	LCS % REC	LCS RPD	MS % REC	MS RPD	PDS % REC	SD %D	SURR-OGATE % REC
Sulfide	80-120	20	75-125	20			

010304 1123

Chain of Custody Documentation

010304 1123

CH2M Hill Constructors, Inc.
115 Perimeter Center Place, Suite 700
Atlanta, GA 30346-1278
Tel No (770) 604-9182 ; Fax No (770) 604-9282

CHAIN-OF-CUSTODY RECORD

2402126 RM

COC NUMBER: 163231-15

PROJECT NAME:	PROJECT NUMBER:	LAB NAME AND CONTACT:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 1 (Name and Company)	RECIPIENT 1 (Address, Tel No. , and Fax No.):
Former NAS Cecil Field	163231	PEL Laboratories, Inc. Darcy Wiesman	Jeff Marks J.A. Jones Env.	6219 Authority Avenue, Jacksonville, FL 32215 PH: 904-777-4812 FAX: 904-777-4262
PROJECT PHASE/SITE/TASK:	CTO OR DO NUMBER:	LAB PO NUMBER:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (Address, Tel No. , and Fax No.):
Tank 285 Waste Characterization Water	CTO 057		Bonnie Hogue CH2M Hill Constuctors, Inc.	115 Perimeter Center Place, N.E. Suite 700 Atlanta, GA 30346 (770)604-9182 Ext.561
PROJECT CONTACT:	PROJECT TEL NO AND FAX NO:		FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 3 (Name and Company)	RECIPIENT 3 (Address, Tel No. , and Fax No.):
Jeff Marks J.A. Jones Env.	PH (904) 777-4812 FAX (904) 777-4262	Ph:(813) 247-2805		

ANALYSES REQUIRED (Include Method Numbers)

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on back)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see codes on back)	TAT (calendar days)	TCL Volatiles 5035/8260B (GRAB)	TCL Semi-Volatiles 8270C	TPH FL-PRO	PCBs 8082	TCL Pest. 8081A	Ignitability 1010, Corrosivity 9040B	TCL Herb. 8151A	TAL Metals 6010B/7470	Cyanide (Total) 9010	Sulfide (Total) 9030	pH 9045B	SAMPLE TYPE (see codes on back)	COMMENTS/ SCREENING READINGS	LAB ID
1	57285LW040212	Waste Characterization Tank Water	W	02/12/04	15:30	B	7	3	1	1	1	1	1	1	1	1	1	1	Grab		01
2	57TB2W040212	Trip Blank #2	W	NA	NA	B	7	~~2~~ 1	RM 02/13/04										Grab	Prepared by Lab	02
3																					
4																					
5																					
6																					
7																				Temp: 3.5C	
8																				pH<2 (8260, metals)	
9																				pH>12 (CN)	
10																				pH=7 (Sulfide)	

2402126

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:
~~Randy Dumaop~~ / Jeff Marks J.A. Jones Environmental Services	UPS Tracking No. 1Z2AE0480140328785.

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature:			Printed Name and Signature:		
Randy Dumaop	2/12/2004	18:00	UPS Tracking No. 1Z2AE0480140328785.	2/12/2004	18:00
Printed Name and Signature:			Printed Name and Signature:		
			Ryan Moon Ryan Moon/PEL	02/13/04	10:00

Distribution: [ ] **Original** - Laboratory (To be returned with Analytical Report); [ ] **Copy 1** - Project File; [ ] **Copy 2** - PMO

Form CCI001, Rev 02/00

SAMPLE RECEIPT CONFIRMATION SHEET

Client Information

SDG:	2402126	**Req:**	47410
Client:	CH2M Hill	**Project:**	CTO 057/R3 Tank 285
Level:	4	**Date Rec'd:**	2/13/04 10:00:00 AM
Rec'd via:	UPS	**Due Date:**	02/27/04

Sample Verification

Samples/Cooler Secure?	Yes	**All Samples on COC accounted For?**	Yes
Temperature of Samples(Celsius)	3.5	**All Samples Rec'd Intact?**	Yes
pH Verified?	Yes	**Sample Vol. Stuff. For Analysis?**	Yes
pH WNL?	No	**Samples Rec'd W/I Hold Time?**	Yes
Soil Origin (Domestic/Foreign):		**Are All Samples to be Analyzed?**	Yes
Site Location/Project on COC?	Yes	**Correct Sample Containers?**	Yes
Client Project # on COC?	Yes	**COC Comments written on COC?**	Yes
Project Mgr. Indicated on COC?	Yes	**Samplers Initials on COC?**	Yes
COC relinquished/Dated by Client?	Yes	**Sample Date/Time Indicated?**	Yes
COC Received/Dated by PEL?	Yes	**TAT Requested:**	RUSH
Specific Subcontract Indicated?	No	**Client Requests Verbal Results?**	Yes
Samples Received By	UPS	**Client Requests Faxed Results?**	Yes
PEL to Conduct ALL Analyses?	Yes		

Subcontract Analysis

Parameter	Due Date	Via	Lab Name	Comments

PEER REVIEW **PM REVIEW:**

pH LOG SHEET

Work Order # 2402126

By RM

Client / Project Name CH2M HILL / Former NAS Cecil Field

Date 02/13/04

PEL Sample Number	H_2SO_4 pH<2	HNO_3 pH<2	NaOH pH>12	ZnAC/NaOH pH>9	HCl pH<2	Other _____ pH _____
01		① pH<2	pH>12	pH=7	③ pH<2	

W:\login\phlogsheet

2402126

Client: CH2M Hill

WONo: 2402126 **Profile Name:** Cecil Field **Profile #:** 47410

MATRIX ***W***

Sample #	Parameter		Relinquished	Received	Date	Time
01	376.1	Sulfide	J.HS	LAC	2-18-04	1000
01	376.1	Sulfide	LAC	J.HS	2-18-04	1200
01	9012	Total Cyanide	J.HS	JP	2/18/04	9:00
01	9012	Total Cyanide	JP	J.HS	2/18/04	16:00
01	FL-PRO	Petroleum Hydrocarbons	J.HS	DM	2-13-04	5:30 p.m.
01	FL-PRO	Petroleum Hydrocarbons	consumed			
01	8151	Herbicides	J.HS	L	2-13-04	11:25
01	8151	Herbicides	Consumed			
01	150.1	pH	J.HS	JP	2/13/04	11:30
01	150.1	pH	JP	J.HS	2/13/04	12:50
01	1010	Flashpoint	J.HS	JC	2-20-04	12:15
01	1010	Flashpoint	JC	J.HS	2-20-04	15:40
01	8082	PCB	J.HS	RS	2/16/04	4:00
01	8082	PCB	Consumed			
01	8081	Pesticides	J.HS	L	2/16/04	4:00
01	8081	Pesticides	Consumed			
01	8270	GCMS semivolatile	J.HS	DM	2-13-04	5:30 p.m.
01	8270	GCMS semivolatile	consumed			
01 & 02	8260	Volatile Organic Compounds	J.HS	TP	2/13/04	1600
01 & 02	8260	Volatile Organic Compounds				
01	6010	Metals	J.HS	SK	2/16/4	2000
01	6010	Metals	SK	J.HS	2/16/4	2030
01	7470	Mercury	J.HS	SK	2/12/4	1730
01	7470	Mercury	SK	J.HS	2/12/4	1800

WONo: 2402126 **Profile Name:** Cecil Field **Profile #:** 47410

Additional:

1	5270 (8310 bottle)	consumed	OM	2/17/04	6:30pm.

Comments:

Addendum

010304 1123

Letter of Acceptance

Customer Name:	CH2M Hill
Date and Time Received:	2/13/04 10:00:00 AM
Date to be Reported:	2/20/04
Laboratory Submission Number/SDG:	2402126
Project:	Former NAS Cecil Field

Samples: The submission consisted of 2 samples with sample identification shown in the attached data tables.

Tests: The Samples will be analyzed for EPA methods: 1010, 150.1, 376.1, 6010, 7470, 8081, 8082, 8151, 8260, 8270, 9012, FL-PRO.

Sample Custody/COC discrepancies:

Please note that PEL will report Total Cyanide and Total Sulfide for Reactivity. PEL reports Cyanide by method 9012. PEL reports Sulfide by method 376.1. PEL reports pH by method 150.1. The pH for Sulfide upon receipt was 7.

Notes:

None.

Distribution of Report to:

CH2M Hill
Attn: Melissa Osborne
Phone: W 770-604-9182
F 770-604-9282

Note: Submitted material will be retained for 30 days unless otherwise requested by client or consumed in analysis. PEL letters and reports are for the exclusive use of the client to whom they are addressed. OurLetters and reports apply to the sample tested and are not necessarily indicative of the qualities of apparently identical or similar materials

Log-in Report

Level: 3

Total of: 13 analyses on 2 samples (including QC) *16-Feb-04*

Report/SDG #: 2402126

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
57285LW040212	240212601	Waste Character	W	2/12/04 3:30:00 PM	2/13/04 10:00:00 AM

Method		
1010	Flashpoint	1010
150.1	pH	150.1
376.1	Sulfide	376.1
6010	Metals	6010
7470	Mercury	7470
8081	Pesticides	8081
8082	PCB	8082
8151	Herbicides	8151
8260	Volatile Organic Compounds	8260
8270	GCMS semivolatile	8270
9012	Total Cyanide	9012
FL-PRO	Petroleum Hydrocarbons	FL-PRO

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
57TB2W040212	240212602	Trip Blank #2	WQ	2/13/04	2/13/04 10:00:00 AM

Method		
8260	Volatile Organic Compounds	8260

FAX MESSAGE

1010000 1000101 1100110
PEL Laboratories, Inc.

4420 Pendola Point Road
Tampa, Florida 33619
Phone: (813) 247-2805
Fax: (813) 248-1537

Date: 2/23/04

To: Bonnie Hogue

Company: CCI

Number: via email

From: Darcy Weisman

This transmittal consists of ____ page(s), exclusive of the cover sheet.

Notes:
prelims for SDG 2401-126:
metals
8081
8082
8260/8270
PRO
8151- being re-extracted
Flash/sulfide-

4420 Pendola Point Road • Tampa, Florida 33619
(813) 247-2805 • FAX: (813) 248-1537

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1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID 240212601

Level:(low/med) LOW Date Received: 2/13/04

PercentSolids: 0 Station ID: Waste Character

CONCENTRATION UNITS: UG/L

CAS NO.	ANALYTE	Concentration	C	Q	M
7429-90-5	Aluminum	27100			P
7440-36-0	Antimony	18.9			P
7440-38-2	Arsenic	4.92	B		P
7440-39-3	Barium	81.3			P
7440-41-7	Beryllium	0.494	B		P
7440-43-9	Cadmium	6.35			P
7440-70-2	Calcium	81700			P
7440-47-3	Chromium	33.1			P
7440-48-4	Cobalt	1.96	B		P
7440-50-8	Copper	238			P
7439-89-6	Iron	43800			P
7439-92-1	Lead	138			P
7439-95-4	Magnesium	13100			P
7439-96-5	Manganese	218			P
7439-97-6	Mercury	0.519			CV
7440-02-0	Nickel	14.8			P
7440-09-7	Potassium	2550			P
7782-49-2	Selenium	5.84			P
7440-22-4	Silver	0.472	U		P
7440-23-5	Sodium	7080			P
7440-28-0	Thallium	3.16	B		P
7440-62-2	Vanadium	23.7			P
7440-66-6	Zinc	4630			P

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

230204 1140

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3

BLANKS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Preparation Blank Matrix (water/soil): WATER

Preparation Blank Concentration Units (ug/L or mg/Kg): UG/L

Analyte	Initial Calib. Blank (UG/L)	C	Continuing Calibration Blank (UG/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	35	U	35	U	35	U			35	U	P
Antimony	2.5	U	2.5	U	2.5	U			2.5	U	P
Arsenic	2.04	U	2.04	U	2.04	U			2.04	U	P
Barium	0.491	U	0.491	U	0.491	U			0.491	U	P
Beryllium	0.125	B	0.0945	U	0.0945	U			0.0945	U	P
Cadmium	0.356	U	0.356	U	0.356	U			0.356	U	P
Calcium	32.5	U	32.5	U	-35.9	B			32.5	U	P
Chromium	0.57	U	0.57	U	0.57	U			0.57	U	P
Cobalt	0.569	U	0.569	U	0.569	U			0.569	U	P
Copper	1.17	U	1.17	U	1.17	U			1.17	U	P
Iron	-21	B	-19.4	B	-35.9	B			16.7	U	P
Lead	1.76	U	1.76	U	1.76	U			1.76	U	P
Magnesium	-22.2	B	-16.6	B	-31.7	B			5.23	U	P
Manganese	0.167	U	0.167	U	0.167	U			0.167	U	P
Mercury	0.0162	U	0.0162	U	0.0162	U	-0.0168	B	0.0162	U	CV
Nickel	0.997	U	0.997	U	0.997	U			0.997	U	P
Potassium	-21.8	B	11.5	U	-21.8	B			12	B	P
Selenium	2.1	U	2.1	U	2.1	U			2.1	U	P
Silver	0.472	U	0.472	U	0.472	U			0.472	U	P
Sodium	27.1	B	22.7	U	22.7	U			22.7	U	P
Thallium	2.54	U	2.54	U	2.54	U			2.54	U	P
Vanadium	0.447	U	0.447	U	0.447	U			0.447	U	P
Zinc	0.409	U	0.409	U	0.409	U			0.409	U	P

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3

BLANKS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Preparation Blank Matrix (water/soil): WATER

Preparation Blank Concentration Units (ug/L or mg/Kg): UG/L

Analyte	Initial Calib. Blank (UG/L)	C	Continuing Calibration Blank (UG/L) 4	C	5	C	6	C	Prepa-ration Blank	C	M
Aluminum											P
Antimony											P
Arsenic											P
Barium											P
Beryllium											P
Cadmium											P
Calcium											P
Chromium											P
Cobalt											P
Copper											P
Iron											P
Lead											P
Magnesium											P
Manganese											P
Mercury			0.0162	U	0.0162	U	0.0162	U	0.0162	U	CV
Nickel											P
Potassium											P
Selenium											P
Silver											P
Sodium											P
Thallium											P
Vanadium											P
Zinc											P

230204 1141

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7

LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 129778LCS

Lab Code: PEL Case No. SAS No. SDG No.: 2402126

Solid LCS Source:

Aqueous LCS Source: MET-38701, MET-36701

Analyte	Aqueous (UG/L) True	Found	%R	Solid True	Found	C	Limits	%R
Aluminum	50000	50500	101.0				-	
Antimony	500	527	105.4				-	
Arsenic	500	494	98.8				-	
Barium	500	500	100.0				-	
Beryllium	500	515	103.0				-	
Cadmium	500	502	100.4				-	
Calcium	50000	53100	106.2				-	
Chromium	500	495	99.0				-	
Cobalt	500	500	100.0				-	
Copper	500	501	100.2				-	
Iron	50000	52500	105.0				-	
Lead	500	498	99.6				-	
Magnesium	50000	50200	100.4				-	
Manganese	500	498	99.6				-	
Nickel	500	487	97.4				-	
Potassium	50000	53500	107.0				-	
Selenium	500	523	104.6				-	
Silver	500	503	100.6				-	
Sodium	50000	51000	102.0				-	
Thallium	500	515	103.0				-	
Vanadium	500	514	102.8				-	
Zinc	500	522	104.4				-	

230204 1142

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7

LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 129778LCSD

Lab Code: PEL Case No: SAS No: SDG No.: 2402126

Solid LCS Source:

Aqueous LCS Source: MET-38701, MET-36701

Analyte	Aqueous (UG/L) True	Found	%R	Solid True	Found	C	Limits	%R
Aluminum	50000	50500	101.0				-	
Antimony	500	527	105.4				-	
Arsenic	500	494	98.8				-	
Barium	500	499	99.8				-	
Beryllium	500	515	103.0				-	
Cadmium	500	502	100.4				-	
Calcium	50000	53200	106.4				-	
Chromium	500	496	99.2				-	
Cobalt	500	500	100.0				-	
Copper	500	500	100.0				-	
Iron	50000	52600	105.2				-	
Lead	500	497	99.4				-	
Magnesium	50000	50300	100.6				-	
Manganese	500	497	99.4				-	
Nickel	500	487	97.4				-	
Potassium	50000	53500	107.0				-	
Selenium	500	527	105.4				-	
Silver	500	503	100.6				-	
Sodium	50000	51200	102.4				-	
Thallium	500	516	103.2				-	
Vanadium	500	514	102.8				-	
Zinc	500	521	104.2				-	

230204 1142

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7

LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 129993LCS

Lab Code: PEL Case No: SAS No: SDG No.: 2402126

Solid LCS Source:

Aqueous LCS Source: MET-38307

Analyte	Aqueous (UG/L) True	Found	%R	Solid True	Found	C	Limits	%R
Mercury	3	3.34	111.3				-	

230204 1142

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7

LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 129993LCSD

Lab Code: PEL Case No: SAS No: SDG No.: 2402126

Solid LCS Source:

Aqueous LCS Source: MET-38307

Analyte	Aqueous (UG/L) True	Found	%R	Solid True	Found	C	Limits	%R
Mercury	3	3.25	108.3				-	

230204 1142

1

PESTICIDE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID 240212601 Lab File ID 126-01.D

Sample wt/vol: 990 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 10 Date Extracted: 02/16/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 1023

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID Waste Character Method: 8081

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.058	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.05	U
72-55-9	4,4'-DDE	0.056	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.05	U
72-54-8	4,4'-DDD	0.05	U
1031-07-8	Endosulfan sulfate	0.05	U
50-29-3	4,4'-DDT	0.05	U
72-43-5	Methoxychlor	0.05	U
7421-93-4	Endrin aldehyde	0.052	U
5103-74-2	gamma-Chlordane	0.05	U
5103-71-9	alpha-Chlordane	0.05	U
53494-70-5	Endrin ketone	0.05	U
8001-35-2	Toxaphene	5	U

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

230204 1144

Form I

1

PESTICIDE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 6891BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID 129710 Lab File ID 6891BLK.D

Sample wt/vol: 1000 Units: ML Date Received: 02/16/04

Concentrated Extract Volume: 10 Date Extracted: 02/16/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 0659

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID Method: 8081

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.058	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.05	U
72-55-9	4,4'-DDE	0.056	U
72-20-8	Endrin	0.05	U
33213-65-9	Endosulfan II	0.05	U
72-54-8	4,4'-DDD	0.05	U
1031-07-8	Endosulfan sulfate	0.05	U
50-29-3	4,4'-DDT	0.05	U
72-43-5	Methoxychlor	0.05	U
7421-93-4	Endrin aldehyde	0.051	U
5103-74-2	gamma-Chlordane	0.05	U
5103-71-9	alpha-Chlordane	0.05	U
53494-70-5	Endrin ketone	0.05	U
8001-35-2	Toxaphene	5	U

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

230204 1145

Form I

PESTICIDE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No. 6891LCS2

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
alpha-BHC	0.5	0.31	62.0		42.0	27 - 118
beta-BHC	0.5	0.34	68.0		36.0	33 - 130
delta-BHC	0.5	0.37	74.0		42.0	35 - 102
gamma-BHC (Lindane)	0.5	0.3	60.0		39.0	28 - 127
Heptachlor	0.5	0.32	64.0		31.0	25 - 123
Aldrin	0.5	0.3	60.0		42.0	55 - 117
Heptachlor epoxide	0.5	0.35	70.0		31.0	45 - 114
Endosulfan I	0.5	0.36	72.0		34.0	30 - 126
Dieldrin	0.5	0.35	70.0		31.0	35 - 116
4,4'-DDE	0.5	0.34	68.0		36.0	35 - 121
Endrin	0.5	0.37	74.0		31.0	37 - 121
Endosulfan II	0.5	0.39	78.0		31.0	36 - 121
4,4'-DDD	0.5	0.38	76.0		39.0	30 - 129
Endosulfan sulfate	0.5	0.46	92.0		34.0	34 - 125
4,4'-DDT	0.5	0.38	76.0		32.0	19 - 149
Methoxychlor	0.5	0.39	78.0		30.0	63 - 151
Endrin aldehyde	0.5	0.31	62.0		42.0	37 - 117
gamma-Chlordane	0.5	0.35	70.0		40.0	48 - 124
alpha-Chlordane	0.5	0.35	70.0		40.0	47 - 122
Endrin ketone	0.5	0.45	90.0		40.0	57 - 132

Spike Recovery: 0 out of 20 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1145

Form III

PESTICIDE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 6891LCS3

Lab Code : PEL Case No. SAS No. SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
alpha-BHC	0.5	0.32	64.0	3.2	42.0	27 - 118
beta-BHC	0.5	0.36	72.0	5.7	36.0	33 - 130
delta-BHC	0.5	0.38	76.0	2.7	42.0	35 - 102
gamma-BHC (Lindane)	0.5	0.31	62.0	3.3	39.0	28 - 127
Heptachlor	0.5	0.33	66.0	3.1	31.0	25 - 123
Aldrin	0.5	0.31	62.0	3.3	42.0	55 - 117
Heptachlor epoxide	0.5	0.37	74.0	5.6	31.0	45 - 114
Endosulfan I	0.5	0.38	76.0	5.4	34.0	30 - 126
Dieldrin	0.5	0.36	72.0	2.8	31.0	35 - 116
4,4'-DDE	0.5	0.35	70.0	2.9	36.0	35 - 121
Endrin	0.5	0.38	76.0	2.7	31.0	37 - 121
Endosulfan II	0.5	0.41	82.0	5.0	31.0	36 - 121
4,4'-DDD	0.5	0.39	78.0	2.6	39.0	30 - 129
Endosulfan sulfate	0.5	0.48	96.0	4.3	34.0	34 - 125
4,4'-DDT	0.5	0.4	80.0	5.1	32.0	19 - 149
Methoxychlor	0.5	0.41	82.0	5.0	30.0	63 - 151
Endrin aldehyde	0.5	0.32	64.0	3.2	42.0	37 - 117
gamma-Chlordane	0.5	0.37	74.0	5.6	40.0	48 - 124
alpha-Chlordane	0.5	0.36	72.0	2.8	40.0	47 - 122
Endrin ketone	0.5	0.48	96.0	6.5	40.0	57 - 132

Spike Recovery: 0 out of 20 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1145

Form III

PESTICIDE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.: 6891TLCS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Toxaphene	10	7.5	75.0		38.0	70 - 130

Spike Recovery: 0 out of 1 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1145

Form III

1

PCB ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 57285LW040212

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID 240212601 Lab File ID 126-01.D

Sample wt/vol: 990 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 10 Date Extracted: 02/16/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 1023

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID Waste Character Method: 8082

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
12674-11-2	Aroclor-1016	0.5	U
11096-82-5	Aroclor-1260	0.5	U
11104-28-2	Aroclor-1221	5	U
11141-16-5	Aroclor-1232	5	U
53469-21-9	Aroclor-1242	5	U
12672-29-6	Aroclor-1248	5	U
11097-69-1	Aroclor-1254	5	U

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

230204 1146

Form I

1

PCB ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

6891BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID 129711 Lab File ID 6891BLK.D

Sample wt/vol: 1000 Units: ML Date Received: 02/16/04

Concentrated Extract Volume: 10 Date Extracted: 02/16/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 0659

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID Method: 8082

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
12674-11-2	Aroclor-1016	0.5	U
11096-82-5	Aroclor-1260	0.5	U
11104-28-2	Aroclor-1221	5	U
11141-16-5	Aroclor-1232	5	U
53469-21-9	Aroclor-1242	5	U
12672-29-6	Aroclor-1248	5	U
11097-69-1	Aroclor-1254	5	U

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

230204 1146

Form I

PCB ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.: 6892LCS2

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	10	6.2	62.0		30.0	37 - 100
Aroclor-1260	10	6.9	69.0		30.0	47 - 96

Spike Recovery: 0 out of 2 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1146

Form III

3

PCB ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

6892LCS3

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	10	6.2	62.0	0.0	30.0	37 - 100
Aroclor-1260	10	6.7	67.0	2.9	30.0	47 - 96

Spike Recovery: 0 out of 2 outside limits

Higher value of the two columns reported as result unless %D between the columns is >40%, then the lower of the two results is reported

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1146

Form III

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID 240212601 Lab File ID 12601.D

Sample wt/vol: 5 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 1415

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID Waste Character Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-15-0	Carbon disulfide	1	U
75-09-2	Methylene chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
67-64-1	Acetone	4	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	Bromochloromethane	1	U
78-93-3	2-Butanone	2	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-10-1	4-Methyl-2-pentanone	2	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U

230204 1147

Form I

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID 240212601 Lab File ID 12601.D

Sample wt/vol: 5 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 1415

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID Waste Character Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
591-78-6	2-Hexanone	2	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane(EDB)	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene (Cumene)	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U
1330-20-7	Xylene (total)	3	U
1634-04-4	MTBE	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
108-87-2	Methyl Cyclohexane	1	U
79-20-9	Methyl Acetate	1	U
110-82-7	Cyclohexane	1	U

230204 1147

Form I

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 57TB2W040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID 240212602 Lab File ID 12602.D

Sample wt/vol: 5 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 1438

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID Trip Blank #2 Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-15-0	Carbon disulfide	1	U
75-09-2	Methylene chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
67-64-1	Acetone	4	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	Bromochloromethane	1	U
78-93-3	2-Butanone	2	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-10-1	4-Methyl-2-pentanone	2	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U

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Form I

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57TB2W040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID 240212602 Lab File ID 12602.D

Sample wt/vol: 5 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 1438

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID Trip Blank #2 Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
591-78-6	2-Hexanone	2	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane(EDB)	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene (Cumene)	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U
1330-20-7	Xylene (total)	3	U
1634-04-4	MTBE	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
108-87-2	Methyl Cyclohexane	1	U
79-20-9	Methyl Acetate	1	U
110-82-7	Cyclohexane	1	U

230204 1147

Form I

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

021304BLKA32

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID 021304BLKA32 Lab File ID BLK32.D

Sample wt/vol: 5 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 0829

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-15-0	Carbon disulfide	1	U
75-09-2	Methylene chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
67-64-1	Acetone	4	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	Bromochloromethane	1	U
78-93-3	2-Butanone	2	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-10-1	4-Methyl-2-pentanone	2	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U

230204 1147

Form I

1

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 021304BLKA32

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID 021304BLKA32 Lab File ID BLK32.D

Sample wt/vol: 5 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 5 Date Extracted:

Level:(low/med) LOW Date Analyzed: 02/13/04 Time: 0829

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: PURGETRAP Station ID Method: 8260

GPC Cleanup : (Y/N) pH:

Column(1): DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
591-78-6	2-Hexanone	2	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane(EDB)	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene (Cumene)	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U
1330-20-7	Xylene (total)	3	U
1634-04-4	MTBE	1	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	U
108-87-2	Methyl Cyclohexane	1	U
79-20-9	Methyl Acetate	1	U
110-82-7	Cyclohexane	1	U

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021304LCSA32

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	20	19.8	99.0		21.0	56 - 144
Chloromethane	20	19.4	97.0		18.0	48 - 149
Vinyl chloride	20	16.7	83.5		24.0	66 - 128
Bromomethane	20	19.3	96.5		20.0	55 - 159
Chloroethane	20	19.2	96.0		12.0	77 - 144
Trichlorofluoromethane	20	18.4	92.0		14.0	65 - 190
1,1-Dichloroethene	20	21	105.0		14.0	75 - 150
Carbon disulfide	20	19.5	97.5		17.0	72 - 142
Methylene chloride	20	20.2	101.0		9.0	81 - 129
trans-1,2-Dichloroethene	20	20.8	104.0		14.0	84 - 135
1,1-Dichloroethane	20	20.7	104.0		10.0	88 - 127
Acetone	60	68.4	114.0		19.0	70 - 135
cis-1,2-Dichloroethene	20	21.4	107.0		11.0	88 - 127
Bromochloromethane	20	21	105.0		12.0	80 - 124
2-Butanone	60	61.2	102.0		20.0	83 - 127
Chloroform	20	20.1	100.0		13.0	83 - 127
1,1,1-Trichloroethane	20	21.4	107.0		12.0	83 - 132
Carbon tetrachloride	20	22.8	114.0		15.0	74 - 140
Benzene	20	20.6	103.0		10.0	82 - 129
1,2-Dichloroethane	20	21.4	107.0		8.0	86 - 120
Trichloroethene	20	20.9	104.0		13.0	82 - 127
1,2-Dichloropropane	20	20.6	103.0		11.0	83 - 126
Bromodichloromethane	20	20.5	102.0		13.0	84 - 127
cis-1,3-Dichloropropene	20	21.8	109.0		13.0	67 - 133
4-Methyl-2-pentanone	60	57	95.0		15.0	64 - 140
Toluene	20	20.6	103.0		13.0	82 - 128
trans-1,3-Dichloropropene	20	24.3	122.0		10.0	62 - 137
1,1,2-Trichloroethane	20	21.2	106.0		13.0	86 - 117
Tetrachloroethene	20	21.2	106.0		11.0	87 - 124
2-Hexanone	60	69.8	116.0		19.0	58 - 136
Dibromochloromethane	20	21.2	106.0		12.0	87 - 123
1,2-Dibromoethane(EDB)	20	20.9	104.0		11.0	79 - 117

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1147

Form III

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No. 021304LCSA32

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Chlorobenzene	20	20.9	104.0		12.0	87 - 117
Ethylbenzene	20	21.2	106.0		13.0	89 - 121
Styrene	20	21.2	106.0		13.0	80 - 127
Bromoform	20	23.7	118.0		10.0	67 - 129
Isopropylbenzene (Cumene)	20	19.8	99.0		10.0	96 - 118
1,1,2,2-Tetrachloroethane	20	19.5	97.5		9.0	87 - 116
1,3-Dichlorobenzene	20	20.5	102.0		13.0	88 - 121
1,4-Dichlorobenzene	20	20.3	102.0		11.0	88 - 118
1,2-Dichlorobenzene	20	21	105.0		13.0	91 - 116
1,2-Dibromo-3-chloropropane	20	22.6	113.0		17.0	82 - 127
1,2,4-Trichlorobenzene	20	23.9	120.0		11.0	84 - 124
1,2,3-Trichlorobenzene	20	24.7	124.0 *		11.0	91 - 122
Xylene (total)	60	62.6	104.0		9.0	82 - 124
MTBE	20	21.3	106.0		17.0	83 - 131
1,1,2-Trichlorotrifluoroethane	20	20.6	103.0		30.0	70 - 130
Methyl Cyclohexane	20	21.2	106.0		30.0	70 - 130
Methyl Acetate	20	21.3	106.0		30.0	70 - 130
Cyclohexane	20	21.2	106.0		30.0	70 - 130

Spike Recovery: 1 out of 50 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1147

Form III

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021304LCSA32D

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	20	18.6	93.0	6.2	21.0	56 - 144
Chloromethane	20	19	95.0	2.1	18.0	48 - 149
Vinyl chloride	20	16.2	81.0	3.0	24.0	66 - 128
Bromomethane	20	18.4	92.0	4.8	20.0	55 - 159
Chloroethane	20	17.8	89.0	7.6	12.0	77 - 144
Trichlorofluoromethane	20	17.2	86.0	6.7	14.0	65 - 190
1,1-Dichloroethene	20	19.8	99.0	5.9	14.0	75 - 150
Carbon disulfide	20	18.3	91.5	6.3	17.0	72 - 142
Methylene chloride	20	19.9	99.5	1.5	9.0	81 - 129
trans-1,2-Dichloroethene	20	20.1	100.0	3.4	14.0	84 - 135
1,1-Dichloroethane	20	20.1	100.0	2.9	10.0	88 - 127
Acetone	60	64.7	108.0	5.6	19.0	70 - 135
cis-1,2-Dichloroethene	20	20.9	104.0	2.4	11.0	88 - 127
Bromochloromethane	20	20.5	102.0	2.4	12.0	80 - 124
2-Butanone	60	66.3	110.0	8.0	20.0	83 - 127
Chloroform	20	19.7	98.5	2.0	13.0	83 - 127
1,1,1-Trichloroethane	20	20.3	102.0	5.3	12.0	83 - 132
Carbon tetrachloride	20	21.7	108.0	4.9	15.0	74 - 140
Benzene	20	20.1	100.0	2.5	10.0	82 - 129
1,2-Dichloroethane	20	20.6	103.0	3.8	8.0	86 - 120
Trichloroethene	20	20.4	102.0	2.4	13.0	82 - 127
1,2-Dichloropropane	20	19.7	98.5	4.5	11.0	83 - 126
Bromodichloromethane	20	19.9	99.5	3.0	13.0	84 - 127
cis-1,3-Dichloropropene	20	21.5	108.0	1.4	13.0	67 - 133
4-Methyl-2-pentanone	60	55.6	92.7	2.5	15.0	64 - 140
Toluene	20	20	100.0	3.0	13.0	82 - 128
trans-1,3-Dichloropropene	20	23.6	118.0	2.9	10.0	62 - 137
1,1,2-Trichloroethane	20	20.8	104.0	1.9	13.0	86 - 117
Tetrachloroethene	20	20.6	103.0	2.9	11.0	87 - 124
2-Hexanone	60	66.2	110.0	5.3	19.0	58 - 136
Dibromochloromethane	20	20.8	104.0	1.9	12.0	87 - 123
1,2-Dibromoethane(EDB)	20	20.8	104.0	0.5	11.0	79 - 117

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1147

Form III

VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021304LCSA32D

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Chlorobenzene	20	19.8	99.0	5.4	12.0	87 - 117
Ethylbenzene	20	20.3	102.0	4.3	13.0	89 - 121
Styrene	20	20.7	104.0	2.4	13.0	80 - 127
Bromoform	20	22	110.0	7.4	10.0	67 - 129
Isopropylbenzene (Cumene)	20	18.8	94.0 *	5.2	10.0	96 - 118
1,1,2,2-Tetrachloroethane	20	18.3	91.5	6.3	9.0	87 - 116
1,3-Dichlorobenzene	20	20	100.0	2.5	13.0	88 - 121
1,4-Dichlorobenzene	20	20	100.0	1.5	11.0	88 - 118
1,2-Dichlorobenzene	20	20.4	102.0	2.9	13.0	91 - 116
1,2-Dibromo-3-chloropropane	20	21	105.0	7.3	17.0	82 - 127
1,2,4-Trichlorobenzene	20	23.2	116.0	3.0	11.0	84 - 124
1,2,3-Trichlorobenzene	20	22.4	112.0	9.8	11.0	91 - 122
Xylene (total)	60	60.1	100.0	4.1	9.0	82 - 124
MTBE	20	21.4	107.0	0.5	17.0	83 - 131
1,1,2-Trichlorotrifluoroethane	20	19.5	97.5	5.5	30.0	70 - 130
Methyl Cyclohexane	20	19.9	99.5	6.3	30.0	70 - 130
Methyl Acetate	20	22.1	110.0	3.7	30.0	70 - 130
Cyclohexane	20	19.8	99.0	6.8	30.0	70 - 130

Spike Recovery: 1 out of 50 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1147

Form III

1

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID 240212601 Lab File ID 126-1.D

Sample wt/vol: 985 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 2 Date Extracted: 02/13/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 1437

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID Waste Character Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: MG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
5289290-40-0	TPH	0.17	J

230204 1148

Form I

1

FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 021304WBLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID 129491 Lab File ID 0213BLK.D

Sample wt/vol: 1000 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 2 Date Extracted: 02/13/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 1211

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID Method: FL-PRO

GPC Cleanup : (Y/N) N pH:

Column(1): RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: MG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
5289290-40-0	TPH	0.34	U

230204 1148

Form I

FL-PRO ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.: 021304WLCS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code: PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED MG/L	LCS CONCENTRATION MG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
TPH	3.4	2.4	70.6		20.0	55 - 118

Spike Recovery: 0 out of 1 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1148

Form III

FL-PRO ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021304WLCSD

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED MG/L	LCS CONCENTRATION MG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
TPH	3.4	2.4	70.6	0.0	20.0	55 - 118

Spike Recovery: 0 out of 1 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1148

Form III

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID 240212601

Level:(low/med) LOW Date Received: 2/13/04

PercentSolids: 0 Station ID: Waste Character

CONCENTRATION UNITS: Fahrenheit

CAS NO.	ANALYTE	Concentration	C	Q	M
1-01-3	Flash Point	160	>		N/A

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

230204 1315

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID 240212601

Level:(low/med) LOW Date Received: 2/13/04

PercentSolids: 0 Station ID: Waste Character

CONCENTRATION UNITS: MG/L

CAS NO.	ANALYTE	Concentration	C	Q	M
18496-25-8	Sulfide	0.08	U		T

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

230204 1316

U.S. EPA - CLP

3

BLANKS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Preparation Blank Matrix (water/soil): WATER

Preparation Blank Concentration Units (ug/L or mg/Kg): MG/L

Analyte	Initial Calib. Blank (MG/L)	C	Continuing Calibration Blank (MG/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Sulfide									0.16	B	T

230204 1316

U.S. EPA - CLP

3

BLANKS

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Preparation Blank Matrix (water/soil): WATER

Preparation Blank Concentration Units (ug/L or mg/Kg): MG/L

Analyte	Initial Calib. Blank (MG/L)	C	Continuing Calibration Blank (MG/L) 4	C	5	C	6	C	Prepa-ration Blank	C	M
Sulfide									0.08	U	T

230204 1316

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID 240212601 Lab File ID 126-1.D

Sample wt/vol: 1000 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 1 Date Extracted: 02/13/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 1255

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID Waste Character Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
111-44-4	Bis(2-Chloroethyl)ether	4	U
108-95-2	Phenol	4	U
95-57-8	2-Chlorophenol	4	U
108-60-1	2,2-Oxybis(1-chloropropane)	4	U
95-48-7	2-Methylphenol (o-Cresol)	4	U
67-72-1	Hexachloroethane	4	U
621-64-7	N-Nitroso-di-n-propylamine	4	U
106-44-5	4-Methylphenol	6.1	U
98-95-3	Nitrobenzene	4	U
78-59-1	Isophorone	4	U
88-75-5	2-Nitrophenol	4	U
105-67-9	2,4-Dimethylphenol	4	U
111-91-1	Bis(2-Chloroethoxy)methane	4	U
120-83-2	2,4-Dichlorophenol	4	U
91-20-3	Naphthalene	4	U
106-47-8	4-Chloroaniline	4	U
91-57-6	2-Methylnaphthalene	4	U
87-68-3	Hexachlorobutadiene	4	U
59-50-7	4-Chloro-3-methylphenol	4	U
77-47-4	Hexachlorocyclopentadiene	4	U
88-06-2	2,4,6-Trichlorophenol	4	U
95-95-4	2,4,5-Trichlorophenol	4	U
91-58-7	2-Chloronaphthalene	4	U
88-74-4	2-Nitroaniline	4	U
208-96-8	Acenaphthylene	4	U
131-11-3	Dimethyl-phthalate	4	U
606-20-2	2,6-Dinitrotoluene	4	U

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

57285LW040212

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID 240212601 Lab File ID 126-1.D

Sample wt/vol: 1000 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 1 Date Extracted: 02/13/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 1255

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID Waste Character Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
83-32-9	Acenaphthene	4	U
99-09-2	3-Nitroaniline	4	U
51-28-5	2,4-Dinitrophenol	10	U
132-64-9	Dibenzofuran	4	U
121-14-2	2,4-Dinitrotoluene	4	U
100-02-7	4-Nitrophenol	4	U
86-73-7	Fluorene	4	U
7005-72-3	4-Chlorophenyl-phenylether	4	U
84-66-2	Diethylphthalate	4	U
100-01-6	4-Nitroaniline	4	U
534-52-1	2-Methyl-4,6-dinitrophenol	4	U
86-30-6	N-Nitrosodiphenylamine	4	U
101-55-3	4-Bromophenyl-phenylether	4	U
118-74-1	Hexachlorobenzene	4	U
87-86-5	Pentachlorophenol	4	U
85-01-8	Phenanthrene	4	U
120-12-7	Anthracene	4	U
84-74-2	Di-n-butylphthalate	4	U
206-44-0	Fluoranthene	4	U
129-00-0	Pyrene	4	U
85-68-7	Butylbenzylphthalate	4	U
91-94-1	3,3'-Dichlorobenzidine	4	U
56-55-3	Benzo(a)anthracene	4	U
218-01-9	Chrysene	4	U
117-81-7	bis(2-ethylhexyl)phthalate	4.4	U
117-84-0	Di-n-octylphthalate	4	U
205-99-2	Benzo(b)fluoranthene	4	U

230204 1316

Form I

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 57285LW040212

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID 240212601 Lab File ID 126-1.D

Sample wt/vol: 1000 Units: ML Date Received: 02/13/04

Concentrated Extract Volume: 1 Date Extracted: 02/13/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 1255

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID Waste Character Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
207-08-9	Benzo(k)fluoranthene	4	U
50-32-8	Benzo(a)pyrene	4	U
193-39-5	Indeno(1,2,3-cd)pyrene	4	U
53-70-3	Dibenz(a,h)anthracene	4	U
191-24-2	Benzo(g,h,i)perylene	4	U
98-86-2	Acetophenone	4	U
95-94-3	1,2,4,5-Tetrachlorobenzene	4	U
86-74-8	Carbazole	4	U
105-60-2	Caprolactam	4	U
92-52-4	Biphenyl	4	U
1912-24-9	Atrazine	4	U
100-52-7	Benzaldehyde	4	U

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 0217BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID 129889 Lab File ID 0217BLK.D

Sample wt/vol: 1000 Units: ML Date Received: 02/17/04

Concentrated Extract Volume: 1 Date Extracted: 02/17/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 1018

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
111-44-4	Bis(2-Chloroethyl)ether	4	U
108-95-2	Phenol	4	U
95-57-8	2-Chlorophenol	4	U
108-60-1	2,2-Oxybis(1-chloropropane)	4	U
95-48-7	2-Methylphenol (o-Cresol)	4	U
67-72-1	Hexachloroethane	4	U
621-64-7	N-Nitroso-di-n-propylamine	4	U
106-44-5	4-Methylphenol	6.1	U
98-95-3	Nitrobenzene	4	U
78-59-1	Isophorone	4	U
88-75-5	2-Nitrophenol	4	U
105-67-9	2,4-Dimethylphenol	4	U
111-91-1	Bis(2-Chloroethoxy)methane	4	U
120-83-2	2,4-Dichlorophenol	4	U
91-20-3	Naphthalene	4	U
106-47-8	4-Chloroaniline	4	U
91-57-6	2-Methylnaphthalene	4	U
87-68-3	Hexachlorobutadiene	4	U
59-50-7	4-Chloro-3-methylphenol	4	U
77-47-4	Hexachlorocyclopentadiene	4	U
88-06-2	2,4,6-Trichlorophenol	4	U
95-95-4	2,4,5-Trichlorophenol	4	U
91-58-7	2-Chloronaphthalene	4	U
88-74-4	2-Nitroaniline	4	U
208-96-8	Acenaphthylene	4	U
131-11-3	Dimethyl-phthalate	4	U
606-20-2	2,6-Dinitrotoluene	4	U

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

0217BLK

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID 129889 Lab File ID 0217BLK.D

Sample wt/vol: 1000 Units: ML Date Received: 02/17/04

Concentrated Extract Volume: 1 Date Extracted: 02/17/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 1018

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
83-32-9	Acenaphthene	4	U
99-09-2	3-Nitroaniline	4	U
51-28-5	2,4-Dinitrophenol	10	U
132-64-9	Dibenzofuran	4	U
121-14-2	2,4-Dinitrotoluene	4	U
100-02-7	4-Nitrophenol	4	U
86-73-7	Fluorene	4	U
7005-72-3	4-Chlorophenyl-phenylether	4	U
84-66-2	Diethylphthalate	4	U
100-01-6	4-Nitroaniline	4	U
534-52-1	2-Methyl-4,6-dinitrophenol	4	U
86-30-6	N-Nitrosodiphenylamine	4	U
101-55-3	4-Bromophenyl-phenylether	4	U
118-74-1	Hexachlorobenzene	4	U
87-86-5	Pentachlorophenol	4	U
85-01-8	Phenanthrene	4	U
120-12-7	Anthracene	4	U
84-74-2	Di-n-butylphthalate	4	U
206-44-0	Fluoranthene	4	U
129-00-0	Pyrene	4	U
85-68-7	Butylbenzylphthalate	4	U
91-94-1	3,3'-Dichlorobenzidine	4	U
56-55-3	Benzo(a)anthracene	4	U
218-01-9	Chrysene	4	U
117-81-7	bis(2-ethylhexyl)phthalate	4.4	U
117-84-0	Di-n-octylphthalate	4	U
205-99-2	Benzo(b)fluoranthene	4	U

230204 1316

Form I

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 0217BLK

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

Matrix: WATER Lab Sample ID 129889 Lab File ID 0217BLK.D

Sample wt/vol: 1000 Units: ML Date Received: 02/17/04

Concentrated Extract Volume: 1 Date Extracted: 02/17/04

Level:(low/med) LOW Date Analyzed: 02/18/04 Time: 1018

PercentSolids: 0 decanted : Dilution Factor: 1

Extraction: SEPF Station ID Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/L

CAS NO.	*ANALYTE*	*RESULT*	*Q*
207-08-9	Benzo(k)fluoranthene	4	U
50-32-8	Benzo(a)pyrene	4	U
193-39-5	Indeno(1,2,3-cd)pyrene	4	U
53-70-3	Dibenz(a,h)anthracene	4	U
191-24-2	Benzo(g,h,i)perylene	4	U
98-86-2	Acetophenone	4	U
95-94-3	1,2,4,5-Tetrachlorobenzene	4	U
86-74-8	Carbazole	4	U
105-60-2	Caprolactam	4	U
92-52-4	Biphenyl	4	U
1912-24-9	Atrazine	4	U
100-52-7	Benzaldehyde	4	U

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021704ALCS

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Bis(2-Chloroethyl)ether	40	33.9	84.8		30.0	36 - 129
Phenol	40	17.1	42.8		49.0	9 - 65
2-Chlorophenol	40	33.7	84.2		72.0	37 - 98
2,2-Oxybis(1-chloropropane)	40	34.4	86.0		24.0	41 - 133
2-Methylphenol (o-Cresol)	40	31.3	78.2		43.0	6 - 114
Hexachloroethane	40	29.5	73.8		33.0	22 - 96
N-Nitroso-di-n-propylamine	40	30.4	76.0		27.0	36 - 112
4-Methylphenol	40	23.7	59.2		77.0	6 - 104
Nitrobenzene	40	35.1	87.8		21.0	37 - 136
Isophorone	40	46.4	116.0		17.0	35 - 153
2-Nitrophenol	40	35	87.5		18.0	11 - 129
2,4-Dimethylphenol	40	38	95.0		44.0	4 - 116
Bis(2-Chloroethoxy)methane	40	47.6	119.0		24.0	42 - 143
2,4-Dichlorophenol	40	36	90.0		18.0	7 - 128
Naphthalene	40	34	85.0		23.0	36 - 114
4-Chloroaniline	40	33.3	83.2		55.0	41 - 102
2-Methylnaphthalene	40	35.1	87.8		25.0	33 - 127
Hexachlorobutadiene	40	33.3	83.2		42.0	48 - 92
4-Chloro-3-methylphenol	40	37.6	94.0		72.0	33 - 116
Hexachlorocyclopentadiene	40	34.1	85.2 *		45.0	13 - 80
2,4,6-Trichlorophenol	40	37	92.5		18.0	8 - 130
2,4,5-Trichlorophenol	40	35.8	89.5		52.0	9 - 131
2-Chloronaphthalene	40	32.6	81.5		20.0	37 - 128
2-Nitroaniline	40	36.1	90.2		18.0	53 - 114
Acenaphthylene	40	36.4	91.0		19.0	45 - 125
Dimethyl-phthalate	40	34.9	87.2		69.0	16 - 139
2,6-Dinitrotoluene	40	39.5	98.8		18.0	40 - 145
Acenaphthene	40	35.8	89.5		17.0	44 - 124
3-Nitroaniline	40	36.4	91.0		25.0	34 - 130
2,4-Dinitrophenol	40	42	105.0		87.0	2 - 125
Dibenzofuran	40	36.2	90.5		20.0	42 - 137
2,4-Dinitrotoluene	40	39.5	98.8		18.0	39 - 144

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1316

Form III

3

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021704ALCS

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
4-Nitrophenol	40	17.4	43.5		17.0	0 - 82
Fluorene	40	37.2	93.0		21.0	47 - 127
4-Chlorophenyl-phenylether	40	36.4	91.0		25.0	45 - 128
Diethylphthalate	40	36.6	91.5		42.0	25 - 145
4-Nitroaniline	40	35.9	89.8		19.0	35 - 134
2-Methyl-4,6-dinitrophenol	40	39.6	99.0		19.0	7 - 129
N-Nitrosodiphenylamine	40	40.6	102.0		20.0	66 - 145
4-Bromophenyl-phenylether	40	32.6	81.5		20.0	41 - 114
Hexachlorobenzene	40	37.6	94.0		18.0	35 - 135
Pentachlorophenol	40	37.3	93.2		108.0	17 - 131
Phenanthrene	40	37.2	93.0		17.0	49 - 125
Anthracene	40	37.6	94.0		15.0	47 - 124
Di-n-butylphthalate	40	38.3	95.8		15.0	48 - 137
Fluoranthene	40	37	92.5		18.0	44 - 132
Pyrene	40	34.9	87.2		21.0	45 - 129
Butylbenzylphthalate	40	38.2	95.5		18.0	42 - 150
3,3'-Dichlorobenzidine	40	36.7	91.8		55.0	32 - 108
Benzo(a)anthracene	40	34.8	87.0		22.0	34 - 138
Chrysene	40	35.8	89.5		25.0	36 - 140
bis(2-ethylhexyl)phthalate	40	38.4	96.0		28.0	31 - 155
Di-n-octylphthalate	40	37.4	93.5		32.0	25 - 154
Benzo(b)fluoranthene	40	36.6	91.5		23.0	32 - 139
Benzo(k)fluoranthene	40	35.4	88.5		24.0	32 - 138
Benzo(a)pyrene	40	38.4	96.0		21.0	30 - 138
Indeno(1,2,3-cd)pyrene	40	37.2	93.0		29.0	32 - 143
Dibenz(a,h)anthracene	40	39	97.5		24.0	41 - 106
Benzo(g,h,i)perylene	40	38.4	96.0		26.0	32 - 138
Acetophenone	80	60	75.0		26.0	23 - 119
1,2,4,5-Tetrachlorobenzene	40	33.4	83.5		28.0	22 - 113
Carbazole	40	37.3	93.2		26.0	33 - 140
Caprolactam	40	14.9	37.2 *		30.0	70 - 130
Biphenyl	40	34	85.0		30.0	70 - 130

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1316

Form III

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021704ALCS

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Atrazine	40	33.3	83.2		30.0	70 - 130
Benzaldehyde	40	25	62.5		30.0	40 - 100

Spike Recovery: 2 out of 66 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1316

Form III

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021704ALCSD

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Bis(2-Chloroethyl)ether	40	38.5	96.2	12.7	30.0	36 - 129
Phenol	40	19.4	48.5	12.6	49.0	9 - 65
2-Chlorophenol	40	38.3	95.8	12.8	72.0	37 - 98
2,2-Oxybis(1-chloropropane)	40	38	95.0	9.9	24.0	41 - 133
2-Methylphenol (o-Cresol)	40	34.7	86.8	10.3	43.0	6 - 114
Hexachloroethane	40	32.5	81.2	9.7	33.0	22 - 96
N-Nitroso-di-n-propylamine	40	33	82.5	8.2	27.0	36 - 112
4-Methylphenol	40	26.2	65.5	10.0	77.0	6 - 104
Nitrobenzene	40	38.7	96.8	9.8	21.0	37 - 136
Isophorone	40	50.7	127.0	8.9	17.0	35 - 153
2-Nitrophenol	40	39.8	99.5	12.8	18.0	11 - 129
2,4-Dimethylphenol	40	43.2	108.0	12.8	44.0	4 - 116
Bis(2-Chloroethoxy)methane	40	51.4	128.0	7.7	24.0	42 - 143
2,4-Dichlorophenol	40	40	100.0	10.5	18.0	7 - 128
Naphthalene	40	37.5	93.8	9.8	23.0	36 - 114
4-Chloroaniline	40	36.3	90.8	8.6	55.0	41 - 102
2-Methylnaphthalene	40	38.2	95.5	8.5	25.0	33 - 127
Hexachlorobutadiene	40	37.2	93.0 *	11.1	42.0	48 - 92
4-Chloro-3-methylphenol	40	41.2	103.0	9.1	72.0	33 - 116
Hexachlorocyclopentadiene	40	38.6	96.5 *	12.4	45.0	13 - 80
2,4,6-Trichlorophenol	40	39.5	98.8	6.5	18.0	8 - 130
2,4,5-Trichlorophenol	40	40.6	102.0	12.6	52.0	9 - 131
2-Chloronaphthalene	40	35.8	89.5	9.4	20.0	37 - 128
2-Nitroaniline	40	39.4	98.5	8.7	18.0	53 - 114
Acenaphthylene	40	39.3	98.2	7.7	19.0	45 - 125
Dimethyl-phthalate	40	37.1	92.8	6.1	69.0	16 - 139
2,6-Dinitrotoluene	40	43.2	108.0	8.9	18.0	40 - 145
Acenaphthene	40	38.7	96.8	7.8	17.0	44 - 124
3-Nitroaniline	40	39.6	99.0	8.4	25.0	34 - 130
2,4-Dinitrophenol	40	48.4	121.0	14.2	87.0	2 - 125
Dibenzofuran	40	39.1	97.8	7.7	20.0	42 - 137
2,4-Dinitrotoluene	40	43.2	108.0	8.9	18.0	39 - 144

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1316

Form III

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021704ALCSD

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
4-Nitrophenol	40	18.2	45.5	4.5	17.0	0 - 82
Fluorene	40	40.5	101.0	8.5	21.0	47 - 127
4-Chlorophenyl-phenylether	40	39.5	98.8	8.2	25.0	45 - 128
Diethylphthalate	40	40.2	100.0	9.4	42.0	25 - 145
4-Nitroaniline	40	38.7	96.8	7.5	19.0	35 - 134
2-Methyl-4,6-dinitrophenol	40	44.3	111.0	11.2	19.0	7 - 129
N-Nitrosodiphenylamine	40	43.2	108.0	6.2	20.0	66 - 145
4-Bromophenyl-phenylether	40	35.4	88.5	8.2	20.0	41 - 114
Hexachlorobenzene	40	40.1	100.0	6.4	18.0	35 - 135
Pentachlorophenol	40	40.2	100.0	7.5	108.0	17 - 131
Phenanthrene	40	39.9	99.8	7.0	17.0	49 - 125
Anthracene	40	40.2	100.0	6.7	15.0	47 - 124
Di-n-butylphthalate	40	40.8	102.0	6.3	15.0	48 - 137
Fluoranthene	40	39.9	99.8	7.5	18.0	44 - 132
Pyrene	40	38.7	96.8	10.3	21.0	45 - 129
Butylbenzylphthalate	40	42.1	105.0	9.7	18.0	42 - 150
3,3'-Dichlorobenzidine	40	42.5	106.0	14.6	55.0	32 - 108
Benzo(a)anthracene	40	38.2	95.5	9.3	22.0	34 - 138
Chrysene	40	39.4	98.5	9.6	25.0	36 - 140
bis(2-ethylhexyl)phthalate	40	41.7	104.0	8.2	28.0	31 - 155
Di-n-octylphthalate	40	41.2	103.0	9.7	32.0	25 - 154
Benzo(b)fluoranthene	40	35.3	88.2	3.6	23.0	32 - 139
Benzo(k)fluoranthene	40	39.3	98.2	10.4	24.0	32 - 138
Benzo(a)pyrene	40	41.6	104.0	8.0	21.0	30 - 138
Indeno(1,2,3-cd)pyrene	40	40.1	100.0	7.5	29.0	32 - 143
Dibenz(a,h)anthracene	40	42.1	105.0	7.6	24.0	41 - 106
Benzo(g,h,i)perylene	40	41.8	104.0	8.5	26.0	32 - 138
Acetophenone	80	66.7	83.4	10.6	26.0	23 - 119
1,2,4,5-Tetrachlorobenzene	40	37.2	93.0	10.8	28.0	22 - 113
Carbazole	40	39.7	99.2	6.2	26.0	33 - 140
Caprolactam	40	17.2	43.0 *	14.3	30.0	70 - 130
Biphenyl	40	36.3	90.8	6.5	30.0	70 - 130

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1316

Form III

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: PEL Laboratories, Inc. Contract: Former NAS Cecil Field 021704ALCSD

Lab Code : PEL Case No. SAS No: SDG No.: 2402126

COMPOUND	SPIKE ADDED UG/L	LCS CONCENTRATION UG/L	LCS % REC #	LCS % RPD	QC LIMITS RPD	QC LIMITS REC.
Atrazine	40	36.1	90.2	8.1	30.0	70 - 130
Benzaldehyde	40	35.6	89.0	35.0 *	30.0	40 - 100

Spike Recovery: 3 out of 66 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

230204 1316

Form III

Attachment 6

Laboratory Analytical Results
Backfill

(provided on CD)

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

Mr. Rick McCann
Aerostar Environmental Services, Inc.
11181 St. Johns Industrial Parkway, N
Jacksonville, FL 32246

Client PO. No.: 0103-329-09
Cl Project No: 171591

Project: JETC and Building 271
Sampled By: Client
Code: 111930916

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1
TCL Volatiles by GC/MS (8260)	
Chloromethane, ug/kg dw	14U
Bromomethane (Methyl bromide), ug/kg dw	14U
Vinyl chloride, ug/kg dw	14U
Chloroethane, ug/kg dw	14U
Methylene chloride (Dichloromethane), ug/kg dw	7.0U
Acetone, ug/kg dw	70U
Carbon disulfide, ug/kg dw	7.0U
1,1-Dichloroethene, ug/kg dw	7.0U
1,1-Dichloroethane, ug/kg dw	7.0U
cis-1,2-Dichloroethylene, ug/kg dw	7.0U
trans-1,2-Dichloroethene, ug/kg dw	7.0U
Chloroform, ug/kg dw	7.0U
1,2-Dichloroethane, ug/kg dw	7.0U
2-Butanone (MEK), ug/kg dw	35U
1,1,1-Trichloroethane, ug/kg dw	7.0U
Carbon tetrachloride, ug/kg dw	7.0U
Bromodichloromethane, ug/kg dw	7.0U
1,2-Dichloropropane, ug/kg dw	7.0U
cis-1,3-Dichloropropene, ug/kg dw	7.0U
Trichloroethene, ug/kg dw	7.0U
Dibromochloromethane, ug/kg dw	7.0U
1,1,2-Trichloroethane, ug/kg dw	7.0U

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

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Sampled By: Client
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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1
Benzene, ug/kg dw	7.0U
trans-1,3-Dichloropropene, ug/kg dw	7.0U
Bromoform, ug/kg dw	7.0U
4-Methyl-2-pentanone (MIBK), ug/kg dw	35U
2-Hexanone, ug/kg dw	35U
Tetrachloroethene, ug/kg dw	7.0U
Toluene, ug/kg dw	3.2J
1,1,2,2-Tetrachloroethane, ug/kg dw	7.0U
Chlorobenzene, ug/kg dw	7.0U
Ethylbenzene, ug/kg dw	7.0U
Styrene, ug/kg dw	7.0U
Xylenes, Total, ug/kg dw	7.0U
Surrogate - Dibromofluoromethane	98 %
Surrogate - Toluene-d8	71 %
Surrogate - 4-Bromofluorobenzene	67 %
Prep Date	09.10.03
Analysis Date	09.10.03
Batch ID	VM090903M

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

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Cl Project No: 171591

Project: JETC and Building 271
Sampled By: Client
Code: 111930916

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1
TCL - Semivolatiles (8270)	
Phenol, ug/kg dw	360U
bis(2-Chloroethyl)ether, ug/kg dw	360U
2-Chlorophenol, ug/kg dw	360U
1,3-Dichlorobenzene, ug/kg dw	360U
1,4-Dichlorobenzene, ug/kg dw	360U
1,2-Dichlorobenzene, ug/kg dw	360U
2-Methylphenol (o-Cresol), ug/kg dw	360U
2,2'-Oxybis(1-chloropropane) [bis(2-Chloroisopropy 1)ether], ug/kg dw	360U
3-Methylphenol/4-Methylphenol (m&p-Cresol), ug/kg dw	360U
N-Nitroso-di-n-propylamine, ug/kg dw	360U
Hexachloroethane, ug/kg dw	360U
Nitrobenzene, ug/kg dw	360U
Isophorone, ug/kg dw	360U
2-Nitrophenol, ug/kg dw	360U
2,4-Dimethylphenol, ug/kg dw	360U
bis(2-Chloroethoxy)methane, ug/kg dw	360U
2,4-Dichlorophenol, ug/kg dw	360U
1,2,4-Trichlorobenzene, ug/kg dw	360U
4-Chloroaniline, ug/kg dw	720U
Hexachlorobutadiene, ug/kg dw	360U
4-Chloro-3-methylphenol, ug/kg dw	360U

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Project: JETC and Building 271
Sampled By: Client
Code: 111930916

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1
Hexachlorocyclopentadiene, ug/kg dw	360U
2,4,6-Trichlorophenol, ug/kg dw	360U
2,4,5-Trichlorophenol, ug/kg dw	360U
2-Chloronaphthalene, ug/kg dw	360U
2-Nitroaniline, ug/kg dw	1900U
Dimethylphthalate, ug/kg dw	360U
2,6-Dinitrotoluene, ug/kg dw	360U
3-Nitroaniline, ug/kg dw	1900U
2,4-Dinitrophenol, ug/kg dw	1900U
4-Nitrophenol, ug/kg dw	1900U
Dibenzofuran, ug/kg dw	360U
2,4-Dinitrotoluene, ug/kg dw	360U
Diethylphthalate, ug/kg dw	360U
4-Chlorophenylphenyl ether, ug/kg dw	360U
4-Nitroaniline, ug/kg dw	1900U
4,6-Dinitro-2-methylphenol, ug/kg dw	1900U
N-Nitrosodiphenylamine, ug/kg dw	360U
4-Bromophenylphenyl ether, ug/kg dw	360U
Hexachlorobenzene, ug/kg dw	360U
Pentachlorophenol, ug/kg dw	1900U
Carbazole, ug/kg dw	360U
Di-n-butylphthalate, ug/kg dw	360U
Butylbenzylphthalate, ug/kg dw	360U

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Project: JETC and Building 271
Sampled By: Client
Code: 111930916

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1
3,3'-Dichlorobenzidine, ug/kg dw	720U
bis(2-Ethylhexyl)phthalate, ug/kg dw	360U
Di-n-octylphthalate, ug/kg dw	360U
Surrogate - 2-Fluorophenol	43 %
Surrogate - Phenol-d5	51 %
Surrogate - Nitrobenzene - d5	53 %
Surrogate - 2-Fluorobiphenyl	56 %
Surrogate - 2,4,6-Tribromophenol	51 %
Surrogate - Terphenyl-d14	56 %
Prep Date	09.10.03
Analysis Date	09.11.03
Batch ID	SM091003M

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

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Jacksonville, FL 32246

Client PO. No.: 0103-329-09
Cl Project No: 171591

Project: JETC and Building 271
Sampled By: Client
Code: 111930916

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1
Polynuclear Aromatics (8270)	
Acenaphthene, ug/kg dw	7.4U
Acenaphthylene, ug/kg dw	7.4U
Anthracene, ug/kg dw	7.4U
Benzo(a)anthracene, ug/kg dw	7.4U
Benzo(a)pyrene, ug/kg dw	7.4U
Benzo(b)fluoranthene, ug/kg dw	7.4U
Benzo(g,h,i)perylene, ug/kg dw	7.4U
Benzo(k)fluoranthene, ug/kg dw	7.4U
Chrysene, ug/kg dw	7.4U
Dibenzo(a,h)anthracene, ug/kg dw	7.4U
Fluoranthene, ug/kg dw	7.4U
Fluorene, ug/kg dw	7.4U
Indeno(1,2,3-cd)pyrene, ug/kg dw	7.4U
Naphthalene, ug/kg dw	7.4U
Phenanthrene, ug/kg dw	7.4U
Pyrene, ug/kg dw	7.4U
1-Methylnaphthalene, ug/kg dw	7.4U
2-Methylnaphthalene, ug/kg dw	7.4U
Surrogate - o-Terphenyl	67 %
Prep Date	09.10.03
Analysis Date	09.12.03
Batch ID	SM091003L

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

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Client PO. No.: 0103-329-09
Cl Project No: 171591

Project: JETC and Building 271
Sampled By: Client
Code: 111930916

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1
Petroleum Range Organics (FL-PRO)	
Petroleum Hydrocarbons , mg/kg dw	16
Surrogate, o-Terphenyl	55 %
Surrogate-C39	46 %
Prep Date	09.10.03
Analysis Date	09.12.03
Batch ID	SG091003J

LOG NO: T3-73924
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Client PO. No.: 0103-329-09
Cl Project No: 171591

Project: JETC and Building 271
Sampled By: Client
Code: 111930916

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1
TCL - Pesticides/PCB's (8081/8082)	
alpha-BHC, ug/kg dw	1.9U
beta-BHC, ug/kg dw	1.9U
delta-BHC, ug/kg dw	1.9U
gamma-BHC (Lindane), ug/kg dw	1.9U
Heptachlor, ug/kg dw	1.9U
Aldrin, ug/kg dw	1.9U
Heptachlor epoxide, ug/kg dw	1.9U
Endosulfan I, ug/kg dw	1.9U
Dieldrin, ug/kg dw	3.6U
4,4'-DDE, ug/kg dw	3.6U
Endrin, ug/kg dw	3.6U
Endosulfan II, ug/kg dw	3.6U
4,4'-DDD, ug/kg dw	3.6U
Endosulfan sulfate, ug/kg dw	3.6U
4,4'-DDT, ug/kg dw	3.6U
Methoxychlor, ug/kg dw	19U
Endrin ketone, ug/kg dw	3.6U
Endrin aldehyde, ug/kg dw	3.6U
alpha-Chlordane, ug/kg dw	1.9U
gamma-Chlordane, ug/kg dw	1.9U
Toxaphene, ug/kg dw	190U
Aroclor-1016, ug/kg dw	36U

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11181 St. Johns Industrial Parkway, N
Jacksonville, FL 32246

Client PO. No.: 0103-329-09
Cl Project No: 171591

Project: JETC and Building 271
Sampled By: Client
Code: 111930916

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1
Aroclor-1221, ug/kg dw	74U
Aroclor-1232, ug/kg dw	36U
Aroclor-1242, ug/kg dw	36U
Aroclor-1248, ug/kg dw	36U
Aroclor-1254, ug/kg dw	36U
Aroclor-1260, ug/kg dw	36U
Surrogate - Dibutyl Chlorendate	62 %
Surrogate - Tetrachloro-m-xylene	46 %
Surrogate - Decachlorobiphenyl	68 %
Prep Date	09.11.03
Analysis Date	09.12.03
Batch ID	SG091103H

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

Mr. Rick McCann
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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1
Chlorinated Herbicides (8151)	
Bentazon, ug/kg dw	38U
2,4-D, ug/kg dw	9.1U
Dalapon, ug/kg dw	2200U
2,4-DB, ug/kg dw	9.1U
Dicamba, ug/kg dw	22U
Dichloroprop, ug/kg dw	110U
Dinoseb, ug/kg dw	110U
MCPA[(4-chloro-2-methylphenoxy)-acetic acid], ug/kg dw	2200U
MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid], ug/kg dw	2200U
Pentachlorophenol, ug/kg dw	19U
Picloram, ug/kg dw	3.6U
2,4,5-TP (Silvex), ug/kg dw	9.1U
2,4,5-T, ug/kg dw	9.1U
Surrogate-2,4-Dichlorophenyl acetic acid (DCAA)	101 %
Prep Date	09.09.03
Analysis Date	09.12.03
Batch ID	SG090903H

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1
TAL Metals (6010)	
Aluminum, ug/l	1200
Antimony, ug/l	2.2U
Arsenic, ug/l	0.74B
Barium, ug/l	2.1
Beryllium, ug/l	0.43U
Cadmium, ug/l	0.54U
Calcium, ug/l	360
Chromium, ug/l	2.1
Cobalt, ug/l	0.22B
Copper, ug/l	0.83B
Iron, ug/l	140
Lead, ug/l	4.1
Magnesium, ug/l	36B
Manganese, ug/l	1.7
Nickel, ug/l	4.3U
Potassium, ug/l	24B
Selenium, ug/l	1.1U
Silver, ug/l	1.1U
Sodium, ug/l	54U
Thallium, ug/l	1.1U
Vanadium, ug/l	1.5
Zinc, ug/l	2.7
Prep Date	09.10.03
Analysis Date	09.11.03
Batch ID	ME091003C

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1
Mercury (7471), mg/kg dw	0.018B
Prep Date	09.10.03
Analysis Date	09.10.03
Batch ID	ME091003R
pH (150.1), units	6.3

LOG NO: T3-73924
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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-2	086-TB-L-0904-03	09-04-03	JETC01

PARAMETER	73924-2
TCL Volatiles by GC/MS (8260)	
Chloromethane, ug/l	1.0U
Bromomethane (Methyl bromide), ug/l	1.0U
Vinyl chloride, ug/l	1.0U
Chloroethane, ug/l	1.0U
Methylene chloride (Dichloromethane), ug/l	5.0U
Acetone, ug/l	25U
Carbon disulfide, ug/l	1.0U
1,1-Dichloroethene, ug/l	1.0U
1,1-Dichloroethane, ug/l	1.0U
cis-1,2-Dichloroethylene, ug/l	1.0U
trans-1,2-Dichloroethene, ug/l	1.0U
Chloroform, ug/l	1.0U
1,2-Dichloroethane, ug/l	1.0U
2-Butanone (MEK), ug/l	10U
1,1,1-Trichloroethane, ug/l	1.0U
Carbon tetrachloride, ug/l	1.0U
Bromodichloromethane, ug/l	1.0U
1,2-Dichloropropane, ug/l	1.0U
cis-1,3-Dichloropropene, ug/l	1.0U
Trichloroethene, ug/l	1.0U
Dibromochloromethane, ug/l	1.0U
1,1,2-Trichloroethane, ug/l	1.0U

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Received: 06 SEP 03
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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-2	086-TB-L-0904-03	09-04-03	JETC01

PARAMETER	73924-2
Benzene, ug/l	1.0U
trans-1,3-Dichloropropene, ug/l	1.0U
Bromoform, ug/l	1.0U
4-Methyl-2-pentanone (MIBK), ug/l	10U
2-Hexanone, ug/l	10U
Tetrachloroethene, ug/l	1.0U
Toluene, ug/l	1.0U
1,1,2,2-Tetrachloroethane, ug/l	1.0U
Chlorobenzene, ug/l	1.0U
Ethylbenzene, ug/l	1.0U
Styrene, ug/l	1.0U
Xylenes, Total, ug/l	2.0U
Surrogate - Dibromofluoromethane	116 %
Surrogate - Toluene-d8	104 %
Surrogate - 4-Bromofluorobenzene	100 %
Analysis Date	09.09.03
Batch ID	VM090903N

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

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Project: JETC and Building 271
Sampled By: Client
Code: 111930916

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01
73924-4	Accuracy (%Rec)		JETC01
73924-5	Precision (%RPD)		JETC01

PARAMETER	73924-3	73924-4	73924-5
TCL Volatiles by GC/MS (8260)			
Chloromethane, ug/kg dw	10U	---	---
Bromomethane (Methyl bromide), ug/kg dw	10U	---	---
Vinyl chloride, ug/kg dw	10U	---	---
Chloroethane, ug/kg dw	10U	---	---
Methylene chloride (Dichloromethane), ug/kg dw	5.0U	---	---
Acetone, ug/kg dw	50U	---	---
Carbon disulfide, ug/kg dw	5.0U	---	---
1,1-Dichloroethene, ug/kg dw	5.0U	120 %	1.6 %
1,1-Dichloroethane, ug/kg dw	5.0U	---	---
cis-1,2-Dichloroethylene, ug/kg dw	5.0U	---	---
trans-1,2-Dichloroethene, ug/kg dw	5.0U	---	---
Chloroform, ug/kg dw	5.0U	---	---
1,2-Dichloroethane, ug/kg dw	5.0U	---	---
2-Butanone (MEK), ug/kg dw	25U	---	---
1,1,1-Trichloroethane, ug/kg dw	5.0U	---	---
Carbon tetrachloride, ug/kg dw	5.0U	---	---
Bromodichloromethane, ug/kg dw	5.0U	---	---
1,2-Dichloropropane, ug/kg dw	5.0U	---	---
cis-1,3-Dichloropropene, ug/kg dw	5.0U	---	---
Trichloroethene, ug/kg dw	5.0U	114 %	3.4 %

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Project: JETC and Building 271
Sampled By: Client
Code: 111930916

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01
73924-4	Accuracy (%Rec)		JETC01
73924-5	Precision (%RPD)		JETC01

PARAMETER	73924-3	73924-4	73924-5
Dibromochloromethane, ug/kg dw	5.0U	---	---
1,1,2-Trichloroethane, ug/kg dw	5.0U	---	---
Benzene, ug/kg dw	5.0U	120 %	0 %
trans-1,3-Dichloropropene, ug/kg dw	5.0U	---	---
Bromoform, ug/kg dw	5.0U	---	---
4-Methyl-2-pentanone (MIBK), ug/kg dw	25U	---	---
2-Hexanone, ug/kg dw	25U	---	---
Tetrachloroethene, ug/kg dw	5.0U	---	---
Toluene, ug/kg dw	5.0U	124 %	0 %
1,1,2,2-Tetrachloroethane, ug/kg dw	5.0U	---	---
Chlorobenzene, ug/kg dw	5.0U	132 %	1.5 %
Ethylbenzene, ug/kg dw	5.0U	---	---
Styrene, ug/kg dw	5.0U	---	---
Xylenes, Total, ug/kg dw	5.0U	---	---
Surrogate - Dibromofluoromethane	100 %	94 %	---
Surrogate - Toluene-d8	78 %	82 %	---
Surrogate - 4-Bromofluorobenzene	82 %	80 %	---
Prep Date	09.10.03	09.10.03	---
Analysis Date	09.10.03	09.10.03	---
Batch ID	VM090903M	VM090903M	VM090903

LOG NO: T3-73924
Received: 06 SEP 03
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Project: JETC and Building 271
Sampled By: Client
Code: 111930916

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01
73924-4	Accuracy (%Rec)		JETC01
73924-5	Precision (%RPD)		JETC01

PARAMETER	73924-3	73924-4	73924-5
TCL - Semivolatiles (8270)			
Phenol, ug/kg dw	330U	51 %	11 %
bis(2-Chloroethyl)ether, ug/kg dw	330U	---	---
2-Chlorophenol, ug/kg dw	330U	54 %	16 %
1,3-Dichlorobenzene, ug/kg dw	330U	---	---
1,4-Dichlorobenzene, ug/kg dw	330U	50 %	14 %
1,2-Dichlorobenzene, ug/kg dw	330U	---	---
2-Methylphenol (o-Cresol), ug/kg dw	330U	---	---
2,2'-Oxybis(1-chloropropane)[bis(2-Chloroisopropy 1)ether], ug/kg dw	330U	---	---
3-Methylphenol/4-Methylphenol (m&p-Cresol), ug/kg dw	330U	---	---
N-Nitroso-di-n-propylamine, ug/kg dw	330U	44 %	15 %
Hexachloroethane, ug/kg dw	330U	---	---
Nitrobenzene, ug/kg dw	330U	---	---
Isophorone, ug/kg dw	330U	---	---
2-Nitrophenol, ug/kg dw	330U	---	---
2,4-Dimethylphenol, ug/kg dw	330U	---	---
bis(2-Chloroethoxy)methane, ug/kg dw	330U	---	---
2,4-Dichlorophenol, ug/kg dw	330U	---	---
1,2,4-Trichlorobenzene, ug/kg dw	330U	53 %	14 %
4-Chloroaniline, ug/kg dw	660U	---	---

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Project: JETC and Building 271
Sampled By: Client
Code: 111930916

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01
73924-4	Accuracy (%Rec)		JETC01
73924-5	Precision (%RPD)		JETC01

PARAMETER	73924-3	73924-4	73924-5
Hexachlorobutadiene, ug/kg dw	330U	---	---
4-Chloro-3-methylphenol, ug/kg dw	330U	59 %	9.5 %
Hexachlorocyclopentadiene, ug/kg dw	330U	---	---
2,4,6-Trichlorophenol, ug/kg dw	330U	---	---
2,4,5-Trichlorophenol, ug/kg dw	330U	---	---
2-Chloronaphthalene, ug/kg dw	330U	---	---
2-Nitroaniline, ug/kg dw	1700U	---	---
Dimethylphthalate, ug/kg dw	330U	---	---
2,6-Dinitrotoluene, ug/kg dw	330U	---	---
3-Nitroaniline, ug/kg dw	1700U	---	---
2,4-Dinitrophenol, ug/kg dw	1700U	---	---
4-Nitrophenol, ug/kg dw	1700U	70 %	12 %
Dibenzofuran, ug/kg dw	330U	---	---
2,4-Dinitrotoluene, ug/kg dw	330U	67 %	20 %
Diethylphthalate, ug/kg dw	330U	---	---
4-Chlorophenylphenyl ether, ug/kg dw	330U	---	---
4-Nitroaniline, ug/kg dw	1700U	---	---
4,6-Dinitro-2-methylphenol, ug/kg dw	1700U	---	---
N-Nitrosodiphenylamine, ug/kg dw	330U	---	---
4-Bromophenylphenyl ether, ug/kg dw	330U	---	---
Hexachlorobenzene, ug/kg dw	330U	---	---

LOG NO: T3-73924
Received: 06 SEP 03
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Client PO. No.: 0103-329-09
Cl Project No: 171591

Project: JETC and Building 271
Sampled By: Client
Code: 112530916

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01
73924-4	Accuracy (%Rec)		JETC01
73924-5	Precision (%RPD)		JETC01

PARAMETER	73924-3	73924-4	73924-5
Pentachlorophenol, ug/kg dw	1700U	62 %	19 %
Carbazole, ug/kg dw	330U	---	---
Di-n-butylphthalate, ug/kg dw	330U	---	---
Butylbenzylphthalate, ug/kg dw	330U	---	---
3,3'-Dichlorobenzidine, ug/kg dw	660U	---	---
bis(2-Ethylhexyl)phthalate, ug/kg dw	330U	---	---
Di-n-octylphthalate, ug/kg dw	330U	---	---
Surrogate - 2-Fluorophenol	42 %	51 %	---
Surrogate - Phenol-d5	48 %	54 %	---
Surrogate - Nitrobenzene - d5	45 %	61 %	---
Surrogate - 2-Fluorobiphenyl	45 %	61 %	---
Surrogate - 2,4,6-Tribromophenol	45 %	59 %	---
Surrogate - Terphenyl-d14	52 %	67 %	---
Prep Date	09.10.03	09.10.03	---
Analysis Date	09.11.03	09.11.03	---
Batch ID	SM091003M	SM091003M	SM091003M

LOG NO: T3-73924
Received: 06 SEP 03
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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01
73924-4	Accuracy (%Rec)		JETC01
73924-5	Precision (%RPD)		JETC01

PARAMETER	73924-3	73924-4	73924-5
Polynuclear Aromatics (8270)			
Acenaphthene, ug/kg dw	6.7U	61 %	3.7 %
Acenaphthylene, ug/kg dw	6.7U	---	---
Anthracene, ug/kg dw	6.7U	---	---
Benzo(a)anthracene, ug/kg dw	6.7U	---	---
Benzo(a)pyrene, ug/kg dw	6.7U	55 %	2.8 %
Benzo(b)fluoranthene, ug/kg dw	6.7U	---	---
Benzo(g,h,i)perylene, ug/kg dw	6.7U	---	---
Benzo(k)fluoranthene, ug/kg dw	6.7U	---	---
Chrysene, ug/kg dw	6.7U	---	---
Dibenzo(a,h)anthracene, ug/kg dw	6.7U	---	---
Fluoranthene, ug/kg dw	6.7U	---	---
Fluorene, ug/kg dw	6.7U	59 %	6.3 %
Indeno(1,2,3-cd)pyrene, ug/kg dw	6.7U	---	---
Naphthalene, ug/kg dw	6.7U	58 %	1.3 %
Phenanthrene, ug/kg dw	6.7U	---	---
Pyrene, ug/kg dw	6.7U	65 %	8.0 %
1-Methylnaphthalene, ug/kg dw	6.7U	---	---
2-Methylnaphthalene, ug/kg dw	6.7U	---	---
Surrogate - o-Terphenyl	48 %	67 %	---
Prep Date	09.10.03	09.10.03	---
Analysis Date	09.12.03	09.12.03	---
Batch ID	SM091003L	SM091003L	SM091003L

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01
73924-4	Accuracy (%Rec)		JETC01
73924-5	Precision (%RPD)		JETC01

PARAMETER	73924-3	73924-4	73924-5
Petroleum Range Organics (FL-PRO)			
Petroleum Hydrocarbons , mg/kg dw	10U	42 %	19 %
Surrogate, o-Terphenyl	48 %	42 %	---
Surrogate-C39	37 %	37 %	---
Prep Date	09.10.03	09.10.03	---
Analysis Date	09.12.03	09.12.03	---
Batch ID	SG091003J	SG091003J	SG091003J

LOG NO: T3-73924
Received: 06 SEP 03
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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01
73924-4	Accuracy (%Rec)		JETC01
73924-5	Precision (%RPD)		JETC01

PARAMETER	73924-3	73924-4	73924-5
TCL - Pesticides/PCB's (8081/8082)			
alpha-BHC, ug/kg dw	1.7U	---	---
beta-BHC, ug/kg dw	1.7U	---	---
delta-BHC, ug/kg dw	1.7U	---	---
gamma-BHC (Lindane), ug/kg dw	1.7U	61 %	4.9 %
Heptachlor, ug/kg dw	1.7U	64 %	17 %
Aldrin, ug/kg dw	1.7U	67 %	17 %
Heptachlor epoxide, ug/kg dw	1.7U	---	---
Endosulfan I, ug/kg dw	1.7U	---	---
Dieldrin, ug/kg dw	3.3U	65 %	14 %
4,4'-DDE, ug/kg dw	3.3U	---	---
Endrin, ug/kg dw	3.3U	66 %	12 %
Endosulfan II, ug/kg dw	3.3U	---	---
4,4'-DDD, ug/kg dw	3.3U	---	---
Endosulfan sulfate, ug/kg dw	3.3U	---	---
4,4'-DDT, ug/kg dw	3.3U	59 %	12 %
Methoxychlor, ug/kg dw	17U	---	---
Endrin ketone, ug/kg dw	3.3U	---	---
Endrin aldehyde, ug/kg dw	3.3U	---	---
alpha-Chlordane, ug/kg dw	1.7U	---	---
gamma-Chlordane, ug/kg dw	1.7U	---	---

LOG NO: T3-73924
Received: 06 SEP 03
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Sampled By: Client
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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01
73924-4	Accuracy (%Rec)		JETC01
73924-5	Precision (%RPD)		JETC01

PARAMETER	73924-3	73924-4	73924-5
Toxaphene, ug/kg dw	170U	---	---
Aroclor-1016, ug/kg dw	33U	---	---
Aroclor-1221, ug/kg dw	67U	---	---
Aroclor-1232, ug/kg dw	33U	---	---
Aroclor-1242, ug/kg dw	33U	---	---
Aroclor-1248, ug/kg dw	33U	---	---
Aroclor-1254, ug/kg dw	33U	---	---
Aroclor-1260, ug/kg dw	33U	---	---
Surrogate - Dibutyl Chlorendate	55 %	52 %	---
Surrogate - Tetrachloro-m-xylene	67 %	52 %	---
Surrogate - Decachlorobiphenyl	73 %	64 %	---
Prep Date	09.11.03	09.11.03	---
Analysis Date	09.12.03	09.12.03	---
Batch ID	SG091103H	SG091103H	SG091103H

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

Mr. Rick McCann
Aerostar Environmental Services, Inc.
11181 St. Johns Industrial Parkway, N
Jacksonville, FL 32246

Client PO. No.: 0103-329-09
Cl Project No: 171591

Project: JETC and Building 271
Sampled By: Client
Code: 111930916

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01
73924-4	Accuracy (%Rec)		JETC01
73924-5	Precision (%RPD)		JETC01

PARAMETER	73924-3	73924-4	73924-5
Chlorinated Herbicides (8151)			
Bentazon, ug/kg dw	35U	---	---
2,4-D, ug/kg dw	8.3U	128 %	5.7 %
Dalapon, ug/kg dw	2000U	---	---
2,4-DB, ug/kg dw	8.3U	---	---
Dicamba, ug/kg dw	20U	---	---
Dichloroprop, ug/kg dw	100U	---	---
Dinoseb, ug/kg dw	100U	---	---
MCPA[(4-chloro-2-methylphenoxy)-acetic acid], ug/kg dw	2000U	---	---
MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid], ug/kg dw	2000U	---	---
Pentachlorophenol, ug/kg dw	17U	---	---
Picloram, ug/kg dw	3.3U	---	---
2,4,5-TP (Silvex), ug/kg dw	8.3U	114 %	6.4 %
2,4,5-T, ug/kg dw	8.3U	121 %	3.0 %
Surrogate-2,4-Dichlorophenyl acetic acid (DCAA)	101 %	116 %	---
Prep Date	09.09.03	09.09.03	---
Analysis Date	09.12.03	09.12.03	---
Batch ID	SG090903H	SG090903H	SG090903H

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

Mr. Rick McCann
Aerostar Environmental Services, Inc.
11181 St. Johns Industrial Parkway, N
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Client PO. No.: 0103-329-09
Cl Project No: 171591

Project: JETC and Building 271
Sampled By: Client
Code: 111930916

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01
73924-4	Accuracy (%Rec)		JETC01
73924-5	Precision (%RPD)		JETC01

PARAMETER	73924-3	73924-4	73924-5
TAL Metals (6010)			
Aluminum, mg/kg dw	20U	100 %	0 %
Antimony, mg/kg dw	2.0U	102 %	1.9 %
Arsenic, mg/kg dw	1.0U	100 %	0 %
Barium, mg/kg dw	1.0U	105 %	4.6 %
Beryllium, mg/kg dw	0.40U	104 %	1.9 %
Cadmium, mg/kg dw	0.50U	104 %	0 %
Calcium, mg/kg dw	50U	96 %	2.1 %
Chromium, mg/kg dw	1.0U	110 %	0 %
Cobalt, mg/kg dw	1.0U	106 %	0 %
Copper, mg/kg dw	2.0U	108 %	0 %
Iron, mg/kg dw	5.0U	110 %	0 %
Lead, mg/kg dw	0.50U	104 %	1.9 %
Magnesium, mg/kg dw	50U	96 %	2.1 %
Manganese, mg/kg dw	1.0U	106 %	1.9 %
Nickel, mg/kg dw	4.0U	106 %	0 %
Potassium, mg/kg dw	100U	94 %	2.1 %
Selenium, mg/kg dw	1.0U	95 %	5.1 %
Silver, mg/kg dw	1.0U	100 %	2.0 %
Sodium, mg/kg dw	50U	98 %	4.0 %
Thallium, mg/kg dw	1.0U	105 %	4.6 %
Vanadium, mg/kg dw	1.0U	108 %	0 %
Zinc, mg/kg dw	2.0U	104 %	0 %
Prep Date	09.10.03	09.10.03	---
Analysis Date	09.11.03	09.11.03	---
Batch ID	ME091003C	ME091003C	ME091003C

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

Mr. Rick McCann
Aerostar Environmental Services, Inc.
11181 St. Johns Industrial Parkway, N
Jacksonville, FL 32246

Client PO. No.: 0103-329-09
Cl Project No: 171591

Project: JETC and Building 271
Sampled By: Client
Code: 111930916

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01
73924-4	Accuracy (%Rec)		JETC01
73924-5	Precision (%RPD)		JETC01

PARAMETER	73924-3	73924-4	73924-5
Mercury (7471), mg/kg dw	0.020U	100 %	0 %
Prep Date	09.10.03	09.10.03	---
Analysis Date	09.10.03	09.10.03	---
Batch ID	ME091003R	ME091003R	ME091003R
pH (150.1), %	---	123 %	25 %*F86

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

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Jacksonville, FL 32246

Client PO. No.: 0103-329-09
Cl Project No: 171591

Project: JETC and Building 271
Sampled By: Client
Code: 111930916

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-6	Method Blank		JETC01
73924-7	Accuracy (%Rec)		JETC01
73924-8	Precision (%RPD)		JETC01

PARAMETER	73924-6	73924-7	73924-8
TCL Volatiles by GC/MS (8260)			
Chloromethane, ug/l	1.0U	---	---
Bromomethane (Methyl bromide), ug/l	1.0U	---	---
Vinyl chloride, ug/l	1.0U	---	---
Chloroethane, ug/l	1.0U	---	---
Methylene chloride (Dichloromethane), ug/l	5.0U	---	---
Acetone, ug/l	25U	---	---
Carbon disulfide, ug/l	1.0U	---	---
1,1-Dichloroethene, ug/l	1.0U	90 %	1.1 %
1,1-Dichloroethane, ug/l	1.0U	---	---
cis-1,2-Dichloroethylene, ug/l	1.0U	---	---
trans-1,2-Dichloroethene, ug/l	1.0U	---	---
Chloroform, ug/l	1.0U	---	---
1,2-Dichloroethane, ug/l	1.0U	---	---
2-Butanone (MEK), ug/l	10U	---	---
1,1,1-Trichloroethane, ug/l	1.0U	---	---
Carbon tetrachloride, ug/l	1.0U	---	---
Bromodichloromethane, ug/l	1.0U	---	---
1,2-Dichloropropane, ug/l	1.0U	---	---
cis-1,3-Dichloropropene, ug/l	1.0U	---	---
Trichloroethene, ug/l	1.0U	100 %	0 %

LOG NO: T3-73924
Received: 06 SEP 03
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Client PO. No.: 0103-329-09
Cl Project No: 171591

Project: JETC and Building 271
Sampled By: Client
Code: 112730916

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-6	Method Blank		JETC01
73924-7	Accuracy (%Rec)		JETC01
73924-8	Precision (%RPD)		JETC01

PARAMETER	73924-6	73924-7	73924-8
Dibromochloromethane, ug/l	1.0U	---	---
1,1,2-Trichloroethane, ug/l	1.0U	---	---
Benzene, ug/l	1.0U	110 %	9.5 %
trans-1,3-Dichloropropene, ug/l	1.0U	---	---
Bromoform, ug/l	1.0U	---	---
4-Methyl-2-pentanone (MIBK), ug/l	10U	---	---
2-Hexanone, ug/l	10U	---	---
Tetrachloroethene, ug/l	1.0U	---	---
Toluene, ug/l	1.0U	110 %	9.5 %
1,1,2,2-Tetrachloroethane, ug/l	1.0U	---	---
Chlorobenzene, ug/l	1.0U	100 %	0 %
Ethylbenzene, ug/l	1.0U	---	---
Styrene, ug/l	1.0U	---	---
Xylenes, Total, ug/l	2.0U	---	---
Surrogate - Dibromofluoromethane	112 %	112 %	---
Surrogate - Toluene-d8	104 %	104 %	---
Surrogate - 4-Bromofluorobenzene	100 %	104 %	---
Prep Date	09.09.03	09.09.03	---
Analysis Date	09.09.03	09.09.03	---
Batch ID	VM090903N	VM090903N	VM090903N

LOG NO: T3-73924
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Mr. Rick McCann
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11181 St. Johns Industrial Parkway, N
Jacksonville, FL 32246

Client PO. No.: 0103-329-09
Cl Project No: 171591

Project: JETC and Building 271
Sampled By: Client
Code: 111930916

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-6	Method Blank		JETC01
73924-7	Accuracy (%Rec)		JETC01
73924-8	Precision (%RPD)		JETC01

PARAMETER	73924-6	73924-7	73924-8
Dibromochloromethane, ug/l	1.0U	---	---
1,1,2-Trichloroethane, ug/l	1.0U	---	---
Benzene, ug/l	1.0U	110 %	9.5 %
trans-1,3-Dichloropropene, ug/l	1.0U	---	---
Bromoform, ug/l	1.0U	---	---
4-Methyl-2-pentanone (MIBK), ug/l	10U	---	---
2-Hexanone, ug/l	10U	---	---
Tetrachloroethene, ug/l	1.0U	---	---
Toluene, ug/l	1.0U	110 %	9.5 %
1,1,2,2-Tetrachloroethane, ug/l	1.0U	---	---
Chlorobenzene, ug/l	1.0U	100 %	0 %
Ethylbenzene, ug/l	1.0U	---	---
Styrene, ug/l	1.0U	---	---
Xylenes, Total, ug/l	2.0U	---	---
Surrogate - Dibromofluoromethane	112 %	112 %	---
Surrogate - Toluene-d8	104 %	104 %	---
Surrogate - 4-Bromofluorobenzene	100 %	104 %	---
Prep Date	09.09.03	---	---
Analysis Date	09.09.03	09.09.03	09.09.03
Batch ID	VM090903N	VM090903N	VM090903N

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

Mr. Rick McCann
Aerostar Environmental Services, Inc.
11181 St. Johns Industrial Parkway, N
Jacksonville, FL 32246

Client PO. No.: 0103-329-09
Cl Project No: 171591

Project: JETC and Building 271
Sampled By: Client
Code: 112930916

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-6	Method Blank		JETC01
73924-7	Accuracy (%Rec)		JETC01
73924-8	Precision (%RPD)		JETC01

PARAMETER	73924-6	73924-7	73924-8

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.

Method: EPA SW-846, Update III; FL-PRO

Florida Department of Health Certification No.: E81005

U Analyzed for but not detected.

J Estimated value; reported between the Method Detection Limit (MDL) and the Reporting Limit (RL).

B Estimated value; reported between the Instrument Detection Limit (IDL) and the Reporting Limit (RL).

*F86 = Because spikes are not appropriate for this method, reported precision was calculated from duplicate analysis of a sample in the batch.

LEVEL III DATA PACKAGE

SDG# JETC01
STL Log Number: T373924
Project: JETC and Building 271

Prepared for
Aerostar Environmental Services, Inc.
by
STL Tallahassee
Tallahassee, Florida

Contents

Chain-of-Custody Documentation

Laboratory Report

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TAL Metals *Methods 6010/7471*

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GC Chlorinated Pesticides *Method 8081/8082*

GC Chlorinated Pesticides *Method 8081/8082*

GC Petroleum Range Organics *Method FL-PRO*

GC/MS Polynuclear Aromatics *Method 8270*

GC/MS Semivolatile Organics *Method 8270*

GC/MS Volatile Organics *Method 8260*

Timothy Preston
timpreston@stl-inc.com

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The pages of this report are numbered sequentially from 1 to 335.

CH2M Hill Constructors, Inc.
115 Perimeter Center Place, Suite 700
Atlanta, GA 30346-1278
Tel No (770) 604-9182 ; Fax No (770) 604-9282

CHAIN-OF-CUSTODY RECORD

COC NUMBER
171591-003 Page 1 of 1

PROJECT NAME:	PROJECT NUMBER:	LAB NAME AND CONTACT:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 1 (Name and Company)	RECIPIENT 1 (Address, Tel No. , and Fax No.):
JETC and Building 271	171591	STL - Tallahassee	Rick McCann / Aerostar	11181 St. Johns Ind. Pkwy. Jacksonville, FL 32246
PROJECT PHASE/SITE/TASK:	CTO OR DO NUMBER:	LAB PO NUMBER:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (Address, Tel No. , and Fax No.):
Backfill Characterization Sampling	0086	0103-329-09	rmccann@aerostar.net	(904) 565-2820 ph (904) 565-2830 fax
PROJECT CONTACT:	PROJECT TEL NO AND FAX NO:	LAB TEL NO AND FAX NO:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 3 (Name and Company)	RECIPIENT 3 (Address, Tel No. , and Fax No.):
Rick McCann		(850) 878-3994 ph (850) 878-9504 fax		

ANALYSES REQUIRED (Include Method Numbers)

ITEM	SAMPLE IDENTIFIER BF005@4.0' BF001 COMP	SAMPLE DESCRIPTION/LOCATION 1405 1415	MATRIX (see codes on back)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see codes on back)	TAT (calendar days)	TCL Volatiles by 5035/8260B (GRAB)	TCL Semi-volatiles(8270C),TR PH (FL-PRO),16 Listed PAHs(including 1-and2-	Pesticides by 8081A, PCBs by 8082	Herbicides by 8151A	TAL Metals by 6010A/7471A	pH by 9045B			SAMPLE TYPE (see codes on back)	COMMENTS/ SCREENING READINGS	LAB ID
1	086-BFC-S-0904-03	Characterization of fill material	S	09/04/03	1415	III/C	7 Day	X	X	X	X	X	X			Grab / Composite		
2																		
3	086-TB-L-0904-03	Trip Blank	L			III/C	7 Day	X									Prepared by Lab	
4																		
5																		
6																		
7																		
8																		
9																		
10																		

SAMPLER(S) AND COMPANY: (please print)

COURIER AND SHIPPING NUMBER:

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature: Rick McCann / Richard D. McCann	9/4/03	1515	Printed Name and Signature: PAMELA SCHNEITZER	9/4/03	1810
Printed Name and Signature:			Printed Name and Signature: M Jones	9/6/03	1245
Printed Name and Signature:			Printed Name and Signature:		

Distribution: [ ] Original - Laboratory (To be returned with Analytical Report); [ ] Copy 1 - Project File; [ ] Copy 2 - PMO

T373924

Form CCI001, Rev 02/00

REPORT OF SAMPLES WITH SDG# OF JETC01

SAMPLE#	SAMPLE DESCRIPTION	DATE SAMPLED	DATE RECEIVED	MATRIX
T373924*1	086-BFC-S-0904-03	09/04/03	09/06/03	SOLID
T373924*2	086-TB-L-0904-03	09/04/03	09/06/03	LIQUID

LABORATORY REPORT

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

Mr. Rick McCann
Aerostar Environmental Services, Inc.
11181 St. Johns Industrial Parkway, N
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Client PO. No.: 0103-329-09
Cl Project No: 171591

Project: JETC and Building 271
Sampled By: Client
Code: 134430918
Page 1

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1
TCL Volatiles by GC/MS (8260)	
Chloromethane, ug/kg dw	14U
Bromomethane (Methyl bromide), ug/kg dw	14U
Vinyl chloride, ug/kg dw	1.5U*
Chloroethane, ug/kg dw	14U
Methylene chloride (Dichloromethane), ug/kg dw	7.0U
Acetone, ug/kg dw	70U
Carbon disulfide, ug/kg dw	7.0U
1,1-Dichloroethene, ug/kg dw	7.0U
1,1-Dichloroethane, ug/kg dw	7.0U
cis-1,2-Dichloroethylene, ug/kg dw	7.0U
trans-1,2-Dichloroethene, ug/kg dw	7.0U
Chloroform, ug/kg dw	7.0U
1,2-Dichloroethane, ug/kg dw	7.0U
2-Butanone (MEK), ug/kg dw	35U
1,1,1-Trichloroethane, ug/kg dw	7.0U
Carbon tetrachloride, ug/kg dw	7.0U
Bromodichloromethane, ug/kg dw	0.88U*
1,2-Dichloropropane, ug/kg dw	7.0U
cis-1,3-Dichloropropene, ug/kg dw	0.99U*
Trichloroethene, ug/kg dw	7.0U
Dibromochloromethane, ug/kg dw	0.84U*
1,1,2-Trichloroethane, ug/kg dw	7.0U

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Code: 134430918

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1
Benzene, ug/kg dw	7.0U
trans-1,3-Dichloropropene, ug/kg dw	2.1U*
Bromoform, ug/kg dw	7.0U
4-Methyl-2-pentanone (MIBK), ug/kg dw	35U
2-Hexanone, ug/kg dw	35U
Tetrachloroethene, ug/kg dw	7.0U
Toluene, ug/kg dw	3.2J
1,1,2,2-Tetrachloroethane, ug/kg dw	7.0U
Chlorobenzene, ug/kg dw	7.0U
Ethylbenzene, ug/kg dw	7.0U
Styrene, ug/kg dw	7.0U
Xylenes, Total, ug/kg dw	7.0U
Surrogate - Dibromofluoromethane	98 %
Surrogate - Toluene-d8	71 %
Surrogate - 4-Bromofluorobenzene	67 %
Prep Date	09.10.03
Analysis Date	09.10.03
Batch ID	VM090903M

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

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Project: JETC and Building 271
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Code: 134430918

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1
TCL - Semivolatiles (8270)	
Phenol, ug/kg dw	360U
bis(2-Chloroethyl)ether, ug/kg dw	360U
2-Chlorophenol, ug/kg dw	360U
1,3-Dichlorobenzene, ug/kg dw	360U
1,4-Dichlorobenzene, ug/kg dw	360U
1,2-Dichlorobenzene, ug/kg dw	360U
2-Methylphenol (o-Cresol), ug/kg dw	360U
2,2'-Oxybis(1-chloropropane)[bis(2-Chloroisopropy 1)ether], ug/kg dw	360U
3-Methylphenol/4-Methylphenol (m&p-Cresol), ug/kg dw	360U
N-Nitroso-di-n-propylamine, ug/kg dw	360U
Hexachloroethane, ug/kg dw	360U
Nitrobenzene, ug/kg dw	360U
Isophorone, ug/kg dw	360U
2-Nitrophenol, ug/kg dw	360U
2,4-Dimethylphenol, ug/kg dw	360U
bis(2-Chloroethoxy)methane, ug/kg dw	360U
2,4-Dichlorophenol, ug/kg dw	360U
1,2,4-Trichlorobenzene, ug/kg dw	360U
4-Chloroaniline, ug/kg dw	720U
Hexachlorobutadiene, ug/kg dw	360U
4-Chloro-3-methylphenol, ug/kg dw	360U

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1				
Hexachlorocyclopentadiene, ug/kg dw	360U				
2,4,6-Trichlorophenol, ug/kg dw	360U				
2,4,5-Trichlorophenol, ug/kg dw	360U				
2-Chloronaphthalene, ug/kg dw	360U				
2-Nitroaniline, ug/kg dw	1900U				
Dimethylphthalate, ug/kg dw	360U				
2,6-Dinitrotoluene, ug/kg dw	360U				
3-Nitroaniline, ug/kg dw	1900U				
2,4-Dinitrophenol, ug/kg dw	1900U				
4-Nitrophenol, ug/kg dw	1900U				
Dibenzofuran, ug/kg dw	360U				
2,4-Dinitrotoluene, ug/kg dw	360U				
Diethylphthalate, ug/kg dw	360U				
4-Chlorophenylphenyl ether, ug/kg dw	360U				
4-Nitroaniline, ug/kg dw	1900U				
4,6-Dinitro-2-methylphenol, ug/kg dw	1900U				
N-Nitrosodiphenylamine, ug/kg dw	360U				
4-Bromophenylphenyl ether, ug/kg dw	360U				
Hexachlorobenzene, ug/kg dw	360U				
Pentachlorophenol, ug/kg dw	1900U				
Carbazole, ug/kg dw	360U				
Di-n-butylphthalate, ug/kg dw	360U				
Butylbenzylphthalate, ug/kg dw	360U				

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Code: 134430918

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1
3,3'-Dichlorobenzidine, ug/kg dw	720U
bis(2-Ethylhexyl)phthalate, ug/kg dw	360U
Di-n-octylphthalate, ug/kg dw	360U
Surrogate - 2-Fluorophenol	43 %
Surrogate - Phenol-d5	51 %
Surrogate - Nitrobenzene - d5	53 %
Surrogate - 2-Fluorobiphenyl	56 %
Surrogate - 2,4,6-Tribromophenol	51 %
Surrogate - Terphenyl-d14	56 %
Prep Date	09.10.03
Analysis Date	09.11.03
Batch ID	SM091003M

LOG NO: T3-73924
Received: 06 SEP 03
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Mr. Rick McCann
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11181 St. Johns Industrial Parkway, N
Jacksonville, FL 32246

Client PO. No.: 0103-329-09
Cl Project No: 171591

Project: JETC and Building 271
Sampled By: Client
Code: 134430918

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1		
Polynuclear Aromatics (8270)			
Acenaphthene, ug/kg dw	7.4U		
Acenaphthylene, ug/kg dw	7.4U		
Anthracene, ug/kg dw	7.4U		
Benzo(a)anthracene, ug/kg dw	7.4U		
Benzo(a)pyrene, ug/kg dw	7.4U		
Benzo(b)fluoranthene, ug/kg dw	7.4U		
Benzo(g,h,i)perylene, ug/kg dw	7.4U		
Benzo(k)fluoranthene, ug/kg dw	7.4U		
Chrysene, ug/kg dw	7.4U		
Dibenzo(a,h)anthracene, ug/kg dw	7.4U		
Fluoranthene, ug/kg dw	7.4U		
Fluorene, ug/kg dw	7.4U		
Indeno(1,2,3-cd)pyrene, ug/kg dw	7.4U		
Naphthalene, ug/kg dw	7.4U		
Phenanthrene, ug/kg dw	7.4U		
Pyrene, ug/kg dw	7.4U		
1-Methylnaphthalene, ug/kg dw	7.4U		
2-Methylnaphthalene, ug/kg dw	7.4U		
Surrogate - o-Terphenyl	67 %		
Prep Date	09.10.03		
Analysis Date	09.12.03		
Batch ID	SM091003L		

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1
Petroleum Range Organics (FL-PRO)	
Petroleum Hydrocarbons , mg/kg dw	16
Surrogate, o-Terphenyl	55 %
Surrogate-C39	46 %
Prep Date	09.10.03
Analysis Date	09.12.03
Batch ID	SG091003J

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

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Sampled By: Client
Code: 134430918

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1
TCL - Pesticides/PCB's (8081/8082)	
alpha-BHC, ug/kg dw	1.9U
beta-BHC, ug/kg dw	1.9U
delta-BHC, ug/kg dw	1.9U
gamma-BHC (Lindane), ug/kg dw	1.9U
Heptachlor, ug/kg dw	1.9U
Aldrin, ug/kg dw	1.9U
Heptachlor epoxide, ug/kg dw	1.9U
Endosulfan I, ug/kg dw	1.9U
Dieldrin, ug/kg dw	3.6U
4,4'-DDE, ug/kg dw	3.6U
Endrin, ug/kg dw	3.6U
Endosulfan II, ug/kg dw	3.6U
4,4'-DDD, ug/kg dw	3.6U
Endosulfan sulfate, ug/kg dw	3.6U
4,4'-DDT, ug/kg dw	3.6U
Methoxychlor, ug/kg dw	19U
Endrin ketone, ug/kg dw	3.6U
Endrin aldehyde, ug/kg dw	3.6U
alpha-Chlordane, ug/kg dw	1.9U
gamma-Chlordane, ug/kg dw	1.9U
Toxaphene, ug/kg dw	190U
Aroclor-1016, ug/kg dw	36U

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Project: JETC and Building 271
Sampled By: Client
Code: 134430918

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1
Aroclor-1221, ug/kg dw	74U
Aroclor-1232, ug/kg dw	36U
Aroclor-1242, ug/kg dw	36U
Aroclor-1248, ug/kg dw	36U
Aroclor-1254, ug/kg dw	36U
Aroclor-1260, ug/kg dw	36U
Surrogate - Dibutyl Chlorendate	62 %
Surrogate - Tetrachloro-m-xylene	46 %
Surrogate - Decachlorobiphenyl	68 %
Prep Date	09.11.03
Analysis Date	09.12.03
Batch ID	SG091103H

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

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Project: JETC and Building 271
Sampled By: Client
Code: 134430918

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1
Chlorinated Herbicides (8151)	
Bentazon, ug/kg dw	38U
2,4-D, ug/kg dw	9.1U
Dalapon, ug/kg dw	2200U
2,4-DB, ug/kg dw	9.1U
Dicamba, ug/kg dw	22U
Dichloroprop, ug/kg dw	110U
Dinoseb, ug/kg dw	110U
MCPA[(4-chloro-2-methylphenoxy)-acetic acid], ug/kg dw	2200U
MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid], ug/kg dw	2200U
Pentachlorophenol, ug/kg dw	19U
Picloram, ug/kg dw	3.6U
2,4,5-TP (Silvex), ug/kg dw	9.1U
2,4,5-T, ug/kg dw	9.1U
Surrogate-2,4-Dichlorophenyl acetic acid (DCAA)	101 %
Prep Date	09.09.03
Analysis Date	09.12.03
Batch ID	SG090903H

LOG NO: T3-73924
Received: 06 SEP 03
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Project: JETC and Building 271
Sampled By: Client
Code: 134430918

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1
TAL Metals (6010)	
Aluminum, ug/l	1200
Antimony, ug/l	2.2U
Arsenic, ug/l	0.74B
Barium, ug/l	2.1
Beryllium, ug/l	0.43U
Cadmium, ug/l	0.54U
Calcium, ug/l	360
Chromium, ug/l	2.1
Cobalt, ug/l	0.22B
Copper, ug/l	0.83B
Iron, ug/l	140
Lead, ug/l	4.1
Magnesium, ug/l	36B
Manganese, ug/l	1.7
Nickel, ug/l	4.3U
Potassium, ug/l	24B
Selenium, ug/l	1.1U
Silver, ug/l	1.1U
Sodium, ug/l	54U
Thallium, ug/l	1.1U
Vanadium, ug/l	1.5
Zinc, ug/l	2.7
Prep Date	09.10.03
Analysis Date	09.11.03
Batch ID	ME091003C

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

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Project: JETC and Building 271
Sampled By: Client
Code: 134430918

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-1	086-BFC-S-0904-03	09-04-03/14:15	JETC01

PARAMETER	73924-1
Mercury (7471), mg/kg dw	0.018B
Prep Date	09.10.03
Analysis Date	09.10.03
Batch ID	ME091003R
pH (150.1), units	6.3

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

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Client PO. No.: 0103-329-09
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Project: JETC and Building 271
Sampled By: Client
Code: 134430918

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-2	086-TB-L-0904-03	09-04-03	JETC01

PARAMETER	73924-2
TCL Volatiles by GC/MS (8260)	
Chloromethane, ug/l	1.0U
Bromomethane (Methyl bromide), ug/l	1.0U
Vinyl chloride, ug/l	1.0U
Chloroethane, ug/l	1.0U
Methylene chloride (Dichloromethane), ug/l	5.0U
Acetone, ug/l	25U
Carbon disulfide, ug/l	1.0U
1,1-Dichloroethene, ug/l	1.0U
1,1-Dichloroethane, ug/l	1.0U
cis-1,2-Dichloroethylene, ug/l	1.0U
trans-1,2-Dichloroethene, ug/l	1.0U
Chloroform, ug/l	1.0U
1,2-Dichloroethane, ug/l	1.0U
2-Butanone (MEK), ug/l	10U
1,1,1-Trichloroethane, ug/l	1.0U
Carbon tetrachloride, ug/l	1.0U
Bromodichloromethane, ug/l	1.0U
1,2-Dichloropropane, ug/l	1.0U
cis-1,3-Dichloropropene, ug/l	1.0U
Trichloroethene, ug/l	1.0U
Dibromochloromethane, ug/l	1.0U
1,1,2-Trichloroethane, ug/l	1.0U

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Client PO. No.: 0103-329-09
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Project: JETC and Building 271
Sampled By: Client
Code: 134430918

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-2	086-TB-L-0904-03	09-04-03	JETC01

PARAMETER	73924-2
Benzene, ug/l	1.0U
trans-1,3-Dichloropropene, ug/l	1.0U
Bromoform, ug/l	1.0U
4-Methyl-2-pentanone (MIBK), ug/l	10U
2-Hexanone, ug/l	10U
Tetrachloroethene, ug/l	1.0U
Toluene, ug/l	1.0U
1,1,2,2-Tetrachloroethane, ug/l	1.0U
Chlorobenzene, ug/l	1.0U
Ethylbenzene, ug/l	1.0U
Styrene, ug/l	1.0U
Xylenes, Total, ug/l	2.0U
Surrogate - Dibromofluoromethane	116 %
Surrogate - Toluene-d8	104 %
Surrogate - 4-Bromofluorobenzene	100 %
Analysis Date	09.09.03
Batch ID	VM090903N

LOG NO: T3-73924
Received: 06 SEP 03
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Client PO. No.: 0103-329-09
Cl Project No: 171591

Project: JETC and Building 271
Sampled By: Client
Code: 134430918

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-9	Lab Control Standard Result		JETC01
73924-10	Lab Control Standard Duplicate Result		JETC01
73924-11	Spike Amount Added, LCS/LCSD		JETC01
73924-12	Lab Control Standard % Recovery		JETC01
73924-13	Lab Control Standard Duplicate % Recovery		JETC01

PARAMETER	73924-9	73924-10	73924-11	73924-12	73924-13
TCL Volatiles by GC/MS (8260)					
1,1-Dichloroethene, ug/kg dw	60	61	50	120 %	122 %
Trichloroethene, ug/kg dw	57	59	50	114 %	118 %
Benzene, ug/kg dw	60	60	50	120 %	120 %
Toluene, ug/kg dw	62	62	50	124 %	124 %
Chlorobenzene, ug/kg dw	66	67	50	132 %	134 %
Surrogate - Dibromofluoromethane	94 %	102 %	---	---	---
Surrogate - Toluene-d8	82 %	84 %	---	---	---
Surrogate - 4-Bromofluorobenzene	80 %	84 %	---	---	---
Prep Date	09.10.03	09.10.03	---	---	---
Analysis Date	09.10.03	09.10.03	---	---	---
Batch ID	VM090903M	VM090903M	VM090903M	VM090903M	VM090903M

LOG NO: T3-73924
Received: 06 SEP 03
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Project: JETC and Building 271
Sampled By: Client
Code: 134430918

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-9	Lab Control Standard Result		JETC01
73924-10	Lab Control Standard Duplicate Result		JETC01
73924-11	Spike Amount Added, LCS/LCSD		JETC01
73924-12	Lab Control Standard % Recovery		JETC01
73924-13	Lab Control Standard Duplicate % Recovery		JETC01

PARAMETER	73924-9	73924-10	73924-11	73924-12	73924-13
TCL - Semivolatiles (8270)					
Phenol, ug/kg	1400	1100	3300	42 %	33 %
2-Chlorophenol, ug/kg	1500	1200	3300	45 %	36 %
1,4-Dichlorobenzene, ug/kg	700	550	1700	41 %	32 %
N-Nitroso-di-n-propylamine, ug/kg	570	550	1700	34 %	26 %
1,2,4-Trichlorobenzene, ug/kg	700	540	1700	41 %	32 %
4-Chloro-3-methylphenol, ug/kg	1600	1300	3300	48 %	39 %
Acenaphthene, ug/kg	640	510	1700	38 %	30 %
4-Nitrophenol, ug/kg	1700	1400	3300	52 %	42 %
2,4-Dinitrotoluene, ug/kg	740	640	1700	44 %	38 %
Pentachlorophenol, ug/kg	1000	680	3300	30 %	21 %
Pyrene, ug/kg	880	760	1700	52 %	45 %
Surrogate - 2-Fluorophenol	42 %	33 %	---	---	---
Surrogate - Phenol-d5	45 %	39 %	---	---	---
Surrogate - Nitrobenzene - d5	46 %	36 %	---	---	---
Surrogate - 2-Fluorobiphenyl	43 %	36 %	---	---	---
Surrogate - 2,4,6-Tribromophenol	42 %	36 %	---	---	---
Surrogate - Terphenyl-d14	50 %	43 %	---	---	---
Prep Date	09.10.03	09.10.03	---	---	---
Analysis Date	09.11.03	09.11.03	---	---	---
Batch ID	SM091003M	SM091003M	SM091003M	SM091003M	SM091003M

LOG NO: T3-73924
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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-9	Lab Control Standard Result		JETC01
73924-10	Lab Control Standard Duplicate Result		JETC01
73924-11	Spike Amount Added, LCS/LCSD		JETC01
73924-12	Lab Control Standard % Recovery		JETC01
73924-13	Lab Control Standard Duplicate % Recovery		JETC01

PARAMETER	73924-9	73924-10	73924-11	73924-12	73924-13
Polynuclear Aromatics (8270)					
Acenaphthene, ug/kg dw	79	82	130	61 %	63 %
Benzo(a)pyrene, ug/kg dw	71	73	130	55 %	56 %
Fluorene, ug/kg dw	77	82	130	59 %	63 %
Naphthalene, ug/kg dw	76	75	130	58 %	58 %
Pyrene, ug/kg dw	84	91	130	65 %	70 %
Surrogate - o-Terphenyl	67 %	73 %	---	---	---
Prep Date	09.10.03	09.10.03	---	---	---
Analysis Date	09.12.03	09.12.03	---	---	---
Batch ID	SM091003L	SM091003L	SM091003L	SM091003L	SM091003L
Petroleum Range Organics (FL-PRO)					
Petroleum Hydrocarbons , mg/kg	38	46	91	42 %	46 %
Surrogate, o-Terphenyl	42 %	54 %	---	---	---
Surrogate-C39	38 %	45 %	---	---	---
Prep Date	09.10.03	09.10.03	---	---	---
Analysis Date	09.12.03	09.12.03	---	---	---
Batch ID	SG091003J	SG091003J	SG091003J	SG091003J	SG091003J

LOG NO: T3-73924
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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-9	Lab Control Standard Result		JETC01
73924-10	Lab Control Standard Duplicate Result		JETC01
73924-11	Spike Amount Added, LCS/LCSD		JETC01
73924-12	Lab Control Standard % Recovery		JETC01
73924-13	Lab Control Standard Duplicate % Recovery		JETC01

PARAMETER	73924-9	73924-10	73924-11	73924-12	73924-13
TCL - Pesticides/PCB's (8081/8082)					
gamma-BHC (Lindane), ug/l	2.0	2.1	3.3	61 %	64 %
Heptachlor, ug/l	2.1	2.5	3.3	64 %	76 %
Aldrin, ug/l	2.2	2.6	3.3	67 %	79 %
Dieldrin, ug/l	5.4	6.2	8.3	65 %	75 %
Endrin, ug/l	5.5	6.2	8.3	66 %	75 %
4,4'-DDT, ug/l	4.9	5.5	8.3	59 %	66 %
Surrogate - Dibutyl Chlorendate	52 %	61 %	---	---	---
Surrogate - Tetrachloro-m-xylene	52 %	67 %	---	---	---
Surrogate - Decachlorobiphenyl	64 %	79 %	---	---	---
Prep Date	09.11.03	09.11.03	---	---	---
Analysis Date	09.12.03	09.12.03	---	---	---
Batch ID	SG091103H	SG091103H	SG091103H	SG091103H	SG091103H
Chlorinated Herbicides (8151)					
2,4-D, ug/kg dw	20	33	28	71 %	118 %
2,4,5-TP (Silvex), ug/kg dw	24	31	28	86 %	111 %
2,4,5-T, ug/kg dw	21	33	28	75 %	118 %
Surrogate-2,4-Dichloropheny 1 acetic acid (DCAA)	90 %	110 %	---	---	---
Prep Date	09.09.03	09.09.03	---	---	---
Analysis Date	09.12.03	09.12.03	---	---	---
Batch ID	SG090903H	SG090903H	SG090903H	SG090903H	SG090903H

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-9	Lab Control Standard Result		JETC01
73924-10	Lab Control Standard Duplicate Result		JETC01
73924-11	Spike Amount Added, LCS/LCSD		JETC01
73924-12	Lab Control Standard % Recovery		JETC01
73924-13	Lab Control Standard Duplicate % Recovery		JETC01

PARAMETER	73924-9	73924-10	73924-11	73924-12	73924-13
TAL Metals (6010)					
Aluminum, mg/kg dw	200	200	200	100 %	100 %
Antimony, mg/kg dw	51	52	50	102 %	104 %
Arsenic, mg/kg dw	200	200	200	100 %	100 %
Barium, mg/kg dw	210	220	200	105 %	110 %
Beryllium, mg/kg dw	5.2	5.3	5.0	104 %	106 %
Cadmium, mg/kg dw	5.2	5.2	5.0	104 %	104 %
Calcium, mg/kg dw	480	490	500	96 %	98 %
Chromium, mg/kg dw	22	22	20	110 %	110 %
Cobalt, mg/kg dw	53	53	50	106 %	106 %
Copper, mg/kg dw	27	27	25	108 %	108 %
Iron, mg/kg dw	110	110	100	110 %	110 %
Lead, mg/kg dw	52	53	50	104 %	106 %
Magnesium, mg/kg dw	480	490	500	96 %	98 %
Manganese, mg/kg dw	53	54	50	106 %	108 %
Nickel, mg/kg dw	53	53	50	106 %	106 %
Potassium, mg/kg dw	470	480	500	94 %	96 %
Selenium, mg/kg dw	190	200	200	95 %	100 %
Silver, mg/kg dw	5.0	5.1	5.0	100 %	102 %

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-9	Lab Control Standard Result		JETC01
73924-10	Lab Control Standard Duplicate Result		JETC01
73924-11	Spike Amount Added, LCS/LCSD		JETC01
73924-12	Lab Control Standard % Recovery		JETC01
73924-13	Lab Control Standard Duplicate % Recovery		JETC01

PARAMETER	73924-9	73924-10	73924-11	73924-12	73924-13
Sodium, mg/kg dw	490	510	500	98 %	102 %
Thallium, mg/kg dw	210	220	200	105 %	110 %
Vanadium, mg/kg dw	54	54	50	108 %	108 %
Zinc, mg/kg dw	52	52	50	104 %	104 %
Prep Date	09.10.03	09.10.03	---	---	---
Analysis Date	09.11.03	09.11.03	---	---	---
Batch ID	ME091003C	ME091003C	ME091003C	ME091003C	ME091003C
Mercury (7471), mg/kg dw	0.20	0.20	0.20	100 %	100 %
Batch ID	ME091003R	ME091003R	ME091003R	ME091003R	ME091003R

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Mr. Rick McCann
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11181 St. Johns Industrial Parkway, N
Jacksonville, FL 32246

Client PO. No.: 0103-329-09
Cl Project No: 171591

Project: JETC and Building 271
Sampled By: Client
Code: 134430918

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-14	LCS Accuracy Control Limit (%R)		JETC01
73924-15	Precision (%RPD) of LCS/LCSD		JETC01
73924-16	LCS Precision Control Limit (Advisory) %RPD		JETC01

PARAMETER	73924-14	73924-15	73924-16
TCL Volatiles by GC/MS (8260)			
1,1-Dichloroethene, %	40-164 %	1.6 %	<46 %
Trichloroethene, %	51-146 %	3.4 %	<34 %
Benzene, %	49-142 %	0 %	<42 %
Toluene, %	38-158 %	0 %	<32 %
Chlorobenzene, %	66-135 %	1.5 %	<34 %
Surrogate - Dibromofluoromethane	58-142 %	---	---
Surrogate - Toluene-d8	64-136 %	---	---
Surrogate - 4-Bromofluorobenzene	63-135 %	---	---
Batch ID	VM090903M	VM090903M	VM090903M

LOG NO: T3-73924
Received: 06 SEP 03
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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-14	LCS Accuracy Control Limit (%R)		JETC01
73924-15	Precision (%RPD) of LCS/LCSD		JETC01
73924-16	LCS Precision Control Limit (Advisory) %RPD		JETC01

PARAMETER	73924-14	73924-15	73924-16
TCL - Semivolatiles (8270)			
Phenol, %	13-115 %	24 %	<39 %
2-Chlorophenol, %	15-111 %	22 %	<38 %
1,4-Dichlorobenzene, %	10-105 %	24 %	<31 %
N-Nitroso-di-n-propylamine, %	11-122 %	24 %	<37 %
1,2,4-Trichlorobenzene, %	10-112 %	26 %*F99	<22 %
4-Chloro-3-methylphenol, %	22-114 %	21 %	<32 %
Acenaphthene, %	18-123 %	23 %	<49 %
4-Nitrophenol, %	15-118 %	19 %	<57 %
2,4-Dinitrotoluene, %	11-120 %	14 %	<37 %
Pentachlorophenol, %	10-140 %	38 %	<55 %
Pyrene, %	10-133 %	15 %	<42 %
Surrogate - 2-Fluorophenol	16-113 %	---	---
Surrogate - Phenol-d5	19-114 %	---	---
Surrogate - Nitrobenzene - d5	20-120 %	---	---
Surrogate - 2-Fluorobiphenyl	30-120 %	---	---
Surrogate - 2,4,6-Tribromophenol	23-129 %	---	---
Surrogate - Terphenyl-d14	30-131 %	---	---
Batch ID	SM091003M	SM091003M	SM091003M

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-14	LCS Accuracy Control Limit (%R)		JETC01
73924-15	Precision (%RPD) of LCS/LCSD		JETC01
73924-16	LCS Precision Control Limit (Advisory) %RPD		JETC01

PARAMETER	73924-14	73924-15	73924-16
Polynuclear Aromatics (8270)			
Acenaphthene, %	18-123 %	3.7 %	<49 %
Benzo(a)pyrene, %	41-142 %	2.8 %	<55 %
Fluorene, %	27-151 %	6.3 %	<50 %
Naphthalene, %	25-131 %	1.3 %	<34 %
Pyrene, %	10-133 %	8.0 %	<42 %
Surrogate - o-Terphenyl	30-130 %	---	---
Batch ID	SM091003L	SM091003L	SM091003L
Petroleum Range Organics (FL-PRO)			
Petroleum Hydrocarbons , %	26-116 %	19 %	<25 %
Surrogate, o-Terphenyl	15-154 %	---	---
Surrogate-C39	30-118 %	---	---
TCL - Pesticides/PCB's (8081/8082)			
gamma-BHC (Lindane), %	12-138 %	4.9 %	<37 %
Heptachlor, %	17-138 %	17 %	<38 %
Aldrin, %	10-144 %	17 %	<38 %
Dieldrin, %	28-137 %	14 %	<30 %
Endrin, %	33-149 %	12 %	<32 %
4,4'-DDT, %	29-134 %	12 %	<26 %
Batch ID	SG091103H	SG091103H	SG091103H

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Project: JETC and Building 271
Sampled By: Client
Code: 134430918

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-14	LCS Accuracy Control Limit (%R)		JETC01
73924-15	Precision (%RPD) of LCS/LCSD		JETC01
73924-16	LCS Precision Control Limit (Advisory) %RPD		JETC01

PARAMETER	73924-14	73924-15	73924-16
Chlorinated Herbicides (8151)			
2,4-D, %	19-153 %	49 %*F99	<47 %
2,4,5-TP (Silvex), %	27-120 %	25 %	<51 %
2,4,5-T, %	14-143 %	44 %	<59 %
Surrogate-2,4-Dichlorophenyl acetic acid (DCAA)	30-189 %	---	---
Batch ID	SG090903H	SG090903H	SG090903H

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Received: 06 SEP 03
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Project: JETC and Building 271
Sampled By: Client
Code: 134430918

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-14	LCS Accuracy Control Limit (%R)		JETC01
73924-15	Precision (%RPD) of LCS/LCSD		JETC01
73924-16	LCS Precision Control Limit (Advisory) %RPD		JETC01

PARAMETER	73924-14	73924-15	73924-16
TAL Metals (6010)			
Aluminum, %	75-125 %	0 %	<20 %
Antimony, %	75-125 %	1.9 %	<20 %
Arsenic, %	75-125 %	0 %	<20 %
Barium, %	75-125 %	4.6 %	<20 %
Beryllium, %	75-125 %	1.9 %	<20 %
Cadmium, %	75-125 %	0 %	<20 %
Calcium, %	75-125 %	2.1 %	<20 %
Chromium, %	75-125 %	0 %	<20 %
Cobalt, %	75-125 %	0 %	<20 %
Copper, %	75-125 %	0 %	<20 %
Iron, %	75-125 %	0 %	<20 %
Lead, %	75-125 %	1.9 %	<20 %
Magnesium, %	75-125 %	2.1 %	<20 %
Manganese, %	75-125 %	1.9 %	<20 %
Nickel, %	75-125 %	0 %	<20 %
Potassium, %	75-125 %	2.1 %	<20 %
Selenium, %	75-125 %	5.1 %	<20 %
Silver, %	75-125 %	2.0 %	<20 %
Sodium, %	75-125 %	4.0 %	<20 %
Thallium, %	75-125 %	4.6 %	<20 %
Vanadium, %	75-125 %	0 %	<20 %
Zinc, %	75-125 %	0 %	<20 %
Batch ID	ME091003C	ME091003C	ME091003C

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-14	LCS Accuracy Control Limit (%R)		JETC01
73924-15	Precision (%RPD) of LCS/LCSD		JETC01
73924-16	LCS Precision Control Limit (Advisory) %RPD		JETC01

PARAMETER	73924-14	73924-15	73924-16
Mercury (7471), %	80-120 %	0 %	<20 %
Batch ID	ME091003R	ME091003R	ME091003R

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Project: JETC and Building 271
Sampled By: Client
Code: 134430918

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-17	Matrix Spike Result		JETC01
73924-18	Matrix Spike Duplicate Result		JETC01
73924-19	Spike Amount Added, MS		JETC01
73924-20	Spike Amount Added, MSD		JETC01
73924-21	Matrix Spike % Recovery		JETC01

PARAMETER	73924-17	73924-18	73924-19	73924-20	73924-21
TCL Volatiles by GC/MS (8260)					
1,1-Dichloroethene, ug/kg dw	45	54	50	50	90 %
Trichloroethene, ug/kg dw	35	46	50	50	70 %
Benzene, ug/kg dw	41	52	50	50	82 %
Toluene, ug/kg dw	36	45	50	50	72 %
Chlorobenzene, ug/kg dw	31	42	50	50	62 %*F73
Surrogate - Dibromofluoromethane	88 %	89 %	---	---	---
Surrogate - Toluene-d8	88 %	88 %	---	---	---
Surrogate - 4-Bromofluorobenzene	84 %	80 %	---	---	---
Prep Date	09.15.03	09.15.03	---	---	---
Analysis Date	09.15.03	09.15.03	---	---	---
Batch ID	VM090903M	VM090903M	VM090903M	VM090903M	VM090903M

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Project: JETC and Building 271
Sampled By: Client
Code: 134430918

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-17	Matrix Spike Result		JETC01
73924-18	Matrix Spike Duplicate Result		JETC01
73924-19	Spike Amount Added, MS		JETC01
73924-20	Spike Amount Added, MSD		JETC01
73924-21	Matrix Spike % Recovery		JETC01

PARAMETER	73924-17	73924-18	73924-19	73924-20	73924-21
TCL - Semivolatiles (8270)					
Phenol, ug/kg	1900	1700	3700	3700	51 %
2-Chlorophenol, ug/kg	2000	1700	3700	3700	54 %
1,4-Dichlorobenzene, ug/kg	910	790	1800	1800	50 %
N-Nitroso-di-n-propylamine, ug/kg	800	690	1800	1800	44 %
1,2,4-Trichlorobenzene, ug/kg	960	830	1800	1800	53 %
4-Chloro-3-methylphenol, ug/kg	2200	2000	3700	3700	59 %
Acenaphthene, ug/kg	960	840	1800	1800	53 %
4-Nitrophenol, ug/kg	2600	2300	3700	3700	70 %
2,4-Dinitrotoluene, ug/kg	1200	980	1800	1800	67 %
Pentachlorophenol, ug/kg	2300	1900	3700	3700	62 %
Pyrene, ug/kg	1200	1100	1800	1800	67 %
Surrogate - 2-Fluorophenol	51 %	43 %	---	---	---
Surrogate - Phenol-d5	54 %	49 %	---	---	---
Surrogate - Nitrobenzene - d5	61 %	54 %	---	---	---
Surrogate - 2-Fluorobiphenyl	61 %	54 %	---	---	---
Surrogate - 2,4,6-Tribromophenol	59 %	51 %	---	---	---
Surrogate - Terphenyl-d14	67 %	56 %	---	---	---
Prep Date	09.10.03	09.10.03	---	---	---
Analysis Date	09.11.03	09.11.03	---	---	---
Batch ID	SM091003M	SM091003M	SM091003M	SM091003M	SM091003M

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-17	Matrix Spike Result		JETC01
73924-18	Matrix Spike Duplicate Result		JETC01
73924-19	Spike Amount Added, MS		JETC01
73924-20	Spike Amount Added, MSD		JETC01
73924-21	Matrix Spike % Recovery		JETC01

PARAMETER	73924-17	73924-18	73924-19	73924-20	73924-21
Polynuclear Aromatics (8270)					
Acenaphthene, ug/kg dw	*F62	*F62	*F62	*F62	*F62
Benzo(a)pyrene, ug/kg dw	*F62	*F62	*F62	*F62	*F62
Fluorene, ug/kg dw	*F62	*F62	*F62	*F62	*F62
Naphthalene, ug/kg dw	*F62	*F62	*F62	*F62	*F62
Pyrene, ug/kg dw	*F62	*F62	*F62	*F62	*F62
Chrysene, ug/kg dw	---	*F62	---	---	---
Batch ID	SM091003L	SM091003L	SM091003L	SM091003L	SM091003L
Petroleum Range Organics (FL-PRO)					
Petroleum Hydrocarbons , mg/kg	*F62	*F62	*F62	*F62	*F62
TCL - Pesticides/PCB's (8081/8082)					
gamma-BHC (Lindane), ug/l	*F62	*F62	*F62	*F62	*F62
Heptachlor, ug/l	*F62	*F62	*F62	*F62	*F62
Aldrin, ug/l	*F62	*F62	*F62	*F62	*F62
Dieldrin, ug/l	*F62	*F62	*F62	*F62	*F62
Endrin, ug/l	*F62	*F62	*F62	*F62	*F62
4,4'-DDT, ug/l	*F62	*F62	*F62	*F62	*F62
Batch ID	SG091103H	SG091103H	SG091103H	SG091103H	SG091103H

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-17	Matrix Spike Result		JETC01
73924-18	Matrix Spike Duplicate Result		JETC01
73924-19	Spike Amount Added, MS		JETC01
73924-20	Spike Amount Added, MSD		JETC01
73924-21	Matrix Spike % Recovery		JETC01

PARAMETER	73924-17	73924-18	73924-19	73924-20	73924-21
Chlorinated Herbicides (8151)					
2,4-D, ug/kg dw	36	34	28	28	128 %
2,4,5-TP (Silvex), ug/kg dw	32	30	28	28	114 %
2,4,5-T, ug/kg dw	34	33	28	28	121 %
Surrogate-2,4-Dichloropheny l acetic acid (DCAA)	116 %	110 %	---	---	---
Prep Date	09.09.03	09.09.03	---	---	---
Analysis Date	09.12.03	09.12.03	---	---	---
Batch ID	SG090903H	SG090903H	SG090903H	SG090903H	SG090903H

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-17	Matrix Spike Result		JETC01
73924-18	Matrix Spike Duplicate Result		JETC01
73924-19	Spike Amount Added, MS		JETC01
73924-20	Spike Amount Added, MSD		JETC01
73924-21	Matrix Spike % Recovery		JETC01

PARAMETER	73924-17	73924-18	73924-19	73924-20	73924-21
TAL Metals (6010)					
Aluminum, mg/kg dw	0	0	220	220	0 %*61
Antimony, mg/kg dw	34	34	54	54	62 %*73
Arsenic, mg/kg dw	180	190	220	220	80 %
Barium, mg/kg dw	350	340	220	220	105 %
Beryllium, mg/kg dw	5.4	5.5	5.4	5.4	91 %
Cadmium, mg/kg dw	4.6	4.7	5.4	5.4	85 %
Calcium, mg/kg dw	0	0	0	0	0 %*F61
Chromium, mg/kg dw	43	44	22	22	91 %
Cobalt, mg/kg dw	47	49	54	54	85 %
Copper, mg/kg dw	28	29	27	27	91 %
Iron, mg/kg dw	0	0	110	110	0 %*F61
Lead, mg/kg dw	57	59	54	54	87 %
Magnesium, mg/kg dw	0	0	0	0	0 %*F61
Manganese, mg/kg dw	110	110	54	54	67 %*F73
Nickel, mg/kg dw	51	53	54	54	87 %
Potassium, mg/kg dw	0	0	0	0	0 %*F61
Selenium, mg/kg dw	180	180	220	220	82 %
Silver, mg/kg dw	4.9	5.0	5.4	5.4	91 %

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-17	Matrix Spike Result		JETC01
73924-18	Matrix Spike Duplicate Result		JETC01
73924-19	Spike Amount Added, MS		JETC01
73924-20	Spike Amount Added, MSD		JETC01
73924-21	Matrix Spike % Recovery		JETC01

PARAMETER	73924-17	73924-18	73924-19	73924-20	73924-21
Sodium, mg/kg dw	0	0	0	0	0 %*F61
Thallium, mg/kg dw	190	190	220	220	86 %
Vanadium, mg/kg dw	83	85	54	54	89 %
Zinc, mg/kg dw	61	62	54	54	81 %
Prep Date	09.10.03	09.10.03	---	---	---
Analysis Date	09.11.03	09.11.03	---	---	---
Batch ID	ME091003C	ME091003C	ME091003C	ME091003C	ME091003C
Mercury (7471), mg/kg dw	0.11	0.11	0.091	0.091	88 %
Prep Date	09.10.03	09.10.03	---	---	---
Analysis Date	09.10.03	09.10.03	---	---	---
Batch ID	ME091003R	ME091003R	ME091003R	ME091003R	ME091003R

LOG NO: T3-73924
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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-22	Matrix Spike Duplicate % Recovery		JETC01
73924-24	MS Accuracy Advisory Limit (%R)		JETC01
73924-25	Precision (%RPD) MS/MSD		JETC01
73924-26	MS Precision Advisory Limit (%RPD)		JETC01

PARAMETER	73924-22	73924-24	73924-25	73924-26
TCL Volatiles by GC/MS (8260)				
1,1-Dichloroethene, ug/l	96 %	40-164 %	18 %	<46 %
Trichloroethene, ug/l	82 %	51-146 %	27 %	<34 %
Benzene, ug/l	93 %	49-142 %	24 %	<42 %
Toluene, ug/l	80 %	38-158 %	22 %	<32 %
Chlorobenzene, ug/l	75 %	66-135 %	30 %	<34 %
Surrogate - Dibromofluoromethane	---	58-142 %	---	---
Surrogate - Toluene-d8	---	64-136 %	---	---
Surrogate - 4-Bromofluorobenzene	---	63-135 %	---	---
Batch ID	VM090903M	VM090903M	VM090903M	VM090903M

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-22	Matrix Spike Duplicate % Recovery		JETC01
73924-24	MS Accuracy Advisory Limit (%R)		JETC01
73924-25	Precision (%RPD) MS/MSD		JETC01
73924-26	MS Precision Advisory Limit (%RPD)		JETC01

PARAMETER	73924-22	73924-24	73924-25	73924-26
TCL - Semivolatiles (8270)				
Phenol, %	46 %	13-115 %	11 %	<39 %
2-Chlorophenol, %	46 %	15-111 %	16 %	<38 %
1,4-Dichlorobenzene, %	44 %	10-105 %	14 %	<31 %
N-Nitroso-di-n-propylamine, %	38 %	11-122 %	15 %	<37 %
1,2,4-Trichlorobenzene, %	46 %	10-112 %	14 %	<22 %
4-Chloro-3-methylphenol, %	54 %	22-114 %	9.5 %	<32 %
Acenaphthene, %	47 %	18-123 %	13 %	<49 %
4-Nitrophenol, %	62 %	15-118 %	12 %	<57 %
2,4-Dinitrotoluene, %	54 %	11-120 %	20 %	<37 %
Pentachlorophenol, %	51 %	10-140 %	19 %	<55 %
Pyrene, %	61 %	10-133 %	8.7 %	<42 %
Batch ID	SM091003M	SM091003M	SM091003M	SM091003M
Polynuclear Aromatics (8270)				
Acenaphthene, %	*F62	*F62	*F62	*F62
Benzo(a)pyrene, %	*F62	*F62	*F62	*F62
Fluorene, %	*F62	*F62	*F62	*F62
Naphthalene, %	*F62	*F62	*F62	*F62
Pyrene, %	*F62	*F62	*F62	*F62
Batch ID	SM091003L	SM091003L	SM091003L	SM091003L

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Client PO. No.: 0103-329-09
Cl Project No: 171591

Project: JETC and Building 271
Sampled By: Client
Code: 134430918

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-22	Matrix Spike Duplicate % Recovery		JETC01
73924-24	MS Accuracy Advisory Limit (%R)		JETC01
73924-25	Precision (%RPD) MS/MSD		JETC01
73924-26	MS Precision Advisory Limit (%RPD)		JETC01

PARAMETER	73924-22	73924-24	73924-25	73924-26
Petroleum Range Organics (FL-PRO)				
Petroleum Hydrocarbons , mg/kg	*F62	*F62	*F62	*F62
TCL - Pesticides/PCB's (8081/8082)				
gamma-BHC (Lindane), %	*F62	*F62	*F62	*F62
Heptachlor, %	*F62	*F62	*F62	*F62
Aldrin, %	*F62	*F62	*F62	*F62
Dieldrin, %	*F62	*F62	*F62	*F62
Endrin, %	*F62	*F62	*F62	*F62
4,4'-DDT, %	*F62	*F62	*F62	*F62
Batch ID	SG091003H	SG091003H	SG091003H	SG091003H
Chlorinated Herbicides (8151)				
2,4-D, %	121 %	19-153 %	5.7 %	<47 %
2,4,5-TP (Silvex), %	107 %	27-120 %	6.4 %	<51 %
2,4,5-T, %	118 %	14-143 %	3.0 %	<59 %
Surrogate-2,4-Dichlorophenyl acetic acid (DCAA)	---	30-189 %	---	---
Batch ID	SG090903H	SG090903H	SG090903H	SG090903H

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-22	Matrix Spike Duplicate % Recovery		JETC01
73924-24	MS Accuracy Advisory Limit (%R)		JETC01
73924-25	Precision (%RPD) MS/MSD		JETC01
73924-26	MS Precision Advisory Limit (%RPD)		JETC01

PARAMETER	73924-22	73924-24	73924-25	73924-26
TAL Metals (6010)				
Aluminum, %	0 %F61	75-125 %	*F61	<20 %
Antimony, %	62 %*F73	75-125 %	0 %	<20 %
Arsenic, %	85 %	75-125 %	5.4 %	<20 %
Barium, %	100 %	75-125 %	2.9 %	<20 %
Beryllium, %	93 %	75-125 %	1.8 %	<20 %
Cadmium, %	87 %	75-125 %	2.2 %	<20 %
Calcium, %	0 %*F61	75-125 %	*F61	<20 %
Chromium, %	95 %	75-125 %	2.3 %	<20 %
Cobalt, %	89 %	75-125 %	4.2 %	<20 %
Copper, %	94 %	75-125 %	3.5 %	<20 %
Iron, %	0 %*F61	75-125 %	*F61	<20 %
Lead, %	91 %	75-125 %	3.4 %	<20 %
Magnesium, %	0 %*F61	75-125 %	*F61	<20 %
Manganese, %	67 %*F73	75-125 %	0 %	<20 %
Nickel, %	90 %	75-125 %	3.8 %	<20 %
Potassium, %	0 %	75-125 %	*F61	<20 %
Selenium, %	82 %	75-125 %	0 %	<20 %
Silver, %	93 %	75-125 %	2.0 %	<20 %
Sodium, %	0 %*F61	75-125 %	*F61	<20 %
Thallium, %	86 %	75-125 %	0 %	<20 %
Vanadium, %	93 %	75-125 %	2.4 %	<20 %
Zinc, %	83 %	75-125 %	1.6 %	<20 %
Batch ID	ME091003C	ME091003C	ME091003C	ME091003C

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Sampled By: Client
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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-22	Matrix Spike Duplicate % Recovery		JETC01
73924-24	MS Accuracy Advisory Limit (%R)		JETC01
73924-25	Precision (%RPD) MS/MSD		JETC01
73924-26	MS Precision Advisory Limit (%RPD)		JETC01

PARAMETER	73924-22	73924-24	73924-25	73924-26
Mercury (7471), %	88 %	80-120 %	0 %	<20 %
Batch ID	ME091003R	ME091003R	ME091003R	ME091003R

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Sampled By: Client
Code: 134430918

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01

PARAMETER	73924-3
TCL Volatiles by GC/MS (8260)	
Chloromethane, ug/kg dw	10U
Bromomethane (Methyl bromide), ug/kg dw	10U
Vinyl chloride, ug/kg dw	10U
Chloroethane, ug/kg dw	10U
Methylene chloride (Dichloromethane), ug/kg dw	5.0U
Acetone, ug/kg dw	50U
Carbon disulfide, ug/kg dw	5.0U
1,1-Dichloroethene, ug/kg dw	5.0U
1,1-Dichloroethane, ug/kg dw	5.0U
cis-1,2-Dichloroethylene, ug/kg dw	5.0U
trans-1,2-Dichloroethene, ug/kg dw	5.0U
Chloroform, ug/kg dw	5.0U
1,2-Dichloroethane, ug/kg dw	5.0U
2-Butanone (MEK), ug/kg dw	25U
1,1,1-Trichloroethane, ug/kg dw	5.0U
Carbon tetrachloride, ug/kg dw	5.0U
Bromodichloromethane, ug/kg dw	5.0U
1,2-Dichloropropane, ug/kg dw	5.0U
cis-1,3-Dichloropropene, ug/kg dw	5.0U
Trichloroethene, ug/kg dw	5.0U
Dibromochloromethane, ug/kg dw	5.0U
1,1,2-Trichloroethane, ug/kg dw	5.0U

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01

PARAMETER	73924-3				
Benzene, ug/kg dw	5.0U				
trans-1,3-Dichloropropene, ug/kg dw	5.0U				
Bromoform, ug/kg dw	5.0U				
4-Methyl-2-pentanone (MIBK), ug/kg dw	25U				
2-Hexanone, ug/kg dw	25U				
Tetrachloroethene, ug/kg dw	5.0U				
Toluene, ug/kg dw	5.0U				
1,1,2,2-Tetrachloroethane, ug/kg dw	5.0U				
Chlorobenzene, ug/kg dw	5.0U				
Ethylbenzene, ug/kg dw	5.0U				
Styrene, ug/kg dw	5.0U				
Xylenes, Total, ug/kg dw	5.0U				
Surrogate - Dibromofluoromethane	100 %				
Surrogate - Toluene-d8	78 %				
Surrogate - 4-Bromofluorobenzene	82 %				
Prep Date	09.10.03				
Analysis Date	09.10.03				
Batch ID	VM090903M				

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01

PARAMETER	73924-3				
TCL - Semivolatiles (8270)					
Phenol, ug/kg dw	330U				
bis(2-Chloroethyl)ether, ug/kg dw	330U				
2-Chlorophenol, ug/kg dw	330U				
1,3-Dichlorobenzene, ug/kg dw	330U				
1,4-Dichlorobenzene, ug/kg dw	330U				
1,2-Dichlorobenzene, ug/kg dw	330U				
2-Methylphenol (o-Cresol), ug/kg dw	330U				
2,2'-Oxybis(1-chloropropane)[bis(2-Chloroisopropyl)ether], ug/kg dw	330U				
3-Methylphenol/4-Methylphenol (m&p-Cresol), ug/kg dw	330U				
N-Nitroso-di-n-propylamine, ug/kg dw	330U				
Hexachloroethane, ug/kg dw	330U				
Nitrobenzene, ug/kg dw	330U				
Isophorone, ug/kg dw	330U				
2-Nitrophenol, ug/kg dw	330U				
2,4-Dimethylphenol, ug/kg dw	330U				
bis(2-Chloroethoxy)methane, ug/kg dw	330U				
2,4-Dichlorophenol, ug/kg dw	330U				
1,2,4-Trichlorobenzene, ug/kg dw	330U				
4-Chloroaniline, ug/kg dw	660U				
Hexachlorobutadiene, ug/kg dw	330U				
4-Chloro-3-methylphenol, ug/kg dw	330U				

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01

PARAMETER	73924-3
Hexachlorocyclopentadiene, ug/kg dw	330U
2,4,6-Trichlorophenol, ug/kg dw	330U
2,4,5-Trichlorophenol, ug/kg dw	330U
2-Chloronaphthalene, ug/kg dw	330U
2-Nitroaniline, ug/kg dw	1700U
Dimethylphthalate, ug/kg dw	330U
2,6-Dinitrotoluene, ug/kg dw	330U
3-Nitroaniline, ug/kg dw	1700U
2,4-Dinitrophenol, ug/kg dw	1700U
4-Nitrophenol, ug/kg dw	1700U
Dibenzofuran, ug/kg dw	330U
2,4-Dinitrotoluene, ug/kg dw	330U
Diethylphthalate, ug/kg dw	330U
4-Chlorophenylphenyl ether, ug/kg dw	330U
4-Nitroaniline, ug/kg dw	1700U
4,6-Dinitro-2-methylphenol, ug/kg dw	1700U
N-Nitrosodiphenylamine, ug/kg dw	330U
4-Bromophenylphenyl ether, ug/kg dw	330U
Hexachlorobenzene, ug/kg dw	330U
Pentachlorophenol, ug/kg dw	1700U
Carbazole, ug/kg dw	330U
Di-n-butylphthalate, ug/kg dw	330U
Butylbenzylphthalate, ug/kg dw	330U

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01

PARAMETER	73924-3				
3,3'-Dichlorobenzidine, ug/kg dw	660U				
bis(2-Ethylhexyl)phthalate, ug/kg dw	330U				
Di-n-octylphthalate, ug/kg dw	330U				
Surrogate - 2-Fluorophenol	42 %				
Surrogate - Phenol-d5	48 %				
Surrogate - Nitrobenzene - d5	45 %				
Surrogate - 2-Fluorobiphenyl	45 %				
Surrogate - 2,4,6-Tribromophenol	45 %				
Surrogate - Terphenyl-d14	52 %				
Prep Date	09.10.03				
Analysis Date	09.11.03				
Batch ID	SM091003M				

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01

PARAMETER	73924-3
Polynuclear Aromatics (8270)	
Acenaphthene, ug/kg dw	6.7U
Acenaphthylene, ug/kg dw	6.7U
Anthracene, ug/kg dw	6.7U
Benzo(a)anthracene, ug/kg dw	6.7U
Benzo(a)pyrene, ug/kg dw	6.7U
Benzo(b)fluoranthene, ug/kg dw	6.7U
Benzo(g,h,i)perylene, ug/kg dw	6.7U
Benzo(k)fluoranthene, ug/kg dw	6.7U
Chrysene, ug/kg dw	6.7U
Dibenzo(a,h)anthracene, ug/kg dw	6.7U
Fluoranthene, ug/kg dw	6.7U
Fluorene, ug/kg dw	6.7U
Indeno(1,2,3-cd)pyrene, ug/kg dw	6.7U
Naphthalene, ug/kg dw	6.7U
Phenanthrene, ug/kg dw	6.7U
Pyrene, ug/kg dw	6.7U
1-Methylnaphthalene, ug/kg dw	6.7U
2-Methylnaphthalene, ug/kg dw	6.7U
Surrogate - o-Terphenyl	48 %
Prep Date	09.10.03
Analysis Date	09.12.03
Batch ID	SM091003L

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01

PARAMETER	73924-3
Petroleum Range Organics (FL-PRO)	
Petroleum Hydrocarbons , mg/kg dw	10U
Surrogate, o-Terphenyl	48 %
Surrogate-C39	37 %
Prep Date	09.10.03
Analysis Date	09.12.03
Batch ID	SG091003J

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01

PARAMETER	73924-3
TCL - Pesticides/PCB's (8081/8082)	
alpha-BHC, ug/kg dw	1.7U
beta-BHC, ug/kg dw	1.7U
delta-BHC, ug/kg dw	1.7U
gamma-BHC (Lindane), ug/kg dw	1.7U
Heptachlor, ug/kg dw	1.7U
Aldrin, ug/kg dw	1.7U
Heptachlor epoxide, ug/kg dw	1.7U
Endosulfan I, ug/kg dw	1.7U
Dieldrin, ug/kg dw	3.3U
4,4'-DDE, ug/kg dw	3.3U
Endrin, ug/kg dw	3.3U
Endosulfan II, ug/kg dw	3.3U
4,4'-DDD, ug/kg dw	3.3U
Endosulfan sulfate, ug/kg dw	3.3U
4,4'-DDT, ug/kg dw	3.3U
Methoxychlor, ug/kg dw	17U
Endrin ketone, ug/kg dw	3.3U
Endrin aldehyde, ug/kg dw	3.3U
alpha-Chlordane, ug/kg dw	1.7U
gamma-Chlordane, ug/kg dw	1.7U
Toxaphene, ug/kg dw	170U
Aroclor-1016, ug/kg dw	33U

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LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01

PARAMETER	73924-3
Aroclor-1221, ug/kg dw	67U
Aroclor-1232, ug/kg dw	33U
Aroclor-1242, ug/kg dw	33U
Aroclor-1248, ug/kg dw	33U
Aroclor-1254, ug/kg dw	33U
Aroclor-1260, ug/kg dw	33U
Surrogate - Dibutyl Chlorendate	55 %
Surrogate - Tetrachloro-m-xylene	67 %
Surrogate - Decachlorobiphenyl	73 %
Prep Date	09.11.03
Analysis Date	09.12.03
Batch ID	SG091103H

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LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01

PARAMETER	73924-3
Chlorinated Herbicides (8151)	
Bentazon, ug/kg dw	35U
2,4-D, ug/kg dw	8.3U
Dalapon, ug/kg dw	2000U
2,4-DB, ug/kg dw	8.3U
Dicamba, ug/kg dw	20U
Dichloroprop, ug/kg dw	100U
Dinoseb, ug/kg dw	100U
MCPA[(4-chloro-2-methylphenoxy)-acetic acid], ug/kg dw	2000U
MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid], ug/kg dw	2000U
Pentachlorophenol, ug/kg dw	17U
Picloram, ug/kg dw	3.3U
2,4,5-TP (Silvex), ug/kg dw	8.3U
2,4,5-T, ug/kg dw	8.3U
Surrogate-2,4-Dichlorophenyl acetic acid (DCAA)	101 %
Prep Date	09.09.03
Analysis Date	09.12.03
Batch ID	SG090903H

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LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01

PARAMETER	73924-3		
TAL Metals (6010)			
Aluminum, mg/kg dw	20U		
Antimony, mg/kg dw	2.0U		
Arsenic, mg/kg dw	1.0U		
Barium, mg/kg dw	1.0U		
Beryllium, mg/kg dw	0.40U		
Cadmium, mg/kg dw	0.50U		
Calcium, mg/kg dw	50U		
Chromium, mg/kg dw	1.0U		
Cobalt, mg/kg dw	1.0U		
Copper, mg/kg dw	2.0U		
Iron, mg/kg dw	5.0U		
Lead, mg/kg dw	0.50U		
Magnesium, mg/kg dw	50U		
Manganese, mg/kg dw	1.0U		
Nickel, mg/kg dw	4.0U		
Potassium, mg/kg dw	100U		
Selenium, mg/kg dw	1.0U		
Silver, mg/kg dw	1.0U		
Sodium, mg/kg dw	50U		
Thallium, mg/kg dw	1.0U		
Vanadium, mg/kg dw	1.0U		
Zinc, mg/kg dw	2.0U		
Prep Date	09.10.03		
Analysis Date	09.11.03		
Batch ID	ME091003C		

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LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	SDG#
73924-3	Method Blank		JETC01

PARAMETER	73924-3		
Mercury (7471), mg/kg dw	0.020U		
Prep Date	09.10.03		
Analysis Date	09.10.03		
Batch ID	ME091003R		
pH (150.1)	---		

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-6	Method Blank		JETC01

PARAMETER	73924-6				
TCL Volatiles by GC/MS (8260)					
Chloromethane, ug/l	1.0U				
Bromomethane (Methyl bromide), ug/l	1.0U				
Vinyl chloride, ug/l	1.0U				
Chloroethane, ug/l	1.0U				
Methylene chloride (Dichloromethane), ug/l	5.0U				
Acetone, ug/l	25U				
Carbon disulfide, ug/l	1.0U				
1,1-Dichloroethene, ug/l	1.0U				
1,1-Dichloroethane, ug/l	1.0U				
cis-1,2-Dichloroethylene, ug/l	1.0U				
trans-1,2-Dichloroethene, ug/l	1.0U				
Chloroform, ug/l	1.0U				
1,2-Dichloroethane, ug/l	1.0U				
2-Butanone (MEK), ug/l	10U				
1,1,1-Trichloroethane, ug/l	1.0U				
Carbon tetrachloride, ug/l	1.0U				
Bromodichloromethane, ug/l	1.0U				
1,2-Dichloropropane, ug/l	1.0U				
cis-1,3-Dichloropropene, ug/l	1.0U				
Trichloroethene, ug/l	1.0U				
Dibromochloromethane, ug/l	1.0U				
1,1,2-Trichloroethane, ug/l	1.0U				

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

Mr. Rick McCann
Aerostar Environmental Services, Inc.
11181 St. Johns Industrial Parkway, N
Jacksonville, FL 32246

Client PO. No.: 0103-329-09
Cl Project No: 171591

Project: JETC and Building 271
Sampled By: Client
Code: 134430918

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-6	Method Blank		JETC01

PARAMETER	73924-6
Benzene, ug/l	1.0U
trans-1,3-Dichloropropene, ug/l	1.0U
Bromoform, ug/l	1.0U
4-Methyl-2-pentanone (MIBK), ug/l	10U
2-Hexanone, ug/l	10U
Tetrachloroethene, ug/l	1.0U
Toluene, ug/l	1.0U
1,1,2,2-Tetrachloroethane, ug/l	1.0U
Chlorobenzene, ug/l	1.0U
Ethylbenzene, ug/l	1.0U
Styrene, ug/l	1.0U
Xylenes, Total, ug/l	2.0U
Surrogate - Dibromofluoromethane	112 %
Surrogate - Toluene-d8	104 %
Surrogate - 4-Bromofluorobenzene	100 %
Prep Date	09.09.03
Analysis Date	09.09.03
Batch ID	VM090903N

LOG NO: T3-73924
Received: 06 SEP 03
Reported: 15 SEP 03

Mr. Rick McCann
Aerostar Environmental Services, Inc.
11181 St. Johns Industrial Parkway, N
Jacksonville, FL 32246

Client PO. No.: 0103-329-09
Cl Project No: 171591

Project: JETC and Building 271
Sampled By: Client
Code: 134430918

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED	SDG#
73924-6	Method Blank		JETC01

PARAMETER	73924-6				

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.

Method: EPA SW-846, Update III; FL-PRO

Florida Department of Health Certification No.: E81005

U Analyzed for but not detected.

J Estimated value; reported between the Method Detection Limit (MDL) and the Reporting Limit (RL).

B Estimated value; reported between the Instrument Detection Limit (IDL) and the Reporting Limit (RL).

* Reported down to the Method Detection Limit.

*F61 = Recovery of the Matrix Spike is outside advisory limits due to the abundance of target analyte in the sample.

*F73 = The recovery of the Matrix Spike is outside advisory limits due to matrix interference in the sample.

*F99 = % RPD is outside advisory limits.

*F86 = Because spikes are not appropriate for this method, reported precision was calculated from duplicate analysis of a sample in the batch.

DATA DELIVERABLES

pH
Methods 150.1/9045

CASE NARRATIVE

CASE NARRATIVE
PH

STL Lab Reference No. / SDG: JETC01

Project: JETC and Building 271/0103-329-09

RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

METHOD

Preparation: 150.1
Cleanup: N/A
Analysis: 150.1

PREPARATION

Sample preparation proceeded normally.

ANALYSIS

Calibration: All acceptance criteria were met

Samples: No analytical or quality problems were observed.

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

SIGNED: _____ DATE: 9/24/03

Timothy Preston
Project Manager

RAW DATA

pH
EPA Method 9045 (Soils)

DATE: 09.08.03

Time	Analyst	Batch ID	Log #	TU = 9.28 Sample ID	pH Units	Temp °C	Acceptance Criteria	
1030	MF	GE090803HS	QC Check	ERA 77079	9.19	19.5	+/- 0.20 pH units	123%
↓	↓	↓	Blank	Di H2O	9.09	21.4		
			T373923	Comp	7.67	19.4		
			T373924	BF001	6.31	19.3		
						MF 09/09/03		
1030	MF	GE090803HS	Lab Dup	BF001	6.42	19.3	<40% RPD	15%
↓	↓	↓	QC Check	Buffer 7	7.05	19.7	+/- 0.10 pH units	
			Blank	Di H2O	8.70	21.9		
						MF 09/09/03		
			Lab Dup				<40% RPD	
			QC Check	Buffer 7			+/- 0.10 pH units	
			Blank	Di H2O				
			Lab Dup				<40% RPD	
			QC Check	Buffer 7			+/- 0.10 pH units	
			Blank	Di H2O				

$$\%RPD = \frac{H1 - H2}{\frac{H1 + H2}{2}} \times 100$$

[H+] = antilog pH -1

H1 & H2 = hydrogen ion conc. [H+]

REVIEWED BY: DATE: 9/10/03

FGE00P2-T:06.14.01:2

STL Tallahassee

TAL METALS and MERCURY
Method 6010/ 7470

CASE NARRATIVE

CASE NARRATIVE
TAL METALS

STL Lab Reference No. / SDG: JETC01

Project: JETC and Building 271/0103-329-09

RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

METHOD

Preparation: SW-846 3005
Cleanup: N/A
Analysis: SW-846 6010/7471

PREPARATION

Sample preparation proceeded normally.

ANALYSIS

Calibration: All acceptance criteria were met

Blanks: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Spikes: The Matrix Spike recoveries for Aluminum, Antimony, Calcium, Iron, Manganese, Magnesium, Potassium, and Sodium were outside the established limits due to the abundance of target analyte in the sample.

Samples: No analytical or quality problems were observed.

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

SIGNED: _____ DATE: 9/24/03

Timothy Preston
Project Manager

FORMS

- COVER PAGE -
INORGANIC ANALYSIS DATA PACKAGE

Client: Aerostar Environmental

SDG No.: JETC01 **Method Type:** SW846 **SOW No.:** SW846

Contract: **Lab Code:** STLTAL **Case No.:** **SAS No.:**

Lab Sample ID	Client Sample ID	QC Description
T373924-1	086-BFC-S-0904-03	

Were ICP interelement corrections applied?	Yes/No	Yes
Were ICP background corrections applied?	Yes/No	Yes
If yes - were raw data generated before applications of background corrections?	Yes/No	No

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Name:

Date: Title:

- COVER PAGE -
INORGANIC ANALYSIS DATA PACKAGE

Client: Aerostar Environmetal

SDG No.: JETC01 Method Type: SW846 SOW No.: SW846

Contract: Lab Code: STLTAL Case No.: SAS No.:

Lab Sample ID	Client Sample ID	QC Description
T373924-1	086-BFC-S-0904-03	

Were ICP interelement corrections applied?	Yes/No	Yes
Were ICP background corrections applied?	Yes/No	Yes
If yes - were raw data generated before applications of background corrections?	Yes/No	No

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or

Signature: Name:

Date: Title:

INORGANIC ANALYSIS DATA PACKAGE

Client: Aerostar Environmental **SDG No.:** JETC01 **Method Type:** SW846

Sample ID: T373924-1 **Client ID:** 086-BFC-S-0904-03

Contract: **Lab Code:** STLTAL **Case No.:** **SAS No.:**

Matrix: SOIL **Date Received:** 9/6/03 **Level:** LOW

% Solids: 91

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7429-90-5	Aluminum	1200.00	mg/Kg dw			P	6.30	TJA61E Trace	091103
7440-36-0	Antimony	2.20	mg/Kg dw	U		P	0.54	TJA61E Trace	091103
7440-38-2	Arsenic	0.74	mg/Kg dw	B		P	0.49	TJA61E Trace	091103
7440-39-2	Barium	2.10	mg/Kg dw			P	0.17	TJA61E Trace	091103
7440-41-7	Beryllium	0.43	mg/Kg dw	U		P	0.06	TJA61E Trace	091103
7440-43-9	Cadmium	0.54	mg/Kg dw	U		P	0.09	TJA61E Trace	091103
7440-70-2	Calcium	360.00	mg/Kg dw			P	22.00	TJA61E Trace	091103
7440-47-3	Chromium	2.10	mg/Kg dw			P	0.18	TJA61E Trace	091103
7440-48-4	Cobalt	0.22	mg/Kg dw	B		P	0.21	TJA61E Trace	091103
7440-50-8	Copper	0.83	mg/Kg dw	B		P	0.78	TJA61E Trace	091103
7439-89-6	Iron	140.00	mg/Kg dw			P	4.90	TJA61E Trace	091103
7439-92-1	Lead	4.10	mg/Kg dw			P	0.46	TJA61E Trace	091103
7439-95-4	Magnesium	36.00	mg/Kg dw	B		P	7.40	TJA61E Trace	091103
7439-96-5	Manganese	1.70	mg/Kg dw			P	0.23	TJA61E Trace	091103
7440-02-0	Nickel	4.30	mg/Kg dw	U		P	0.47	TJA61E Trace	091103
7440-09-7	Potassium	24.00	mg/Kg dw	B		P	17.00	TJA61E Trace	091103
7782-49-2	Selenium	1.10	mg/Kg dw	U		P	0.47	TJA61E Trace	091103
7440-22-4	Silver	1.10	mg/Kg dw	U		P	0.21	TJA61E Trace	091103
7440-23-5	Sodium	54.00	mg/Kg dw	U		P	53.00	TJA61E Trace	091103
7440-28-0	Thallium	1.10	mg/Kg dw	U		P	0.62	TJA61E Trace	091103
7440-62-2	Vanadium	1.50	mg/Kg dw			P	0.12	TJA61E Trace	091103
7440-66-6	Zinc	2.70	mg/Kg dw			P	1.10	TJA61E Trace	091103

INORGANIC ANALYSIS DATA PACKAGE

Client: Aerostar Environmetal **SDG No.:** JETC01 **Method Type:** SW846

Sample ID: T373924-1 **Client ID:** 086-BFC-S-0904-03

Contract: **Lab Code:** STLTAL **Case No.:** **SAS No.:**

Matrix: SOIL **Date Received:** 9/6/03 **Level:** LOW

% Solids: 91

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7439-97-6	Mercury	0.018	mg/Kg dw		B	CV	0.003	CVA	0910CVSS

Color Before: **Clarity Before:** **Texture:**

Color After: **Clarity After** **Artifacts:**

Comments:

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: _____ **Lab Code:** STLTAL **Case No.:** _____ **SAS No.:** _____

Initial Calibration Source: _____

Continuing Calibration Source: _____

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV1									
	Aluminum	2000.00	2000.00	100	90.0 - 110.0	P	9/11/03	08:57	091103
	Antimony	2000.00	2000.00	100	90.0 - 110.0	P	9/11/03	08:57	091103
	Arsenic	2000.00	2000.00	100	90.0 - 110.0	P	9/11/03	08:57	091103
	Barium	2000.00	2000.00	100	90.0 - 110.0	P	9/11/03	08:57	091103
	Beryllium	2000.00	2000.00	100	90.0 - 110.0	P	9/11/03	08:57	091103
	Cadmium	2000.00	2000.00	100	90.0 - 110.0	P	9/11/03	08:57	091103
	Calcium	2100.00	2000.00	105	90.0 - 110.0	P	9/11/03	08:57	091103
	Chromium	2100.00	2000.00	105	90.0 - 110.0	P	9/11/03	08:57	091103
	Cobalt	2000.00	2000.00	100	90.0 - 110.0	P	9/11/03	08:57	091103
	Copper	2000.00	2000.00	100	90.0 - 110.0	P	9/11/03	08:57	091103
	Iron	2000.00	2000.00	100	90.0 - 110.0	P	9/11/03	08:57	091103
	Lead	2000.00	2000.00	100	90.0 - 110.0	P	9/11/03	08:57	091103
	Magnesium	2000.00	2000.00	100	90.0 - 110.0	P	9/11/03	08:57	091103
	Manganese	2100.00	2000.00	105	90.0 - 110.0	P	9/11/03	08:57	091103
	Nickel	2000.00	2000.00	100	90.0 - 110.0	P	9/11/03	08:57	091103
	Potassium	21000.00	20000.00	105	90.0 - 110.0	P	9/11/03	08:57	091103
	Selenium	2000.00	2000.00	100	90.0 - 110.0	P	9/11/03	08:57	091103
	Silver	1900.00	2000.00	95	90.0 - 110.0	P	9/11/03	08:57	091103
	Sodium	16000.00	17000.00	94	90.0 - 110.0	P	9/11/03	08:57	091103
	Thallium	2000.00	2000.00	100	90.0 - 110.0	P	9/11/03	08:57	091103
	Vanadium	2000.00	2000.00	100	90.0 - 110.0	P	9/11/03	08:57	091103
	Zinc	2000.00	2000.00	100	90.0 - 110.0	P	9/11/03	08:57	091103

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: _____ **Lab Code:** STLTAL **Case No.:** _____ **SAS No.:** _____

Initial Calibration Source: _____

Continuing Calibration Source: _____

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV1									
	Aluminum	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	10:49	091103
	Antimony	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	10:49	091103
	Arsenic	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	10:49	091103
	Barium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	10:49	091103
	Beryllium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	10:49	091103
	Cadmium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	10:49	091103
	Calcium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	10:49	091103
	Chromium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	10:49	091103
	Cobalt	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	10:49	091103
	Copper	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	10:49	091103
	Iron	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	10:49	091103
	Lead	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	10:49	091103
	Magnesium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	10:49	091103
	Manganese	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	10:49	091103
	Nickel	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	10:49	091103
	Potassium	10000.00	10000.00	100	90.0 - 110.0	P	9/11/03	10:49	091103
	Selenium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	10:49	091103
	Silver	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	10:49	091103
	Sodium	11000.00	11000.00	100	90.0 - 110.0	P	9/11/03	10:49	091103
	Thallium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	10:49	091103
	Vanadium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	10:49	091103
	Zinc	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	10:49	091103

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: _____ **Lab Code:** STLTAL **Case No.:** _____ **SAS No.:** _____

Initial Calibration Source: _____

Continuing Calibration Source: _____

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV2									
	Aluminum	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	11:59	091103
	Antimony	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	11:59	091103
	Arsenic	990.00	1000.00	99	90.0 - 110.0	P	9/11/03	11:59	091103
	Barium	980.00	1000.00	98	90.0 - 110.0	P	9/11/03	11:59	091103
	Beryllium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	11:59	091103
	Cadmium	980.00	1000.00	98	90.0 - 110.0	P	9/11/03	11:59	091103
	Calcium	990.00	1000.00	99	90.0 - 110.0	P	9/11/03	11:59	091103
	Chromium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	11:59	091103
	Cobalt	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	11:59	091103
	Copper	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	11:59	091103
	Iron	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	11:59	091103
	Lead	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	11:59	091103
	Magnesium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	11:59	091103
	Manganese	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	11:59	091103
	Nickel	990.00	1000.00	99	90.0 - 110.0	P	9/11/03	11:59	091103
	Potassium	10000.00	10000.00	100	90.0 - 110.0	P	9/11/03	11:59	091103
	Selenium	990.00	1000.00	99	90.0 - 110.0	P	9/11/03	11:59	091103
	Silver	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	11:59	091103
	Sodium	11000.00	11000.00	100	90.0 - 110.0	P	9/11/03	11:59	091103
	Thallium	990.00	1000.00	99	90.0 - 110.0	P	9/11/03	11:59	091103
	Vanadium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	11:59	091103
	Zinc	990.00	1000.00	99	90.0 - 110.0	P	9/11/03	11:59	091103

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: _____ **Lab Code:** STLTAL **Case No.:** _____ **SAS No.:** _____

Initial Calibration Source: _____

Continuing Calibration Source: _____

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV3									
	Aluminum	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	12:56	091103
	Antimony	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	12:56	091103
	Arsenic	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	12:56	091103
	Barium	970.00	1000.00	97	90.0 - 110.0	P	9/11/03	12:56	091103
	Beryllium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	12:56	091103
	Cadmium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	12:56	091103
	Calcium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	12:56	091103
	Chromium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	12:56	091103
	Cobalt	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	12:56	091103
	Copper	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	12:56	091103
	Iron	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	12:56	091103
	Lead	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	12:56	091103
	Magnesium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	12:56	091103
	Manganese	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	12:56	091103
	Nickel	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	12:56	091103
	Potassium	10000.00	10000.00	100	90.0 - 110.0	P	9/11/03	12:56	091103
	Selenium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	12:56	091103
	Silver	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	12:56	091103
	Sodium	11000.00	11000.00	100	90.0 - 110.0	P	9/11/03	12:56	091103
	Thallium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	12:56	091103
	Vanadium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	12:56	091103
	Zinc	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	12:56	091103

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: _____ **Lab Code:** STLTAL **Case No.:** _____ **SAS No.:** _____

Initial Calibration Source: _____

Continuing Calibration Source: _____

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV9									
	Aluminum	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	18:10	091103
	Antimony	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	18:10	091103
	Arsenic	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	18:10	091103
	Barium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	18:10	091103
	Beryllium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	18:10	091103
	Cadmium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	18:10	091103
	Calcium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	18:10	091103
	Chromium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	18:10	091103
	Cobalt	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	18:10	091103
	Copper	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	18:10	091103
	Iron	990.00	1000.00	99	90.0 - 110.0	P	9/11/03	18:10	091103
	Lead	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	18:10	091103
	Magnesium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	18:10	091103
	Manganese	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	18:10	091103
	Nickel	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	18:10	091103
	Potassium	10000.00	10000.00	100	90.0 - 110.0	P	9/11/03	18:10	091103
	Selenium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	18:10	091103
	Silver	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	18:10	091103
	Sodium	11000.00	11000.00	100	90.0 - 110.0	P	9/11/03	18:10	091103
	Thallium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	18:10	091103
	Vanadium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	18:10	091103
	Zinc	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	18:10	091103

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: _____ **Lab Code:** STLTAL **Case No.:** _____ **SAS No.:** _____

Initial Calibration Source: _____

Continuing Calibration Source: _____

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV10									
	Aluminum	990.00	1000.00	99	90.0 - 110.0	P	9/11/03	19:27	091103
	Antimony	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	19:27	091103
	Arsenic	990.00	1000.00	99	90.0 - 110.0	P	9/11/03	19:27	091103
	Barium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	19:27	091103
	Beryllium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	19:27	091103
	Cadmium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	19:27	091103
	Calcium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	19:27	091103
	Chromium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	19:27	091103
	Cobalt	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	19:27	091103
	Copper	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	19:27	091103
	Iron	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	19:27	091103
	Lead	990.00	1000.00	99	90.0 - 110.0	P	9/11/03	19:27	091103
	Magnesium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	19:27	091103
	Manganese	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	19:27	091103
	Nickel	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	19:27	091103
	Potassium	10000.00	10000.00	100	90.0 - 110.0	P	9/11/03	19:27	091103
	Selenium	990.00	1000.00	99	90.0 - 110.0	P	9/11/03	19:27	091103
	Silver	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	19:27	091103
	Sodium	11000.00	11000.00	100	90.0 - 110.0	P	9/11/03	19:27	091103
	Thallium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	19:27	091103
	Vanadium	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	19:27	091103
	Zinc	1000.00	1000.00	100	90.0 - 110.0	P	9/11/03	19:27	091103

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Aerostar Environmetal **SDG No.:** JETC01

Contract: _____ **Lab Code:** STLTAL **Case No.:** _____ **SAS No.:** _____

Initial Calibration Source: _____

Continuing Calibration Source: _____

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV1									
	Mercury	2.80	3.00	93.3	90.0 - 110.0	CV	9/10/03	13:35	0910CVSS
CCV1									
	Mercury	1.79	2.00	89.5	80.0 - 120.0	CV	9/10/03	14:04	0910CVSS
CCV2									
	Mercury	1.79	2.00	89.5	80.0 - 120.0	CV	9/10/03	14:18	0910CVSS

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CRDL STANDARD FOR AA & ICP

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: _____ **Lab Code:** STLTAL **Case No.:** _____ **SAS No.:** _____

AA CRDL Standard Source: _____

ICP CRDL Standard Source: _____

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Advisory Limits (%R)	M	Analysis Date	Analysis Time	Run Number
CRDL1									
	Aluminum	200.00	200.00	100	50 - 150	P	9/11/03	10:02	091103
	Arsenic	10.00	8.00	125	50 - 150	P	9/11/03	10:02	091103
	Barium	9.60	10.00	96	50 - 150	P	9/11/03	10:02	091103
	Beryllium	3.60	4.00	90	50 - 150	P	9/11/03	10:02	091103
	Cadmium	4.40	5.00	88	50 - 150	P	9/11/03	10:02	091103
	Calcium	490.00	500.00	98	50 - 150	P	9/11/03	10:02	091103
	Chromium	9.70	10.00	97	50 - 150	P	9/11/03	10:02	091103
	Cobalt	9.70	10.00	97	50 - 150	P	9/11/03	10:02	091103
	Copper	8.20	10.00	82	50 - 150	P	9/11/03	10:02	091103
	Iron	49.00	50.00	98	50 - 150	P	9/11/03	10:02	091103
	Lead	4.90	5.00	98	50 - 150	P	9/11/03	10:02	091103
	Magnesium	470.00	500.00	94	50 - 150	P	9/11/03	10:02	091103
	Manganese	10.00	10.00	100	50 - 150	P	9/11/03	10:02	091103
	Nickel	19.00	20.00	95	50 - 150	P	9/11/03	10:02	091103
	Potassium	1000.00	1000.00	100	50 - 150	P	9/11/03	10:02	091103
	Selenium	12.00	10.00	120	50 - 150	P	9/11/03	10:02	091103
	Silver	3.80	5.00	76	50 - 150	P	9/11/03	10:02	091103
	Sodium	420.00	500.00	84	50 - 150	P	9/11/03	10:02	091103
	Vanadium	10.00	10.00	100	50 - 150	P	9/11/03	10:02	091103
	Zinc	20.00	20.00	100	50 - 150	P	9/11/03	10:02	091103
CRDL2									
	Antimony	24.00	20.00	120	50 - 150	P	9/11/03	10:19	091103
	Thallium	12.00	10.00	120	50 - 150	P	9/11/03	10:19	091103

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CRDL STANDARD FOR AA & ICP

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: _____ **Lab Code:** STLTAL **Case No.:** _____ **SAS No.:** _____

AA CRDL Standard Source: _____

ICP CRDL Standard Source: _____

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Advisory Limits (%R)	M	Analysis Date	Analysis Time	Run Number
CRDL3									
	Aluminum	220.00	200.00	110	50 - 150	P	9/11/03	18:39	091103
	Antimony	24.00	20.00	120	50 - 150	P	9/11/03	18:39	091103
	Arsenic	9.10	8.00	114	50 - 150	P	9/11/03	18:39	091103
	Barium	9.90	10.00	99	50 - 150	P	9/11/03	18:39	091103
	Beryllium	3.30	4.00	82	50 - 150	P	9/11/03	18:39	091103
	Cadmium	5.00	5.00	100	50 - 150	P	9/11/03	18:39	091103
	Calcium	470.00	500.00	94	50 - 150	P	9/11/03	18:39	091103
	Chromium	9.50	10.00	95	50 - 150	P	9/11/03	18:39	091103
	Cobalt	9.40	10.00	94	50 - 150	P	9/11/03	18:39	091103
	Copper	7.00	10.00	70	50 - 150	P	9/11/03	18:39	091103
	Iron	55.00	50.00	110	50 - 150	P	9/11/03	18:39	091103
	Lead	4.90	5.00	98	50 - 150	P	9/11/03	18:39	091103
	Magnesium	470.00	500.00	94	50 - 150	P	9/11/03	18:39	091103
	Manganese	10.00	10.00	100	50 - 150	P	9/11/03	18:39	091103
	Nickel	20.00	20.00	100	50 - 150	P	9/11/03	18:39	091103
	Potassium	1000.00	1000.00	100	50 - 150	P	9/11/03	18:39	091103
	Selenium	14.00	10.00	140	50 - 150	P	9/11/03	18:39	091103
	Silver	4.90	5.00	98	50 - 150	P	9/11/03	18:39	091103
	Sodium	330.00	500.00	66	50 - 150	P	9/11/03	18:39	091103
	Thallium	8.80	10.00	88	50 - 150	P	9/11/03	18:39	091103
	Vanadium	10.00	10.00	100	50 - 150	P	9/11/03	18:39	091103
	Zinc	20.00	20.00	100	50 - 150	P	9/11/03	18:39	091103

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CRDL STANDARD FOR AA & ICP

Client: Aerostar Environmetal **SDG No.:** JETC01

Contract: _____ **Lab Code:** STLTAL **Case No.:** _____ **SAS No.:** _____

AA CRDL Standard Source: _____

ICP CRDL Standard Source: _____

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Advisory Limits (%R)	M	Analysis Date	Analysis Time	Run Number
CRDL1									
	Mercury	0.205	0.20	102.5	50 - 150	CV	9/10/03	13:40	0910CVSS

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: **Lab Code:** STLTAL **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	PQL	M	Analysis Date	Analysis Time	Run
ICB1										
	Aluminum	200.00	+/-200.00	U	27.00	200.00	P	9/11/03	09:09	091103
	Antimony	5.10	+/-20.00	B	5.00	20.00	P	9/11/03	09:09	091103
	Arsenic	10.00	+/-10.00	U	3.20	10.00	P	9/11/03	09:09	091103
	Barium	10.00	+/-10.00	U	1.20	10.00	P	9/11/03	09:09	091103
	Beryllium	4.00	+/-4.00	U	0.54	4.00	P	9/11/03	09:09	091103
	Cadmium	5.00	+/-5.00	U	0.71	5.00	P	9/11/03	09:09	091103
	Calcium	500.00	+/-500.00	U	44.00	500.00	P	9/11/03	09:09	091103
	Chromium	10.00	+/-10.00	U	1.70	10.00	P	9/11/03	09:09	091103
	Cobalt	10.00	+/-10.00	U	1.40	10.00	P	9/11/03	09:09	091103
	Copper	20.00	+/-20.00	U	0.90	20.00	P	9/11/03	09:09	091103
	Iron	50.00	+/-50.00	U	18.00	50.00	P	9/11/03	09:09	091103
	Lead	5.00	+/-5.00	U	1.50	5.00	P	9/11/03	09:09	091103
	Magnesium	500.00	+/-500.00	U	110.00	500.00	P	9/11/03	09:09	091103
	Manganese	10.00	+/-10.00	U	1.40	10.00	P	9/11/03	09:09	091103
	Nickel	40.00	+/-40.00	U	4.70	40.00	P	9/11/03	09:09	091103
	Potassium	1000.00	+/-1000.00	U	190.00	1000.00	P	9/11/03	09:09	091103
	Selenium	10.00	+/-10.00	U	4.20	10.00	P	9/11/03	09:09	091103
	Silver	10.00	+/-10.00	U	1.90	10.00	P	9/11/03	09:09	091103
	Sodium	500.00	+/-500.00	U	310.00	500.00	P	9/11/03	09:09	091103
	Thallium	10.00	+/-10.00	U	4.90	10.00	P	9/11/03	09:09	091103
	Vanadium	10.00	+/-10.00	U	2.20	10.00	P	9/11/03	09:09	091103
	Zinc	20.00	+/-20.00	U	5.90	20.00	P	9/11/03	09:09	091103

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: **Lab Code:** STLTAL **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	PQL	M	Analysis Date	Analysis Time	Run
CCB1										
	Aluminum	200.00	+/-200.00	U	27.00	200.00	P	9/11/03	10:53	091103
	Antimony	20.00	+/-20.00	U	5.00	20.00	P	9/11/03	10:53	091103
	Arsenic	10.00	+/-10.00	U	3.20	10.00	P	9/11/03	10:53	091103
	Barium	10.00	+/-10.00	U	1.20	10.00	P	9/11/03	10:53	091103
	Beryllium	4.00	+/-4.00	U	0.54	4.00	P	9/11/03	10:53	091103
	Cadmium	5.00	+/-5.00	U	0.71	5.00	P	9/11/03	10:53	091103
	Calcium	500.00	+/-500.00	U	44.00	500.00	P	9/11/03	10:53	091103
	Chromium	10.00	+/-10.00	U	1.70	10.00	P	9/11/03	10:53	091103
	Cobalt	10.00	+/-10.00	U	1.40	10.00	P	9/11/03	10:53	091103
	Copper	-1.20	+/-20.00	B	0.90	20.00	P	9/11/03	10:53	091103
	Iron	50.00	+/-50.00	U	18.00	50.00	P	9/11/03	10:53	091103
	Lead	5.00	+/-5.00	U	1.50	5.00	P	9/11/03	10:53	091103
	Magnesium	500.00	+/-500.00	U	110.00	500.00	P	9/11/03	10:53	091103
	Manganese	10.00	+/-10.00	U	1.40	10.00	P	9/11/03	10:53	091103
	Nickel	40.00	+/-40.00	U	4.70	40.00	P	9/11/03	10:53	091103
	Potassium	1000.00	+/-1000.00	U	190.00	1000.00	P	9/11/03	10:53	091103
	Selenium	10.00	+/-10.00	U	4.20	10.00	P	9/11/03	10:53	091103
	Silver	-2.70	+/-10.00	B	1.90	10.00	P	9/11/03	10:53	091103
	Sodium	500.00	+/-500.00	U	310.00	500.00	P	9/11/03	10:53	091103
	Thallium	10.00	+/-10.00	U	4.90	10.00	P	9/11/03	10:53	091103
	Vanadium	10.00	+/-10.00	U	2.20	10.00	P	9/11/03	10:53	091103
	Zinc	20.00	+/-20.00	U	5.90	20.00	P	9/11/03	10:53	091103

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: **Lab Code:** STLTAL **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	PQL	M	Analysis Date	Analysis Time	Run
CCB2										
	Aluminum	200.00	+/-200.00	U	27.00	200.00	P	9/11/03	12:02	091103
	Antimony	5.60	+/-20.00	B	5.00	20.00	P	9/11/03	12:02	091103
	Arsenic	10.00	+/-10.00	U	3.20	10.00	P	9/11/03	12:02	091103
	Barium	1.50	+/-10.00	B	1.20	10.00	P	9/11/03	12:02	091103
	Beryllium	1.10	+/-4.00	B	0.54	4.00	P	9/11/03	12:02	091103
	Cadmium	1.20	+/-5.00	B	0.71	5.00	P	9/11/03	12:02	091103
	Calcium	500.00	+/-500.00	U	44.00	500.00	P	9/11/03	12:02	091103
	Chromium	10.00	+/-10.00	U	1.70	10.00	P	9/11/03	12:02	091103
	Cobalt	1.80	+/-10.00	B	1.40	10.00	P	9/11/03	12:02	091103
	Copper	20.00	+/-20.00	U	0.90	20.00	P	9/11/03	12:02	091103
	Iron	50.00	+/-50.00	U	18.00	50.00	P	9/11/03	12:02	091103
	Lead	2.40	+/-5.00	B	1.50	5.00	P	9/11/03	12:02	091103
	Magnesium	500.00	+/-500.00	U	110.00	500.00	P	9/11/03	12:02	091103
	Manganese	1.40	+/-10.00	B	1.40	10.00	P	9/11/03	12:02	091103
	Nickel	40.00	+/-40.00	U	4.70	40.00	P	9/11/03	12:02	091103
	Potassium	1000.00	+/-1000.00	U	190.00	1000.00	P	9/11/03	12:02	091103
	Selenium	4.80	+/-10.00	B	4.20	10.00	P	9/11/03	12:02	091103
	Silver	10.00	+/-10.00	U	1.90	10.00	P	9/11/03	12:02	091103
	Sodium	500.00	+/-500.00	U	310.00	500.00	P	9/11/03	12:02	091103
	Thallium	10.00	+/-10.00	U	4.90	10.00	P	9/11/03	12:02	091103
	Vanadium	10.00	+/-10.00	U	2.20	10.00	P	9/11/03	12:02	091103
	Zinc	20.00	+/-20.00	U	5.90	20.00	P	9/11/03	12:02	091103

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: **Lab Code:** STLTAL **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	PQL	M	Analysis Date	Analysis Time	Run
CCB3										
	Aluminum	200.00	+/-200.00	U	27.00	200.00	P	9/11/03	13:02	091103
	Antimony	6.80	+/-20.00	B	5.00	20.00	P	9/11/03	13:02	091103
	Arsenic	10.00	+/-10.00	U	3.20	10.00	P	9/11/03	13:02	091103
	Barium	10.00	+/-10.00	U	1.20	10.00	P	9/11/03	13:02	091103
	Beryllium	4.00	+/-4.00	U	0.54	4.00	P	9/11/03	13:02	091103
	Cadmium	5.00	+/-5.00	U	0.71	5.00	P	9/11/03	13:02	091103
	Calcium	500.00	+/-500.00	U	44.00	500.00	P	9/11/03	13:02	091103
	Chromium	10.00	+/-10.00	U	1.70	10.00	P	9/11/03	13:02	091103
	Cobalt	10.00	+/-10.00	U	1.40	10.00	P	9/11/03	13:02	091103
	Copper	20.00	+/-20.00	U	0.90	20.00	P	9/11/03	13:02	091103
	Iron	50.00	+/-50.00	U	18.00	50.00	P	9/11/03	13:02	091103
	Lead	5.00	+/-5.00	U	1.50	5.00	P	9/11/03	13:02	091103
	Magnesium	500.00	+/-500.00	U	110.00	500.00	P	9/11/03	13:02	091103
	Manganese	10.00	+/-10.00	U	1.40	10.00	P	9/11/03	13:02	091103
	Nickel	40.00	+/-40.00	U	4.70	40.00	P	9/11/03	13:02	091103
	Potassium	1000.00	+/-1000.00	U	190.00	1000.00	P	9/11/03	13:02	091103
	Selenium	10.00	+/-10.00	U	4.20	10.00	P	9/11/03	13:02	091103
	Silver	-2.00	+/-10.00	B	1.90	10.00	P	9/11/03	13:02	091103
	Sodium	-410.00	+/-500.00	B	310.00	500.00	P	9/11/03	13:02	091103
	Thallium	10.00	+/-10.00	U	4.90	10.00	P	9/11/03	13:02	091103
	Vanadium	10.00	+/-10.00	U	2.20	10.00	P	9/11/03	13:02	091103
	Zinc	20.00	+/-20.00	U	5.90	20.00	P	9/11/03	13:02	091103

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: **Lab Code:** STLTAL **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	PQL	M	Analysis Date	Analysis Time	Run
CCB9										
	Aluminum	200.00	+/-200.00	U	27.00	200.00	P	9/11/03	18:13	091103
	Antimony	20.00	+/-20.00	U	5.00	20.00	P	9/11/03	18:13	091103
	Arsenic	10.00	+/-10.00	U	3.20	10.00	P	9/11/03	18:13	091103
	Barium	10.00	+/-10.00	U	1.20	10.00	P	9/11/03	18:13	091103
	Beryllium	4.00	+/-4.00	U	0.54	4.00	P	9/11/03	18:13	091103
	Cadmium	5.00	+/-5.00	U	0.71	5.00	P	9/11/03	18:13	091103
	Calcium	500.00	+/-500.00	U	44.00	500.00	P	9/11/03	18:13	091103
	Chromium	10.00	+/-10.00	U	1.70	10.00	P	9/11/03	18:13	091103
	Cobalt	10.00	+/-10.00	U	1.40	10.00	P	9/11/03	18:13	091103
	Copper	-1.60	+/-20.00	B	0.90	20.00	P	9/11/03	18:13	091103
	Iron	50.00	+/-50.00	U	18.00	50.00	P	9/11/03	18:13	091103
	Lead	5.00	+/-5.00	U	1.50	5.00	P	9/11/03	18:13	091103
	Magnesium	500.00	+/-500.00	U	110.00	500.00	P	9/11/03	18:13	091103
	Manganese	10.00	+/-10.00	U	1.40	10.00	P	9/11/03	18:13	091103
	Nickel	40.00	+/-40.00	U	4.70	40.00	P	9/11/03	18:13	091103
	Potassium	1000.00	+/-1000.00	U	190.00	1000.00	P	9/11/03	18:13	091103
	Selenium	10.00	+/-10.00	U	4.20	10.00	P	9/11/03	18:13	091103
	Silver	10.00	+/-10.00	U	1.90	10.00	P	9/11/03	18:13	091103
	Sodium	-320.00	+/-500.00	B	310.00	500.00	P	9/11/03	18:13	091103
	Thallium	10.00	+/-10.00	U	4.90	10.00	P	9/11/03	18:13	091103
	Vanadium	10.00	+/-10.00	U	2.20	10.00	P	9/11/03	18:13	091103
	Zinc	20.00	+/-20.00	U	5.90	20.00	P	9/11/03	18:13	091103

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: **Lab Code:** STLTAL **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	PQL	M	Analysis Date	Analysis Time	Run
CCB10										
	Aluminum	200.00	+/-200.00	U	27.00	200.00	P	9/11/03	19:31	091103
	Antimony	8.00	+/-20.00	B	5.00	20.00	P	9/11/03	19:31	091103
	Arsenic	10.00	+/-10.00	U	3.20	10.00	P	9/11/03	19:31	091103
	Barium	10.00	+/-10.00	U	1.20	10.00	P	9/11/03	19:31	091103
	Beryllium	4.00	+/-4.00	U	0.54	4.00	P	9/11/03	19:31	091103
	Cadmium	5.00	+/-5.00	U	0.71	5.00	P	9/11/03	19:31	091103
	Calcium	500.00	+/-500.00	U	44.00	500.00	P	9/11/03	19:31	091103
	Chromium	10.00	+/-10.00	U	1.70	10.00	P	9/11/03	19:31	091103
	Cobalt	10.00	+/-10.00	U	1.40	10.00	P	9/11/03	19:31	091103
	Copper	-2.50	+/-20.00	B	0.90	20.00	P	9/11/03	19:31	091103
	Iron	50.00	+/-50.00	U	18.00	50.00	P	9/11/03	19:31	091103
	Lead	5.00	+/-5.00	U	1.50	5.00	P	9/11/03	19:31	091103
	Magnesium	500.00	+/-500.00	U	110.00	500.00	P	9/11/03	19:31	091103
	Manganese	10.00	+/-10.00	U	1.40	10.00	P	9/11/03	19:31	091103
	Nickel	40.00	+/-40.00	U	4.70	40.00	P	9/11/03	19:31	091103
	Potassium	1000.00	+/-1000.00	U	190.00	1000.00	P	9/11/03	19:31	091103
	Selenium	10.00	+/-10.00	U	4.20	10.00	P	9/11/03	19:31	091103
	Silver	10.00	+/-10.00	U	1.90	10.00	P	9/11/03	19:31	091103
	Sodium	500.00	+/-500.00	U	310.00	500.00	P	9/11/03	19:31	091103
	Thallium	10.00	+/-10.00	U	4.90	10.00	P	9/11/03	19:31	091103
	Vanadium	10.00	+/-10.00	U	2.20	10.00	P	9/11/03	19:31	091103
	Zinc	20.00	+/-20.00	U	5.90	20.00	P	9/11/03	19:31	091103

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Aerostar Environmetal **SDG No.:** JETC01

Contract: **Lab Code:** STLTAL **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	PQL	M	Analysis Date	Analysis Time	Run
ICB1	Mercury	0.200	+/-0.200	U	0.072	0.200	CV	9/10/03	13:38	0910CVSS
CCB1	Mercury	0.200	+/-0.200	U	0.072	0.200	CV	9/10/03	14:06	0910CVSS
CCB2	Mercury	0.200	+/-0.200	U	0.072	0.200	CV	9/10/03	14:21	0910CVSS

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PREPARATION BLANK SUMMARY

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: **Lab Code:** STLTAL **Case No.:** **SAS No.:**

Sample ID	Analyte	Result (mg/Kg	Acceptance Limit	Conc Qual	MDL	PQL	M	Analysis Date	Analysis Time	Run
PBS			SOIL							
	Aluminum	20.00	+/-20.00	U	5.80	20.00	P	9/11/03	11:24	091103
	Antimony	2.00	+/-2.00	U	0.50	2.00	P	9/11/03	11:24	091103
	Arsenic	1.00	+/-1.00	U	0.45	1.00	P	9/11/03	11:24	091103
	Barium	1.00	+/-1.00	U	0.16	1.00	P	9/11/03	11:24	091103
	Beryllium	0.40	+/-0.40	U	0.06	0.40	P	9/11/03	11:24	091103
	Cadmium	0.50	+/-0.50	U	0.09	0.50	P	9/11/03	11:24	091103
	Calcium	50.00	+/-50.00	U	20.00	50.00	P	9/11/03	11:24	091103
	Chromium	1.00	+/-1.00	U	0.17	1.00	P	9/11/03	11:24	091103
	Cobalt	1.00	+/-1.00	U	0.19	1.00	P	9/11/03	11:24	091103
	Copper	2.00	+/-2.00	U	0.72	2.00	P	9/11/03	11:24	091103
	Iron	5.00	+/-5.00	U	4.50	5.00	P	9/11/03	11:24	091103
	Lead	0.50	+/-0.50	U	0.42	0.50	P	9/11/03	11:24	091103
	Magnesium	50.00	+/-50.00	U	6.80	50.00	P	9/11/03	11:24	091103
	Manganese	1.00	+/-1.00	U	0.21	1.00	P	9/11/03	11:24	091103
	Nickel	4.00	+/-4.00	U	0.43	4.00	P	9/11/03	11:24	091103
	Potassium	100.00	+/-100.00	U	16.00	100.00	P	9/11/03	11:24	091103
	Selenium	1.00	+/-1.00	U	0.43	1.00	P	9/11/03	11:24	091103
	Silver	1.00	+/-1.00	U	0.19	1.00	P	9/11/03	11:24	091103
	Sodium	50.00	+/-50.00	U	49.00	50.00	P	9/11/03	11:24	091103
	Thallium	1.00	+/-1.00	U	0.57	1.00	P	9/11/03	11:24	091103
	Vanadium	1.00	+/-1.00	U	0.11	1.00	P	9/11/03	11:24	091103
	Zinc	2.00	+/-2.00	U	0.98	2.00	P	9/11/03	11:24	091103

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PREPARATION BLANK SUMMARY

Client: Aerostar Environmetal **SDG No.:** JETC01

Contract: **Lab Code:** STLTAL **Case No.:** **SAS No.:**

Sample ID	Analyte	Result (mg/Kg	Acceptance Limit	Conc Qual	MDL	PQL	M	Analysis Date	Analysis Time	Run
PBS;0910R			**SOIL**							
	Mercury	0.020	+/-0.020	U	0.003	0.020	CV	9/10/03	13:42	0910CVSS

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INTERFERENCE CHECK SAMPLE

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: **Lab Code:** STLTAL **Case No.:** **SAS No.:**

ICS Source: **Instrument ID:** TJA61E Trace

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window %Rec	Analysis Date	Analysis Time	Run Number
ICS-A1								
	Aluminum	480000.00	500000.00	96.0	80 - 120	9/11/03	10:34	091103
	Antimony	15.00			100 - 100	9/11/03	10:34	091103
	Arsenic	7.20			100 - 100	9/11/03	10:34	091103
	Barium	1.60			100 - 100	9/11/03	10:34	091103
	Beryllium	-0.60			100 - 100	9/11/03	10:34	091103
	Cadmium	-1.10			100 - 100	9/11/03	10:34	091103
	Calcium	490000.00	500000.00	98.0	80 - 120	9/11/03	10:34	091103
	Chromium	1.50			100 - 100	9/11/03	10:34	091103
	Cobalt	-1.30			100 - 100	9/11/03	10:34	091103
	Copper	1.20			100 - 100	9/11/03	10:34	091103
	Iron	200000.00	200000.00	100.0	80 - 120	9/11/03	10:34	091103
	Lead	-0.04			100 - 100	9/11/03	10:34	091103
	Magnesium	540000.00	500000.00	108.0	80 - 120	9/11/03	10:34	091103
	Manganese	-2.80			100 - 100	9/11/03	10:34	091103
	Nickel	-0.06			100 - 100	9/11/03	10:34	091103
	Potassium	-31.00			100 - 100	9/11/03	10:34	091103
	Selenium	7.20			100 - 100	9/11/03	10:34	091103
	Silver	-1.60			100 - 100	9/11/03	10:34	091103
	Sodium	-210.00			100 - 100	9/11/03	10:34	091103
	Thallium	-1.20			100 - 100	9/11/03	10:34	091103
	Vanadium	2.70			100 - 100	9/11/03	10:34	091103
	Zinc	13.00			100 - 100	9/11/03	10:34	091103

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INTERFERENCE CHECK SAMPLE

Client: Aerostar Environmental

SDG No.: JETC01

Contract:

Lab Code: STLTAL **Case No.:** **SAS No.:**

ICS Source:

Instrument ID: TJA61E Trace

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window %Rec	Analysis Date	Analysis Time	Run Number
ICS-AB1								
	Aluminum	480000.00	500000.00	96.0	80 - 120	9/11/03	10:37	091103
	Antimony	620.00	600.00	103.3	80 - 120	9/11/03	10:37	091103
	Arsenic	100.00	100.00	100.0	80 - 120	9/11/03	10:37	091103
	Barium	510.00	500.00	102.0	80 - 120	9/11/03	10:37	091103
	Beryllium	520.00	500.00	104.0	80 - 120	9/11/03	10:37	091103
	Cadmium	960.00	1000.00	96.0	80 - 120	9/11/03	10:37	091103
	Calcium	480000.00	500000.00	96.0	80 - 120	9/11/03	10:37	091103
	Chromium	510.00	500.00	102.0	80 - 120	9/11/03	10:37	091103
	Cobalt	470.00	500.00	94.0	80 - 120	9/11/03	10:37	091103
	Copper	530.00	500.00	106.0	80 - 120	9/11/03	10:37	091103
	Iron	200000.00	200000.00	100.0	80 - 120	9/11/03	10:37	091103
	Lead	960.00	1000.00	96.0	80 - 120	9/11/03	10:37	091103
	Magnesium	540000.00	500000.00	108.0	80 - 120	9/11/03	10:37	091103
	Manganese	500.00	500.00	100.0	80 - 120	9/11/03	10:37	091103
	Nickel	930.00	1000.00	93.0	80 - 120	9/11/03	10:37	091103
	Potassium	-57.00			100 - 100	9/11/03	10:37	091103
	Selenium	56.000	50.00	112.00	80 - 120	9/11/03	10:37	091103
	Silver	1100.00	1000.00	110.0	80 - 120	9/11/03	10:37	091103
	Sodium	-140.00			100 - 100	9/11/03	10:37	091103
	Thallium	89.000	100.00	89.0	80 - 120	9/11/03	10:37	091103
	Vanadium	520.00	500.00	104.0	80 - 120	9/11/03	10:37	091103
	Zinc	940.00	1000.00	94.0	80 - 120	9/11/03	10:37	091103

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INTERFERENCE CHECK SAMPLE

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: **Lab Code:** STLTAL **Case No.:** **SAS No.:**

ICS Source: **Instrument ID:** TJA61E Trace

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window %Rec	Analysis Date	Analysis Time	Run Number
ICS-A2								
	Aluminum	460000.00	500000.00	92.0	80 - 120	9/11/03	19:08	091103
	Antimony	10.00			100 - 100	9/11/03	19:08	091103
	Arsenic	3.70			100 - 100	9/11/03	19:08	091103
	Barium	1.60			100 - 100	9/11/03	19:08	091103
	Beryllium	-0.77			100 - 100	9/11/03	19:08	091103
	Cadmium	-1.50			100 - 100	9/11/03	19:08	091103
	Calcium	480000.00	500000.00	96.0	80 - 120	9/11/03	19:08	091103
	Chromium	2.90			100 - 100	9/11/03	19:08	091103
	Cobalt	-0.68			100 - 100	9/11/03	19:08	091103
	Copper	0.20			100 - 100	9/11/03	19:08	091103
	Iron	190000.00	200000.00	95.0	80 - 120	9/11/03	19:08	091103
	Lead	2.10			100 - 100	9/11/03	19:08	091103
	Magnesium	530000.00	500000.00	106.0	80 - 120	9/11/03	19:08	091103
	Manganese	-3.20			100 - 100	9/11/03	19:08	091103
	Nickel	0.66			100 - 100	9/11/03	19:08	091103
	Potassium	23.00			100 - 100	9/11/03	19:08	091103
	Selenium	7.50			100 - 100	9/11/03	19:08	091103
	Silver	1.30			100 - 100	9/11/03	19:08	091103
	Sodium	180.00			100 - 100	9/11/03	19:08	091103
	Thallium	-6.20			100 - 100	9/11/03	19:08	091103
	Vanadium	3.60			100 - 100	9/11/03	19:08	091103
	Zinc	11.00			100 - 100	9/11/03	19:08	091103

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INTERFERENCE CHECK SAMPLE

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: **Lab Code:** STLTAL **Case No.:** **SAS No.:**

ICS Source: **Instrument ID:** TJA61E Trace

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window %Rec	Analysis Date	Analysis Time	Run Number
ICS-AB2								
	Aluminum	460000.00	500000.00	92.0	80 - 120	9/11/03	19:13	091103
	Antimony	580.00	600.00	96.7	80 - 120	9/11/03	19:13	091103
	Arsenic	99.00	100.00	99.0	80 - 120	9/11/03	19:13	091103
	Barium	510.00	500.00	102.0	80 - 120	9/11/03	19:13	091103
	Beryllium	510.00	500.00	102.0	80 - 120	9/11/03	19:13	091103
	Cadmium	900.00	1000.00	90.0	80 - 120	9/11/03	19:13	091103
	Calcium	480000.00	500000.00	96.0	80 - 120	9/11/03	19:13	091103
	Chromium	500.00	500.00	100.0	80 - 120	9/11/03	19:13	091103
	Cobalt	460.00	500.00	92.0	80 - 120	9/11/03	19:13	091103
	Copper	520.00	500.00	104.0	80 - 120	9/11/03	19:13	091103
	Iron	200000.00	200000.00	100.0	80 - 120	9/11/03	19:13	091103
	Lead	920.00	1000.00	92.0	80 - 120	9/11/03	19:13	091103
	Magnesium	530000.00	500000.00	106.0	80 - 120	9/11/03	19:13	091103
	Manganese	490.00	500.00	98.0	80 - 120	9/11/03	19:13	091103
	Nickel	890.00	1000.00	89.0	80 - 120	9/11/03	19:13	091103
	Potassium	-62.00			100 - 100	9/11/03	19:13	091103
	Selenium	55.000	50.00	110.00	80 - 120	9/11/03	19:13	091103
	Silver	1100.00	1000.00	110.0	80 - 120	9/11/03	19:13	091103
	Sodium	-51.00			100 - 100	9/11/03	19:13	091103
	Thallium	92.000	100.00	92.0	80 - 120	9/11/03	19:13	091103
	Vanadium	510.00	500.00	102.0	80 - 120	9/11/03	19:13	091103
	Zinc	900.00	1000.00	90.0	80 - 120	9/11/03	19:13	091103

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POST DIGEST SPIKE SUMMARY

Client: Aerostar Environmetal **SDG No.:** JETC01

Contract: **Lab Code:** STLTAL **Case No.:** **SAS No.:**

Matrix: SOIL **Level:** LOW **Client ID:** 086-BFC-S-0904-03A

Sample ID: T373924-1 **Spiked ID:** T373924-1A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	85 - 115	1.3000		0.2040		1.0	109.6		CV

DUPLICATE SAMPLE SUMMARY

Client: Aerostar Environmental **Level:** LOW **SDG No.:** JETC01

Contract: **Lab Code:** STLTAL **Case No.:** **SAS No.:**

Matrix: SOIL **Sample ID:** LCS **Client ID:** LCSD; S-2 ME091003C

Percent Solids for Sample: 100.00 **Duplicate ID:** LCSD **Percent Solids for Duplicate:** 100.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	mg/Kg		200		200		0		P
Antimony	mg/Kg		51		52		1.9		P
Arsenic	mg/Kg		200		200		0		P
Barium	mg/Kg		210		220		4.6		P
Beryllium	mg/Kg		5.2		5.3		1.9		P
Cadmium	mg/Kg		5.2		5.2		0		P
Calcium	mg/Kg		480		490		2.1		P
Chromium	mg/Kg		22		22		0		P
Cobalt	mg/Kg		53		53		0		P
Copper	mg/Kg		27		27		0		P
Iron	mg/Kg		110		110		0		P
Lead	mg/Kg		52		53		1.9		P
Magnesium	mg/Kg		480		490		2.1		P
Manganese	mg/Kg		53		54		1.9		P
Nickel	mg/Kg		53		53		0		P
Potassium	mg/Kg		470		480		2.1		P
Selenium	mg/Kg		190		200		5.1		P
Silver	mg/Kg		5.0		5.1		2.0		P
Sodium	mg/Kg		490		510		4.0		P
Thallium	mg/Kg		210		220		4.6		P
Vanadium	mg/Kg		54		54		0		P
Zinc	mg/Kg		52		52		0		P

DUPLICATE SAMPLE SUMMARY

Client: Aerostar Environmetal **Level:** LOW **SDG No.:** JETC01

Contract: **Lab Code:** STLTAL **Case No.:** **SAS No.:**

Matrix: SOIL **Sample ID:** LCS;0910R **Client ID:** LCSD;0910R

Percent Solids for Sample: 100.00 **Duplicate ID:** LCSD;0910R **Percent Solids for Duplicate:** 100.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	mg/Kg		0.20		0.20		0		CV

LABORATORY CONTROL SAMPLE SUMMARY

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: **Lab Code:** STLTAL **Case No.:** **SAS No.:**

Aqueous LCS Source: **Solid LCS Source:**

Sample ID	Analyte	Unit	True Value	Result	C	% Recovery	Acceptance Limits	M
LCS								
	Aluminum	mg/Kg	200.000	200		100	75.0 - 125.0	P
	Antimony	mg/Kg	50.000	51		102	75.0 - 125.0	P
	Arsenic	mg/Kg	200.000	200		100	75.0 - 125.0	P
	Barium	mg/Kg	200.000	210		105	75.0 - 125.0	P
	Beryllium	mg/Kg	5.000	5.2		104	75.0 - 125.0	P
	Cadmium	mg/Kg	5.000	5.2		104	75.0 - 125.0	P
	Calcium	mg/Kg	500.000	480		96	75.0 - 125.0	P
	Chromium	mg/Kg	20.000	22		110	75.0 - 125.0	P
	Cobalt	mg/Kg	50.000	53		106	75.0 - 125.0	P
	Copper	mg/Kg	25.000	27		108	75.0 - 125.0	P
	Iron	mg/Kg	100.000	110		110	75.0 - 125.0	P
	Lead	mg/Kg	50.000	52		104	75.0 - 125.0	P
	Magnesium	mg/Kg	500.000	480		96	75.0 - 125.0	P
	Manganese	mg/Kg	50.000	53		106	75.0 - 125.0	P
	Nickel	mg/Kg	50.000	53		106	75.0 - 125.0	P
	Potassium	mg/Kg	500.000	470		94	75.0 - 125.0	P
	Selenium	mg/Kg	200.000	190		95	75.0 - 125.0	P
	Silver	mg/Kg	5.000	5.0		100	75.0 - 125.0	P
	Sodium	mg/Kg	500.000	490		98	75.0 - 125.0	P
	Thallium	mg/Kg	200.000	210		105	75.0 - 125.0	P
	Vanadium	mg/Kg	50.000	54		108	75.0 - 125.0	P
	Zinc	mg/Kg	50.000	52		104	75.0 - 125.0	P

LABORATORY CONTROL SAMPLE DUPLICATE SUMMARY

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: **Lab Code:** STLTAL **Case No.:** **SAS No.:**

Aqueous LCS Source: **Solid LCS Source:**

Sample ID	Analyte	Unit	True Value	Result	C	% Recovery	Acceptance Limits	M
LCSD								
	Aluminum	mg/Kg	200.000	200		100	75.0 - 125.0	P
	Antimony	mg/Kg	50.000	52		104	75.0 - 125.0	P
	Arsenic	mg/Kg	200.000	200		100	75.0 - 125.0	P
	Barium	mg/Kg	200.000	220		110	75.0 - 125.0	P
	Beryllium	mg/Kg	5.000	5.3		106	75.0 - 125.0	P
	Cadmium	mg/Kg	5.000	5.2		104	75.0 - 125.0	P
	Calcium	mg/Kg	500.000	490		98	75.0 - 125.0	P
	Chromium	mg/Kg	20.000	22		110	75.0 - 125.0	P
	Cobalt	mg/Kg	50.000	53		106	75.0 - 125.0	P
	Copper	mg/Kg	25.000	27		108	75.0 - 125.0	P
	Iron	mg/Kg	100.000	110		110	75.0 - 125.0	P
	Lead	mg/Kg	50.000	53		106	75.0 - 125.0	P
	Magnesium	mg/Kg	500.000	490		98	75.0 - 125.0	P
	Manganese	mg/Kg	50.000	54		108	75.0 - 125.0	P
	Nickel	mg/Kg	50.000	53		106	75.0 - 125.0	P
	Potassium	mg/Kg	500.000	480		96	75.0 - 125.0	P
	Selenium	mg/Kg	200.000	200		100	75.0 - 125.0	P
	Silver	mg/Kg	5.000	5.1		102	75.0 - 125.0	P
	Sodium	mg/Kg	500.000	510		102	75.0 - 125.0	P
	Thallium	mg/Kg	200.000	220		110	75.0 - 125.0	P
	Vanadium	mg/Kg	50.000	54		108	75.0 - 125.0	P
	Zinc	mg/Kg	50.000	52		104	75.0 - 125.0	P

LABORATORY CONTROL SAMPLE SUMMARY

Client: Aerostar Environmetal **SDG No.:** JETC01

Contract: **Lab Code:** STLTAL **Case No.:** **SAS No.:**

Aqueous LCS Source: **Solid LCS Source:**

Sample ID	Analyte	Unit	True Value	Result	C	% Recovery	Acceptance Limits	M
LCS;0910R								
	Mercury	mg/Kg	0.20	0.20		100	80.0 - 120.0	CV

LABORATORY CONTROL SAMPLE DUPLICATE SUMMARY

Client: Aerostar Environmetal **SDG No.:** JETC01

Contract: **Lab Code:** STLTAL **Case No.:** **SAS No.:**

Aqueous LCS Source: **Solid LCS Source:**

Sample ID	Analyte	Unit	True Value	Result	C	% Recovery	Acceptance Limits	M
LCSD;0910R								
	Mercury	mg/Kg	0.20	0.20		100	80.0 - 120.0	CV

METHOD DETECTION LIMITS

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: _____ **Lab Code:** STLTAL **Case No.:** _____ **SAS No.:** _____

Analyte	Wave- length (nm)	MDL ug/L	PQL ug/L
TJA61E Trace			**Date:**
Aluminum	308.20	58.0	200.0
Antimony	206.80	5.0	20.0
Arsenic	193.60	4.5	10.0
Barium	455.40	1.6	10.0
Beryllium	313.00	0.6	4.0
Cadmium	228.80	0.9	5.0
Calcium	317.90	200.0	500.0
Chromium	267.70	1.7	10.0
Cobalt	228.60	1.9	10.0
Copper	324.70	7.2	20.0
Iron	259.90	45.0	50.0
Lead	220.30	4.2	5.0
Magnesium	279.00	68.0	500.0
Manganese	257.60	2.1	10.0
Nickel	231.60	4.3	40.0
Potassium	766.40	160.0	1000.0
Selenium	196.00	4.3	10.0
Silver	328.00	1.9	10.0
Sodium	330.20	490.0	500.0
Thallium	190.80	5.7	10.0
Vanadium	292.40	1.1	10.0
Zinc	206.20	9.8	20.0

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METHOD DETECTION LIMITS

Client: Aerostar Environmetal **SDG No.:** JETC01

Contract: _____ **Lab Code:** STLTAL **Case No.:** _____ **SAS No.:** _____

	Analyte	Wave- length (nm)	MDL ug/L	POL ug/L
CVA				Date:
	Mercury	253.70	0.0340	0.200

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ICP INTERELEMENT CORRECTION FACTORS

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: _____ **Lab Code:** STLTAL **Case No.:** _____ **SAS No.:** _____

Instrument ID: TJA61E Trace **Date:** 7/8/03

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For:				
		Al	Ca	Fe	Mg	Ba
Aluminum	308.21	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000210	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0001270	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.71	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.0000000	0.0000000	-0.0009600
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0004880	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.00	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000080	0.0000000	0.0000000
Silver	328.06	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.98	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

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ICP INTERELEMENT CORRECTION FACTORS

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: _____ **Lab Code:** STLTAL **Case No.:** _____ **SAS No.:** _____

Instrument ID: TJA61E Trace **Date:** 7/8/03

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Cd	Co	Cr	Cu	Mn
Aluminum	308.21	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0039980	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0001660	0.0000000	0.0000000
Barium	493.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	-0.0001070	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.71	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0933920	0.0006990	0.0000000	0.0000000
Lead	220.35	0.0000000	-0.0004010	0.0000000	0.0000000	0.0000000
Magnesium	279.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.00	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	-0.0004990	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.06	0.0000000	0.0000000	0.0000000	0.0000000	0.0000410
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.98	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

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ICP INTERELEMENT CORRECTION FACTORS

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: _____ **Lab Code:** STLTAL **Case No.:** _____ **SAS No.:** _____

Instrument ID: TJA61E Trace **Date:** 7/8/03

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Mo	Ni	Sb	Sn	V
Aluminum	308.21	0.0000000	0.0000000	0.0000000	0.0000000	0.0221630
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0003210	0.0000000	0.0000000	0.0000000	0.0002950
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.71	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0067400
Lead	220.35	-0.0003160	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.07	-0.0336840	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.00	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.06	-0.0004500	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.98	0.0000000	0.0000000	0.0015660	0.0000000	0.0000000
Vanadium	292.40	-0.0030720	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

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ICP INTERELEMENT CORRECTION FACTORS

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: _____ **Lab Code:** STLTAL **Case No.:** _____ **SAS No.:** _____

Instrument ID: TJA61E Trace **Date:** 7/8/03

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Zn	Th			
Aluminum	308.21	0.0000000	0.0000000			
Antimony	206.84	0.0000000	0.0000000			
Arsenic	189.04	0.0000000	0.0000000			
Barium	493.40	0.0000000	0.0000000			
Beryllium	313.04	0.0000000	0.0000000			
Cadmium	226.50	0.0000000	0.0000000			
Calcium	317.93	0.0000000	0.0000000			
Chromium	267.71	0.0000000	0.0000000			
Cobalt	228.61	0.0000000	0.0000000			
Copper	324.75	0.0000000	0.0000000			
Iron	271.44	0.0000000	0.0000000			
Lead	220.35	0.0000000	0.0000000			
Magnesium	279.07	0.0000000	0.0000000			
Manganese	257.61	0.0000000	0.0000000			
Molybdenum	202.00	0.0000000	0.0000000			
Nickel	231.60	0.0000000	0.0000000			
Potassium	766.49	0.0000000	0.0000000			
Selenium	196.02	0.0000000	0.0000000			
Silver	328.06	0.0000000	0.0000000			
Sodium	330.23	0.0000000	0.0000000			
Thallium	190.86	0.0000000	0.0000000			
Tin	189.98	0.0000000	0.0000000			
Vanadium	292.40	0.0000000	0.0000000			
Zinc	206.20	0.0000000	0.0000000			

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LINEAR RANGES

Client: Aerostar Environmental **SDG No.:** JETC01

Contract: **Lab Code:** STLTAL **Case No.:** **SAS No.:**

Instrument ID: TJA61E Trace **Date:** 7/8/03

Analyte	Integration Time (sec)	LDR ug/L
Aluminum	10.00	1000000
Antimony	10.00	100000
Arsenic	10.00	30000
Barium	10.00	50000
Beryllium	10.00	15000
Cadmium	10.00	40000
Calcium	10.00	400000
Chromium	10.00	75000
Cobalt	10.00	75000
Copper	10.00	40000
Iron	10.00	200000
Lead	10.00	100000
Magnesium	10.00	500000
Manganese	10.00	10000
Nickel	10.00	10000
Potassium	10.00	40000
Selenium	10.00	50000
Silver	10.00	3000
Sodium	10.00	50000
Thallium	10.00	20000
Vanadium	10.00	20000
Zinc	10.00	10000

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LINEAR RANGES

Client: Aerostar Environmetal **SDG No.:** JETC01

Contract: _____ **Lab Code:** STLTAL **Case No.:** _____ **SAS No.:** _____

Instrument ID: CVA **Date:** _____

Analyte	Integration Time (sec)	LDR ug/L
Mercury		5

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SAMPLE PREPARATION SUMMARY

Client: Aerostar Environmental

SDG No.: JETC01

Contract:

Lab Code: STLTAL

Method: P

Case No.:

SAS No.:

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number:	ME091003C						
PBS	PBS; ME091003C	MB	SOIL	9/10/03	0.50	50.0	100.00
LCS	LCS; S-1 ME091003C	LCS	SOIL	9/10/03	0.50	50.0	100.00
LCSD	LCSD; S-2 ME091003C	LCSD	SOIL	9/10/03	0.50	50.0	100.00
T373924-1	086-BFC-S-0904-03	SAM	SOIL	9/10/03	0.51	50.0	91.00

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SAMPLE PREPARATION SUMMARY

Client: Aerostar Environmetal

SDG No.: JETC01

Contract:

Lab Code: STLTAL

Method: CV

Case No.:

SAS No.:

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number:	ME091003R						
PBS;0910R	PBS;0910R	MB	SOIL	9/10/03	0.60	50.0	100.00
LCS;0910R	LCS;0910R	LCS	SOIL	9/10/03	0.60	50.0	100.00
LCSD;0910R	LCSD;0910R	LCSD	SOIL	9/10/03	0.60	50.0	100.00
T373924-1	086-BFC-S-0904-03	SAM	SOIL	9/10/03	0.61	50.0	91.00

ANALYSIS RUN LOG

Client: Aerostar Environmental Contract:

Lab Code STLTAL Case No.: SAS No.: SDG JETC01

Instrument ID Number: TJA61E Trace Method: P Run Number: 091103

Start Date: 9/11/03 End Date: 9/11/03

Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	08:30		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
S1	1.00	08:31		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
S2	1.00	08:32		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
S3	1.00	08:33		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
S4	1.00	08:34		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
S5	1.00	08:35		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
S6	1.00	08:36		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICV1	1.00	08:57		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICB1	1.00	09:09		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
STD 4	1.00	09:13		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
STD 3	1.00	09:42		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
STD 2	1.00	09:47		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
FE STD	1.00	09:52		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
STD 5	1.00	09:56		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CRDL1	1.00	10:02		X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X		X	X	
CRDL2	1.00	10:19			X																			X			
ICS-A1	1.00	10:34		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICS-AB1	1.00	10:37		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV1	1.00	10:49		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB1	1.00	10:53		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
PBS	1.00	11:24		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
LCS	1.00	11:27		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
LCSD	1.00	11:29		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV2	1.00	11:59		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB2	1.00	12:02		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
T373924-1	1.00	12:09		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV3	1.00	12:56		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB3	1.00	13:02		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV9	1.00	18:10		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB9	1.00	18:13		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CRDL3	1.00	18:39		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICS-A2	1.00	19:08		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICS-AB2	1.00	19:13		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

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ANALYSIS RUN LOG

Client: Aerostar Environmental Contract:

Lab Code STLTAL Case No.: SAS No.: SDG JETC01

Instrument ID Number: TJA61E Trace Method: P Run Number: 091103

Start Date: 9/11/03 End Date: 9/11/03

Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV10	1.00	19:27		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB10	1.00	19:31		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

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ANALYSIS RUN LOG

Client: Aerostar Environmetal Contract: _____

Lab Code STLTAL Case No.: _____ SAS No.: _____ SDG JETC01

Instrument ID Number: CVA Method: CV Run Number: 0910CVSS

Start Date: 9/10/03 End Date: 9/10/03

Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ICV1	1.00	13:35																X									
ICB1	1.00	13:38																X									
CRDL1	1.00	13:40																X									
PBS;0910R	1.00	13:42																X									
LCS;0910R	1.00	13:45																X									
LCSD;0910R	1.00	13:47																X									
T373924-1	1.00	14:02																X									
CCV1	1.00	14:04																X									
CCB1	1.00	14:06																X									
T373924-1A	1.00	14:16																X									
CCV2	1.00	14:18																X									
CCB2	1.00	14:21																X									

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

DIGESTION LOG(S)

DIGESTION SOLIDS

Job No: 262

Batch No: me091003C

Job Date: 091003

ANALYSIS

ICP | AA | HG

FLAME | TCLP

MISC

Date/Time Started: 09-10-03 17:00

Date/Time Completed: ↓ 16:00

Analyst: SK

Method/SOP: 3050B 6010B

Final Volume: 50mL

Acid Lot #(s): HNO_3: 1-me-R0008

HCl: 1-me-R0007

95°#81 H_2O_2: 4233250

Hood: CW420066 Hot Block #2

Bath Temp(Hg only):

Final Project Check:

	ID	LOT#	AMT (mL)	INIT
Spike	1	1-me-50125	0.50	SK
Spike	2	16-3-85-3	↓	↓
Spike		09-10-03 SK		
Spike				

SAMPLE ID/MTX/DESCRIPTION	D-D	SDG	BENCH	BEAKER#	WET WEIGHT(g)	DF	COMMENTS
1. T373946*1/SS/5-2 (SINGLE DRUM)	09.17		ICP		0.510		*XN|
2. T373946*2/SS/5-3 (3 OPEN DRUMS)	09.17		ICP		0.510		*XN|
3. T373946*3/SS/5-4 (PORTABLE TANK)	09.17		ICP		0.501		*XN|
4. T373946*4/SS/5-1 (SW CORNER)	09.17		ICP		0.506		*XN|
5. T373946*5/SS/5-5 (SOUTH 55 GAL)	09.17		ICP		0.509		*XN|
6. T373924*1/SS/086-BFC-S-0904-03	09.12	JETC01	ICP		0.506		R*DNAP| RUSH
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							
Lab Blank					0.502		1-me-50112
Lab Spike #1					0.500		↓
Lab Spike #2					0.501		
Dup T373946-1 5-2					0.510		
MS					0.509		
MSD ↓					0.510		

09-10-03 SK

Comments: Digi tube lot# 03-06-26-8984-263-108

SL SOIL DIGESTION LOG

BATCH ID: ME091003R

LOG #'s: 73946, 73924

ANALYSIS METHOD: 7471

DIGESTION METHOD: 7471

DATE / TIME STARTED: 09.10.03 10:45 ANALYST: EO

DATE / TIME FINISHED: 09.10.03 11:15 ANALYST: EO

AQUA REGIA: 17-3-51-1

$KMnO_4$ LOT: 17-3-50-10

$K_2S_2O_8$ LOT: N/A ED 09.10.03

$NaCl/(NH_2OH_2)\cdot H_2SO_4$ LOTS: 17-3-50-3

$SnCl_2$: 17-3-50-11

DIGESTION TEMP: 95 °C

Digest. block #3 Hood: CK 411277 therm #101

SPIKE SOLN #	NAME	ID	AMT ADDED	INITIALS
1	LCS work std	14-3-53-9	0.50 mL	EO
2	MS work std	14-3-53-10	0.50 mL	EO
3				
4	EO	09.10.03		

	PROJECT ID	SAMPLE ID	BEAKER #	AMOUNT DIGESTED (g)	% SOLID	DRY WT (g)	FINAL VOLUME (ml)	COMMENTS
	ME091003R	LAB BLANK	N/A	0.616	100%	0.62	50 ml	I-ME-042
		SOIL LCS 1		0.608		0.61		LOT #: 1
		SOIL LCS 2		0.614		0.61		LOT #: 1
1	73946-1	5-2		0.603	91	0.55		
2	73946-2	5-3		0.609	92	0.56		
3	EO 09.10.03 -3	5-4		0.612	91	0.56		
4	-4	5-1		0.609	91	0.55		
5	-5	5-5		0.601	90	0.54		
7	73924-1	086-BFC		0.610	91	0.56		
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
	73946-1	DUP 5-2	N/A	0.604	91	0.55	50 mL	
		MS1		0.602	91	0.55		SPIKE SOLN #: 2
		MS2		0.602	91	0.55		SPIKE SOLN #: 2

EO 09.10.03

0074

0116

FME00A4-T:06.14.01:2

STL Tallahassee

CHLORINATED HERBICIDES
Method 8151

CASE NARRATIVE

CASE NARRATIVE
GC CHLORINATED HERBICIDES

STL Lab Reference No. / SDG: JETC01

Project: JETC and Building 271/0103-329-09

RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

METHOD

Preparation: SW-846 3550
Cleanup: N/A
Analysis: SW-846 8151

PREPARATION

Sample preparation proceeded normally.

ANALYSIS

Calibration: All acceptance criteria were met

Blanks: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Spikes: The Relative Percent Difference (%RPD) value for 2,4-D was outside advisory limits.

Samples: No analytical or quality problems were observed.

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

SIGNED: _____ DATE: 9/24/13

Timothy Preston
Project Manager

FORMS

FORM 1
SG ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

73924-1

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project:

SDG No.: JETC01

Matrix: (soil/water) SOIL

Lab Sample ID: 086-BFC-S-0904-03

Sample wt/vol: 30 (g/mL) G

Lab File ID: 1I12L010

Level: (low/med) LOW

Date Received: 09/06/03

% Moisture: 9 decanted: (Y/N) N

Date Extracted: 09/09/03

Concentrated Extract Volume: 5 (mL)

Date Analyzed: 09/12/03

Injection Volume: 1.5 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-99-0	Dalapon	2200	U
93-65-2	MCPP	2200	U
1918-00-9	Dicamba	22	U
94-74-6	MCPA	2200	U
120-36-5	Dichlorprop	110	U
94-75-7	2,4-D	9.1	U
87-86-5	Pentachlorophenol	19	U
93-72-1	2,4,5-TP	9.1	U
93-76-5	2,4,5-T	9.1	U
88-85-7	Dinoseb	110	U
1918-02-1	Picloram	3.6	U
25057-89-0	Bentazon	38	U
94-82-6	2,4-DB	9.1	U

FORM 1
SG ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

0909HMB

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: 0909HMB

Sample wt/vol: 30 (g/mL) G Lab File ID: 1I12L005

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/09/03

Concentrated Extract Volume: 5 (mL) Date Analyzed: 09/12/03

Injection Volume: 1.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-99-0	Dalapon	2000	U
93-65-2	MCPP	2000	U
1918-00-9	Dicamba	20	U
94-74-6	MCPA	2000	U
120-36-5	Dichlorprop	100	U
94-75-7	2,4-D	8.3	U
87-86-5	Pentachlorophenol	17	U
93-72-1	2,4,5-TP	8.3	U
93-76-5	2,4,5-T	8.3	U
88-85-7	Dinoseb	100	U
1918-02-1	Picloram	3.3	U
25057-89-0	Bentazon	35	U
94-82-6	2,4-DB	8.3	U

FORM 1
SG ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

0909HMBLCS

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: 0909HMBLCS

Sample wt/vol: 30 (g/mL) G Lab File ID: 1I12L006

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/09/03

Concentrated Extract Volume: 5 (mL) Date Analyzed: 09/12/03

Injection Volume: 1.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-99-0	Dalapon	38	J
93-65-2	MCPP	2600	
1918-00-9	Dicamba	31	
94-74-6	MCPA	6300	
120-36-5	Dichlorprop	21	J
94-75-7	2,4-D	20	
87-86-5	Pentachlorophenol	4.0	J
93-72-1	2,4,5-TP	24	
93-76-5	2,4,5-T	21	
88-85-7	Dinoseb	100	U
1918-02-1	Picloram	28	
62476-59-9	Acifluorfen	14	
25057-89-0	Bentazon	39	
94-82-6	2,4-DB	46	

FORM I SG

FORM 1
SG ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

0909HMBLCSD

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: 0909HMBLCSD

Sample wt/vol: 30 (g/mL) G Lab File ID: 1I12L007

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/09/03

Concentrated Extract Volume: 5 (mL) Date Analyzed: 09/12/03

Injection Volume: 1.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-99-0	Dalapon	24	J
93-65-2	MCPP	3400	
1918-00-9	Dicamba	32	
94-74-6	MCPA	3500	
120-36-5	Dichlorprop	27	J
94-75-7	2,4-D	33	
87-86-5	Pentachlorophenol	4.4	J
93-72-1	2,4,5-TP	31	
93-76-5	2,4,5-T	33	
88-85-7	Dinoseb	3.2	J
1918-02-1	Picloram	28	
62476-59-9	Acifluorfen	24	
25057-89-0	Bentazon	36	
94-82-6	2,4-DB	31	

FORM 1
SG ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

0909HMBMS

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: 0909HMBMS

Sample wt/vol: 30 (g/mL) G Lab File ID: 1I12L008

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/09/03

Concentrated Extract Volume: 5 (mL) Date Analyzed: 09/12/03

Injection Volume: 1.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-99-0	Dalapon	14	J
93-65-2	MCPP	4400	
1918-00-9	Dicamba	30	
94-74-6	MCPA	3700	
120-36-5	Dichlorprop	28	J
94-75-7	2,4-D	36	
87-86-5	Pentachlorophenol	4.5	J
93-72-1	2,4,5-TP	32	
93-76-5	2,4,5-T	34	
88-85-7	Dinoseb	4.8	J
1918-02-1	Picloram	24	
25057-89-0	Bentazon	34	
94-82-6	2,4-DB	38	

FORM 1
SG ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

0909HMBMSD

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: 0909HMBMSD

Sample wt/vol: 30 (g/mL) G Lab File ID: 1I12L009

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/09/03

Concentrated Extract Volume: 5 (mL) Date Analyzed: 09/12/03

Injection Volume: 1.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-99-0	Dalapon	20	J
93-65-2	MCPP	4600	
1918-00-9	Dicamba	29	
94-74-6	MCPA	3400	
120-36-5	Dichlorprop	27	J
94-75-7	2,4-D	34	
87-86-5	Pentachlorophenol	5.4	J
93-72-1	2,4,5-TP	30	
93-76-5	2,4,5-T	33	
88-85-7	Dinoseb	5.1	J
1918-02-1	Picloram	22	
25057-89-0	Bentazon	32	
94-82-6	2,4-DB	36	

FORM 2
SOIL SG SURROGATE RECOVERY

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Level: (low/med) LOW

	CLIENT SAMPLE NO.	S1 (DCPA) #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	0909HMB	101								0
02	0909HMBLCS	90								0
03	0909HMBLCSD	110								0
04	0909HMBMS	116								0
05	0909HMBMSD	110								0
06	73924-1	101								0
07										
08										
09										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

QC LIMITS
S1 (DCPA) = 2,4-DichlorophenylAcet (30-189)

Column to be used to flag recovery values
* Values outside of laboratory QC limits
D Sample diluted

FORM 3
SOIL SG LAB CONTROL SAMPLE

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix Spike - Sample No.: 0909HMB Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONC (ug/Kg)	LCS CONC (ug/Kg)	LCS % REC#	QC. LIMITS REC.
2,4,5-T	28	0.00	21	75	14-143
2,4,5-TP	28	0.00	24	86	27-120
2,4-D	28	0.00	20	71	19-153

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONC (ug/Kg)	LCSD % REC#	AVG % REC	% RPD$#	QC LIMITS RPD	QC LIMITS REC.
2,4,5-T	28	33	118	96	44	59	14-143
2,4,5-TP	28	31	111	98	25	51	27-120
2,4-D	28	33	118	94	49*	47	19-153

$ %RPD calculated using the spike and spike duplicate concentrations as per SW846 8000B

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 1 out of 3 outside limits
Spike Recovery: 0 out of 6 outside limits

COMMENTS: _____

FORM III SG

FORM 3
SOIL SG MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix Spike - Sample No.: 0909HMB Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONC (ug/Kg)	MS CONC (ug/Kg)	MS % REC#	QC. LIMITS REC.
2,4,5-T	28	0.00	34	121	14-143
2,4,5-TP	28	0.00	32	114	27-120
2,4-D	28	0.00	36	128	19-153

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONC (ug/Kg)	MSD % REC#	AVG % REC	% RPD$#	QC LIMITS RPD	QC LIMITS REC.
2,4,5-T	28	33	118	120	3.0	59	14-143
2,4,5-TP	28	30	107	110	6.4	51	27-120
2,4-D	28	34	121	124	5.7	47	19-153

$ %RPD calculated using the spike and spike duplicate concentrations as per SW846 8000B

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 3 outside limits
Spike Recovery: 0 out of 6 outside limits

COMMENTS: _____

FORM III SG

FORM 4
SG METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

0909HMB

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Lab File ID: 1I12L005 Lab Sample ID: 0909HMB

Instrument ID: TSGLECD1 Date Extracted: 09/09/03

Matrix: (soil/water) SOIL Date Analyzed: 09/12/03

Level: (low/med) LOW Time Analyzed: 1351

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	0909HMBLCS	0909HMBLCS	1I12L006	09/12/03
02	0909HMBLCSD	0909HMBLCSD	1I12L007	09/12/03
03	0909HMBMS	0909HMBMS	1I12L008	09/12/03
04	0909HMBMSD	0909HMBMSD	1I12L009	09/12/03
05	73924-1	086-BFC-S-0904	1I12L010	09/12/03
06				
07				
08				
09				
10				
11				
12				
13				
14				
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29				
30				

COMMENTS:

FORM 6
SG INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGLECD1 Calibration Date(s): 09/02/03 09/02/03

Column: DB-5 ID: 0.32 (mm) Calibration Time(s): 0756 0911

LAB FILE ID: RF0: 1I02L003 RF0: 1I02L004 RF0: 1I02L005
RF0: 1I02L006 RF0: 1I02L007

COMPOUND	RF0	RF0	RF0	RF0	RF0
Dalapon	0.18501	0.17285	0.17953	0.15491	0.17803
MCPP	0.00029	0.00028	0.00028	0.00027	0.00027
Dicamba	0.43175	0.39018	0.38653	0.36563	0.35807
MCPA	0.00048	0.00041	0.00035	0.00033	0.00033
Dichlorprop	0.13576	0.10401	0.09968	0.09314	0.09317
2,4-D	0.10758	0.09076	0.08456	0.08271	0.08328
Pentachlorophenol	1.86361	1.80159	1.79483	1.73680	1.72172
2,4,5-TP	0.63790	0.58080	0.56189	0.52404	0.50713
2,4,5-T	0.63924	0.57579	0.53202	0.46911	0.46842
Dinoseb	0.32271	0.31600	0.31260	0.31384	0.33046
Picloram	0.88000	0.80488	0.81343	0.76751	0.74723
Bentazon	0.08390	0.07155	0.06762	0.06118	0.05828
2,4-DB	0.05464	0.04684	0.04469	0.04621	0.04856
2,4-DichlorophenylAceticAcid	0.10171	0.08692	0.08500	0.08091	0.08098

FORM VI SG

FORM 6
SG INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGLECD1 Calibration Date(s): 09/02/03 09/02/03

Column: DB-5 ID: 0.32 (mm) Calibration Time(s): 0756 0911

RF0: 1I02L008

COMPOUND	RF0	CURVE	COEFFICIENTS A0	A1	%RSD or R^2
Dalapon		AVRG		0.17407	6.6
MCPP	0.00030	AVRG		2.817e-004	3.3
Dicamba	0.36151	AVRG		0.38228	7.2
MCPA	0.00035	AVRG		3.738e-004	15.6
Dichlorprop	0.09600	AVRG		0.10363	15.7
2,4-D	0.08983	AVRG		8.979e-002	10.4
Pentachlorophenol	1.72981	AVRG		1.77472	3.1
2,4,5-TP	0.49065	AVRG		0.55040	9.9
2,4,5-T	0.45846	AVRG		0.52384	13.9
Dinoseb	0.35397	LINR	0.00000000	2.85303	0.999
Picloram	0.74463	LINR	-0.350	1.35196	1.000
Bentazon	0.05348	AVRG		6.6e-002	16.5
2,4-DB	0.05951	AVRG		5.008e-002	11.5
2,4-DichlorophenylAceticAcid	0.08623	AVRG		8.696e-002	8.8

FORM VI SG

FORM 7
SG CONTINUING CALIBRATION CHECK

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGLECD1 Calibration Date: 09/12/03 Time: 0859

Lab File ID: 1I12L004 Init. Calib. Date(s): 09/02/03 09/02/03

Init. Calib. Times: 0756 0911

GC Column: DB-5 ID: 0.32 (mm)

COMPOUND	SAMPLE AMOUNT	CAL0 AMOUNT	CURVE	%D	MAX %d
Dalapon	0.629	0.614	AVRG	2.4	15.0
MCPP	13.4	14.1	AVRG	5.0	15.0
Dicamba	0.138	0.141	AVRG	2.1	15.0
MCPA	12.6	14.0	AVRG	10.0	15.0
Dichlorprop	0.130	0.141	AVRG	7.8	15.0
2,4-D	0.142	0.141	AVRG	0.7	15.0
Pentachlorophenol	0.0457	0.0475	AVRG	3.8	15.0
2,4,5-TP	0.138	0.142	AVRG	2.8	15.0
2,4,5-T	0.134	0.142	AVRG	5.6	15.0
Dinoseb	0.143	0.141	LINR	1.4	15.0
Picloram	0.193	0.189	LINR	2.1	15.0
Bentazon	0.178	0.190	AVRG	6.3	15.0
2,4-DB	0.142	0.142	AVRG	0.0	15.0
2,4-DichlorophenylAceticAcid	0.363	0.374	AVRG	2.9	15.0

FORM VII SG

FORM 8
SG INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Lab File ID (Standard): 1I12L004 Date Analyzed: 09/12/03

Instrument ID: TSGLECD1 Time Analyzed: 0859

		IS1 AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	6471	6.39				
	UPPER LIMIT	9707	6.89				
	LOWER LIMIT	3236	5.89				
	CLIENT SAMPLE NO.						
01	0909HMB	4829	6.38				
02	0909HMBLCS	4346	6.38				
03	0909HMBLCSD	4936	6.38				
04	0909HMBMS	5011	6.38				
05	0909HMBMSD	5225	6.38				
06	73924-1	5326	6.38				
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = Dbofb

AREA UPPER LIMIT = + 50% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
SG ANALYTICAL SEQUENCE

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

GC Column: DB-5 ID: 0.32 (mm) Init. Calib. Date(s): 09/02/03 09/02/03

Instrument ID: TSGLECD1

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	RT
01		51.1 226	09/02/03	0756	5.82	
02		51.2 227	09/02/03	0811	5.81	
03		51.3 228	09/02/03	0826	5.81	
04		51.4 229	09/02/03	0841	5.81	
05		51.5 2210	09/02/03	0856	5.80	
06		51.6 231	09/02/03	0911	5.80	
07		HERB4 229	09/12/03	0859	5.80	
08	0909HMB	0909HMB	09/12/03	1351	5.81	
09	0909HMBLCS	0909HMBLCS	09/12/03	1406	5.80	
10	0909HMBLCSD	0909HMBLCSD	09/12/03	1421	5.80	
11	0909HMBMS	0909HMBMS	09/12/03	1436	5.80	
12	0909HMBMSD	0909HMBMSD	09/12/03	1451	5.80	
13	73924-1	086-BFC-S-09	09/12/03	1506	5.81	
14						
15						
16						
17						
18						
19						
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31						
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33						
34						
35						
36						

QC LIMITS
S1 = 2,4-DichlorophenylAcet (+/- 0.04 MINUTES)

FORM VIII SG

EXTRACTION LOG(S)

EXTRACTION LOG

Job No: 268 12

Batch No: SG090903 H

Date Extracted: 09.09.03

Start Time: 1230pm

Stop Time: 2 pm

Analysis Required: 8151

Prep Method: 3510

Analyst/Activity Code* DJH/A,B,P,E,D,S,F

Initial Project Check: BE

Final Project Check: [illegible] 9.12.03

Date Concentrated: DJH 9/12/03

Initials:

Extract Box ID:

	ID	Lot #	Amt (ml)	Init
Surr.	8151	6.3.70.9	1.0	BE
Surr.				
Spike	8151	6.3.71.19	1.0	BE
Spike				

Clean Up: Yes No

ACIDIFIED Na_2SO_4: Y02631

Comments

Solvent(s) Lot No:

$MeCl_2$: Y17E34

E.Ether: X45H12

MTBE: L51419

~~MeOH~~: DJH 9/10/03

HEX: Y13E22

* See inside front cover of logbook for definition codes

SAMPLE ID/DESCRIPTION	SDG	MT	Amt Exc'd	PH I	PH F	FV (ml)	D-D	H-D	COMMENTS
1. T373924*1/086-BFC-S-0904-03*	JETC01	SS	30.0	<4	>12/<2	5.0	09.12	09.18	RP 2/3
2. T373913*1/1309-1-LAFB*	LAG001	SS		<4	>12/<2	5.0	09.23	09.17	P 1/1 [illegible] 9/10/03
3. T373913*2/1309 Dup-LAFB*	LAG001	SS		<4	>12/<2	5.0	09.23	09.17	P 2/1
4. T373913*3/1309-2-LAFB*	LAG001	SS		<4	>12/<2	5.0	09.23	09.17	P 1/2
5. T373913*4/1309-3-LAFB*	LAG001	SS		<4	>12/<2	5.0	09.23	09.17	P 2/2
6. T373913*5/1309-4-LAFB*	LAG001	SS		<4	>12/<2	5.0	09.23	09.17	P 1/3
7. T373913*6/1309-5-LAFB*	LAG001	SS		<4	>12/<2	5.0	09.23	09.17	P 2/3
8.									
9.									
10.									
11.									
12.									
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									
Lab Blank			30.0	<4	>12/<2	5.0			1/1
Lab Spike #1				<4	>12/<2	5.0			2/1
Lab Spike #2				<4	>12/<2	5.0			1/2
MS: T373913*3 1309-2 LAFB				<4	>12/<2	5.0			2/2
MSD: T373913*3 1309-2 LAFB				<4	>12/<2	5.0			1/3
1:3 H_2SO_4: AN.922.0004.2.5									
10 N NaOH: AN.922.0004.3.2									
NaCl: X4414									

Dets: Chlorinated Herbicides <8151> |(-)Chlorinated Herbicides <8151>|

HCL: T12027

+ Additional Dets:

[illegible] 9.15.03

0137

ANALYSIS LOG(S)

SAMPLE INFORMATION SUMMARY

Client SDG: JETC01 Sample Fraction: SG

QCGroup	Batch	DataFile	Sample Type	Client Id	Lab ID	SmplRef	Lab Prep	SDG
4402772	1L0902.b	1I02L003.D	CALIB_1		51.1 226	4402764		
4402772	1L0902.b	1I02L004.D	CALIB_2		51.2 227	4402765		
4402772	1L0902.b	1I02L005.D	CALIB_3		51.3 228	4402766		
4402772	1L0902.b	1I02L006.D	CALIB_4		51.4 229	4402767		
4402772	1L0902.b	1I02L007.D	CALIB_5		51.5 2210	4402768		
4402772	1L0902.b	1I02L008.D	CALIB_6		51.6 231	4402769		
4404307	1L0912.b	1I12L004.D	CCALIB_4		HERB4 229	4404306		
4404307	1L0912.b	1I12L005.D	BLANK	0909HMB	0909HMB	4404319	SG090903H	JETC01
4404307	1L0912.b	1I12L006.D	LCS	0909HMBLCS	0909HMBLCS	4404320	SG090903H	JETC01
4404307	1L0912.b	1I12L007.D	LCSD	0909HMBLCSD	0909HMBLCSD	4404321	SG090903H	JETC01
4404307	1L0912.b	1I12L008.D	MS	0909HMBMS	0909HMBMS	4404322	SG090903H	JETC01
4404307	1L0912.b	1I12L009.D	MSD	0909HMBMSD	0909HMBMSD	4404323	SG090903H	JETC01
4404307	1L0912.b	1I12L010.D	SAMPLE	73924-1	086-BFC-S-0904-0	4404325	SG090903H	JETC01

Sequence Table (Front Injector):

Quantification Part:

Line	Vial	SampleName	SampleAmount	ISTDAmt	Multiplier	Dilution
1	1	RINSE~1L0902				
2	2	RINSE~1L0902				
3	3	51.1 226~1L0902				
4	4	51.2 227~1L0902				
5	5	51.3 228~1L0902				
6	6	51.4 229~1L0902				
7	7	51.5 2210~1L0902				
8	8	51.6 231~1L0902				
9	9	0826PMB~1L0902				
10	10	0826PMBLS~1L0902				
11	11	0826PMBLD~1L0902				
12	12	0826PMS~1L0902				
13	13	0826PMSD~1L0902				
14	14	73698-1~1L0902				
15	15	73698-2~1L0902				
16	16	73627-1~1L0902				
17	2	RINSE~1L0902				
18	5	51.3 228~1L0902				

Sequence Table (Back Injector):

No entries - empty table!

Sequence: C:\HPCHEM\2\SEQUENCE\1I12L.S

Sequence Table (Front Injector):

Quantification Part:

Line	Vial	SampleName	SampleAmount	ISTDAmt	Multiplier	Dilution
1	1	RINSE~1L0912				
2	2	RINSE~1L0912				
3	3	HERB2 227~1L0912				
4	4	HERB4 229~1L0912				
5	5	0909HMB~1l0912				
6	6	0909HMBLS~1l0912				
7	7	0909HMBLD~1l0912				
8	8	0909HMBMS~1l0912				
9	9	0909HMBMD~1l0912				
10	10	73924-1~1L0912				
11	4	HERB4 229~1L0912				

Sequence Table (Back Injector):

No entries - empty table!

ORGANOCHLORINE PESTICIDES and PCBs
Method 8081/8082

CASE NARRATIVE

CASE NARRATIVE
GC CHLORINATED PESTICIDES

STL Lab Reference No. / SDG: JETC01

Project: JETC and Building 271/0103-329-09

RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

METHOD

Preparation: SW-846 3550
Cleanup: N/A
Analysis: SW-846 8081/8082

PREPARATION

Sample preparation proceeded normally.

ANALYSIS

Calibration: All acceptance criteria were met

Blanks: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Spikes: The Matrix Spikes were not recovered due to a sample dilution that was required prior to analysis.

Samples: No analytical or quality problems were observed.

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

SIGNED: _____ DATE: 9/24/03

Timothy Preston
Project Manager

CASE NARRATIVE
GC CHLORINATED PESTICIDES

STL Lab Reference No. / SDG: JETC01

Project: JETC and Building 271/0103-329-09

RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

METHOD

Preparation: SW-846 3550
Cleanup: N/A
Analysis: SW-846 8081/8082

PREPARATION

Sample preparation proceeded normally.

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Calibration: All acceptance criteria were met

Blanks: All acceptance criteria were met.

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Spikes: The Matrix Spikes were not recovered due to a sample dilution that was required prior to analysis.

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

SIGNED: TPrestt DATE: 9/24/03

Timothy Preston
Project Manager

FORMS

FORM 1
PEST-PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

73924-1

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: 086-BFC-S-0904-03

Sample wt/vol: 30 (g/mL) G Lab File ID: 1I12K015

Level: (low/med) LOW Date Received: 09/06/03

% Moisture: 9 decanted: (Y/N) N Date Extracted: 09/11/03

Concentrated Extract Volume: 10 (mL) Date Analyzed: 09/12/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.6	U
72-55-9	4,4'-DDE	3.6	U
72-20-8	Endrin	3.6	U
33213-65-9	Endosulfan II	3.6	U
72-54-8	4,4'-DDD	3.6	U
1031-07-8	Endosulfan sulfate	3.6	U
50-29-3	4,4'-DDT	3.6	U
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	3.6	U
7421-93-4	Endrin aldehyde	3.6	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	74	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	U
57-74-9	Chlordane	19	U

FORM 1
PEST-PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

0911HMB

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: 0911HMB

Sample wt/vol: 30 (g/mL) G Lab File ID: 1I12K010

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/11/03

Concentrated Extract Volume: 10 (mL) Date Analyzed: 09/12/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	U
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.3	U
72-55-9	4,4'-DDE	3.3	U
72-20-8	Endrin	3.3	U
33213-65-9	Endosulfan II	3.3	U
72-54-8	4,4'-DDD	3.3	U
1031-07-8	Endosulfan sulfate	3.3	U
50-29-3	4,4'-DDT	3.3	U
72-43-5	Methoxychlor	17	U
53494-70-5	Endrin ketone	3.3	U
7421-93-4	Endrin aldehyde	3.3	U
5103-71-9	alpha-Chlordane	1.7	U
5103-74-2	gamma-Chlordane	1.7	U
8001-35-2	Toxaphene	170	U
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	67	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
57-74-9	Chlordane	17	U

FORM 1
PEST-PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

0911HMBLCS

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: 0911HMBLCS

Sample wt/vol: 30 (g/mL) G Lab File ID: 1I12K011

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/11/03

Concentrated Extract Volume: 10 (mL) Date Analyzed: 09/12/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	U
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	2.0	
76-44-8	Heptachlor	2.1	
309-00-2	Aldrin	2.2	
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	5.4	
72-55-9	4,4'-DDE	3.3	U
72-20-8	Endrin	5.5	
33213-65-9	Endosulfan II	3.3	U
72-54-8	4,4'-DDD	3.3	U
1031-07-8	Endosulfan sulfate	3.3	U
50-29-3	4,4'-DDT	4.9	
72-43-5	Methoxychlor	17	U
53494-70-5	Endrin ketone	3.3	U
7421-93-4	Endrin aldehyde	3.3	U
5103-71-9	alpha-Chlordane	1.7	U
5103-74-2	gamma-Chlordane	1.7	U

FORM 1
PEST-PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

0911HMBLCSD

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: 0911HMBLCSD

Sample wt/vol: 30 (g/mL) G Lab File ID: 1I12K012

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/11/03

Concentrated Extract Volume: 10 (mL) Date Analyzed: 09/12/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	U
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	2.1	
76-44-8	Heptachlor	2.5	
309-00-2	Aldrin	2.6	
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	6.2	
72-55-9	4,4'-DDE	3.3	U
72-20-8	Endrin	6.2	
33213-65-9	Endosulfan II	3.3	U
72-54-8	4,4'-DDD	3.3	U
1031-07-8	Endosulfan sulfate	3.3	U
50-29-3	4,4'-DDT	5.5	
72-43-5	Methoxychlor	17	U
53494-70-5	Endrin ketone	3.3	U
7421-93-4	Endrin aldehyde	3.3	U
5103-71-9	alpha-Chlordane	1.7	U
5103-74-2	gamma-Chlordane	1.7	U

FORM 2
SOIL PEST-PCB SURROGATE RECOVERY

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

GC Column(1): DB-5 ID: 0.32 (mm) GC Column(2): DB-17 ID: 0.32 (mm)

	CLIENT SAMPLE NO.	S1 1 (TCX) #	S1 2 (TCX) #	S2 1 (DCB) #	S2 2 (DCB) #	S3 1 (DBC) #	S3 2 (DBC) #	S4 1 #	S4 2 #	TOT OUT
01	0911HMB	67	64	73	70	54	67			0
02	0911HMBLCS	52	52	64	67	52	67			0
03	0911HMBLCSD	67	64	79	70	61	70			0
04	73924-1	46	89	68	122	54	128			0
05										
06										
07										
08										
09										
10										
11										
12										
13										
14										
15										
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21										
22										
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26										
27										
28										
29										
30										

		QC LIMITS	
S1 (TCX)	= Tetrachloro-m-xylene	(30-150)	
S2 (DCB)	= Decachlorobiphenyl	(30-150)	(advisory)
S3 (DBC)	= Dibutylchlorendate	(30-150)	

Column to be used to flag recovery values
* Values outside of laboratory QC limits
D Sample diluted

FORM 3
SOIL PEST-PCB LAB CONTROL SAMPLE

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix Spike - Sample No.: 0911HMBLCS Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONC (ug/Kg)	LCS CONC (ug/Kg)	LCS % REC#	QC. LIMITS REC.
Aldrin	3.3		2.2	67	10-144
gamma-BHC (Lindane)	3.3		2.0	61	12-138
4,4'-DDT	8.3		4.9	59	29-134
Dieldrin	8.3		5.4	65	28-137
Endrin	8.3		5.5	66	33-149
Heptachlor	3.3		2.1	64	17-138

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONC (ug/Kg)	LCSD % REC#	AVG % REC	% RPD$#	QC LIMITS RPD	QC LIMITS REC.
Aldrin	3.3	2.6	79	73	17	38	10-144
gamma-BHC (Lindane)	3.3	2.1	64	62	4.9	37	12-138
4,4'-DDT	8.3	5.5	66	62	12	26	29-134
Dieldrin	8.3	6.2	75	70	14	30	28-137
Endrin	8.3	6.2	75	70	12	32	33-149
Heptachlor	3.3	2.5	76	70	17	38	17-138

$ %RPD calculated using the spike and spike duplicate concentrations as per SW846 8000B

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS: _____

FORM III PEST-PCB

FORM 4
PEST-PCB METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

0911HMB

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Lab File ID: 1I12K010 Lab Sample ID: 0911HMB

Instrument ID: TSGKECD1 Matrix: (soil/water) SOIL

Level: (low/med) LOW Date Extracted: 09/11/03

Date Analyzed (1): 09/12/03 Date Analyzed (2): 09/12/03

Time Analyzed (1): 1251 Time Analyzed (2): 1251

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	0911HMBLCS	0911HMBLCS	1I12K011	09/12/03	09/12/03
02	0911HMBLCSD	0911HMBLCSD	1I12K012	09/12/03	09/12/03
03	73924-1	086-BFC-S-0904	1I12K015	09/12/03	09/12/03
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COMMENTS:

Report Date : 09/15/2003 16:36

Data file : 1I04K011.D
Lab Smp Id : PEM 29216
Inj Date : 04-SEP-2003 15:46
Inst ID : TSGKECD1.i
Smp Info : PEM 29216~1K0906

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	182528			N/A
4,4-DDE	1713	0.9	15.0	PASS
4,4-DDD	1909	1.0	15.0	PASS
4,4-DDD + DDE	3622	1.9	15.0	PASS

****
PEM SAMPLE *** PASSED *** DDT BREAKDOWN TEST
****

Endrin DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
Endrin	102615			N/A
E. Aldehyde	551	0.5	15.0	PASS
E. Ketone	1145	1.1	15.0	PASS
Ketone+Aldehyde	1696	1.6	15.0	PASS

****
PEM SAMPLE *** PASSED *** Endrin BREAKDOWN TEST
****

Report Date : 09/15/2003 16:36

Data file : 1I04K011.D
Lab Smp Id : PEM 29216
Inj Date : 04-SEP-2003 15:46
Inst ID : TSGKECD2.i
Smp Info : PEM 29216~1K0906

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	59333			N/A
4,4-DDE	696	1.2	15.0	PASS
4,4-DDD	1033	1.7	15.0	PASS
4,4-DDD + DDE	1729	2.8	15.0	PASS

****
PEM SAMPLE *** PASSED *** DDT BREAKDOWN TEST
****

Endrin DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
Endrin	34814			N/A
E. Aldehyde	202	0.6	15.0	PASS
E. Ketone	482	1.4	15.0	PASS
Ketone+Aldehyde	684	1.9	15.0	PASS

****
PEM SAMPLE *** PASSED *** Endrin BREAKDOWN TEST
****

Report Date : 09/12/2003 11:43

Data file : 1I12C004.D
Lab Smp Id : PEM 29216
Inj Date : 12-SEP-2003 10:10
Inst ID : TSGKECD1.i
Smp Info : PEM 29216~1K0912

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	193744			N/A
4,4-DDE	1454	0.7	15.0	PASS
4,4-DDD	2790	1.4	15.0	PASS
4,4-DDD + DDE	4244	2.1	15.0	PASS

****
PEM SAMPLE *** PASSED *** DDT BREAKDOWN TEST
****

Endrin DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
Endrin	106915			N/A
E. Aldehyde	2610	2.4	15.0	PASS
E. Ketone	3590	3.2	15.0	PASS
Ketone+Aldehyde	6200	5.5	15.0	PASS

****
PEM SAMPLE *** PASSED *** Endrin BREAKDOWN TEST
****

Report Date : 09/12/2003 11:42

Data file : 1I12C004.D
Lab Smp Id : PEM 29216
Inj Date : 12-SEP-2003 10:10
Inst ID : TSGKECD2.i
Smp Info : PEM 29216~1K0912

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	62476			N/A
4,4-DDE	450	0.7	15.0	PASS
4,4-DDD	1760	2.7	15.0	PASS
4,4-DDD + DDE	2210	3.4	15.0	PASS

****
PEM SAMPLE *** PASSED *** DDT BREAKDOWN TEST
****

Endrin DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
Endrin	36542			N/A
E. Aldehyde	1130	3.0	15.0	PASS
E. Ketone	1061	2.8	15.0	PASS
Ketone+Aldehyde	2191	5.7	15.0	PASS

****
PEM SAMPLE *** PASSED *** Endrin BREAKDOWN TEST
****

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGKECD1 Calibration Date(s): 09/04/03 09/04/03

Column: DB-5 ID: 0.32 (mm) Calibration Time(s): 1632 1802

LAB FILE ID: RF0.005: 1I04K012 RF0.025: 1I04K013 RF0.05: 1I04K014
RF0.075: 1I04K015 RF0.1: 1I04K016

COMPOUND	RF0.005	RF0.025	RF0.05	RF0.075	RF0.1
alpha-BHC	1.40201	1.30749	1.35614	1.35945	1.33005
beta-BHC	0.68520	0.61356	0.57611	0.55149	0.53076
delta-BHC	1.24697	1.15221	1.20294	1.21037	1.19737
gamma-BHC (Lindane)	2.03418	2.09120	1.88637	1.92039	2.14871
Heptachlor	1.39921	1.22991	1.22838	1.21011	1.16321
Aldrin	1.24085	1.14360	1.11795	1.11608	1.07564
Heptachlor epoxide	1.21000	1.06648	1.02299	1.00395	0.94946
Endosulfan I	1.09805	0.99123	0.91293	0.88197	0.86047
Dieldrin	1.24340	1.15465	1.05466	1.07072	1.02475
4,4'-DDE	0.99936	0.81129	0.87702	0.88402	0.83524
Endrin	1.12686	1.02415	0.96793	0.96171	0.90791
Endosulfan II	1.04985	0.95738	0.89273	0.87713	0.82725
4,4'-DDD	0.86956	0.80280	0.79454	0.81033	0.77948
Endosulfan sulfate	1.04373	0.88329	0.81807	0.79636	0.76120
4,4'-DDT	0.98202	0.93028	0.84920	0.85968	0.84162
Methoxychlor	0.58472	0.53679	0.47400	0.44063	0.41750
Endrin ketone	1.13783	1.04776	0.95385	0.91328	0.87133
Endrin aldehyde	0.90501	0.80745	0.74669	0.73087	0.69204
alpha-Chlordane	1.15721	1.04299	1.00410	1.01822	0.94102
gamma-Chlordane	1.18144	1.07998	1.02928	1.03007	0.98668
Tetrachloro-m-xylene	1.06490	0.96066	0.90746	0.87758	0.84256
Decachlorobiphenyl	0.71269	0.62768	0.52282	0.48924	0.47156
Dibutylchlorendate	0.69208	0.62261	0.56923	0.56490	0.54689

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGKECD1 Calibration Date(s): 09/04/03 09/04/03

Column: DB-5 ID: 0.32 (mm) Calibration Time(s): 1632 1802

RF0.2: 1I04K017

COMPOUND	RF0.2
alpha-BHC	1.31569
beta-BHC	0.51646
delta-BHC	1.19038
gamma-BHC (Lindane)	1.94548
Heptachlor	1.13352
Aldrin	1.05831
Heptachlor epoxide	0.92484
Endosulfan I	0.81242
Dieldrin	0.96884
4,4'-DDE	0.86351
Endrin	0.89249
Endosulfan II	0.80585
4,4'-DDD	0.77015
Endosulfan sulfate	0.75954
4,4'-DDT	0.81744
Methoxychlor	0.40334
Endrin ketone	0.84429
Endrin aldehyde	0.67044
alpha-Chlordane	0.94684
gamma-Chlordane	0.97503
Tetrachloro-m-xylene	0.82482
Decachlorobiphenyl	0.45767
Dibutylchlorendate	0.53494

FORM VI PEST-PCB

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGKECD1 Calibration Date(s): 09/04/03 09/04/03

Column: DB-5 ID: 0.32 (mm) Calibration Time(s): 1632 1802

COMPOUND	CURVE	COEFFICIENTS A0	A1	A2	%RSD or R^2
alpha-BHC	2ORDR	0.00000000	0.72043	1.004e-002	1.000
beta-BHC	2ORDR	-1.56e-002	1.70842	0.1544	1.000
delta-BHC	2ORDR	5.925e-003	0.81315	7.077e-003	1.000
gamma-BHC (Lindane)	2ORDR	0.00000000	0.50011	-3.28e-004	0.994
Heptachlor	2ORDR	0.00000000	0.77551	3.142e-002	1.000
Aldrin	2ORDR	-1.51e-003	0.86159	2.663e-002	1.000
Heptachlor epoxide	2ORDR	0.00000000	0.91918	5.91e-002	1.000
Endosulfan I	2ORDR	0.00000000	1.00878	8.829e-002	1.000
Dieldrin	2ORDR	0.00000000	0.84334	6.269e-002	1.000
4,4'-DDE	2ORDR	0.00000000	1.15735	3.48e-003	0.999
Endrin	2ORDR	0.00000000	0.97869	5.41e-002	1.000
Endosulfan II	2ORDR	0.00000000	1.04931	8.03e-002	1.000
4,4'-DDD	2ORDR	0.00000000	1.20303	4.16e-002	1.000
Endosulfan sulfate	2ORDR	0.00000000	1.20168	5.349e-002	1.000
4,4'-DDT	2ORDR	0.00000000	1.11016	4.484e-002	1.000
Methoxychlor	2ORDR	0.00000000	1.98949	0.4123	1.000
Endrin ketone	2ORDR	0.00000000	0.99124	7.711e-002	1.000
Endrin aldehyde	2ORDR	0.00000000	1.24776	0.1220	1.000
alpha-Chlordane	2ORDR	0.00000000	0.95669	3.729e-002	0.999
gamma-Chlordane	2ORDR	0.00000000	0.93350	3.221e-002	1.000
Tetrachloro-m-xylene	2ORDR	-3.56e-002	1.08581	2.166e-002	1.000
Decachlorobiphenyl	2ORDR	-0.116	1.97050	7.26e-002	1.000
Dibutylchlorendate	2ORDR	-3.52e-002	1.71287	4.098e-002	1.000

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETCO1

Instrument ID: TSGKECD2 Calibration Date(s): 09/04/03 09/04/03

Column: DB-17 ID: 0.32 (mm) Calibration Time(s): 1632 1802

LAB FILE ID: RF0.005: 1I04K012 RF0.025: 1I04K013 RF0.05: 1I04K014
RF0.075: 1I04K015 RF0.1: 1I04K016

COMPOUND	RF0.005	RF0.025	RF0.05	RF0.075	RF0.1
alpha-BHC	1.61025	1.65190	1.44386	1.56019	1.72297
beta-BHC	0.95462	0.91693	0.71801	0.70251	0.76027
delta-BHC	1.76295	1.71415	1.51565	1.63539	1.82961
gamma-BHC (Lindane)	1.69247	1.72492	1.44942	1.54149	1.69133
Heptachlor	1.72664	1.67524	1.40740	1.49525	1.60029
Aldrin	1.18103	1.13292	1.01780	1.00369	1.00395
Heptachlor epoxide	1.53123	1.52322	1.24289	1.29263	1.38474
Endosulfan I	1.34330	1.32212	1.08436	1.10625	1.21945
Dieldrin	1.29845	1.29220	1.07054	1.14149	1.21395
4,4'-DDE	1.21410	1.20062	1.01955	1.10595	1.21065
Endrin	1.36572	1.33349	1.11526	1.18025	1.27982
Endosulfan II	1.32408	1.41429	1.13734	1.18361	1.27745
4,4'-DDD	1.10198	1.14257	0.99320	1.04010	1.14769
Endosulfan sulfate	1.43300	1.41549	1.10116	1.14725	1.24024
4,4'-DDT	1.24613	1.26406	1.04989	1.13303	1.22426
Methoxychlor	0.62315	0.55614	0.46259	0.44638	0.42020
Endrin ketone	1.21516	1.32152	1.07082	1.07849	1.18263
Endrin aldehyde	1.18313	1.21858	0.97810	0.99776	1.08533
alpha-Chlordane	1.45969	1.43165	1.12851	1.20733	1.27712
gamma-Chlordane	1.45862	1.47594	1.16084	1.22566	1.34602
Tetrachloro-m-xylene	1.27069	1.23150	1.05687	1.09226	1.17857
Decachlorobiphenyl	0.95419	0.89801	0.68517	0.69773	0.74426
Dibutylchlorendate	0.99135	0.97031	0.83096	0.86985	0.96280

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGKECD2 Calibration Date(s): 09/04/03 09/04/03

Column: DB-17 ID: 0.32 (mm) Calibration Time(s): 1632 1802

RF0.2: 1I04K017

COMPOUND	RF0.2
alpha-BHC	1.61699
beta-BHC	0.71425
delta-BHC	1.77871
gamma-BHC (Lindane)	1.61904
Heptachlor	1.51385
Aldrin	1.01989
Heptachlor epoxide	1.33870
Endosulfan I	1.11346
Dieldrin	1.16585
4,4'-DDE	1.15434
Endrin	1.20696
Endosulfan II	1.18893
4,4'-DDD	1.06538
Endosulfan sulfate	1.18502
4,4'-DDT	1.18029
Methoxychlor	0.41040
Endrin ketone	1.06032
Endrin aldehyde	0.98760
alpha-Chlordane	1.19958
gamma-Chlordane	1.26884
Tetrachloro-m-xylene	1.12072
Decachlorobiphenyl	0.70424
Dibutylchlorendate	0.93878

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGKECD2 Calibration Date(s): 09/04/03 09/04/03

Column: DB-17 ID: 0.32 (mm) Calibration Time(s): 1632 1802

COMPOUND	CURVE	COEFFICIENTS A0	A1	A2	%RSD or R^2
alpha-BHC	2ORDR	0.00000000	0.64266	-7.83e-003	0.996
beta-BHC	2ORDR	0.00000000	1.34371	1.652e-002	0.997
delta-BHC	AVRG		1.70608		6.7
gamma-BHC (Lindane)	2ORDR	0.00000000	0.65329	-9.44e-003	0.997
Heptachlor	2ORDR	0.00000000	0.66002	-2.31e-003	0.998
Aldrin	2ORDR	0.00000000	1.00182	-5.93e-003	1.000
Heptachlor epoxide	AVRG		1.38557		8.6
Endosulfan I	AVRG		1.19816		9.5
Dieldrin	2ORDR	0.00000000	0.87496	-8.15e-003	0.998
4,4'-DDE	AVRG		1.15087		6.6
Endrin	2ORDR	0.00000000	0.83704	-6.55e-003	0.997
Endosulfan II	AVRG		1.25428		8.3
4,4'-DDD	AVRG		1.08182		5.6
Endosulfan sulfate	2ORDR	-1.73e-002	0.88119	-1.27e-002	0.998
4,4'-DDT	2ORDR	0.00000000	0.89385	-1.66e-002	0.998
Methoxychlor	2ORDR	-3.81e-002	2.15567	0.2575	1.000
Endrin ketone	2ORDR	5.616e-003	0.85533	1.796e-002	0.994
Endrin aldehyde	2ORDR	2.88e-004	0.94366	1.431e-002	0.995
alpha-Chlordane	2ORDR	0.00000000	0.80655	3.552e-003	0.997
gamma-Chlordane	2ORDR	0.00000000	0.80605	-8.65e-003	0.997
Tetrachloro-m-xylene	2ORDR	-3.71e-003	0.90343	-2.91e-003	0.998
Decachlorobiphenyl	2ORDR	-7.2e-002	1.43524	-4.49e-003	0.998
Dibutylchlorendate	2ORDR	-1.03e-002	1.17693	-1.77e-002	0.998

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGKECD1 Calibration Date(s): 09/04/03 09/04/03

Column: DB-5 ID: 0.32 (mm) Calibration Time(s): 2009 2139

LAB FILE ID: RF0.005: 1I04K024 RF0.025: 1I04K025 RF0.05: 1I04K026
RF0.075: 1I04K027 RF0.1: 1I04K028

COMPOUND	RF0.005	RF0.025	RF0.05	RF0.075	RF0.1
Aroclor-1016	0.05265	0.03705	0.02887	0.02941	0.02644
(2)	0.03311	0.02753	0.02218	0.02267	0.02136
(3)	0.04053	0.02913	0.02066	0.02180	0.01975
(4)	0.04454	0.03356	0.02578	0.02650	0.02446
(5)	0.03909	0.02857	0.02047	0.02138	0.01954
Aroclor-1260	0.03930	0.02612	0.01956	0.01845	0.01724
(2)	0.02361	0.01833	0.01446	0.01379	0.01292
(3)	0.05898	0.04189	0.03380	0.03222	0.03020
(4)	0.03512	0.02415	0.01872	0.01808	0.01691
(5)	0.03052	0.02170	0.01845	0.01710	0.01589
Tetrachloro-m-xylene(#)	1.77968	1.35436	1.14236	1.15044	1.07909
Decachlorobiphenyl(#)	0.93610	0.63747	0.53447	0.51162	0.47625
Dibutylchlorendate(#)	1.46405	1.11280	0.87815	0.89102	0.83830

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGKECD1 Calibration Date(s): 09/04/03 09/04/03

Column: DB-5 ID: 0.32 (mm) Calibration Time(s): 2009 2139

RF0.2: 1I04K029

COMPOUND	RF0.2
Aroclor-1016	0.03113
(2)	0.02500
(3)	0.02370
(4)	0.02930
(5)	0.02363
Aroclor-1260	0.01719
(2)	0.01298
(3)	0.03021
(4)	0.01674
(5)	0.01561
Tetrachloro-m-xylene(#)	1.24126
Decachlorobiphenyl(#)	0.47587
Dibutylchlorendate(#)	1.02465

FORM VI PEST-PCB

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGKECD1 Calibration Date(s): 09/04/03 09/04/03

Column: DB-5 ID: 0.32 (mm) Calibration Time(s): 2009 2139

COMPOUND	CURVE	COEFFICIENTS A0	A1	A2	%RSD or R^2
Aroclor-1016	2ORDR	-4.956	47.8645	-7.747	0.990
(2)	2ORDR	-3.537	58.9037	-12.42	0.993
(3)	2ORDR	-5.803	67.9880	-17.12	0.988
(4)	2ORDR	-4.739	53.4717	-10.66	0.991
(5)	2ORDR	-5.702	69.0346	-18.00	0.988
Aroclor-1260	2ORDR	-3.686	54.4585	10.269	0.997
(2)	2ORDR	-2.415	70.6832	17.184	0.997
(3)	2ORDR	-2.600	30.6316	3.0419	0.998
(4)	2ORDR	-2.934	54.7103	10.934	0.998
(5)	2ORDR	-1.639	49.6999	22.015	0.998
Tetrachloro-m-xylene(#)	2ORDR	-0.348	1.14291	-4.35e-002	0.994
Decachlorobiphenyl(#)	2ORDR	-0.236	1.91309	0.1305	0.999
Dibutylchlorendate(#)	2ORDR	-0.461	1.59368	-0.101	0.992

FORM VI PEST-PCB

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGKECD2 Calibration Date(s): 09/04/03 09/04/03

Column: DB-17 ID: 0.32 (mm) Calibration Time(s): 2009 2139

LAB FILE ID: RF0.005: 1I04K024 RF0.025: 1I04K025 RF0.05: 1I04K026
RF0.075: 1I04K027 RF0.1: 1I04K028

COMPOUND	RF0.005	RF0.025	RF0.05	RF0.075	RF0.1
Aroclor-1016	0.06294	0.04443	0.03577	0.03501	0.03246
(2)	0.02661	0.02124	0.01802	0.01700	0.01556
(3)	0.02862	0.02320	0.01989	0.01900	0.01760
(4)	0.03961	0.02988	0.02483	0.02377	0.02202
(5)	0.02530	0.01857	0.01493	0.01432	0.01309
Aroclor-1260	0.08066	0.05703	0.04225	0.04241	0.03898
(2)	0.04452	0.03282	0.02540	0.02443	0.02234
(3)	0.03884	0.02805	0.02114	0.02096	0.01908
(4)	0.07898	0.05615	0.04407	0.04436	0.04244
(5)	0.04679	0.03324	0.02607	0.02569	0.02384
Tetrachloro-m-xylene (#)	1.56406	1.15461	1.02842	1.05055	0.98542
Decachlorobiphenyl (#)	1.20598	0.85020	0.67149	0.66277	0.63291
Dibutylchlorendate (#)	1.18207	0.88400	0.81337	0.78668	0.76461

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETCO1

Instrument ID: TSGKECD2 Calibration Date(s): 09/04/03 09/04/03

Column: DB-17 ID: 0.32 (mm) Calibration Time(s): 2009 2139

RF0.2: 1I04K029

COMPOUND	RF0.2
Aroclor-1016	0.03163
(2)	0.01548
(3)	0.01786
(4)	0.02200
(5)	0.01297
Aroclor-1260	0.04412
(2)	0.02557
(3)	0.02167
(4)	0.04765
(5)	0.02756
Tetrachloro-m-xylene(#)	1.08483
Decachlorobiphenyl(#)	0.73829
Dibutylchlorendate(#)	0.77163

FORM VI PEST-PCB

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETCO1

Instrument ID: TSGKECD2 Calibration Date(s): 09/04/03 09/04/03

Column: DB-17 ID: 0.32 (mm) Calibration Time(s): 2009 2139

COMPOUND	CURVE	COEFFICIENTS A0	A1	A2	%RSD or R^2
Aroclor-1016	2ORDR	-1.984	26.0362	4.4541	0.999
(2)	2ORDR	-1.265	50.1241	22.011	0.998
(3)	2ORDR	-1.604	50.2997	9.2731	0.997
(4)	2ORDR	-1.888	39.3692	7.6158	0.998
(5)	2ORDR	-1.988	62.4974	28.762	0.998
Aroclor-1260	2ORDR	-5.215	32.0615	-3.014	0.991
(2)	2ORDR	-4.817	53.8616	-7.995	0.989
(3)	2ORDR	-4.968	63.7670	-11.25	0.990
(4)	2ORDR	-4.425	30.1396	-2.951	0.995
(5)	2ORDR	-4.886	53.0834	-9.194	0.992
Tetrachloro-m-xylene(#)	2ORDR	-0.258	1.17959	-3.69e-002	0.997
Decachlorobiphenyl(#)	2ORDR	-0.492	2.08765	-0.157	0.994
Dibutylchlorendate(#)	2ORDR	-0.155	1.31348	7.9e-003	1.000

FORM VI PEST-PCB

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGKECD1 Calibration Date(s): 09/04/03 09/04/03

Column: DB-5 ID: 0.32 (mm) Calibration Time(s): 1632 2139

RF0.05: 1I04K018

COMPOUND	RF0.05	CURVE	AVE RRF A1	%RSD or R^2
Chlordane	0.02196	AVRG	2.196e-002	0.0
(2)	0.08493	AVRG	8.493e-002	0.0
(3)	0.02564	AVRG	2.564e-002	0.0
(4)	0.07460	AVRG	7.46e-002	0.0
(5)	0.05298	AVRG	5.298e-002	0.0

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETCO1

Instrument ID: TSGKECD2 Calibration Date(s): 09/02/03 09/04/03

Column: DB-17 ID: 0.32 (mm) Calibration Time(s): 1051 2139

RF0.05: 1I04K018

COMPOUND	RF0.05	CURVE	AVE RRF A1	%RSD or R^2
Chlordane	0.02303	AVRG	2.303e-002	0.0
(2)	0.10179	AVRG	0.10179	0.0
(3)	0.05832	AVRG	5.832e-002	0.0
(4)	0.02186	AVRG	2.186e-002	0.0
(5)	0.08177	AVRG	8.177e-002	0.0

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGKECD1 Calibration Date(s): 09/04/03 09/04/03

Column: DB-5 ID: 0.32 (mm) Calibration Time(s): 1632 2139

RF0.05: 1I04K019

COMPOUND	RF0.05	CURVE	AVE RRF A1	%RSD or R^2
Toxaphene	0.02317	AVRG	2.317e-002	0.0
(2)	0.01573	AVRG	1.573e-002	0.0
(3)	0.00927	AVRG	9.268e-003	0.0
(4)	0.01923	AVRG	1.923e-002	0.0
(5)	0.05070	AVRG	5.07e-002	0.0

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGKECD2 Calibration Date(s): 09/02/03 09/04/03

Column: DB-17 ID: 0.32 (mm) Calibration Time(s): 1051 2139

RF0.05: 1I04K019

COMPOUND	RF0.05	CURVE	AVE RRF A1	%RSD or R^2
Toxaphene	0.01876	AVRG	1.876e-002	0.0
(2)	0.01260	AVRG	1.26e-002	0.0
(3)	0.01386	AVRG	1.386e-002	0.0
(4)	0.02207	AVRG	2.207e-002	0.0
(5)	0.03564	AVRG	3.564e-002	0.0

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGKECD1 Calibration Date(s): 09/04/03 09/04/03

Column: DB-5 ID: 0.32 (mm) Calibration Time(s): 1632 2139

RF0.05: 1I04K020

COMPOUND	RF0.05	CURVE	AVE RRF A1	%RSD or R^2
Aroclor-1232	0.02338	AVRG	2.338e-002	0.0
(2)	0.01301	AVRG	1.301e-002	0.0
(3)	0.01375	AVRG	1.375e-002	0.0
(4)	0.01174	AVRG	1.174e-002	0.0
(5)	0.01141	AVRG	1.141e-002	0.0

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETCO1

Instrument ID: TSGKECD2 Calibration Date(s): 09/02/03 09/04/03

Column: DB-17 ID: 0.32 (mm) Calibration Time(s): 1051 2139

RF0.05: 1I04K020

COMPOUND	RF0.05	CURVE	AVE RRF A1	%RSD or R^2
Aroclor-1232	0.00827	AVRG	8.269e-003	0.0
(2)	0.01996	AVRG	1.996e-002	0.0
(3)	0.01312	AVRG	1.312e-002	0.0
(4)	0.01218	AVRG	1.218e-002	0.0
(5)	0.01034	AVRG	1.034e-002	0.0

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGKECD1 Calibration Date(s): 09/04/03 09/04/03

Column: DB-5 ID: 0.32 (mm) Calibration Time(s): 1632 2139

RF0.05: 1I04K021

COMPOUND	RF0.05	CURVE	AVE RRF A1	%RSD or R^2
Aroclor-1242	0.01929	AVRG	1.929e-002	0.0
(2)	0.02548	AVRG	2.548e-002	0.0
(3)	0.02826	AVRG	2.826e-002	0.0
(4)	0.02487	AVRG	2.487e-002	0.0
(5)	0.02718	AVRG	2.718e-002	0.0

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGKECD2 Calibration Date(s): 09/02/03 09/04/03

Column: DB-17 ID: 0.32 (mm) Calibration Time(s): 1051 2139

RF0.05: 1I04K021

COMPOUND	RF0.05	CURVE	AVE RRF A1	%RSD or R^2
Aroclor-1242	0.03169	AVRG	3.169e-002	0.0
(2)	0.04760	AVRG	4.76e-002	0.0
(3)	0.01859	AVRG	1.859e-002	0.0
(4)	0.00657	AVRG	6.572e-003	0.0
(5)	0.02244	AVRG	2.244e-002	0.0

FORM VI PEST-PCB

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGKECD1 Calibration Date(s): 09/04/03 09/04/03

Column: DB-5 ID: 0.32 (mm) Calibration Time(s): 1632 2139

RF0.05: 1I04K022

COMPOUND	RF0.05	CURVE	AVE RRF A1	%RSD or R^2
Aroclor-1248	0.03016	AVRG	3.016e-002	0.0
(2)	0.04591	AVRG	4.591e-002	0.0
(3)	0.00797	AVRG	7.973e-003	0.0
(4)	0.00151	AVRG	1.506e-003	0.0
(5)	0.00160	AVRG	1.601e-003	0.0

FORM VI PEST-PCB

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGKECD2 Calibration Date(s): 09/02/03 09/04/03

Column: DB-17 ID: 0.32 (mm) Calibration Time(s): 1051 2139

RF0.05: 1I04K022

COMPOUND	RF0.05	CURVE	AVE RRF A1	%RSD or R^2
Aroclor-1248	0.00646	AVRG	6.459e-003	0.0
(2)	0.01401	AVRG	1.401e-002	0.0
(3)	0.03322	AVRG	3.322e-002	0.0
(4)	0.04033	AVRG	4.033e-002	0.0
(5)	0.04492	AVRG	4.493e-002	0.0

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGKECD1 Calibration Date(s): 09/04/03 09/04/03

Column: DB-5 ID: 0.32 (mm) Calibration Time(s): 1632 2139

RF0.05: 1I04K023

COMPOUND	RF0.05	CURVE	AVE RRF A1	%RSD or R^2
Aroclor-1221	0.01264	AVRG	1.265e-002	0.0
(2)	0.00924	AVRG	9.237e-003	0.0
(3)	0.02820	AVRG	2.821e-002	0.0
Aroclor-1254	0.02602	AVRG	2.602e-002	0.0
(2)	0.02700	AVRG	2.7e-002	0.0
(3)	0.01641	AVRG	1.641e-002	0.0
(4)	0.05278	AVRG	5.278e-002	0.0
(5)	0.03611	AVRG	3.611e-002	0.0

FORM 6
PEST-PCB INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGKECD2 Calibration Date(s): 09/02/03 09/04/03

Column: DB-17 ID: 0.32 (mm) Calibration Time(s): 1051 2139

RF0.05: 1I04K023

COMPOUND	RF0.05	CURVE	AVE RRF A1	%RSD or R^2
Aroclor-1254	0.02464	AVRG	2.464e-002	0.0
(2)	0.02090	AVRG	2.09e-002	0.0
(3)	0.01783	AVRG	1.783e-002	0.0
(4)	0.04315	AVRG	4.315e-002	0.0
(5)	0.02310	AVRG	2.31e-002	0.0
Aroclor-1221	0.00826	AVRG	8.26e-003	0.0
(2)	0.02323	AVRG	2.323e-002	0.0
(3)	0.00376	AVRG	3.757e-003	0.0

FORM 7
PEST-PCB CONTINUING CALIBRATION CHECK

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGKECD1 Calibration Date: 09/12/03 Time: 1028

Lab File ID: 1I12K005 Init. Calib. Date(s): 09/04/03 09/04/03

Init. Calib. Times: 1632 1802

GC Column: DB-5 ID: 0.32 (mm)

COMPOUND	SAMPLE AMOUNT	0.05 AMOUNT	CURVE	%D	MAX %d
alpha-BHC	0.0153	0.0150	2ORDR	2.0	15.0
beta-BHC	0.0153	0.0150	2ORDR	2.0	15.0
delta-BHC	0.0157	0.0150	2ORDR	4.7	15.0
gamma-BHC (Lindane)	0.0143	0.0150	2ORDR	4.7	15.0
Heptachlor	0.0147	0.0150	2ORDR	2.0	15.0
Aldrin	0.0156	0.0150	2ORDR	4.0	15.0
Heptachlor epoxide	0.0154	0.0150	2ORDR	2.7	15.0
Endosulfan I	0.0155	0.0150	2ORDR	3.3	15.0
Dieldrin	0.0147	0.0150	2ORDR	2.0	15.0
4,4'-DDE	0.0159	0.0150	2ORDR	6.0	15.0
Endrin	0.0147	0.0150	2ORDR	2.0	15.0
Endosulfan II	0.0152	0.0150	2ORDR	1.3	15.0
4,4'-DDD	0.0155	0.0150	2ORDR	3.3	15.0
Endosulfan sulfate	0.0164	0.0150	2ORDR	9.3	15.0
4,4'-DDT	0.0145	0.0150	2ORDR	3.3	15.0
Methoxychlor	0.0144	0.0150	2ORDR	4.0	15.0
Endrin ketone	0.0156	0.0150	2ORDR	4.0	15.0
Endrin aldehyde	0.0154	0.0150	2ORDR	2.7	15.0
alpha-Chlordane	0.0152	0.0150	2ORDR	1.3	15.0
gamma-Chlordane	0.0155	0.0150	2ORDR	3.3	15.0
Tetrachloro-m-xylene	0.0385	0.0375	2ORDR	2.7	15.0
Decachlorobiphenyl	0.0370	0.0375	2ORDR	1.3	15.0
Dibutylchlorendate	0.0377	0.0375	2ORDR	0.5	15.0

FORM 7
PEST-PCB CONTINUING CALIBRATION CHECK

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGKECD2 Calibration Date: 09/12/03 Time: 1028

Lab File ID: 1I12K005 Init. Calib. Date(s): 09/04/03 09/04/03

Init. Calib. Times: 1632 1802

GC Column: DB-17 ID: 0.32 (mm)

COMPOUND	SAMPLE AMOUNT	0.05 AMOUNT	CURVE	%D	MAX %d
alpha-BHC	0.0144	0.0150	2ORDR	4.0	15.0
beta-BHC	0.0155	0.0150	2ORDR	3.3	15.0
delta-BHC	0.0145	0.0150	AVRG	3.3	15.0
gamma-BHC (Lindane)	0.0149	0.0150	2ORDR	0.7	15.0
Heptachlor	0.0143	0.0150	2ORDR	4.7	15.0
Aldrin	0.0159	0.0150	2ORDR	6.0	15.0
Heptachlor epoxide	0.0143	0.0150	AVRG	4.7	15.0
Endosulfan I	0.0145	0.0150	AVRG	3.3	15.0
Dieldrin	0.0151	0.0150	2ORDR	0.7	15.0
4,4'-DDE	0.0145	0.0150	AVRG	3.3	15.0
Endrin	0.0140	0.0150	2ORDR	6.7	15.0
Endosulfan II	0.0144	0.0150	AVRG	4.0	15.0
4,4'-DDD	0.0148	0.0150	AVRG	1.3	15.0
Endosulfan sulfate	0.0150	0.0150	2ORDR	0.0	15.0
4,4'-DDT	0.0145	0.0150	2ORDR	3.3	15.0
Methoxychlor	0.0145	0.0150	2ORDR	3.3	15.0
Endrin ketone	0.0149	0.0150	2ORDR	0.7	15.0
Endrin aldehyde	0.0149	0.0150	2ORDR	0.7	15.0
alpha-Chlordane	0.0152	0.0150	2ORDR	1.3	15.0
gamma-Chlordane	0.0152	0.0150	2ORDR	1.3	15.0
Tetrachloro-m-xylene	0.0371	0.0375	2ORDR	1.1	15.0
Decachlorobiphenyl	0.0364	0.0375	2ORDR	2.9	15.0
Dibutylchlorendate	0.0372	0.0375	2ORDR	0.8	15.0

FORM 7
PEST-PCB CONTINUING CALIBRATION CHECK

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGKECD1 Calibration Date: 09/12/03 Time: 1046

Lab File ID: 1I12K006 Init. Calib. Date(s): 09/04/03 09/04/03

Init. Calib. Times: 2009 2139

GC Column: DB-5 ID: 0.32 (mm)

COMPOUND	SAMPLE AMOUNT	0.05 AMOUNT	CURVE	%D	MAX %d
Aroclor-1016	0.518	0.500	2ORDR	3.6	15.0
(2)	0.537	0.500	2ORDR	7.4	15.0
(3)	0.530	0.500	2ORDR	6.0	15.0
(4)	0.525	0.500	2ORDR	5.0	15.0
(5)	0.527	0.500	2ORDR	5.4	15.0
Aroclor-1260	0.498	0.500	2ORDR	0.4	15.0
(2)	0.492	0.500	2ORDR	1.6	15.0
(3)	0.484	0.500	2ORDR	3.2	15.0
(4)	0.476	0.500	2ORDR	4.8	15.0
(5)	0.447	0.500	2ORDR	10.6	15.0
Tetrachloro-m-xylene(#)	0.0523	0.0500	2ORDR	4.6	15.0
Decachlorobiphenyl(#)	0.0471	0.0500	2ORDR	5.8	15.0
Dibutylchlorendate(#)	0.0520	0.0500	2ORDR	4.0	15.0

FORM 7
PEST-PCB CONTINUING CALIBRATION CHECK

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGKECD2 Calibration Date: 09/12/03 Time: 1046

Lab File ID: 1I12K006 Init. Calib. Date(s): 09/04/03 09/04/03

Init. Calib. Times: 2009 2139

GC Column: DB-17 ID: 0.32 (mm)

COMPOUND	SAMPLE AMOUNT	0.05 AMOUNT	CURVE	%D	MAX %d
Aroclor-1016	0.514	0.500	2ORDR	2.8	15.0
(2)	0.510	0.500	2ORDR	2.0	15.0
(3)	0.526	0.500	2ORDR	5.2	15.0
(4)	0.526	0.500	2ORDR	5.2	15.0
(5)	0.511	0.500	2ORDR	2.2	15.0
Aroclor-1260	0.515	0.500	2ORDR	3.0	15.0
(2)	0.524	0.500	2ORDR	4.8	15.0
(3)	0.537	0.500	2ORDR	7.4	15.0
(4)	0.514	0.500	2ORDR	2.8	15.0
(5)	0.525	0.500	2ORDR	5.0	15.0
Tetrachloro-m-xylene(#)	0.0527	0.0500	2ORDR	5.4	15.0
Decachlorobiphenyl(#)	0.0516	0.0500	2ORDR	3.2	15.0
Dibutylchlorendate(#)	0.0510	0.0500	2ORDR	2.0	15.0

FORM 8
PEST-PCB ANALYTICAL SEQUENCE

Lab Name: STL TALLAHASSEE Lab Code:

Client: Project: SDG No.: JETC01

GC Column: DB-5 ID: 0.32 (mm) Init. Calib. Date(s): 09/04/03 09/04/03

Instrument ID: TSGKECD1

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT	DCB RT
01		PEM 29216	09/04/03	1546	2.90	8.55
02		60819114	09/04/03	1632	2.89	8.56
03		6082 9115	09/04/03	1650	2.90	8.56
04		6083 9116	09/04/03	1708	2.90	8.55
05		6084 9117	09/04/03	1726	2.90	8.55
06		6085 9118	09/04/03	1744	2.90	8.55
07		6086 9119	09/04/03	1802	2.90	8.55
08		TECH 9162	09/04/03	1820		
09		TOX 91611	09/04/03	1838		
10		1232 9175	09/04/03	1856		
11		1242 9176	09/04/03	1915		
12		1248 9177	09/04/03	1933		
13		2154 9178	09/04/03	1951		
14		60-1 9102	09/04/03	2009	2.90	8.56
15		60-2 9103	09/04/03	2027	2.90	8.56
16		60-3 9104	09/04/03	2045	2.90	8.56
17		60-4 9105	09/04/03	2103	2.90	8.56
18		60-5 9106	09/04/03	2121	2.90	8.55
19		60-6 9107	09/04/03	2139	2.90	8.55
20		PEM 29216	09/12/03	1010	2.90	8.55
21		6083 9114	09/12/03	1028	2.90	8.55
22		60-3 9104	09/12/03	1046	2.90	8.55
23	0911HMB	0911HMB	09/12/03	1251	2.90	8.55
24	0911HMBLCS	0911HMBLCS	09/12/03	1309	2.90	8.55
25	0911HMBLCSD	0911HMBLCSD	09/12/03	1328	2.89	8.55
26	73924-1	086-BFC-S-09	09/12/03	1433	2.89	8.56
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						

	QC LIMITS
TCX = Tetrachloro-m-xylene	(+/- 0.05 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.05 MINUTES)

FORM 8
PEST-PCB ANALYTICAL SEQUENCE

Lab Name: STL TALLAHASSEE Lab Code:

Client: Project: SDG No.: JETC01

GC Column: DB-5 ID: 0.32 (mm) Init. Calib. Date(s): 09/04/03 09/04/03

Instrument ID: TSGKECD1

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S3 RT	RT
01		PEM 29216	09/04/03	1546	7.36	
02		60819114	09/04/03	1632	7.37	
03		6082 9115	09/04/03	1650	7.36	
04		6083 9116	09/04/03	1708	7.36	
05		6084 9117	09/04/03	1726	7.36	
06		6085 9118	09/04/03	1744	7.36	
07		6086 9119	09/04/03	1802	7.36	
08		TECH 9162	09/04/03	1820		
09		TOX 91611	09/04/03	1838		
10		1232 9175	09/04/03	1856		
11		1242 9176	09/04/03	1915		
12		1248 9177	09/04/03	1933		
13		2154 9178	09/04/03	1951		
14		60-1 9102	09/04/03	2009		
15		60-2 9103	09/04/03	2027		
16		60-3 9104	09/04/03	2045		
17		60-4 9105	09/04/03	2103		
18		60-5 9106	09/04/03	2121		
19		60-6 9107	09/04/03	2139		
20		PEM 29216	09/12/03	1010	7.36	
21		6083 9114	09/12/03	1028	7.36	
22		60-3 9104	09/12/03	1046		
23	0911HMB	0911HMB	09/12/03	1251	7.36	
24	0911HMBLCS	0911HMBLCS	09/12/03	1309	7.36	
25	0911HMBLCSD	0911HMBLCSD	09/12/03	1328	7.36	
26	73924-1	086-BFC-S-09	09/12/03	1433	7.36	
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						

S3 = Dibutylchlorendate

QC LIMITS
(+/- 0.05 MINUTES)

FORM VIII PEST-PCB

FORM 8
PEST-PCB ANALYTICAL SEQUENCE

Lab Name: STL TALLAHASSEE Lab Code:

Client: Project: SDG No.: JETC01

GC Column: DB-17 ID: 0.32 (mm) Init. Calib. Date(s): 09/02/03 09/04/03

Instrument ID: TSGKECD2

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT	DCB RT
01		PEM 29216	09/04/03	1546	3.23	9.46
02		60819114	09/04/03	1632	3.22	9.46
03		6082 9115	09/04/03	1650	3.23	9.46
04		6083 9116	09/04/03	1708	3.23	9.45
05		6084 9117	09/04/03	1726	3.23	9.45
06		6085 9118	09/04/03	1744	3.24	9.45
07		6086 9119	09/04/03	1802	3.23	9.45
08		TECH 9162	09/04/03	1820		
09		TOX 91611	09/04/03	1838		
10		1232 9175	09/04/03	1857		
11		1242 9176	09/04/03	1915		
12		1248 9177	09/04/03	1933		
13		2154 9178	09/04/03	1951		
14		60-1 9102	09/04/03	2009	3.24	9.46
15		60-2 9103	09/04/03	2027	3.23	9.45
16		60-3 9104	09/04/03	2045	3.23	9.45
17		60-4 9105	09/04/03	2103	3.24	9.45
18		60-5 9106	09/04/03	2121	3.24	9.45
19		60-6 9107	09/04/03	2139	3.24	9.45
20		PEM 29216	09/12/03	1010	3.23	9.45
21		6083 9114	09/12/03	1028	3.23	9.45
22		60-3 9104	09/12/03	1046	3.23	9.45
23	0911HMB	0911HMB	09/12/03	1251	3.23	9.45
24	0911HMBLCS	0911HMBLCS	09/12/03	1309	3.23	9.45
25	0911HMBLCSD	0911HMBLCSD	09/12/03	1328	3.23	9.45
26	73924-1	086-BFC-S-09	09/12/03	1433	3.22	9.45
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						

	QC LIMITS
TCX = Tetrachloro-m-xylene	(+/- 0.05 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.05 MINUTES)

FORM 8
PEST-PCB ANALYTICAL SEQUENCE

Lab Name: STL TALLAHASSEE Lab Code:

Client: Project: SDG No.: JETC01

GC Column: DB-17 ID: 0.32 (mm) Init. Calib. Date(s): 09/02/03 09/04/03

Instrument ID: TSGKECD2

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S3 RT	RT
01		PEM 29216	09/04/03	1546	7.77	
02		60819114	09/04/03	1632	7.77	
03		6082 9115	09/04/03	1650	7.77	
04		6083 9116	09/04/03	1708	7.77	
05		6084 9117	09/04/03	1726	7.77	
06		6085 9118	09/04/03	1744	7.77	
07		6086 9119	09/04/03	1802	7.77	
08		TECH 9162	09/04/03	1820		
09		TOX 91611	09/04/03	1838		
10		1232 9175	09/04/03	1857		
11		1242 9176	09/04/03	1915		
12		1248 9177	09/04/03	1933		
13		2154 9178	09/04/03	1951		
14		60-1 9102	09/04/03	2009		
15		60-2 9103	09/04/03	2027		
16		60-3 9104	09/04/03	2045		
17		60-4 9105	09/04/03	2103		
18		60-5 9106	09/04/03	2121		
19		60-6 9107	09/04/03	2139		
20		PEM 29216	09/12/03	1010	7.77	
21		6083 9114	09/12/03	1028	7.77	
22		60-3 9104	09/12/03	1046		
23	0911HMB	0911HMB	09/12/03	1251	7.77	
24	0911HMBLCS	0911HMBLCS	09/12/03	1309	7.77	
25	0911HMBLCSD	0911HMBLCSD	09/12/03	1328	7.77	
26	73924-1	086-BFC-S-09	09/12/03	1433	7.77	
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						

S3 = Dibutylchlorendate

QC LIMITS
(+/- 0.05 MINUTES)

FORM VIII PEST-PCB

FORM 8
PEST-PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Lab File ID (Standard): 1I12K006 Date Analyzed: 09/12/03

Instrument ID: TSGKECD1 Time Analyzed: 1046

		IS1 AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	47050	1.71				
	UPPER LIMIT	70575	1.76				
	LOWER LIMIT	23525	1.66				
	CLIENT SAMPLE NO.						
01	0911HMB	47180	1.71				
02	0911HMBLCS	44649	1.71				
03	0911HMBLCSD	45092	1.70				
04	73924-1	41982	1.70				
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = 1-Bromo-2-nitrobenzene

AREA UPPER LIMIT = + 50% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.05 minutes of internal standard RT
RT LOWER LIMIT = - 0.05 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
PEST-PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Lab File ID (Standard): 1I12K006 Date Analyzed: 09/12/03

Instrument ID: TSGKECD2 Time Analyzed: 1046

		IS1 AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	17163	2.33				
	UPPER LIMIT	25745	2.38				
	LOWER LIMIT	8582	2.28				
	CLIENT SAMPLE NO.						
01	0911HMB	16465	2.33				
02	0911HMBLCS	17197	2.33				
03	0911HMBLCSD	17354	2.32				
04	73924-1	16448	2.31				
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = 1-Bromo-2-nitrobenzene

AREA UPPER LIMIT = + 50% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.05 minutes of internal standard RT
RT LOWER LIMIT = - 0.05 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

EXTRACTION LOG(S)

EXTRACTION LOG

Job No: 279 11

Batch No: SG091103H

Date Extracted: 09.10.03

Start Time: 1030 AM

Stop Time: 1130 AM

Analysis Required: 8081/8082

Prep Method: 3550

Analyst/Activity Code*: BE/A,B,S,D

Initial Project Check: BE

Final Project Check: AN

Date Concentrated: 9-16-03

Initials: DK

Extract Box ID:

	ID	Lot #	Amt (ml)	Init
Surr.	8081	6.3.71.2	1.0	BE
Surr.				
Spike	8080	6.3.70.8	1.0	BE
Spike				

Clean Up: Yes No

Comments

Solvent(s) Lot No:

1:1 HEX/ACE: AN.A28.0038.17

Na_2SO_4 POWD: X44144

Na_2SO_4 GRAN: Y02631

HEX: Y16F2L

* See inside front cover of logbook for definition codes

SAMPLE ID/DESCRIPTION	SDG	MT	Amt Exc'd	PH I	PH F	FV (ml)	D.D.	H.D.	COMMENTS
1. T373661*18*R/3B-2*	WRG061	SS	17.16			5.0	09.08	09.01	R|
2. T373662*2*R/2D-2*	WRG060	SS	30.0			10.0	09.08	09.02	R|
3. T373662*6*R/3E-2*	WRG060	SS	20.0			5.0	09.08	09.02	R|
4. T373662*7*R/3E-3*	WRG060	SS	30.0			10.0	09.08	09.02	R|
5. T373924*1/086-BFC-S-0904-03*	JETC01	SS	30.0				09.12	09.18	RP|
6. T373659*9 2A-1		SS	0.90						
7.									
8.									
9.									
10.									
11.									
12.									
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									
Lab Blank		SS	30.0			10.0			
Lab Spike #1		SS	30.0						
Lab Spike #2		SS	30.0						
MS: T373662 R/3E-3		SS							
MSD: T373662 R/3E-3		SS							

AN 9-15-03

Dets: (-)Organochlorine Pesticides <8081> |TCL - Pesticides/PCB's <8081/8082>|

+ Additional Dets:

0193

ANALYSIS LOG(S)

SAMPLE INFORMATION SUMMARY

Client SDG: JETC01 Sample Fraction: PEST-PCB

QCGroup	Batch	DataFile	Sample Type	Client Id	Lab ID	SmplRef	Lab Prep	SDG
712624	1K0904.b	1I04K011.D	PEM		PEM 29216	712623		
712624	1K0904.b	1I04K012.D	CALIB_1		60819114	4705933		
712624	1K0904.b	1I04K013.D	CALIB_2		6082 9115	4705934		
712624	1K0904.b	1I04K014.D	CALIB_3		6083 9116	4705935		
712624	1K0904.b	1I04K015.D	CALIB_4		6084 9117	4705936		
712624	1K0904.b	1I04K016.D	CALIB_5		6085 9118	4705937		
712624	1K0904.b	1I04K017.D	CALIB_6		6086 9119	4705938		
712624	1K0904.b	1I04K018.D	CALIB_3		TECH 9162	4705939		
712624	1K0904.b	1I04K019.D	CALIB_3		TOX 91611	4705940		
712624	1K0904.b	1I04K020.D	CALIB_3		1232 9175	4705941		
712624	1K0904.b	1I04K021.D	CALIB_3		1242 9176	4705942		
712624	1K0904.b	1I04K022.D	CALIB_3		1248 9177	4705943		
712624	1K0904.b	1I04K023.D	CALIB_3		2154 9178	4705944		
712624	1K0904.b	1I04K024.D	CALIB_1		60-1 9102	4705945		
712624	1K0904.b	1I04K025.D	CALIB_2		60-2 9103	4705946		
712624	1K0904.b	1I04K026.D	CALIB_3		60-3 9104	4705947		
712624	1K0904.b	1I04K027.D	CALIB_4		60-4 9105	4705948		
712624	1K0904.b	1I04K028.D	CALIB_5		60-5 9106	4705949		
712624	1K0904.b	1I04K029.D	CALIB_6		60-6 9107	1106822		
712629	1K0904.b	1I04K011.D	PEM		PEM 29216	712628		
712629	1K0904.b	1I04K012.D	CALIB_1		60819114	4705969		
712629	1K0904.b	1I04K013.D	CALIB_2		6082 9115	4705970		
712629	1K0904.b	1I04K014.D	CALIB_3		6083 9116	4705971		
712629	1K0904.b	1I04K015.D	CALIB_4		6084 9117	4705972		
712629	1K0904.b	1I04K016.D	CALIB_5		6085 9118	4705973		
712629	1K0904.b	1I04K017.D	CALIB_6		6086 9119	4705974		
712629	1K0904.b	1I04K018.D	CALIB_3		TECH 9162	4705975		
712629	1K0904.b	1I04K019.D	CALIB_3		TOX 91611	4705976		
712629	1K0904.b	1I04K020.D	CALIB_3		1232 9175	4705977		
712629	1K0904.b	1I04K021.D	CALIB_3		1242 9176	4705978		
712629	1K0904.b	1I04K022.D	CALIB_3		1248 9177	4705979		
712629	1K0904.b	1I04K023.D	CALIB_3		2154 9178	4705980		
712629	1K0904.b	1I04K024.D	CALIB_1		60-1 9102	4705981		
712629	1K0904.b	1I04K025.D	CALIB_2		60-2 9103	4705982		
712629	1K0904.b	1I04K026.D	CALIB_3		60-3 9104	4705983		
712629	1K0904.b	1I04K027.D	CALIB_4		60-4 9105	4705984		
712629	1K0904.b	1I04K028.D	CALIB_5		60-5 9106	4705985		
712629	1K0904.b	1I04K029.D	CALIB_6		60-6 9107	4705986		
713590	1K0912.b	1I12K004.D	PEM		PEM 29216	4801091		
713590	1K0912.b	1I12K005.D	CCALIB_3		6083 9114	4801092		
713590	1K0912.b	1I12K006.D	CCALIB_3		60-3 9104	4801093		
713590	1K0912.b	1I12K010.D	BLANK	0911HMB	0911HMB	713595	SG091103H	JETC01
713590	1K0912.b	1I12K011.D	LCS	0911HMBLCS	0911HMBLCS	713596	SG091103H	JETC01
713590	1K0312.b	1I12K012.D	LCSD	0911HMBLCSD	0911HMBLCSD	713597	SG091103H	JETC01
713590	1K0912.b	1I12K015.D	SAMPLE	73924-1	086-BFC-S-0904-0	4707258	SG091103H	JETC01
713580	1K0912.b	1I12K004.D	PEM		PEM 29216	4801088		
713580	1K0912.b	1I12K005.D	CCALIB_3		6083 9114	4801089		
713580	1K0912.b	1I12K006.D	CCALIB_3		60-3 9104	4801090		
713580	1K0912.b	1I12K010.D	BLANK	0911HMB	0911HMB	713604	SG091103H	JETC01
713580	1K0912.b	1I12K011.D	LCS	0911HMBLCS	0911HMBLCS	713605	SG091103H	JETC01
713580	1K0912.b	1I12K012.D	LCSD	0911HMBLCSD	0911HMBLCSD	713606	SG091103H	JETC01

QCGroup	Batch	DataFile	Sample Type	Client Id	Lab ID	SmplRef	Lab Prep	SDG
713580	1K0912.b	1I12K015.D	SAMPLE	73924-1	086-BFC-S-0904-0	4707261	SG091103H	JETC01

Sequence: C:\HPCHEM\1\SEQUENCE\1I04K.S

Sequence Table (Front Injector):

Quantification Part:

Line	Vial	SampleName	SampleAmount	ISTDAmt	Multiplier	Dilution
1	99	HEX ~1K0904				
2	99	HEX ~1K0904				
3	96	PRIM~1K0904				
4	97	PRIM~1K0904				
5	98	PRIM~1K0904				
6	99	HEX ~1K0904				
7	96	PRIM~1K0904				
8	97	PRIM~1K0904				
9	98	PRIM~1K0904				
10	99	HEX ~1K0904				
11	100	PEM 29216~1K0906				
12	1	60819114~1K0904				
13	2	6082 9115~1K0904				
14	3	6083 9116~1K0904				
15	4	6084 9117~1K0904				
16	5	6085 9118~1K0904				
17	6	6086 9119~1K0904				
18	7	TECH 9162~1K0904				
19	8	TOX 91611~1K0904				
20	9	1232 9175~1K0904				
21	10	1242 9176~1K0904				
22	11	1248 9177~1K0904				
23	12	2154 9178~1K0904				
24	13	60-1 9102~1K0904				
25	14	60-2 9103~1K0904				
26	15	60-3 9104~1K0904				
27	16	60-4 9105~1K0904				
28	17	60-5 9106~1K0904				
29	18	60-6 9107~1K0904				

Sequence Table (Back Injector):

No entries - empty table!

Sequence: C:\HPCHEM\1\SEQUENCE\1I12K.S

Sequence Table (Front Injector):

Quantification Part:

Line	Vial	SampleName	SampleAmount	ISTDAmt	Multiplier	Dilution
1	97	PRIM~1K0912				
2	98	PRIM~1K0912				
3	99	HEX ~1K0912				
4	100	PEM 29216~1K0912				
5	1	6083 9114~1K0912				
6	2	60-3 9104~1K0912				
7	3	73903-3~1K0912~F				
8	4	73903-2~1K0912~F				10
9	5	73903-2~1K0912~F				20
10	6	0911HMB~1K0912~				
11	7	0911HLCS~1K0912				
12	8	0911HLCD~1K0912				
13	9	73662-7~1K0912~M				
14	10	73662-7~1K0912~M				
15	11	73924-1~1K0912				
16	12	0910NMB~1K0912~A				
17	13	0910NLCS~1K0912				
18	14	0910NLCSD~1K0912				
19	15	0910NMS~1K0912				
20	16	0910NMSD~1K0912				
21	17	73925-1`1K0912				
22	1	6083 9114~1K0912				
23	2	60-3 9104~1K0912				

Sequence Table (Back Injector):

No entries - empty table!

PETROLEUM RANGE ORGANICS

Method FL-PRO

CASE NARRATIVE
GC PETROLEUM RANGE ORGANICS

STL Lab Reference No. / SDG: JETC01

Project: JETC and Building 271/0103-329-09

RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

METHOD

Preparation: FL-PRO
Cleanup: N/A
Analysis: FL-PRO

PREPARATION

Sample preparation proceeded normally.

ANALYSIS

Calibration: All acceptance criteria were met

Blanks: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Spikes: The Matrix Spikes were not recovered due to a sample dilution that was required prior to analysis.

Samples: No analytical or quality problems were observed.

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

SIGNED: _____ DATE: 9/24/03

Timothy Preston
Project Manager

CASE NARRATIVE

FORMS

FORM 1
FL PRO ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

73924-1

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: 086-BFC-S-0904-03

Sample wt/vol: 30 (g/mL) G Lab File ID: 1I12H22

Level: (low/med) LOW Date Received: 09/06/03

% Moisture: 9 decanted: (Y/N) N Date Extracted: 09/10/03

Concentrated Extract Volume: 2 (mL) Date Analyzed: 09/12/03

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
68334-30-5------	FLPROTPH	16	

FORM I FL PRO

FORM 1
FL PRO ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

0910JMB

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: 0910JMB

Sample wt/vol: 30 (g/mL) G Lab File ID: 1I12H17

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted:09/10/03

Concentrated Extract Volume: 2(mL) Date Analyzed: 09/12/03

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
68334-30-5	FLPROTPH	10	U

FORM I FL PRO

FORM 1
FL PRO ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

0910JLCS

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: 0910JLCS

Sample wt/vol: 30 (g/mL) G Lab File ID: 1I12H18

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/10/03

Concentrated Extract Volume: 2 (mL) Date Analyzed: 09/12/03

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
68334-30-5------	FLPROTPH	38	

FORM I FL PRO

FORM 1
FL PRO ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

0910JLCSD

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: 0910JLCSD

Sample wt/vol: 30 (g/mL) G Lab File ID: 1I12H19

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/10/03

Concentrated Extract Volume: 2 (mL) Date Analyzed: 09/12/03

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
68334-30-5	FLPROTPH	46	

FORM I FL PRO

FORM 2
SOIL FL PRO SURROGATE RECOVERY

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Level: (low/med) LOW

	CLIENT SAMPLE NO.	S1 (OTP) #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	0910JMB	48	37							0
02	0910JLCS	42	37							0
03	0910JLCSD	54	45							0
04	73924-1	55	46							0
05										
06										
07										
08										
09										
10										
11										
12										
13										
14										
15										
16										
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19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

		QC LIMITS
S1 (OTP)	= o-Terphenyl	(15-154)
S2	= C39	(30-118)

Column to be used to flag recovery values
* Values outside of laboratory QC limits
D Sample diluted

FORM 3
SOIL FL PRO LAB CONTROL SAMPLE

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix Spike - Sample No.: 0910JLCS Level:(low/med) LOW

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONC (ug/Kg)	LCS CONC (mg/Kg)	LCS % REC#	QC. LIMITS REC.
FLPROTPH	91		38	42	26-116

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONC (mg/Kg)	LCSD % REC#	AVG % REC	% RPD$#	QC LIMITS RPD	QC LIMITS REC.
FLPROTPH	91	46	50	46	19	25	26-116

$ %RPD calculated using the spike and spike duplicate concentrations as per SW846 8000B

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS: _____

FORM III FL PRO

FORM 4
FL PRO METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

0910JMB

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Lab File ID: 1I12H17 Lab Sample ID: 0910JMB

Instrument ID: TSGHFID1 Date Extracted: 09/10/03

Matrix: (soil/water) SOIL Date Analyzed: 09/12/03

Level:(low/med) LOW Time Analyzed: 1110

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	0910JLCS	0910JLCS	1I12H18	09/12/03
02	0910JLCSD	0910JLCSD	1I12H19	09/12/03
03	73924-1	086-BFC-S-0904	1I12H22	09/12/03
04				
05				
06				
07				
08				
09				
10				
11				
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30				

COMMENTS:

FORM IV FL PRO

FORM 6
FL PRO INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGHFID1 Calibration Date(s): 09/12/03 09/12/03

Column: RTX-5 ID: 0.25 (mm) Calibration Time(s): 0840 1018

LAB FILE ID: RF0.136: 1I12H8 RF0.425: 1I12H13 RF0.85: 1I12H12
RF1.275: 1I12H5 RF2.55: 1I12H4

COMPOUND	RF0.136	RF0.425	RF0.85	RF1.275	RF2.55
FLPROTPH	1876375	1336635	1993634	1866112	1809775
o-Terphenyl	2026130	1443230	2218310	2187420	2034510
C39	1729150	1232050	1936570	1893800	1765920

FORM VI FL PRO

FORM 6
FL PRO INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGHFID1 Calibration Date(s): 09/12/03 09/12/03

Column: RTX-5 ID: 0.25 (mm) Calibration Time(s): 0840 1018

RF5.1: 1I12H11

COMPOUND	RF5.1	CURVE	AVE RRF A1	%RSD or R^2
FLPROTPH	1948413	AVRG	1805157	13.2
o-Terphenyl		AVRG	1981920	15.8
C39	1987060	AVRG	1757425	15.7

FORM VI FL PRO

FORM 7
FL PRO CONTINUING CALIBRATION CHECK

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSGHFID1 Calibration Date: 09/12/03 Time: 1348

Lab File ID: 1I12H31 Init. Calib. Date(s): 09/12/03 09/12/03

Init. Calib. Times: 0840 1018

GC Column: RTX-5 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 0.85	MIN RRF	%D	MAX %D
FLPROTPH	1805157.4	1621585.9	0.01	10.2	25.0
o-Terphenyl	1981920.0	1795350.0	0.01	9.4	25.0
C39	1757425.0	1588790.0	0.01	9.6	25.0

FORM 8
FL PRO ANALYTICAL SEQUENCE

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

GC Column: RTX-5 ID: 0.25 (mm) Init. Calib. Date(s): 09/12/03 09/12/03

Instrument ID: TSGHFID1

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	S2 RT
01	2-9-14.1	FPRO5-14.1	09/12/03	0840	0.95	3.14
02	2-9-13.10	FPRO4-13.10	09/12/03	0850	0.95	3.14
03	2-9-13.7	FPRO1-13.7	09/12/03	0920	0.95	3.13
04	2-9-14.2	FPRO6-14.2	09/12/03	0958	0.95	3.15
05	2-9-13.9	FPRO3-13.9	09/12/03	1008	0.96	3.14
06	2-9-13.8	FPRO2-13.8	09/12/03	1018	0.95	3.14
07	0910JMB	0910JMB	09/12/03	1110	0.95	3.11
08	0910JLCS	0910JLCS	09/12/03	1120	0.95	3.13
09	0910JLCSD	0910JLCSD	09/12/03	1130	0.95	3.14
10	73924-1	086-BFC-S-09	09/12/03	1200	0.96	3.10
11		FPRO3-13.9	09/12/03	1348	0.96	3.16
12						
13						
14						
15						
16						
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18						
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34						
35						
36						

	QC LIMITS
S1 = o-Terphenyl	(+/- 0.02 MINUTES)
S2 = C39	(+/- 0.06 MINUTES)

EXTRACTION LOG(S)

EXTRACTION LOG

9

Job No: 280

Batch No: SG091003 J

Date Extracted: 09.10.03

Start Time: 2 pm

Stop Time: 4 pm

Analysis Required: FL PRO

Prep Method: 3550 SGT

Analyst/Activity Code*: BE / A,B,S,D

Initial Project Check: BE

Final Project Check: JCB

Date Concentrated: 9-11-03

Initials: DK

Extract Box ID:

	ID	Lot #	Amt (ml)	Init.
Surr.	PRO	63.70.17	2.0	BE
Surr.				
Spike	PRO	63.71.8	2.0	BE
Spike				

Clean Up: Yes No

Comments

Solvent(s) Lot No:

$MeCl_2$: Y17E34 ~~X44144~~

Na_2SO_4 POWD: ~~Y02L67~~ BE 10-3

Na_2SO_4 GRAN: Y02L31

S:1 Gel: Y3126324

CS_2: T25426

* See inside front cover of logbook for definition codes

SAMPLE ID/DESCRIPTION	SDG	MT	Amt Exc'd	PH I	PH F	FV (ml)	D.O	H.D	COMMENTS
1. T373922*1/B-4 (18-19')*		SS	30.0			2.0	09.15	09.19	
2. T373949*1/S001*		SS	↓			2.0	09.17	09.23	
3. T373949*2/S002*		SS	↓			2.0	09.17	09.23	
4. T373924*1/086-BFC-S-0904-03*	JETC01	SS	↓			2.0	09.12	09.18	RP|
5.									
6.									
7.									
8.									
9.									
10.									
11.									
12.									
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									
Lab Blank		SS	30.0			2.0			
Lab Spike #1		SS	30.0			↓			
Lab Spike #2		SS	30.0						
MS: T373922 B4 (18-19')		SS	↓						
MSD: ↓ ↓		SS	↓						

JCB 9-16-03

Dets: Petroleum Range Organics <FL-PRO>|

+ Additional Dets:

0215

ANALYSIS LOG(S)

SAMPLE INFORMATION SUMMARY

Client SDG: JETC01 Sample Fraction: FL PRO

QCGroup	Batch	DataFile	Sample Type	Client Id	Lab ID	SmplRef	Lab Prep	SDG
4110414	1H0912.b	1I12H4.d	CALIB_5	2-9-14.1	FPRO5-14.1	4110409		
4110414	1H0912.b	1I12H5.d	CALIB_4	2-9-13.10	FPRO4-13.10	4110410		
4110414	1H0912.b	1I12H8.d	CALIB_1	2-9-13.7	FPRO1-13.7	4110413		
4110414	1H0912.b	1I12H11.d	CALIB_6	2-9-14.2	FPRO6-14.2	4110418		
4110414	1H0912.b	1I12H12.d	CALIB_3	2-9-13.9	FPRO3-13.9	4110419		
4110414	1H0912.b	1I12H13.d	CALIB_2	2-9-13.8	FPRO2-13.8	4110420		
4110414	1H0912.b	1I12H31.d	CCALIB_3		FPRO3-13.9	4110469		
4110414	1H0912.b	1I12H17.d	BLANK	0910JMB	0910JMB	4110438	SG091003J	JETC01
4110414	1H0912.b	1I12H18.d	LCS	0910JLCS	0910JLCS	4110447	SG091003J	JETC01
4110414	1H0912.b	1I12H19.d	LCSD	0910JLCSD	0910JLCSD	4110444	SG091003J	JETC01
4110414	1H0912.b	1I12H22.d	SAMPLE	73924-1	086-BFC-S-0904-0	4110451	SG091003J	JETC01

SEQUENCE FILE: 1I12H

	SAMPLE NAME	METHOD NAME	DATA FILE	AMOUNT INJECTED	INT.STD. AMOUNT	DILUTION FACTOR	SAMPLE WEIGHT
1	RINSE ~ 1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
2	RINSE ~ 1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
3	FPR06-14.2 ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
4	FPR05-14.1 ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
5	FPR04-13.10~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
6	FPR03-13.9 ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
7	FPR02-13.8 ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
8	FPR01-13.7 ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
9	FRINSE ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
10	CRINCE ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
11	FPR06-14.2~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
12	FPR03-13.9~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
13	FPR02-13.8~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
14	FRINSE ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
15	CHKSTD-14.3~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
16	CRINSE ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
17	0910JMB ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
18	0910JLCS ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
19	0910JLCSD ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
20	73922-1~1H0912	EZFL	1I12H	1.0000	1.0000	10.0000	1.0000
21	7RINSE ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
22	73924-1~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
23	73922-1~1H0912	EZFL	1I12H	1.0000	1.0000	30.0000	1.0000
24	73922-1~1H0912~MS	EZFL	1I12H	1.0000	1.0000	30.0000	1.0000
25	73922-1~1H0912~MSD	EZFL	1I12H	1.0000	1.0000	30.0000	1.0000
26	7RINSE ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
27	73949-1~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
28	73949-2~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
29	7RINSE ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
30	7RINSE ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
31	FPR03-13.9~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
32	FRINSE ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
33	0908BMB ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
34	0908BLCS ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
35	0908BLCSD ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
36	73909-1~1H0912~MS	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
37	73909-1~1H0912~MSD	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
38	73882-1 ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
39	73882-2 ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
40	73882-3 ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
41	73882-4 ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
42	73909-1 ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
43	7RINSE ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
44	7RINSE ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
45	FPR03-13.9~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
46	FPR03-13.9~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
47	FRINSE ~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
48	FPR03-13.9~1H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
49	FRINSE ~2H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
50	FPR06-14.2~2H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
51	FPR05-14.1~2H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
52	FPR04-13.10~2H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
53	FPR03-13.9 ~2H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
54	FPR02-13.8 ~2H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
55	FPR01-13.7 ~2H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
56	FRINSE ~2H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
57	CHKSTD-14.3~2H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
58	CRINSE ~2H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
59	0908BMB ~2H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000

61	0908BLCSD ~2H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
62	73909-1~2H0912~MS	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
63	73909-1~2H0912~MSD	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
64	73909-1~2H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
65	73882-1~2H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
66	73882-2~2H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
67	73882-3~2H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
68	73882-4~2H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
69	7RINSE ~2H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
70	7RINSE ~2H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000
71	FPR03-13.9~2H0912	EZFL	1I12H	1.0000	1.0000	1.0000	1.0000

POLYNUCLEAR AROMATIC HYDROCARBONS
Method 8270

CASE NARRATIVE

CASE NARRATIVE
GC/MS POLYNUCLEAR AROMATICS

STL Lab Reference No. / SDG: JETC01

Project: JETC and Building 271/0103-329-09

RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

METHOD

Preparation: SW-846 3550
Cleanup: N/A
Analysis: SW-846 8270

PREPARATION

Sample preparation proceeded normally.

ANALYSIS

Calibration: All acceptance criteria were met

Blanks: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Spikes: The Matrix Spikes were not recovered due to a sample dilution that was required prior to analysis.

Samples: No analytical or quality problems were observed.

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

SIGNED: _____ DATE: 9/24/03

Timothy Preston
Project Manager

FORMS

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

73924-1

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: 086-BFC-S-0904-03

Sample wt/vol: 30 (g/mL) G Lab File ID: C3091207

Level: (low/med) LOW Date Received: 09/06/03

% Moisture: 9 decanted: (Y/N) N Date Extracted: 09/10/03

Concentrated Extract Volume: 1.0 (mL) Date Analyzed: 09/12/03

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	Naphthalene	7.4	U
91-57-6	2-Methylnaphthalene	7.4	U
90-12-0	1-Methylnaphthalene	7.4	U
208-96-8	Acenaphthylene	7.4	U
83-32-9	Acenaphthene	7.4	U
86-73-7	Fluorene	7.4	U
85-01-8	Phenanthrene	7.4	U
120-12-7	Anthracene	7.4	U
206-44-0	Fluoranthene	7.4	U
129-00-0	Pyrene	7.4	U
56-55-3	Benzo(a)anthracene	7.4	U
218-01-9	Chrysene	7.4	U
205-99-2	Benzo(b)fluoranthene	7.4	U
207-08-9	Benzo(k)fluoranthene	7.4	U
50-32-8	Benzo(a)pyrene	7.4	U
193-39-5	Indeno(1,2,3-cd)pyrene	7.4	U
53-70-3	Dibenzo(a,h)anthracene	7.4	U
191-24-2	Benzo(g,h,i)perylene	7.4	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SM091003LLB

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: SM091003LLB

Sample wt/vol: 30 (g/mL) G Lab File ID: C3091204

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/10/03

Concentrated Extract Volume: 1.0 (mL) Date Analyzed: 09/12/03

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	Naphthalene	6.7	U
91-57-6	2-Methylnaphthalene	6.7	U
90-12-0	1-Methylnaphthalene	6.7	U
208-96-8	Acenaphthylene	6.7	U
83-32-9	Acenaphthene	6.7	U
86-73-7	Fluorene	6.7	U
85-01-8	Phenanthrene	6.7	U
120-12-7	Anthracene	6.7	U
206-44-0	Fluoranthene	6.7	U
129-00-0	Pyrene	6.7	U
56-55-3	Benzo(a)anthracene	6.7	U
218-01-9	Chrysene	6.7	U
205-99-2	Benzo(b)fluoranthene	6.7	U
207-08-9	Benzo(k)fluoranthene	6.7	U
50-32-8	Benzo(a)pyrene	6.7	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.7	U
53-70-3	Dibenzo(a,h)anthracene	6.7	U
191-24-2	Benzo(g,h,i)perylene	6.7	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SM091003LLBLCS

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: SM091003LLBLCS

Sample wt/vol: 30 (g/mL) G Lab File ID: C3091205

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/10/03

Concentrated Extract Volume: 1.0 (mL) Date Analyzed: 09/12/03

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	Naphthalene	76	
91-57-6	2-Methylnaphthalene	75	
90-12-0	1-Methylnaphthalene	76	
208-96-8	Acenaphthylene	82	
83-32-9	Acenaphthene	79	
86-73-7	Fluorene	77	
85-01-8	Phenanthrene	86	
120-12-7	Anthracene	78	
206-44-0	Fluoranthene	82	
129-00-0	Pyrene	84	
56-55-3	Benzo(a)anthracene	83	
218-01-9	Chrysene	86	
205-99-2	Benzo(b)fluoranthene	70	
207-08-9	Benzo(k)fluoranthene	84	
50-32-8	Benzo(a)pyrene	71	
193-39-5	Indeno(1,2,3-cd)pyrene	83	
53-70-3	Dibenzo(a,h)anthracene	78	
191-24-2	Benzo(g,h,i)perylene	86	

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SM091003LLBLCSD

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: SM091003LLBLCSD

Sample wt/vol: 30 (g/mL) G Lab File ID: C3091206

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/10/03

Concentrated Extract Volume: 1.0 (mL) Date Analyzed: 09/12/03

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	Naphthalene	75	
91-57-6	2-Methylnaphthalene	76	
90-12-0	1-Methylnaphthalene	77	
208-96-8	Acenaphthylene	84	
83-32-9	Acenaphthene	82	
86-73-7	Fluorene	82	
85-01-8	Phenanthrene	91	
120-12-7	Anthracene	82	
206-44-0	Fluoranthene	89	
129-00-0	Pyrene	91	
56-55-3	Benzo(a)anthracene	87	
218-01-9	Chrysene	90	
205-99-2	Benzo(b)fluoranthene	77	
207-08-9	Benzo(k)fluoranthene	84	
50-32-8	Benzo(a)pyrene	73	
193-39-5	Indeno(1,2,3-cd)pyrene	85	
53-70-3	Dibenzo(a,h)anthracene	79	
191-24-2	Benzo(g,h,i)perylene	89	

FORM 2
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Level: (low/med) LOW

	CLIENT SAMPLE NO.	S1 (OTP) #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	SM091003LLB	48								0
02	SM091003LLBL	67								0
03	SM091003LLBL	73								0
04	73924-1	67								0
05										
06										
07										
08										
09										
10										
11										
12										
13										
14										
15										
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26										
27										
28										
29										
30										

S1 (OTP) = o-Terphenyl QC LIMITS (30-130)

Column to be used to flag recovery values
* Values outside of laboratory QC limits
D Sample diluted

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix Spike - Sample No.: SM091003LLB Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONC (ug/Kg)	LCS CONC (ug/Kg)	LCS % REC#	QC. LIMITS REC.
Acenaphthene	130	0.00	79	61	18-123
Benzo(a)pyrene	130	0.00	71	55	41-142
Fluorene	130	0.00	77	59	27-151
Naphthalene	130	0.00	76	58	25-131
Pyrene	130	0.00	84	65	10-133

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONC (ug/Kg)	LCSD % REC#	AVG % REC	% RPD$#	QC LIMITS RPD	QC LIMITS REC.
Acenaphthene	130	82	63	62	3.7	49	18-123
Benzo(a)pyrene	130	73	56	56	2.8	55	41-142
Fluorene	130	82	63	61	6.3	50	27-151
Naphthalene	130	75	58	58	1.3	34	25-131
Pyrene	130	91	70	68	8.0	42	10-133

$ %RPD calculated using the spike and spike duplicate concentrations as per SW846 8000B

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

FORM III SV

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

SM091003LLB

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Lab File ID: C3091204 Lab Sample ID: SM091003LLB

Instrument ID: TSMC5973 Date Extracted: 09/10/03

Matrix: (soil/water) SOIL Date Analyzed: 09/12/03

Level: (low/med) LOW Time Analyzed: 0901

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SM091003LLBL	SM091003LLBLCS	C3091205	09/12/03
02	SM091003LLBL	SM091003LLBLCS	C3091206	09/12/03
03	73924-1	086-BFC-S-0904	C3091207	09/12/03
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
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28				
29				
30				

COMMENTS:

FORM IV SV

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Lab File ID: C3082210 DFTPP Injection Date: 08/22/03

Instrument ID: TSMC5973 DFTPP Injection Time: 1110

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 442	27.8
68	Less than 2.0% of mass 69	0.2 (0.7)1
69	Mass 69 relative abundance	34.8
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	10.0 - 80.0% of mass 198	45.4 (53.9)2
197	Less than 2.0% of mass 198	0.0 (0.0)2
198	Greater than 50.0% of mass 442	84.1
199	5.0 to 9.0% of mass 198	5.7 (6.8)2
275	10.0 - 60.0% of mass 442	22.9
365	Greater than 1.0% of mass 442	3.16
441	Less than 100.0% of mass 443	14.3 (74.6)3
442	Base Peak, 100% relative abundance	100.0
443	15.0 - 24.0% of mass 442	19.2

1-Value is % mass 69 2-Value is % mass 198
3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	PAH0.2	PAH0.2	C3082211	08/22/03	1125
02	PAH2.5	PAH2.5	C3082212	08/22/03	1141
03	PAH5.0	PAH5.0	C3082213	08/22/03	1156
04	PAH10	PAH10	C3082214	08/22/03	1211
05	PAH12.5	PAH12.5	C3082215	08/22/03	1227
06	PAH15	PAH15	C3082216	08/22/03	1242
07	PAH17.5	PAH17.5	C3082217	08/22/03	1258
08	PAH20.0	PAH20.0	C3082218	08/22/03	1313
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Lab File ID: C3091201 DFTPP Injection Date: 09/12/03

Instrument ID: TSMC5973 DFTPP Injection Time: 0818

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 442	32.5
68	Less than 2.0% of mass 69	0.2 (0.5)1
69	Mass 69 relative abundance	41.3
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	10.0 - 80.0% of mass 198	53.2 (60.2)2
197	Less than 2.0% of mass 198	0.4 (0.5)2
198	Greater than 50.0% of mass 442	88.3
199	5.0 to 9.0% of mass 198	5.6 (6.3)2
275	10.0 - 60.0% of mass 442	23.8
365	Greater than 1.0% of mass 442	3.79
441	Less than 100.0% of mass 443	14.6 (81.3)3
442	Base Peak, 100% relative abundance	100.0
443	15.0 - 24.0% of mass 442	17.9

1-Value is % mass 69 2-Value is % mass 198
3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		PAH05.0	C3091202	09/12/03	0831
02	SM091003LLB	SM091003LLB	C3091204	09/12/03	0901
03	SM091003LLBL	SM091003LLBLCS	C3091205	09/12/03	0917
04	SM091003LLBL	SM091003LLBLCS	C3091206	09/12/03	0932
05	73924-1	086-BFC-S-0904	C3091207	09/12/03	0948
06					
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FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSMC5973 Calibration Date(s): 08/22/03 08/22/03

Column: ZB5 ID: 0.25 (mm) Calibration Time(s): 1125 1313

LAB FILE ID: RF0.2: C3082211 RF2.5: C3082212 RF5: C3082213
RF10: C3082214

COMPOUND	RF0.2	RF2.5	RF5	RF7.5	RF10
Naphthalene	1.138	1.075	1.046		1.073
2-Methylnaphthalene	0.625	0.727	0.708		0.731
1-Methylnaphthalene	0.609	0.768	0.750		0.751
Acenaphthylene	2.093	1.983	2.020		2.105
Acenaphthene	1.165	1.108	1.122		1.156
Fluorene	1.356	1.354	1.356		1.410
Phenanthrene	1.077	1.066	1.057		1.073
Anthracene	1.155	1.127	1.061		1.086
Fluoranthene	1.163	1.184	1.168		1.157
Pyrene	1.276	1.249	1.238		1.141
Benzo(a)anthracene	1.097	1.080	1.090		1.078
Chrysene	1.066	1.030	1.036		1.028
Benzo(b)fluoranthene	1.285	1.223	1.203		1.228
Benzo(k)fluoranthene	1.388	1.316	1.337		1.310
Benzo(a)pyrene	1.220	1.101	1.135		1.132
Indeno(1,2,3-cd)pyrene	1.274	1.277	1.269		1.251
Dibenzo(a,h)anthracene	1.008	1.032	1.050		1.042
Benzo(g,h,i)perylene	1.076	1.064	1.061		1.044
o-Terphenyl	0.641	0.617	0.590		0.590

FORM VI SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSMC5973 Calibration Date(s): 08/22/03 08/22/03

Column: ZB5 ID: 0.25 (mm) Calibration Time(s): 1125 1313

LAB FILE ID: RF12.5: C3082215 RF15: C3082216 RF17.5: C3082217
RF20: C3082218

COMPOUND	RF12.5	RF15	RF17.5	RF20
Naphthalene	1.073	1.074	1.071	1.139
2-Methylnaphthalene	0.733	0.739	0.712	0.761
1-Methylnaphthalene	0.752	0.748	0.730	0.763
Acenaphthylene	2.093	2.101	1.871	1.844
Acenaphthene	1.173	1.157	1.142	1.205
Fluorene	1.414	1.417	1.376	1.369
Phenanthrene	1.071	1.066	1.026	0.960
Anthracene	1.089	1.090	0.997	0.931
Fluoranthene	1.198	1.171	1.123	1.090
Pyrene	1.178	1.187	1.041	1.089
Benzo(a)anthracene	1.093	1.096	1.075	1.130
Chrysene	1.045	1.033	0.996	1.035
Benzo(b)fluoranthene	1.377	1.385	1.339	1.492
Benzo(k)fluoranthene	1.185	1.304	1.303	1.359
Benzo(a)pyrene	1.184	1.193	1.196	1.251
Indeno(1,2,3-cd)pyrene	1.340	1.360	1.350	1.437
Dibenzo(a,h)anthracene	1.145	1.142	1.159	1.224
Benzo(g,h,i)perylene	1.122	1.124	1.122	1.193
o-Terphenyl	0.583	0.590	0.576	0.603

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSMC5973 Calibration Date(s): 08/22/03 08/22/03

Column: ZB5 ID: 0.25 (mm) Calibration Time(s): 1125 1313

COMPOUND	CURVE	AVE RRF A1	%RSD or R^2
Naphthalene	AVRG	1.08599	3.1
2-Methylnaphthalene	AVRG	0.71721	5.6
1-Methylnaphthalene	AVRG	0.73394	7.0
Acenaphthylene	AVRG	2.01382	5.2
Acenaphthene	AVRG	1.15360	2.6
Fluorene	AVRG	1.38165	2.0
Phenanthrene	AVRG	1.04970	3.8
Anthracene	AVRG	1.06703	6.7
Fluoranthene	AVRG	1.15690	3.0
Pyrene	AVRG	1.17503	6.9
Benzo(a)anthracene	AVRG	1.09255	1.6
Chrysene	AVRG	1.03371	1.9
Benzo(b)fluoranthene	AVRG	1.31656	7.6
Benzo(k)fluoranthene	AVRG	1.31299	4.6
Benzo(a)pyrene	AVRG	1.17641	4.3
Indeno(1,2,3-cd)pyrene	AVRG	1.31991	4.8
Dibenzo(a,h)anthracene	AVRG	1.10030	7.0
Benzo(g,h,i)perylene	AVRG	1.10065	4.4
o-Terphenyl	AVRG	0.59895	3.5

FORM VI SV

FORM 7
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSMC5973 Calibration Date: 09/12/03 Time: 0831

Lab File ID: C3091202 Init. Calib. Date(s): 08/22/03 08/22/03

Init. Calib. Times: 1125 1313

GC Column: ZB5 ID: 0.25 (mm)

COMPOUND	ICAL5 AMT/ AVG RF	CCAL AMT	CCAL RF	MIN RF	%DRIFT /%D*	MAX %DRIFT /%D*	CURVE
Naphthalene	1.086		1.062		2.2	20.0	AVRG
2-Methylnaphthalene	0.717		0.610		14.9	20.0	AVRG
1-Methylnaphthalene	0.734		0.632		13.9	20.0	AVRG
Acenaphthylene	2.014		2.006		0.4	20.0	AVRG
Acenaphthene	1.154		1.106		4.2	20.0	AVRG
Fluorene	1.382		1.329		3.8	20.0	AVRG
Phenanthrene	1.050		1.070		1.9	20.0	AVRG
Anthracene	1.067		1.081		1.3	20.0	AVRG
Fluoranthene	1.157		1.162		0.4	20.0	AVRG
Pyrene	1.175		1.171		0.3	20.0	AVRG
Benzo(a)anthracene	1.092		1.047		4.1	20.0	AVRG
Chrysene	1.034		1.015		1.8	20.0	AVRG
Benzo(b)fluoranthene	1.316		1.209		8.1	20.0	AVRG
Benzo(k)fluoranthene	1.313		1.311		0.2	20.0	AVRG
Benzo(a)pyrene	1.176		1.093		7.0	20.0	AVRG
Indeno(1,2,3-cd)pyrene	1.320		1.136		13.9	20.0	AVRG
Dibenzo(a,h)anthracene	1.100		0.882		19.8	20.0	AVRG
Benzo(g,h,i)perylene	1.101		1.011		8.2	20.0	AVRG
o-Terphenyl	0.599		0.606		1.2		AVRG

*%Drift is reported for linear and 2nd order curves and %D (%Difference) is reported for average curves.

FORM VII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Lab File ID (Standard): C3091202 Date Analyzed: 09/12/03

Instrument ID: TSMC5973 Time Analyzed: 0831

		IS1 (NPT) AREA #	RT #	IS2 (ANT) AREA #	RT #	IS3 (PHN) AREA #	RT #
	12 HOUR STD	1059312	2.72	543181	3.67	881997	4.50
	UPPER LIMIT	2118624	3.22	1086362	4.17	1763994	5.00
	LOWER LIMIT	529656	2.22	271591	3.17	440999	4.00
	CLIENT SAMPLE NO.						
01	SM091003LLB	968135	2.73	569282	3.67	940623	4.49
02	SM091003LLBL	752244	2.72	411877	3.67	712272	4.49
03	SM091003LLBL	679312	2.72	369204	3.67	615545	4.49
04	73924-1	630047	2.74	372320	3.67	597490	4.49
05							
06							
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18							
19							
20							
21							
22							

IS1 (NPT) = Naphthalene-d8
IS2 (ANT) = Acenaphthene-d10
IS3 (PHN) = Phenanthrene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Lab File ID (Standard): C3091202 Date Analyzed: 09/12/03

Instrument ID: TSMC5973 Time Analyzed: 0831

		IS4 (CRY) AREA #	RT #	IS5 (PRY) AREA #	RT #	AREA #	RT #
	12 HOUR STD	874880	6.34	754599	7.93		
	UPPER LIMIT	1749760	6.84	1509198	8.43		
	LOWER LIMIT	437440	5.84	377300	7.43		
	CLIENT SAMPLE NO.						
01	SM091003LLB	961242	6.34	950316	7.92		
02	SM091003LLBL	708142	6.34	649856	7.93		
03	SM091003LLBL	628119	6.34	584123	7.92		
04	73924-1	569414	6.34	500034	7.93		
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 (CRY) = Chrysene-d12
IS5 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

EXTRACTION LOG(S)

EXTRACTION LOG

Job No: 288 7

Batch No: SM091003L

Date Extracted: 09.10.03

Start Time: 3pm

Stop Time: 4pm

Analysis Required: 8270 PAH

Prep Method: 3550

Analyst/Activity Code* BE /A,B,S,D

Initial Project Check: BE

Final Project Check:

Date Concentrated: 9-11-03

Initials: DK

Extract Box ID:

	ID	Lot #	Amt (ml)	Init
Surr.	PAH	7.3.5.6	1.0	BE
Surr.				
Spike	PAH	7.3.5.7	1.0	BE
Spike				

Clean Up: Yes No

Comments

Solvent(s) Lot No:

1:1 $MeCl_2$/ACE:

AN.A28.0038.9

Na_2SO_4 POWD: X44144

Na_2SO_4 GRAN: 102631

$MeCl_2$: 116E79

* See inside front cover of logbook for definition codes

SAMPLE ID/DESCRIPTION	SDG	MT	Amt Exc'd	PH I	PH F	FV (ml)	D-D	H-D	COMMENTS
1. T373922*1/B-4 (18-19')*		SS	30.0			1.0	09.15	09.19	
2. T373924*1/086-BFC-S-0904-03*	JETC01	SS	↓			↓	09.12	09.18	RP]
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									
11.									
12.									
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									
Lab Blank		SS	30.0			1.0			
Lab Spike #1		SS	30.0						
Lab Spike #2		SS	30.0						
MS: T373922 B-4 (18-19')		SS							
MSD: T373922 B4 (18-19')		SS	↓			↓			

Dets: Polynuclear Aromatics <8270>]

+ Additional Dets:

0240

ANALYSIS LOG(S)

SAMPLE INFORMATION SUMMARY

Client SDG: JETC01 Sample Fraction: SV

QCGroup	Batch	DataFile	Sample Type	Client Id	Lab ID	SmplRef	Lab Prep	SDG
14383102	2C30822.b	C3082210.D	DFTPP	DFTPP	DFTPP	14383101		
14383102	2C30822.b	C3082211.D	CALIB_1	PAH0.2	PAH0.2	14383107	3.5.47.6	
14383102	2C30822.b	C3082212.D	CALIB_2	PAH2.5	PAH2.5	14383121	3.5.38.1	
14383102	2C30822.b	C3082213.D	CALIB_3	PAH5.0	PAH5.0	14383122	3.5.38.2	
14383102	2C30822.b	C3082214.D	CALIB_5	PAH10	PAH10	14383123	3.5.38.4	
14383102	2C30822.b	C3082215.D	CALIB_6	PAH12.5	PAH12.5	14383131	3.5.38.5	
14383102	2C30822.b	C3082216.D	CALIB_7	PAH15	PAH15	14383136	3.5.38.6	
14383102	2C30822.b	C3082217.D	CALIB_8	PAH17.5	PAH17.5	4702052	3.5.38.7	
14383102	2C30822.b	C3082218.D	CALIB_9	PAH20.0	PAH20.0	4702053	3.5.39.1	
3161024	1C30912.b	C3091201.D	DFTPP	DFTPP	DFTPP	3161023		
3161024	1C30912.b	C3091202.D	CCALIB_3		PAH05.0	3161029	3.5.54.3	
3161024	1C30912.b	C3091204.D	BLANK	SM091003LLB	SM091003LLB	2536556	SM091003L	JETC01
3161024	1C30912.b	C3091205.D	LCS	SM091003LLBLCS	SM091003LLBLCS	2536557	SM091003L	JETC01
3161024	1C30912.b	C3091206.D	LCSD	SM091003LLBLCSD	SM091003LLBLCSD	2536563	SM091003L	JETC01
3161024	1C30912.b	C3091207.D	SAMPLE	73924-1	086-BFC-S-0904-0	2536578	SM091003L	JETC01

Sequence Name: C:\MSDCHEM\1\SEQUENCE\C30822A.S
Comment: STL Instrument TSMC5973
Operator: MPF
Data Path: D:\DATA\
Pre-Seq Cmd:
Post-Seq Cmd:

MPF 8

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
( ) Inject Anyway
(X) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	96	C3082200	LLPAH4	TUNE5.0~3.5.49.4~1~8270
2	Sample	96	C3082201	LLTUN1	TUNE5.0~3.5.49.4~1~8270
3	Sample	97	C3082202	LLPAH4	PAH5.0~3.5.38.2~1~8270
4	Sample	98	C3082203	LLPAH4	PAH0.2~3.5.47.6~1~8270
5	Sample	97	C3082204	LLPAH4	PAH5.0~3.5.38.2~1~8270
6	Sample	97	C3082205	LLPAH4	PAH5.0~3.5.38.2~1~8270
7	Sample	97	C3082206	LLPAH4	PAH5.0~3.5.38.2~1~8270
8	Sample	97	C3082207	LLPAH4	PAH12.5~3.5.38.5~1~8270
9	Sample	96	C3082208	LLTUN1	TUNE5.0~3.5.49.4~1~8270
10	Sample	51	C3082209	LLPAH5	PAH0.2~3.5.47.6~1~8270
11	Sample	96	C3082210	LLTUN1	TUNE5.0~3.5.49.4~1~8270
12	Sample	51	C3082211	LLPAH5	PAH0.2~3.5.47.6~1~8270
13	Sample	52	C3082212	LLPAH5	PAH2.5~3.5.38.1~1~8270
14	Sample	53	C3082213	LLPAH5	PAH5.0~3.5.38.2~1~8270
15	Sample	54	C3082214	LLPAH5	PAH10~3.5.38.4~1~8270
16	Sample	55	C3082215	LLPAH5	PAH12.5~3.5.38.5~1~8270
17	Sample	56	C3082216	LLPAH5	PAH15~3.5.38.6~1~8270
18	Sample	57	C3082217	LLPAH5	PAH17.5~3.5.38.7~1~8270
19	Sample	58	C3082218	LLPAH5	PAH20.0~3.5.39.1~1~8270
20	Sample	59	C3082219	LLPAH5	73612-16~SM082103H~10~8270
21	Sample	60	C3082220	LLPAH5	73612-17~SM082103H~50~8270
22	Sample	61	C3082221	LLPAH5	73612-18~SM082103H~20~8270
23	Sample	62	C3082222	LLPAH5	73612-19~SM082103H~5~8270
24	Sample	1	C3082223	LLPAH5	SM081303KLB~SM081303K~1~8270
25	Sample	2	C3082224	LLPAH5	SM081303KLBLCS~SM081303K~1~82
26	Sample	3	C3082225	LLPAH5	SM081303KLBLCSD~SM081303K~1~8
27	Sample	26	C3082226	LLPAH5	SM082003DLB~SM082003D~1~8270
28	Sample	27	C3082227	LLPAH5	SM082003DLBLCS~SM082003D~1~82
29	Sample	28	C3082228	LLPAH5	SM082003DLBLCSD~SM082003D~1~8
30	Sample	29	C3082229	LLPAH5	73509-1~SM082003D~1~8270
31	Sample	30	C3082230	LLPAH5	73509-2~SM082003D~1~8270
32	Sample	31	C3082231	LLPAH5	73509-3~SM082003D~1~8270
33	Sample	32	C3082232	LLPAH5	73509-4~SM082003D~1~8270
34	Sample	33	C3082233	LLPAH5	73509-5~SM082003D~1~8270
35	Sample	34	C3082234	LLPAH5	73509-6~SM082003D~1~8270
36	Sample	35	C3082235	LLPAH5	73509-7~SM082003D~1~8270
37	Sample	36	C3082236	LLPAH5	73509-8~SM082003D~1~8270
38	Sample	37	C3082237	LLPAH5	73509-9~SM082003D~1~8270
39	Sample	38	C3082238	LLPAH5	73509-10~SM082003D~1~8270
40	Sample	39	C3082239	LLPAH5	73509-11~SM082003D~1~8270
41	Sample	40	C3082240	LLPAH5	73509-12~SM082003D~1~8270
42	Sample	41	C3082241	LLPAH5	73509-13~SM082003D~1~8270
43	Sample	42	C3082242	LLPAH5	SM0802003DMS~SM082003D~1~8270

CONT'D

Sequence Name: C:\MSDCHEM\1\SEQUENCE\C30912.S
Comment: STL Instrument TSMC5973
Operator: MPF
Data Path: D:\DATA\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
( ) Inject Anyway
(X) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	96	C3091201	LLTUN1	TUNE5.0~3.5.49.4~1~8270
2	Sample	97	C3091202	LLPAH6	PAH05.0~3.5.54.3~1~8270
3	Sample	98	C3091203	LLPAH6	PAH0.20~3.5.54.4~1~8270
4	Sample	1	C3091204	LLPAH6	SM091003LLB~3.5.54.4~1~8270
5	Sample	2	C3091205	LLPAH6	SM091003LLBLCS~3.5.54.4~1~827
6	Sample	3	C3091206	LLPAH6	SM091003LLBLCSD~3.5.54.4~1~82
7	Sample	4	C3091207	LLPAH6	~~73922-1~~~SM091003L~1~8270 T3773924
8	Sample	5	C3091208	LLPAH6	~~73924-1~~~SM091003L~1~8270 T3773922
9	Sample	6	C3091209	LLPAH6	73922-1~SM091003L~8270-MS
10	Sample	7	C3091210	LLPAH6	73922-1~SM091003L~1~8270-MSD
11	Sample	8	C3091211	LLPAH6	~~73924-1~~~SM091003L~50~8270 T3773922
12	Sample	9	C3091212	LLPAH6	~~73924-1~~~SM091003L~100~8270 T3773922
13	Sample	6	C3091213	LLPAH6	73922-1~SM091003L~8270-MS
14	Sample	7	C3091214	LLPAH6	73922-1~SM091003L~1~8270-MSD
15	Sample	100	C3091215	LLPAH6	RINSE
16	Sample	100	C3091216	LLPAH6	RINSE

SBF 9/15/03

SBF 9/12/03

SEMIVOLATILE ORGANIC COMPOUNDS
Method 8270

CASE NARRATIVE

CASE NARRATIVE
GC/MS SEMIVOLATILE ORGANICS

STL Lab Reference No. / SDG: JETC01

Project: JETC and Building 271/0103-329-09

RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

METHOD

Preparation: SW-846 3550
Cleanup: N/A
Analysis: SW-846 8270

PREPARATION

Sample preparation proceeded normally.

ANALYSIS

Calibration: All acceptance criteria were met

Blanks: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Spikes: The Relative Percent Difference (%RPD) value for 1,2,4-Trichlorobenzene was outside advisory limits.

Samples: No analytical or quality problems were observed.

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

SIGNED: _____ DATE: 9/24/03

Timothy Preston
Project Manager

FORMS

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

73924-1

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: 086-BFC-S-0904-03

Sample wt/vol: 30 (g/mL) G Lab File ID: A3091121

Level: (low/med) LOW Date Received: 09/06/03

% Moisture: 9 decanted: (Y/N) N Date Extracted: 09/10/03

Concentrated Extract Volume: 1 (mL) Date Analyzed: 09/11/03

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	Bis(2-chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	bis(2-Chloroisopropyl)ether	360	U
106-44-5	3&4-Methylphenol	360	U
621-64-7	n-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethyphenol	360	U
111-91-1	Bis(2-chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	720	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	360	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	1900	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	1900	U
83-32-9	Acenaphthene	360	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

73924-1

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: 086-BFC-S-0904-03

Sample wt/vol: 30 (g/mL) G Lab File ID: A3091121

Level: (low/med) LOW Date Received: 09/06/03

% Moisture: 9 decanted: (Y/N) N Date Extracted: 09/10/03

Concentrated Extract Volume: 1 (mL) Date Analyzed: 09/11/03

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1900	U
100-02-7	4-Nitrophenol	1900	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
86-73-7	Fluorene	360	U
7005-72-3	4-Chlorophenylphenylether	360	U
100-01-6	4-Nitroaniline	1900	U
534-52-1	2-Methyl-4,6-dinitrophenol	1900	U
86-30-6	Diphenylamine/n-Nitrosodiphe	360	U
101-55-3	4-Bromophenylphenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	1900	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	360	U
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	360	U
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	720	U
56-55-3	Benzo(a)anthracene	360	U
218-01-9	Chrysene	360	U
117-81-7	Bis(2-ethylhexyl)phthalate	360	U
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	360	U
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	360	U
193-39-5	Indeno(1,2,3-c,d)pyrene	360	U
53-70-3	Dibenzo(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	360	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SM091003MLB

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: SM091003MLB

Sample wt/vol: 30 (g/mL) G Lab File ID: A3091118

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/10/03

Concentrated Extract Volume: 1 (mL) Date Analyzed: 09/11/03

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	Bis(2-chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	bis(2-Chloroisopropyl)ether	330	U
106-44-5	3&4-Methylphenol	330	U
621-64-7	n-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethyphenol	330	U
111-91-1	Bis(2-chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	660	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	330	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	1700	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	1700	U
83-32-9	Acenaphthene	330	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SM091003MLB

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: SM091003MLB

Sample wt/vol: 30 (g/mL) G Lab File ID: A3091118

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/10/03

Concentrated Extract Volume: 1 (mL) Date Analyzed: 09/11/03

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1700	U
100-02-7	4-Nitrophenol	1700	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
86-73-7	Fluorene	330	U
7005-72-3	4-Chlorophenylphenylether	330	U
100-01-6	4-Nitroaniline	1700	U
534-52-1	2-Methyl-4,6-dinitrophenol	1700	U
86-30-6	Diphenylamine/n-Nitrosodiphe	330	U
101-55-3	4-Bromophenylphenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	1700	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	Bis(2-ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-c,d)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

73924-1MS

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: 086-BFC-S-0904-03

Sample wt/vol: 30 (g/mL) G Lab File ID: A3091122

Level: (low/med) LOW Date Received: 09/06/03

% Moisture: 9 decanted: (Y/N) N Date Extracted: 09/10/03

Concentrated Extract Volume: 1 (mL) Date Analyzed: 09/11/03

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1900	
111-44-4	Bis(2-chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	2000	
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	910	
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	bis(2-Chloroisopropyl)ether	360	U
106-44-5	3&4-Methylphenol	360	U
621-64-7	n-Nitroso-di-n-propylamine	800	
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethyphenol	360	U
111-91-1	Bis(2-chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	960	
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	720	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	2200	
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	360	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	1900	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	1900	U
83-32-9	Acenaphthene	960	

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

73924-1MS

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: 086-BFC-S-0904-03

Sample wt/vol: 30 (g/mL) G Lab File ID: A3091122

Level: (low/med) LOW Date Received: 09/06/03

% Moisture: 9 decanted: (Y/N) N Date Extracted: 09/10/03

Concentrated Extract Volume: 1(mL) Date Analyzed: 09/11/03

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1900	U
100-02-7	4-Nitrophenol	2600	
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	1200	
84-66-2	Diethylphthalate	360	U
86-73-7	Fluorene	360	U
7005-72-3	4-Chlorophenylphenylether	360	U
100-01-6	4-Nitroaniline	1900	U
534-52-1	2-Methyl-4,6-dinitrophenol	1900	U
86-30-6	Diphenylamine/n-Nitrosodiphe	360	U
101-55-3	4-Bromophenylphenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	2300	
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	360	U
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	1200	
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	720	U
56-55-3	Benzo(a)anthracene	360	U
218-01-9	Chrysene	360	U
117-81-7	Bis(2-ethylhexyl)phthalate	360	U
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	360	U
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	360	U
193-39-5	Indeno(1,2,3-c,d)pyrene	360	U
53-70-3	Dibenzo(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	360	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

73924-1MSD

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: 086-BFC-S-0904-03

Sample wt/vol: 30 (g/mL) G Lab File ID: A3091123

Level: (low/med) LOW Date Received: 09/06/03

% Moisture: 9 decanted: (Y/N) N Date Extracted: 09/10/03

Concentrated Extract Volume: 1 (mL) Date Analyzed: 09/11/03

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1700	
111-44-4	Bis(2-chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	1700	
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	790	
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	bis(2-Chloroisopropyl)ether	360	U
106-44-5	3&4-Methylphenol	360	U
621-64-7	n-Nitroso-di-n-propylamine	690	
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethyphenol	360	U
111-91-1	Bis(2-chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	830	
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	720	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	2000	
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	360	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	1900	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	1900	U
83-32-9	Acenaphthene	840	

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

73924-1MSD

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix: (soil/water) SOIL Lab Sample ID: 086-BFC-S-0904-03

Sample wt/vol: 30 (g/mL) G Lab File ID: A3091123

Level: (low/med) LOW Date Received: 09/06/03

% Moisture: 9 decanted: (Y/N) N Date Extracted: 09/10/03

Concentrated Extract Volume: 1 (mL) Date Analyzed: 09/11/03

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1900	U
100-02-7	4-Nitrophenol	2300	
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	980	
84-66-2	Diethylphthalate	360	U
86-73-7	Fluorene	360	U
7005-72-3	4-Chlorophenylphenylether	360	U
100-01-6	4-Nitroaniline	1900	U
534-52-1	2-Methyl-4,6-dinitrophenol	1900	U
86-30-6	Diphenylamine/n-Nitrosodiphe	360	U
101-55-3	4-Bromophenylphenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	1900	
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	360	U
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	1100	
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	720	U
56-55-3	Benzo(a)anthracene	360	U
218-01-9	Chrysene	360	U
117-81-7	Bis(2-ethylhexyl)phthalate	360	U
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	360	U
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	360	U
193-39-5	Indeno(1,2,3-c,d)pyrene	360	U
53-70-3	Dibenzo(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	360	U

FORM 2
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Level: (low/med) LOW

	CLIENT SAMPLE NO.	S1 (2FP) #	S2 (PHL) #	S3 (NBZ) #	S4 (FBP) #	S5 (TBP) #	S6 (TPH) #	S7 #	S8 #	TOT OUT
01	SM091003MLB	42	48	45	45	45	52			0
02	73924-1	43	51	53	56	51	56			0
03	73924-1MS	51	54	61	61	59	67			0
04	73924-1MSD	43	49	54	54	51	56			0
05										
06										
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		QC LIMITS
S1 (2FP)	= 2-Fluorophenol	(16-113)
S2 (PHL)	= Phenol-d5	(19-114)
S3 (NBZ)	= Nitrobenzene-d5	(20-120)
S4 (FBP)	= 2-Fluorobiphenyl	(30-120)
S5 (TBP)	= 2,4,6-Tribromophenol	(23-129)
S6 (TPH)	= Terphenyl-d14	(30-131)

Column to be used to flag recovery values
* Values outside of laboratory QC limits
D Sample diluted

FORM 3
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix Spike - Sample No.: 73924-1 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONC (ug/Kg)	MS CONC (ug/Kg)	MS % REC#	QC. LIMITS REC.
Phenol	3700	0.00	1900	51	13-115
2-Chlorophenol	3700	0.00	2000	54	15-111
1,4-Dichlorobenzene	1800	0.00	910	50	10-105
n-Nitroso-di-n-prop.(1)	1800	0.00	800	44	11-122
1,2,4-Trichlorobenzene	1800	0.00	960	53	10-112
4-Chloro-3-methylphenol	3700	0.00	2200	59	22-114
Acenaphthene	1800	0.00	960	53	18-123
4-Nitrophenol	3700	0.00	2600	70	15-118
2,4-Dinitrotoluene	1800	0.00	1200	67	11-120
Pentachlorophenol	3700	0.00	2300	62	10-140
Pyrene	1800	0.00	1200	67	10-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONC (ug/Kg)	MSD % REC#	AVG % REC	% RPD$#	QC LIMITS RPD	QC LIMITS REC.
Phenol	3700	1700	46	48	11	39	13-115
2-Chlorophenol	3700	1700	46	50	16	38	15-111
1,4-Dichlorobenzene	1800	790	44	47	14	31	10-105
n-Nitroso-di-n-prop.(1)	1800	690	38	41	15	37	11-122
1,2,4-Trichlorobenzene	1800	830	46	50	14	22	10-112
4-Chloro-3-methylphenol	3700	2000	54	56	9.5	32	22-114
Acenaphthene	1800	840	47	50	13	49	18-123
4-Nitrophenol	3700	2300	62	66	12	57	15-118
2,4-Dinitrotoluene	1800	980	54	60	20	37	11-120
Pentachlorophenol	3700	1900	51	56	19	55	10-140
Pyrene	1800	1100	61	64	8.7	42	10-133

$ %RPD calculated using the spike and spike duplicate concentrations as per SW846 8000B

(1) N-Nitroso-di-n-propylamine
Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits

COMMENTS: _____

FORM III SV

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

SM091003MLB

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Lab File ID: A3091118 Lab Sample ID: SM091003MLB

Instrument ID: TSMA5973 Date Extracted: 09/10/03

Matrix: (soil/water) SOIL Date Analyzed: 09/11/03

Level:(low/med) LOW Time Analyzed: 2131

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	73924-1	086-BFC-S-0904	A3091121	09/11/03
02	73924-1MS	086-BFC-S-0904	A3091122	09/11/03
03	73924-1MSD	086-BFC-S-0904	A3091123	09/11/03
04				
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COMMENTS:

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Lab File ID: A3091002 DFTPP Injection Date: 09/10/03

Instrument ID: TSMA5973 DFTPP Injection Time: 1033

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	39.0
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	32.0
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	53.9
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 30.0% of mass 198	18.7
365	Greater than 0.75% of mass 198	1.80
441	Present, but less than mass 443	9.2
442	40.0 - 110.0% of mass 198	64.5
443	15.0 - 24.0% of mass 442	12.6 (19.5)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		BNA4.00	A3091005	09/10/03	1158
02		BNA10.0	A3091006	09/10/03	1223
03		BNA20.0	A3091007	09/10/03	1249
04		BNA50.0	A3091008	09/10/03	1316
05		BNA80.0	A3091009	09/10/03	1342
06		BNA100	A3091010	09/10/03	1409
07		BNA120	A3091011	09/10/03	1435
08		BNA160	A3091012	09/10/03	1501
09					
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FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Lab File ID: A3091109 DFTPP Injection Date: 09/11/03

Instrument ID: TSMA5973 DFTPP Injection Time: 1744

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	40.4
68	Less than 2.0% of mass 69	0.6 (1.9)1
69	Mass 69 relative abundance	33.9
70	Less than 2.0% of mass 69	0.4 (1.1)1
127	25.0 - 75.0% of mass 198	57.5
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 30.0% of mass 198	18.6
365	Greater than 0.75% of mass 198	1.74
441	Present, but less than mass 443	9.4
442	40.0 - 110.0% of mass 198	60.5
443	15.0 - 24.0% of mass 442	11.8 (19.5)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BNA050	BNA050	A3091110	09/11/03	1759
02	SM091003MLB	SM091003MLB	A3091118	09/11/03	2131
03	73924-1	086-BFC-S-0904	A3091121	09/11/03	2251
04	73924-1MS	086-BFC-S-0904	A3091122	09/11/03	2317
05	73924-1MSD	086-BFC-S-0904	A3091123	09/11/03	2344
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FORM V SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSMA5973 Calibration Date(s): 09/10/03 09/10/03

Column: ZB-5 ID: 0.25 (mm) Calibration Time(s): 1158 1501

LAB FILE ID: RF4: A3091005 RF10: A3091006 RF20: A3091007
RF50: A3091008 RF80: A3091009

COMPOUND	RF4	RF10	RF20	RF50	RF80
Phenol	1.257	1.383	1.390	1.229	1.068
Bis(2-chloroethyl)ether	1.110	1.155	1.109	0.982	0.896
2-Chlorophenol	1.449	1.486	1.532	1.388	1.291
1,3-Dichlorobenzene	1.715	1.707	1.717	1.562	1.474
1,4-Dichlorobenzene	1.697	1.704	1.651	1.499	1.413
1,2-Dichlorobenzene	1.618	1.644	1.578	1.306	1.169
2-Methylphenol	0.918	0.965	0.977	0.924	0.888
bis(2-Chloroisopropyl)ether	2.055	2.133	2.143	1.964	1.808
3&4-Methylphenol	1.065	1.278	1.286	1.178	1.026
n-Nitroso-di-n-propylamine	0.645	0.701	0.727	0.693	0.630
Hexachloroethane	0.647	0.672	0.641	0.535	0.475
Nitrobenzene	0.256	0.263	0.267	0.254	0.237
Isophorone	0.500	0.537	0.516	0.491	0.453
2-Nitrophenol	0.207	0.222	0.220	0.223	0.208
2,4-Dimethyphenol	0.264	0.293	0.304	0.291	0.268
Bis(2-chloroethoxy)methane	0.294	0.340	0.335	0.308	0.289
2,4-Dichlorophenol	0.196	0.262	0.277	0.265	0.245
1,2,4-Trichlorobenzene	0.323	0.340	0.323	0.293	0.268
Naphthalene	1.080	1.069	1.022	0.890	0.791
4-Chloroaniline	0.324	0.407	0.423	0.370	0.337
Hexachlorobutadiene	0.156	0.159	0.151	0.136	0.126
4-Chloro-3-methylphenol	0.217	0.266	0.271	0.274	0.246
2-Methylnaphthalene	0.597	0.611	0.574	0.524	0.468
Hexachlorocyclopentadiene	0.090	0.138	0.172	0.224	0.227
2,4,6-Trichlorophenol	0.350	0.389	0.414	0.394	0.379
2,4,5-Trichlorophenol	0.448	0.411	0.434	0.406	0.368
2-Chloronaphthalene	1.344	1.405	1.334	1.206	1.129
2-Nitroaniline	0.255	0.322	0.335	0.341	0.321
Dimethylphthalate	1.473	1.513	1.475	1.386	1.311
Acenaphthylene	2.206	2.231	2.160	1.798	1.667
2,6-Dinitrotoluene	0.301	0.317	0.321	0.286	0.272
3-Nitroaniline	0.371	0.369	0.403	0.375	0.389
Acenaphthene	1.269	1.304	1.279	1.135	1.076
2,4-Dinitrophenol		0.051	0.084	0.149	0.155
4-Nitrophenol	0.118	0.145	0.155	0.181	0.184
Dibenzofuran	1.810	1.867	1.782	1.593	1.494
2,4-Dinitrotoluene	0.386	0.458	0.450	0.444	0.434
Diethylphthalate	1.661	1.684	1.629	1.437	1.363

FORM VI SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSMA5973 Calibration Date(s): 09/10/03 09/10/03

Column: ZB-5 ID: 0.25 (mm) Calibration Time(s): 1158 1501

LAB FILE ID: RF4: A3091005 RF10: A3091006 RF20: A3091007
RF50: A3091008 RF80: A3091009

COMPOUND	RF4	RF10	RF20	RF50	RF80
Fluorene	1.516	1.512	1.378	1.124	1.033
4-Chlorophenylphenylether	0.633	0.653	0.597	0.499	0.458
4-Nitroaniline	0.423	0.477	0.471	0.427	0.438
2-Methyl-4,6-dinitrophenol	0.075	0.092	0.112	0.121	0.120
Diphenylamine/n-Nitrosodiphe	0.612	0.635	0.600	0.513	0.471
4-Bromophenylphenylether	0.186	0.185	0.184	0.165	0.154
Hexachlorobenzene	0.186	0.191	0.183	0.166	0.155
Pentachlorophenol	0.048	0.062	0.075	0.093	0.097
Phenanthrene	1.248	1.222	1.180	0.989	0.893
Anthracene	1.318	1.310	1.212	0.951	0.866
Carbazole	1.142	1.216	1.188	1.031	0.936
Di-n-butylphthalate	1.654	1.674	1.587	1.329	1.170
Fluoranthene	1.253	1.256	1.206	1.019	0.942
Pyrene	1.527	1.530	1.587	1.346	1.230
Butylbenzylphthalate	0.879	0.880	0.936	0.812	0.749
3,3'-Dichlorobenzidine	0.332	0.379	0.384	0.352	0.330
Benzo(a)anthracene	1.212	1.224	1.225	1.066	0.982
Chrysene	1.168	1.158	1.184	1.046	0.968
Bis(2-ethylhexyl)phthalate	1.265	1.288	1.297	1.137	1.032
Di-n-octylphthalate	2.052	2.084	2.203	1.918	1.758
Benzo(b)fluoranthene	1.252	1.327	1.316	1.287	1.174
Benzo(k)fluoranthene	1.378	1.398	1.442	1.158	1.158
Benzo(a)pyrene	1.209	1.180	1.215	1.125	1.067
Indeno(1,2,3-c,d)pyrene	1.025	1.071	1.060	1.029	0.995
Dibenzo(a,h)anthracene	0.835	0.891	0.927	0.862	0.832
Benzo(g,h,i)perylene	0.854	0.890	0.901	0.865	0.847
2-Fluorophenol	1.156	1.282	1.301	1.275	1.259
Phenol-d5	1.265	1.381	1.424	1.343	1.258
Nitrobenzene-d5	0.276	0.296	0.298	0.287	0.273
2-Fluorobiphenyl	1.360	1.401	1.341	1.156	1.093
2,4,6-Tribromophenol	0.006	0.147	0.143	0.142	0.140
Terphenyl-d14	0.889	0.904	0.902	0.825	0.771

FORM VI SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSMA5973 Calibration Date(s): 09/10/03 09/10/03

Column: ZB-5 ID: 0.25 (mm) Calibration Time(s): 1158 1501

LAB FILE ID: RF100: A3091010 RF120: A3091011 RF160: A3091012

COMPOUND	RF100	RF120	RF160
Phenol	1.026	0.993	0.892
Bis(2-chloroethyl)ether	0.826	0.794	0.762
2-Chlorophenol	1.207	1.147	1.101
1,3-Dichlorobenzene	1.386	1.344	1.279
1,4-Dichlorobenzene	1.331	1.290	1.226
1,2-Dichlorobenzene	1.035	0.988	0.904
2-Methylphenol	0.863	0.823	0.787
bis(2-Chloroisopropyl)ether	1.673	1.599	1.510
3&4-Methylphenol	0.940	0.878	0.823
n-Nitroso-di-n-propylamine	0.566	0.538	0.481
Hexachloroethane	0.409	0.386	0.347
Nitrobenzene	0.225	0.217	0.200
Isophorone	0.439	0.428	0.412
2-Nitrophenol	0.196	0.191	0.179
2,4-Dimethyphenol	0.258	0.242	0.224
Bis(2-chloroethoxy)methane	0.267	0.258	0.243
2,4-Dichlorophenol	0.235	0.223	0.210
1,2,4-Trichlorobenzene	0.252	0.240	0.227
Naphthalene	0.727	0.708	0.651
4-Chloroaniline	0.293	0.275	0.250
Hexachlorobutadiene	0.117	0.115	0.107
4-Chloro-3-methylphenol	0.238	0.225	0.210
2-Methylnaphthalene	0.426	0.410	0.378
Hexachlorocyclopentadiene	0.231	0.220	0.217
2,4,6-Trichlorophenol	0.363	0.349	0.325
2,4,5-Trichlorophenol	0.373	0.350	0.311
2-Chloronaphthalene	1.040	1.009	0.931
2-Nitroaniline	0.314	0.304	0.280
Dimethylphthalate	1.259	1.206	1.126
Acenaphthylene	1.534	1.466	1.336
2,6-Dinitrotoluene	0.261	0.249	0.227
3-Nitroaniline	0.368	0.361	0.342
Acenaphthene	0.986	0.944	0.860
2,4-Dinitrophenol	0.167	0.163	0.154
4-Nitrophenol	0.180	0.177	0.159
Dibenzofuran	1.385	1.320	1.242
2,4-Dinitrotoluene	0.421	0.412	0.383
Diethylphthalate	1.262	1.190	1.101

FORM VI SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSMA5973 Calibration Date(s): 09/10/03 09/10/03

Column: ZB-5 ID: 0.25 (mm) Calibration Time(s): 1158 1501

LAB FILE ID: RF100: A3091010 RF120: A3091011 RF160: A3091012

COMPOUND	RF100	RF120	RF160
Fluorene	0.947	0.886	0.805
4-Chlorophenylphenylether	0.424	0.399	0.368
4-Nitroaniline	0.433	0.416	0.376
2-Methyl-4,6-dinitrophenol	0.111	0.108	0.099
Diphenylamine/n-Nitrosodiphe	0.426	0.407	0.395
4-Bromophenylphenylether	0.147	0.143	0.139
Hexachlorobenzene	0.146	0.143	0.137
Pentachlorophenol	0.099	0.093	0.088
Phenanthrene	0.837	0.812	0.768
Anthracene	0.764	0.744	0.696
Carbazole	0.845	0.816	0.754
Di-n-butylphthalate	1.064	1.024	0.953
Fluoranthene	0.883	0.844	0.776
Pyrene	1.150	1.122	1.117
Butylbenzylphthalate	0.710	0.672	0.671
3,3'-Dichlorobenzidine	0.312	0.304	0.295
Benzo(a)anthracene	0.936	0.920	0.877
Chrysene	0.906	0.899	0.876
Bis(2-ethylhexyl)phthalate	0.974	0.933	0.914
Di-n-octylphthalate	1.633	1.574	1.519
Benzo(b)fluoranthene	1.107	1.107	1.107
Benzo(k)fluoranthene	1.122	1.090	0.958
Benzo(a)pyrene	1.019	1.007	0.954
Indeno(1,2,3-c,d)pyrene	0.948	0.939	0.894
Dibenzo(a,h)anthracene	0.785	0.791	0.732
Benzo(g,h,i)perylene	0.807	0.784	0.744
2-Fluorophenol	1.226	1.185	1.156
Phenol-d5	1.185	1.144	1.082
Nitrobenzene-d5	0.263	0.253	0.240
2-Fluorobiphenyl	1.004	0.976	0.906
2,4,6-Tribromophenol	0.138	0.135	0.124
Terphenyl-d14	0.749	0.707	0.715

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSMA5973 Calibration Date(s): 09/10/03 09/10/03

Column: ZB-5 ID: 0.25 (mm) Calibration Time(s): 1158 1501

COMPOUND	CURVE	COEFFICIENTS A0	A1	A2	%RSD or R^2
Phenol	2ORDR	0.00000000	0.61669	0.1389	0.999
Bis(2-chloroethyl)ether	2ORDR	0.00000000	0.86964	0.1506	0.999
2-Chlorophenol	AVRG		1.32501		12.3
1,3-Dichlorobenzene	AVRG		1.52309		11.7
1,4-Dichlorobenzene	AVRG		1.47644		12.9
1,2-Dichlorobenzene	2ORDR	0.00000000	0.49537	0.1705	0.999
2-Methylphenol	AVRG		0.89330		7.4
bis(2-Chloroisopropyl)ether	AVRG		1.86071		13.3
3&4-Methylphenol	2ORDR	0.00000000	0.62110	0.1839	0.999
n-Nitroso-di-n-propylamine	2ORDR	0.00000000	0.92172	0.5889	0.998
Hexachloroethane	2ORDR	0.00000000	0.95325	1.3864	0.998
Nitrobenzene	AVRG		0.23987		10.1
Isophorone	AVRG		0.47207		9.6
2-Nitrophenol	AVRG		0.20584		7.7
2,4-Dimethyphenol	AVRG		0.26820		10.2
Bis(2-chloroethoxy)methane	AVRG		0.29180		12.0
2,4-Dichlorophenol	AVRG		0.23914		11.9
1,2,4-Trichlorobenzene	2ORDR	0.00000000	2.81115	1.7866	1.000
Naphthalene	2ORDR	0.00000000	0.86176	0.2615	1.000
4-Chloroaniline	2ORDR	0.00000000	1.56558	2.4372	0.997
Hexachlorobutadiene	AVRG		0.13331		14.9
4-Chloro-3-methylphenol	AVRG		0.24344		10.3
2-Methylnaphthalene	2ORDR	0.00000000	1.43420	0.8054	0.999
Hexachlorocyclopentadiene	LINR	0.00000000	4.51662		0.997
2,4,6-Trichlorophenol	AVRG		0.37041		7.9
2,4,5-Trichlorophenol	AVRG		0.38772		11.7
2-Chloronaphthalene	AVRG		1.17467		14.9
2-Nitroaniline	AVRG		0.30904		9.3
Dimethylphthalate	AVRG		1.34373		10.5
Acenaphthylene	2ORDR	0.00000000	0.39336	6.616e-002	1.000
2,6-Dinitrotoluene	AVRG		0.27917		11.9
3-Nitroaniline	AVRG		0.37245		4.9
Acenaphthene	2ORDR	0.00000000	0.64025	0.1497	0.999
2,4-Dinitrophenol	2ORDR	0.00000000	6.28262	9.161e-002	0.994
4-Nitrophenol	AVRG		0.16225		14.1
Dibenzofuran	2ORDR	0.00000000	0.50310	6.155e-002	1.000
2,4-Dinitrotoluene	AVRG		0.42369		6.7
Diethylphthalate	2ORDR	0.00000000	0.51677	8.845e-002	1.000

FORM VI SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSMA5973 Calibration Date(s): 09/10/03 09/10/03

Column: ZB-5 ID: 0.25 (mm) Calibration Time(s): 1158 1501

COMPOUND	CURVE	COEFFICIENTS A0	A1	A2	%RSD or R^2
Fluorene	2ORDR	0.00000000	0.56430	0.2098	1.000
4-Chlorophenylphenylether	2ORDR	0.00000000	1.42140	0.8828	1.000
4-Nitroaniline	AVRG		0.43281		7.4
2-Methyl-4,6-dinitrophenol	2ORDR	0.00000000	6.76426	8.1533	0.999
Diphenylamine/n-Nitrosodiphe	2ORDR	0.00000000	1.64332	0.5876	0.998
4-Bromophenylphenylether	AVRG		0.16294		12.2
Hexachlorobenzene	AVRG		0.16356		13.0
Pentachlorophenol	2ORDR	0.00000000	9.46025	4.8212	0.997
Phenanthrene	2ORDR	0.00000000	0.84649	0.1528	0.999
Anthracene	2ORDR	0.00000000	0.77286	0.2458	0.998
Carbazole	2ORDR	0.00000000	0.72618	0.2008	0.999
Di-n-butylphthalate	2ORDR	0.00000000	0.56095	0.1310	0.999
Fluoranthene	2ORDR	0.00000000	0.74137	0.1757	1.000
Pyrene	2ORDR	0.00000000	0.71108	4.473e-002	0.998
Butylbenzylphthalate	2ORDR	0.00000000	1.14905	0.1363	0.998
3,3'-Dichlorobenzidine	AVRG		0.33601		9.9
Benzo(a)anthracene	AVRG		1.05524		13.9
Chrysene	2ORDR	0.00000000	0.90460	7.116e-002	0.999
Bis(2-ethylhexyl)phthalate	2ORDR	0.00000000	0.80182	8.435e-002	0.998
Di-n-octylphthalate	2ORDR	0.00000000	0.45762	3.437e-002	0.999
Benzo(b)fluoranthene	AVRG		1.20968		8.0
Benzo(k)fluoranthene	AVRG		1.21290		14.2
Benzo(a)pyrene	AVRG		1.09701		9.1
Indeno(1,2,3-c,d)pyrene	AVRG		0.99517		6.3
Dibenzo(a,h)anthracene	AVRG		0.83175		7.5
Benzo(g,h,i)perylene	AVRG		0.83644		6.5
2-Fluorophenol	AVRG		1.23000		4.7
Phenol-d5	AVRG		1.26028		9.4
Nitrobenzene-d5	AVRG		0.27329		7.6
2-Fluorobiphenyl	2ORDR	0.00000000	0.68394	0.1165	1.000
2,4,6-Tribromophenol	LINR	0.00000000	7.56597		0.992
Terphenyl-d14	AVRG		0.80781		10.3

FORM VI SV

FORM 7
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSMA5973 Calibration Date: 09/11/03 Time: 1759

Lab File ID: A3091110 Init. Calib. Date(s): 09/10/03 09/10/03

Init. Calib. Times: 1158 1501

GC Column: ZB-5 ID: 0.25 (mm)

COMPOUND	ICAL50 AMT/ AVG RF	CCAL AMT	CCAL RF	MIN RF	%DRIFT /%D*	MAX %DRIFT /%D*	CURVE
Phenol	50	49	1.191		2.0	20.0	2ORDR
Bis(2-chloroethyl)ether	50	50	0.962		0.0	40.0	2ORDR
2-Chlorophenol	1.325		1.379		4.1	40.0	AVRG
1,3-Dichlorobenzene	1.523		1.572		3.2	40.0	AVRG
1,4-Dichlorobenzene	1.476		1.461		1.0	20.0	AVRG
1,2-Dichlorobenzene	50	46	1.224		8.0	40.0	2ORDR
2-Methylphenol	0.893		0.929		4.0	40.0	AVRG
bis(2-Chloroisopropyl)ether	1.861		1.887		1.4	40.0	AVRG
3&4-Methylphenol	50	48	1.092		4.0	40.0	2ORDR
n-Nitroso-di-n-propylamine	50	47	0.665	0.05	6.0	40.0	2ORDR
Hexachloroethane	50	45	0.498		10.0	40.0	2ORDR
Nitrobenzene	0.240		0.263		9.6	40.0	AVRG
Isophorone	0.472		0.502		6.4	40.0	AVRG
2-Nitrophenol	0.206		0.229		11.2	20.0	AVRG
2,4-Dimethyphenol	0.268		0.288		7.5	40.0	AVRG
Bis(2-chloroethoxy)methane	0.292		0.322		10.3	40.0	AVRG
2,4-Dichlorophenol	0.239		0.268		12.1	20.0	AVRG
1,2,4-Trichlorobenzene	50	52	0.301		4.0	40.0	2ORDR
Naphthalene	50	50	0.866		0.0	40.0	2ORDR
4-Chloroaniline	50	48	0.358		4.0	40.0	2ORDR
Hexachlorobutadiene	0.133		0.138		3.8	20.0	AVRG
4-Chloro-3-methylphenol	0.243		0.272		11.9	20.0	AVRG
2-Methylnaphthalene	50	50	0.513		0.0	40.0	2ORDR
Hexachlorocyclopentadiene	50	59	0.261	0.05	18.0		LINR
2,4,6-Trichlorophenol	0.370		0.416		12.4	20.0	AVRG
2,4,5-Trichlorophenol	0.388		0.420		8.2	40.0	AVRG
2-Chloronaphthalene	1.175		1.233		4.9	40.0	AVRG
2-Nitroaniline	0.309		0.358		15.8	40.0	AVRG
Dimethylphthalate	1.344		1.428		6.2	40.0	AVRG
Acenaphthylene	50	51	1.857		2.0	40.0	2ORDR
2,6-Dinitrotoluene	0.279		0.305		9.3	40.0	AVRG
3-Nitroaniline	0.372		0.387		4.0	40.0	AVRG
Acenaphthene	50	49	1.152		2.0	20.0	2ORDR
2,4-Dinitrophenol	50	49	0.156	0.05	2.0		2ORDR
4-Nitrophenol	0.162		0.218	0.05	34.6	40.0	AVRG

*%Drift is reported for linear and 2nd order curves and %D (%Difference) is reported for average curves.

FORM 7
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSMA5973 Calibration Date: 09/11/03 Time: 1759

Lab File ID: A3091110 Init. Calib. Date(s): 09/10/03 09/10/03

Init. Calib. Times: 1158 1501

GC Column: ZB-5 ID: 0.25 (mm)

COMPOUND	ICAL50 AMT/ AVG RF	CCAL AMT	CCAL RF	MIN RF	%DRIFT /%D*	MAX %DRIFT /%D*	CURVE
Dibenzofuran	50	52	1.639		4.0	40.0	2ORDR
2,4-Dinitrotoluene	0.424		0.480		13.2	40.0	AVRG
Diethylphthalate	50	50	1.483		0.0	40.0	2ORDR
Fluorene	50	48	1.111		4.0	40.0	2ORDR
4-Chlorophenylphenylether	50	48	0.490		4.0	40.0	2ORDR
4-Nitroaniline	0.433		0.502		15.9	40.0	AVRG
2-Methyl-4,6-dinitrophenol	50	50	0.125		0.0	40.0	2ORDR
Diphenylamine/n-Nitrosodiphe	50	52	0.518		4.0	20.0	2ORDR
4-Bromophenylphenylether	0.163		0.167		2.4	40.0	AVRG
Hexachlorobenzene	0.163		0.164		0.6	40.0	AVRG
Pentachlorophenol	50	56	0.111		12.0	20.0	2ORDR
Phenanthrene	50	50	0.971		0.0	40.0	2ORDR
Anthracene	50	49	0.928		2.0	40.0	2ORDR
Carbazole	50	47	0.978		6.0	40.0	2ORDR
Di-n-butylphthalate	50	50	1.286		0.0	40.0	2ORDR
Fluoranthene	50	50	1.029		0.0	20.0	2ORDR
Pyrene	50	47	1.198		6.0	40.0	2ORDR
Butylbenzylphthalate	50	50	0.774		0.0	40.0	2ORDR
3,3'-Dichlorobenzidine	0.336		0.350		4.2	40.0	AVRG
Benzo(a)anthracene	1.055		1.036		1.8	40.0	AVRG
Chrysene	50	51	1.025		2.0	40.0	2ORDR
Bis(2-ethylhexyl)phthalate	50	49	1.068		2.0	40.0	2ORDR
Di-n-octylphthalate	50	49	1.832		2.0	20.0	2ORDR
Benzo(b)fluoranthene	1.210		1.180		2.5	40.0	AVRG
Benzo(k)fluoranthene	1.213		1.189		2.0	40.0	AVRG
Benzo(a)pyrene	1.097		1.091		0.5	20.0	AVRG
Indeno(1,2,3-c,d)pyrene	0.995		1.131		13.7	40.0	AVRG
Dibenzo(a,h)anthracene	0.832		0.930		11.8	40.0	AVRG
Benzo(g,h,i)perylene	0.836		0.982		17.5	40.0	AVRG
2-Fluorophenol	1.230		1.340		8.9	40.0	AVRG
Phenol-d5	1.260		1.367		8.5	40.0	AVRG
Nitrobenzene-d5	0.273		0.302		10.6	40.0	AVRG
2-Fluorobiphenyl	50	52	1.210		4.0	40.0	2ORDR
2,4,6-Tribromophenol	50	58	0.152		16.0	40.0	LINR

*%Drift is reported for linear and 2nd order curves and %D (%Difference) is reported for average curves.

FORM 7
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TSMA5973 Calibration Date: 09/11/03 Time: 1759

Lab File ID: A3091110 Init. Calib. Date(s): 09/10/03 09/10/03

Init. Calib. Times: 1158 1501

GC Column: ZB-5 ID: 0.25 (mm)

COMPOUND	ICAL50 AMT/ AVG RF	CCAL AMT	CCAL RF	MIN RF	%DRIFT /%D*	MAX %DRIFT /%D*	CURVE
Terphenyl-d14	0.808		0.794		1.7	40.0	AVRG

*%Drift is reported for linear and 2nd order curves and
%D (%Difference) is reported for average curves.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Lab File ID (Standard): A3091110 Date Analyzed: 09/11/03

Instrument ID: TSMA5973 Time Analyzed: 1759

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	391074	5.15	1468007	6.32	665572	7.81
	UPPER LIMIT	782148	5.65	2936014	6.82	1331144	8.31
	LOWER LIMIT	195537	4.65	734004	5.82	332786	7.31
	CLIENT SAMPLE NO.						
01	SM091003MLB	339101	5.15	1263992	6.31	590856	7.81
02	73924-1	339624	5.15	1218737	6.31	525698	7.81
03	73924-1MS	336860	5.15	1215100	6.31	552516	7.80
04	73924-1MSD	335408	5.15	1196079	6.31	548982	7.81
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Lab File ID (Standard): A3091110 Date Analyzed: 09/11/03

Instrument ID: TSMA5973 Time Analyzed: 1759

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	1231175	9.02	988517	11.50	864727	13.09
	UPPER LIMIT	2462350	9.52	1977034	12.00	1729454	13.59
	LOWER LIMIT	615588	8.52	494259	11.00	432364	12.59
	CLIENT SAMPLE NO.						
01	SM091003MLB	978473	9.02	809572	11.48	644592	13.08
02	73924-1	879666	9.01	714720	11.48	553502	13.08
03	73924-1MS	894472	9.02	724050	11.48	570228	13.08
04	73924-1MSD	874317	9.02	694170	11.48	568884	13.08
05							
06							
07							
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17							
18							
19							
20							
21							
22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

EXTRACTION LOG(S)

4 a

EXTRACTION LOG

Job No: 290 6

Batch No: SMD91003 M

Date Extracted: 09.10.03

Start Time: 3 pm

Stop Time: 4 pm

Analysis Required: 8270

Prep Method: 3550

Analyst/Activity Code* BE/A,B,S,D

Initial Project Check: BE

Final Project Check:

Date Concentrated: 9-11-03

Initials: DK

Extract Box ID:

	ID	Lot #	Amt (ml)	Init
Surr.	8270	7.3.4.1	1.0	BE
Surr.				
Spike	8270	7.3.4.13	1.0	BE
Spike				

Clean Up: Yes No

Comments

Solvent(s) Lot No:

1:1 MeCl2/ACETAN. A28.0028.09

Na2SO4 POWD: X44144

Na2SO4 GRAN: Y02631

MeCl2: Y16 E 79

* See inside front cover of logbook for definition codes

SAMPLE ID/DESCRIPTION	SDG	MT	Amt Exc'd	PH I	PH F	FV (ml)	D-D	H-D	COMMENTS
1. T373924*1/086-BFC-S-0904-03*	JETC01	SS	30.0			1.0	09.12	09.18	RP1
2.									
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									
11.									
12.									
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									
Lab Blank		SS	30.0			1.0			
Lab Spike #1		SS	30.0						
Lab Spike #2		SS	30.0						
MS: T373924*1 086-BFC-S-0904-03		SS							
MSD: T373924*1 086-BFC-S-0904-03		SS							

Dets: TCL - Semivolatiles <8270>

\+ Additional Dets:

0274

ANALYSIS LOG(S)

SAMPLE INFORMATION SUMMARY

Client SDG: JETC01 Sample Fraction: SV

QCGroup	Batch	DataFile	Sample Type	Client Id	Lab ID	SmplRef	Lab Prep	SDG
3160986	1A30910.b	A3091002.D	DFTPP	TUNE50	TUNE50	3160985		
3160986	1A30910.b	A3091005.D	CALIB_1		BNA4.00	2536478	3.5.50.2	
3160986	1A30910.b	A3091006.D	CALIB_2		BNA10.0	2536479	3.5.50.3	
3160986	1A30910.b	A3091007.D	CALIB_3		BNA20.0	2536480	3.5.50.4	
3160986	1A30910.b	A3091008.D	CALIB_4		BNA50.0	2536481	3.5.50.5	
3160986	1A30910.b	A3091009.D	CALIB_5		BNA80.0	2536482	3.5.51.1	
3160986	1A30910.b	A3091010.D	CALIB_6		BNA100	2536483	3.5.51.2	
3160986	1A30910.b	A3091011.D	CALIB_7		BNA120	2536484	3.5.51.3	
3160986	1A30910.b	A3091012.D	CALIB_8		BNA160	2536463	3.5.51.4	
14385362	1A30911.b	A3091109.D	DFTPP	TUNE50	TUNE50	14385355		
14385362	1A30911.b	A3091110.D	CCALIB_4	BNA050	BNA050	14385366	3.5.50.5	
14385362	1A30911.b	A3091118.D	BLANK	SM091003MLB	SM091003MLB	14385413	SM091003M	
14385362	1A30911.b	A3091122.D	MS	73924-1MS	086-BFC-S-0904-0	14385417	SM091003M	JETC01
14385362	1A30911.b	A3091123.D	MSD	73924-1MSD	086-BFC-S-0904-0	14385418	SM091003M	JETC01
14385362	1A30911.b	A3091121.D	SAMPLE	73924-1	086-BFC-S-0904-0	14385416	SM091003M	JETC01

Sequence Name: C:\HPCHEM\1\SEQUENCE\A30910.S
Comment: STL Instrument TSMA5973
Operator: MPF
Data Path: D:\DATA\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
( ) Inject Anyway
(X) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	100	A3091000	BNA9	RINSE
2	Sample	96	A3091001	TUN1	TUNE050~3.5.35.9~1~8270/625
3	Sample	96	A3091002	TUN1	TUNE050~3.5.35.9~1~8270/625
4	Sample	97	A3091003	BNA9	BNA050~3.5.50.5~1~8270/625
5	Sample	98	A3091004	BNA9	BNA010~3.5.50.3~1~8270/625
6	Sample	26	A3091005	BNA9	BNA400~3.5.50.2~1~8270/625
7	Sample	27	A3091006	BNA9	BNA100~3.5.50.1~1~8270/625
8	Sample	28	A3091007	BNA9	BNA20.0~3.5.50.4~1~8270/625
9	Sample	29	A3091008	BNA9	BNA50.0~3.5.50.5~1~8270/625
10	Sample	30	A3091009	BNA9	BNA80.0~3.5.51.1~1~8270/625
11	Sample	31	A3091010	BNA9	BNA100~3.5.51.2~1~8270/625
12	Sample	32	A3091011	BNA9	BNA120~3.5.51.3~1~8270/625
13	Sample	33	A3091012	BNA9	BNA160~3.5.51.4~1~8270/625
14	Sample	7	A3091013	BNA9	ICV050~7.3.5.9~1~8270/625
15	Sample	1	A3091014	BNA9	SM090803ALB~SM090803A~1~625
16	Sample	2	A3091015	BNA9	SM090803ALBLCS~SM090803A~1~62
17	Sample	3	A3091016	BNA9	SM090803ALBLCSD~SM090803A~1~6
18	Sample	4	A3091017	BNA9	73899-1~SM090803A~1~625
19	Sample	5	A3091018	BNA9	SM090803ALBMS~SM090803A~1~625
20	Sample	6	A3091019	BNA9	SM090803ALBMSD~SM090803A~1~62
21					

MPF 9/11/03

Sequence Name: C:\HPCHEM\1\SEQUENCE\A30911.S
Comment: STL Instrument TSMA5973
Operator: MPF
Data Path: D:\DATA\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
( ) Inject Anyway
(X) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	96	A3091100	TUN1	TUNE050~3.5.35.9~1~8270/625
2	Sample	97	A3091101	BNA9	BNA050~3.5.50.5~1~8270/625
3	Sample	98	A3091102	BNA9	BNA010~3.5.50.3~1~8270/625
4	Sample	99	A3091103	BNA9	TEST
5	Sample	99	A3091104	BNA9	TEST
6	Sample	96	A3091105	TUN1	TUNE050~3.5.35.9~1~8270/625
7	Sample	100	A3091106	BNA9	RINSE
8	Sample	100	A3091107	BNA9	RINSE
9	Sample	96	A3091108	BNA9	RINSE
10	Sample	96	A3091109	TUN1	TUNE050~3.5.35.9~1~8270/625
11	Sample	97	A3091110	BNA9	BNA050~3.5.50.5~1~8270/625
12	Sample	98	A3091111	BNA9	BNA010~3.5.50.3~1~8270/625
13	Sample	1	A3091112	BNA9	SM091003CLB~SM091003C~1~8270/
14	Sample	2	A3091113	BNA9	SM091003CLBLCS~SM091003C~1~82
15	Sample	3	A3091114	BNA9	SM091003CLBLCSD~SM091003C~1~8
16	Sample	4	A3091115	BNA9	73945-1~SM091003C~1~8270/625
17	Sample	5	A3091116	BNA9	SM091003CLBMS~SM091003C~1~827
18	Sample	6	A3091117	BNA9	SM091003CLBMSD~SM091003C~1~82
19	Sample	7	A3091118	BNA9	SM091003MLB~SM091003M~1~8270/
20	Sample	8	A3091119	BNA9	SM091003MLBLCS~SM091003M~1~82
21	Sample	9	A3091120	BNA9	SM091003MLBLCSD~SM091003M~1~8
22	Sample	10	A3091121	BNA9	73924-1~SM091003M~1~8270/625
23	Sample	11	A3091122	BNA9	73924-1~SM091003M~1~8270/625
24	Sample	12	A3091123	BNA9	73924-1~SM091003M~1~8270/625

56F 9/12/03

VOLATILE ORGANIC COMPOUNDS
Method 8260

CASE NARRATIVE

CASE NARRATIVE
GC/MS VOLATILE ORGANICS

STL Lab Reference No. / SDG: JETC01

Project: JETC and Building 271/0103-329-09

RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

METHOD

Preparation: SW-846 5030
Cleanup: N/A
Analysis: SW-846 8260

PREPARATION

Sample preparation proceeded normally.

ANALYSIS

Calibration: All acceptance criteria were met

Blanks: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Spikes: The Matrix Spike recovery for Chlorobenzene was outside advisory limits due to matrix interference in the sample.

Samples: No analytical or quality problems were observed.

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

SIGNED: _____ DATE: 9/24/03

Timothy Preston
Project Manager

FORMS

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

73924-1

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project:

SDG No.: JETC01

Matrix: (soil/water) SOIL

Lab Sample ID: 086-BFC-S-0904-03

Sample wt/vol: 4.0 (g/mL) G

Lab File ID: 2FI10011

Level: (low/med) LOW

Date Received: 09/06/03

% Moisture: not dec. 9

Date Analyzed: 09/10/03

GC Column: DB-624 60M ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume:_____(uL)

Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1,1-DICHLOROETHENE	7.0	U
67-64-1	ACETONE	70	U
75-15-0	CARBON DISULFIDE	7.0	U
75-09-2	METHYLENE CHLORIDE	7.0	U
156-60-5	trans-1,2-DICHLOROETHENE	7.0	U
75-34-3	1,1-DICHLOROETHANE	7.0	U
156-59-2	cis-1,2-DICHLOROETHENE	7.0	U
540-59-0	1,2-DICHLOROETHENE (total)	7.0	U
67-66-3	CHLOROFORM	7.0	U
78-93-3	2-BUTANONE	35	U
71-55-6	1,1,1-TRICHLOROETHANE	7.0	U
56-23-5	CARBON TETRACHLORIDE	7.0	U
107-06-2	1,2-DICHLOROETHANE	7.0	U
71-43-2	BENZENE	7.0	U
79-01-6	TRICHLOROETHENE	7.0	U
78-87-5	1,2-DICHLOROPROPANE	7.0	U
75-27-4	BROMODICHLOROMETHANE	7.0	U
10061-01-5	cis-1,3-DICHLOROPROPENE	7.0	U
108-88-3	TOLUENE	3.2	J
10061-02-6	trans-1,3-DICHLOROPROPENE	7.0	U
79-00-5	1,1,2-TRICHLOROETHANE	7.0	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	35	U
591-78-6	2-HEXANONE	35	U
127-18-4	TETRACHLOROETHENE	7.0	U
124-48-1	DIBROMOCHLOROMETHANE	7.0	U
108-90-7	CHLOROBENZENE	7.0	U
100-41-4	ETHYLBENZENE	7.0	U
108-38-3	m,p-XYLENE	7.0	U
95-47-6	o-XYLENE	7.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

73924-1

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project:

SDG No.: JETC01

Matrix: (soil/water) SOIL

Lab Sample ID: 086-BFC-S-0904-03

Sample wt/vol: 4.0 (g/mL) G

Lab File ID: 2FI10011

Level: (low/med) LOW

Date Received: 09/06/03

% Moisture: not dec. 9

Date Analyzed: 09/10/03

GC Column: DB-624 60M ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume:_____(uL)

Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	XYLENE (total)	7.0	U
100-42-5	STYRENE	7.0	U
75-25-2	BROMOFORM	7.0	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	7.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

73924-2

Lab Name: Lab Code:

Client: Project: SDG No.: JETC01

Matrix: (soil/water) WATER Lab Sample ID: 086-TB-L-0904-03

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 2GI09019

Level: (low/med) LOW Date Received: 09/06/03

% Moisture: not dec. _____ Date Analyzed: 09/09/03

GC Column: DB-624 60M ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	CHLOROMETHANE	1.0	U
75-01-4	VINYL CHLORIDE	1.0	U
74-83-9	BROMOMETHANE	1.0	U
75-00-3	CHLOROETHANE	1.0	U
75-35-4	1,1-DICHLOROETHENE	1.0	U
67-64-1	ACETONE	25	U
75-15-0	CARBON DISULFIDE	1.0	U
75-09-2	METHYLENE CHLORIDE	5.0	U
156-60-5	trans-1,2-DICHLOROETHENE	1.0	U
75-34-3	1,1-DICHLOROETHANE	1.0	U
156-59-2	cis-1,2-DICHLOROETHENE	1.0	U
540-59-0	1,2-DICHLOROETHENE (total)	1.0	U
67-66-3	CHLOROFORM	1.0	U
78-93-3	2-BUTANONE	10	U
71-55-6	1,1,1-TRICHLOROETHANE	1.0	U
56-23-5	CARBON TETRACHLORIDE	1.0	U
107-06-2	1,2-DICHLOROETHANE	1.0	U
71-43-2	BENZENE	1.0	U
79-01-6	TRICHLOROETHENE	1.0	U
78-87-5	1,2-DICHLOROPROPANE	1.0	U
75-27-4	BROMODICHLOROMETHANE	1.0	U
10061-01-5	cis-1,3-DICHLOROPROPENE	1.0	U
108-88-3	TOLUENE	1.0	U
10061-02-6	trans-1,3-DICHLOROPROPENE	1.0	U
79-00-5	1,1,2-TRICHLOROETHANE	1.0	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	10	U
591-78-6	2-HEXANONE	10	U
127-18-4	TETRACHLOROETHENE	1.0	U
124-48-1	DIBROMOCHLOROMETHANE	1.0	U
108-90-7	CHLOROBENZENE	1.0	U
100-41-4	ETHYLBENZENE	1.0	U
108-38-3	m,p-XYLENE	2.0	U
95-47-6	o-XYLENE	1.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

73924-2

Lab Name: Lab Code:

Client: Project: SDG No.: JETC01

Matrix: (soil/water) WATER Lab Sample ID: 086-TB-L-0904-03

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 2GI09019

Level: (low/med) LOW Date Received: 09/06/03

% Moisture: not dec. _____ Date Analyzed: 09/09/03

GC Column: DB-624 60M ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	XYLENE (total)	2.0	U
100-42-5	STYRENE	1.0	U
75-25-2	BROMOFORM	1.0	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	1.0	U

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

2G090903MB

Lab Name: Lab Code:

Client: Project: SDG No.: JETC01

Matrix: (soil/water) WATER Lab Sample ID: 2G090903MB

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 2GI09008

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/09/03

GC Column: DB-624 60M ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	CHLOROMETHANE	1.0	U
75-01-4	VINYL CHLORIDE	1.0	U
74-83-9	BROMOMETHANE	1.0	U
75-00-3	CHLOROETHANE	1.0	U
75-35-4	1,1-DICHLOROETHENE	1.0	U
67-64-1	ACETONE	25	U
75-15-0	CARBON DISULFIDE	1.0	U
75-09-2	METHYLENE CHLORIDE	5.0	U
156-60-5	trans-1,2-DICHLOROETHENE	1.0	U
75-34-3	1,1-DICHLOROETHANE	1.0	U
156-59-2	cis-1,2-DICHLOROETHENE	1.0	U
540-59-0	1,2-DICHLOROETHENE (total)	1.0	U
67-66-3	CHLOROFORM	1.0	U
78-93-3	2-BUTANONE	10	U
71-55-6	1,1,1-TRICHLOROETHANE	1.0	U
56-23-5	CARBON TETRACHLORIDE	1.0	U
107-06-2	1,2-DICHLOROETHANE	1.0	U
71-43-2	BENZENE	1.0	U
79-01-6	TRICHLOROETHENE	1.0	U
78-87-5	1,2-DICHLOROPROPANE	1.0	U
75-27-4	BROMODICHLOROMETHANE	1.0	U
10061-01-5	cis-1,3-DICHLOROPROPENE	1.0	U
108-88-3	TOLUENE	1.0	U
10061-02-6	trans-1,3-DICHLOROPROPENE	1.0	U
79-00-5	1,1,2-TRICHLOROETHANE	1.0	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	10	U
591-78-6	2-HEXANONE	10	U
127-18-4	TETRACHLOROETHENE	1.0	U
124-48-1	DIBROMOCHLOROMETHANE	1.0	U
108-90-7	CHLOROBENZENE	1.0	U
100-41-4	ETHYLBENZENE	1.0	U
108-38-3	m,p-XYLENE	2.0	U
95-47-6	o-XYLENE	1.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

2G090903MB

Lab Name: Lab Code:

Client: Project: SDG No.: JETC01

Matrix: (soil/water) WATER Lab Sample ID: 2G090903MB

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 2GI09008

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/09/03

GC Column: DB-624 60M ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	XYLENE (total)	2.0	U
100-42-5	STYRENE	1.0	U
75-25-2	BROMOFORM	1.0	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	1.0	U

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

2G090903MBLCS

Lab Name: Lab Code:

Client: Project: SDG No.: JETC01

Matrix: (soil/water) WATER Lab Sample ID: 2G090903MBLCS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 2GI09003

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/09/03

GC Column: DB-624 60M ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	CHLOROMETHANE	9.8	
75-01-4	VINYL CHLORIDE	9.8	
74-83-9	BROMOMETHANE	6.9	
75-00-3	CHLOROETHANE	11	
75-35-4	1,1-DICHLOROETHENE	9.0	
67-64-1	ACETONE	83	
75-15-0	CARBON DISULFIDE	8.0	
75-09-2	METHYLENE CHLORIDE	8.8	
156-60-5	trans-1,2-DICHLOROETHENE	12	
75-34-3	1,1-DICHLOROETHANE	12	
156-59-2	cis-1,2-DICHLOROETHENE	12	
540-59-0	1,2-DICHLOROETHENE (total)	23	
67-66-3	CHLOROFORM	12	
78-93-3	2-BUTANONE	81	
71-55-6	1,1,1-TRICHLOROETHANE	11	
56-23-5	CARBON TETRACHLORIDE	11	
107-06-2	1,2-DICHLOROETHANE	9.6	
71-43-2	BENZENE	11	
79-01-6	TRICHLOROETHENE	10	
78-87-5	1,2-DICHLOROPROPANE	11	
75-27-4	BROMODICHLOROMETHANE	10	
10061-01-5	cis-1,3-DICHLOROPROPENE	10	
108-88-3	TOLUENE	11	
10061-02-6	trans-1,3-DICHLOROPROPENE	10	
79-00-5	1,1,2-TRICHLOROETHANE	10	
108-10-1	4-METHYL-2-PENTANONE (MIBK)	75	
591-78-6	2-HEXANONE	74	
127-18-4	TETRACHLOROETHENE	8.4	
124-48-1	DIBROMOCHLOROMETHANE	9.5	
108-90-7	CHLOROBENZENE	10	
100-41-4	ETHYLBENZENE	10	
108-38-3	m,p-XYLENE	21	
95-47-6	o-XYLENE	10	

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

2G090903MBLCS

Lab Name: Lab Code:

Client: Project: SDG No.: JETC01

Matrix: (soil/water) WATER Lab Sample ID: 2G090903MBLCS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 2GI09003

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/09/03

GC Column: DB-624 60M ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	XYLENE (total)	31	
100-42-5	STYRENE	10	
75-25-2	BROMOFORM	9.7	
79-34-5	1,1,2,2-TETRACHLOROETHANE	8.9	

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

2G090903MBLCSD

Lab Name: Lab Code:

Client: Project: SDG No.: JETC01

Matrix: (soil/water) WATER Lab Sample ID: 2G090903MBLCSD

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 2GI09004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/09/03

GC Column: DB-624 60M ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	CHLOROMETHANE	12	
75-01-4	VINYL CHLORIDE	10	
74-83-9	BROMOMETHANE	6.7	
75-00-3	CHLOROETHANE	10	
75-35-4	1,1-DICHLOROETHENE	9.1	
67-64-1	ACETONE	52	
75-15-0	CARBON DISULFIDE	7.9	
75-09-2	METHYLENE CHLORIDE	9.4	
156-60-5	trans-1,2-DICHLOROETHENE	11	
75-34-3	1,1-DICHLOROETHANE	11	
156-59-2	cis-1,2-DICHLOROETHENE	11	
540-59-0	1,2-DICHLOROETHENE (total)	22	
67-66-3	CHLOROFORM	11	
78-93-3	2-BUTANONE	84	
71-55-6	1,1,1-TRICHLOROETHANE	10	
56-23-5	CARBON TETRACHLORIDE	10	
107-06-2	1,2-DICHLOROETHANE	9.4	
71-43-2	BENZENE	10	
79-01-6	TRICHLOROETHENE	10	
78-87-5	1,2-DICHLOROPROPANE	10	
75-27-4	BROMODICHLOROMETHANE	10	
10061-01-5	cis-1,3-DICHLOROPROPENE	10	
108-88-3	TOLUENE	10	
10061-02-6	trans-1,3-DICHLOROPROPENE	9.9	
79-00-5	1,1,2-TRICHLOROETHANE	10	
108-10-1	4-METHYL-2-PENTANONE (MIBK)	86	
591-78-6	2-HEXANONE	87	
127-18-4	TETRACHLOROETHENE	8.1	
124-48-1	DIBROMOCHLOROMETHANE	9.6	
108-90-7	CHLOROBENZENE	10	
100-41-4	ETHYLBENZENE	9.9	
108-38-3	m,p-XYLENE	20	
95-47-6	o-XYLENE	9.9	

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

2G090903MBLCSD

Lab Name: Lab Code:

Client: Project: SDG No.: JETC01

Matrix: (soil/water) WATER Lab Sample ID: 2G090903MBLCSD

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 2GI09004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/09/03

GC Column: DB-624 60M ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	XYLENE (total)	30	
100-42-5	STYRENE	9.5	
75-25-2	BROMOFORM	9.5	
79-34-5	1,1,2,2-TETRACHLOROETHANE	9.6	

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

2F0910MB

Lab Name: STL TALLAHASSEE Lab Code: TL

SDG No.: JETC01

Client: Project:

Matrix: (soil/water) SOIL Lab Sample ID: 2F0910MB

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 2FI10006

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/10/03

GC Column: DB-624 60M ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	10	U
75-01-4	VINYL CHLORIDE	10	U
74-83-9	BROMOMETHANE	10	U
75-00-3	CHLOROETHANE	10	U
75-35-4	1,1-DICHLOROETHENE	5.0	U
67-64-1	ACETONE	50	U
75-15-0	CARBON DISULFIDE	5.0	U
75-09-2	METHYLENE CHLORIDE	5.0	U
156-60-5	trans-1,2-DICHLOROETHENE	5.0	U
75-34-3	1,1-DICHLOROETHANE	5.0	U
156-59-2	cis-1,2-DICHLOROETHENE	5.0	U
540-59-0	1,2-DICHLOROETHENE (total)	5.0	U
67-66-3	CHLOROFORM	5.0	U
78-93-3	2-BUTANONE	25	U
71-55-6	1,1,1-TRICHLOROETHANE	5.0	U
56-23-5	CARBON TETRACHLORIDE	5.0	U
107-06-2	1,2-DICHLOROETHANE	5.0	U
71-43-2	BENZENE	5.0	U
79-01-6	TRICHLOROETHENE	5.0	U
78-87-5	1,2-DICHLOROPROPANE	5.0	U
75-27-4	BROMODICHLOROMETHANE	5.0	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.0	U
108-88-3	TOLUENE	5.0	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.0	U
79-00-5	1,1,2-TRICHLOROETHANE	5.0	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	25	U
591-78-6	2-HEXANONE	25	U
127-18-4	TETRACHLOROETHENE	5.0	U
124-48-1	DIBROMOCHLOROMETHANE	5.0	U
108-90-7	CHLOROBENZENE	5.0	U
100-41-4	ETHYLBENZENE	5.0	U
108-38-3	m,p-XYLENE	5.0	U
95-47-6	o-XYLENE	5.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

2F0910MB

Lab Name: STL TALLAHASSEE Lab Code: TL

SDG No.: JETC01

Client: Project:

Matrix: (soil/water) SOIL Lab Sample ID: 2F0910MB

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 2FI10006

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/10/03

GC Column: DB-624 60M ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	XYLENE (total)	5.0	U
100-42-5	STYRENE	5.0	U
75-25-2	BROMOFORM	5.0	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5.0	U

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

2F0910MBLCS

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project:

SDG No.: JETC01

Matrix: (soil/water) SOIL

Lab Sample ID: 2F0910MBLCS

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: 2FI10003

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 09/10/03

GC Column: DB-624 60M ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume:_____(uL)

Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	35	
75-01-4	VINYL CHLORIDE	38	
74-83-9	BROMOMETHANE	31	
75-00-3	CHLOROETHANE	41	
75-35-4	1,1-DICHLOROETHENE	60	
67-64-1	ACETONE	500	
75-15-0	CARBON DISULFIDE	47	
75-09-2	METHYLENE CHLORIDE	5.0	U
156-60-5	trans-1,2-DICHLOROETHENE	5.0	U
75-34-3	1,1-DICHLOROETHANE	5.0	U
156-59-2	cis-1,2-DICHLOROETHENE	5.0	U
540-59-0	1,2-DICHLOROETHENE (total)	5.0	U
67-66-3	CHLOROFORM	5.0	U
78-93-3	2-BUTANONE	490	E
71-55-6	1,1,1-TRICHLOROETHANE	5.0	U
56-23-5	CARBON TETRACHLORIDE	5.0	U
107-06-2	1,2-DICHLOROETHANE	5.0	U
71-43-2	BENZENE	60	
79-01-6	TRICHLOROETHENE	57	
78-87-5	1,2-DICHLOROPROPANE	5.0	U
75-27-4	BROMODICHLOROMETHANE	5.0	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.0	U
108-88-3	TOLUENE	62	
10061-02-6	trans-1,3-DICHLOROPROPENE	5.0	U
79-00-5	1,1,2-TRICHLOROETHANE	5.0	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	480	E
591-78-6	2-HEXANONE	480	E
127-18-4	TETRACHLOROETHENE	5.0	U
124-48-1	DIBROMOCHLOROMETHANE	5.0	U
108-90-7	CHLOROBENZENE	66	
100-41-4	ETHYLBENZENE	5.0	U
108-38-3	m,p-XYLENE	5.0	U
95-47-6	o-XYLENE	5.0	U

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

2F0910MBLCS

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project:

SDG No.: JETC01

Matrix: (soil/water) SOIL

Lab Sample ID: 2F0910MBLCS

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: 2FI10003

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 09/10/03

GC Column: DB-624 60M ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume:_____(uL)

Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	XYLENE (total)	5.0	U
100-42-5	STYRENE	5.0	U
75-25-2	BROMOFORM	5.0	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

2F0910MBLCSD

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project:

SDG No.: JETC01

Matrix: (soil/water) SOIL

Lab Sample ID: 2F0910MBLCSD

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: 2FI10004

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 09/10/03

GC Column: DB-624 60M ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume:_____(uL)

Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	36	
75-01-4	VINYL CHLORIDE	40	
74-83-9	BROMOMETHANE	34	
75-00-3	CHLOROETHANE	43	
75-35-4	1,1-DICHLOROETHENE	61	
67-64-1	ACETONE	540	
75-15-0	CARBON DISULFIDE	47	
75-09-2	METHYLENE CHLORIDE	5.0	U
156-60-5	trans-1,2-DICHLOROETHENE	5.0	U
75-34-3	1,1-DICHLOROETHANE	5.0	U
156-59-2	cis-1,2-DICHLOROETHENE	5.0	U
540-59-0	1,2-DICHLOROETHENE (total)	5.0	U
67-66-3	CHLOROFORM	5.0	U
78-93-3	2-BUTANONE	520	E
71-55-6	1,1,1-TRICHLOROETHANE	5.0	U
56-23-5	CARBON TETRACHLORIDE	5.0	U
107-06-2	1,2-DICHLOROETHANE	5.0	U
71-43-2	BENZENE	60	
79-01-6	TRICHLOROETHENE	59	
78-87-5	1,2-DICHLOROPROPANE	5.0	U
75-27-4	BROMODICHLOROMETHANE	5.0	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.0	U
108-88-3	TOLUENE	62	
10061-02-6	trans-1,3-DICHLOROPROPENE	5.0	U
79-00-5	1,1,2-TRICHLOROETHANE	5.0	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	500	E
591-78-6	2-HEXANONE	520	E
127-18-4	TETRACHLOROETHENE	5.0	U
124-48-1	DIBROMOCHLOROMETHANE	5.0	U
108-90-7	CHLOROBENZENE	67	
100-41-4	ETHYLBENZENE	5.0	U
108-38-3	m,p-XYLENE	5.0	U
95-47-6	o-XYLENE	5.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

2F0910MBLCSD

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project:

SDG No.: JETC01

Matrix: (soil/water) SOIL

Lab Sample ID: 2F0910MBLCSD

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: 2FI10004

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 09/10/03

GC Column: DB-624 60M ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume:_____(uL)

Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	XYLENE (total)	5.0	U
100-42-5	STYRENE	5.0	U
75-25-2	BROMOFORM	5.0	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5.0	U

FORM I VOA

FORM 2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Lab Code:

Client: Project: SDG No.: JETC01

	CLIENT SAMPLE NO.	SMC1 (DFM) #	SMC2 (TOL) #	SMC3 (BFB) #	OTHER (DCB) #	TOT OUT
01	2G090903MBLC	112	104	104	104	0
02	2G090903MBLC	112	104	104	104	0
03	2G090903MB	112	104	100	112	0
04	73924-2	116	104	100	112	0
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
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22						
23						
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25						
26						
27						
28						
29						
30						

		QC LIMITS
SMC1 (DFM)	= DIBROMFLUOROMETHANE	(70-130)
SMC2 (TOL)	= TOLUENE-d8	(77-122)
SMC3 (BFB)	= p-BROMOFLUOROBENZENE	(74-126)
OTHER(DCB)	= 1,2-DICHLOROBENZENE d4	(70-130)

Column to be used to flag recovery values

* Values outside of laboratory QC limits

D System Monitoring Compound diluted out

FORM 2
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Level:(low/med) LOW

	CLIENT SAMPLE NO.	SMC1 (DFM)#	SMC2 (TOL)#	SMC3 (BFB)#	OTHER (DCB)#	TOT OUT
01	2F0910MBLCS	94	82	80	88	0
02	2F0910MBLCSD	102	84	84	90	0
03	2F0910MB	100	78	82	88	0
04	73924-1	98	71	67	81	0
05						
06						
07						
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		QC LIMITS
SMC1 (DFM)	= DIBROMFLUOROMETHANE	(58-142)
SMC2 (TOL)	= TOLUENE-d8	(64-136)
SMC3 (BFB)	= p-BROMOFLUOROBENZENE	(63-135)
OTHER(DCB)	= 1,2-DICHLOROBENZENE d4	(70-130)

Column to be used to flag recovery values

* Values outside of laboratory QC limits

D System Monitoring Compound diluted out

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: Lab Code:

Client: Project: SDG No.: JETC01

Matrix Spike - Sample No.: 2G090903MB

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	LCS CONC (ug/L)	LCS % REC#	QC. LIMITS REC.
BENZENE	10	0.00	11	110	62-135
CHLOROBENZENE	10	0.00	10	100	72-127
1,1-DICHLOROETHENE	10	0.00	9.0	90	46-147
TOLUENE	10	0.00	11	110	68-131
TRICHLOROETHENE	10	0.00	10	100	56-143

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONC (ug/L)	LCSD % REC#	AVG % REC	% RPD$#	QC LIMITS RPD	QC LIMITS REC.
BENZENE	10	10	100	105	9.5	37	62-135
CHLOROBENZENE	10	10	100	100	0	22	72-127
1,1-DICHLOROETHENE	10	9.1	91	90	1.1	30	46-147
TOLUENE	10	10	100	105	9.5	33	68-131
TRICHLOROETHENE	10	10	100	100	0	35	56-143

$ %RPD calculated using the spike and spike duplicate concentrations as per SW846 8000B
# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

FORM III VOA

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Matrix Spike - Sample No.: 2F0910MB Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONC (ug/Kg)	LCS CONC (ug/Kg)	LCS % REC#	QC. LIMITS REC.
BENZENE	50	0.00	60	120	49-142
CHLOROBENZENE	50	0.00	66	132	66-135
1,1-DICHLOROETHENE	50	0.00	60	120	40-164
TOLUENE	50	0.00	62	124	38-158
TRICHLOROETHENE	50	0.00	57	114	51-146

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONC (ug/Kg)	LCSD % REC#	AVG % REC	% RPD$#	QC LIMITS RPD	QC LIMITS REC.
BENZENE	50	60	120	120	0	42	49-142
CHLOROBENZENE	50	67	134	133	1.5	34	66-135
1,1-DICHLOROETHENE	50	61	122	121	1.6	46	40-164
TOLUENE	50	62	124	124	0	32	38-158
TRICHLOROETHENE	50	59	118	116	3.4	34	51-146

$ %RPD calculated using the spike and spike duplicate concentrations as per SW846 8000B
# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

2G090903MB

Lab Name: Lab Code:

Client: Project: SDG No.: JETC01

Lab File ID: 2GI09008 Lab Sample ID: 2G090903MB

Date Analyzed: 09/09/03 Time Analyzed: 1441

GC Column: DB-624 6 ID: 0.32 (mm) Heated Purge: (Y/N) N

Instrument ID: TVMG5973

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	2G090903MBLC	2G090903MBLCS	2GI09003	1332
02	2G090903MBLC	2G090903MBLCSD	2GI09004	1345
03	73924-2	086-TB-L-0904-	2GI09019	1715
04				
05				
06				
07				
08				
09				
10				
11				
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30				

COMMENTS:

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

2F0910MB

Lab Name: STL TALLAHASSEE Lab Code: TL

SDG No.: JETC01

Client: Project:

Lab File ID: 2FI10006 Lab Sample ID: 2F0910MB

Date Analyzed: 09/10/03 Time Analyzed: 1331

GC Column: DB-624 6 ID: 0.32 (mm) Heated Purge: (Y/N) Y

Instrument ID: TVMF5973

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	2F0910MBLCS	2F0910MBLCS	2FI10003	1151
02	2F0910MBLCSD	2F0910MBLCSD	2FI10004	1224
03	73924-1	086-BFC-S-0904	2FI10011	1824
04				
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COMMENTS:

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lab Code:

Client: Project: SDG No.: JETC01

Lab File ID: 1GH08001 BFB Injection Date: 08/08/03

Instrument ID: TVMG5973 BFB Injection Time: 0746

GC Column: DB-624 60 ID: 0.32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	18.5
75	30.0 - 66.0% of mass 95	47.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	91.0
175	4.0 - 9.0% of mass 174	6.6 (7.3)1
176	93.0 - 101.0% of mass 174	85.3 (93.7)1
177	5.0 - 9.0% of mass 176	5.9 (6.9)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD001GR	VSTD001GR	1GH08002	08/08/03	0800
02	VSTD001DS	VSTD001DS	1GH08003	08/08/03	0814
03	VSTD005GR	VSTD005GR	1GH08004	08/08/03	0828
04	VSTD005DS	VSTD005DS	1GH08005	08/08/03	0841
05	VSTD010GR	VSTD010GR	1GH08006	08/08/03	0856
06	VSTD010DS	VSTD010DS	1GH08007	08/08/03	0909
07	VSTD020GR	VSTD020GR	1GH08008	08/08/03	0924
08	VSTD020DS	VSTD020DS	1GH08009	08/08/03	0937
09	VSTD030GR	VSTD030GR	1GH08010	08/08/03	0952
10	VSTD030DS	VSTD030DS	1GH08011	08/08/03	1005
11	VSTD040GR	VSTD040GR	1GH08012	08/08/03	1020
12	VSTD040DS	VSTD040DS	1GH08013	08/08/03	1033
13	VSTD060GR	VSTD060GR	1GH08014	08/08/03	1048
14	VSTD060DS	VSTD060DS	1GH08015	08/08/03	1101
15					
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FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lab Code:

Client: Project: SDG No.: JETC01

Lab File ID: 2GI09001 BFB Injection Date: 09/09/03

Instrument ID: TVMG5973 BFB Injection Time: 1244

GC Column: DB-624 60 ID: 0.32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	18.2
75	30.0 - 66.0% of mass 95	48.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.6 (0.7)1
174	50.0 - 120.0% of mass 95	90.1
175	4.0 - 9.0% of mass 174	6.5 (7.2)1
176	93.0 - 101.0% of mass 174	86.8 (96.3)1
177	5.0 - 9.0% of mass 176	5.6 (6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD020	VSTD020	2GI09002	09/09/03	1257
02	2G090903MBLC	2G090903MBLCS	2GI09003	09/09/03	1332
03	2G090903MBLC	2G090903MBLCSD	2GI09004	09/09/03	1345
04	2G090903MB	2G090903MB	2GI09008	09/09/03	1441
05	73924-2	086-TB-L-0904-	2GI09019	09/09/03	1715
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FORM V VOA

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Lab File ID: 2FH11001 BFB Injection Date: 08/11/03

Instrument ID: TVMF5973 BFB Injection Time: 1144

GC Column: DB-624 30 ID: 0.32 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	20.3
75	30.0 - 66.0% of mass 95	53.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	107.5
175	4.0 - 9.0% of mass 174	9.0 (8.4)1
176	93.0 - 101.0% of mass 174	108.2 (100.6)1
177	5.0 - 9.0% of mass 176	7.9 (7.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD 001	VSTD 001	2FH11003	08/11/03	1427
02	VSTD 02.5	VSTD 02.5	2FH11004	08/11/03	1501
03	VSTD 005	VSTD 005	2FH11005	08/11/03	1534
04	VSTD 010	VSTD 010	2FH11006	08/11/03	1607
05	VSTD 025	VSTD 025	2FH11007	08/11/03	1641
06	VSTD 050	VSTD 050	2FH11008	08/11/03	1714
07	VSTD 075	VSTD 075	2FH11009	08/11/03	1747
08	VSTD 100	VSTD 100	2FH11010	08/11/03	1820
09	VSTD 200	VSTD 200	2FH11011	08/11/03	1854
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FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Lab File ID: 2FI10001 BFB Injection Date: 09/10/03

Instrument ID: TVMF5973 BFB Injection Time: 1000

GC Column: DB-624 30 ID: 0.32 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	17.2
75	30.0 - 66.0% of mass 95	51.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	111.4
175	4.0 - 9.0% of mass 174	8.3 (7.5)1
176	93.0 - 101.0% of mass 174	103.7 (93.1)1
177	5.0 - 9.0% of mass 176	6.2 (6.0)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD 050	VSTD 050	2FI10002	09/10/03	1033
02	2F0910MBLCS	2F0910MBLCS	2FI10003	09/10/03	1151
03	2F0910MBLCSD	2F0910MBLCSD	2FI10004	09/10/03	1224
04	2F0910MB	2F0910MB	2FI10006	09/10/03	1331
05	73924-1	086-BFC-S-0904	2FI10011	09/10/03	1824
06					
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FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: Lab Code:

Client: Project: SDG No.: JETC01

Instrument ID: TVMG5973 Calibration Date(s): 07/24/03 08/08/03

Column: DB-624 60M ID: 0.32 (mm) Calibration Time(s): 1049 1101

LAB FILE ID: RF1: 1GH08003 RF5: 1GH08005 RF10: 1GH08007
RF20: 1GH08009 RF30: 1GH08011

COMPOUND	RF1	RF5	RF10	RF20	RF30
CHLOROMETHANE	1.300	1.275	1.179	1.439	1.385
VINYL CHLORIDE	1.150	1.216	1.175	1.434	1.338
BROMOMETHANE	1.019	0.976	0.826	1.052	0.995
CHLOROETHANE	0.779	0.796	0.798	0.896	0.849
1,1-DICHLOROETHENE	1.204	1.236	1.210	1.139	1.133
ACETONE	0.119	0.122	0.116	0.108	0.109
CARBON DISULFIDE	3.837	4.337	4.531	4.069	3.933
METHYLENE CHLORIDE	1.477	1.096	1.129	1.111	1.088
trans-1,2-DICHLOROETHENE	0.930	0.830	0.846	0.881	0.929
1,1-DICHLOROETHANE	1.385	1.508	1.422	1.514	1.592
cis-1,2-DICHLOROETHENE	0.868	0.922	0.869	0.904	0.955
1,2-DICHLOROETHENE (total)	0.900	0.876	0.858	0.893	0.942
CHLOROFORM	1.434	1.406	1.422	1.420	1.494
2-BUTANONE	0.032	0.036	0.039	0.039	0.041
1,1,1-TRICHLOROETHANE	0.432	0.422	0.429	0.457	0.478
CARBON TETRACHLORIDE	0.334	0.331	0.332	0.360	0.378
1,2-DICHLOROETHANE	0.412	0.414	0.410	0.428	0.431
BENZENE	1.290	1.276	1.269	1.342	1.337
TRICHLOROETHENE	0.323	0.317	0.321	0.329	0.345
1,2-DICHLOROPROPANE	0.315	0.311	0.309	0.324	0.338
BROMODICHLOROMETHANE	0.363	0.359	0.375	0.397	0.411
cis-1,3-DICHLOROPROPENE	0.411	0.428	0.422	0.461	0.476
TOLUENE	0.817	0.773	0.776	0.822	0.837
trans-1,3-DICHLOROPROPENE	0.310	0.380	0.366	0.409	0.428
1,1,2-TRICHLOROETHANE	0.194	0.231	0.233	0.248	0.253
4-METHYL-2-PENTANONE (MIBK)	0.127	0.147	0.142	0.159	0.173
2-HEXANONE	0.658	0.729	0.735	0.760	0.844
TETRACHLOROETHENE	1.145	1.101	1.062	1.359	1.426
DIBROMOCHLOROMETHANE	0.814	0.865	0.822	0.982	1.065
CHLOROBENZENE	3.017	2.947	2.830	3.057	3.218
ETHYLBENZENE	4.738	4.931	4.702	5.158	5.453
m,p-XYLENE	1.907	1.990	1.935	2.096	2.237
o-XYLENE	1.834	1.892	1.809	2.008	2.175
XYLENE (total)	1.883	1.957	1.893	2.067	2.494
STYRENE	2.827	3.065	2.972	3.372	3.630
BROMOFORM	0.484	0.520	0.514	0.616	0.712
1,1,2,2-TETRACHLOROETHANE	1.054	1.222	1.173	1.334	1.420

FORM VI VOA

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: Lab Code:

Client: Project: SDG No.: JETC01

Instrument ID: TVMG5973 Calibration Date(s): 07/24/03 08/08/03

Column: DB-624 60M ID: 0.32 (mm) Calibration Time(s): 1049 1101

LAB FILE ID: RF1: 1GH08003 RF5: 1GH08005 RF10: 1GH08007
RF20: 1GH08009 RF30: 1GH08011

COMPOUND	RF1	RF5	RF10	RF20	RF30
DIBROMFLUOROMETHANE		0.738	0.830	0.765	0.816
TOLUENE-d8		1.055	1.212	1.122	1.165
p-BROMOFLUOROBENZENE		1.259	1.394	1.361	1.479
1,2-DICHLOROBENZENE d4		0.515	0.559	0.516	0.528

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: Lab Code:

Client: Project: SDG No.: JETC01

Instrument ID: TVMG5973 Calibration Date(s): 07/24/03 08/08/03

Column: DB-624 60M ID: 0.32 (mm) Calibration Time(s): 1049 1101

LAB FILE ID: RF40: 1GH08013 RF60: 1GH08015

COMPOUND	RF40	RF60
CHLOROMETHANE	1.420	1.462
VINYL CHLORIDE	1.346	1.383
BROMOMETHANE	0.822	
CHLOROETHANE	0.882	
1,1-DICHLOROETHENE	1.201	1.236
ACETONE	0.118	0.114
CARBON DISULFIDE	4.232	4.350
METHYLENE CHLORIDE	1.203	1.308
trans-1,2-DICHLOROETHENE	0.921	0.915
1,1-DICHLOROETHANE	1.568	1.522
cis-1,2-DICHLOROETHENE	0.980	0.955
1,2-DICHLOROETHENE (total)	0.950	0.935
CHLOROFORM	1.495	1.445
2-BUTANONE	0.046	0.044
1,1,1-TRICHLOROETHANE	0.492	0.479
CARBON TETRACHLORIDE	0.396	0.380
1,2-DICHLOROETHANE	0.465	0.454
BENZENE	1.417	1.373
TRICHLOROETHENE	0.355	0.340
1,2-DICHLOROPROPANE	0.353	0.338
BROMODICHLOROMETHANE	0.439	0.418
cis-1,3-DICHLOROPROPENE	0.515	0.503
TOLUENE	0.887	0.839
trans-1,3-DICHLOROPROPENE	0.459	0.448
1,1,2-TRICHLOROETHANE	0.275	0.261
4-METHYL-2-PENTANONE (MIBK)	0.187	0.179
2-HEXANONE	0.894	0.845
TETRACHLOROETHENE	1.458	1.492
DIBROMOCHLOROMETHANE	1.096	1.065
CHLOROBENZENE	3.264	3.066
ETHYLBENZENE	5.513	5.202
m,p-XYLENE	2.272	2.212
o-XYLENE	2.221	2.118
XYLENE (total)	2.255	2.181
STYRENE	3.765	3.589
BROMOFORM	0.744	0.723
1,1,2,2-TETRACHLOROETHANE	1.465	1.408

FORM VI VOA

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: Lab Code:

Client: Project: SDG No.: JETC01

Instrument ID: TVMG5973 Calibration Date(s): 07/24/03 08/08/03

Column: DB-624 60M ID: 0.32 (mm) Calibration Time(s): 1049 1101

LAB FILE ID: RF40: 1GH08013 RF60: 1GH08015

COMPOUND	RF40	RF60
DIBROMFLUOROMETHANE	0.861	0.838
TOLUENE-d8	1.267	1.202
p-BROMOFLUOROBENZENE	1.565	1.465
1,2-DICHLOROBENZENE d4	0.546	0.490

FORM VI VOA

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: Lab Code:

Client: Project: SDG No.: JETC01

Instrument ID: TVMG5973 Calibration Date(s): 07/24/03 08/08/03

Column: DB-624 60M ID: 0.32 (mm) Calibration Time(s): 1049 1101

COMPOUND	CURVE	COEFFICIENTS A0	A1	%RSD or R^2
CHLOROMETHANE	AVRG		1.35149	7.6
VINYL CHLORIDE	AVRG		1.29194	8.5
BROMOMETHANE	AVRG		0.94826	10.5
CHLOROETHANE	AVRG		0.83324	5.9
1,1-DICHLOROETHENE	AVRG		1.19425	3.5
ACETONE	AVRG		0.11537	4.4
CARBON DISULFIDE	AVRG		4.18421	5.9
METHYLENE CHLORIDE	AVRG		1.20186	12.0
trans-1,2-DICHLOROETHENE	AVRG		0.89333	4.6
1,1-DICHLOROETHANE	AVRG		1.50164	4.9
cis-1,2-DICHLOROETHENE	AVRG		0.92188	4.8
1,2-DICHLOROETHENE (total)	AVRG		0.90764	3.9
CHLOROFORM	AVRG		1.44532	2.5
2-BUTANONE	AVRG		3.947e-002	12.1
1,1,1-TRICHLOROETHANE	AVRG		0.45561	6.2
CARBON TETRACHLORIDE	AVRG		0.35893	7.5
1,2-DICHLOROETHANE	AVRG		0.43067	5.0
BENZENE	AVRG		1.32902	4.1
TRICHLOROETHENE	AVRG		0.33282	4.2
1,2-DICHLOROPROPANE	AVRG		0.32696	5.1
BROMODICHLOROMETHANE	AVRG		0.39458	7.6
cis-1,3-DICHLOROPROPENE	AVRG		0.45961	8.9
TOLUENE	AVRG		0.82171	4.8
trans-1,3-DICHLOROPROPENE	AVRG		0.39996	13.0
1,1,2-TRICHLOROETHANE	AVRG		0.24217	10.8
4-METHYL-2-PENTANONE (MIBK)	AVRG		0.15909	13.7
2-HEXANONE	AVRG		0.78061	10.6
TETRACHLOROETHENE	AVRG		1.29196	14.2
DIBROMOCHLOROMETHANE	AVRG		0.95854	12.8
CHLOROBENZENE	AVRG		3.05712	4.9
ETHYLBENZENE	AVRG		5.09967	6.3
m,p-XYLENE	AVRG		2.09274	7.2
o-XYLENE	AVRG		2.00808	8.3
XYLENE (total)	AVRG		2.10410	10.6
STYRENE	AVRG		3.31722	11.0
BROMOFORM	LINR	7.5e-002	1.32853	0.996
1,1,2,2-TETRACHLOROETHANE	AVRG		1.29684	11.7

FORM VI VOA

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: Lab Code:

Client: Project: SDG No.: JETC01

Instrument ID: TVMG5973 Calibration Date(s): 07/24/03 08/08/03

Column: DB-624 60M ID: 0.32 (mm) Calibration Time(s): 1049 1101

COMPOUND	CURVE	COEFFICIENTS A0	A1	%RSD or R^2
DIBROMFLUOROMETHANE	AVRG		0.80811	5.8
TOLUENE-d8	AVRG		1.17058	6.4
p-BROMOFLUOROBENZENE	AVRG		1.42047	7.5
1,2-DICHLOROBENZENE d4	AVRG		0.52586	4.6

FORM VI VOA

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TVMF5973 Calibration Date(s): 07/05/03 08/11/03

Column: DB-624 60M ID: 0.32 (mm) Calibration Time(s): 1544 1854

LAB FILE ID: RF1: 2FH11003 RF2.5: 2FH11004 RF5: 2FG05011
RF10: 2FG05012 RF25: 2FG05013

COMPOUND	RF1	RF2.5	RF5	RF10	RF25
CHLOROMETHANE			1.506	1.417	1.447
VINYL CHLORIDE			1.631	1.753	1.664
BROMOMETHANE			1.175	1.150	1.472
CHLOROETHANE			1.006	1.064	1.032
1,1-DICHLOROETHENE			1.621	1.563	1.746
ACETONE		0.064	0.051	0.054	0.048
CARBON DISULFIDE			5.433	5.067	5.242
METHYLENE CHLORIDE			1.434	1.349	1.333
trans-1,2-DICHLOROETHENE			1.578	1.648	1.733
1,1-DICHLOROETHANE			2.376	2.319	2.408
cis-1,2-DICHLOROETHENE			1.550	1.534	1.572
1,2-DICHLOROETHENE (total)			1.564	1.591	1.653
CHLOROFORM			2.434	2.409	2.426
2-BUTANONE		0.084	0.082	0.077	0.073
1,1,1-TRICHLOROETHANE			0.622	0.636	0.631
CARBON TETRACHLORIDE			0.570	0.550	0.567
1,2-DICHLOROETHANE			0.352	0.359	0.345
BENZENE			1.430	1.404	1.455
TRICHLOROETHENE			0.409	0.397	0.411
1,2-DICHLOROPROPANE			0.276	0.281	0.273
BROMODICHLOROMETHANE			0.419	0.404	0.404
cis-1,3-DICHLOROPROPENE			0.380	0.411	0.415
TOLUENE			0.953	0.903	0.973
trans-1,3-DICHLOROPROPENE			0.308	0.299	0.309
1,1,2-TRICHLOROETHANE			0.182	0.158	0.168
4-METHYL-2-PENTANONE (MIBK)		0.073	0.061	0.065	0.064
2-HEXANONE		0.238	0.214	0.222	0.216
TETRACHLOROETHENE			0.992	0.975	1.073
DIBROMOCHLOROMETHANE			0.672	0.640	0.655
CHLOROBENZENE			2.416	2.288	2.475
ETHYLBENZENE			3.921	4.022	4.473
m,p-XYLENE			1.555	1.616	1.802
o-XYLENE			1.457	1.403	1.599
XYLENE (total)			1.522	1.545	1.734
STYRENE			2.242	2.298	2.540
BROMOFORM			0.332	0.365	0.332
1,1,2,2-TETRACHLOROETHANE			0.551	0.520	0.496

FORM VI VOA

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TVMF5973 Calibration Date(s): 07/05/03 08/11/03

Column: DB-624 60M ID: 0.32 (mm) Calibration Time(s): 1544 1854

LAB FILE ID: RF1: 2FH11003 RF2.5: 2FH11004 RF5: 2FG05011
RF10: 2FG05012 RF25: 2FG05013

COMPOUND	RF1	RF2.5	RF5	RF10	RF25
DIBROMFLUOROMETHANE			2.250	1.708	1.541
TOLUENE-d8			1.786	1.627	1.581
p-BROMOFLUOROBENZENE			1.176	1.091	1.013
1,2-DICHLOROBENZENE d4			1.312	1.162	1.104

FORM VI VOA

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TVMF5973 Calibration Date(s): 07/05/03 08/11/03

Column: DB-624 60M ID: 0.32 (mm) Calibration Time(s): 1544 1854

LAB FILE ID: RF50: 2FG05014 RF75: 2FG05015 RF100: 2FG05016
RF200: 2FG05017

COMPOUND	RF50	RF75	RF100	RF200
CHLOROMETHANE		1.431	1.513	1.354
VINYL CHLORIDE		1.769	1.887	1.620
BROMOMETHANE		1.500	1.235	0.994
CHLOROETHANE		1.084	1.159	1.062
1,1-DICHLOROETHENE		1.777	1.940	1.940
ACETONE		0.051	0.048	0.049
CARBON DISULFIDE		4.886	5.263	5.063
METHYLENE CHLORIDE		1.323	1.371	1.343
trans-1,2-DICHLOROETHENE		1.796	1.904	1.901
1,1-DICHLOROETHANE		2.428	2.641	2.520
cis-1,2-DICHLOROETHENE		1.619	1.761	1.762
1,2-DICHLOROETHENE (total)		1.708	1.832	1.831
CHLOROFORM		2.418	2.588	2.516
2-BUTANONE		0.078	0.078	0.082
1,1,1-TRICHLOROETHANE		0.729	0.736	0.744
CARBON TETRACHLORIDE		0.642	0.691	0.669
1,2-DICHLOROETHANE		0.378	0.389	0.394
BENZENE		1.597	1.681	1.659
TRICHLOROETHENE		0.445	0.467	0.465
1,2-DICHLOROPROPANE		0.302	0.313	0.311
BROMODICHLOROMETHANE		0.436	0.448	0.439
cis-1,3-DICHLOROPROPENE		0.466	0.482	0.478
TOLUENE		1.081	1.121	1.108
trans-1,3-DICHLOROPROPENE		0.377	0.378	0.382
1,1,2-TRICHLOROETHANE		0.190	0.189	0.185
4-METHYL-2-PENTANONE (MIBK)		0.075	0.071	0.076
2-HEXANONE		0.245	0.224	0.240
TETRACHLOROETHENE		1.174	1.270	1.313
DIBROMOCHLOROMETHANE		0.728	0.729	0.739
CHLOROBENZENE		2.659	2.721	2.748
ETHYLBENZENE		4.862	5.088	5.130
m,p-XYLENE		1.999	2.108	2.234
o-XYLENE		1.804	1.875	1.970
XYLENE (total)		1.934	2.031	2.146
STYRENE		2.917	3.012	3.149
BROMOFORM		0.427	0.407	0.415
1,1,2,2-TETRACHLOROETHANE		0.580	0.534	0.566

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TVMF5973 Calibration Date(s): 07/05/03 08/11/03

Column: DB-624 60M ID: 0.32 (mm) Calibration Time(s): 1544 1854

LAB FILE ID: RF50: 2FG05014 RF75: 2FG05015 RF100: 2FG05016
RF200: 2FG05017

COMPOUND	RF50	RF75	RF100	RF200
DIBROMFLUOROMETHANE		1.437	1.359	1.434
TOLUENE-d8		1.584	1.665	1.627
p-BROMOFLUOROBENZENE		1.056	1.082	1.088
1,2-DICHLOROBENZENE d4		1.052	1.097	1.066

FORM VI VOA

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TVMF5973 Calibration Date(s): 07/05/03 08/11/03

Column: DB-624 60M ID: 0.32 (mm) Calibration Time(s): 1544 1854

COMPOUND	CURVE	COEFFICIENTS A0	A1	A2	%RSD or R^2
CHLOROMETHANE	AVRG		1.45021		3.9
VINYL CHLORIDE	AVRG		1.73866		6.0
BROMOMETHANE	2ORDR	0.1136	0.35831	0.1541	0.994
CHLOROETHANE	AVRG		1.07606		4.9
1,1-DICHLOROETHENE	2ORDR	3.12e-002	0.53291	-2.86e-003	0.999
ACETONE	2ORDR	-0.107	19.5850	0.3823	0.998
CARBON DISULFIDE	AVRG		5.14323		3.5
METHYLENE CHLORIDE	AVRG		1.36082		2.7
trans-1,2-DICHLOROETHENE	2ORDR	2.794e-002	0.53636	-1.92e-003	1.000
1,1-DICHLOROETHANE	2ORDR	3.032e-002	0.38072	1.188e-003	0.999
cis-1,2-DICHLOROETHENE	2ORDR	2.416e-002	0.58966	-3.75e-003	0.999
1,2-DICHLOROETHENE (total)	2ORDR	5.21e-002	0.56186	-1.37e-003	1.000
CHLOROFORM	AVRG		2.47242		2.7
2-BUTANONE	2ORDR	-3.43e-002	12.7334	-0.148	0.998
1,1,1-TRICHLOROETHANE	2ORDR	3.321e-002	1.30790	8.553e-003	0.999
CARBON TETRACHLORIDE	LINR	2.417e-002	1.47429		0.998
1,2-DICHLOROETHANE	2ORDR	1.952e-002	2.56377	-2.38e-002	0.999
BENZENE	2ORDR	3.709e-002	0.59243	6.069e-004	1.000
TRICHLOROETHENE	2ORDR	2.911e-002	2.12316	5.603e-003	0.999
1,2-DICHLOROPROPANE	2ORDR	2.788e-002	3.11954	5.767e-002	0.999
BROMODICHLOROMETHANE	AVRG		0.43210		5.8
cis-1,3-DICHLOROPROPENE	LINR	2.636e-002	2.07278		0.999
TOLUENE	2ORDR	3.863e-002	0.86691	5.954e-003	0.999
trans-1,3-DICHLOROPROPENE	LINR	3.848e-002	2.58667		0.999
1,1,2-TRICHLOROETHANE	AVRG		0.18257		8.3
4-METHYL-2-PENTANONE (MIBK)	2ORDR	0.1504	13.1637	1.321e-002	0.996
2-HEXANONE	2ORDR	7.615e-002	4.01895	1.509e-002	0.994
TETRACHLOROETHENE	2ORDR	3.89e-002	0.81597	-1.19e-002	0.999
DIBROMOCHLOROMETHANE	2ORDR	2.297e-002	1.33107	5.497e-003	0.999
CHLOROBENZENE	2ORDR	2.531e-002	0.36407	-2.21e-004	1.000
ETHYLBENZENE	2ORDR	3.813e-002	0.19605	-1.48e-004	1.000
m,p-XYLENE	2ORDR	7.463e-002	0.49071	-2.64e-003	1.000
o-XYLENE	2ORDR	3.962e-002	0.54425	-5.29e-003	1.000
XYLENE (total)	2ORDR	0.1140	0.50740	-1.78e-003	1.000
STYRENE	2ORDR	4.244e-002	0.33584	-1.72e-003	1.000
BROMOFORM	2ORDR	4.381e-002	2.27627	6.781e-002	0.998
1,1,2,2-TETRACHLOROETHANE	AVRG		0.55890		9.7

FORM VI VOA

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TVMF5973 Calibration Date(s): 07/05/03 08/11/03

Column: DB-624 60M ID: 0.32 (mm) Calibration Time(s): 1544 1854

COMPOUND	CURVE	COEFFICIENTS A0	A1	A2	%RSD or R^2
DIBROMFLUOROMETHANE	2ORDR	-8.09e-002	0.76945	-9.9e-003	0.999
TOLUENE-d8	AVRG		1.65237		4.3
p-BROMOFLUOROBENZENE	AVRG		1.08892		4.6
1,2-DICHLOROBENZENE d4	LINR	-2.45e-002	0.94085		1.000

FORM VI VOA

FORM 7
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: Lab Code:

Client: Project: SDG No.: JETC01

Instrument ID: TVMG5973 Calibration Date: 09/09/03 Time: 1257

Lab File ID: 2GI09002 Init. Calib. Date(s): 07/24/03 08/08/03

Init. Calib. Times: 1049 1101

GC Column: DB-624 60M ID: 0.32 (mm)

COMPOUND	ICAL20 AMT/ AVG RF	CCAL AMT	CCAL RF	MIN RF	%DRIFT /%D*	MAX %DRIFT /%D*	CURVE
CHLOROMETHANE	1.351		1.626	0.10	20.4		AVRG
VINYL CHLORIDE	1.292		1.533	0.01	18.6	20.0	AVRG
BROMOMETHANE	0.948		0.819	0.01	13.6		AVRG
CHLOROETHANE	0.833		0.902	0.01	8.3		AVRG
1,1-DICHLOROETHENE	1.194		1.118	0.01	6.4	20.0	AVRG
ACETONE	0.115		0.094	0.01	18.3		AVRG
CARBON DISULFIDE	4.184		3.730	0.01	10.8		AVRG
METHYLENE CHLORIDE	1.202		1.109	0.01	7.7		AVRG
trans-1,2-DICHLOROETHENE	0.893		0.939	0.01	5.2		AVRG
1,1-DICHLOROETHANE	1.502		1.604	0.10	6.8		AVRG
cis-1,2-DICHLOROETHENE	0.922		0.988	0.01	7.2		AVRG
1,2-DICHLOROETHENE (total)	0.908		0.964	0.01	6.2		AVRG
CHLOROFORM	1.445		1.528	0.01	5.7	20.0	AVRG
2-BUTANONE	0.040		0.031	0.00	22.5		AVRG
1,1,1-TRICHLOROETHANE	0.456		0.449	0.01	1.5		AVRG
CARBON TETRACHLORIDE	0.359		0.371	0.01	3.3		AVRG
1,2-DICHLOROETHANE	0.430		0.388	0.01	9.8		AVRG
BENZENE	1.329		1.299	0.01	2.2		AVRG
TRICHLOROETHENE	0.333		0.319	0.01	4.2		AVRG
1,2-DICHLOROPROPANE	0.327		0.321	0.01	1.8	20.0	AVRG
BROMODICHLOROMETHANE	0.394		0.380	0.00	3.6		AVRG
cis-1,3-DICHLOROPROPENE	0.459		0.450	0.01	2.0		AVRG
TOLUENE	0.822		0.819	0.01	0.4	20.0	AVRG
trans-1,3-DICHLOROPROPENE	0.400		0.392	0.01	2.0		AVRG
1,1,2-TRICHLOROETHANE	0.242		0.225	0.01	7.0		AVRG
4-METHYL-2-PENTANONE (MIBK)	0.159		0.121	0.01	23.9		AVRG
2-HEXANONE	0.781		0.597	0.00	23.6		AVRG
TETRACHLOROETHENE	1.292		1.122	0.01	13.2		AVRG
DIBROMOCHLOROMETHANE	0.958		0.941	0.01	1.8		AVRG
CHLOROBENZENE	3.057		2.994	0.30	2.1		AVRG
ETHYLBENZENE	5.100		5.084	0.01	0.3	20.0	AVRG
m,p-XYLENE	2.093		2.079	0.01	0.7		AVRG
o-XYLENE	2.008		2.016	0.01	0.4		AVRG
XYLENE (total)	2.104		2.058	0.01	2.2		AVRG
STYRENE	3.317		3.342	0.01	0.8		AVRG

*%Drift is reported for linear and 2nd order curves and %D (%Difference) is reported for average curves.

FORM 7
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: Lab Code:

Client: Project: SDG No.: JETC01

Instrument ID: TVMG5973 Calibration Date: 09/09/03 Time: 1257

Lab File ID: 2GI09002 Init. Calib. Date(s): 07/24/03 08/08/03

Init. Calib. Times: 1049 1101

GC Column: DB-624 60M ID: 0.32 (mm)

COMPOUND	ICAL20 AMT/ AVG RF	CCAL AMT	CCAL RF	MIN RF	%DRIFT /%D*	MAX %DRIFT /%D*	CURVE
BROMOFORM	20	18	0.602	0.10	10.0		LINR
1,1,2,2-TETRACHLOROETHANE	1.296		1.165	0.30	10.1		AVRG
DIBROMFLUOROMETHANE	0.808		0.905	0.01	12.0		AVRG
TOLUENE-d8	1.170		1.215	0.01	3.8		AVRG
p-BROMOFLUOROBENZENE	1.420		1.447	0.01	1.9		AVRG
1,2-DICHLOROBENZENE d4	0.526		0.522	0.01	0.8		AVRG

*%Drift is reported for linear and 2nd order curves and %D (%Difference) is reported for average curves.

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TVMF5973 Calibration Date: 09/10/03 Time: 1033

Lab File ID: 2FI10002 Init. Calib. Date(s): 07/05/03 08/11/03

Heated Purge: (Y/N) Y Init. Calib. Times: 1544 1854

GC Column: DB-624 60M ID: 0.32 (mm)

COMPOUND	SAMPLE AMOUNT	CAL50 AMOUNT	CURVE	%D	MAX %d
CHLOROMETHANE	54	50	AVRG	8.0	100
VINYL CHLORIDE	59	50	AVRG	18.0	20.0
BROMOMETHANE	53	50	2ORDR	6.0	100
CHLOROETHANE	58	50	AVRG	16.0	100
1,1-DICHLOROETHENE	51	50	2ORDR	2.0	20.0
ACETONE	500	500	2ORDR	0.0	100
CARBON DISULFIDE	52	50	AVRG	4.0	100
METHYLENE CHLORIDE	53	50	AVRG	6.0	100
trans-1,2-DICHLOROETHENE	52	50	2ORDR	4.0	100
1,1-DICHLOROETHANE	52	50	2ORDR	4.0	100
cis-1,2-DICHLOROETHENE	54	50	2ORDR	8.0	100
1,2-DICHLOROETHENE (total)	110	100	2ORDR	10.0	100
CHLOROFORM	55	50	AVRG	10.0	20.0
2-BUTANONE	510	500	2ORDR	2.0	100
1,1,1-TRICHLOROETHANE	43	50	2ORDR	14.0	100
CARBON TETRACHLORIDE	44	50	LINR	12.0	100
1,2-DICHLOROETHANE	42	50	2ORDR	16.0	100
BENZENE	46	50	2ORDR	8.0	100
TRICHLOROETHENE	44	50	2ORDR	12.0	100
1,2-DICHLOROPROPANE	48	50	2ORDR	4.0	20.0
BROMODICHLOROMETHANE	46	50	AVRG	8.0	100
cis-1,3-DICHLOROPROPENE	45	50	LINR	10.0	100
TOLUENE	46	50	2ORDR	8.0	20.0
trans-1,3-DICHLOROPROPENE	44	50	LINR	12.0	100
1,1,2-TRICHLOROETHANE	47	50	AVRG	6.0	100
4-METHYL-2-PENTANONE (MIBK)	460	500	2ORDR	8.0	100
2-HEXANONE	460	500	2ORDR	8.0	100
TETRACHLOROETHENE	52	50	2ORDR	4.0	100
DIBROMOCHLOROMETHANE	46	50	2ORDR	8.0	100
CHLOROBENZENE	49	50	2ORDR	2.0	100
ETHYLBENZENE	50	50	2ORDR	0.0	20.0
m,p-XYLENE	100	100	2ORDR	0.0	100
o-XYLENE	50	50	2ORDR	0.0	100
XYLENE (total)	150	150	2ORDR	0.0	100
STYRENE	50	50	2ORDR	0.0	100
BROMOFORM	46	50	2ORDR	8.0	100
1,1,2,2-TETRACHLOROETHANE	46	50	AVRG	8.0	100

FORM VII VOA

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Instrument ID: TVMF5973 Calibration Date: 09/10/03 Time: 1033

Lab File ID: 2FI10002 Init. Calib. Date(s): 07/05/03 08/11/03

Heated Purge: (Y/N) Y Init. Calib. Times: 1544 1854

GC Column: DB-624 60M ID: 0.32 (mm)

COMPOUND	SAMPLE AMOUNT	CAL50 AMOUNT	CURVE	%D	MAX %d
DIBROMFLUOROMETHANE	58	50	2ORDR	16.0	100
TOLUENE-d8	47	50	AVRG	6.0	100
p-BROMOFLUOROBENZENE	51	50	AVRG	2.0	100
1,2-DICHLOROBENZENE d4	48	50	LINR	4.0	100

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Lab Code:

Client: Project: SDG No.: JETC01

Lab File ID (Standard): 2GI09002 Date Analyzed: 09/09/03

Instrument ID: TVMG5973 Time Analyzed: 1257

GC Column: DB-624 6 ID: 0.32 (mm) Heated Purge: (Y/N) N

		IS1(DCA) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	63545	2.61	197039	2.80	59876	4.41
	UPPER LIMIT	127090	3.11	394078	3.30	119752	4.91
	LOWER LIMIT	31773	2.11	98520	2.30	29938	3.91
	CLIENT SAMPLE NO.						
01	2G090903MBLC	60599	2.61	191710	2.80	62340	4.41
02	2G090903MBLC	55766	2.61	173431	2.80	54570	4.41
03	2G090903MB	55917	2.61	168320	2.80	53469	4.40
04	73924-2	53580	2.60	169465	2.79	55179	4.41
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22							

IS1 (DCA) = 1,2-DICHLOROETHANE-d4
IS2 (DFB) = 1,4-DIFLUOROBENZENE
IS3 (CBZ) = CHLOROBENZENE-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Lab File ID (Standard): 2FI10002 Date Analyzed: 09/10/03

Instrument ID: TVMF5973 Time Analyzed: 1033

GC Column: DB-624 6 ID: 0.32 (mm) Heated Purge: (Y/N) Y

		IS1(DCA) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	54193	3.81	250294	4.09	98718	6.12
	UPPER LIMIT	108386	4.31	500588	4.59	197436	6.62
	LOWER LIMIT	27097	3.31	125147	3.59	49359	5.62
	CLIENT SAMPLE NO.						
01	2F0910MBLCS	57398	3.81	244506	4.09	99831	6.12
02	2F0910MBLCSD	53828	3.81	232888	4.09	94634	6.11
03	2F0910MB	55254	3.81	238384	4.09	94303	6.12
04	73924-1	55622	3.81	264147	4.09	89881	6.11
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22							

IS1 (DCA) = 1,2-DICHLOROETHANE-d4
IS2 (DFB) = 1,4-DIFLUOROBENZENE
IS3 (CBZ) = CHLOROBENZENE-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL TALLAHASSEE Lab Code: TL

Client: Project: SDG No.: JETC01

Lab File ID (Standard): 2FI10002 Date Analyzed: 09/10/03

Instrument ID: TVMF5973 Time Analyzed: 1033

GC Column: DB-624 6 ID: 0.32 (mm) Heated Purge: (Y/N) Y

		IS4(DCB) AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	108271	7.94				
	UPPER LIMIT	216542	8.44				
	LOWER LIMIT	54136	7.44				
	CLIENT SAMPLE NO.						
01	2F0910MBLCS	90676	7.94				
02	2F0910MBLCSD	87666	7.94				
03	2F0910MB	88331	7.94				
04	73924-1	60269	7.94				
05							
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22							

IS4 (DCB) = 1,4-DICHLOROBENZENE d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

ANALYSIS LOG(S)

SAMPLE INFORMATION SUMMARY

Client SDG: JETC01 Sample Fraction: VOA

QCGroup	Batch	DataFile	Sample Type	Client Id	Lab ID	SmplRef	Lab Prep	SDG
3735218	1G0808.b	1GH08001.D	BFB	1G0808BFB	1G0808BFB	3735217		
3735218	1G0808.b	1GH08002.D	CALIB_1	VSTD001GR	VSTD001GR	3735251		
3735218	1G0808.b	1GH08003.D	CALIB_1	VSTD001DS	VSTD001DS	3735252		
3735218	1G0808.b	1GH08004.D	CALIB_2	VSTD005GR	VSTD005GR	3735253		
3735218	1G0808.b	1GH08005.D	CALIB_2	VSTD005DS	VSTD005DS	3735254		
3735218	1G0808.b	1GH08006.D	CALIB_3	VSTD010GR	VSTD010GR	3735231		
3735218	1G0808.b	1GH08007.D	CALIB_3	VSTD010DS	VSTD010DS	3735232		
3735218	1G0808.b	1GH08008.D	CALIB_4	VSTD020GR	VSTD020GR	3735348		
3735218	1G0808.b	1GH08009.D	CALIB_4	VSTD020DS	VSTD020DS	3735349		
3735218	1G0808.b	1GH08010.D	CALIB_5	VSTD030GR	VSTD030GR	3735350		
3735218	1G0808.b	1GH08011.D	CALIB_5	VSTD030DS	VSTD030DS	3735351		
3735218	1G0808.b	1GH08012.D	CALIB_6	VSTD040GR	VSTD040GR	3735352		
3735218	1G0808.b	1GH08013.D	CALIB_6	VSTD040DS	VSTD040DS	3735353		
3735218	1G0808.b	1GH08014.D	CALIB_7	VSTD060GR	VSTD060GR	3735354		
3735218	1G0808.b	1GH08015.D	CALIB_7	VSTD060DS	VSTD060DS	3735355		
4307561	2G0909.b	2GI09001.D	BFB		2G090903BFB	4307560		
4307561	2G0909.b	2GI09002.D	CCALIB_4	VSTD020	VSTD020	3743678		
4307561	2G0909.b	2GI09003.D	LCS	2G090903MBLCS	2G090903MBLCS	3743688	VM090903N	JETC01
4307561	2G0909.b	2GI09004.D	LCSD	2G090903MBLCSD	2G090903MBLCSD	3743689	VM090903N	JETC01
4307561	2G0909.b	2GI09008.D	BLANK	2G090903MB	2G090903MB	3743712	VM090903N	JETC01
4307561	2G0909.b	2GI09019.D	SAMPLE	73924-2	086-TB-L-0904-03	3744321	VM090903N	JETC01

SAMPLE INFORMATION SUMMARY

Client SDG: JETC01 Sample Fraction: VOA

QCGroup	Batch	DataFile	Sample Type	Client Id	Lab ID	SmplRef	Lab Prep	SDG
4302171	2F0811-CURVE.	2FH11001.D	BFB	2F0811BFB	2F0811BFB	4308288		
4302171	2F0811-CURVE.	2FH11003.D	CALIB_1	VSTD 001	VSTD 001	4302387		
4302171	2F0811-CURVE.	2FH11004.D	CALIB_2	VSTD 02.5	VSTD 02.5	4302388		
4302171	2F0811-CURVE.	2FH11005.D	CALIB_3	VSTD 005	VSTD 005	4302389		
4302171	2F0811-CURVE.	2FH11006.D	CALIB_4	VSTD 010	VSTD 010	4302390		
4302171	2F0811-CURVE.	2FH11007.D	CALIB_5	VSTD 025	VSTD 025	4302391		
4302171	2F0811-CURVE.	2FH11008.D	CALIB_6	VSTD 050	VSTD 050	4302392		
4302171	2F0811-CURVE.	2FH11009.D	CALIB_7	VSTD 075	VSTD 075	4302393		
4302171	2F0811-CURVE.	2FH11010.D	CALIB_8	VSTD 100	VSTD 100	4302394		
4302171	2F0811-CURVE.	2FH11011.D	CALIB_9	VSTD 200	VSTD 200	4302395		
4307959	2F0910.b	2FI10001.D	BFB	2F0910BFB	2F0910BFB	4307958		
4307959	2F0910.b	2FI10002.D	CCALIB_6	VSTD 050	VSTD 050	4307964		
4307959	2F0910.b	2FI10003.D	LCS	2F0910MBLCS	2F0910MBLCS	4308065	VM090903M	JETC01
4307959	2F0910.b	2FI10004.D	LCSD	2F0910MBLCSD	2F0910MBLCSD	4308066	VM090903M	JETC01
4307959	2F0910.b	2FI10006.D	BLANK	2F0910MB	2F0910MB	4308068	VM090903M	JETC01
4307959	2F0910.b	2FI10011.D	SAMPLE	73924-1	086-BFC-S-0904-0	4308184	VM090903M	JETC01

VOA INSTRUMENT LOG - GC/MS

Date: 08-08-03	Analyst: SOB/CMR	ICAL/CCAL		Standard	Standard Lot #	Conc. (ug/ml)	Volume(ul)	Notes
Inst. ID: TVMG	Sequence: 160808	1st ISTD: 1,2-DCA-d4	3rd ISTD: Chlorobenzene-d5	BFB	56-11-42-1	2.5	100 ADD'L 1	56-11-43-4 5ug/mL
Tune File: ATUNE.4		Time: 2.61	Time: 4.41	MS INT	42-2		2	43-5 20ug/mL
Tune Method: MG SAV	EM Voltage: 1941	Area: 65203	Area: 54686	SURR	42-3			
Analysis Method:	EM Voltage:	2nd ISTD: 1,4-Difluorobenzene	4th ISTD: 1,4-DCB-d4	INT/SURR	43-4	5ml/mix		
ICAL Files:		Time: 2.80	Time: 5.98	DAILY 1	44-1	5/100/1000		
Daily Clock ID: 160808		Area: 182755	Area: 160193	DAILY 2	44-2	20/400/4000		
ICAL/Clock ID: 160808				GASES 1	43-1	5/50		
Analytical Method: 8260B or 624 or 8260				GASES 2	43-2	20/200		
				REACT	43-3	10/100		
				VMSSPIL	43-6	25		
				GC GASES	40-3	10		
				REACT BLK	41-3	10/100		

Data File	SL Log #	Sample Description	ALS #	Sample Vol/WT	Dilution Factor	QVM Batch	Det Code	pH	Chlorine check	Load Initials	Target Sublist	Comments
1GH0801		BFBTUNE	32	5mL	1.0	ALL	8260/624	—	OK	CMR 8/8/03		
02		STD 001GR	1									
03		DS	2									
04		005GR	3									
05		DS	4									
06		010GR	5									
07		DS	6									
08		020GR	7									
09		DS	8									
10		030GR	9									
11		DS	10									
12		040GR	11									
13		DS	12									
14		060GR	13									
15		DS	14									
16		020 ADD'L	15									
17		160808MBLCS	16									
18		160808MBLCSD	17									
19		160808LOQ ADD'L	18									
20		CUB	19									
21		160808MB	20			VM080603A	8260	—				
22	73242-1	EB-073003	21					1.5				
23	73244-5	TRIP BLANK	22									
24	73252-1	MW-4	23	1mL/5mL	5.0	VM080403N						
25	-2	RW-1	24	50ul/5mL	100							
26	-3	RW-3	25									
27	-4	MW-9	26	1mL/5mL	5.0							
28	-5	MW-9	27	2mL/5mL	2.5							
29	-6	RW-2	28	50ul/5mL	100							
30	73230-1	CW-4	29	5mL	1.0							
31	-2	CW-3	30									
32	-3	BW-1	31									

VOA INSTRUMENT LOG - GC/MS

Date: 09/09/03	Analyst: CMR	ICAL/CCALS	
Inst. ID: TVMS	Sequence: 260909	1st ISTD: 1, 2-DCA-d4	3rd ISTD: Chlorobenzene-d5
Tune File: ATUNE-4		Time: 2.61	Time: 4.41
Tune Method: MGSAV	EM Voltage: 1871	Area: 317411	Area: 595974
Analysis Method: ↓	EM Voltage: ↓	2nd ISTD: 1,4-Difluorobenzene	4th ISTD: 1, 4-DCB-d4
ICAL Files:		Time: 2.80	Time: 5.98
Daily Clock ID: 260909		Area: 522018	Area: 1267101
ICAL/Clock ID: 160808			
Analytical Method: 8260B or 624 or 524.2			

Standard	Standard Lot #	Conc. (ug/ml)	Volume(ul)	Notes
BFB	56-11-52-2	25		
MS INT	56-11-51-3	↓		
SUR	↓ -4			
INT/SUR	↓ -5	↓		
DAILY 1	56-11-53-4	5/100/1000		
DAILY 2	↓ -5	20/100/1000		
GASES 1	56-11-54-3	5/50		
GASES 2	↓ -4	20/200		
REACT	-5	10/100		
MUSE F/L	↓ -6	.25		
CC GASES	56-11-53-1	10		
REACT SPK	56-11-52-5	10/100		

Data File	SL Log #	Sample Description	ATS #	Sample Vol/WT	Dilution Factor	QVM Batch	Det Code	pH	Chlorine check	Load Initials	Target Sublist	Comments
1 59001	—	BFB TUNE	1	.5mL	1.0	—	82100	—	ok	CMR		
02	—	VSTD 020	2			—		—				
03	—	260909 03 MBLCS	3			—		—				
04	—	260909 03 MBLCSD	4			—		—				
05	—	CUB	5			—		—				
06	—	260909 03 LOQ	6			—		—				
07	—	CUB	7			—		—				
08	—	260909 03 MB	8			—		—				
09	—	CUB	9			—		—				
10	73909-1	AFI 032	10			VM090203P		1.5				
11	-2	033	11									
12	-3	034 TB	12									
13	—	CUB	13			—		—				
14	73916-1	AFI 035	14			VM090203P		1.5				
15	-2	036	15									
16	-3	037	16									
17	-4	038 TB	17									
18	73932-1	CRS059	18									
19	73924-2	CB6-TB-L-0901-03	19			VM090903N						
20	73913-7	1309-FB-LAFB	20									
21	-8	1309-EB-LAFB	21									
22	-9	TB	22									
23	—	SPLP BLK 090603	23			VM090403P						
24	—	090703	24									
25	—	090803	25									
26	—	090603 LCS	26									
27	—	090603 LCSD	27									
28	86875A-11	TM-1 POST 2 (8-12) STEAM	28									
29	-12	TM-2 ↓	29									
30	-1	TM-1 POST 2 (8-12)	30									
31	-2	(16-20)	31									
32	-3	(24-28)	32									

VOA INSTRUMENT LOG - GC/MS

: 09/09/03	Analyst: CMR	ICAL/CCAL		Standard	Standard Lot #	Conc. (ug/ml)	Volume(ul)	Notes
ID:	Sequence: 2L70909	1st ISTD: 1, 2-DCA-d4	3rd ISTD: Chlorobenzene-d5					
e File:		Time:	Time:					
e Method:	EM Voltage:	Area:	Area:					
lysis Method:	EM Voltage:	2nd ISTD: 1,4-Difluorobenzene	4th ISTD: 1, 4-DCB-d4					
1. Files:		Time:	Time:					
s Clock ID:		Area:	Area:					
1./Clock ID:							See Previous Page	
ethod: 8260B or 624 or 524.2								

a File	SL Log #	Sample Description	ALS #	Sample Vol/WT	Dilution Factor	QVM Batch	Det Code	pH	Chlorine check	Load Initials	Target Sublist	Comments
09033	86875A-4	TM-1 POST 2 (20-40)	1	5 mL	1.0	VM090407P	8260	1.5	✓ok	CMR		
34	-5	↓ (44-48)	2									
35	-6	TM-2 POST 2 (8-12)	3									
36	-7	↓ (16-20)	4									
37	—	CUB	5									
38	86875A-8	TM-2 POST 2 (24-28)	6									
39	—	CUB	7									
40	86875A-9	TM-2 POST 2 (36-40)	8									
41	73913-7	1309 - FB - LAF B	9			VM090903N						
42	86875A-10	TM-2 POST 2 (44-48)	10			VM090403A						
43	73909-1	AFI 032 MS	11									
44	-1	↓ MSD	12									
45	73932-2	TB	13									
46	—	CONTROL BLK 090903	14									
47	—	624 CK STD	15			VM090903N	624					
48	—	3L090903MB	16									
49	—	3L090903LCS(MB)	17									
50	—	3L090903MBLCSD	18									
51	73920-1	Avg. Rec. Groundwater	19	5mL/5mL	1,000							
52	73921-1	Scrubber Blowdown Water	20	100µL/5mL	50							
53	73911-1	C-EFF	21	5mL	1.0							
54	-2	C-INF	22									
55	-3	TB	23									
56	-1	C-EFF MS	24									
57	-1	↓ MSD	25									
58	73920-1	Avg. Rec. Groundwater	26									
59	73921-1	Scrubber Blowdown Water	27									
60	73920-1	Avg. Rec. Groundwater	28	200µL/5mL	25							
61	73921-1	Scrubber Blowdown Water	29	50µL/5mL	100							
							} CMR 9/10/03					NFE CMR 9/10/03

Date: 8/11/3	Analyst: AC	ICAL/CCAL		Standard	Standard Lot #	Conc. (ug/ml)	Volume(ul)	Notes
Inst. ID: VMF	Sequence:	1st ISTD: 1, 2-DCA-d4	3rd ISTD: Chlorobenzene-d5	BFB	8/6 Sb. 11.42.1	25		
Tune File: ATune.U		Time: 3.82	Time: 6.11	VM Std Mix	42.3	25		
Tune Method: PTS	EM Voltage: 1671	Area: 77K	Area: 131K	Daily 1	44.1	5/100/1000		
Analysis Method: PTS	EM Voltage: 1671	2nd ISTD: 1,4-Difluorobenzene	4th ISTD: 1, 4-DCB-d4	↓ 2	44.2	20/400/4000		
ICAL Files: 2FH081103 → 11		Time: 4.09	Time: 7.44	Reactives	43.3	10/100		
Daily Clock ID: 1FO811.b		Area: 301K	Area: 140K	Gas 1	43.1	5/50		
ICAL/Clock ID: ↓				↓ 2	43.2	20/200		
Analytical Method: 8260B or 624 or 524.2				Spike	N/A	25		Reac Spike Sb. 11.47.3
				Archon IS	Sb. 11. 35.4	250		
				↓ ↓ ↓	↓ 35.5	210		
				VG Gas Mix	N/A	10		

Data File	SL Log #	Sample Description	ALS #	Sample Vol/WT	Dilution Factor	QVM Batch	Det Code	pH	Chlorine check	Lead Initials	Target Sublist	Comments
2FH11001	—	BFB	2	5ml	—	—	—	N/A		JC		
2		VMSTD 050	4									
3		001	6									
4		02.5	8									
5		005	10									
6		010	12									
7		025	14									
8		050	16									
9		075	18									
10		100	20									
11		200	22									
12		Rinse	24									
NFE JC 8/14/3												

0334

C2

Date: 9/10/3	Analyst: JG	ICAL/CCAL		Standard	Standard Lot #	Conc. (ug/ml)	Volume(ul)	Notes
Inst. ID: TVMF	Sequence:	1st ISTD: 1, 2-DCA-d4	3rd ISTD: Chlorobenzene-d5	BFB	5b·11·51·2	25		
Tune File: ATune.U		Time: 3.81	Time: 6.12	VM Daily 1		53·3	5/160/1000	
Tune Method: PTS	EM Voltage: 1671	Area: 54K	Area: 98K	↓ 2		53·4	20/40/4000	
Analysis Method: PTS	EM Voltage: 1671	2nd ISTD: 1,4-Difluorobenzene	4th ISTD: 1, 4-DCB-d4	GAS 1		54·3	5/50	
ICAL Files: 2FH11003 → 11		Time: 4.09	Time: 7.94	↓ 2		54·4	20/200	
Daily Clock ID: 2F0910.b		Area: 270K	Area: 108K	SPIKE		52·5	25	
ICAL/Clock ID: 2F0811.b				SUR		57·4	↓	
Analytical Method: (8260B) or 624 or 524.2				REAC		54·5	10/100	
				Archon TS		56·4	250	
SoiLS				↓		56·5	310	
				VG GAS Mx		53·2	10	

Data File	SL Log #	Sample Description	ALS #	Sample Vol/WT (g)	Dilution Factor	QVM Batch	Det Code	pH	Chloring check	Load Initials	Target Sublist	Comments
2FI10001		BFB	2	5ml								
2		VMSTD 050	4	1				NA	NA	JG		
3		2F0910 MB LCS	6	1								
4		LCSD	8	1								
5		LOO	10	1								
6		MB	12	1								
7	T373924-1	086-BFC-S-0904-03	14	1 6.72	1.0	VM090903M	8260BSS				TCL-U-3/10	IS ↓
8	T373922-1	B-4 (18-A')	16	1 4.22	100							
10 JG	T373924-1	086-BFC-SC904-03	20	1 5.30	1.00							not needed
11 JG			22	1 3.45	1.0							IS OK!
9 JG	S386953	I-3 POST 2(8-12)	18	1 4.30	1000						B4CX	inserted Rush sample
12	S387037-1	SB-1	24	1 4.81	1.0	VM041103M					TCL-U	
13	-2	-2	26	1 4.40								
14	-3	-3	28	1 4.84								
15	-4	-4	30	1 4.66								
16	-5	-5	32	1 4.02								
17	—	Blank	34	1 —	—	—	—				—	
18	—	Blank — Rinse	36	1 —	—	—	—				—	
NFE JG												

C335

FVM00C-T:05.21.03:5

SFL TALLAHASSEE