EPA Region 10 Dive Team

Diver Assisted Site Assessment at the Columbia River Drum Site; Portland, OR, April 2007

What: The Superfund Environmental Cleanup Office/Site Assessment Unit requested assistance from the EPA Region 10 Dive Team to collect samples for characterization of a drum dump site in the Columbia River.

Why: Diver survey objectives were to: 1) map out the area of drums on the river bottom and 2) collect core samples in and around the drums to determine their impact on the River relative to background chemical concentrations.

Where: Columbia River, south channel between Lemon Island and Marine Drive (near the Portland Airport).

When: Dive surveys were conducted April 24-26, 2007.

How: Due to river currents, divers were tethered and in constant communication with dive tenders. Divers swept an 'arc' search pattern behind the boat up to 50 meters downstream, and worked their way back to the dive platform. Divers took approximately 20 core samples as they encountered drums on the bottom.

Results: Divers found that the river bottom was covered with debris, likely rolled into the river off Marine Drive. More than two dozen drums/drum parts were encountered, all in an advanced state of deterioration. Many drums had holes in them, and appeared to be filled with sand and silt. Sample results may be found in the site investigation report - December 7, 2007 below.

Contact: Rob Pedersen (206) 553-1646, Pedersen.rob@epa.gov

Photos:

The diver is under constant tether tension to maintain their position in the water; for example during searching or taking a sample.

Aerial photo of drum field.

Diver preparing to enter the water with core tubes and caps in a ‘goody bag’

Divemaster Sean Sheldrake dons diver Rob Pedersen's AGA full face mask in preparation for drum sampling.

Tender/standby diver Tim Siwiec pulls the diver back towards the boat to continue the search pattern.

Return to EPA Region 10 Dive Team homepage.

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December 7, 2007 TO-002-06-07-0006-DCN120

Joanne LaBaw, Task Monitor
United States Environmental Protection Agency
1200 Sixth Avenue, Suite 900– M/S ECL 112
Seattle, WA 98101

Reference: Contract No. EP-S7-06-03
Technical Direction Document No. 06-07-0006
Drums-NE Marine Drive Site
Final Site Inspection Report, Revision 3
Response to Comments Letter

Dear Ms. LaBaw:

Please find enclosed the Final Drums-NE Marine Drive Site Inspection Report, Revision 3 (SI Report) located in Portland, Oregon. This revised version of the report incorporates the comments provided by EPA dated December 4, 2007. An electronic version of this deliverable, formatted in Adobe Acrobat for Windows, was uploaded to the START Final Deliverables folder on the United States Environmental Protection Agency (EPA) Region 10 FTP site. The SI Report has been named according to the standard operating guidance (SOG).

If you have any questions or comments, please contact me at (770) 331-8761, the Project Manager, Lesa Nelson, at (360) 871-8777, or the Site Assessment Group Leader, Alexis Ande, at (360) 443-6575.

Sincerely,

William R. (Ray) Doyle
START-3 Program Manager
TechLaw, Inc.

Enclosure

cc: Sharon Nickels, EPA Project Officer, Seattle, WA
Elizabeth Burris, Central Files Administrator, TechLaw, Wheeling, WV
Alexis Ande, Site Assessment Group Leader, TechLaw, Port Orchard, WA
Lesa Nelson, Project Manager, TechLaw, Port Orchard, WA

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MEMORANDUM

TO-002-06-07-0006-DCN120

To: Joanne LaBaw, Task Monitor, EPA, Seattle, WA

From: William R. Doyle, START-3 Program Manager, TechLaw, Inc., Port Orchard, WA WRD

Subject: Site Recommendations Memorandum
Drums-NE Marine Drive
Site Inspection
Portland, Multnomah County, Oregon

Reference: Contract No.EP-S7-06-03
Technical Direction Document No. 06-07-0006

This recommendation memorandum has been developed for the Drums-NE Marine Drive Site (Site), located in Portland, Multnomah County, Oregon as part of Site Inspection (SI). The Site consists of contaminated sediment located beneath and within deteriorating drums and other debris found in the Columbia River, in an area northeast of Portland International Airport and south of the Government Island Complex.

Results of the SI documented the presence of heavy metals and semi-volatiles in the sediments, which have been identified as the source. The area in and around the Site constitutes the habitat for Federally-designated, protected or endangered species, including various anadromous fishes, fish-eating birds of prey, and amphibians.

Further evaluation of the Site under CERCLA is recommended.

Please contact Alexis Ande, the Site Assessment Group Leader, at (360) 443-6575, or Lesa Nelson, the TechLaw Project Manager, at (360) 871-8777, if you have any questions or comments regarding this memorandum.

Enclosure

cc: Sharon Nickels, EPA Project Officer, Seattle, WA
Elizabeth Burris, Central Files Administrator, TechLaw, Wheeling, WV
Alexis Ande, Site Assessment Group Leader, TechLaw, Port Orchard, WA
Lesa Nelson, Project Manager, TechLaw, Port Orchard, WA.

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MEMORANDUM TO-002-06-07-0006-DCN120

To: Joanne LaBaw, Task Monitor, EPA, Seattle, WA

From: William R. Doyle, START-3 Program Manager, TechLaw, Inc., Port Orchard, WA

Subject: Hazard Ranking System Score
Drums-NE Marine Drive
Portland, Multnomah County, Oregon

Reference: Contract No.EP-S7-06-03
Technical Direction Document No. 06-07-0006

A Hazard Ranking System (HRS) score of 50 was derived for the Drums-NE Marine Drive site (Site) as part of a Site Investigation (SI). The Site is located Portland, Multnomah County, Oregon, along the southern shoreline and within the Columbia River. The Site was reported to Oregon Department of Environmental Quality (ODEQ) on September 28, 2005, by a city work crew and is currently inactive. The Sherriff's deputies on-scene estimated that there were 400 to 500 rusty, 55-gallon drums, with no containment structures, located on the river bottom (ODEQ 2005). During the SI, approximately 32 drums in various states of disintegration and disrepair were located in the Columbia River along the southern shoreline. The Site score is based on the SI and, when necessary, professional assumptions.

The objective of this SI was to assess the Site's impact on the surface water. The groundwater migration pathway, air migration pathway, and soil exposure pathway were not evaluated. The HRS scoresheets, which were generated using QuickScore version 2.3 software, are attached. The following information and assumptions were used to derive the score. The results in the SI whose values were marked with a J were not adjusted.

Source:

Contaminated Sediment
Contaminated sediment located beneath the deteriorating drums and within the deteriorating drums is considered to be the source at the Site. The drums themselves were not considered to be a source because it was not possible to determine if they contained hazardous materials at the time they were disposed of into the Columbia River due to their deteriorated condition. In addition, the sampling results indicated that the levels of contaminants found in sediment samples collected from the inside the drums were not higher than those found in the surrounding sediments. For the purposes of this report, the sediment within the drums is assumed to have been deposited by natural siltation. All samples collected from within the drums are also considered part of the contaminated sediment source.

During the SI field event, seven samples were collected from within seven drums and seventeen sediment samples were collected within the immediate vicinity of the drums. All of these samples are considered part of the contaminated sediment source area. Of the sediments collected from within the drums, the grain size analysis revealed that one of the seven drum samples consisted of coarse sand/small gravel sediment and six of the seven drums samples consisted of clay/silt sediments. Of the seventeen samples collected from the vicinity of the drums, six consisted of coarse sand/small gravel sediments, and the remaining eleven samples consisted of clay/silt sediments.

As the exact area of contaminated sediment is not known, the area of contaminated sediment is assumed to be greater than (>) 0, resulting in an HWQ of 10. As there is no containment structures associated with the contaminated sediment along the river bottom, the containment value for the surface water pathway is 10.

Surface Water Migration Pathway:

- An observed release to the surface water pathway was documented based on both direct observation and chemical analysis. The source (contaminated sediment) is located directly on the bottom of the Columbia River and therefore constitutes an observed release by direct observation. In addition, sediment samples collected from within and in the immediate vicinity of the drums contained elevated concentrations of contaminants including barium, beryllium, cadmium, copper, mercury, silver, selenium, zinc, acetophenone, bis (2-ethylhexyl) phthalate, and 4-methylphenol.

- There are no drinking water intakes along the surface water pathway; therefore, there is no actual contamination of a drinking water intake. In addition, there is no potential to contaminate a drinking water supply within the Target Distance Limit (TDL). The Columbia River is a major water recreation area, so a resource value of 5 was assigned in the Drinking Water Threat portion of the surface water pathway.

- For the Human Food Chain portion of the surface water pathway, actual contamination of a fishery was documented by both direct observation and chemical analysis. The source (contaminated sediment) is located in the surface water pathway (Columbia River), and is presently in direct contact with the surface water. In addition, elevated concentrations of mercury were detected in 10 sediment samples collected from within or in the immediate vicinity of the drums. The concentration of mercury in these samples ranged from 0.021 to 0.039 J mg/kg. A toxicity/mobility factor used was 10,000 based on mercury as the contaminant of concern.

- The fishery and the Site are both located in the Columbia River. Therefore, actual contamination of a fishery has occurred. Anadromous salmon, Steelhead Trout, and Cutthroat Trout use the Columbia River as a migratory route between upstream spawning areas and the Pacific Ocean (Fishman 2002). The area where the Site is located is managed as a recreational and commercial fishery.

- As mercury has a Bioaccumulation Potential factor value of 50,000 and the sampling results document an actual contamination of a fishery, a Food Chain Individual (FCI) score of 45 for a Level II fishery population was assigned.

- To determine the Human Food Chain Population factor value, the total weight of fish obtained from the area of the site was estimated. The lower Columbia River is 146 miles long from the Bonneville Dam to the Pacific Ocean. In 2004, 43,418 Chinook Salmon; 1,335 Coho Salmon; 10,166 Steelhead Trout; 22 Cutthroat Trout; 27,525 White Sturgeon; and 29 Green Sturgeon were caught during recreational fishing trips. According to local guides, salmon range in weight from 10 to 50 pounds and market salmon average 20 pounds. Therefore, it was conservatively assumed that each fish kept weighed 20 pounds, resulting in a total of 1,649,900 pounds of fish obtained from the Lower Columbia River at an average of 11,300 fish per mile. For the Commercial Gillnet Fisheries for Zone 4, approximately 41 river miles, 74,114 pounds of Chinook Salmon; 11,937 pounds of Coho Salmon; 8,025 pounds of White Sturgeon; and 14 pounds of Shad were caught. The total weight of fish caught for commercial uses in Commercial Fisheries Zone 4 is 96,090 pounds, at an average of 2,344 pounds of fish per mile. Only a portion of the fishery is subject to actual contamination from the source. As the Site is not an entire mile, it was assumed that between 100 and 10,000 pounds of fish were subject to actual Level II contamination from the Site, resulting in a Human Food Chain Population factor value of 3.

- The remainder of the TDL is subject to potential contamination. However, due to the presence of Level II contamination and the low score for potential contamination of a fishery, the Human Food Chain Population factor value for potential contamination of a fishery was not calculated.

- Evidence of evolutionary significant units (ESUs), federally endangered species, and threatened species are located within the Site boundaries. An ESU is a distinctive group of Pacific Salmon or Steelhead. NOAA Fisheries considers an ESU a “species” under the Endangered Species Act. Anadromous salmon, Steelhead Trout, and Cutthroat Trout use the Columbia River as a migratory route between upstream spawning areas and the Pacific Ocean. The following ESUs are federally threatened and migrate upstream past the Site: four ESUs of Chinook Salmon, one ESU of Columbia River Chum Salmon, one ESU of Lower Columbia River/Southwest Washington Coho Salmon, and 4 ESUs of Steelhead Trout. The Snake River Sockeye Salmon, a federally endangered species, migrates through the area of the Site. The Southwest Washington/Lower Columbia River Coastal Cutthroat Trout ESU is proposed for federal listing as a threatened species and is found in the Columbia River in the Government Island Complex vicinity. Another federal species of concern and a state sensitive species of undetermined status is the Northern Red-Legged Frog. This species is found in the wetlands and slow moving streams on the Government Island Complex. A pair of Bald Eagles, formerly a federal and state threatened species, has a nest on Government Island and catch food in the Columbia River. The Purple Martin, a state sensitive species, forages for insects over the Columbia River in the Government Island Complex vicinity.

- For the Sensitive Environment portion of the surface water pathway, actual contamination of the above listed sensitive environments was documented by both direct observation and chemical analysis. The source (contaminated sediment) is located in the surface water pathway (Columbia River), and is presently in direct contact with the surface water. In addition, elevated concentrations of mercury were detected in 10 sediment samples collected from within or in the immediate vicinity of the drums. The concentration of mercury in these samples ranged from 0.021 J to 0.039 J mg/kg. A toxicity/mobility factor used was 10,000 based on mercury as the contaminant of concern. In addition to mercury, cadmium and silver are also present in elevated concentrations in samples collected from the Site and also document actual contamination of the sensitive environments.

- A total of nine federally endangered, threatened, or proposed ESUs of salmon or trout migrate past the Site. The point value for each species (or ESU) utilizing the Columbia River as a migratory route through an area of observed contamination is 75. Mercury, cadmium, and silver found in source sediment samples all document an observed release to the sensitive environment, but cannot be used to establish Level I concentrations as the samples were not surface water samples. In addition to the evidence of actual contamination by chemical analysis, the Site is located directly in the Columbia River, and constitutes an observed release by direct observation, resulting in a Level II contamination designation by direct observation. Therefore, nine separate endangered or threatened species, at 75 points each, migrate through an area of observed Level II contamination, which results in a total target score of 675 for the sensitive environment portion of the surface water pathway.

- The surface water migration pathway is a combination of the three components, Drinking Water, Human Food Chain, and Sensitive Environments. The score of the three components is 0.60, 57.60, and 60.0. The uncapped score for the surface water pathway is 810, the capped score is 100.

- Using the surface water migration pathway score, the site score is 50. The SI focused on the surface water pathway, so the groundwater migration, soil exposure, and air migration pathways were not evaluated.

Please contact Alexis Ande, the Site Assessment Group Leader, at (360) 443-6575 or Lesa Nelson, the TechLaw Project Manager, at (360) 871-8777 if you have any questions or comments regarding HRS memo.

****** CONFIDENTIAL ******
******PRE-DECISIONAL DOCUMENT ******
****** SUMMARY SCORESHEET ******
****** FOR COMPUTING PROJECTED HRS SCORE ******

****** Do Not Cite or Quote ******

Site Name: Drums-NE Marine Drive

Region: 10

City, County, State: Portland, Multnomah OR

Evaluator: Lesa Nelson

EPA ID#: ORN001002678

Date: 10/22/2007

Lat/Long: 45.5819 North, -122.5597 West

T/R/S: 1 North/2 East/Section 9

Congressional District: 3

This Scoresheet is for: SI

Scenario Name: Contaminated Sediment

Description: Contaminated sediment located beneath deteriorating drums and within the deteriorated drums located on the bottom of the Columbia River.

	S pathway	S^2 pathway
Ground Water Migration Pathway Score (S_{gw})		
Surface Water Migration Pathway Score (S_{sw})	100	10000
Soil Exposure Pathway Score (S_s)		
Air Migration Score (S_a)		
$S^2_{gw} + S^2_{sw} + S^2_s + S^2_a$		10000
$(S^2_{gw} + S^2_{sw} + S^2_s + S^2_a)/4$		2500
$\sqrt{(S^2_{gw} + S^2_{sw} + S^2_s + S^2_a)/4}$		50

Pathways not assigned a score (explain): Groundwater, soil exposure, and air migration pathways were not scored due to the location of the Site within the Columbia River. The source (contaminated sediment (soil) is not available to migrate to any of the other pathways.

1.0 Table 4-1 --Surface Water Overland/Flood Migration Component Scoresheet

Factor categories and factors	Maximum Value	Value Assigned	
Watershed Evaluated:			
Drinking Water Threat			
Likelihood of Release:			
1. Observed Release	550	550	
2. Potential to Release by Overland Flow:			
2a. Containment	10		
2b. Runoff	10		
2c. Distance to Surface Water	5		
2d. Potential to Release by Overland Flow [lines 2a(2b + 2c)]	35	0	
3.Potential to Release by Flood:			
3a. Containment (Flood)	10		
3b. Flood Frequency	50		
3c. Potential to Release by Flood (lines 3a x 3b)	500	0	
4. Potential to Release (lines 2d + 3c, subject to a maximum of 500)	500	0	
5. Likelihood of Release (higher of lines 1 and 4)	550		550
Waste Characteristics:			
6. Toxicity/Persistence	(a)	10000	
7. Hazardous Waste Quantity	(a)	10	
8. Waste Characteristics	100		18
Targets:			
9. Nearest Intake	50		
10. Population:			
10a. Level I Concentrations	(b)		
10b. Level II Concentrations	(b)		
10c. Potential Contamination	(b)		
10d. Population (lines 10a + 10b + 10c)	(b)		
11. Resources	5	5	
12. Targets (lines 9 + 10d + 11)	(b)		5
Drinking Water Threat Score:			
13. Drinking Water Threat Score [(lines 5x8x12)/82,500, subject to a max of 100]	100		0.6
Human Food Chain Threat			
Likelihood of Release:			
14. Likelihood of Release (same value as line 5)	550		550
Waste Characteristics:			
15. Toxicity/Persistence/Bioaccumulation	(a)	500000000	
16. Hazardous Waste Quantity	(a)	10	
17. Waste Characteristics	1000		180
Targets:			
18. Food Chain Individual	50	45	
19. Population			
19a. Level I Concentration	(b)		
19b. Level II Concentration	(b)	3	
19c. Potential Human Food Chain Contamination	(b)		
19d. Population (lines 19a + 19b + 19c)	(b)	3	
20. Targets (lines 18 + 19d)	(b)		48
Human Food Chain Threat Score:			
21. Human Food Chain Threat Score [(lines 14x17x20)/82500, subject to max of 100]	100		57.6
Environmental Threat			
Likelihood of Release:			
22. Likelihood of Release (same value as line 5)	550		550
Waste Characteristics:			

23. Ecosystem Toxicity/Persistence/Bioaccumulation	(a)	500000000	
24. Hazardous Waste Quantity	(a)	10	
25. Waste Characteristics	1000		180
Targets:			
26. Sensitive Environments			
26a. Level I Concentrations	(b)		
26b. Level II Concentrations	(b)	675	
26c. Potential Contamination	(b)		
26d. Sensitive Environments (lines 26a + 26b + 26c)	(b)	675	
27. Targets (value from line 26d)	(b)		675
Environmental Threat Score:			
28. Environmental Threat Score [(lines 22x25x27)/82,500 subject to a max of 60]	60		60
Surface Water Overland/Flood Migration Component Score for a Watershed			
29. Watershed Score[c] (lines 13+21+28, subject to a max of 100}	100		100
Surface Water Overland/Flood Migration Component Score			
30. Component Score (S_{sw})[c] (highest score from line 29 for all watersheds evaluated)	100		100

[a] Maximum value applies to waste characteristics category
[b] Maximum value not applicable
[c] Do not round to nearest integer

Site Inspection Report
Drums NE-Marine Drive
Portland, Multnomah County, Oregon
TDD: 06-07-0006

TechLaw, Inc.
Contract EP-S7-06-03

Region 10

START-3

Superfund Technical Assessment and Response Team

Submitted To: Joanne LaBaw, Task Monitor
United States Environmental Protection Agency, Region 10
1200 Sixth Avenue Suite 900– M/S ECL 112
Seattle, Washington 98101

December 2007

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LIST OF APPENDICES

APPENDIX

LIST OF ACRONYMS

Acronym	Definition
%R	spike % recovery
°C	degrees Celsius
ASTM	American Society for Testing and Materials
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
cfs	cubic feet per second
CLP	Contract Laboratory Program
CLPAS	Contract Laboratory Program Analytical Services
CRQL	contract required quantitation limit
CRDL	contract required detection limit
CSSW	Columbia South Shore Well Field
Datachem	Datachem Laboratories, Inc.
DQOs	data quality objectives
Ecology	Washington Department of Ecology
EPA	United States Environmental Protection Agency
ESU	evolutionary significant units
Fishman	Fishman Environmental Services, LLC
GPS	Global Positioning System
HRS	Hazard Ranking System
IDW	investigation-derived waste
MEL	Manchester Environmental Laboratory
Metro	Metro Regional Parks and Greenspaces Department
mg/kg	milligrams per kilogram
µg/kg	micrograms per kilogram
MS/MSD	matrix spike/matrix spike duplicate
NOAA	National Oceanic and Atmospheric Administration
NPL	National Priorities List
NRC	National Response Corporation
ODEQ	Oregon Department of Environmental Quality
PA	Preliminary Assessment
PAH	polyaromatic hydrocarbon
PCB	polychlorinated biphenyl
Ponar	Petite Ponar Dredge
PPE	probable point of entry
QA	quality assurance
QC	quality control
RM	river mile
RPD	relative percent difference
SARA	Superfund Amendments and Reauthorization Act
SI	Site Inspection
Site	Drums NE-Marine Drive Site
SOPs	Standard Operating Procedures
SQAP	Sampling and Quality Assurance Plan
SQL	sample quantitation limit
START-3	Superfund Technical Assessment and Response Team-3
SVOC	semivolatile organic compound
TAL	Target Analyte List
TDD	Technical Direction Document
TDL	target distance limit
TechLaw	TechLaw, Inc.
TM	Task Monitor

LIST OF ACRONYMS (CONTINUED)

Acronym	Definition
TOC	Total Organic Carbon
USGS	United States Geological Survey
VOC	volatile organic compound

1.0 INTRODUCTION

Pursuant to the United States Environmental Protection Agency (EPA) Region 10 Superfund Technical Assessment and Response Team-3 (START-3) Contract No. EP-S7-06-03 and Technical Direction Document (TDD) No. 06-07-0006, TechLaw, Incorporated (TechLaw) conducted a site inspection (SI) at the Drums-NE Marine Drive Site (Site) in Portland, Oregon. The SI activities performed were conducted under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 and the Superfund Amendments and Reauthorization Act (SARA) of 1986.

The objectives of this Site Inspection are to:

- Document a threat or potential threat to public health or the environment posed by the Site;
- Assess the need for additional detailed investigation and/or response action at the Site; and
- Provide the EPA with adequate information to determine whether the site is eligible for placement on the Nation Priorities List (NPL).

This document includes the site background information (Section 2), field sampling activities and analytical protocols (Section 3), quality assurance and quality control criteria (Section 4), background sample results (Section 5), potential sources (Section 6), migration pathways and targets (Section 7), summary and conclusions (Section 8), and references (Section 9).

2.0 SITE BACKGROUND

2.1 Site Description and Background

The following subsections discuss the Site background, description, ownership history, and operations. Information presented in this subsection is based on a review of Site background information using EPA Region 10 and Oregon Department of Environmental Quality (ODEQ) files.

2.1.1 Project Location

Site Name:	Drums - NE Marine Drive Site (Site)
EPA Identification Number:	ORN001002678
Location:	9000 Block of NE Marine Drive
County:	Multnomah
Latitude:	45.5819 North
Longitude:	-122.5597 West
Legal Description:	Section 09, Township 01 North, Range 02 East
Bank Property Site Owner/ Contact:	Port of Portland- 121 Northwest Everett Street Portland, Oregon 97209-4049 (503) 944-7000
River Bottom Site Owner/ Contact:	State of Oregon Water Resources Department 725 Summer Street Northeast, Suite A Salem, Oregon 97301 (503) 986-0900

2.1.2 Site Description and Current Use

The Site is located in Portland, Multnomah County, Oregon, in the Columbia River, along the southern shoreline (Figure 2-1 and Figure 2-2). The surrounding land is urban and industrial; located southwest of the Site is Portland International Airport and north of the Site is the Government Island Complex.

The Columbia River is tidally influenced. Tidal effects can be observed during low river flow up to Warrendale, Oregon, approximately river mile 141 and around 30 miles east of Portland, Oregon (van der Naald, et al. 2004). The Columbia River estuary has a salt wedge. A salt wedge is formed in estuaries when salt waters (which are heavier) move inland on and near the bottom and fresh waters (which are lighter) move toward the sound on top. A density gradient (wall) is formed and the bottom waters have no way of replenishing oxygen unless a strong wind mixes the waters together (Lerner et al. 2006). It has been reported that during high runoff events and low tides, seawater protrudes five miles inland of the river mouth (Larsson, et al. 2006). During low runoff periods and high tides seawater can intrude up to 23 miles inland (Larsson, et al. 2006). Under these conditions seawater influence on salinity can extend up to river mile 37 due to the mixing of the salt wedge with river water (Larsson, et al. 2006). The

Government Island Complex is located within river mile 111.5 (western part of the Government Island Complex) and 118 (eastern part of the Government Island Complex) (Topinka 2006). The Site is located just south of Lemon Island, which is located on the western part of the Government Island Complex. The lower Columbia River is subject to annual flooding in late fall and early winter when rains are the heaviest (van der Naald, et al. 2004). The average annual flow for the Columbia River at The Dalles, Oregon is approximately 190,000 cubic feet per second (cfs) (Washington State Department of Ecology (Ecology) 2006). The Dalles, Oregon is located approximately 60 miles southeast of Portland, Oregon.

The Government Island Complex is 2,200 acres in area, and consists of Government Island, Lemon Island, and McGuire Island (Fishman Environmental Services, LLC (Fishman) 2002). The Government Island Complex is owned by the Port of Portland, except for 224 acres, which are owned by the Metro Regional Parks and Greenspaces Department (Metro) (Fishman 2002). These islands are only accessible by boat, and are state recreational areas (Fishman 2002). The Government Island Complex supports wetland mitigation projects, recreation, and livestock (Fishman 2002). Many federally and state threatened and endangered species live on these islands (Fishman 2002). Details regarding federally and state threatened and endangered species are found in the Surface Water Pathway section.

2.1.3 Site Ownership

According to the Oregon Admissions Act, the State of Oregon "shall have concurrent jurisdiction on the Columbia and all other rivers and waters bordering the State of Oregon, so far as the same shall form a common boundary to said State, and any other State or States now or hereafter to be formed or bounded by the same; and said rivers and waters, and all the navigable waters of said State, shall be common highways and forever free, as well as to the inhabitants of said State as to all other citizens of the United States, without any tax, duty, impost, or toll therefore (Oregon 1859)…". Under the Oregon Admissions Act, the Columbia River belongs to the State of Oregon from river mile 0 to river mile 309 (Oregon 2007).

The Port of Portland owns the banks of the southern shoreline of the Columbia River, Portland, Multnomah County, Oregon with the following Property identifications: R317064, R317076, and R317066 (Assessors 2007a, b, and c). The current use of the property is vacant and is zoned as open space (Assessors 2007a, b, and c). There is a multi-use path located along the southern Columbia River bank, just south of the Site.

2.1.4 Site Operations and Waste Characteristics

The Site was discovered and reported to ODEQ on September 28, 2005, by a city work crew. At that time, it was estimated that there were 400 to 500 55-gallon drums with unknown contents located along the Columbia River bottom. There were no original estimates as to the extent of the drums but, according to Metro; they were spread over a fairly wide area (Kraten 2006a). It is not known who owned, transported, or illegally disposed of the drums into the Columbia River; as there are no known industrial uses of this stretch of river. Two samples were previously collected from the Site and contained barium, chromium, polyaromatic hydrocarbons (PAHs), phthalate, 2,4,6-Tribromophenol (a flame retardant chemical), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), cadmium, chromium, lead, and mercury (Specialty Analytical 2005).

2.2 Previous Investigations

The following subsections discuss previous Site investigations, potential sources, and the migration/exposure pathways and targets.

2.2.1 Multnomah County Sheriff's Office and Metro

The Site was reported to ODEQ on September 28, 2005, by a city work crew and is currently inactive. The Sherriff's deputies on-scene estimated that there were 400 to 500 rusty, 55-gallon drums, with no containment structures, located on the river bottom (ODEQ 2005).

On October 19, 2006, Multnomah County Sheriff's Office and Metro removed some old tires, a car, and other trash from the Site. While on Site, Multnomah County Sheriff's Office and Metro did some pre-inspections of the Site, with the assistance of a diver. The diver observed approximately 200 drums in the channels, with some of the drums having large holes in them (Kraten 2006b).

2.2.2 Oregon Department of Environmental Quality

ODEQ led an investigation on September 29, 2005. National Response Corporation (NRC), an environmental consulting firm contracted to ODEQ, collected two samples at the Site: a sediment sample and a sludge sample. No background samples were collected (Hyke 2006). According to ODEQ, the drums, which were scattered over a fairly wide area, contained a sludgy, flaky, green substance, and when the drums were disturbed they left a sheen in the water (Greenburg 2006; Kraten 2006a). All of the drums observed appeared to be very old and disintegrated (Hyke 2006).

The sediment sample was collected from along the water's edge, and the sludge sample was collected from inside a partially-filled drum (Hyke 2006). The sediment sample contained barium (51.5 milligrams per kilogram (mg/kg)), chromium (6.83 mg/kg), PAHs (concentrations found between 137 to 2760 mg/kg), Bis(2-ethylhexyl)phthalate (325 micrograms per kilogram (µg/kg)), 2,4,6-Tribromophenol (a flame retardant chemical, 111 µg/kg), SVOCs (concentrations found between 73.9 and 105 µg/kg), and Decachlorobiphenyl (a PCB, 94.9 µg/kg) (Specialty Analytical 2005). The sludge sample contained barium (71.8 mg/kg), cadmium (0.846 mg/kg), chromium (11.4 mg/kg), lead (10.8 mg/kg), mercury (0.0244 mg/kg), bis(2-ethylhexyl)phthalate (247 µg/kg), 2,4,6-Tribromophenol (a flame retardant chemical, 98.2 µg/kg), SVOCs (concentrations found between 73.1 and 99.1 µg/kg), volatile organic compounds (VOCs) (concentrations found between 14.8 and 95.1 µg/kg), and Decachlorobiphenyl (a PCB, 102 µg/kg) (Specialty Analytical 2005). According to ODEQ, based on the analytical results, it was likely that a release occurred.

2.2.3 START Preliminary Assessment

As part of an abbreviated Preliminary Assessment (PA), the EPA Task Monitor (TM) and START-3 conducted a site reconnaissance inspection at the Site On September 8, 2006. The EPA/START-3 team met with a representative of ODEQ in order to obtain additional Site information. The team attempted to locate the area along the southern shoreline of the lower Columbia River, where the drums were reportedly located. However, due to the high water levels within the river at the time of the reconnaissance inspection, the drums were not observed.

On December 7, 2006, START-3 submitted the abbreviated PA report to the EPA TM. It was recommended that a CERCLA SI conducted at the Site. It was also recommended that the Site also be further evaluated to determine if any removal activities were warranted.

2.3 Site Inspection Site Visit

START-3 conducted sampling at the Site from April 23 to 27, 2007 in conjunction with the EPA Dive Team.

A total of 33 sediment samples were collected and analyzed for SVOCs, PCBs, pesticides, Target Analyte List (TAL) metals, mercury, total organic carbon (TOC), and grain-size. The samples were analyzed either under the Contract Laboratory Program (CLP) contract or by Manchester Environmental Laboratory (MEL). The CLP laboratory analyzed the samples for SVOCs, PCBs, and pesticides. EPA Region 10 MEL analyzed the samples for TAL metals, mercury, TOC, and grain size.

2.3.1 Summary of SI Investigation Locations

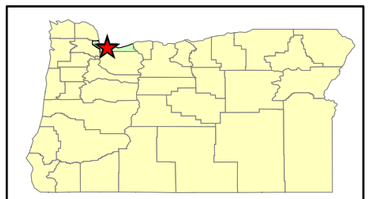
The objective of this SI was to determine if sediment has been impacted at or downstream of the Site. A total of 33 sediment samples were collected and analyzed for SVOCs, TAL metals, mercury, pesticides, PCBs, TOC, and grain size, to meet the SI objective. Of the sediment sampling locations, seven were collected from within the drums themselves, 17 within the direct vicinity of the drums, five were collected downstream of the Site, and four background samples were collected.

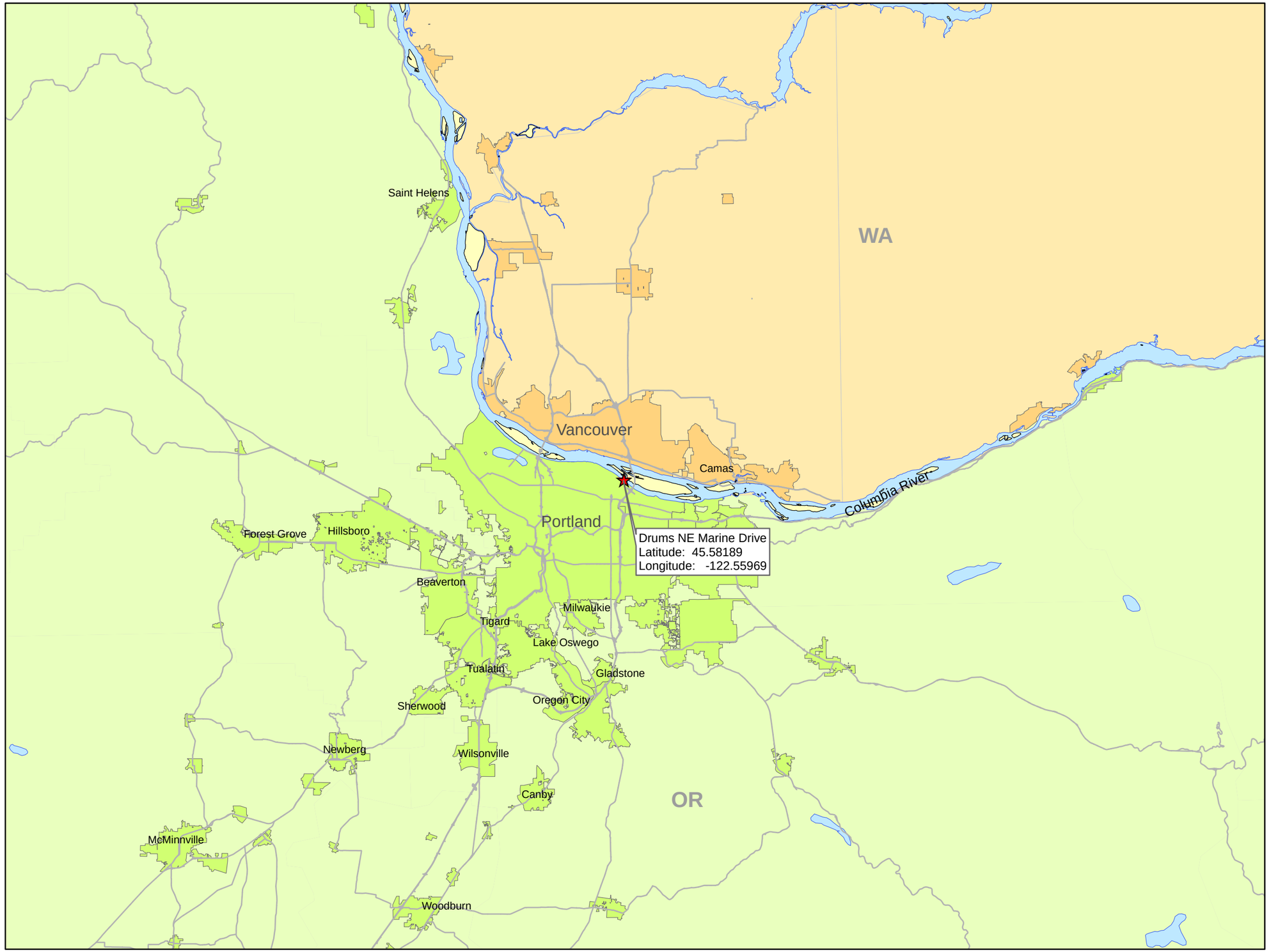
2.3.2 Summary of Locations and Conditions of Drums

During the SI approximately 32 drums were located and confirmed to be in various stages of disintegration; five of these drums were sampled during SI activities. The general location of the drums is latitude 45.5819° north and longitude -122.5597° west. The exact numbers of drums located in the area is not known, but reports range from 200 (according to the Multnomah County Sheriff's Office diver) to 600 (according to the ODEQ Environmental Cleanup Site Information Database Site Summary Report) (ODEQ 2007). Thirty-two drums were observed by the EPA Dive Team. The conditions of these drums are as follows: five were intact with no holes, two were intact with an obvious bulge, four were intact with holes, eight were rusted out and barely intact, three were only partially intact, two were crushed, four only consisted of pieces of drums scattered over the observed area,. No observations were provided of the remaining four drums by the EPA Dive team due to low visibility.

Although sediment was observed in the drums, it cannot be stated definitively what the contents of the drums were prior to their deposition on the river bottom. Due to the deteriorated nature of the drums, it is possible that the sediment observed in the drums were deposited after the drums deteriorated.

Figure 2-1
General Site Location Map
Drums-NE Marine Drive, Portland, Multnomah County, Oregon





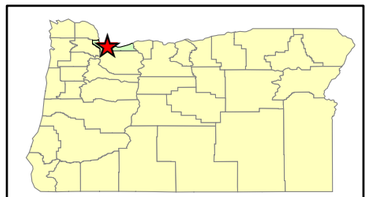
- Site Location
- Waterbodies
- Urban WA
- Urban OR

N

0 5 10 Miles

Source: - Oregon Geospatial Enterprise Office
- Washington State Dept. of Ecology
Date: 09/27/07
Created by: MKS

Figure 2-2
Aerial Photo with
General Site Location Map
Drums NE Marine Drive
Portland, Multnomah County,
Oregon



★ Site Locations

N

0 0.5 1 Miles

Source: TerraServer USGS 2002
Date: 09/27/07
Created by: MKS

3.0 FIELD ACTIVITIES AND ANALYTICAL PROTOCOL

3.1 Sampling Objectives

The sampling objective of this SI is to determine if Columbia River sediments have been impacted by the release of contaminants. A total of 33 sediment samples were collected. All samples were analyzed for SVOCs, TAL metals, mercury, PCBs, pesticides, TOC, and grain size. Sample types and methods of collection are described below. A list of all samples collected for fixed laboratory analysis under the SI is contained in Table 3-1 and the sample locations are also shown in Figure 3-1. Photographic documentation of SI field activities is contained in Appendix A.

A Sampling and Quality Assurance Plan (SQAP) was developed by START-3 and approved by EPA prior to field sampling (TechLaw 2007). The SQAP was based on a review of background information and interviews with site representatives. The SQAP describes the sampling strategy, sampling methodology, and analytical program to investigate potential targets. Sample locations were selected during the field sampling activities in conjunction with the EPA TM, START-3 Project Lead, and EPA Divers. Sample selection was based on the likelihood of proximity to the drum area. Sample location selection also depended on the underwater visibility and the ability to collect the sediment sample underwater with the river current. With few exceptions, SI field activities were conducted in accordance with the approved SQAP. Deviations from the SQAP were approved by the EPA and are described, when applicable in the sampling location discussions in Section 6 and Section 7 and are also found in sample plan alteration forms (SPAFs) located in Appendix D.

The START-3 SI field events were conducted from April 23 through April 27, 2007. Alphanumeric identification numbers applied by START-3 to each sample location (e.g., DMD-SD-01) are used in this SI report as the station location identifiers. Sample locations are provided in Table 3-1. The sample locations specify the distance from the boat in nautical miles in reference to the distance from the original Global Positioning System (GPS) Site location provided by ODEQ.

3.2 Sediment Sample Methodology

Sediment samples were collected at the Site in accordance with the sampling methodologies and standard operating procedures (SOPs) provided in the SQAP. Samples designated to be analyzed for TAL metals were preserved as required by the SOP. A total of 33 sediment samples were collected. Twenty-four sediment samples were collected from within the area of the drums; seven of those samples were collected from sediment located inside of the drums themselves. Five sediment samples were collected downstream of the Site, and four background sediment samples were collected upstream of Site.

3.2.1 Sediment Samples Collected by START-3

The five downstream and three of the four background sediment samples were collected by START-3. The fourth background was collected by the EPA Dive Team and is described in Section 3.2.2. START-3 used a Petite Ponar Dredge (Ponar) to collect sediment samples from 0 to 6 inches below ground surface (bgs) in depth. Two to three volumes were collected from the Ponar to obtain the required 24-oz of sediment for the samples. The sample material was placed

into a dedicated stainless steel bowl, excess water decanted, and sample material homogenized. START-3 then placed the requisite aliquot of sample material into pre-labeled sample containers.

3.2.2 Sediment Samples Collected by the EPA Dive Team

Out of the total of 33 sediment samples obtained, the EPA Dive Team collected 26, including two duplicates and one background. The EPA Dive Team collected seven of the sediment samples from within the drums themselves (described as Drum Sample in Table 3-1); 17 sediment samples from close proximity of the drums (described as Drum Vicinity in Table 3-1), including a duplicate sample; and one background sediment samples, upgradient of Site influences. These samples were collected from 0- to 6-inches bgs in depth using a one foot long, 4-inch diameter, thin-walled, beveled corer. The EPA Dive Team then brought the corer to the surface of the Columbia River and handed the corer and sample off to START-3. START-3 then placed the sample material into a dedicated stainless steel bowl, decanted excess water, and homogenized the sample material. The EPA Dive Report is located in Appendix E.

3.3 Analytical Protocols

Samples collected for SVOCs, PCBs, and pesticides were analyzed by Contract Laboratory Program Analytical Services (CLPAS). Analytical methods for SVOCs, PCBs, and Pesticides were completed using EPA Method SOM01.1 by Datachem Laboratories, Inc. (Datachem), in Salt Lake City, Utah. Analyses for TAL metals and mercury were completed using EPA Method 200.7/6010B and 200.8 by EPA MEL in Port Orchard, Washington. Analysis of TOC was completed by EPA MEL using EPA Method 415.1. Analysis of grain size was completed by EPA MEL using American Society for Testing and Materials (ASTM) D 421-85 (Standard Practice for Dry Preparation of Soil Samples for Particle Size Analysis and Determination of Soil Constants).

3.4 Global Positioning System

The GP-1650 DF, Garmin 276C, and the Garmin Handheld 60CS were utilized by START-3 personnel to record coordinates of all sample locations. The Trimble was not utilized due to space constraints on the boat. GPS coordinates are provided in Appendix B.

3.5 Investigation-Derived Waste

Investigation-derived waste (IDW) generated during the SI sampling effort consisted of solid sampling equipment (gloves) disposed of as non-hazardous waste through the City of Portland solid waste program. No IDW generated during the SI sampling effort remains on site.

Table 3-1
Sample Collection Summary
Drums-NE Marine Drive Site
Portland, Multnomah County, Oregon

EPA Sample ID	Station ID	CLP Sample ID	Matrix	Description
07174000	DMD-SD-01	J86R0	Sediment	Background Sample. Boat located 0.2 nautical miles east of ODEQ GPS location. Sample collected approximately 15 meters west of boat location. Sediment consists of coarse sand/small gravel.
07174002	DMD-SD-02	J86R1	Sediment	Background Sample. Boat located 1.25 nautical miles east of ODEQ GPS location. Sample collected at boat location. Sediment consists of coarse sand/small gravel.
07174003	DMD-SD-03	J86R2	Sediment	Background Sample collected 0.2 nautical miles west of stormwater outfall. Boat located 2.59 nautical miles upstream from ODEQ GPS location. Sample collected at boat location. Sediment consists of coarse sand/small gravel.
07174004	DMD-SD-04	J86R3	Sediment	Downstream Sample. Boat located 0.5 nautical miles downstream from ODEQ GPS location. Sample collected at boat location. Sediment consists of coarse sand/small gravel.
07174005	DMD-SD-05	J86R4	Sediment	Downstream Sample. Boat located 1 nautical mile downstream from ODEQ GPS location. Sample collected at boat location. Sediment consists of coarse sand/small gravel.
07174006	DMD-SD-06	J86R5	Sediment	Downstream Sample. Boat located 1.5 nautical miles downstream from ODEQ GPS location. Sample collected at boat location. Sediment consists of brown coarse sand/small gravel.
07174007	DMD-SD-07	J86R6	Sediment	Drum Vicinity Sample. Boat located at ODEQ GPS location. Sample collected approximately 19 meters west of boat location. Sediment consists of coarse sand/small gravel.
07174008	DMD-SD-08	J86R7	Sediment	Drum Vicinity Sample. Boat located at ODEQ GPS location. Sample collected approximately 36 meters west of boat location. Sediment consists of coarse sand/small gravel.
07174009	DMD-SD-09	J86R8	Sediment	Drum Vicinity Sample. Boat located 0.57 nautical miles west of ODEQ GPS location. Sample collected approximately 10 meters west of boat location. Sample collected 6 inches south of a rusted out drum. Sediment consists of clay/silt.

Table 3-1 (Continued)
Sample Collection Summary
Drums-NE Marine Drive Site
Portland, Multnomah County, Oregon

EPA Sample ID	Station ID	CLP Sample ID	Matrix	Description
07174010	DMD-SD-10	J86R9	Sediment	Drum Sample. Boat located 0.57 nautical miles west of ODEQ GPS location. Sample collected approximately 18 meters west of boat location. Sample collected from inside of a rusted drum. One other drum observed in vicinity. Sediment consists of clay/silt.
07174011	DMD-SD-11	J86S0	Sediment	Drum Vicinity Sample. Boat located 0.57 nautical miles west of ODEQ GPS location. Sample collected 23 meters west of boat location. Sediment consists of coarse sand/small gravel.
07174012	DMD-SD-12	J86S1	Sediment	Drum Sample. Boat located 0.57 nautical miles west of ODEQ GPS location. Sample collected 37 meters west of boat location. Sample collected from inside a large intact drum. Sediment consists of clay/silt.
07174013	DMD-SD-13	J86S2	Sediment	Drum Vicinity Sample collected just south of DMD-SD-12. Boat located 0.57 nautical miles west of ODEQ GPS location. Sample collected 37 meters west of boat location. Sample collected from sediment south of a large intact drum. Sediment consists of clay/silt.
07174014	DMD-SD-14	J86S3	Sediment	Drum Vicinity Sample. Boat located 0.48 nautical miles west of ODEQ GPS location. Sample collected between 9 and 15 meters west of boat location. Sample collected from sediment beneath a crushed drum. Sediment consists of coarse sand/small gravel.
07174015	DMD-SD-15	J86S4	Sediment	Drum Vicinity Sample. Boat located 0.48 nautical miles west of ODEQ GPS location. Sample collected approximately 18.5 meters west of boat location. Sample collected from sediment adjacent to a full intact drum. Sediment consists of coarse sand/small gravel.
07174016	DMD-SD-16	J86S5	Sediment	Drum Sample. Boat located 0.78 nautical miles west of ODEQ GPS location. Sample collected approximately 50 meters west of boat location. Sample collected from inside a 2/3 rusted drum with paper thin side walls. Sediment consists of coarse sand/small gravel.

Table 3-1 (Continued)
Sample Collection Summary
Drums-NE Marine Drive Site
Portland, Multnomah County, Oregon

EPA Sample ID	Station ID	CLP Sample ID	Matrix	Description
07174017	DMD-SD-17	J86S6	Sediment	Drum Vicinity Sample. Boat located 0.78 nautical miles west of ODEQ GPS location. Sample collected approximately 31 meters west of boat location. Sample collected from sediment adjacent to a dilapidated drum. Sediment consists of clay/silt.
07174018	DMD-SD-18	J86S7	Sediment	Drum Vicinity Sample. Boat located 0.78 nautical miles west of ODEQ GPS location. Sample collected from approximately 16 meters west of boat location. Sample collected from sediment in between a 2/3 drum and an intact drum. Sediment consists of clay/silt.
07174019	DMD-SD-19	J86S8	Sediment	Drum Sample. Boat located 0.74 nautical miles west of ODEQ GPS location. Sample collected approximately 44 meters west of boat location. Sample collected from inside of a barely intact drum. Sediment consists of clay/silt.
07174020	DMD-SD-20	J86S9	Sediment	Drum Sample. Boat located 0.74 nautical miles west of ODEQ GPS location. Sample collected approximately 27 meters west of boat location. Sample collected from inside of a partially buried drum with top exposed. Sediment consists of clay/silt.
07174021	DMD-SD-21	J86T0	Sediment	Drum Sample. Boat located 0.71 nautical miles west of ODEQ GPS location. Sample collected approximately 45 meters west of boat location. Sample collected from inside a drum, on its side, deteriorated with hole on down slope side. Sediment consists of clay/silt.
07174022	DMD-SD-22	J86T1	Sediment	Drum Vicinity Sample. Boat located 0.71 nautical miles west of ODEQ GPS location. Sample collected approximately 17 meters west of boat location. Sediment consists of clay/silt.
07174023	DMD-SD-23	J86T2	Sediment	Drum Vicinity Sample. Boat located 0.67 nautical miles west of ODEQ GPS location. Sample collected approximately 35 meters west of boat location. An intact drum is located 32 meters west of sample. Sediment consists of clay/silt with some metal shards.

Table 3-1 (Continued)
Sample Collection Summary
Drums-NE Marine Drive Site
Portland, Multnomah County, Oregon

EPA Sample ID	Station ID	CLP Sample ID	Matrix	Description
07174024	DMD-SD-24	J86T3	Sediment	Drum Vicinity Sample. Boat located 0.67 nautical miles west of ODEQ GPS location. Sample collected approximately 13 meters west of boat location. Sediment consists of coarse sand/small gravel.
07174025	DMD-SD-25	J86T4	Sediment	Drum Vicinity Sample. Boat located 0.62 nautical miles west of ODEQ GPS location. Sample collected approximately 30 meters west of boat location. Sediment consists of clay/silt.
07174026	DMD-SD-26	J86T5	Sediment	Drum Vicinity Sample. Boat located 0.62 nautical miles west of ODEQ GPS location. Sample collected approximately 12 meters west of boat location. Sediment consists of clay/silt.
07174027	DMD-SD-27	J86T6	Sediment	Downstream Sample. Boat located 1.5 nautical miles from ODEQ GPS location. Sample collected from boat location. Sediment consists of brown coarse sand/small gravel. Duplicate for DMD-SD-06.
07174028	DMD-SD-28	J86T7	Sediment	Drum Vicinity Sample. Boat located 0.78 nautical miles west of ODEQ GPS location. Sample collected approximately 31 meters west of boat location. Sample collected from sediment adjacent to a dilapidated drum. Sediment consists of clay/silt. Duplicate for DMD-SD-17
07174029	DMD-SD-29	J86T8	Sediment	Drum Sample. Boat located 0.71 nautical miles west of ODEQ GPS location. Sample collected approximately 45 meters west of boat location. Sample collected from inside a drum, on its side, deteriorated with hole on down slope side. Sediment consists of clay/silt. Duplicate for DMD-SD-21.
07174034	DMD-SD-30	J86W4	Sediment	Drum Vicinity Sample. Boat located 0.56 nautical miles west of ODEQ GPS location. Sample collected approximately 29 meters west of boat location. Sediment consists of clay/silt.
07174035	DMD-SD-31	J86W5	Sediment	Drum Vicinity Sample. Boat located 0.56 nautical miles west of ODEQ GPS location. Sample collected approximately 10 meters west of boat location. Sediment consists of clay/silt.
07174036	DMD-SD-32	J86W6	Sediment	Background Sample. Boat located 0.2 nautical miles east of ODEQ GPS location and further south from DMD-SD-01. Sediment consists of clay/silt.

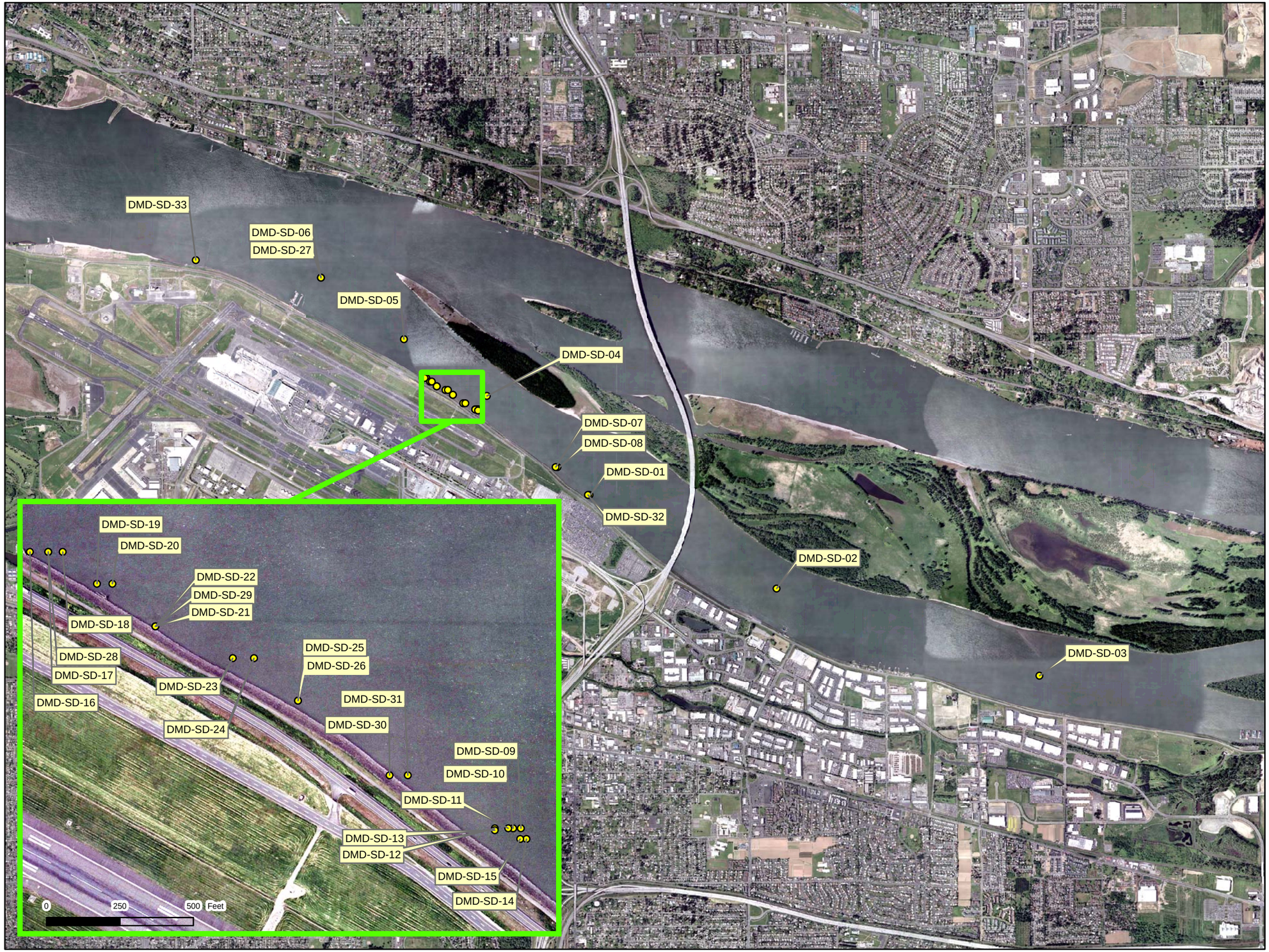
Table 3-1 (Continued)
Sample Collection Summary
Drums-NE Marine Drive Site
Portland, Multnomah County, Oregon

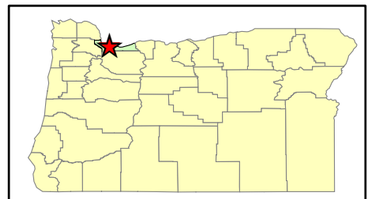
EPA Sample ID	Station ID	CLP Sample ID	Matrix	Description
07174037	DMD-SD-33	J86W7	Sediment	Downstream Sample. Boat located 2.37 nautical miles west of ODEQ GPS location. Sample collected from boat location. Sediment consists of clay/silt. Downstream Sample.
07174030	DMD-RB-01	J86W0	Water	Rinsate blank collected from the Ponar.
07174031	DMD-RB-02	J86W1	Water	Rinsate blank collected from a sampling spoon and bowl.
07174032	DMD-RB-03	J86W2	Water	Rinsate blank collected from 2 corer lids (1 with holes and 1 without) and one corer.
07174033	DMD-RB-04	J86W3	Water	Rinsate blank collected from a sampling spoon and bowl.

KEY

CLP Sample ID = Contract Laboratory Program Organic tracking code. Inorganic code includes an M at the front.
DMD = Drums- NE Marine Drive
Drum Sample = Sample collected from sediment located in a drum
Drum Vicinity = Sample collected from within the area where the drums are located
EPA Sample ID = EPA Region 10 Regional sample tracking code
GPS = Global Positioning System
ODEQ = Oregon Department of Environmental Quality
Ponar = Petite Ponar Dredge
RB = Rinsate blank
SD = Sediment
Station ID = START-3 sample tracking code

Figure 3-1
Aerial Photo with Sample Location Map
Drums NE Marine Drive
Portland, Multnomah County, Oregon





Sample Points

N

0 0.5 1 Miles

Source: TerraServer USGS 2002
Date: 09/27/07
Created by: MKS

4.0 QUALITY ASSURANCE/QUALITY CONTROL

A total of 33 sediment samples were analyzed for the SVOC, TAL metals, mercury, PCBs, pesticides, and TOCs. Organic analysis was performed in accordance with the *USEPA Contract Laboratory Program Statement of Work for Trace Organic Analysis SOM01.1* (EPA 2005). TAL metals and mercury samples were analyzed by MEL in accordance with EPA Method 200.7/6010B and 200.8. TOC samples were analyzed by MEL in accordance with EPA Method 415.1. Specific quality assurance/quality control (QA/QC) requirements for analyses of the Site samples are presented in the CLP statement of work and the project SQAP (TechLaw 2007).

All data from analyses performed were reviewed and validated by an EPA chemist. Data qualifiers were applied, as necessary, according to statements of work, analytical methods, and the following guidance:

- U.S. EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (EPA 2002).
- U.S. EPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (EPA 1999).
- Manchester Environmental Laboratory Quality Assurance Manual and Standard Operating Procedures.

Copies of the data QA memoranda are included in Appendix C.

4.1 Satisfaction of Data Quality Objectives

The data quality objectives (DQOs) for this site were established using the *Guidance for the Data Quality Objective Process* (EPA 2000). The data quality achieved during field sample collected and sample analyses conducted at the laboratories produced sufficient data to meet DQOs established in the SQAP (TechLaw 2007).

4.2 Quality Assurance/Quality Control Samples

Samples were collected or processed in the field to assist analysis of QA/QC measures. QC samples included temperature blanks, three field duplicates, and four equipment rinsate blanks. One temperature blank sample per shipment cooler was submitted. QC samples for all analyses included matrix spike and matrix spike duplicates (MS/MSD) at a rate of one sample per 20 sample media.

4.3 Project-Specific Data Quality Objectives

The following describes the laboratories' ability to meet project DQOs for precision, accuracy, and completeness, and the overall success of the field team and the laboratories at meeting project DQOs for representativeness and comparability. The laboratory and field team were able to meet the project DQOs for all samples except for rinsate blank samples DMD-RB-02 and DMD-RB-03. DMD-RB-02 and DMD-RB-03 water samples were extracted for pesticides and PCBs outside seven days of sample collection date. The temperature blank was also 12° Celsius (°C), which is just outside of the acceptable limits of 2° to 10°C.

4.3.1 Precision

Precision measures the reproducibility of the sampling and analytical methodology. Laboratory and field precision is defined as the relative percent difference (RPD) between duplicate sample analyses. The laboratory duplicate samples measure the precision of the analytical method.

The RPD values were reviewed for all samples. No sample results were qualified solely based on laboratory duplicate QC outliers.

4.3.2 Accuracy

Accuracy measures the reproducibility of sampling and analytical methodology. Laboratory accuracy is defined as the spike % recovery (%R). The %R for all inorganic compounds and organic compounds met the criterion.

4.3.3 Completeness

Data completeness is defined as the percentage of usable data (usable data divided by the total possible data). All laboratory data were reviewed for data validation and usability.

Out of a total of 3,589 SVOC, PCBs, and pesticide results, 142 (approximately 4% of the data) were qualified as non-detects (U); 54 (approximately 1.5% of the data) were qualified due to calibration; 40 (approximately 1.1% of the data) were qualified due to deuterated monitoring compounds; and 59 (approximately 1.7% of the data) were qualified due to holding time failure. Therefore, the project DQO for completeness of 90% was met.

4.3.4 Representativeness

Data representativeness expresses the degree to which sample data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point or environmental condition. The number and selection of samples were determined in the field to account accurately for site variations and sample matrices. The DQO for representativeness of 90% was met.

4.3.5 Comparability

Comparability is a qualitative parameter expressing the confidence with which one data set can be compared to another. Data produced for this site followed applicable field sampling techniques and specific analytical methodology as applied to sediment. The DQO for comparability was met.

5.0 ANALYTICAL RESULTS REPORTING AND BACKGROUND SAMPLES

This section describes analytical results reporting, the sample locations, and analytical results of SI samples obtained from background samples. The sampling rationale and analytical results are summarized in the following sections. Tables 6-1 and 6-2 summarize sediment sample analytical results. Laboratory data sheets of results for all samples are located in Appendix C.

5.1 Analytical Results Evaluation Criteria

Analytical results presented in the summary tables 6-1 and 6-2 in section 6, show all compounds detected above laboratory detection limits. Analytical results indicating significant concentrations above background are considered elevated and will be indicated in **bold** and **underlined**. For the purposes of this Site Inspection, significant/elevated concentrations are defined, using Table 2-3 of the EPA Hazard Ranking System (HRS) model criteria for observed release as follows:

- Equal to or greater than the sample's contract required quantitation limit (CRQL/CRDL), or the sample quantitation limit (SQL) when a non-CLP laboratory was used; and
- Equal to or greater than the background sample's CRQL/CRDL or SQL when the background concentration is below detection limits; or
- At least three times greater than the background concentration when the background concentration equals or exceeds the detection limit.

MEL performed a thorough visual check of all 33 samples and determined that approximately half were clay/silt samples and half were coarse sand/small gravel samples. MEL decided to do two grain size fractions using the following representative samples: DMD-SD-03 (coarse sand/small gravel) and DMD-SD-32 (clay/silt). The other 31 samples were then visually compared to the two representative samples and were either determined to be clay/silt or coarse sand/small gravel samples. The sediment samples were then organized into groups by TechLaw START-3 and compared to similar background samples (e.g. coarse sand/small gravel and clay/silt). Background samples DMD-SD-01, DMD-SD-02, and DMD-SD-03 consisted of coarse sand/small gravel and were used for comparison for coarse sand/small gravel sediment samples. Those samples composed primarily of clay/silt were compared to background sediment sample DMD-SD-32. In the case where multiple background samples were collected for the same matrix, the highest background value was used for comparison (i.e. within the sandy sediments, three background samples were collected and the highest of the three background concentrations for each constituent was used for comparison purposes).

The following qualifiers were used in data validation:

U The material was analyzed for but was not detected. The associated numerical value is the sample quantitation limit.

J The associated numerical value is an estimated quantity because the reported concentrations were less than the sample quantitation limits or because QC criteria limits were not met.

UJ The material was analyzed for, but not detected. The reported detection limit is estimated because QC criteria were not met.

R The sample results are rejected (analyte may or may not be present) due to gross deficiencies in QC criteria. Any reported value is unusable. Resampling and/or reanalysis are necessary for verification.

5.1.1 Analytical Sample Results Reporting

Based on EPA Region 10 policy, evaluation of aluminum, calcium, iron, magnesium, potassium, and sodium (common earth crust elements) is beyond the scope of this report. For this reason, these elements are not discussed.

5.2 Background Samples

Background results are shown in the first column of the analytical results summary tables in this section for comparison against source or target results. The background sample locations are depicted in Figure 3-1.

5.2.1 Sample Locations

Four background samples were collected for the SI field sampling event upstream of Site. Due to the distance of tidal influence along the Columbia River, it was not possible to be totally removed from possible site influences. Multiple backgrounds were collected to take into account the tidal influence and grain size. The three backgrounds collected also account for the variability in local concentrations of contaminants.

DMD-SD-01 and DMD-SD-32 were collected 0.2 nautical miles upstream/east of the Site. DMD-SD-01 sediment consisted of coarse sand/small gravel and DMD-SD-32 sediment consisted of clay/silt. DMD-SD-02 was collected 1.25 nautical miles upstream/east of the Site and consisted of coarse sand/small gravel. DMD-SD-03 was collected 2.59 nautical miles upstream/east of the Site and the sediment consisted of coarse sand/small gravel.

5.2.1.1 Sample Results

The following eight TAL metals were detected in all coarse sand/small gravel background sediment samples DMD-SD-01, DMD-SD-02 and DMD-SD-03: arsenic at concentrations of 0.54 to 1.9 mg/kg, beryllium (0.077 to 0.17 mg/kg), lead (1.3 to 3.18 mg/kg), chromium (5.57 to 20.4 mg/kg), copper (5.15 to 8.19 mg/kg), manganese (113 to 245 mg/kg), nickel (6.02 to12.3 mg/kg), and zinc (23.2 to 42.7mg/kg). Overall, the highest concentrations were detected in DMD-SD-01, which was also collected closest to the Site.

In addition to the eight TAL metals listed above, barium and cobalt were also detected in coarse sand/small gravel background sample DMD-SD-01 at concentrations of 38.5 and 6.42 mg/kg, respectively. Silver was detected in the coarse sand/small gravel background sediment sample DMD-SD-03 at a concentration of 1.6 mg/kg. Mercury was not detected in any coarse sand/small gravel background samples. Acetophenone, benzaldehyde, bis(2-ethylhexyl) phthalate, 4-methylphenol, and methoxychlor were detected in the coarse sand/small gravel background samples as well; however, all SVOCs, pesticides, and PCBs detected in background samples were at concentrations well below the detection limit for that constituent.

Background sample DMD-SD-32, consisted of clay/silt and was also collected near the Site. Detected contaminants and concentrations are as follows: mercury (0.036 J mg/kg), arsenic (5.18 mg/kg), beryllium (0.93 mg/kg), cadmium (0.74 mg/kg), lead (9.84 mg/kg), silver (0.17 mg/kg), barium (204 mg/kg), chromium (23.4 mg/kg), cobalt (13.7 mg/kg), copper (24.1 mg/kg), manganese (848 mg/kg), nickel (25.2 mg/kg), and zinc (72.3 mg/kg). SVOCs detected in the clay/silt background sample included acetophenone, bis(2-ethylhexyl)phthalate, 4-methylphenol, and methoxychlor; all contaminants were detected below the CRQL.

The results can be found below in Tables 6-1 and 6-2. The tables are organized by sediment type (i.e. sandy versus clayey) and sample location (i.e. drums samples).

6.0 POTENTIAL SOURCES

Sampling locations, sampling rationale, and analytical results are summarized in the following sections. Tables 6-1 and 6-2 summarize analytes detected at each potential source location investigated. Laboratory analytical results for all samples are provided in Appendix C.

6.1 Source

During the SI field event, seven samples were collected from within seven drums and seventeen sediment samples were collected within the immediate vicinity of the drums. All of these samples are considered part of the contaminated sediment source area. Of the sediments collected from within the drums, the grain size analysis revealed that one of the seven drum samples consisted of coarse sand/small gravel sediment and six of the seven drums samples consisted of clay/silt sediments. Of the seventeen samples collected from the vicinity of the drums, six consisted of coarse sand/small gravel sediments, and the remaining eleven samples consisted of clay/silt sediments.

From within the coarse sand/small gravel fraction of the sediment samples, mercury was detected at an elevated concentration of 0.016 mg/kg in drum sample DMD-SD-16; mercury was also detected in four of the six samples collected from the drum vicinity (DMD-SD-11, DMD-SD-14, DMD-SD-15, and DMD-SD-24) at concentrations between 0.021 J to 0.035 J mg/kg. Drum vicinity sample DMD-SD-24 also contained elevated concentrations of barium (159 mg/kg), beryllium (0.69 mg/kg), cadmium (0.80 mg/kg), copper (24.9 mg/kg) and silver (0.18 mg/kg),

There were no elevated SVOCs, pesticides, or PCBs detected within the coarse sand/small gravel sediment samples (DMD-SD-07, DMD-SD-08, DMD-SD-11, DMD-SD-14, DMD-SD-15, DMD-SD-16, DMD-SD-24).

From within the clay/silt fraction of the sediment samples, selenium was the only elevated TAL metal constituent detected in drum sediment sample DMD-SD-12 at a concentration of 0.57 mg/kg; selenium was also detected at elevated concentrations ranging from 0.51 mg/kg to 0.76 mg/kg in drum vicinity sediment samples DMD-SD-09, DMD-SD-13, DMD-SD-17, DMD-SD-18, and DMD-SD-23. Other TAL metals detected at elevated concentrations include barium (156 mg/kg), beryllium (0.6 mg/kg), cadmium (0.62 mg/kg), copper (30.7 mg/kg), mercury (0.39 mg/kg), and silver (0.13 mg/kg) in sediment sample DMD-SD-17 and zinc in DMD-SD-25 at a concentration of 290 mg/kg.

Elevated SVOCs detected within the clay/silt fraction of the sediment samples collected from within the drums included acetophenone in sediment sample DMD-SD-29 at a concentration of 98J µg/kg, bis (2-ethylhexyl) phthalate in DMD-SD-20 (99 J µg/kg), and 4-methylphenol in DMD-SD-10 and DMD-SD-29 at a concentration of 290 µg/kg and 170 µg/kg , respectively. No SVOCs, pesticides, or PCBs were detected at elevated concentrations from the clay/silt fraction of the sediment samples collected in the drum vicinity.

Table 6-1
Inorganic Sediment Analytical Results
Drums-NE Marine Drive Site
Portland, Multnomah County, Oregon

EPA ID NO. CLP ID NO. STATION NO.	07174000 J86R0 DMD-SD-01	07174002 J86R1 DMD-SD-02	07174003 J86R2 DMD-SD-03	07174016 J86S5 DMD-SD-16	07174007 J86R6 DMD-SD-07	07174008 J86R7 DMD-SD-08	07174011 J86S0 DMD-SD-11	07174014 J86S3 DMD-SD-14	07174015 J86S4 DMD-SD-15
TAL Metals (mg/kg)	**Background Samples (coarse sand/small gravel)**			**Drum Samples (coarse sand/small gravel)**	**Drum Vicinity (coarse sand/small gravel)**				
Mercury	0.010 UJ	0.01 UJ	0.01 UJ	**0.016 J**	---	---	**0.035 J**	**0.031 J**	**0.021 J**
Arsenic	1.9	0.74	0.54	1.7	0.66	0.81	1.6	1.9	1.8
Beryllium	0.17	0.085	0.077	0.14	0.052	0.066	0.20	0.18	0.12
Cadmium	0.5 U	0.5 U	0.5 U	---	---	---	---	---	---
Lead	3.18	1.6	1.3	5.71	1.2	2.5	4.89	5.64	5.02
Selenium	0.5 U	0.5 U	0.5 U	---	---	---	---	---	---
Silver	0.05 U	0.05 U	0.05 U	---	---	---	---	---	---
Barium	38.5	28.3	26.4	51.1	19.6	27.8	69.8	67.4	50.3
Chromium	20.4	5.57	10.2	9.98	4.5	5.52	12.2	11.9	12.2
Cobalt	6.42	2.9	3.42	4.01	2.62	2.81	5.60	5.17	4.77
Copper	8.19	5.24	5.15	17.3	5.00	5.48	10.3	13.2	10.7
Manganese	245	113	115	128	121	127	173	170	150
Nickel	12.3	6.02	8.39	9.37	5.36	6.47	11.6	10.7	10.3
Zinc	42.7	27.6	23.2	37.4	20.0	19.7	49.2	46.4	41.0

Table 6-1 (Continued)
Inorganic Sediment Analytical Results
Drums-NE Marine Drive Site
Portland, Multnomah County, Oregon

EPA ID No.	07174000	07174002	07174003	07174024	07174004	07174005	07174006	07174027
CLP ID NO.	J86R0	J86R1	J86R2	J86T3	J86R3	J86R4	J86R5	J86R7
Station No.	DMD-SD-01	DMD-SD-02	DMD-SD-03	DMD-SD-24	DMD-SD-04	DMD-SD-05	DMD-SD-06	DMD-SD-27
TAL Metals (mg/kg)	Background Samples (coarse sand/small gravel)			Drum Vicinity Samples (coarse sand/small gravel)	Downstream Samples (coarse sand/small gravel)			
Mercury	0.010 UJ	0.01 UJ	0.01 UJ	**0.026 J**	---	---	--	---
Arsenic	1.9	0.74	0.54	4.54	0.84	0.79	1.0	1.1
Beryllium	0.17	0.085	0.077	**0.69**	0.079	0.073	0.092	0.078
Cadmium	0.5 U	0.5 U	0.5 U	**0.80**	---	---	---	---
Lead	3.18	1.6	1.3	7.97	1.6	2.0	1.9	1.8
Selenium	0.5 U	0.5 U	0.5 U	---	---	---	---	---
Silver	0.05 U	0.05 U	0.05 U	**0.18**	---	---	---	---
Barium	38.5	28.3	26.4	**159**	29.0	35.6	39.0	30.1
Chromium	20.4	5.57	10.2	23.5	6.04	11.8	5.95	5.58
Cobalt	6.42	2.9	3.42	9.96	2.86	4.05	3.19	2.96
Copper	8.19	5.24	5.15	**24.9**	6.33	5.45	5.60	5.05
Manganese	245	113	115	365	129	137	148	136
Nickel	12.3	6.02	8.39	19.4	6.14	9.32	7.39	6.8
Zinc	42.7	27.6	23.2	64.5	25.0	32.9	28.5	28.0

Table 6-1 (Continued)
Inorganic Sediment Analytical Results
Drums-NE Marine Drive Site
Portland, Multnomah County, Oregon

EPA ID NO. CLP ID NO. STATION NO.	07174036 J86W6 DMD-SD-32	07174010 J86R9 DMD-SD-10	07174012 J86S1 DMD-SD-12	07174019 J86S8 DMD-SD-19	07174020 J86S9 DMD-SD-20	07174021 J86T0 DMD-SD-21	07174029 J86T8 DMD-SD-29	07174009 J86R8 DMD-SD-09	07174013 J86S2 DMD- SD-13	07174017 J86S6 DMD-SD-17
TAL Metals (mg/kg)	**Background Samples (clay/silt)**	**Drum Samples (clay/silt)**						**Drum Vicinity Samples (clay/silt)**		
Mercury	0.036 J	0.091 J	0.029 J	0.031 J	---	0.064 J	0.101 J	0.038 J	0.059 J	**0.039**
Arsenic	5.18	2.3	4.32	5.2	2.1	2.1	2.1	5.86	5.75	3.32
Beryllium	0.93	0.24	0.55	0.24	0.12	0.32	0.33	0.81	0.78	**0.6**
Cadmium	0.74	--	1	0.54	---	0.6	0.6	0.97	0.88	**0.62**
Lead	9.84	8.35	7.98	6.65	9.14	6.93	6.9	9.39	8.74	7.71
Selenium	0.5 U	--	**0.57**	---	---	---	---	**0.76**	**0.75**	**0.51**
Silver	0.17	0.068	0.12	0.084	---	0.074	0.073	0.18	0.16	**0.13**
Barium	204	83.0	130	91.7	40.8	97.3	99.4	167	169	**156**
Chromium	23.4	13.9	21.7	13.9	15.7	13.0	13.8	24.8	21.9	21.8
Cobalt	13.7	6.03	9.33	11.3	5.53	6.64	6.94	12.1	11.3	10.2
Copper	24.1	29.9	22.7	51.7	8.89	21.3	21.7	32.9	31.5	**30.7**
Manganese	848	219	323	229	171	226	233	399	376	435
Nickel	25.2	13.6	18.5	29.6	11.3	13.2	13.5	23.3	21.6	20.3
Zinc	72.3	72.4	60.8	60.8	42.2	58.8	64.8	69.7	65.2	59.8

Table 6-1 (Continued)
Inorganic Sediment Analytical Results
Drums-NE Marine Drive Site
Portland, Multnomah County, Oregon

EPA ID NO. CLP ID NO. STATION NO.	07174036 J86W6 DMD-SD-32	07174018 J86S7 DMD-SD-18	07174022 J86T1 DMD-SD-22	07174023 J86T2 DMD-SD-23	07174025 J86T4 DMD-SD-25	07174026 J86T5 DMD-SD-26	07174028 J86T7 DMD-SD-28	07174034 J86W4 DMD-SD-30	07174035 J86W5 DMD-SD-31	07174037 J86W7 DMD-SD-33
TAL Metals (mg/kg)	**Background (clay/silt)**	**Drum Vicinity Samples (clay/silt)**								**Downstream Sample (clay/silt)**
Mercury	0.036 J	0.036 J	0.058 J	0.040 J	0.111 J	0.024	0.042 J	0.028 J	0.031 J	0.043 J
Arsenic	5.18	2.94	2.4	2.92	3.71	2.0	3.05	2.2	2.5	1.8
Beryllium	0.93	0.61	0.34	0.58	0.44	0.30	0.57	0.53	0.70	0.11
Cadmium	0.74	0.61	---	0.73	0.53	---	0.55	0.50	0.91	---
Lead	9.84	26.9	5.77	5.65	6.23	8.54	17.3	7.69	7.56	3.76
Selenium	0.5 U	**0.51**	---	**0.5**	---	---	---	---	---	---
Silver	0.17	0.12	0.079	0.12	0.077	0.061	0.11	0.10	0.13	---
Barium	204	138	86	158	126	97.1	140	132	158	54.2
Chromium	23.4	19.6	13.4	16.1	15.7	12.8	16.8	17.8	19.5	7.08
Cobalt	13.7	9.54	6.52	8.91	7.82	6.31	9.19	8.21	9.91	3.98
Copper	24.1	20.8	14.8	33.5	34.8	15.2	22.6	22.6	28.4	8.37
Manganese	848	398	221	310	1240	259	383	231	252	164
Nickel	25.2	20.5	12.7	16.2	16.7	12.1	17.5	18.6	20.3	7.85
Zinc	72.3	54.8	51.3	54.5	**290**	41.7	52.1	54.6	73.0	39.5

KEY:

---	= Non-detect
Bold and Underline	= Concentration elevated when compared to background concentration(s), as defined in Section 5
CLP ID Number	= Contract Laboratory Program sample identification number
DMD	= Drums-NE Marine Drive
EPA ID Number	= EPA Region 10 Regional EPA sample identification number
J	= The analyte was positively identified. The associated numerical result is an estimate.
mg/kg	= milligrams per kilogram
NO.	= Number
SD	= Sediment
Station ID	= START-3 sample tracking code
TAL	= Total Analyte List
U	= The analyte was not detected at or above the reported result

Table 6-2
Organic Sediment Analytical Results
Drums-NE Marine Drive Site
Portland, Multnomah County, Oregon

EPA ID NO.	07174000	07174002	07174003	07174016	07174007	07174008	07174011	07174014	07174015	07174024
CLP ID NO.	J86R0	J86R1	J86R2	J86S5	J86R6	J86R7	J86S0	J86S3	J86S4	J86T3
STATION NO.	DMD-SD-01	DMD-SD-02	DMD-SD-03	DMD-SD-16	DMD-SD-07	DMD-SD-08	DMD-SD-11	DMD-SD-14	DMD-SD-15	DMD-SD-24
Analyte	Background Samples (coarse sand/small gravel)			Drum Samples (coarse sand/small gravel)	Drum Vicinity Samples (coarse sand/small gravel)					
Semivolatile Organic Compounds (µg/kg)										
Acetophenone	71 J	20 J	32 J	50 J	20 J	21 J	25 J	17 J	19 J	45 J
Benzaldehyde	210 U	33 J	260 U	---	60 J	51 J	57 J	50 J	51 J	---
Benzo(a)anthracene	210 U	220 U	260 U	---	---	---	---	---	15 J	---
Benzo(a)pyrene	210 U	220 U	260 U	---	---	---	---	---	17 J	---
Benzo(b)fluoranthene	210 U	220 U	260 U	---	---	---	---	---	17 J	---
Benzo(g,h,i)perylene	210 U	220 U	260 U	---	---	---	---	---	---	---
Benzo(k)fluoranthene	210 U	220 U	260 U	---	---	---	---	---	8.2 J	---
Bis(2)-ethylhexyl)phthalate	33 J	220 U	28 J	31 J	---	---	---	---	24 J	23 J
Butylbenzylphthalate	210 U	220 U	260 U	---	---	---	---	---	---	---
Chrysene	210 U	220 U	260 U	---	---	---	---	---	12 J	---
Dimethylphthalate	210 U	220 U	260 U	---	---	---	---	---	---	---
Di-n-butyl phthalate	210 U	220 U	260 U	---	---	---	---	---	---	---
Fluoranthene	210 U	220 U	260 U	---	---	---	---	---	30 J	---
4-Methylphenol	210 U	220 U	21 J	---	---	---	9.6 J	---		---
Naphthalene	210 U	220 U	260 U	---	---	---	---	---	8.0 J	---
Phenanthrene	210 U	220 U	260 U	---	---	---	---	---	14 J	---
Phenol	210 U	220 U	260 U	---	---	---	---	---	---	---
Pyrene	210 U	220 U	260 U	---	---	---	12 J	---	32 J	---
Pesticides and PCBs (µg/kg)										
Beta-BHC	2.1 U	2.1 U	2.2 U	---	---	---	---	---	---	---
Heptachlor epoxide	2.1 U	2.1 U	2.2 U	---	---	---	---	---	---	---
Dieldrin	2.1 U	4.1 U	2.2 U	---	---	---	---	0.12 J	---	---
4,4'-DDE	4.1 U	4.1 U	4.2 U	---	---	---	---	0.36 J	0.23 J	---
Endosulfan II	4.1 U	4.1 U	4.2 U	---	---	---	---	---	---	---
4,4'-DDD	4.1 U	4.1 U	4.2 U	---	---	---	---	---	---	---
4,4'-DDT	4.1 U	4.1 U	4.2 U	---	---	---	---	0.21 J	---	---
Methoxychlor	0.46 J	0.46 J	22 U	0.27 J	---	---	---	---	---	---
Gamma-chlordane	2.1 U	2.1 U	2.2 U	---	---	---	0.17 J	---	---	---
Total Organic Carbon (mg/kg)										
Total Organic Carbon	966	212	204	2,200	235	266	**3,000**	**2,930**	**3,450**	2,820

Table 6-2 (Continued)
Organic Sediment Analytical Results
Drums-NE Marine Drive Site
Portland, Multnomah County, Oregon

EPA ID NO. CLP ID NO. STATION NO.	07174000 J86R0 DMD-SD-01	07174002 J86R1 DMD-SD-02	07174003 J86R2 DMD-SD-03	07174004 J86R3 DMD-SD-04	07174005 J86R4 DMD-SD-05	07174006 J86R5 DMD-SD-06	07174027 J86R7 DMD-SD-27
Analyte	**Background Samples (coarse sand/small gravel)**			**Downstream Samples (coarse sand/small gravel)**			
Semivolatile Organic Compounds (µg/kg)							
Acetophenone	71 J	20 J	32 J	19 J	21 J	17 J	21 J
Benzaldehyde	210 U	33 J	260 U	35 J	29 J	34 J	51 J
Benzo(a)anthracene	210 U	220 U	260 U	---	---	---	---
Benzo(a)pyrene	210 U	220 U	260 U	---	---	---	---
Benzo(b)fluoranthene	210 U	220 U	260 U	---	---	---	---
Benzo(g,h,i)perylene	210 U	220 U	260 U	---	---	---	---
Benzo(k)fluoranthene	210 U	220 U	260 U	---	---	---	---
Bis (2-ethylhexyl)phthalate	33 J	220 U	28 J	---	---	---	---
Butylbenzylphthalate	210 U	220 U	260 U	---	---	---	---
Chrysene	210 U	220 U	260 U	---	---	---	---
Dimethylphthalate	210 U	220 U	260 U	---	---	---	---
Di-n-butyl phthalate	210 U	220 U	260 U	---	---	---	---
Fluoranthene	210 U	220 U	260 U	---	---	---	---
4-Methylphenol	210 U	220 U	21 J	---	---	---	---
Naphthalene	210 U	220 U	260 U	---	---	---	---
Phenanthrene	210 U	220 U	260 U	---	---	---	---
Phenol	210 U	220 U	260 U	---	---	---	---
Pyrene	210 U	220 U	260 U	---	---	---	---
Pesticides and PCBs (µg/kg)							
Beta-BHC	2.1 U	2.1 U	2.2 U	---	---	---	---
Heptachlor epoxide	2.1 U	2.1 U	2.2 U	---	---	---	---
Dieldrin	2.1 U	4.1 U	2.2 U	---	---	---	---
4,4'-DDE	4.1 U	4.1 U	4.2 U	---	---	---	---
Endosulfan II	4.1 U	4.1 U	4.2 U	---	---	---	---
4,4'-DDD	4.1 U	4.1 U	4.2 U	---	---	---	---
4,4'-DDT	4.1 U	4.1 U	4.2 U	---	---	---	---
Methoxychlor	0.46 J	0.46 J	22 U	---	---	---	---
Gamma-chlordane	2.1 U	2.1 U	2.2 U	---	---	---	---
Total Organic Carbon (mg/kg)							
Total Organic Carbon	966	212	204	263	94	96	279

Table 6-2 (Continued)
Organic Sediment Analytical Results
Drums-NE Marine Drive Site
Portland, Multnomah County, Oregon

EPA ID No. / CLP ID No. / Station NO.	07174036 J86W6 DMD-SD-32	07174010 J86R9 DMD-SD-10	07174012 J86S1 DMD-SD-12	07174019 J86S8 DMD-SD-19	07174020 J86S9 DMD-SD-20	07174021 J86T0 DMD-SD-21	07174029 J86T8 DMD-SD-29	07174009 J86R8 DMD-SD-09	07174013 J86S2 DMD-SD-13	07174017 J86S6 DMD-SD-17
Analyte	**Background (clay/silt)**	**Drum Samples (clay/silt)**						**Drum Vicinity Samples (clay/silt)**		
Semivolatile Organic Compounds (µg/kg)										
Acetophenone	32 J	27 J	21 J	51 J	---	56 J	**98 J**	40 J	31 J	---
Benzaldehyde	260 U	63 J	79 J	---	---	---	---	110 J	150 J	---
Benzo(a)anthracene	260 U	16 J	---	---	---	---	---	---	---	---
Benzo(a)pyrene	260 U	21 J	---	---	---	---	---	---	---	---
Benzo(b)fluoranthene	260 U	22 J	---	18 J	---	---	---	---	---	---
Benzo(g,h,i)perylene	260 U	23 J	---	---	---	---	---	---	---	---
Benzo(k)fluoranthene	260 U	9.8 J	---	8.5 J	---	---	---	---	---	---
Bis (2-ethylhexyl)phthalate	28 J	---	---	59 J	**99 J**	41 J	50 J	---	---	41 J
Butylbenzylphthalate	260 U	---	---	---	12 J	14 J	---	---	---	---
Chrysene	260 U	18 J	---	15 J	9.8 J	---	---	---	---	---
Dimethylphthalate	260 U	---	---	---	---	---	---	---	---	---
Di-n-butyl phthalate	260 U	---	---	42 J	43 J	21 J	---	---	---	---
Fluoranthene	260 U	19 J	---	24 J	15 J	---	10 J	---	---	---
4-Methylphenol	21 J	**290**	40 J	---	---	---	**170 J**	---	14 J	---
Naphthalene	260 U	---	---	---	---	---	---	14 J	---	---
Phenanthrene	260 U	---	---	15 J	9.3 J	---	---	---	---	---
Phenol	260 U	---	24 J	---	---	---	---	---	---	---
Pyrene	260 U	26 J	---	16 J	---	---	12 J	---	---	---
Pesticides and PCBs (µg/kg)										
Beta BHC	2.6 U	---	---	---	---	---	0.37 J	---	---	---
Heptachlor epoxide	2.6 U	---	---	0.12 J	---	---	---	---	---	---
Dieldrin	5.1 U	---	---	---	---	---	0.39 J	---	---	---
4,4'-DDE	5.1 U	0.79 J	---	1.1 J	---	1.2 J	1.1 J	---	---	---
Endosulfan II	5.1 U	---	---	---	---	0.42 J	---	---	---	---
4,4'-DDD	5.1 U	---	---	---	---	---	---	---	---	---
4,4'-DDT	5.1 U	---	---	---	---	---	---	---	---	---
Methoxychlor	0.37 J	---	---	0.63 J	0.44 J	---	---	---	---	---
Gamma-chlordane	2.6 U	---	---	---	0.066 J	---	---	---	---	---
Total Organic Carbon (mg/kg)										
Total Organic Carbon	2,750	95	**21,700**	5,340	721	**16,700**	**14,000**	6,480	**34,800**	**11,500**

Table 6-2 (Continued)
Organic Sediment Analytical Results
Drums-NE Marine Drive Site
Portland, Multnomah County, Oregon

EPA ID NO. CLP ID NO. Station NO.	07174036 J86W6 DMD-SD-32	07174018 J86S7 DMD-SD-18	07174022 J86T1 DMD-SD-22	07174023 J86T2 DMD-SD-23	07174025 J86T4 DMD-SD-25	07174026 J86T5 DMD-SD-26	07174028 J86T7 DMD-SD-28	07174034 J86W4 DMD-SD-30	07174035 J86W5 DMD-SD-31	07174037 J86W7 DMD-SD-33
Analyte	**Background (clay/silt)**	**Drum Vicinity Samples (clay/silt)**								**Downstream Sample (clay/silt)**
Semivolatile Organic Compounds (µg/kg)										
Acetophenone	32 J	---	77 J	54 J	52 J	41 J	48 J	37 J	51 J	24 J
Benzaldehyde	260 U	---	---	---	---	---	---	---	---	83 J
Benzo(a)anthracene	260 U	---	12 J	---	---	---	---	---	---	---
Benzo(a)pyrene	260 U	---	---	---	---	---	---	---	---	---
Benzo(b)fluoranthene	260 U	---	15 J	---	14 J	---	---	---	---	---
Benzo(g,h,i)perylene	260 U	---	---	---	---	---	---	---	---	---
Benzo(k)fluoranthene	260 U	---	---	---	---	---	---	---	---	---
Bis (2-ethylhexyl)phthalate	28 J	---	77 J	39 J	49 J	20 J	45 J	19 J	23 J	---
Butylbenzylphthalate	260 U	---	---	---	---	---	---	---	---	---
Chrysene	260 U	---	13 J	---	11 J	---	---	---	---	---
Dimethylphthalate	260 U	---	67 J	---	---	---	---	---	---	---
Di-n-butyl phthalate	260 U	---	---	---	21 J	8.8 J	---	---	---	---
Fluoranthene	260 U	---	13 J	---	---	---	---	---	---	---
4-Methylphenol	21 J	---	---	---	---	---	---	---	---	19 J
Naphthalene	260 U	---	---	---	---	---	---	---	---	---
Phenanthrene	260 U	---	---	---	12 J	---	---	---	---	---
Phenol	260 U	---	---	---	---	---	---	---	---	---
Pyrene	260 U	---	21 J	---	19 J	---	---	---	---	---
Pesticides and PCBs (µg/kg)										
Beta-BHC	2.6 U	---	---	---	---	---	---	---	---	---
Heptachlor epoxide	2.6 U	---	---	---	---	---	---	---	---	---
Dieldrin	5.1 U	---	0.21 J	0.18 J	---	0.054 J	---	---	---	---
4,4'-DDE	5.1 U	---	---	---	---	---	---	---	---	---
Endosulfan II	5.1 U	---	---	---	---	---	---	---	---	---
4,4'-DDD	5.1 U	---	---	---	---	0.14 J	---	---	---	---
4,4'-DDT	5.1 U	---	---	---	---	---	---	---	---	0.60 J
Methoxychlor	0.37 J	---	1.6 J	0.77 J	0.61 J	---	---	0.44 J	---	---
Gamma-chlordane	2.6 U	---	---	---	---	0.062 J	---	---	---	---
Total Organic Carbon (mg/kg)										
Total Organic Carbon	2,750	7,310	5,300	6,610	7,140	2,070	**11,700**	3,250	**10,900**	3,100

Table 6-2 (Continued)
Organic Sediment Analytical Results
Drums-NE Marine Drive Site
Portland, Multnomah County, Oregon

Key:

---	= Non-detect
Bold and Underline	= Concentration elevated when compared to background concentration(s), as defined in Section 5
CLP ID No.	= Contract Laboratory Program sample identification number
DMD	= Drums-NE Marine Drive
EPA ID No.	= EPA Region 10 Regional EPA sample identification number
J	= The analyte was positively identified. The associated numerical result is an estimate
mg/kg	= Milligrams per kilogram
No.	= Number
PCBs	= Polychlorinated biphenyls
SD	= Sediment
Station ID	= START-3 sample tracking code
µg/kg	= Micrograms per kilogram
U	= The analyte was not detected at or above the reported result
UJ	= The analyte was not detected at or above the reported estimated result. The associated numerical value is an estimate of the quantitation limit of the analyte in the sample.

7.0 MIGRATION PATHWAYS AND TARGETS

The following section describes the surface water migration pathway and potential targets within the site's range of influence. The groundwater, air migration, and soil exposure pathways are not being evaluated as part of this SI. Therefore, the only pathway discussed is the surface water migration pathway.

7.1 Surface Water Migration Pathway

- **Environmental Setting and Surface Water Flow**

  The Site lies within the Columbia Slough watershed. The two-year, 24-hour rainfall for the Site is 2.52 inches (National Oceanographic and Atmospheric Administration (NOAA) 1973). The mean annual precipitation for Portland, Oregon for April is 2.33 inches and 1.97 inches for May (National Weather Service 1999). The Site is located directly within the Columbia River with no containment structures. There are no known drinking water intakes along the target distance limit (TDL).

  The Columbia River is tidally influenced. Tidal effects can be felt during low river flow up to Warrendale, Oregon, approximately river mile 141 and around 30 miles east of Portland, Oregon (van der Naald, et al. 2004). The Columbia River estuary has a salt wedge. It has been reported that during high runoff events and low tides, seawater protrudes five miles inland of the river mouth (Larsson, et al. 2006). During low runoff periods and high tides seawater can intrude up to 23 miles inland (Larsson, et al. 2006). Under these conditions seawater influence on salinity can extend up to river mile 37 due to the mixing of the salt wedge with river water (Larsson, et al. 2006). The lower Columbia River is subject to annual flooding in late fall and early winter when rains are the heaviest (van der Naald, et al. 2004). The average annual flow for the Columbia River at The Dalles, Oregon, is approximately 190,000 cfs (Ecology 2006). The Dalles, Oregon, is located approximately 60 miles southwest of Portland, Oregon.

  The Site TDLs are shown in Figures 7-1 and 7-2. Because the lower Columbia River is tidally-influenced, with the tidal influx of approximately 141 nautical miles, the TDL extends downstream for 15 nautical miles and also extends upstream for an additional 15 nautical miles from the probable point of entry (PPE).

7.2 Sediment Sample Locations

Seven sediment samples were collected from within the drums themselves, 17 in the immediate vicinity of the drums, and five downstream from the Site. The drums and the surrounding sediments are located within the Columbia River. Therefore, any elevated contaminants detected either within the drums, in the vicinity of the drums, or downstream of the Site, constitute an observed release to the Columbia River. The specific locations of the sediment samples are provided in Figure 3-1.

7.3 Sediment Sample Results

The TAL metal sample results are depicted in Table 6-1 and SVOC, pesticide/PCB and TOC sample results are located in Table 6-2. Only detected contaminants are included in the tables.

All sediment samples were categorized according to the sample matrix (either coarse sand/small gravel or clay/silt) and compared to similar background samples. When more than one background sample of the matrix was collected, the highest concentration of the constituent within the set of samples was used for comparison purposes.

Overall, the following contaminants were detected at elevated concentrations in sediment samples: barium, beryllium, cadmium, copper, lead, mercury, silver, selenium, zinc, acetophenone, 4-methylphenol, and bis(2-ethylhexyl)phthalate.

For the coarse sand/small gravel sediment samples (collected from the drum vicinity and within the drums), elevated TAL metals were detected in five samples (DMD-SD-11, DMD-SD-14, DMD-SD-15, DMD-SD-16, and DMD-SD-24). Elevated contaminants and their concentrations included: barium (159 mg/kg), beryllium (0.69 mg/kg), cadmium (0.80 mg/kg), copper (24.9 mg/kg), mercury (0.0121 J to 0.035 J mg/kg), and silver (0.18 mg/kg). No SVOCs, pesticides, or PCBs were found at elevated concentrations in the coarse sand/small gravel sediment samples. Although TAL metals were detected in the drum vicinity and drum samples, no TAL metals were detected at elevated concentrations in downstream sediment samples.

From within the clay/silt fraction of the sediment samples, selenium was detected in five samples collected from the drum vicinity and from within the drums (DMD-SD-09, DMD-SD-12, DMD-SD-13, DMD-SD-17, DMD-SD-18, and DMD-SD-23) at concentrations ranging from 0.51 mg/kg to 0.76 mg/kg. Elevated concentrations of mercury (0.39 mg/kg), barium (156 mg/kg), beryllium (0.6 mg/kg), cadmium (0.62 mg/kg), copper (30.7 mg/kg) and silver (0.13 mg/kg) were detected in one sediment sample collected from within the drum vicinity (DMD-SD-17). An elevated concentration of zinc was detected in sediment sample DMD-SD-25 collected from the drum vicinity (290 mg/kg). Although TAL metals were detected in the drum vicinity and drum samples, no TAL metals were detected at elevated concentrations in downstream clay/silt fraction sediment samples.

SVOCs detected at elevated concentrations in the clay/silt fraction of sediment samples included acetophenone in DMD-SD-29 (98J µg/kg), bis(2-ethylhexyl)phthalate in DMD-SD-20 (99 J µg/kg) and 4-methylphenol in DMD-SD-10 and DMD-SD-29 (290 µg/kg and 170J µg/kg, respectively), all of which were collected from within the drums. No SVOCs were detected at elevated concentrations in drum vicinity or downstream samples.

PCBs and pesticides were not detected at elevated concentrations in the coarse sand/small gravel sediment samples, nor were they found in the clay/silt sediment samples. The complete data set is located in Appendix C.

7.4 Targets

Located north of the Site is the Government Island Complex, which encompasses approximately 2,200 acres, and consists of Government Island, Lemon Island, and McGuire Island (Fishman 2002). The Government Island Complex is owned by the Port of Portland, except for 224 acres, which are owned by the Metro (Fishman 2002). These islands are only accessible by boat, and are state recreational areas (Fishman 2002). The Government Island Complex supports wetland mitigation projects, recreation, and livestock (Fishman 2002). Many federally and state

threatened and endangered species live on these islands (Fishman 2002). Details regarding federally and state threatened and endangered species are discussed below.

Anadromous salmon, Steelhead Trout, and Cutthroat Trout use the Columbia River as a migratory route between upstream spawning areas and the Pacific Ocean (Fishman 2002). There are four evolutionary significant units (ESUs) of Chinook Salmon, one ESU of Columbia River Chum Salmon, one ESU of Lower Columbia River/Southwest Washington Coho Salmon, and 4 ESUs of Steelhead Trout, which migrate past the Government Island Complex (Fishman 2002). There is also the Snake River Sockeye Salmon, a federally endangered species, which migrates past the Government Island Complex (Fishman 2002). The Southwest Washington/Lower Columbia River Coastal Cutthroat Trout ESU is proposed for federal listing as a threatened species and is found in the Columbia River in the Government Island Complex vicinity (Fishman 2002). According to NOAA, a salmon stock are considered a distinct population and hence a "species" under the Endangered Species Act, if it represents an ESU of the biological species (NMFS 1991).

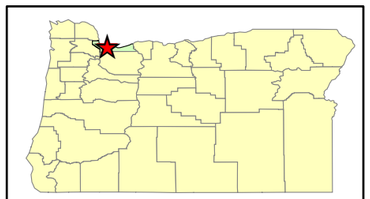
Recreational fishing occurs on the Columbia River, and many fish are kept and consumed (Melcher 2006). There were a total of 421,686 fishing trips on the lower Columbia River in 2004 (Takata, et al. 2005). From these fishing trips, 43,418 Chinook Salmon, 1,335 Coho Salmon, 10,166 Steelhead Trout, 22 Cutthroat Trout, 27,525 White Sturgeon, and 29 Green Sturgeon were kept (Takata, et al. 2005).

There are no tribal fisheries within the Site TDL (Gartzke 2007). Commercial Drift Gillnet Fishing occurs within the Sites TDL and the species of fish caught are Chinook Salmon, Coho Salmon, White Sturgeon, and Shad (Case 2007b). The Site is located within Columbia River Commercial Fisheries Zone 4, which starts at river mile (RM) 87.5 and goes to RM 129, for a total of 41.5 RM (Case 2007a). The number of pounds for various fishes caught in 2006 for Commercial Fisheries Zone 4 is as follows: 76,114 pounds of Chinook Salmon; 11,937 pounds of Coho Salmon; 8,025 pounds of White Sturgeon; and 14 pounds of Shad (Case 2007b).

Another federal species of concern and a state sensitive species of undetermined status is the Northern Red-Legged Frog. This species is found in the wetlands and slow moving streams on the Government Island Complex (Fishman 2002). A pair of Bald Eagles, a federally and state threatened species, have a nest on Government Island and catch food in the Columbia River (Fishman 2002). The Purple Martin, a state sensitive species, forages for insects over the Columbia River in the Government Island Complex vicinity (Fishman 2002).

The entire island is located within the 15-mile TDL of the Site, and although all 2000 feet of wetlands in the area are located north of the Government Island Complex, tidal influences could potentially move and deposit contaminants at any point on or near these wetlands.

Figure 7-1
15-Mile Target Distance Limit Map Downstream
Drums NE Marine Drive
Portland, Multnomah County, Oregon



Down-Stream TDL

PPE

End TDL

Note: The Columbia River is assumed to be tidally influenced in this region therefore TDL provided up and down stream of PPE

N

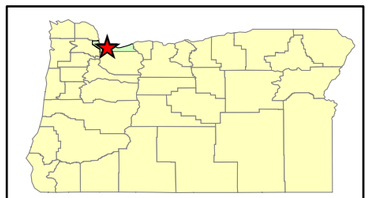
0 1 2 Miles

Drums NE Marine Drive
Latitude: 45.58189
Longitude: -122.55969

Source: TerraServer USGS 1975
Date: 09/27/07
Created by: MKS

Drums NE Marine Drive
Latitude: 45.58189
Longitude: -122.55969

Figure 7-2
15-Mile Target Distance Limit Map Upstream
Drums-NE Marine Drive
Portland, Multnomah County, Oregon



Up-Stream TDL
PPE
End TDL

Note: The Columbia River is assumed to be tidally influenced in this region therefore TDL provided up and down stream of PPE

N

0 1 2 Miles

Source: TerraServer USGS 1975
Date: 09/27/07
Created by: MKS

8.0 SITE SUMMARY AND CONCLUSIONS

In April, 2007, START-3 conducted SI field sampling activities at the Site in Portland, Multnomah County, Oregon. The Site was discovered in September 2005 and is currently inactive. The SI objectives focused on the surface water pathway, therefore, only sediment samples were collected.

8.1 Sources

Contaminated sediments located around, beneath and within the deteriorating drums are considered to be the source at the Site. The drums themselves were not considered to be a source because it was not possible to determine if they contained hazardous materials at the time they were disposed of into the Columbia River due to their deteriorated condition.

The extent of the contaminated sediment is not known. Elevated contaminants detected within the source include: barium, beryllium, cadmium, copper, mercury, silver, selenium, zinc, acetophenone, bis(2-ethylhexyl)phthalate, and 4-methylphenol.

8.2 Pathways

Contaminants may have migrated to the surface water pathway via a release from the sediments. To determine if the surface water pathway has been impacted by the release of the sediments, START-3 collected 29 sediment samples from the Columbia River in the vicinity or downstream of the drums; four background samples were collected for comparison purposes. All Site and downstream samples were categorized as either coarse sand/small gravel or clay/silt and compared to the appropriate background for that matrix. Within the coarse sand/small gravel category, three background samples were collected; one background sample was collected within the silt/clay category. For each constituent, the highest background concentration was used for comparison purposes to downstream samples. Elevated contaminants detected within close proximity of the drums included barium, beryllium, cadmium, copper, mercury, silver, selenium, and zinc. These results can be found in Tables 6-1 and 6-2.

8.3 Targets

Evidence of ESUs, federally endangered species, and threatened species are located within the area of the Site. According to NOAA, a salmon stock are considered a distinct population and hence a “species” under the Endangered Species Act, if it represents an ESU of the biological species (NMFS 1991). Anadromous salmon, Steelhead Trout, and Cutthroat Trout use the Columbia River as a migratory route between upstream spawning areas and the Pacific Ocean (Fishman 2002). There are four ESUs of Chinook Salmon, one ESU of Columbia River Chum Salmon, one ESU of Lower Columbia River/Southwest Washington Coho Salmon, and 4 ESUs of Steelhead Trout, which migrate past the Government Island Complex (Fishman 2002). There is also the Snake River Sockeye Salmon, a federally endangered species, which migrates past the Government Island Complex (Fishman 2002). The Southwest Washington/Lower Columbia River Coastal Cutthroat Trout ESU is proposed for federal listing as a threatened species and is found in the Columbia River in the Government Island Complex vicinity (Fishman 2002).

Recreational fishing occurs on the Columbia River, and many fish are kept and consumed (Melcher 2006). In 2004, 43,418 Chinook Salmon, 1,335 Coho Salmon, 10,166 Steelhead Trout, 22 Cutthroat Trout, 27,525 White Sturgeon, and 29 Green Sturgeon were caught for recreational purposes (Takata, et al. 2005). There are no tribal fisheries within the Site TDL (Gartzke 2007). Commercial fisheries within the Site's TDL include Chinook Salmon, Coho Salmon, White Sturgeon, and Shad (Case 2007a). In 2006, a total of 76,114 pounds of Chinook Salmon, 11,937 pounds of Coho Salmon, 8,025 pounds of White Sturgeon, and 14 pounds of Shad were caught in Columbia River Commercial Fisheries Zone 4 (Case 2007b).

Another federal species of concern and a state sensitive species of undetermined status is the Northern Red-Legged Frog. This species is found in the wetlands and slow moving streams on the Government Island Complex (Fishman 2002). A pair of Bald Eagles, a former federally and state threatened species, have a nest on Government Island and catch food in the Columbia River (Fishman 2002). The Purple Martin, a state sensitive species, forages for insects over the Columbia River in the Government Island Complex vicinity (Fishman 2002). No wetlands are located within the 15-mile TDL of the Site.

8.4 Conclusions

Results of the SI indicate that sediments at the Site are a source of contamination to the surface water pathway. The SI documents that contaminants were detected in the sediment samples at elevated concentrations.

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APPENDIX A
PHOTOGRAPHIC DOCUMENTATION

Drums-NE Marine Drive
Site Assessment
Photographic Log
April 23 to April 27, 2007
Portland Oregon

Photo Number	Direction Facing	Site Location	Description
1	North/ Northeast	ODEQ GPS Location	View of ODEQ GPS Location taken from NE Marine Drive. Location Identified using Garmin Hand Held 60CS
2	North/ Northeast	ODEQ GPS Location	View of Flag along the Columbia River Shore identifying ODEQ GPS Location
3	North/Northeast	0.5 Miles East of ODEQ GPS Location	View of Flag along NE Marine Drive, marking 0.5 Miles east of ODEQ GPS Location. Location measured using START-3 Suburban odometer.
4	North/ Northeast	1.5 Miles East of ODEQ GPS Location	View if Flag along NE Marine Drive, marking 1.5 Miles east of ODEQ GPS Location. Location measured using START-3 Suburban odometer.
5	North/ Northeast	1.0 Miles East of ODEQ GPS Location	View if Flag along NE Marine Drive, marking 1.0 Miles east of ODEQ GPS Location at a stormwater outfall. Location measured using START-3 Suburban odometer.
6	Northeast	1.5 NM west from ODEQ GPS Location	View of Neal Amick collecting sediment samples DMD-SD-06 and DMD-SD-27 on EPA Boat.
7	South	1.5 NM west from ODEQ GPS Location	View of Portland Shore taken from DMD-SD-06 and DMD-SD-27 sample locations.
8	South	1.0 NM west from ODEQ GPS Location	View of Portland Shore taken from DMD-SD-05 sample location.
9	North	1.0 NM west from ODEQ GPS Location	View of Vancouver Shore taken from DMD-SD-05 sample location.
10	South	0.5 NM west from ODEQ GPS Location	View of Portland Shore taken from DMD-SD-04 sample location.
11	North	0.5 NM west from ODEQ GPS Location	View of Government Island Complex taken from DMD-SD-04 sample location.
12	Southwest	2.76 NM east from ODEQ GPS Location	View of Stormwater Outfall located on the Portland Shore.
13	Southwest	2.76 NM east from ODEQ GPS Location	View of Stormwater Outfall located on the Portland Shore.
14	Southeast	2.76 NM east from ODEQ GPS Location	View of Stormwater Outfall located on the Portland Shore taken from DMD-SD-03 Sample Location.
15	Southeast	2.76 NM east from ODEQ GPS Location	Zoomed in view of Stormwater Outfall located on the Portland Shore taken from DMD-SD-03 Sample Location.

Drums-NE Marine Drive
Site Assessment
Photographic Log
April 23 to April 27, 2007
Portland Oregon

Photo Number	Direction Facing	Site Location	Description
16	South	2.76 NM east of ODEQ GPS Location	View of the Portland Shore taken from DMD-SD-03 Sample Location.
17	North	2.76 NM east of ODEQ GPS Location	View of the Government Island Complex taken from DMD-SD-03 Sample Location.
18	West	2.76 NM east of ODEQ GPS Location	View of the I-205 Bridge taken from DMD-SD-03 Sample Location.
19	West	2.76 NM east of ODEQ GPS Location	Zoomed in view of the I-205 Bridge taken from DMD-SD-03 Sample Location.
20	West	1.25 NM east of ODEQ GPS Location	View of the I-205 Bridge taken from DMD-SD-02 Sample Location.
21	South	1.25 NM east of ODEQ GPS Location	View of the Portland Shore taken from DMD-SD-02 Sample Location.
22	South	1.25 NM east of ODEQ GPS Location	View of a possible outfall located on the Portland Shore taken from DMD-SD-02 Sample Location.
23	Southeast	1.25 NM east of ODEQ GPS Location	View of a possible outfall located on the Portland Shore.
24	West	500 feet east of ODEQ GPS Location	View of EPA Dive Team Preparing a diver to enter the water at first Diver Drum Survey Location.
25	South	500 feet east of ODEQ GPS Location	View of Portland Shore taken from the first Diver Drum Survey Location.
26	North	500 feet east of ODEQ GPS Location	View of the Government Island Complex taken from the first Diver Drum Survey Location.
27	Southeast	500 feet east of ODEQ GPS Location	Full extent Zoom view of an unknown vehicle spraying an unknown liquid along the Portland Shore from the first diver survey location
28	Southeast	500 feet east of ODEQ GPS Location	Medium extent Zoom view of an unknown vehicle spraying an unknown liquid along the Portland Shore taken from the first diver survey location
29	Southeast	500 feet east of ODEQ GPS Location	View of an unknown vehicle spraying an unknown liquid along the Portland Shore taken from the first diver survey location
30	West	ODEQ GPS Location	View of the Columbia River west of DMD-SD-07 and DMD-SD-08 Sample Locations.

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Photo Number	Direction Facing	Site Location	Description
31	South	ODEQ GPS Location	View of Portland shore taken from DMD-SD-07 and DMD-SD-08 Sample Locations.
32	North	ODEQ GPS Location	View of the Government Island Complex taken from DMD-SD-07 and DMD-SD-08 Sample Locations.
33	Down	ODEQ GPS Location	View of DMD-SD-07 and DMD-SD-08 Samples in the sample corers.
34	N/A	N/A	View of EPA Diver Sean Sheldrake uploading the ODEQ site summary photographs.
35	N/A	N/A	View of EPA Diver Sean Sheldrake uploading the ODEQ site summary photographs.
36	South	0.57 NM west of ODEQ GPS Location	View of Portland Shore taken from DMD-SD-09 to DMD-SD-13 Sample Locations.
37	North	0.57 NM west of ODEQ GPS Location	View of the Government Island Complex taken from DMD-SD-09 to DMD-SD-13 Sample Locations.
38	West	0.57 NM west of ODEQ GPS Location	View of EPA Diver entering water at DMD-SD-09 to DMD-SD-13 Sample Locations.
39	Down	0.57 NM west of ODEQ GPS Location	View of DMD-SD-09 Sample located in the sample corer.
40	South	0.48 NM west of ODEQ GPS Location	View of Portland Shore taken from DMD-SD-14 and DMD-SD-15 Sample Locations.
41	North	0.48 NM west of ODEQ GPS Location	View of the Government Island Complex taken from DMD-SD-14 and DMD-SD-15 Sample Locations.
42	South	0.91 NM west of ODEQ GPS Location	View of Portland Shore taken from DMD-SD-16, DMD-SD-17, DMD-SD-18, and DMD-SD-28 Sample Locations.
43	West	0.91 NM west of ODEQ GPS Location	View of EPA Diver entering water at DMD-SD-16, DMD-SD-17, DMD-SD-18, and DMD-SD-28 Sample Locations.
44	North	0.91 NM west of ODEQ GPS Location	View of Vancouver Shore and the Government Island Complex taken from DMD-SD-16, DMD-SD-17, DMD-SD-18, and DMD-SD-28 Sample Locations.
45	South	0.74 NM west of ODEQ GPS Location	View of Portland Shore taken from DMD-SD-19 and DMD-SD-20 Sample Locations.
46	North	0.74 NM west of ODEQ GPS Location	View of the Government Island Complex taken from DMD-SD-19 and DMD-SD-20 Sample Locations.

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Photo Number	Direction Facing	Site Location	Description
47	West	0.74 NM west of ODEQ GPS Location	View of the Columbia River taken from DMD-SD-19 and DMD-SD-20 Sample Locations.
48	South	0.71 NM west of ODEQ GPS Location	View of Portland Shore taken from DMD-SD-21, DMD-SD-22, and DMD-SD-29 Sample Locations.
49	West	0.71 NM west of ODEQ GPS Location	View of the Columbia River taken from DMD-SD-21, DMD-SD-22, and DMD-SD-29 Sample Locations.
50	North	0.71 NM west of ODEQ GPS Location	View of the Government Island Complex taken from DMD-SD-21, DMD-SD-22, and DMD-SD-29 Sample Locations.
51	Southwest	0.67 NM west of ODEQ GPS Location	View of a tire floating down the Columbia River.
52	South	0.67 NM west of ODEQ GPS Location	View of Portland Shore taken from DMD-SD-23 and DMD-SD-24 Sample Locations.
53	West	0.67 NM west of ODEQ GPS Location	View of the Columbia River taken from DMD-SD-23 and DMD-SD-24 Sample Locations.
54	Northwest	0.67 NM west of ODEQ GPS Location	View of the Government Island Complex taken from DMD-SD-23 and DMD-SD-24 Sample Locations.
55	South	0.62 NM west of ODEQ GPS Location	View of Portland Shore taken from DMD-SD-25 and DMD-SD-26 Sample Locations.
56	West	0.62 NM west of ODEQ GPS Location	View of the Columbia River taken from DMD-SD-25 and DMD-SD-26 Sample Locations.
57	North	0.62 NM west of ODEQ GPS Location	View of the Government Island Complex taken from DMD-SD-25 and DMD-SD-26 Sample Locations.
58	South	0.56 NM west of ODEQ GPS Location	View of Portland Shore taken from DMD-SD-30 and DMD-SD-31 Sample Locations.
59	West	0.56 NM west of ODEQ GPS Location	View of the Columbia River taken from DMD-SD-30 and DMD-SD-31 Sample Locations.
60	North	0.56 NM west of ODEQ GPS Location	View of the Government Island Complex taken from DMD-SD-30 and DMD-SD-31 Sample Locations.
61	South	0.2 NM east of ODEQ GPS Location	View of Portland Shore taken from DMD-SD-01.

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Photo Number	Direction Facing	Site Location	Description
62	West	0.2 NM east of ODEQ GPS Location	View of the Columbia River taken from DMD-SD-01.
63	North	0.2 NM east of ODEQ GPS Location	View of the Government Island Complex taken from DMD-SD-01.
64	East	0.2 NM east of ODEQ GPS Location	View of the I-205 Bridge taken from DMD-SD-01.
65	South	0.2 NM east of ODEQ GPS Location and South of DMD-SD-01	View of Portland Shore taken from DMD-SD-32.
66	Southeast	2.37 NM west of ODEQ GPS Location	First attempt to photograph an Osprey.
67	South	2.37 NM west of ODEQ GPS Location	Zoomed in view of an Osprey Nest located on Mile Marker 16 Post.
68	East	2.37 NM west of ODEQ GPS Location	Zoomed in view of an Osprey in an Osprey Nest located on Mile Marker 16 Post.
69	East	2.37 NM west of ODEQ GPS Location	View of old pilings taken from DMD-SD-33.
70	Northeast	2.37 NM west of ODEQ GPS Location	Zoomed in view of an Osprey in an Osprey Nest located on Mile Marker 16 Post taken from DMD-SD-33.
71	North	2.37 NM west of ODEQ GPS Location	View of Vancouver Shore taken from DMD-SD-33.
72	West	2.37 NM west of ODEQ GPS Location	View of the Columbia River taken from DMD-SD-33.

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Photo 1. ODEQ GPS Location. Facing NE. 1250 hours. April 23, 2007.

Photo 2. ODEQ GPS Location marked by a red flag. Facing NE. 1252 hours. April 23, 2007.

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Photo 3. Approximately half a mile upstream from the ODEQ GPS Location, measured using the TechLaw, Inc. Suburban Odometer. Facing NE. 1300 hours. April 23, 2007.

Photo 4. Approximately one and a half miles upstream from the ODEQ GPS Location, measured using the TechLaw, Inc. Suburban odometer. Facing NE. 1310 hours. April 23, 2007.

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Photo 5. Approximately one mile upstream from the ODEQ GPS Location and location of a storm outfall. Facing NE. 1315 hours. April 23, 2007.

Photo 6. Approximately One and a half nautical miles downstream from the ODEQ GPS Location. Samples DMD-SD-06 and DMD-SD-27. Facing NE. 1610 hours. April 23, 2007.

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Photo 7. Approximately One and a half nautical miles downstream from the ODEQ GPS Location. Samples DMD-SD-06 and DMD-SD-27. Facing S. 1620 hours. April 23, 2007.

Photo 8. Approximately one nautical mile downstream from the ODEQ GPS Location. Sample DMD-SD-05. Facing S. 1719 hours. April 23, 2007.

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Photo 9. Approximately one nautical mile downstream from the ODEQ GPS Location. Sample DMD-SD-05. Facing N. 1720 hours. April 23, 2007.

Photo 10. Approximately a half nautical mile downstream from the ODEQ GPS Location. Sample DMD-SD-04. Facing S. 1810 hours. April 23, 2007.

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Photo 11. Approximately a half nautical mile downstream from the ODEQ GPS Location. Sample DMD-SD-04. Facing N. 1811 hours. April 23, 2007.

Photo 12. Approximately 2.76 nautical miles upstream from the ODEQ GPS Location at the storm outfall. Facing SW. 0820 hours. April 24, 2007.

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Photo 13. Approximately 2.76 nautical miles upstream from the ODEQ GPS Location at the storm outfall. Facing SW. 0820 hours. April 24, 2007.

Photo 14. Approximately 2.76 nautical miles upstream from the ODEQ GPS Location slightly downstream from the storm outfall. Sample DMD-SD-03. Facing SE. 1030 hours. April 24, 2007.

Photo 15. Approximately 2.76 nautical miles upstream from the ODEQ GPS Location slightly downstream from the storm outfall, zoomed in to full extent. Sample DMD-SD-03. Facing SE. 1031 hours. April 24, 2007.

Photo 16. Approximately 2.76 nautical miles upstream from the ODEQ GPS Location slightly downstream from the storm outfall. Sample DMD-SD-03. Facing S. 1032 hours. April 24, 2007.

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Photo 17. Approximately 2.76 nautical miles upstream from the ODEQ GPS Location slightly downstream from the storm outfall. Sample DMD-SD-03. Facing N. 1033 hours. April 24, 2007.

Photo 18. Approximately 2.76 nautical miles upstream from the ODEQ GPS Location slightly downstream from the storm outfall. Sample DMD-SD-03. Facing W. 1034 hours. April 24, 2007.

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Photo 19. Approximately 2.76 nautical miles upstream from the ODEQ GPS Location slightly downstream from the storm outfall. Sample DMD-SD-03. Facing W. 1035 hours. April 24, 2007.

Photo 20. Approximately 1.25 nautical miles upstream from the ODEQ GPS Location. Sample DMD-SD-02. Facing W. 1105 hours. April 24, 2007.

Photo 21. Approximately 1.25 nautical miles upstream from the ODEQ GPS Sample DMD-SD-02. Facing S. 1105 hours. April 24, 2007.

Photo 22. Approximately 1.25 nautical miles upstream from the ODEQ GPS Location, zoomed in to full extent. Sample DMD-SD-02. Facing S. 1105 hours. April 24, 2007.

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Photo 23. Approximately 1.25 nautical miles upstream from the ODEQ GPS Location, slightly downstream from a potential outfall. Facing SE. 1105 hours. April 24, 2007.

Photo 24. Approximately 500 feet upstream from the ODEQ GPS Location, EPA Divers first drum survey location. Facing W. 1030 hours. April 25, 2007.

Photo 25. Approximately 500 feet upstream from the ODEQ GPS Location, EPA Divers first drum survey location. Facing S. 1105 hours. April 25, 2007.

Photo 26. Approximately 500 feet upstream from the ODEQ GPS Location, EPA Divers first drum survey location. Facing N. 1105 hours. April 25, 2007.

Photo 27. Approximately 500 feet upstream from the ODEQ GPS Location. Unknown vehicle spraying an unknown liquid along the Columbia River bank, zoomed into full extent. Facing SE. 1140 hours. April 25, 2007.

Photo 28. Approximately 500 feet upstream from the ODEQ GPS Location. Unknown vehicle spraying an unknown liquid along the Columbia River bank, zoomed into medium extent. Facing SE. 1140 hours. April 25, 2007.

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Photo 29. Approximately 500 feet upstream from the ODEQ GPS Location. Unknown vehicle spraying an unknown liquid along the Columbia River bank. Facing SE. 1140 hours. April 25, 2007.

Photo 30. South of ODEQ GPS Location. Samples DMD-SD-07 and DMD-SD-08. Facing W. 1209 hours. April 25, 2007.

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Photo 31. South of ODEQ GPS Location. Samples DMD-SD-07 and DMD-SD-08. Facing S. 1209 hours. April 25, 2007.

Photo 32. South of ODEQ GPS Location. Samples DMD-SD-07 and DMD-SD-08. Facing N. 1209 hours. April 25, 2007.

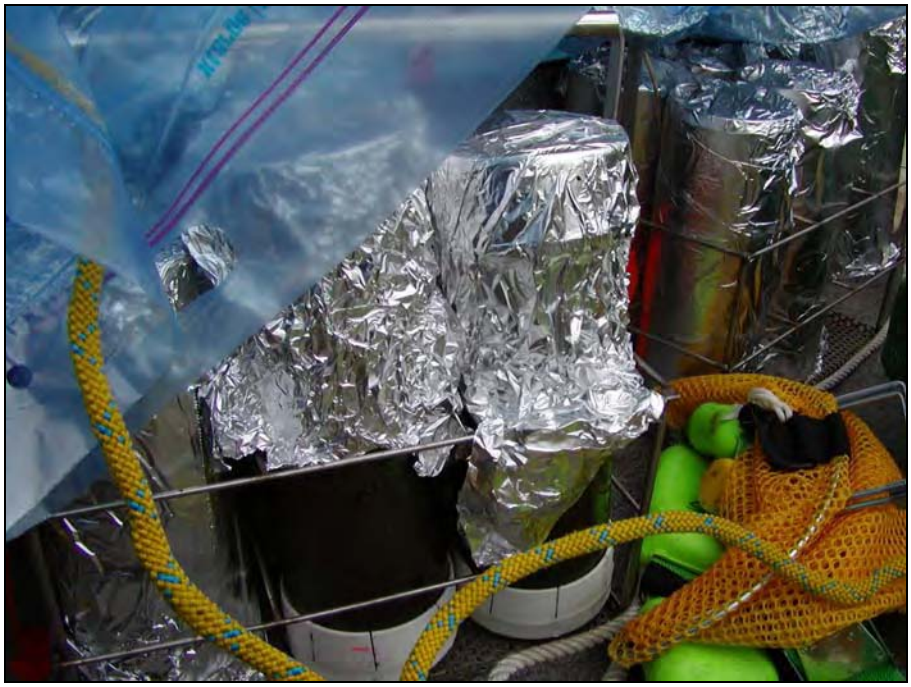

Photo 33. South of ODEQ GPS Location. Samples DMD-SD-07 and DMD-SD-08 located in the sample corers, on a rack, on the boat. Facing SW. 1250 hours. April 25, 2007.

Photo 34. EPA Diver Sean Sheldrake pulling up ODEQ site summary photographs. 1257 hours. April 25, 2007.

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Photo 35. EPA Diver Sean Sheldrake pulling up ODEQ site summary photographs. 1257 hours. April 25, 2007.

Photo 36. Approximately 0.57 nautical miles downstream from ODEQ GPS Location. Samples DMD-SD-09, DMD-SD-10, DMD-SD-11, DMD-SD-12, and DMD-SD-13. Facing S. 1342 hours. April 25, 2007.

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Photo 37. Approximately 0.57 nautical miles downstream from ODEQ GPS Location. Samples DMD-SD-09, DMD-SD-10, DMD-SD-11, DMD-SD-12, and DMD-SD-13. Facing N. 1342 hours. April 25, 2007.

Photo 38. Approximately 0.57 nautical miles downstream from ODEQ GPS Location. Samples DMD-SD-09, DMD-SD-10, DMD-SD-11, DMD-SD-12, and DMD-SD-13. Facing W. 1342 hours. April 25, 2007.

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Photo 39. Approximately 0.57 nautical miles downstream from ODEQ GPS Location. Sample DMD-SD-09 in the sample corer. Facing SW. 1342 hours. April 25, 2007.

Photo 40. Approximately 0.48 nautical miles downstream from ODEQ GPS Location. Samples DMD-SD-14 and DMD-SD-15. Facing S. 1605 hours. April 25, 2007.

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Photo 41. Approximately 0.48 nautical miles downstream from ODEQ GPS Location. Samples DMD-SD-14 and DMD-SD-15. Facing N. 1605 hours. April 25, 2007.

Photo 42. Approximately 0.91 nautical miles downstream from ODEQ GPS Location. Samples DMD-SD-16, DMD-SD-17, DMD-SD-18, and DMD-SD-28. Facing S. 0900 hours. April 26, 2007.

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Photo 43. Approximately 0.91 nautical miles downstream from ODEQ GPS Location. Samples DMD-SD-16, DMD-SD-17, DMD-SD-18, and DMD-SD-28. Facing W. 0900 hours. April 26, 2007.

Photo 44. Approximately 0.91 nautical miles downstream from ODEQ GPS Location. Samples DMD-SD-16, DMD-SD-17, DMD-SD-18, and DMD-SD-28. Facing N. 0900 hours. April 26, 2007.

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Photo 45. Approximately 0.74 nautical miles downstream from ODEQ GPS Location. Samples DMD-SD-19 and DMD-SD-20. Facing S. 1120 hours. April 26, 2007.

Photo 46. Approximately 0.74 nautical miles downstream from ODEQ GPS Location. Samples DMD-SD-19 and DMD-SD-20. Facing N. 1120 hours. April 26, 2007.

Photo 47. Approximately 0.74 nautical miles downstream from ODEQ GPS Location. Samples DMD-SD-19 and DMD-SD-20. Facing W. 1120 hours. April 26, 2007.

Photo 48. Approximately 0.71 nautical miles downstream from ODEQ GPS Location. Samples DMD-SD-21, DMD-SD-22, and DMD-SD-29. Facing S. 1215 hours. April 26, 2007.

Photo 49. Approximately 0.71 nautical miles downstream from ODEQ GPS Location. Samples DMD-SD-21 and DMD-SD-22. Facing W. 1215 hours. April 26, 2007.

Photo 50. Approximately 0.71 nautical miles downstream from ODEQ GPS Location. Samples DMD-SD-21 and DMD-SD-22. Facing N. 1215 hours. April 26, 2007.

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Photo 51. Approximately 0.67 nautical miles downstream from ODEQ GPS Location. Floating Tire. Facing SW. 1326 hours. April 26, 2007.

Photo 52. Approximately 0.67 nautical miles downstream from ODEQ GPS Location. Samples DMD-SD-23 and DMD-SD-24. Facing S. 1330 hours. April 26, 2007.

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Photo 53. Approximately 0.67 nautical miles downstream from ODEQ GPS Location. Samples DMD-SD-23 and DMD-SD-24. Facing W. 1330 hours. April 26, 2007.

Photo 54. Approximately 0.67 nautical miles downstream from ODEQ GPS Location. Samples DMD-SD-23 and DMD-SD-24. Facing NW. 1330 hours. April 26, 2007.

Photo 55. Approximately 0.62 nautical miles downstream from ODEQ GPS Location showing bikers on the bike path. Samples DMD-SD-25 and DMD-SD-26. Facing S. 1410 hours. April 26, 2007.

Photo 56. Approximately 0.62 nautical miles downstream from ODEQ GPS Location showing diver approximately 40 meters downstream. Samples DMD-SD-25 and DMD-SD-26. Facing W. 1410 hours. April 26, 2007.

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Photo 57. Approximately 0.62 nautical miles downstream from ODEQ GPS Location. Samples DMD-SD-25 and DMD-SD-26. Facing N. 1410 hours. April 26, 2007.

Photo 58. Approximately 0.56 nautical miles downstream from ODEQ GPS Location. Samples DMD-SD-30 and DMD-SD-31. Facing S. 1515 hours. April 26, 2007.

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Photo 59. Approximately 0.56 nautical miles downstream from ODEQ GPS Location. Samples DMD-SD-30 and DMD-SD-31. Facing W. 1515 hours. April 26, 2007.

Photo 60. Approximately 0.56 nautical miles downstream from ODEQ GPS Location. Samples DMD-SD-30 and DMD-SD-31. Facing N. 1515 hours. April 26, 2007.

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Photo 61. Approximately 0.2 nautical miles upstream from ODEQ GPS Location. Sample DMD-SD-01, further north from DMD-SD-32. Facing S. 1550 hours. April 26, 2007.

Photo 62. Approximately 0.2 nautical miles upstream from ODEQ GPS Location. Sample DMD-SD-01, further north from DMD-SD-32. Facing W. 1550 hours. April 26, 2007.

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Photo 63. Approximately 0.2 nautical miles upstream from ODEQ GPS Location. Sample DMD-SD-01, further north from DMD-SD-32. Facing N. 1550 hours. April 26, 2007.

Photo 64. Approximately 0.2 nautical miles upstream from ODEQ GPS Location. Sample DMD-SD-01, further north from DMD-SD-32. Facing E. 1550 hours. April 26, 2007.

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Photo 65. Approximately 0.2 nautical miles upstream from ODEQ GPS Location. Sample DMD-SD-32, further south from DMD-SD-01. Facing S. 1610 hours. April 26, 2007.

Photo 66. Approximately 2.37 nautical miles downstream from ODEQ GPS Location. Attempted to photograph of an Osprey located mile marker 16. Facing SE. 0946 hours. April 27, 2007.

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Photo 67. Approximately 2.37 nautical miles downstream from ODEQ GPS Location. An Osprey nest located mile marker 16. Facing S. 0946 hours. April 27, 2007.

Photo 68. Approximately 2.37 nautical miles downstream from ODEQ GPS Location. An Osprey in its nest located mile marker 16. Facing E. 0946 hours. April 27, 2007.

Photo 69. Approximately 2.37 nautical miles downstream from ODEQ GPS Location, view of old pilings. Sample DMD-SD-33. Facing E. 0946 hours. April 27, 2007.

Photo 70. Approximately 2.37 nautical miles downstream from ODEQ GPS Location, zoomed in view of mile marker 16 with an Osprey and an Osprey nest. Sample DMD-SD-33. Facing NE. 0946 hours. April 27, 2007.

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Photo 71. Approximately 2.37 nautical miles downstream from ODEQ GPS Location. Sample DMD-SD-33. Facing N. 0946 hours. April 27, 2007.

Photo 72. Approximately 2.37 nautical miles downstream from ODEQ GPS Location. Sample DMD-SD-33. Facing W. 0946 hours. April 27, 2007.

APPENDIX B
GPS SAMPLE LOCATION DATA

Appendix B
Global Positioning System Coordinates
Sample Locations
Drums-NE Marine Drive Site
Portland, Multnomah County, Oregon

EPA Sample ID	Station ID	CLP ID	GP-1650 DF	Garmin 276C	Garmin Hand Held 60CS
J86R0	DMD-SD-01	MJ86R0	15 meters west of 45.5800, -122.5556	15 meters west of 45.5801, -122.5565	15 meters west of 45.5800, -122.5556
J86R1	DMD-SD-02	MJ86R1	45.5722, -122.5339	N/A	45.5723, -122.5340
J86R2	DMD-SD-03	MJ86R2	45.5649, -122.5031	N/A	45.5650, -122.5031
J86R3	DMD-SD-04	MJ86R3	45.5882, -122.5678	N/A	45.5882, -122.5678
J86R4	DMD-SD-05	MJ86R4	45.5929, -122.5775	N/A	45.5930, -122.5776
J86R5	DMD-SD-06	MJ86R5	45.5980, -122.5872	N/A	45.5978, - 122.5873
J86R6	DMD-SD-07	MJ86R6	19 meters west of 45.5823, -122.5593	19 meters west of 45.5823, -122.5593	19 meters west of 45.5823, - 122.5593
J86R7	DMD-SD-08	MJ86R7	36 meters west of 45.5823, -122.5593	36 meters west of 45.5823, -122.5593	36 meters west of 45.5823, - 122.5593
J86R8	DMD-SD-09	MJ86R8	10 meters west of 45.5871, -122.5687	N/A	10 meters west of 45.5871, - 122.5687
J86R9	DMD-SD-10	MJ86R9	18 meters west of 45.5871, -122.5687	N/A	18 meters west of 45.5871, - 122.5687
J86S0	DMD-SD-11	MJ86S0	23 meters west of 45.5871, -122.5687	N/A	23 meters west of 45.5871, - 122.5687
J86S1	DMD-SD-12	MJ86S1	37 meters west of 45.5871, -122.5687	N/A	37 meters west of 45.5871, - 122.5687
J86S2	DMD-SD-13	MJ86S2	37 meters west of and slightly south of DMD-SD-12 45.5871, -122.5687	N/A	37 meters west of and slightly south of DMD-SD-12 45.5871, - 122.5687
J86S3	DMD-SD-14	MJ86S3	Between 9 and 15 meters west of 45.5870, -122.5686	N/A	Between 9 and 15 meters west of 45.5870, -122.5686
J86S4	DMD-SD-15	MJ86S4	18.5 meters west of 45.5870, -122.5686	N/A	18.5 meters west of 45.5870, -122.5686

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Sample Locations
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EPA Sample ID	Station ID	CLP ID	GP-1650 DF	Garmin 276C	Garmin Hand Held 60CS
J86S5	DMD-SD-16	MJ86S5	50 meters west of 45.5897, -122.5747	N/A	50 meters west of 45.5897, -122.5747
J86S6	DMD-SD-17	MJ86S6	31 meters west of 45.5897, -122.5747	N/A	31 meters west of 45.5897, -122.5747
J86S7	DMD-SD-18	MJ86S7	16 meters west of 45.5897, -122.5747	N/A	16 meters west of 45.5897, -122.5747
J86S8	DMD-SD-19	MJ86S8	44 meters west of 45.5894, -122.5739	N/A	44 meters west of 45.5894, -122.5739
J86S9	DMD-SD-20	MJ86S9	27 meters west of 45.5894, -122.5739	N/A	27 meters west of 45.5894, -122.5739
J86T0	DMD-SD-21	MJ86T0	45 meters west of 45.5890, -122.5731	45 meters west of 45.5890, -122.5731	45 meters west of 45.5891, -122.5731
J86T1	DMD-SD-22	MJ86T1	45 meters west of 45.5890, -122.5731	45 meters west of 45.5890, -122.5731	45 meters west of 45.5891, -122.5731
J86T2	DMD-SD-23	MJ86T2	35 meters west of 45.5887, -122.5722	35 meters west of 45.5887, -122.5722	35 meters west of 45.5887, -122.5722
J86T3	DMD-SD-24	MJ86T3	13 meters west of 45.5887, -122.5722	13 meters west of 45.5887, -122.5722	13 meters west of 45.5887, -122.5722
J86T4	DMD-SD-25	MJ86T4	30 meters west of 45.5883, -122.5714	30 meters west of 45.5883, -122.5714	30 meters west of 45.5883, -122.5714
J86T5	DMD-SD-26	MJ86T5	30 meters west of 45.5883, -122.5714	30 meters west of 45.5883, -122.5714	30 meters west of 45.5883, -122.5714
J86T6	DMD-SD-27	MJ86T6	45.5980, -122.5872	N/A	45.5978, - 122.5873
J86T7	DMD-SD-28	MJ86T7	31 meters west of 45.5897, -122.5747	N/A	31 meters west of 45.5897, -122.5747
J86T8	DMD-SD-29	MJ86T8	45 meters west of 45.5890, -122.5731	45 meters west of 45.5890, -122.5731	45 meters west of 45.5891, -122.5731

Appendix B
Global Positioning System Coordinates
Sample Locations
Drums-NE Marine Drive Site
Portland, Multnomah County, Oregon

EPA Sample ID	Station ID	CLP ID	GP-1650 DF	Garmin 276C	Garmin Hand Held 60CS
J86W4	DMD-SD-30	MJ86W4	N/A	29 meters west of 45.5876, -122.5702	29 meters west of 45.5877, - 122.5702
J86W5	DMD-SD-31	MJ86W5	N/A	10 meters west of 45.5876, -122.5702	10 meters west of 45.5877, - 122.5702
J86W6	DMD-SD-32	MJ86W6	14 meters west of 45.5800, -122.5558	14 meters west of 45.5800, -122.5586	No available satellites
J86W7	DMD-SD-33	MJ86W7	45.5995, -122.6019	N/A	45.5996, - 122.6019
J86W0	DMD-RB-01	MJ86W0	N/A	N/A	N/A
J86W1	DMD-RB-02	MJ86W1	N/A	N/A	N/A
J86W2	DMD-RB-03	MJ86W2	N/A	N/A	N/A
J86W3	DMD-RB-04	MJ86W3	N/A	N/A	N/A

APPENDIX C
DATA VALIDATON MEMO AND LABORATORY DATA

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T7

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009015

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAF04C15

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 40 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/15/2007

GPC Cleanup: (Y/N) Y pH: 7.4 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	550	U
100-02-7	4-Nitrophenol	550	U
132-64-9	Dibenzofuran	280	U
121-14-2	2,4-Dinitrotoluene	280	U
84-66-2	Diethylphthalate	280	U
86-73-7	Fluorene	280	U
7005-72-3	4-Chlorophenyl-phenylether	280	U
100-01-6	4-Nitroaniline	550	U
534-52-1	4,6-Dinitro-2-methylphenol	550	U
86-30-6	N-Nitrosodiphenylamine[1]	280	U
95-94-3	1,2,4,5-Tetrachlorobenzene	280	U
101-55-3	4-Bromophenyl-phenylether	280	U
118-74-1	Hexachlorobenzene	280	U
1912-24-9	Atrazine	280	U
87-86-5	Pentachlorophenol	550	U
85-01-8	Phenanthrene	280	U
120-12-7	Anthracene	280	U
86-74-8	Carbazole	280	U
84-74-2	Di-n-butylphthalate	280	U
206-44-0	Fluoranthene	280	U
129-00-0	Pyrene	280	U
85-68-7	Butylbenzylphthalate	280	U
91-94-1	3,3'-Dichlorobenzidine	280	U
56-55-3	Benzo(a)anthracene	280	U
218-01-9	Chrysene	280	U
117-81-7	Bis(2-ethylhexyl)phthalate	45	J
117-84-0	Di-n-octylphthalate	280	U
205-99-2	Benzo(b)fluoranthene	280	U
207-08-9	Benzo(k)fluoranthene	280	U
50-32-8	Benzo(a)pyrene	280	U
193-39-5	Indeno(1,2,3-cd)pyrene	280	U
53-70-3	Dibenzo(a,h)anthracene	280	U
191-24-2	Benzo(g,h,i)perylene	280	U
58-90-2	2,3,4,6-Tetrachlorophenol	280	U

[1]Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86T7

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009015

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAF04C15

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 40 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/15/2007

GPC Cleanup: (Y/N) Y pH: 7.4 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	471-43-2	Ethane, 1,1-dichloro-2,2-difluoro-	3.99	440	JN
02		Unsaturated Hydrocarbon	4.09	120	JN
03		Polycyclic hydrocarbon	19.15	670	JN
04		Polycyclic hydrocarbon	24.71	510	JN
05					
06					
07					
08					
09					
10					
11					
12					
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19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A	750	J

[2]EPA-designated Registry Number.

6/11/07

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T8

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009016

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB10C16

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 39 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 6.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
100-52-7	Benzaldehyde	~~280~~ 86	~~J~~ U
108-95-2	Phenol	280	U
111-44-4	Bis(2-chloroethyl)ether	280	U
95-57-8	2-Chlorophenol	280	U
95-48-7	2-Methylphenol	280	U
108-60-1	2,2'-Oxybis(1-chloropropane)	280	U
98-86-2	Acetophenone	98	J
106-44-5	4-Methylphenol	170	J
621-64-7	N-Nitroso-di-n-propylamine	280	U
67-72-1	Hexachloroethane	280	U
98-95-3	Nitrobenzene	280	U
78-59-1	Isophorone	280	U
88-75-5	2-Nitrophenol	280	U
105-67-9	2,4-Dimethylphenol	280	U
111-91-1	Bis(2-chloroethoxy)methane	280	U
120-83-2	2,4-Dichlorophenol	280	U
91-20-3	Naphthalene	280	U
106-47-8	4-Chloroaniline	280	U
87-68-3	Hexachlorobutadiene	280	U
105-60-2	Caprolactam	280	U
59-50-7	4-Chloro-3-methylphenol	280	U
91-57-6	2-Methylnaphthalene	280	U
77-47-4	Hexachlorocyclopentadiene	280	U
88-06-2	2,4,6-Trichlorophenol	280	U
95-95-4	2,4,5-Trichlorophenol	280	U
92-52-4	1,1'-Biphenyl	280	U
91-58-7	2-Chloronaphthalene	280	U
88-74-4	2-Nitroaniline	540	U
131-11-3	Dimethylphthalate	280	U
606-20-2	2,6-Dinitrotoluene	280	U
208-96-8	Acenaphthylene	280	U
99-09-2	3-Nitroaniline	540	U
83-32-9	Acenaphthene	280	U

6/11/07

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T8

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009016

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB10C16

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 39 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 6.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	540	UJ
100-02-7	4-Nitrophenol	540	U
132-64-9	Dibenzofuran	280	U
121-14-2	2,4-Dinitrotoluene	280	U
84-66-2	Diethylphthalate	280	U
86-73-7	Fluorene	280	U
7005-72-3	4-Chlorophenyl-phenylether	280	U
100-01-6	4-Nitroaniline	540	U
534-52-1	4,6-Dinitro-2-methylphenol	540	U
86-30-6	N-Nitrosodiphenylamine[1]	280	U
95-94-3	1,2,4,5-Tetrachlorobenzene	280	U
101-55-3	4-Bromophenyl-phenylether	280	U
118-74-1	Hexachlorobenzene	280	U
1912-24-9	Atrazine	280	U
87-86-5	Pentachlorophenol	540	U
85-01-8	Phenanthrene	280	U
120-12-7	Anthracene	280	U
86-74-8	Carbazole	280	U
84-74-2	Di-n-butylphthalate	280	U
206-44-0	Fluoranthene	10	J
129-00-0	Pyrene	12	J
85-68-7	Butylbenzylphthalate	280	U
91-94-1	3,3'-Dichlorobenzidine	280	U
56-55-3	Benzo(a)anthracene	280	U
218-01-9	Chrysene	280	U
117-81-7	Bis(2-ethylhexyl)phthalate	50	J
117-84-0	Di-n-octylphthalate	280	U
205-99-2	Benzo(b)fluoranthene	280	U
207-08-9	Benzo(k)fluoranthene	280	U
50-32-8	Benzo(a)pyrene	280	U
193-39-5	Indeno(1,2,3-cd)pyrene	280	U
53-70-3	Dibenzo(a,h)anthracene	280	U
191-24-2	Benzo(g,h,i)perylene	280	U
58-90-2	2,3,4,6-Tetrachlorophenol	280	U

[1]Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86T8

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009016

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB10C16

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 39 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 6.1 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	79-34-5	Ethane, 1,1,2,2-tetrachloro-	4.02	560	JN
02		Unsaturated Hydrocarbon	4.22	240	JN
03	123-08-0	Benzaldehyde, 4-hydroxy-	7.64	180	JN
04	544-63-8	Tetradecanoic acid	11.13	140	JN
05	61886-66-6	3-Eicosyne	12.17	170	JN
06	5129-60-2	Pentadecanoic acid, 14-methyl-, methyl e	12.51	130	JN
07	2416-20-8	Hexadecenoic acid, Z-11-	12.63	260	JN
08	57-10-3	n-Hexadecanoic acid	12.77	600	JN
09	100008-91-0	2'-Methoxy-N-methyl-2-oxo-2-phenylethyla	13.10	140	JN
10		Unknown aromatic	13.76	190	JN
11	2529-03-5	1.alpha., 4a.alpha., 8a.beta.-Decehydro-	13.96	190	JN
12	35599-77-0	Tridecane, 1-iodo-	15.64	370	JN
13	52078-56-5	11-Tricosene	15.69	170	JN
14	941-69-5	N-Phenylmaleimide	15.99	130	JN
15	73105-83-6	Methyl 2,8-dimethyltridecanoate	16.09	150	JN
16		Unknown oxyhydrocarbon	16.30	260	JN
17	50838-19-2	2-Propenoic acid, 3-[bis(1,1-dimethyleth	16.50	180	JN
18		Unknown oxyhydrocarbon	16.87	310	JN
19		Unknown oxyhydrocarbon	17.09	230	JN
20	111-61-5	Octadecanoic acid, ethyl ester	17.25	150	JN
21	14811-95-1	1,19-Eicosadiene	17.59	350	JN
22	7206-21-5	5-Octadecene, (E)-	18.17	200	JN
23		Polycyclic hydrocarbon	19.18	460	JN
24	100012-93-0	Z-9-Tetradecenal	19.32	250	JN
25	57-88-5	Cholesterol	20.70	420	JN
26	83-47-6	.gamma.-Sitosterol	23.50	150	JN
27	2435-53-2	3,5-Cyclohexadiene-1,2-dione, 3,4,5,6-te	23.70	490	JN
28	6095-82-5	2,4,6-Trimethylphenyl isothiocyanate	23.87	120	JN
29		Polycyclic hydrocarbon	24.58	610	JN
30		Polycyclic hydrocarbon	24.78	360	JN
	E966796[2]	Total Alkanes	N/A	1200	JN

[2]EPA-designated Registry Number.

6/11/07

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86W4

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009017

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB11C17

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 32 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 7.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
100-52-7	Benzaldehyde	250 ~~41~~	~~J~~ U
108-95-2	Phenol	250	U
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	2,2'-Oxybis(1-chloropropane)	250	U
98-86-2	Acetophenone	37	J
106-44-5	4-Methylphenol	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
105-67-9	2,4-Dimethylphenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	250	U
87-68-3	Hexachlorobutadiene	250	U
105-60-2	Caprolactam	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	250	U
95-95-4	2,4,5-Trichlorophenol	250	U
92-52-4	1,1'-Biphenyl	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	480	U
131-11-3	Dimethylphthalate	250	U
606-20-2	2,6-Dinitrotoluene	250	U
208-96-8	Acenaphthylene	250	U
99-09-2	3-Nitroaniline	480	U
83-32-9	Acenaphthene	250	U

6/11/07

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86W4

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009017

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB11C17

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 32 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 7.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	480	UJ
100-02-7	4-Nitrophenol	480	U
132-64-9	Dibenzofuran	250	U
121-14-2	2,4-Dinitrotoluene	250	U
84-66-2	Diethylphthalate	250	U
86-73-7	Fluorene	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	480	U
534-52-1	4,6-Dinitro-2-methylphenol	480	U
86-30-6	N-Nitrosodiphenylamine[1]	250	U
95-94-3	1,2,4,5-Tetrachlorobenzene	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	250	U
1912-24-9	Atrazine	250	U
87-86-5	Pentachlorophenol	480	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
86-74-8	Carbazole	250	U
84-74-2	Di-n-butylphthalate	250	U
206-44-0	Fluoranthene	250	U
129-00-0	Pyrene	250	U
85-68-7	Butylbenzylphthalate	250	U
91-94-1	3,3'-Dichlorobenzidine	250	U
56-55-3	Benzo(a)anthracene	250	U
218-01-9	Chrysene	250	U
117-81-7	Bis(2-ethylhexyl)phthalate	19	J
117-84-0	Di-n-octylphthalate	250	U
205-99-2	Benzo(b)fluoranthene	250	U
207-08-9	Benzo(k)fluoranthene	250	U
50-32-8	Benzo(a)pyrene	250	U
193-39-5	Indeno(1,2,3-cd)pyrene	250	U
53-70-3	Dibenzo(a,h)anthracene	250	U
191-24-2	Benzo(g,h,i)perylene	250	U
58-90-2	2,3,4,6-Tetrachlorophenol	250	U

[1]Cannot be separated from Diphenylamine

6/11/07

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86W4

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009017

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB11C17

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 32 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 7.8 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	79-34-5	Ethane, 1,1,2,2-tetrachloro-	4.01	260	JN
02		Polycyclic hydrocarbon	19.18	510	JN
03		Polycyclic hydrocarbon	24.78	440	JN
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
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18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

6/11/07

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86W5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009018

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB12C18

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
100-52-7	Benzaldehyde	~~270~~ 45	~~J~~ U
108-95-2	Phenol	270	U
111-44-4	Bis(2-chloroethyl)ether	270	U
95-57-8	2-Chlorophenol	270	U
95-48-7	2-Methylphenol	270	U
108-60-1	2,2'-Oxybis(1-chloropropane)	270	U
98-86-2	Acetophenone	51	J
106-44-5	4-Methylphenol	270	U
621-64-7	N-Nitroso-di-n-propylamine	270	U
67-72-1	Hexachloroethane	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
87-68-3	Hexachlorobutadiene	270	U
105-60-2	Caprolactam	270	U
59-50-7	4-Chloro-3-methylphenol	270	U
91-57-6	2-Methylnaphthalene	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
92-52-4	1,1'-Biphenyl	270	U
91-58-7	2-Chloronaphthalene	270	U
88-74-4	2-Nitroaniline	520	U
131-11-3	Dimethylphthalate	270	U
606-20-2	2,6-Dinitrotoluene	270	U
208-96-8	Acenaphthylene	270	U
99-09-2	3-Nitroaniline	520	U
83-32-9	Acenaphthene	270	U

6/11/07

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86W5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009018

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB12C18

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	520	UJ
100-02-7	4-Nitrophenol	520	U
132-64-9	Dibenzofuran	270	U
121-14-2	2,4-Dinitrotoluene	270	U
84-66-2	Diethylphthalate	270	U
86-73-7	Fluorene	270	U
7005-72-3	4-Chlorophenyl-phenylether	270	U
100-01-6	4-Nitroaniline	520	U
534-52-1	4,6-Dinitro-2-methylphenol	520	U
86-30-6	N-Nitrosodiphenylamine[1]	270	U
95-94-3	1,2,4,5-Tetrachlorobenzene	270	U
101-55-3	4-Bromophenyl-phenylether	270	U
118-74-1	Hexachlorobenzene	270	U
1912-24-9	Atrazine	270	U
87-86-5	Pentachlorophenol	520	U
85-01-8	Phenanthrene	270	U
120-12-7	Anthracene	270	U
86-74-8	Carbazole	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	23	J
117-84-0	Di-n-octylphthalate	270	U
205-99-2	Benzo(b)fluoranthene	270	U
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	Dibenzo(a,h)anthracene	270	U
191-24-2	Benzo(g,h,i)perylene	270	U
58-90-2	2,3,4,6-Tetrachlorophenol	270	U

[1]Cannot be separated from Diphenylamine

5/11/07

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86W5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009018

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB12C18

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	79-34-5	Ethane, 1,1,2,2-tetrachloro-	4.01	200	JN
02		Polycyclic hydrocarbon	19.17	610	JN
03		Polycyclic hydrocarbon	24.76	500	JN
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A	290	J

[2]EPA-designated Registry Number.

6/11/07

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86W6

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009019

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB13C19

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
100-52-7	Benzaldehyde	~~260~~ 37	~~J~~ U
108-95-2	Phenol	260	U
111-44-4	Bis(2-chloroethyl)ether	260	U
95-57-8	2-Chlorophenol	260	U
95-48-7	2-Methylphenol	260	U
108-60-1	2,2'-Oxybis(1-chloropropane)	260	U
98-86-2	Acetophenone	32	J
106-44-5	4-Methylphenol	21	J
621-64-7	N-Nitroso-di-n-propylamine	260	U
67-72-1	Hexachloroethane	260	U
98-95-3	Nitrobenzene	260	U
78-59-1	Isophorone	260	U
88-75-5	2-Nitrophenol	260	U
105-67-9	2,4-Dimethylphenol	260	U
111-91-1	Bis(2-chloroethoxy)methane	260	U
120-83-2	2,4-Dichlorophenol	260	U
91-20-3	Naphthalene	260	U
106-47-8	4-Chloroaniline	260	U
87-68-3	Hexachlorobutadiene	260	U
105-60-2	Caprolactam	260	U
59-50-7	4-Chloro-3-methylphenol	260	U
91-57-6	2-Methylnaphthalene	260	U
77-47-4	Hexachlorocyclopentadiene	260	U
88-06-2	2,4,6-Trichlorophenol	260	U
95-95-4	2,4,5-Trichlorophenol	260	U
92-52-4	1,1'-Biphenyl	260	U
91-58-7	2-Chloronaphthalene	260	U
88-74-4	2-Nitroaniline	510	U
131-11-3	Dimethylphthalate	260	U
606-20-2	2,6-Dinitrotoluene	260	U
208-96-8	Acenaphthylene	260	U
99-09-2	3-Nitroaniline	510	U
83-32-9	Acenaphthene	260	U

6/11/07

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86W6

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009019

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB13C19

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	510	UJ
100-02-7	4-Nitrophenol	510	U
132-64-9	Dibenzofuran	260	U
121-14-2	2,4-Dinitrotoluene	260	U
84-66-2	Diethylphthalate	260	U
86-73-7	Fluorene	260	U
7005-72-3	4-Chlorophenyl-phenylether	260	U
100-01-6	4-Nitroaniline	510	U
534-52-1	4,6-Dinitro-2-methylphenol	510	U
86-30-6	N-Nitrosodiphenylamine[1]	260	U
95-94-3	1,2,4,5-Tetrachlorobenzene	260	U
101-55-3	4-Bromophenyl-phenylether	260	U
118-74-1	Hexachlorobenzene	260	U
1912-24-9	Atrazine	260	U
87-86-5	Pentachlorophenol	510	U
85-01-8	Phenanthrene	260	U
120-12-7	Anthracene	260	U
86-74-8	Carbazole	260	U
84-74-2	Di-n-butylphthalate	260	U
206-44-0	Fluoranthene	260	U
129-00-0	Pyrene	260	U
85-68-7	Butylbenzylphthalate	260	U
91-94-1	3,3'-Dichlorobenzidine	260	U
56-55-3	Benzo(a)anthracene	260	U
218-01-9	Chrysene	260	U
117-81-7	Bis(2-ethylhexyl)phthalate	28	J
117-84-0	Di-n-octylphthalate	260	U
205-99-2	Benzo(b)fluoranthene	260	U
207-08-9	Benzo(k)fluoranthene	260	U
50-32-8	Benzo(a)pyrene	260	U
193-39-5	Indeno(1,2,3-cd)pyrene	260	U
53-70-3	Dibenzo(a,h)anthracene	260	U
191-24-2	Benzo(g,h,i)perylene	260	U
58-90-2	2,3,4,6-Tetrachlorophenol	260	U

[1]Cannot be separated from Diphenylamine

6/11/07

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86W6

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009019

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB13C19

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	79-34-5	Ethane, 1,1,2,2-tetrachloro-	4.01	210	JN
02		Unknown aromatic	7.18	120	JBN
03		Polycyclic hydrocarbon	19.16	670	JN
04		Polycyclic hydrocarbon	24.75	490	JN
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

6/11/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86R0

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009001

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A023,21070514B023

% Moisture: 19 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	2.1 ~~0.046~~	~~JP~~ U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.1	U
72-55-9	4,4'-DDE	~~4.1 0.042~~	~~JP~~ U
72-20-8	Endrin	4.1	U
33213-65-9	Endosulfan II	4.1	U
72-54-8	4,4'-DDD	4.1	U
1031-07-8	Endosulfan sulfate	4.1	U
50-29-3	4,4'-DDT	4.1	U
72-43-5	Methoxychlor	0.46	J
53494-70-5	Endrin ketone	4.1	U
7421-93-4	Endrin aldehyde	4.1	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009002

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A024,21070514B024

% Moisture: 19 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	2.1 ~~0.064~~	~~JP~~ U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.1 ~~0.054~~	~~JP~~ U
72-55-9	4,4'-DDE	4.1 ~~0.12~~	~~JP~~ U
72-20-8	Endrin	4.1	U
33213-65-9	Endosulfan II	4.1	U
72-54-8	4,4'-DDD	4.1 ~~0.088~~	~~JP~~ U
1031-07-8	Endosulfan sulfate	4.1	U
50-29-3	4,4'-DDT	4.1 ~~0.26~~	~~JP~~ U
72-43-5	Methoxychlor	0.27	J
53494-70-5	Endrin ketone	4.1	U
7421-93-4	Endrin aldehyde	4.1	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1 ~~0.073~~	~~JP~~ U
8001-35-2	Toxaphene	210	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S6

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009003

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A025,21070514B025

% Moisture: 38 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.7	U
319-85-7	beta-BHC	2.7	U
319-86-8	delta-BHC	2.7	U
58-89-9	gamma-BHC (Lindane)	2.7 ~~0.070~~	~~JP~~ U
76-44-8	Heptachlor	2.7 ~~0.20~~	~~JP~~ U
309-00-2	Aldrin	2.7	U
1024-57-3	Heptachlor epoxide	2.7	U
959-98-8	Endosulfan I	2.7	U
60-57-1	Dieldrin	5.3	U
72-55-9	4,4'-DDE	5.3 ~~0.088~~	~~JP~~ U
72-20-8	Endrin	5.3	U
33213-65-9	Endosulfan II	5.3 ~~0.057~~	~~JP~~ U
72-54-8	4,4'-DDD	5.3	U
1031-07-8	Endosulfan sulfate	5.3	U
50-29-3	4,4'-DDT	5.3 ~~0.31~~	~~JP~~ U
72-43-5	Methoxychlor	27	U
53494-70-5	Endrin ketone	5.3	U
7421-93-4	Endrin aldehyde	5.3	U
5103-71-9	alpha-Chlordane	2.7	U
5103-74-2	gamma-Chlordane	2.7 ~~0.11~~	~~JP~~ U
8001-35-2	Toxaphene	270	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S7

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009004

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A026,21070514B026

% Moisture: 30 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.4	U
319-85-7	beta-BHC	2.4	U
319-86-8	delta-BHC	2.4	U
58-89-9	gamma-BHC (Lindane)	2.4	U
76-44-8	Heptachlor	2.4	U
309-00-2	Aldrin	2.4	U
1024-57-3	Heptachlor epoxide	2.4	U
959-98-8	Endosulfan I	2.4	U
60-57-1	Dieldrin	4.7	U
72-55-9	4,4'-DDE	4.7	U
72-20-8	Endrin	4.7	U
33213-65-9	Endosulfan II	4.7	U
72-54-8	4,4'-DDD	4.7	U
1031-07-8	Endosulfan sulfate	4.7	U
50-29-3	4,4'-DDT	4.7	U
72-43-5	Methoxychlor	24	U
53494-70-5	Endrin ketone	4.7	U
7421-93-4	Endrin aldehyde	4.7	U
5103-71-9	alpha-Chlordane	2.4	U
5103-74-2	gamma-Chlordane	2.4 ~~0.054~~	~~JP~~ U
8001-35-2	Toxaphene	240	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S8

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009005

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A027,21070514B027

% Moisture: 29 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.4	U
319-85-7	beta-BHC	~~24~~ ~~0.17~~	~~JP~~ U
319-86-8	delta-BHC	2.4	U
58-89-9	gamma-BHC (Lindane)	2.4	U
76-44-8	Heptachlor	2.4	U
309-00-2	Aldrin	2.4	U
1024-57-3	Heptachlor epoxide	0.12	J
959-98-8	Endosulfan I	2.4	U
60-57-1	Dieldrin	4.7	U
72-55-9	4,4'-DDE	1.1	J
72-20-8	Endrin	4.7	U
33213-65-9	Endosulfan II	~~4.7~~ ~~0.079~~	~~JP~~ U
72-54-8	4,4'-DDD	~~4.7~~ ~~0.52~~	~~JP~~ U
1031-07-8	Endosulfan sulfate	4.7	U
50-29-3	4,4'-DDT	~~4.7~~ ~~0.30~~	~~JP~~ U
72-43-5	Methoxychlor	0.63	J
53494-70-5	Endrin ketone	4.7	U
7421-93-4	Endrin aldehyde	4.7	U
5103-71-9	alpha-Chlordane	2.4	U
5103-74-2	gamma-Chlordane	~~2.4~~ ~~0.60~~	~~JP~~ U
8001-35-2	Toxaphene	240	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S9

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009006

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A028,21070514B028

% Moisture: 19 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.1	U
72-55-9	4,4'-DDE	4.1	U
72-20-8	Endrin	4.1	U
33213-65-9	Endosulfan II	4.1	U
72-54-8	4,4'-DDD	4.1	U
1031-07-8	Endosulfan sulfate	4.1	U
50-29-3	4,4'-DDT	4.1	U
72-43-5	Methoxychlor	0.44	J
53494-70-5	Endrin ketone	4.1	U
7421-93-4	Endrin aldehyde	4.1	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	0.066	JP
8001-35-2	Toxaphene	210	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T0

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009007

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A029,21070514B029

% Moisture: 40 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.8	U
319-85-7	beta-BHC	2.8 ~~0.13~~	~~JP~~ U
319-86-8	delta-BHC	2.8	U
58-89-9	gamma-BHC (Lindane)	2.8	U
76-44-8	Heptachlor	2.8	U
309-00-2	Aldrin	2.8	U
1024-57-3	Heptachlor epoxide	2.8	U
959-98-8	Endosulfan I	2.8	U
60-57-1	Dieldrin	5.5 ~~0.10~~	~~JP~~ U
72-55-9	4,4'-DDE	1.2	JP
72-20-8	Endrin	5.5	U
33213-65-9	Endosulfan II	0.42	JP
72-54-8	4,4'-DDD	5.5 ~~0.22~~	~~JP~~ U
1031-07-8	Endosulfan sulfate	0.34	JP
50-29-3	4,4'-DDT	5.5 ~~0.85~~	~~JP~~ U
72-43-5	Methoxychlor	28	U
53494-70-5	Endrin ketone	5.5	U
7421-93-4	Endrin aldehyde	5.5	U
5103-71-9	alpha-Chlordane	2.8	U
5103-74-2	gamma-Chlordane	2.8 ~~0.34~~	~~JP~~ U
8001-35-2	Toxaphene	280	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T1

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009010

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A032,21070514B032

% Moisture: 33 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.5	U
319-85-7	beta-BHC	2.5	U
319-86-8	delta-BHC	2.5	U
58-89-9	gamma-BHC (Lindane)	2.5	U
76-44-8	Heptachlor	2.5	U
309-00-2	Aldrin	2.5	U
1024-57-3	Heptachlor epoxide	2.5	U
959-98-8	Endosulfan I	2.5	U
60-57-1	Dieldrin	0.21	JP
72-55-9	4,4'-DDE	4.9 ~~0.24~~	~~JP~~ U
72-20-8	Endrin	4.9	U
33213-65-9	Endosulfan II	4.9 ~~0.093~~	~~JP~~ U
72-54-8	4,4'-DDD	4.9 ~~0.14~~	~~JP~~ U
1031-07-8	Endosulfan sulfate	4.9	U
50-29-3	4,4'-DDT	4.9 ~~0.11~~	~~JP~~ U
72-43-5	Methoxychlor	1.6	JP
53494-70-5	Endrin ketone	4.9	U
7421-93-4	Endrin aldehyde	4.9	U
5103-71-9	alpha-Chlordane	2.5	U
5103-74-2	gamma-Chlordane	2.5 ~~0.11~~	~~JP~~ U
8001-35-2	Toxaphene	250	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T2

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009011

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A033,21070514B033

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.6	U
319-85-7	beta-BHC	2.6	U
319-86-8	delta-BHC	2.6	U
58-89-9	gamma-BHC (Lindane)	2.6	U
76-44-8	Heptachlor	2.6	U
309-00-2	Aldrin	2.6	U
1024-57-3	Heptachlor epoxide	2.6	U
959-98-8	Endosulfan I	2.6	U
60-57-1	Dieldrin	0.18	JP
72-55-9	4,4'-DDE	5.1 ~~0.11~~	~~JP~~ U
72-20-8	Endrin	5.1	U
33213-65-9	Endosulfan II	0.14	J
72-54-8	4,4'-DDD	5.1	U
1031-07-8	Endosulfan sulfate	5.1	U
50-29-3	4,4'-DDT	5.1 ~~0.32~~	~~JP~~ U
72-43-5	Methoxychlor	0.77	JP
53494-70-5	Endrin ketone	5.1	U
7421-93-4	Endrin aldehyde	5.1	U
5103-71-9	alpha-Chlordane	2.6	U
5103-74-2	gamma-Chlordane	2.6 ~~0.10~~	~~JP~~ U
8001-35-2	Toxaphene	260	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T3

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009012

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A034,21070514B034

% Moisture: 37 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.7	U
319-85-7	beta-BHC	2.7	U
319-86-8	delta-BHC	2.7	U
58-89-9	gamma-BHC (Lindane)	~~2.7~~ 0.057	~~JP~~ U
76-44-8	Heptachlor	2.7	U
309-00-2	Aldrin	2.7	U
1024-57-3	Heptachlor epoxide	2.7	U
959-98-8	Endosulfan I	2.7	U
60-57-1	Dieldrin	5.2	U
72-55-9	4,4'-DDE	5.2	U
72-20-8	Endrin	5.2	U
33213-65-9	Endosulfan II	5.2	U
72-54-8	4,4'-DDD	5.2	U
1031-07-8	Endosulfan sulfate	5.2	U
50-29-3	4,4'-DDT	5.2	U
72-43-5	Methoxychlor	27	U
53494-70-5	Endrin ketone	5.2	U
7421-93-4	Endrin aldehyde	5.2	U
5103-71-9	alpha-Chlordane	2.7	U
5103-74-2	gamma-Chlordane	~~2.7~~ 0.19	~~JP~~ U
8001-35-2	Toxaphene	270	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T4

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009013

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A035,21070514B035

% Moisture: 32 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.5	U
319-85-7	beta-BHC	2.5	U
319-86-8	delta-BHC	2.5	U
58-89-9	gamma-BHC (Lindane)	2.5	U
76-44-8	Heptachlor	2.5	U
309-00-2	Aldrin	2.5	U
1024-57-3	Heptachlor epoxide	2.5	U
959-98-8	Endosulfan I	2.5	U
60-57-1	Dieldrin	4.9	U
72-55-9	4,4'-DDE	~~4.9~~ ~~0.28~~	~~JP~~ U
72-20-8	Endrin	4.9	U
33213-65-9	Endosulfan II	4.9	U
72-54-8	4,4'-DDD	~~4.9~~ ~~0.13~~	~~JP~~ U
1031-07-8	Endosulfan sulfate	4.9	U
50-29-3	4,4'-DDT	4.9	U
72-43-5	Methoxychlor	0.61	JP
53494-70-5	Endrin ketone	4.9	U
7421-93-4	Endrin aldehyde	4.9	U
5103-71-9	alpha-Chlordane	2.5	U
5103-74-2	gamma-Chlordane	2.5 ~~0.085~~	~~JP~~ U
8001-35-2	Toxaphene	250	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009014

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A036,21070514B036

% Moisture: 23 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	2.2	U
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	2.2	U
1024-57-3	Heptachlor epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	0.054	JP
72-55-9	4,4'-DDE	43 ~~0.10~~	~~JP~~ U
72-20-8	Endrin	4.3	U
33213-65-9	Endosulfan II	4.3	U
72-54-8	4,4'-DDD	0.14	J
1031-07-8	Endosulfan sulfate	4.3	U
50-29-3	4,4'-DDT	~~4.3 0.15~~	~~JP~~ U
72-43-5	Methoxychlor	22 ~~0.35~~	~~JP~~ U
53494-70-5	Endrin ketone	4.3	U
7421-93-4	Endrin aldehyde	4.3	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	0.062	JP
8001-35-2	Toxaphene	220	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T7

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009015

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A037,21070514B037

% Moisture: 40 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.8	U
319-85-7	beta-BHC	2.8	U
319-86-8	delta-BHC	2.8	U
58-89-9	gamma-BHC (Lindane)	2.8 ~~0.067~~	~~JP~~ U
76-44-8	Heptachlor	2.8	U
309-00-2	Aldrin	2.8	U
1024-57-3	Heptachlor epoxide	2.8 ~~0.24~~	~~JP~~ U
959-98-8	Endosulfan I	2.8 ~~0.11~~	~~JP~~ U
60-57-1	Dieldrin	5.5	U
72-55-9	4,4'-DDE	1.3	~~JP~~
72-20-8	Endrin	0.30	J
33213-65-9	Endosulfan II	5.5 ~~0.89~~	~~JP~~ U
72-54-8	4,4'-DDD	5.5	U
1031-07-8	Endosulfan sulfate	5.5	U
50-29-3	4,4'-DDT	2.8	J
72-43-5	Methoxychlor	28	U
53494-70-5	Endrin ketone	5.5	U
7421-93-4	Endrin aldehyde	5.5	U
5103-71-9	alpha-Chlordane	2.8	U
5103-74-2	gamma-Chlordane	2.8	U
8001-35-2	Toxaphene	280	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T8

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009016

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A038,21070514B038

% Moisture: 39 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.8	U
319-85-7	beta-BHC	0.37	J
319-86-8	delta-BHC	2.8	U
58-89-9	gamma-BHC (Lindane)	2.8	U
76-44-8	Heptachlor	2.8	U
309-00-2	Aldrin	2.8	U
1024-57-3	Heptachlor epoxide	2.8	U
959-98-8	Endosulfan I	2.8	U
60-57-1	Dieldrin	0.39	J
72-55-9	4,4'-DDE	1.1	J
72-20-8	Endrin	5.4	U
33213-65-9	Endosulfan II	5.4 ~~0.061~~	~~JP~~ U
72-54-8	4,4'-DDD	5.4 ~~0.45~~	~~JP~~ U
1031-07-8	Endosulfan sulfate	5.4	U
50-29-3	4,4'-DDT	5.4 ~~0.68~~	~~JP~~ U
72-43-5	Methoxychlor	28 ~~1.9~~	~~JP~~ U
53494-70-5	Endrin ketone	5.4	U
7421-93-4	Endrin aldehyde	5.4	U
5103-71-9	alpha-Chlordane	2.8	U
5103-74-2	gamma-Chlordane	2.8 ~~0.76~~	~~JP~~ U
8001-35-2	Toxaphene	280	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86W4

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009017

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A039,21070514B039

% Moisture: 32 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.5	U
319-85-7	beta-BHC	2.5	U
319-86-8	delta-BHC	2.5	U
58-89-9	gamma-BHC (Lindane)	2.5	U
76-44-8	Heptachlor	2.5	U
309-00-2	Aldrin	2.5	U
1024-57-3	Heptachlor epoxide	2.5	U
959-98-8	Endosulfan I	2.5	U
60-57-1	Dieldrin	4.8	U
72-55-9	4,4'-DDE	4.8	U
72-20-8	Endrin	4.8	U
33213-65-9	Endosulfan II	4.8	U
72-54-8	4,4'-DDD	4.8	U
1031-07-8	Endosulfan sulfate	4.8	U
50-29-3	4,4'-DDT	4.8	U
72-43-5	Methoxychlor	0.44	~~JP~~
53494-70-5	Endrin ketone	4.8	U
7421-93-4	Endrin aldehyde	4.8	U
5103-71-9	alpha-Chlordane	2.5	U
5103-74-2	gamma-Chlordane	2.5 ~~0.074~~	~~JP~~ U
8001-35-2	Toxaphene	250	U

6/12/07

Report

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86W5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009018

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A040,21070514B040

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.7	U
319-85-7	beta-BHC	2.7	U
319-86-8	delta-BHC	2.7	U
58-89-9	gamma-BHC (Lindane)	2.7	U
76-44-8	Heptachlor	2.7	U
309-00-2	Aldrin	2.7 ~~0.41~~	~~JP~~ U
1024-57-3	Heptachlor epoxide	2.7	U
959-98-8	Endosulfan I	2.7	U
60-57-1	Dieldrin	5.2	U
72-55-9	4,4'-DDE	5.2	U
72-20-8	Endrin	5.2	U
33213-65-9	Endosulfan II	5.2	U
72-54-8	4,4'-DDD	5.2	U
1031-07-8	Endosulfan sulfate	5.2	U
50-29-3	4,4'-DDT	5.2	U
72-43-5	Methoxychlor	27	U
53494-70-5	Endrin ketone	5.2	U
7421-93-4	Endrin aldehyde	5.2	U
5103-71-9	alpha-Chlordane	2.7	U
5103-74-2	gamma-Chlordane	2.7	U
8001-35-2	Toxaphene	270	U

6/12/07

REPORT J86W5

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86W5RX

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009018RX

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070517A020,21070517B020

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/14/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/18/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.7	U
319-85-7	beta-BHC	2.7	U
319-86-8	delta-BHC	2.7	U
58-89-9	gamma-BHC (Lindane)	2.7	U
76-44-8	Heptachlor	2.7	U
309-00-2	Aldrin	2.7	U
1024-57-3	Heptachlor epoxide	2.7	U
959-98-8	Endosulfan I	2.7	U
60-57-1	Dieldrin	5.2	U
72-55-9	4,4'-DDE	5.2	U
72-20-8	Endrin	5.2	U
33213-65-9	Endosulfan II	5.2	U
72-54-8	4,4'-DDD	5.2	U
1031-07-8	Endosulfan sulfate	5.2	U
50-29-3	4,4'-DDT	5.2	U
72-43-5	Methoxychlor	27	U
53494-70-5	Endrin ketone	5.2	U
7421-93-4	Endrin aldehyde	5.2	U
5103-71-9	alpha-Chlordane	2.7	U
5103-74-2	gamma-Chlordane	0.066	J
8001-35-2	Toxaphene	270	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86W6

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009019

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A041,21070514B041

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.6	U
319-85-7	beta-BHC	2.6	U
319-86-8	delta-BHC	2.6	U
58-89-9	gamma-BHC (Lindane)	2.6 ~~0.071~~	~~JP~~ U
76-44-8	Heptachlor	2.6	U
309-00-2	Aldrin	2.6	U
1024-57-3	Heptachlor epoxide	2.6	U
959-98-8	Endosulfan I	2.6	U
60-57-1	Dieldrin	5.1	U
72-55-9	4,4'-DDE	5.1	U
72-20-8	Endrin	5.1	U
33213-65-9	Endosulfan II	5.1	U
72-54-8	4,4'-DDD	5.1	U
1031-07-8	Endosulfan sulfate	5.1	U
50-29-3	4,4'-DDT	5.1	U
72-43-5	Methoxychlor	0.37	JP
53494-70-5	Endrin ketone	5.1	U
7421-93-4	Endrin aldehyde	5.1	U
5103-71-9	alpha-Chlordane	2.6	U
5103-74-2	gamma-Chlordane	2.6	U
8001-35-2	Toxaphene	260	U

6/12/07

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86R0

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009001

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A038,20070515B038

% Moisture: 19 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	41	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	41	U
11096-82-5	Aroclor-1260	41	U
37324-23-5	Aroclor-1262	41	U
11100-14-4	Aroclor-1268	41	U

6/12/07

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009002

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A039,20070515B039

% Moisture: 19 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	41	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	41	U
11096-82-5	Aroclor-1260	41	U
37324-23-5	Aroclor-1262	41	U
11100-14-4	Aroclor-1268	41	U

6/12/07

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S6

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009003

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A040,20070515B040

% Moisture: 38 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	53	U
11104-28-2	Aroclor-1221	53	U
11141-16-5	Aroclor-1232	53	U
53469-21-9	Aroclor-1242	53	U
12672-29-6	Aroclor-1248	53	U
11097-69-1	Aroclor-1254	53	U
11096-82-5	Aroclor-1260	53	U
37324-23-5	Aroclor-1262	53	U
11100-14-4	Aroclor-1268	53	U

6/12/07

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S7

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009004

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A045,20070515B045

% Moisture: 30 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	47	U
11104-28-2	Aroclor-1221	47	U
11141-16-5	Aroclor-1232	47	U
53469-21-9	Aroclor-1242	47	U
12672-29-6	Aroclor-1248	47	U
11097-69-1	Aroclor-1254	47	U
11096-82-5	Aroclor-1260	47	U
37324-23-5	Aroclor-1262	47	U
11100-14-4	Aroclor-1268	47	U

6/12/07

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S8

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009005

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A046,20070515B046

% Moisture: 29 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.3 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	47	U
11104-28-2	Aroclor-1221	47	U
11141-16-5	Aroclor-1232	47	U
53469-21-9	Aroclor-1242	47	U
12672-29-6	Aroclor-1248	47	U
11097-69-1	Aroclor-1254	47	U
11096-82-5	Aroclor-1260	47	U
37324-23-5	Aroclor-1262	47	U
11100-14-4	Aroclor-1268	47	U

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1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S9

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009006

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A047,20070515B047

% Moisture: 19 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	41	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	41	U
11096-82-5	Aroclor-1260	41	U
37324-23-5	Aroclor-1262	41	U
11100-14-4	Aroclor-1268	41	U

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1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T0

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009007

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A048,20070515B048

% Moisture: 40 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	55	U
11104-28-2	Aroclor-1221	55	U
11141-16-5	Aroclor-1232	55	U
53469-21-9	Aroclor-1242	55	U
12672-29-6	Aroclor-1248	55	U
11097-69-1	Aroclor-1254	55	U
11096-82-5	Aroclor-1260	55	U
37324-23-5	Aroclor-1262	55	U
11100-14-4	Aroclor-1268	55	U

6/12/07

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T1

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009010

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A051,20070515B051

% Moisture: 33 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	49	U
11104-28-2	Aroclor-1221	49	U
11141-16-5	Aroclor-1232	49	U
53469-21-9	Aroclor-1242	49	U
12672-29-6	Aroclor-1248	49	U
11097-69-1	Aroclor-1254	49	U
11096-82-5	Aroclor-1260	49	U
37324-23-5	Aroclor-1262	49	U
11100-14-4	Aroclor-1268	49	U

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1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T2

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009011

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A052,20070515B052

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	51	U
11104-28-2	Aroclor-1221	51	U
11141-16-5	Aroclor-1232	51	U
53469-21-9	Aroclor-1242	51	U
12672-29-6	Aroclor-1248	51	U
11097-69-1	Aroclor-1254	51	U
11096-82-5	Aroclor-1260	51	U
37324-23-5	Aroclor-1262	51	U
11100-14-4	Aroclor-1268	51	U

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1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T3

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009012

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A053,20070515B053

% Moisture: 37 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	52	U
11104-28-2	Aroclor-1221	52	U
11141-16-5	Aroclor-1232	52	U
53469-21-9	Aroclor-1242	52	U
12672-29-6	Aroclor-1248	52	U
11097-69-1	Aroclor-1254	52	U
11096-82-5	Aroclor-1260	52	U
37324-23-5	Aroclor-1262	52	U
11100-14-4	Aroclor-1268	52	U

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1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T4

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009013

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A054,20070515B054

% Moisture: 32 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	49	U
11104-28-2	Aroclor-1221	49	U
11141-16-5	Aroclor-1232	49	U
53469-21-9	Aroclor-1242	49	U
12672-29-6	Aroclor-1248	49	U
11097-69-1	Aroclor-1254	49	U
11096-82-5	Aroclor-1260	49	U
37324-23-5	Aroclor-1262	49	U
11100-14-4	Aroclor-1268	49	U

6/12/07

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009014

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A055,20070515B055

% Moisture: 23 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	43	U
11104-28-2	Aroclor-1221	43	U
11141-16-5	Aroclor-1232	43	U
53469-21-9	Aroclor-1242	43	U
12672-29-6	Aroclor-1248	43	U
11097-69-1	Aroclor-1254	43	U
11096-82-5	Aroclor-1260	43	U
37324-23-5	Aroclor-1262	43	U
11100-14-4	Aroclor-1268	43	U

6/12/07

REPORT FROM J86T7RE

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T7

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009015

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A056,20070515B056

% Moisture: 40 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	55	U
11104-28-2	Aroclor-1221	55	U
11141-16-5	Aroclor-1232	55	U
53469-21-9	Aroclor-1242	55	U
12672-29-6	Aroclor-1248	55	U
11097-69-1	Aroclor-1254	30	JS
11096-82-5	Aroclor-1260	55	U
37324-23-5	Aroclor-1262	55	U
11100-14-4	Aroclor-1268	55	U

6/12/07

1H - FORM I ARO

Report

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T7RE

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009015RE

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A072,20070515B072

% Moisture: 40 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/17/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016		U
11104-28-2	Aroclor-1221		U
11141-16-5	Aroclor-1232		U
53469-21-9	Aroclor-1242		U
12672-29-6	Aroclor-1248		U
11097-69-1	Aroclor-1254	33	J
11096-82-5	Aroclor-1260		U
37324-23-5	Aroclor-1262		U
11100-14-4	Aroclor-1268		U

6/12/07

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T8

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009016

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A057,20070515B057

% Moisture: 39 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	54	U
11104-28-2	Aroclor-1221	54	U
11141-16-5	Aroclor-1232	54	U
53469-21-9	Aroclor-1242	54	U
12672-29-6	Aroclor-1248	54	U
11097-69-1	Aroclor-1254	54	U
11096-82-5	Aroclor-1260	54	U
37324-23-5	Aroclor-1262	54	U
11100-14-4	Aroclor-1268	54	U

6/12/07

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86W4

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009017

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A058,20070515B058

% Moisture: 32 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	48	U
11104-28-2	Aroclor-1221	48	U
11141-16-5	Aroclor-1232	48	U
53469-21-9	Aroclor-1242	48	U
12672-29-6	Aroclor-1248	48	U
11097-69-1	Aroclor-1254	48	U
11096-82-5	Aroclor-1260	48	U
37324-23-5	Aroclor-1262	48	U
11100-14-4	Aroclor-1268	48	U

6/12/07

R2Pol

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86W5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009018

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A059,20070515B059

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	52	U
11104-28-2	Aroclor-1221	52	U
11141-16-5	Aroclor-1232	52	U
53469-21-9	Aroclor-1242	52	U
12672-29-6	Aroclor-1248	52	U
11097-69-1	Aroclor-1254	52	U
11096-82-5	Aroclor-1260	52	U
37324-23-5	Aroclor-1262	52	U
11100-14-4	Aroclor-1268	52	U

6/12/07

REPORT FROM J86W5

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86W5RX

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009018RX

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070517A021,20070517B021

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/14/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/18/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	52	U
11104-28-2	Aroclor-1221	52	U
11141-16-5	Aroclor-1232	52	U
53469-21-9	Aroclor-1242	52	U
12672-29-6	Aroclor-1248	52	U
11097-69-1	Aroclor-1254	52	U
11096-82-5	Aroclor-1260	52	U
37324-23-5	Aroclor-1262	52	U
11100-14-4	Aroclor-1268	52	U

6/12/07

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86W6

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009019

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A060,20070515B060

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/17/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	51	U
11104-28-2	Aroclor-1221	51	U
11141-16-5	Aroclor-1232	51	U
53469-21-9	Aroclor-1242	51	U
12672-29-6	Aroclor-1248	51	U
11097-69-1	Aroclor-1254	51	U
11096-82-5	Aroclor-1260	51	U
37324-23-5	Aroclor-1262	51	U
11100-14-4	Aroclor-1268	51	U

6/12/07

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, WA 98101

June 13, 2007

MEMORANDUM

SUBJECT: Data validation report for the Semi-Volatile Organics (SVOCs), Organochlorine Pesticides (Pests) and Polychlorinated Biphenyls (PCBs) analysis of samples from the Drums NE Marine Drive SI Site Case: 36345 SDG: J86R0

FROM: Raymond Wu, QA Chemist
Office of Environmental Assessment 6/13/07

TO: Joanne Labaw, Site Assessment Manager
Office of Environmental Cleanup

CC: Alexis Ande, Start-3 Site Assessment Project Leader
Techlaw, Inc.

The quality assurance (QA) review of 17 soil samples collected from the above referenced site has been completed. The samples were analyzed for SVOCs, Pesticides, and PCBs in accordance with the USEPA Contract Laboratory Program (CLP) Statement of Work (SOW) for Multi-Concentration Organic Analysis (SOM01.1) by Datachem Laboratories, Inc. in Salt Lake City, Utah. The following samples were evaluated in this validation report:

SDG: J86R0

J86R0	J86S5	J86S6	J86S7	J86S8	J86S9
J86T0	J86T1	J86T2	J86T3	J86T4	J86T5
J86T7	J86T8	J86W4	J86W5	J86W6	

DATA QUALIFICATIONS

The following comments refer to the laboratory performance specification outlined in the Quality Assurance Project Plan dated April, 2007, USEPA CLP SOW for Organic Analysis (SOM01.1, 05/2005), and applicable criteria set forth in the USEPA CLP National Functional Guidelines for Organic Data Review (01/2005). Note that some of the analytical data reported may be qualified based on the professional judgment of the data reviewer.

The conclusions presented herein are based on the information provided for the review.

detected in all of the samples. Detected Target compounds in the samples at concentrations less than the CRQLs were qualified as estimated, "J".

Single-component pesticides detected at concentrations with variability of >30% but were <60% between the primary and confirmatory columns, RTXCLP and RTXCLP2, were reported and qualified estimated, "J". Variability >60% were reported as non-detected, "U", at an elevated reporting limits (CRQL) due to chromatographic interferences. When applicable, all of the "J" and "P" qualifiers applied by the laboratory were crossed-out by the reviewer.

Blanks - Acceptable

The frequency of analysis of blanks and surrogate recovery criteria were met by all of the blanks analyzed. There were only trace amount of one target compound (Endrin Aldehyde) detected in some of the pesticide instrument blanks. Since it was substantially lower than the CRQLs and there were no target compounds detected, none of the data was qualified on this basis.

Analytical Sequence - Acceptable

All of the standards, blanks, samples, and QC samples were analyzed in accordance with the SOW specified analytical sequence. The retention times as monitored by the internal standards (SVOCs) and surrogates (Pesticides) were within the specified RT windows. All of the sample analyses were within an acceptable 12 hour QC period and were bracketed by a technically acceptable CCV check standards. None of the data was qualified on this basis.

Surrogates/Deuterated Monitoring Compound Recoveries

Surrogates or deuterated monitoring compounds (DMCs) are known concentrations of isotope-labeled acid and base/neutral or polynuclear hydrocarbon compounds added to the field and QC samples prior to extraction for SVOC analyses to monitor the laboratory's performance and efficiency during sample processing, extraction and analysis. The following is the list of DMCs/surrogates added to all field and QC samples prior to sample extraction:

DMCs (Soil SVOCs)	Recovery Limits (%)	DMCs (Soil SVOCs)	Recovery Limits (%)
Phenol-d5 (PHL)	17-103	Dimethylphthalate-d6 (DMP)	43-111
Bis(2-chloroethyl)ether-d8 (BCE)	12-98	Acenapthylene-d8 (ACY)	20-97
2-chlorophenol-d4 (2CP)	13-101	4-Nitrophenol-d4 (4NP)	16-166
4-Methylphenol-d8 (4MP)	8-100	Fluorene-d10 (FLR)	40-108
Nitrobenzene-d4 (NBZ)	16-103	4,6-Dinitro-2-methylphenol-d2 (NMP)	1-121
2-Nitrophenol-d4 (2NP)	16-104	Anthracene-d10 (ANC)	22-98
2,4-Dichlorophenol-d3 (DCP)	23-104	Pyrene-d10 (PYR)	51-120
4-Chloroaniline-d4 (4CA)	1-145	Benzo(a)pyrene-d12 (BAP)	43-111

spiking mix during the extraction step. The re-extraction confirmed the results from the first extraction were ok and the original results were picked for reporting purpose by the reviewer. None of the pesticide and PCB data were qualified on this basis.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) / Lab Control Spike/Spike Duplicate (LCS/LCSD) - Acceptable

Samples J86R9 was designated for MS/MSD analyses for SVOCs, Pesticides and PCB's. 0 SVOC, 2 of 12 Pesticides, 1 of 2 PCB Matrix Spike or Spike Duplicates were out. Because none of the spiking compounds were detected in any of the samples and the LCS/LCSD was ok, none of the data was qualified by the reviewer on this basis.

Internal Standards - Acceptable

The acceptance criteria for internal standards (IS) are +/−30 seconds for retention time (RT) shifts and -50% to +100% of the IS area as compared to the IS RT and area of the daily continuing calibration standard. All of the results met the IS area and RT shift criteria.

Compound Identification

All of the detected target compounds were within the retention time windows. The SVOC detections met the USEPA spectral matching criteria and were judged to be acceptable. Likewise, the pesticide/PCB detections were confirmed on a second dissimilar column and were acceptable.

Florisil Cartridge Check - Acceptable

The frequency of analysis and the recovery criteria for florisil used during Pesticides/PCB clean-up were met. None of the data were qualified on this basis.

Gel Permeation Chromatography (GPC) Check - Acceptable

The frequency of analysis and the recovery criteria for GPC used during Pesticides/PCB clean-up were met. None of the data were qualified on this basis.

Tentatively Identified Compounds

Chromatographic peaks in the samples' SVOC runs that are not target compounds, surrogates or internal standards with areas > 10% of the nearest IS must be tentatively identified by the laboratory using a mass spectral search of the NIST library.

Common laboratory artifacts and peaks that are found in both the sample and the blanks were crossed out by the reviewer and flagged unusable, "R". The rest of the TICs identified by the lab on the Form I were qualified as tentatively identified at estimated concentrations, "JN", with an unknown bias.

Laboratory Contact

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86R0

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009001

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA04C01

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 19 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 7.4 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
100-52-7	Benzaldehyde	~~62~~ 210	~~J~~ U
108-95-2	Phenol	~~24~~ 210	~~J~~ U
111-44-4	Bis(2-chloroethyl)ether	210	U
95-57-8	2-Chlorophenol	210	U
95-48-7	2-Methylphenol	210	U
108-60-1	2,2'-Oxybis(1-chloropropane)	210	U
98-86-2	Acetophenone	71	J
106-44-5	4-Methylphenol	210	U
621-64-7	N-Nitroso-di-n-propylamine	210	U
67-72-1	Hexachloroethane	210	U
98-95-3	Nitrobenzene	210	U
78-59-1	Isophorone	210	U
88-75-5	2-Nitrophenol	210	U
105-67-9	2,4-Dimethylphenol	210	U
111-91-1	Bis(2-chloroethoxy)methane	210	U
120-83-2	2,4-Dichlorophenol	210	U
91-20-3	Naphthalene	210	U
106-47-8	4-Chloroaniline	210	U
87-68-3	Hexachlorobutadiene	210	U
105-60-2	Caprolactam	210	U
59-50-7	4-Chloro-3-methylphenol	210	U
91-57-6	2-Methylnaphthalene	210	U
77-47-4	Hexachlorocyclopentadiene	210	U
88-06-2	2,4,6-Trichlorophenol	210	U
95-95-4	2,4,5-Trichlorophenol	210	U
92-52-4	1,1'-Biphenyl	210	U
91-58-7	2-Chloronaphthalene	210	U
88-74-4	2-Nitroaniline	410	U
131-11-3	Dimethylphthalate	210	U
606-20-2	2,6-Dinitrotoluene	210	U
208-96-8	Acenaphthylene	210	U
99-09-2	3-Nitroaniline	410	U
83-32-9	Acenaphthene	210	U

6/11/07

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86R0

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009001

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA04C01

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 19 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 7.4 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	410	U
100-02-7	4-Nitrophenol	410	U
132-64-9	Dibenzofuran	210	U
121-14-2	2,4-Dinitrotoluene	210	U
84-66-2	Diethylphthalate	210	U
86-73-7	Fluorene	210	U
7005-72-3	4-Chlorophenyl-phenylether	210	U
100-01-6	4-Nitroaniline	410	U
534-52-1	4,6-Dinitro-2-methylphenol	410	U
86-30-6	N-Nitrosodiphenylamine[1]	210	U
95-94-3	1,2,4,5-Tetrachlorobenzene	210	U
101-55-3	4-Bromophenyl-phenylether	210	U
118-74-1	Hexachlorobenzene	210	U
1912-24-9	Atrazine	210	U
87-86-5	Pentachlorophenol	410	U
85-01-8	Phenanthrene	210	U
120-12-7	Anthracene	210	U
86-74-8	Carbazole	210	U
84-74-2	Di-n-butylphthalate	210	U
206-44-0	Fluoranthene	210	U
129-00-0	Pyrene	210	U
85-68-7	Butylbenzylphthalate	210	U
91-94-1	3,3'-Dichlorobenzidine	210	U
56-55-3	Benzo(a)anthracene	210	U
218-01-9	Chrysene	210	U
117-81-7	Bis(2-ethylhexyl)phthalate	33	J
117-84-0	Di-n-octylphthalate	210	U
205-99-2	Benzo(b)fluoranthene	210	U
207-08-9	Benzo(k)fluoranthene	210	U
50-32-8	Benzo(a)pyrene	210	U
193-39-5	Indeno(1,2,3-cd)pyrene	210	U
53-70-3	Dibenzo(a,h)anthracene	210	U
191-24-2	Benzo(g,h,i)perylene	210	U
58-90-2	2,3,4,6-Tetrachlorophenol	210	U

[1]Cannot be separated from Diphenylamine

6/11/07

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86R0

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009001

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA04C01

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 19 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 7.4 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	79-34-5	Ethane, 1,1,2,2-tetrachloro-	4.02	740	JN
02		Unsaturated Hydrocarbon	4.11	110	JN
03		Polycyclic hydrocarbon	19.15	470	JN
04		Polycyclic hydrocarbon	24.70	250	JN
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A	390	J

[2]EPA-designated Registry Number.

6/11/07

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009002

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA05C02

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 19 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
100-52-7	Benzaldehyde	210 ~~52~~	~~J~~ U
108-95-2	Phenol	210 ~~19~~	~~J~~ U
111-44-4	Bis(2-chloroethyl)ether	210	U
95-57-8	2-Chlorophenol	210	U
95-48-7	2-Methylphenol	210	U
108-60-1	2,2'-Oxybis(1-chloropropane)	210	U
98-86-2	Acetophenone	50	J
106-44-5	4-Methylphenol	210	U
621-64-7	N-Nitroso-di-n-propylamine	210	U
67-72-1	Hexachloroethane	210	U
98-95-3	Nitrobenzene	210	U
78-59-1	Isophorone	210	U
88-75-5	2-Nitrophenol	210	U
105-67-9	2,4-Dimethylphenol	210	U
111-91-1	Bis(2-chloroethoxy)methane	210	U
120-83-2	2,4-Dichlorophenol	210	U
91-20-3	Naphthalene	210	U
106-47-8	4-Chloroaniline	210	U
87-68-3	Hexachlorobutadiene	210	U
105-60-2	Caprolactam	210	U
59-50-7	4-Chloro-3-methylphenol	210	U
91-57-6	2-Methylnaphthalene	210	U
77-47-4	Hexachlorocyclopentadiene	210	U
88-06-2	2,4,6-Trichlorophenol	210	U
95-95-4	2,4,5-Trichlorophenol	210	U
92-52-4	1,1'-Biphenyl	210	U
91-58-7	2-Chloronaphthalene	210	U
88-74-4	2-Nitroaniline	410	U
131-11-3	Dimethylphthalate	210	U
606-20-2	2,6-Dinitrotoluene	210	U
208-96-8	Acenaphthylene	210	U
99-09-2	3-Nitroaniline	410	U
83-32-9	Acenaphthene	210	U

6/11/07

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009002

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA05C02

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 19 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	410	U
100-02-7	4-Nitrophenol	410	U
132-64-9	Dibenzofuran	210	U
121-14-2	2,4-Dinitrotoluene	210	U
84-66-2	Diethylphthalate	210	U
86-73-7	Fluorene	210	U
7005-72-3	4-Chlorophenyl-phenylether	210	U
100-01-6	4-Nitroaniline	410	U
534-52-1	4,6-Dinitro-2-methylphenol	410	U
86-30-6	N-Nitrosodiphenylamine[1]	210	U
95-94-3	1,2,4,5-Tetrachlorobenzene	210	U
101-55-3	4-Bromophenyl-phenylether	210	U
118-74-1	Hexachlorobenzene	210	U
1912-24-9	Atrazine	210	U
87-86-5	Pentachlorophenol	410	U
85-01-8	Phenanthrene	210	U
120-12-7	Anthracene	210	U
86-74-8	Carbazole	210	U
84-74-2	Di-n-butylphthalate	210	U
206-44-0	Fluoranthene	210	U
129-00-0	Pyrene	210	U
85-68-7	Butylbenzylphthalate	210	U
91-94-1	3,3'-Dichlorobenzidine	210	U
56-55-3	Benzo(a)anthracene	210	U
218-01-9	Chrysene	210	U
117-81-7	Bis(2-ethylhexyl)phthalate	31	J
117-84-0	Di-n-octylphthalate	210	U
205-99-2	Benzo(b)fluoranthene	210	U
207-08-9	Benzo(k)fluoranthene	210	U
50-32-8	Benzo(a)pyrene	210	U
193-39-5	Indeno(1,2,3-cd)pyrene	210	U
53-70-3	Dibenzo(a,h)anthracene	210	U
191-24-2	Benzo(g,h,i)perylene	210	U
58-90-2	2,3,4,6-Tetrachlorophenol	210	U

[1]Cannot be separated from Diphenylamine

6/11/07

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86S5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009002

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA05C02

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 19 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	79-34-5	Ethane, 1,1,2,2-tetrachloro-	4.02	660	JN
02		Unsaturated Hydrocarbon	4.11	140	JN
03		Polycyclic hydrocarbon	19.14	390	JN
04		Polycyclic hydrocarbon	24.70	250	JN
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A	610	J

[2]EPA-designated Registry Number.

6/11/07

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S6

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009003

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA06C03

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 38 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
100-52-7	Benzaldehyde	270 ~~53~~	~~J~~ U
108-95-2	Phenol	270 ~~24~~	~~J~~ U
111-44-4	Bis(2-chloroethyl)ether	270	U
95-57-8	2-Chlorophenol	270	U
95-48-7	2-Methylphenol	270	U
108-60-1	2,2'-Oxybis(1-chloropropane)	270	U
98-86-2	Acetophenone	60	J
106-44-5	4-Methylphenol	270	U
621-64-7	N-Nitroso-di-n-propylamine	270	U
67-72-1	Hexachloroethane	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
87-68-3	Hexachlorobutadiene	270	U
105-60-2	Caprolactam	270	U
59-50-7	4-Chloro-3-methylphenol	270	U
91-57-6	2-Methylnaphthalene	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
92-52-4	1,1'-Biphenyl	270	U
91-58-7	2-Chloronaphthalene	270	U
88-74-4	2-Nitroaniline	530	U
131-11-3	Dimethylphthalate	270	U
606-20-2	2,6-Dinitrotoluene	270	U
208-96-8	Acenaphthylene	270	U
99-09-2	3-Nitroaniline	530	U
83-32-9	Acenaphthene	270	U

6/11/07

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S6

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009003

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA06C03

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 38 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	530	U
100-02-7	4-Nitrophenol	530	U
132-64-9	Dibenzofuran	270	U
121-14-2	2,4-Dinitrotoluene	270	U
84-66-2	Diethylphthalate	270	U
86-73-7	Fluorene	270	U
7005-72-3	4-Chlorophenyl-phenylether	270	U
100-01-6	4-Nitroaniline	530	U
534-52-1	4,6-Dinitro-2-methylphenol	530	U
86-30-6	N-Nitrosodiphenylamine[1]	270	U
95-94-3	1,2,4,5-Tetrachlorobenzene	270	U
101-55-3	4-Bromophenyl-phenylether	270	U
118-74-1	Hexachlorobenzene	270	U
1912-24-9	Atrazine	270	U
87-86-5	Pentachlorophenol	530	U
85-01-8	Phenanthrene	270	U
120-12-7	Anthracene	270	U
86-74-8	Carbazole	270	U
84-74-2	Di-n-butylphthalate	270	U
206-44-0	Fluoranthene	270	UJ
129-00-0	Pyrene	270	UJ
85-68-7	Butylbenzylphthalate	270	U
91-94-1	3,3'-Dichlorobenzidine	270	U
56-55-3	Benzo(a)anthracene	270	UJ
218-01-9	Chrysene	270	UJ
117-81-7	Bis(2-ethylhexyl)phthalate	41	J
117-84-0	Di-n-octylphthalate	270	U
205-99-2	Benzo(b)fluoranthene	270	UJ
207-08-9	Benzo(k)fluoranthene	270	UJ
50-32-8	Benzo(a)pyrene	270	UJ
193-39-5	Indeno(1,2,3-cd)pyrene	270	UJ
53-70-3	Dibenzo(a,h)anthracene	270	UJ
191-24-2	Benzo(g,h,i)perylene	270	UJ
58-90-2	2,3,4,6-Tetrachlorophenol	270	U

[1]Cannot be separated from Diphenylamine

6/11/07

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86S6

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009003

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA06C03

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 38 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CONCENTRATION UNITS:(ug/L or ug/kg) ug/kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	79-34-5	Ethane, 1,1,2,2-tetrachloro-	4.01	630	JN
02		Unsaturated Hydrocarbon	4.11	140	JN
03	119-93-7	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimet	13.76	120	JN
04		Polycyclic hydrocarbon	19.14	570	JN
05		Polycyclic hydrocarbon	24.70	390	JN
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A	680	J

[2]EPA-designated Registry Number.

6/11/07

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S7

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009004

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA07C04

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 30 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
100-52-7	Benzaldehyde	240 ~~49~~	J U
108-95-2	Phenol	240 ~~28~~	J U
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	2,2'-Oxybis(1-chloropropane)	240	U
98-86-2	Acetophenone	50	J
106-44-5	4-Methylphenol	240 ~~11~~	J U
621-64-7	N-Nitroso-di-n-propylamine	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
105-67-9	2,4-Dimethylphenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	240	U
87-68-3	Hexachlorobutadiene	240	U
105-60-2	Caprolactam	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	240	U
95-95-4	2,4,5-Trichlorophenol	240	U
92-52-4	1,1'-Biphenyl	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	470	U
131-11-3	Dimethylphthalate	240	U
606-20-2	2,6-Dinitrotoluene	240	U
208-96-8	Acenaphthylene	240	U
99-09-2	3-Nitroaniline	470	U
83-32-9	Acenaphthene	240	U

6/11/07

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S7

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009004

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA07C04

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 30 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	470	U
100-02-7	4-Nitrophenol	470	U
132-64-9	Dibenzofuran	240	U
121-14-2	2,4-Dinitrotoluene	240	U
84-66-2	Diethylphthalate	240	U
86-73-7	Fluorene	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	470	U
534-52-1	4,6-Dinitro-2-methylphenol	470	U
86-30-6	N-Nitrosodiphenylamine[1]	240	U
95-94-3	1,2,4,5-Tetrachlorobenzene	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	240	U
1912-24-9	Atrazine	240	U
87-86-5	Pentachlorophenol	470	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
86-74-8	Carbazole	240	U
84-74-2	Di-n-butylphthalate	240	U
206-44-0	Fluoranthene	240	UJ
129-00-0	Pyrene	240	UJ
85-68-7	Butylbenzylphthalate	~~12~~ 240	~~J~~ U
91-94-1	3,3'-Dichlorobenzidine	240	U
56-55-3	Benzo(a)anthracene	240	UJ
218-01-9	Chrysene	240	UJ
117-81-7	Bis(2-ethylhexyl)phthalate	~~30~~ 240	~~J~~ U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	UJ
207-08-9	Benzo(k)fluoranthene	240	UJ
50-32-8	Benzo(a)pyrene	240	UJ
193-39-5	Indeno(1,2,3-cd)pyrene	240	UJ
53-70-3	Dibenzo(a,h)anthracene	240	UJ
191-24-2	Benzo(g,h,i)perylene	240	UJ
58-90-2	2,3,4,6-Tetrachlorophenol	240	U

[1]Cannot be separated from Diphenylamine

6/11/07

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86S7

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009004

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA07C04

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 30 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	79-34-5	Ethane, 1,1,2,2-tetrachloro-	4.01	580	JN
02		Unsaturated Hydrocarbon	4.10	190	JN
03	19026-94-9	2,5-Methano-1H-indene, octahydro-	15.41	280	JN
04		Polycyclic hydrocarbon	19.14	570	JN
05		Polycyclic hydrocarbon	24.70	300	JN
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A	600	J

[2]EPA-designated Registry Number.

6/11/07

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S8

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009005

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA08C05

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 29 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 5.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
100-52-7	Benzaldehyde	240 ~~44~~	~~J~~ U
108-95-2	Phenol	240 ~~22~~	~~J~~ U
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	2,2'-Oxybis(1-chloropropane)	240	U
98-86-2	Acetophenone	51	J
106-44-5	4-Methylphenol	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
105-67-9	2,4-Dimethylphenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	240	U
87-68-3	Hexachlorobutadiene	240	U
105-60-2	Caprolactam	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	240	U
95-95-4	2,4,5-Trichlorophenol	240	U
92-52-4	1,1'-Biphenyl	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	470	U
131-11-3	Dimethylphthalate	240	U
606-20-2	2,6-Dinitrotoluene	240	U
208-96-8	Acenaphthylene	240	U
99-09-2	3-Nitroaniline	470	U
83-32-9	Acenaphthene	240	U

6/11/07

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S8

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009005

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA08C05

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 29 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 5.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	470	U
100-02-7	4-Nitrophenol	470	U
132-64-9	Dibenzofuran	240	U
121-14-2	2,4-Dinitrotoluene	240	U
84-66-2	Diethylphthalate	240	U
86-73-7	Fluorene	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	470	U
534-52-1	4,6-Dinitro-2-methylphenol	470	U
86-30-6	N-Nitrosodiphenylamine[1]	240	U
95-94-3	1,2,4,5-Tetrachlorobenzene	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	240	U
1912-24-9	Atrazine	240	U
87-86-5	Pentachlorophenol	470	U
85-01-8	Phenanthrene	15	J
120-12-7	Anthracene	240	U
86-74-8	Carbazole	240	U
84-74-2	Di-n-butylphthalate	42	J
206-44-0	Fluoranthene	24	J
129-00-0	Pyrene	16	J
85-68-7	Butylbenzylphthalate	240	U
91-94-1	3,3'-Dichlorobenzidine	240	U
56-55-3	Benzo(a)anthracene	~~12~~ 240	~~J~~ U
218-01-9	Chrysene	15	J
117-81-7	Bis(2-ethylhexyl)phthalate	59	J
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	18	J
207-08-9	Benzo(k)fluoranthene	8.5	J
50-32-8	Benzo(a)pyrene	240	UJ
193-39-5	Indeno(1,2,3-cd)pyrene	240	UJ
53-70-3	Dibenzo(a,h)anthracene	240	UJ
191-24-2	Benzo(g,h,i)perylene	240	UJ
58-90-2	2,3,4,6-Tetrachlorophenol	240	U

[1]Cannot be separated from Diphenylamine

6/11/07

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86S8

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009005

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA08C05

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 29 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 5.3 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	79-34-5	Ethane, 1,1,2,2-tetrachloro-	4.01	610	JN
02		Unsaturated Hydrocarbon	4.11	100	JN
03		Polycyclic hydrocarbon	15.16	100	JN
04	100018-99-0	Benzoxazole, 2-[(2,3-dihydro-3,5-dimethy	15.67	98	JN
05	100013-00-0	Z-17-Nonadecen-1-ol acetate	17.55	130	JN
06		Polycyclic hydrocarbon	19.14	480	JN
07	100013-97-0	3-Methylaminocarbonyl-1,2-diphenyl-cyclo	22.29	170	JN
08	100018-94-0	4,4,6a,6b,8a,11,11,14b-Octamethyl-1,4,4a	23.63	220	JN
09		Polycyclic hydrocarbon	24.50	190	JN
10		Polycyclic hydrocarbon	24.71	310	JN
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A	900	J

[2]EPA-designated Registry Number.

6/11/07

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S9

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009006

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA09C06

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 19 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
100-52-7	Benzaldehyde	210 ~~63~~	~~J~~ U
108-95-2	Phenol	210 ~~46~~	~~J~~ U
111-44-4	Bis(2-chloroethyl)ether	210	U
95-57-8	2-Chlorophenol	210	U
95-48-7	2-Methylphenol	210	U
108-60-1	2,2'-Oxybis(1-chloropropane)	210	U
98-86-2	Acetophenone	140	J
106-44-5	4-Methylphenol	200	J
621-64-7	N-Nitroso-di-n-propylamine	210	U
67-72-1	Hexachloroethane	210	U
98-95-3	Nitrobenzene	210	U
78-59-1	Isophorone	210	U
88-75-5	2-Nitrophenol	210	U
105-67-9	2,4-Dimethylphenol	210	U
111-91-1	Bis(2-chloroethoxy)methane	210	U
120-83-2	2,4-Dichlorophenol	210	U
91-20-3	Naphthalene	210	U
106-47-8	4-Chloroaniline	210	U
87-68-3	Hexachlorobutadiene	210	U
105-60-2	Caprolactam	210	U
59-50-7	4-Chloro-3-methylphenol	210	U
91-57-6	2-Methylnaphthalene	210	U
77-47-4	Hexachlorocyclopentadiene	210	U
88-06-2	2,4,6-Trichlorophenol	210	U
95-95-4	2,4,5-Trichlorophenol	210	U
92-52-4	1,1'-Biphenyl	210	U
91-58-7	2-Chloronaphthalene	210	U
88-74-4	2-Nitroaniline	410	U
131-11-3	Dimethylphthalate	14	J
606-20-2	2,6-Dinitrotoluene	210	U
208-96-8	Acenaphthylene	210	U
99-09-2	3-Nitroaniline	410	U
83-32-9	Acenaphthene	210	U

6/11/07

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S9

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009006

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA09C06

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 19 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	410	U
100-02-7	4-Nitrophenol	410	U
132-64-9	Dibenzofuran	210	U
121-14-2	2,4-Dinitrotoluene	210	U
84-66-2	Diethylphthalate	210	U
86-73-7	Fluorene	210	U
7005-72-3	4-Chlorophenyl-phenylether	210	U
100-01-6	4-Nitroaniline	410	U
534-52-1	4,6-Dinitro-2-methylphenol	410	U
86-30-6	N-Nitrosodiphenylamine[1]	210	U
95-94-3	1,2,4,5-Tetrachlorobenzene	210	U
101-55-3	4-Bromophenyl-phenylether	210	U
118-74-1	Hexachlorobenzene	210	U
1912-24-9	Atrazine	210	U
87-86-5	Pentachlorophenol	410	U
85-01-8	Phenanthrene	9.3	J
120-12-7	Anthracene	210	U
86-74-8	Carbazole	210	U
84-74-2	Di-n-butylphthalate	43	J
206-44-0	Fluoranthene	15	J
129-00-0	Pyrene	12	J
85-68-7	Butylbenzylphthalate	210	U
91-94-1	3,3'-Dichlorobenzidine	210	U
56-55-3	Benzo(a)anthracene	210 ~~8.4~~	~~J~~ U
218-01-9	Chrysene	9.8	J
117-81-7	Bis(2-ethylhexyl)phthalate	99	J
117-84-0	Di-n-octylphthalate	210	U
205-99-2	Benzo(b)fluoranthene	210	UJ
207-08-9	Benzo(k)fluoranthene	210	UJ
50-32-8	Benzo(a)pyrene	210	UJ
193-39-5	Indeno(1,2,3-cd)pyrene	210	UJ
53-70-3	Dibenzo(a,h)anthracene	210	UJ
191-24-2	Benzo(g,h,i)perylene	210	UJ
58-90-2	2,3,4,6-Tetrachlorophenol	210	U

[1]Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86S9

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009006

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA09C06

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 19 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	79-34-5	Ethane, 1,1,2,2-tetrachloro-	4.02	740	JN
02		Cyclic hydrocarbon	4.07	170	JN
03	103-82-2	Benzeneacetic acid	6.57	120	JN
04	544-63-8	Tetradecanoic acid	11.14	280	JN
05	102608-53-7	3,7,11,15-Tetramethyl-2-hexadecen-1-ol	12.16	230	JN
06	112-62-9	9-Octadecenoic acid (Z)-, methyl ester	12.34	180	JN
07	7132-64-1	Pentadecanoic acid, methyl ester	12.50	220	JN
08	100012-92-0	Z-11-Tetradecenoic acid	12.63	560	JN
09	57-10-3	n-Hexadecanoic acid	12.77	1200	JN
10		Unknown aromatic	13.09	120	JN
11		Unknown oxyhydrocarbon	13.23	130	JN
12	69009-90-1	1,1'-Biphenyl, bis(1-methylethyl)-	13.89	220	JN
13	100012-92-0	Z-8-Methyl-9-tetradecenoic acid	13.95	220	JN
14	18801-00-8	Anthracene, 2-(1,1-dimethylethyl)-	14.55	86	JN
15	511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	14.97	84	JN
16	18435-45-5	1-Nonadecene	16.27	410	JN
17	100012-91-0	E-15-Heptadecenal	16.47	220	JN
18		Unknown oxyhydrocarbon	16.70	120	JN
19	22412-97-1	Dodecanoic acid, tetradecyl ester	16.83	420	JN
20		Unknown oxyhydrocarbon	17.06	360	JN
21	1639-05-0	2-Pentanethiol, 4-methyl-	17.30	130	JN
22	4602-84-0	2,6,10-Dodecatrien-1-ol, 3,7,11-trimethy	17.38	100	JN
23		Unknown oxyhydrocarbon	17.47	210	JN
24	638-66-4	Octadecanal	17.54	630	JN
25	78563-70-9	3-Ethyl-2-methyl-6-n-propyl-4-(2-furyl)p	18.22	160	JN
26	638-66-4	Octadecanal	19.28	400	JN
27	100020-97-0	17-(1,5-Dimethylhexyl)-10,13-dimethyl-2,	20.59	360	JN
28	83-47-6	.gamma.-Sitosterol	23.37	660	JN
29	471-68-1	Olean-12-ene	23.64	470	JN
30	19890-84-7	Longifolenaldehyde	24.51	800	JN
	E966796[2]	Total Alkanes	N/A	2900	JN

[2]EPA-designated Registry Number.

6/11/07

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T0

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009007

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA10C07

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 40 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 5.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
100-52-7	Benzaldehyde	280 ~~75~~	~~J~~ U
108-95-2	Phenol	280 ~~28~~	~~J~~ U
111-44-4	Bis(2-chloroethyl)ether	280	U
95-57-8	2-Chlorophenol	280	U
95-48-7	2-Methylphenol	280	U
108-60-1	2,2'-Oxybis(1-chloropropane)	280	U
98-86-2	Acetophenone	56	J
106-44-5	4-Methylphenol	280	U
621-64-7	N-Nitroso-di-n-propylamine	280	U
67-72-1	Hexachloroethane	280	U
98-95-3	Nitrobenzene	280	U
78-59-1	Isophorone	280	U
88-75-5	2-Nitrophenol	280	U
105-67-9	2,4-Dimethylphenol	280	U
111-91-1	Bis(2-chloroethoxy)methane	280	U
120-83-2	2,4-Dichlorophenol	280	U
91-20-3	Naphthalene	280	U
106-47-8	4-Chloroaniline	280	U
87-68-3	Hexachlorobutadiene	280	U
105-60-2	Caprolactam	280	U
59-50-7	4-Chloro-3-methylphenol	280	U
91-57-6	2-Methylnaphthalene	280	U
77-47-4	Hexachlorocyclopentadiene	280	U
88-06-2	2,4,6-Trichlorophenol	280	U
95-95-4	2,4,5-Trichlorophenol	280	U
92-52-4	1,1'-Biphenyl	280	U
91-58-7	2-Chloronaphthalene	280	U
88-74-4	2-Nitroaniline	550	U
131-11-3	Dimethylphthalate	280	U
606-20-2	2,6-Dinitrotoluene	280	U
208-96-8	Acenaphthylene	280	U
99-09-2	3-Nitroaniline	550	U
83-32-9	Acenaphthene	280	U

6/11/07

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T0

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009007

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA10C07

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 40 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 5.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	550	U
100-02-7	4-Nitrophenol	550	U
132-64-9	Dibenzofuran	280	U
121-14-2	2,4-Dinitrotoluene	280	U
84-66-2	Diethylphthalate	280	U
86-73-7	Fluorene	280	U
7005-72-3	4-Chlorophenyl-phenylether	280	U
100-01-6	4-Nitroaniline	550	U
534-52-1	4,6-Dinitro-2-methylphenol	550	U
86-30-6	N-Nitrosodiphenylamine[1]	280	U
95-94-3	1,2,4,5-Tetrachlorobenzene	280	U
101-55-3	4-Bromophenyl-phenylether	280	U
118-74-1	Hexachlorobenzene	280	U
1912-24-9	Atrazine	280	U
87-86-5	Pentachlorophenol	550	U
85-01-8	Phenanthrene	280	U
120-12-7	Anthracene	280	U
86-74-8	Carbazole	280	U
84-74-2	Di-n-butylphthalate	21	J
206-44-0	Fluoranthene	280	UJ
129-00-0	Pyrene	280	UJ
85-68-7	Butylbenzylphthalate	14	J
91-94-1	3,3'-Dichlorobenzidine	280	U
56-55-3	Benzo(a)anthracene	280	UJ
218-01-9	Chrysene	280	UJ
117-81-7	Bis(2-ethylhexyl)phthalate	41	J
117-84-0	Di-n-octylphthalate	280	U
205-99-2	Benzo(b)fluoranthene	280	UJ
207-08-9	Benzo(k)fluoranthene	280	UJ
50-32-8	Benzo(a)pyrene	280	UJ
193-39-5	Indeno(1,2,3-cd)pyrene	280	UJ
53-70-3	Dibenzo(a,h)anthracene	280	UJ
191-24-2	Benzo(g,h,i)perylene	280	UJ
58-90-2	2,3,4,6-Tetrachlorophenol	280	U

[1]Cannot be separated from Diphenylamine

5/11/07

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86T0

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009007

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA10C07

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 40 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 5.9 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	79-34-5	Ethane, 1,1,2,2-tetrachloro-	4.01	720	JN
02		Unsaturated Hydrocarbon	4.11	160	JN
03		Unknown aromatic	7.18	260	JBN
04		Unsaturated Hydrocarbon	7.40	210	JN
05	4706-81-4	2-Tetradecanol	12.27	1300	JN
06		Unknown amide	12.87	130	JN
07	629-54-9	Hexadecanamide	14.17	130	JN
08	90949-53-4	7-Nonenamide	15.06	1600	JN
09	143-22-6	Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]-	15.40	150	JN
10		Polycyclic hydrocarbon	19.14	490	JN
11		Polycyclic hydrocarbon	24.70	440	JN
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A	3200	J

[2] EPA-designated Registry Number.

6/11/07

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T1

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009010

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA14C10

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 33 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
100-52-7	Benzaldehyde	250 ~~71~~	J U
108-95-2	Phenol	250 ~~35~~	J U
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	2,2'-Oxybis(1-chloropropane)	250	U
98-86-2	Acetophenone	77	J
106-44-5	4-Methylphenol	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
105-67-9	2,4-Dimethylphenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	250	U
87-68-3	Hexachlorobutadiene	250	U
105-60-2	Caprolactam	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	250	U
95-95-4	2,4,5-Trichlorophenol	250	U
92-52-4	1,1'-Biphenyl	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	490	U
131-11-3	Dimethylphthalate	250	U
606-20-2	2,6-Dinitrotoluene	250	U
208-96-8	Acenaphthylene	250	U
99-09-2	3-Nitroaniline	490	U
83-32-9	Acenaphthene	250	U

6/11/07

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T1

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009010

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA14C10

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 33 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	490	U
100-02-7	4-Nitrophenol	490	U
132-64-9	Dibenzofuran	250	U
121-14-2	2,4-Dinitrotoluene	250	U
84-66-2	Diethylphthalate	250	U
86-73-7	Fluorene	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	490	U
534-52-1	4,6-Dinitro-2-methylphenol	490	U
86-30-6	N-Nitrosodiphenylamine[1]	250	U
95-94-3	1,2,4,5-Tetrachlorobenzene	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	250	U
1912-24-9	Atrazine	250	U
87-86-5	Pentachlorophenol	490	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
86-74-8	Carbazole	250	U
84-74-2	Di-n-butylphthalate	67	J
206-44-0	Fluoranthene	13	J
129-00-0	Pyrene	21	J
85-68-7	Butylbenzylphthalate	250	U
91-94-1	3,3'-Dichlorobenzidine	250	U
56-55-3	Benzo(a)anthracene	12	J
218-01-9	Chrysene	13	J
117-81-7	Bis(2-ethylhexyl)phthalate	77	J
117-84-0	Di-n-octylphthalate	250	U
205-99-2	Benzo(b)fluoranthene	15	J
207-08-9	Benzo(k)fluoranthene	250	U
50-32-8	Benzo(a)pyrene	250	U
193-39-5	Indeno(1,2,3-cd)pyrene	250	U
53-70-3	Dibenzo(a,h)anthracene	250	U
191-24-2	Benzo(g,h,i)perylene	250	U
58-90-2	2,3,4,6-Tetrachlorophenol	250	U

[1]Cannot be separated from Diphenylamine

6/11/07

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86T1

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009010

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAA14C10

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 33 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/09/2007

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	79-34-5	Ethane, 1,1,2,2-tetrachloro-	4.03	530	JN
02		Unsaturated Hydrocarbon	4.11	110	JN
03	2416-20-8	Hexadecenoic acid, Z-11-	12.62	320	JN
04	57-10-3	n-Hexadecanoic acid	12.76	310	JN
05		Unknown oxyhydrocarbon	16.84	150	JN
06	67860-04-2	Oxirane, heptadecyl-	17.54	210	JN
07		Polycyclic hydrocarbon	19.14	530	JN
08		Unknown oxyhydrocarbon	19.27	120	JN
09		Polycyclic hydrocarbon	24.49	160	JN
10		Polycyclic hydrocarbon	24.70	470	JN
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A	1100	J

[2]EPA-designated Registry Number.

6/11/07

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T2

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009011

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB05C11

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
100-52-7	Benzaldehyde	~~260~~ ~~86~~	~~J~~ U
108-95-2	Phenol	260	U
111-44-4	Bis(2-chloroethyl)ether	260	U
95-57-8	2-Chlorophenol	260	U
95-48-7	2-Methylphenol	260	U
108-60-1	2,2'-Oxybis(1-chloropropane)	260	U
98-86-2	Acetophenone	54	J
106-44-5	4-Methylphenol	260	U
621-64-7	N-Nitroso-di-n-propylamine	260	U
67-72-1	Hexachloroethane	260	U
98-95-3	Nitrobenzene	260	U
78-59-1	Isophorone	260	U
88-75-5	2-Nitrophenol	260	U
105-67-9	2,4-Dimethylphenol	260	U
111-91-1	Bis(2-chloroethoxy)methane	260	U
120-83-2	2,4-Dichlorophenol	260	U
91-20-3	Naphthalene	260	U
106-47-8	4-Chloroaniline	260	U
87-68-3	Hexachlorobutadiene	260	U
105-60-2	Caprolactam	260	U
59-50-7	4-Chloro-3-methylphenol	260	U
91-57-6	2-Methylnaphthalene	260	U
77-47-4	Hexachlorocyclopentadiene	260	U
88-06-2	2,4,6-Trichlorophenol	260	U
95-95-4	2,4,5-Trichlorophenol	260	U
92-52-4	1,1'-Biphenyl	260	U
91-58-7	2-Chloronaphthalene	260	U
88-74-4	2-Nitroaniline	510	U
131-11-3	Dimethylphthalate	260	U
606-20-2	2,6-Dinitrotoluene	260	U
208-96-8	Acenaphthylene	260	U
99-09-2	3-Nitroaniline	510	U
83-32-9	Acenaphthene	260	U

6/11/07

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T2

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009011

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB05C11

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	510	UJ
100-02-7	4-Nitrophenol	510	U
132-64-9	Dibenzofuran	260	U
121-14-2	2,4-Dinitrotoluene	260	U
84-66-2	Diethylphthalate	260	U
86-73-7	Fluorene	260	U
7005-72-3	4-Chlorophenyl-phenylether	260	U
100-01-6	4-Nitroaniline	510	U
534-52-1	4,6-Dinitro-2-methylphenol	510	U
86-30-6	N-Nitrosodiphenylamine[1]	260	U
95-94-3	1,2,4,5-Tetrachlorobenzene	260	U
101-55-3	4-Bromophenyl-phenylether	260	U
118-74-1	Hexachlorobenzene	260	U
1912-24-9	Atrazine	260	U
87-86-5	Pentachlorophenol	510	U
85-01-8	Phenanthrene	260	U
120-12-7	Anthracene	260	U
86-74-8	Carbazole	260	U
84-74-2	Di-n-butylphthalate	260	U
206-44-0	Fluoranthene	260	U
129-00-0	Pyrene	260	U
85-68-7	Butylbenzylphthalate	13	J
91-94-1	3,3'-Dichlorobenzidine	260	U
56-55-3	Benzo(a)anthracene	260	U
218-01-9	Chrysene	260	U
117-81-7	Bis(2-ethylhexyl)phthalate	39	J
117-84-0	Di-n-octylphthalate	260	U
205-99-2	Benzo(b)fluoranthene	260	U
207-08-9	Benzo(k)fluoranthene	260	U
50-32-8	Benzo(a)pyrene	260	U
193-39-5	Indeno(1,2,3-cd)pyrene	260	U
53-70-3	Dibenzo(a,h)anthracene	260	U
191-24-2	Benzo(g,h,i)perylene	260	U
58-90-2	2,3,4,6-Tetrachlorophenol	260	U

[1]Cannot be separated from Diphenylamine

6/11/07

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86T2

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009011

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB05C11

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

CONCENTRATION UNITS:(ug/L or ug/kg) ug/kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	79-34-5	Ethane, 1,1,2,2-tetrachloro-	4.01	260	JN
02		Polycyclic hydrocarbon	19.17	600	JN
03		Polycyclic hydrocarbon	24.78	490	JN
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A	550	J

[2]EPA-designated Registry Number.

6/11/07

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T3

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009012

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB06C12

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 37 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 7.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
100-52-7	Benzaldehyde	~~270~~ 50	~~J~~ U
108-95-2	Phenol	270	U
111-44-4	Bis(2-chloroethyl)ether	270	U
95-57-8	2-Chlorophenol	270	U
95-48-7	2-Methylphenol	270	U
108-60-1	2,2'-Oxybis(1-chloropropane)	270	U
98-86-2	Acetophenone	45	J
106-44-5	4-Methylphenol	270	U
621-64-7	N-Nitroso-di-n-propylamine	270	U
67-72-1	Hexachloroethane	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
87-68-3	Hexachlorobutadiene	270	U
105-60-2	Caprolactam	270	U
59-50-7	4-Chloro-3-methylphenol	270	U
91-57-6	2-Methylnaphthalene	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
92-52-4	1,1'-Biphenyl	270	U
91-58-7	2-Chloronaphthalene	270	U
88-74-4	2-Nitroaniline	520	U
131-11-3	Dimethylphthalate	270	U
606-20-2	2,6-Dinitrotoluene	270	U
208-96-8	Acenaphthylene	270	U
99-09-2	3-Nitroaniline	520	U
83-32-9	Acenaphthene	270	U

6/11/07

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T3

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009012

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB06C12

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 37 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 7.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	520	UJ
100-02-7	4-Nitrophenol	520	U
132-64-9	Dibenzofuran	270	U
121-14-2	2,4-Dinitrotoluene	270	U
84-66-2	Diethylphthalate	270	U
86-73-7	Fluorene	270	U
7005-72-3	4-Chlorophenyl-phenylether	270	U
100-01-6	4-Nitroaniline	520	U
534-52-1	4,6-Dinitro-2-methylphenol	520	U
86-30-6	N-Nitrosodiphenylamine[1]	270	U
95-94-3	1,2,4,5-Tetrachlorobenzene	270	U
101-55-3	4-Bromophenyl-phenylether	270	U
118-74-1	Hexachlorobenzene	270	U
1912-24-9	Atrazine	270	U
87-86-5	Pentachlorophenol	520	U
85-01-8	Phenanthrene	270	U
120-12-7	Anthracene	270	U
86-74-8	Carbazole	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	23	J
117-84-0	Di-n-octylphthalate	270	U
205-99-2	Benzo(b)fluoranthene	270	U
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	Dibenzo(a,h)anthracene	270	U
191-24-2	Benzo(g,h,i)perylene	270	U
58-90-2	2,3,4,6-Tetrachlorophenol	270	U

[1]Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86T3

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009012

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB06C12

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 37 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 7.8 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	79-34-5	Ethane, 1,1,2,2-tetrachloro-	4.01	460	JN
02		Polycyclic hydrocarbon	19.17	620	JN
03		Polycyclic hydrocarbon	24.77	640	JN
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A	400	J

[2]EPA-designated Registry Number.

6/11/07

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T4

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009013

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB07C13

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 32 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
100-52-7	Benzaldehyde	~~250~~ 66	~~J~~ U
108-95-2	Phenol	250	U
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	2,2'-Oxybis(1-chloropropane)	250	U
98-86-2	Acetophenone	52	J
106-44-5	4-Methylphenol	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
105-67-9	2,4-Dimethylphenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	250	U
87-68-3	Hexachlorobutadiene	250	U
105-60-2	Caprolactam	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	250	U
95-95-4	2,4,5-Trichlorophenol	250	U
92-52-4	1,1'-Biphenyl	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	490	U
131-11-3	Dimethylphthalate	250	U
606-20-2	2,6-Dinitrotoluene	250	U
208-96-8	Acenaphthylene	250	U
99-09-2	3-Nitroaniline	490	U
83-32-9	Acenaphthene	250	U

6/11/07

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T4

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009013

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB07C13

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 32 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	490	UJ
100-02-7	4-Nitrophenol	490	U
132-64-9	Dibenzofuran	250	U
121-14-2	2,4-Dinitrotoluene	250	U
84-66-2	Diethylphthalate	250	U
86-73-7	Fluorene	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	490	U
534-52-1	4,6-Dinitro-2-methylphenol	490	U
86-30-6	N-Nitrosodiphenylamine[1]	250	U
95-94-3	1,2,4,5-Tetrachlorobenzene	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	250	U
1912-24-9	Atrazine	250	U
87-86-5	Pentachlorophenol	490	U
85-01-8	Phenanthrene	12	J
120-12-7	Anthracene	250	U
86-74-8	Carbazole	250	U
84-74-2	Di-n-butylphthalate	250	U
206-44-0	Fluoranthene	21	J
129-00-0	Pyrene	19	J
85-68-7	Butylbenzylphthalate	250	U
91-94-1	3,3'-Dichlorobenzidine	250	U
56-55-3	Benzo(a)anthracene	~~250~~ 9.2	~~J~~ U
218-01-9	Chrysene	11	J
117-81-7	Bis(2-ethylhexyl)phthalate	49	J
117-84-0	Di-n-octylphthalate	250	U
205-99-2	Benzo(b)fluoranthene	14	J
207-08-9	Benzo(k)fluoranthene	250	U
50-32-8	Benzo(a)pyrene	250	U
193-39-5	Indeno(1,2,3-cd)pyrene	250	U
53-70-3	Dibenzo(a,h)anthracene	250	U
191-24-2	Benzo(g,h,i)perylene	250	U
58-90-2	2,3,4,6-Tetrachlorophenol	250	U

[1]Cannot be separated from Diphenylamine

6/11/07

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86T4

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009013

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB07C13

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 32 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	79-34-5	Ethane, 1,1,2,2-tetrachloro-	4.02	450	JN
02	2416-20-8	Hexadecenoic acid, Z-11-	12.63	320	JN
03	57-10-3	n-Hexadecanoic acid	12.76	220	JN
04		Unknown oxyhydrocarbon	15.98	140	JN
05		Unknown oxyhydrocarbon	16.30	130	JN
06		Unknown oxyhydrocarbon	16.86	120	JN
07	91-76-9	1,3,5-Triazine-2,4-diamine, 6-phenyl-	17.09	140	JN
08		Unknown oxyhydrocarbon	17.58	100	JN
09		Polycyclic hydrocarbon	19.18	520	JN
10		Polycyclic hydrocarbon	24.54	110	JN
11		Polycyclic hydrocarbon	24.78	400	JN
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A	990	J

[2]EPA-designated Registry Number.

6/11/07

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009014

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB08C14

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 23 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
100-52-7	Benzaldehyde	220 ~~41~~	~~J~~ U
108-95-2	Phenol	220	U
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
95-48-7	2-Methylphenol	220	U
108-60-1	2,2'-Oxybis(1-chloropropane)	220	U
98-86-2	Acetophenone	41	J
106-44-5	4-Methylphenol	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
105-67-9	2,4-Dimethylphenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
91-20-3	Naphthalene	220	U
106-47-8	4-Chloroaniline	220	U
87-68-3	Hexachlorobutadiene	220	U
105-60-2	Caprolactam	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U
88-06-2	2,4,6-Trichlorophenol	220	U
95-95-4	2,4,5-Trichlorophenol	220	U
92-52-4	1,1'-Biphenyl	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	430	U
131-11-3	Dimethylphthalate	220	U
606-20-2	2,6-Dinitrotoluene	220	U
208-96-8	Acenaphthylene	220	U
99-09-2	3-Nitroaniline	430	U
83-32-9	Acenaphthene	220	U

6/11/07

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009014

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB08C14

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 23 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	430	UJ
100-02-7	4-Nitrophenol	430	U
132-64-9	Dibenzofuran	220	U
121-14-2	2,4-Dinitrotoluene	220	U
84-66-2	Diethylphthalate	220	U
86-73-7	Fluorene	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	430	U
534-52-1	4,6-Dinitro-2-methylphenol	430	U
86-30-6	N-Nitrosodiphenylamine[1]	220	U
95-94-3	1,2,4,5-Tetrachlorobenzene	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	220	U
1912-24-9	Atrazine	220	U
87-86-5	Pentachlorophenol	430	U
85-01-8	Phenanthrene	220	U
120-12-7	Anthracene	220	U
86-74-8	Carbazole	220	U
84-74-2	Di-n-butylphthalate	8.8	J
206-44-0	Fluoranthene	220	U
129-00-0	Pyrene	220	U
85-68-7	Butylbenzylphthalate	9.4	J
91-94-1	3,3'-Dichlorobenzidine	220	U
56-55-3	Benzo(a)anthracene	220	U
218-01-9	Chrysene	220	U
117-81-7	Bis(2-ethylhexyl)phthalate	20	J
117-84-0	Di-n-octylphthalate	220	U
205-99-2	Benzo(b)fluoranthene	220	U
207-08-9	Benzo(k)fluoranthene	220	U
50-32-8	Benzo(a)pyrene	220	U
193-39-5	Indeno(1,2,3-cd)pyrene	220	U
53-70-3	Dibenzo(a,h)anthracene	220	U
191-24-2	Benzo(g,h,i)perylene	220	U
58-90-2	2,3,4,6-Tetrachlorophenol	220	U

[1]Cannot be separated from Diphenylamine

5/11/07

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86T5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009014

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAB08C14

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 23 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/10/2007

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	79-34-5	Ethane, 1,1,2,2-tetrachloro-	4.01	220	JN
02		Polycyclic hydrocarbon	19.17	260	JN
03		Polycyclic hydrocarbon	24.76	230	JN
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

6/11/07

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T7

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009015

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NAF04C15

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 40 Decanted: (Y/N) N Date Received: 04/30/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/01/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/15/2007

GPC Cleanup: (Y/N) Y pH: 7.4 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
100-52-7	Benzaldehyde	280 ~~52~~	~~J~~ U
108-95-2	Phenol	280 ~~68~~	~~J~~ U
111-44-4	Bis(2-chloroethyl)ether	280	U
95-57-8	2-Chlorophenol	280	U
95-48-7	2-Methylphenol	280	U
108-60-1	2,2'-Oxybis(1-chloropropane)	280	U
98-86-2	Acetophenone	48	J
106-44-5	4-Methylphenol	280	U
621-64-7	N-Nitroso-di-n-propylamine	280	U
67-72-1	Hexachloroethane	280	U
98-95-3	Nitrobenzene	280	U
78-59-1	Isophorone	280	U
88-75-5	2-Nitrophenol	280	U
105-67-9	2,4-Dimethylphenol	280	U
111-91-1	Bis(2-chloroethoxy)methane	280	U
120-83-2	2,4-Dichlorophenol	280	U
91-20-3	Naphthalene	280	U
106-47-8	4-Chloroaniline	280	U
87-68-3	Hexachlorobutadiene	280	U
105-60-2	Caprolactam	280	U
59-50-7	4-Chloro-3-methylphenol	280	U
91-57-6	2-Methylnaphthalene	280	U
77-47-4	Hexachlorocyclopentadiene	280	U
88-06-2	2,4,6-Trichlorophenol	280	U
95-95-4	2,4,5-Trichlorophenol	280	U
92-52-4	1,1'-Biphenyl	280	U
91-58-7	2-Chloronaphthalene	280	U
88-74-4	2-Nitroaniline	550	U
131-11-3	Dimethylphthalate	280	U
606-20-2	2,6-Dinitrotoluene	280	U
208-96-8	Acenaphthylene	280	U
99-09-2	3-Nitroaniline	550	U
83-32-9	Acenaphthene	280	U

6/11/07

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, WA 98101

June 4, 2007

MEMORANDUM

SUBJECT: Data validation report for the Semi-Volatile Organics (SVOCs), Organochlorine Pesticides (Pests) and Polychlorinated Biphenyls (PCBs) analysis of samples from the Drums NE Marine Drive SI Site Case: 36345 SDG: J86R1

FROM: Raymond Wu, QA Chemist
Office of Environmental Assessment 6/4/07

TO: Joanne Labaw, Site Assessment Manager
Office of Environmental Cleanup

CC: Alexis Ande, Start-3 Site Assessment Project Leader
Techlaw, Inc.

The quality assurance (QA) review of six soil and two water samples collected from the above referenced site has been completed. The samples were analyzed for SVOCs, Pesticides, and PCBs in accordance with the USEPA Contract Laboratory Program (CLP) Statement of Work (SOW) for Multi-Concentration Organic Analysis (SOM01.1) by Datachem Laboratories, Inc. in Salt Lake City, Utah. The following samples were evaluated in this validation report:

SDG: J86R1

J86R1	J86R2	J86R3	J86R4	J86R5	J86T6
J86T9	J86W1				

DATA QUALIFICATIONS

The following comments refer to the laboratory performance specification outlined in the Quality Assurance Project Plan dated April, 2007, USEPA CLP SOW for Organic Analysis (SOM01.1, 05/2005), and applicable criteria set forth in the USEPA CLP National Functional Guidelines for Organic Data Review (01/2005). Note that some of the analytical data reported may be qualified based on the professional judgment of the data reviewer.

The conclusions presented herein are based on the information provided for the review.

Holding Time - Acceptable

All of the samples met the extraction and analytical holding time criteria for SVOC,

Analytical Sequence - Acceptable

All of the standards, blanks, samples, and QC samples were analyzed in accordance with the SOW specified analytical sequence. The retention times as monitored by the internal standards (SVOCs) and surrogates (Pesticides) were within the specified RT windows. All of the sample analyses were within an acceptable 12 hour QC period and were bracketed by a technically acceptable CCV check standards. None of the data was qualified on this basis.

Surrogates/Deuterated Monitoring Compound Recoveries - Acceptable

Surrogates or deuterated monitoring compounds (DMCs) are known concentrations of isotope-labeled acid and base/neutral or polynuclear hydrocarbon compounds added to the field and QC samples prior to extraction for SVOC analyses to monitor the laboratory's performance and efficiency during sample processing, extraction and analysis. The following is the list of DMCs/surrogates added to all field and QC samples prior to sample extraction:

DMCs (Water SVOCs)	Recovery Limits (%)	DMCs (Water SVOCs)	Recovery Limits (%)
Phenol-d5 (PHL)	39-106	Dimethylphthalate-d6 (DMP)	47-114
Bis(2-chloroethyl)ether-d8 (BCE)	40-105	Acenapthylene-d8 (ACY)	41-107
2-chlorophenol-d4 (2CP)	41-106	4-Nitrophenol-d4 (4NP)	33-116
4-Methylphenol-d8 (4MP)	25-111	Fluorene-d10 (FLR)	42-111
Nitrobenzene-d4 (NBZ)	43-108	4,6-Dinitro-2-methylphenol-d2 (NMP)	22-104
2-Nitrophenol-d4 (2NP)	40-108	Anthracene-d10 (ANC)	44-110
2,4-Dichlorophenol-d3 (DCP)	37-105	Pyrene-d10 (PYR)	52-119
4-Chloroaniline-d4 (4CA)	1-145	Benzo(a)pyrene-d12 (BAP)	32-121

DMCs (Soil SVOCs)	Recovery Limits (%)	DMCs (Soil SVOCs)	Recovery Limits (%)
Phenol-d5 (PHL)	17-103	Dimethylphthalate-d6 (DMP)	43-111
Bis(2-chloroethyl)ether-d8 (BCE)	12-98	Acenapthylene-d8 (ACY)	20-97
2-chlorophenol-d4 (2CP)	13-101	4-Nitrophenol-d4 (4NP)	16-166
4-Methylphenol-d8 (4MP)	8-100	Fluorene-d10 (FLR)	40-108
Nitrobenzene-d4 (NBZ)	16-103	4,6-Dinitro-2-methylphenol-d2 (NMP)	1-121
2-Nitrophenol-d4 (2NP)	16-104	Anthracene-d10 (ANC)	22-98
2,4-Dichlorophenol-d3 (DCP)	23-104	Pyrene-d10 (PYR)	51-120

Tentatively Identified Compounds

Chromatographic peaks in the samples' SVOC runs that are not target compounds, surrogates or internal standards with areas > 10% of the nearest IS must be tentatively identified by the laboratory using a mass spectral search of the NIST library.

Common laboratory artifacts and peaks that are found in both the sample and the blanks were crossed out by the reviewer and flagged unusable, "R". The rest of the TICs identified by the lab on the Form I were qualified as tentatively identified at estimated concentrations, "JN", with an unknown bias.

Laboratory Contact

The laboratory was not contacted for this review.

Overall Assessment

The total number of data points was 776. As the result of the data validation, data results were qualified as follows: 2.6% of the total data points were qualified as non-detects, "U".

The data, as qualified, are acceptable and can be used for all purposes.

Data Qualifiers		
	U	The analyte was not detected at or above the reported result.
	J	The analyte was positively identified. The associated numerical result is an estimate.
	UJ	The analyte was not detected at or above the reported estimated result. The associated numerical value is an estimate of the quantitation limit of the analyte in this sample.
	R	The data are unusable for all purposes.
	N	There is evidence the analyte is present in this sample.
	JN	There is evidence that the analyte is present. The associated numerical result is an estimate.

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86R1

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R1

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7117018001

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NZW08C01

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 22 Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/29/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/03/2007

GPC Cleanup: (Y/N) Y pH: 8.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
100-52-7	Benzaldehyde	33	J
108-95-2	Phenol	220	U
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
95-48-7	2-Methylphenol	220	U
108-60-1	2,2'-Oxybis(1-chloropropane)	220	U
98-86-2	Acetophenone	20	J
106-44-5	4-Methylphenol	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
105-67-9	2,4-Dimethylphenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
91-20-3	Naphthalene	220	U
106-47-8	4-Chloroaniline	220	U
87-68-3	Hexachlorobutadiene	220	U
105-60-2	Caprolactam	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U
88-06-2	2,4,6-Trichlorophenol	220	U
95-95-4	2,4,5-Trichlorophenol	220	U
92-52-4	1,1'-Biphenyl	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	420	U
131-11-3	Dimethylphthalate	220	U
606-20-2	2,6-Dinitrotoluene	220	U
208-96-8	Acenaphthylene	220	U
99-09-2	3-Nitroaniline	420	U
83-32-9	Acenaphthene	220	U

5/31/07

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86R1

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R1

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7117018001

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NZW08C01

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 22 Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/29/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/03/2007

GPC Cleanup: (Y/N) Y pH: 8.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	420	U
100-02-7	4-Nitrophenol	420	U
132-64-9	Dibenzofuran	220	U
121-14-2	2,4-Dinitrotoluene	220	U
84-66-2	Diethylphthalate	220	U
86-73-7	Fluorene	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	420	U
534-52-1	4,6-Dinitro-2-methylphenol	420	U
86-30-6	N-Nitrosodiphenylamine[1]	220	U
95-94-3	1,2,4,5-Tetrachlorobenzene	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	220	U
1912-24-9	Atrazine	220	U
87-86-5	Pentachlorophenol	420	U
85-01-8	Phenanthrene	220	U
120-12-7	Anthracene	220	U
86-74-8	Carbazole	220	U
84-74-2	Di-n-butylphthalate	220	U
206-44-0	Fluoranthene	220	U
129-00-0	Pyrene	220	U
85-68-7	Butylbenzylphthalate	220	U
91-94-1	3,3'-Dichlorobenzidine	220	U
56-55-3	Benzo(a)anthracene	220	U
218-01-9	Chrysene	220	U
117-81-7	Bis(2-ethylhexyl)phthalate	220	U
117-84-0	Di-n-octylphthalate	220	U
205-99-2	Benzo(b)fluoranthene	220	U
207-08-9	Benzo(k)fluoranthene	220	U
50-32-8	Benzo(a)pyrene	220	U
193-39-5	Indeno(1,2,3-cd)pyrene	220	U
53-70-3	Dibenzo(a,h)anthracene	220	U
191-24-2	Benzo(g,h,i)perylene	220	U
58-90-2	2,3,4,6-Tetrachlorophenol	220	U

[1]Cannot be separated from Diphenylamine

5/31/07

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
J86R1

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: SDG No.: J86R1

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7117018001

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NZW08C01

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 22 Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/29/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/03/2007

GPC Cleanup: (Y/N) Y pH: 8.1 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	79-34-5	Ethane, 1,1,2,2-tetrachloro-	4.02	590	JN
02	2050-95-5	1-Butanol, 3-methyl-, carbonate (2:1)	4.21	210	JN
03		Unknown aromatic	7.18	270	JN
04		Polycyclic hydrocarbon	19.13	230	JN
05		Polycyclic hydrocarbon	24.69	98	JN
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

5/31/07

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86R2

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: SDG No.: J86R1

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7117018002

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NZW09C02

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 25 Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/29/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/03/2007

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
100-52-7	Benzaldehyde	32	J
108-95-2	Phenol	230	U
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	2,2'-Oxybis(1-chloropropane)	230	U
98-86-2	Acetophenone	19	J
106-44-5	4-Methylphenol	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
105-67-9	2,4-Dimethylphenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	230	U
87-68-3	Hexachlorobutadiene	230	U
105-60-2	Caprolactam	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	230	U
95-95-4	2,4,5-Trichlorophenol	230	U
92-52-4	1,1'-Biphenyl	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	440	U
131-11-3	Dimethylphthalate	230	U
606-20-2	2,6-Dinitrotoluene	230	U
208-96-8	Acenaphthylene	230	U
99-09-2	3-Nitroaniline	440	U
83-32-9	Acenaphthene	230	U

5/31/07

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86R2

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: SDG No.: J86R1

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7117018002

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NZW09C02

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 25 Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/29/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/03/2007

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	440	U
100-02-7	4-Nitrophenol	440	U
132-64-9	Dibenzofuran	230	U
121-14-2	2,4-Dinitrotoluene	230	U
84-66-2	Diethylphthalate	230	U
86-73-7	Fluorene	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	440	U
534-52-1	4,6-Dinitro-2-methylphenol	440	U
86-30-6	N-Nitrosodiphenylamine[1]	230	U
95-94-3	1,2,4,5-Tetrachlorobenzene	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	230	U
1912-24-9	Atrazine	230	U
87-86-5	Pentachlorophenol	440	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
86-74-8	Carbazole	230	U
84-74-2	Di-n-butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
91-94-1	3,3'-Dichlorobenzidine	230	U
56-55-3	Benzo(a)anthracene	230	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	230	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	230	U
191-24-2	Benzo(g,h,i)perylene	230	U
58-90-2	2,3,4,6-Tetrachlorophenol	230	U

[1]Cannot be separated from Diphenylamine

5/31/07

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86R2

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R1

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7117018002

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NZW09C02

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 25 Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/29/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/03/2007

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	79-34-5	Ethane, 1,1,2,2-tetrachloro-	4.02	480	JN
02		Unsaturated Hydrocarbon	4.21	210	JN
03		Unknown aromatic	7.18	180	JN
04		Polycyclic hydrocarbon	19.14	210	JN
05		Polycyclic hydrocarbon	24.70	95	JN
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

5/31/07

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86R3

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: SDG No.: J86R1

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7117018003

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NZW10C03

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 25 Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/29/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/03/2007

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
100-52-7	Benzaldehyde	35	J
108-95-2	Phenol	230	U
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	2,2'-Oxybis(1-chloropropane)	230	U
98-86-2	Acetophenone	19	J
106-44-5	4-Methylphenol	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
105-67-9	2,4-Dimethylphenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	230	U
87-68-3	Hexachlorobutadiene	230	U
105-60-2	Caprolactam	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	230	U
95-95-4	2,4,5-Trichlorophenol	230	U
92-52-4	1,1'-Biphenyl	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	440	U
131-11-3	Dimethylphthalate	230	U
606-20-2	2,6-Dinitrotoluene	230	U
208-96-8	Acenaphthylene	230	U
99-09-2	3-Nitroaniline	440	U
83-32-9	Acenaphthene	230	U

5/31/07

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86R3

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: SDG No.: J86R1

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7117018003

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NZW10C03

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 25 Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/29/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/03/2007

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	440	U
100-02-7	4-Nitrophenol	440	U
132-64-9	Dibenzofuran	230	U
121-14-2	2,4-Dinitrotoluene	230	U
84-66-2	Diethylphthalate	230	U
86-73-7	Fluorene	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	440	U
534-52-1	4,6-Dinitro-2-methylphenol	440	U
86-30-6	N-Nitrosodiphenylamine[1]	230	U
95-94-3	1,2,4,5-Tetrachlorobenzene	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	230	U
1912-24-9	Atrazine	230	U
87-86-5	Pentachlorophenol	440	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
86-74-8	Carbazole	230	U
84-74-2	Di-n-butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
91-94-1	3,3'-Dichlorobenzidine	230	U
56-55-3	Benzo(a)anthracene	230	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	230	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	230	U
191-24-2	Benzo(g,h,i)perylene	230	U
58-90-2	2,3,4,6-Tetrachlorophenol	230	U

[1]Cannot be separated from Diphenylamine

5/31/07

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86R3

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: SDG No.: J86R1

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7117018003

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NZW10C03

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 25 Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/29/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/03/2007

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	79-34-5	Ethane, 1,1,2,2-tetrachloro-	4.02	480	JN
02		Unsaturated Hydrocarbon	4.21	260	JN
03		Unknown aromatic	7.18	410	JN
04		Polycyclic hydrocarbon	19.13	230	JN
05		Polycyclic hydrocarbon	24.70	110	JN
06					
07					
08					
09					
10					
11					
12					
13					
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15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

5/31/07

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86R4

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: SDG No.: J86R1

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7117018004

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NZW11C04

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 25 Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/29/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/03/2007

GPC Cleanup: (Y/N) Y pH: 8.4 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
100-52-7	Benzaldehyde	29	J
108-95-2	Phenol	230	U
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	2,2'-Oxybis(1-chloropropane)	230	U
98-86-2	Acetophenone	21	J
106-44-5	4-Methylphenol	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
105-67-9	2,4-Dimethylphenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	230	U
87-68-3	Hexachlorobutadiene	230	U
105-60-2	Caprolactam	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	230	U
95-95-4	2,4,5-Trichlorophenol	230	U
92-52-4	1,1'-Biphenyl	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	440	U
131-11-3	Dimethylphthalate	230	U
606-20-2	2,6-Dinitrotoluene	230	U
208-96-8	Acenaphthylene	230	U
99-09-2	3-Nitroaniline	440	U
83-32-9	Acenaphthene	230	U

5/31/07

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86R4

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R1

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7117018004

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NZW11C04

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 25 Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/29/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/03/2007

GPC Cleanup: (Y/N) Y pH: 8.4 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	440	U
100-02-7	4-Nitrophenol	440	U
132-64-9	Dibenzofuran	230	U
121-14-2	2,4-Dinitrotoluene	230	U
84-66-2	Diethylphthalate	230	U
86-73-7	Fluorene	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	440	U
534-52-1	4,6-Dinitro-2-methylphenol	440	U
86-30-6	N-Nitrosodiphenylamine[1]	230	U
95-94-3	1,2,4,5-Tetrachlorobenzene	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	230	U
1912-24-9	Atrazine	230	U
87-86-5	Pentachlorophenol	440	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
86-74-8	Carbazole	230	U
84-74-2	Di-n-butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
91-94-1	3,3'-Dichlorobenzidine	230	U
56-55-3	Benzo(a)anthracene	230	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	~~230~~ 21	~~J~~ U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	230	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	230	U
191-24-2	Benzo(g,h,i)perylene	230	U
58-90-2	2,3,4,6-Tetrachlorophenol	230	U

[1]Cannot be separated from Diphenylamine

5/31/07

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86R4

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R1

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7117018004

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NZW11C04

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 25 Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/29/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/03/2007

GPC Cleanup: (Y/N) Y pH: 8.4 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	354-21-2	Ethane, 1,2,2-trichloro-1,1-difluoro-	4.02	350	JN
02		Unsaturated Hydrocarbon	4.23	150	JN
03		Unknown aromatic	7.18	370	JN
04		Polycyclic hydrocarbon	19.14	220	JN
05		Polycyclic hydrocarbon	24.70	120	JN
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
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17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

5/31/07

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86R5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: SDG No.: J86R1

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7117018007

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NZW14C07

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 29 Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/29/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/03/2007

GPC Cleanup: (Y/N) Y pH: 8.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
100-52-7	Benzaldehyde	34	J
108-95-2	Phenol	240	U
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	2,2'-Oxybis(1-chloropropane)	240	U
98-86-2	Acetophenone	17	J
106-44-5	4-Methylphenol	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
105-67-9	2,4-Dimethylphenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	240	U
87-68-3	Hexachlorobutadiene	240	U
105-60-2	Caprolactam	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	240	U
95-95-4	2,4,5-Trichlorophenol	240	U
92-52-4	1,1'-Biphenyl	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	460	U
131-11-3	Dimethylphthalate	240	U
606-20-2	2,6-Dinitrotoluene	240	U
208-96-8	Acenaphthylene	240	U
99-09-2	3-Nitroaniline	460	U
83-32-9	Acenaphthene	240	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86R5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: SDG No.: J86R1

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7117018007

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NZW14C07

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 29 Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/29/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/03/2007

GPC Cleanup: (Y/N) Y pH: 8.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	460	U
100-02-7	4-Nitrophenol	460	U
132-64-9	Dibenzofuran	240	U
121-14-2	2,4-Dinitrotoluene	240	U
84-66-2	Diethylphthalate	240	U
86-73-7	Fluorene	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	460	U
534-52-1	4,6-Dinitro-2-methylphenol	460	U
86-30-6	N-Nitrosodiphenylamine[1]	240	U
95-94-3	1,2,4,5-Tetrachlorobenzene	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	240	U
1912-24-9	Atrazine	240	U
87-86-5	Pentachlorophenol	460	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
86-74-8	Carbazole	240	U
84-74-2	Di-n-butylphthalate	240	U
206-44-0	Fluoranthene	240	U
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	U
91-94-1	3,3'-Dichlorobenzidine	240	U
56-55-3	Benzo(a)anthracene	240	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	~~240~~ 19	~~J~~ U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	240	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	240	U
191-24-2	Benzo(g,h,i)perylene	240	U
58-90-2	2,3,4,6-Tetrachlorophenol	240	U

[1]Cannot be separated from Diphenylamine

5/31/07

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86R5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R1

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7117018007

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NZW14C07

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 29 Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/29/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/03/2007

GPC Cleanup: (Y/N) Y pH: 8.1 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	79-34-5	Ethane, 1,1,2,2-tetrachloro-	4.03	360	JN
02		Unsaturated Hydrocarbon	4.22	200	JN
03		Unknown aromatic	7.19	260	JN
04		Polycyclic hydrocarbon	19.15	210	JN
05		Polycyclic hydrocarbon	24.74	100	JN
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

5/31/07

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T6

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: SDG No.: J86R1

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7117018008

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NZW15C08

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 29 Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/29/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/03/2007

GPC Cleanup: (Y/N) Y pH: 8.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
100-52-7	Benzaldehyde	39	J
108-95-2	Phenol	240	U
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	2,2'-Oxybis(1-chloropropane)	240	U
98-86-2	Acetophenone	20	J
106-44-5	4-Methylphenol	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
105-67-9	2,4-Dimethylphenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	240	U
87-68-3	Hexachlorobutadiene	240	U
105-60-2	Caprolactam	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	240	U
95-95-4	2,4,5-Trichlorophenol	240	U
92-52-4	1,1'-Biphenyl	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	460	U
131-11-3	Dimethylphthalate	240	U
606-20-2	2,6-Dinitrotoluene	240	U
208-96-8	Acenaphthylene	240	U
99-09-2	3-Nitroaniline	460	U
83-32-9	Acenaphthene	240	U

5/31/07

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T6

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: SDG No.: J86R1

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7117018008

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NZW15C08

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 29 Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/29/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/03/2007

GPC Cleanup: (Y/N) Y pH: 8.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	460	U
100-02-7	4-Nitrophenol	460	U
132-64-9	Dibenzofuran	240	U
121-14-2	2,4-Dinitrotoluene	240	U
84-66-2	Diethylphthalate	240	U
86-73-7	Fluorene	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	460	U
534-52-1	4,6-Dinitro-2-methylphenol	460	U
86-30-6	N-Nitrosodiphenylamine[1]	240	U
95-94-3	1,2,4,5-Tetrachlorobenzene	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	240	U
1912-24-9	Atrazine	240	U
87-86-5	Pentachlorophenol	460	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
86-74-8	Carbazole	240	U
84-74-2	Di-n-butylphthalate	240	U
206-44-0	Fluoranthene	240	U
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	U
91-94-1	3,3'-Dichlorobenzidine	240	U
56-55-3	Benzo(a)anthracene	240	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	240	U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	240	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	240	U
191-24-2	Benzo(g,h,i)perylene	240	U
58-90-2	2,3,4,6-Tetrachlorophenol	240	U

[1]Cannot be separated from Diphenylamine

5/31/07

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86T6

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R1

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7117018008

Sample wt/vol: 30.0 (g/mL) g Lab File ID: NZW15C08

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 29 Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/29/2007

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 05/03/2007

GPC Cleanup: (Y/N) Y pH: 8.0 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	79-34-5	Ethane, 1,1,2,2-tetrachloro-	4.03	500	JN
02		Unsaturated Hydrocarbon	4.22	200	JN
03		Unknown aromatic	7.20	340	JN
04	629-54-9	Hexadecanamide	14.17	130	JN
05		Unknown amide	15.06	1500	JN
06		Polycyclic hydrocarbon	19.15	260	JN
07		Polycyclic hydrocarbon	24.74	170	JN
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A	4400	J

[2]EPA-designated Registry Number.

5/31/07

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T9

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 7117018010

Sample wt/vol: 1000 (g/mL) mL Lab File ID: YEJ04C10

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/30/2007

Injection Volume: 1.0 (uL) GPC Factor: _____ Date Analyzed: 05/01/2007

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T9

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 7117018010

Sample wt/vol: 1000 (g/mL) mL Lab File ID: YEJ04C10

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/30/2007

Injection Volume: 1.0 (uL) GPC Factor: _____ Date Analyzed: 05/01/2007

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0 ~~0.79~~	~~J~~ U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine[1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0 ~~0.65~~	~~J~~ U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0 ~~0.28~~	~~J~~ U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0 ~~0.30~~	~~J~~ U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1]Cannot be separated from Diphenylamine

5/31/07

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86T9

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 7117018010

Sample wt/vol: 1000 (g/mL) mL Lab File ID: YEJ04C10

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/30/2007

Injection Volume: 1.0 (uL) GPC Factor: _____ Date Analyzed: 05/01/2007

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86W1

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 7117018009

Sample wt/vol: 1000 (g/mL) mL Lab File ID: YEJ03C09

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/30/2007

Injection Volume: 1.0 (uL) GPC Factor: _____ Date Analyzed: 05/01/2007

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

5/31/07

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86W1

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 7117018009

Sample wt/vol: 1000 (g/mL) mL Lab File ID: YEJ03C09

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/30/2007

Injection Volume: 1.0 (uL) GPC Factor: _____ Date Analyzed: 05/01/2007

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0 ~~0.97~~	~~J~~ U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine[1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0 ~~0.67~~	~~J~~ U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0 ~~0.20~~	~~J~~ U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0 ~~0.30~~	~~J~~ U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1]Cannot be separated from Diphenylamine

5/31/07

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J86W1

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 7117018009

Sample wt/vol: 1000 (g/mL) mL Lab File ID: YEJ03C09

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) N Date Received: 04/27/2007

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/30/2007

Injection Volume: 1.0 (uL) GPC Factor: _____ Date Analyzed: 05/01/2007

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Column bleed product	6.34	6.1	JR
02		Column bleed product	9.24	2.3	JR
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

5/31/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86R0

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009001

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A023,21070514B023

% Moisture: 19 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	~~2.1~~ ~~0.046~~	~~JP~~ U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.1	U
72-55-9	4,4'-DDE	~~4.1~~ ~~0.042~~	~~JP~~ U
72-20-8	Endrin	4.1	U
33213-65-9	Endosulfan II	4.1	U
72-54-8	4,4'-DDD	4.1	U
1031-07-8	Endosulfan sulfate	4.1	U
50-29-3	4,4'-DDT	4.1	U
72-43-5	Methoxychlor	0.46	J
53494-70-5	Endrin ketone	4.1	U
7421-93-4	Endrin aldehyde	4.1	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009002

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A024,21070514B024

% Moisture: 19 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	2.1 ~~0.064~~	~~JP~~ U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.1 ~~0.054~~	~~JP~~ U
72-55-9	4,4'-DDE	4.1 ~~0.12~~	~~JP~~ U
72-20-8	Endrin	4.1	U
33213-65-9	Endosulfan II	4.1	U
72-54-8	4,4'-DDD	4.1 ~~0.088~~	~~JP~~ U
1031-07-8	Endosulfan sulfate	4.1	U
50-29-3	4,4'-DDT	4.1 ~~0.26~~	~~JP~~ U
72-43-5	Methoxychlor	0.27	J
53494-70-5	Endrin ketone	4.1	U
7421-93-4	Endrin aldehyde	4.1	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1 ~~0.073~~	~~JP~~ U
8001-35-2	Toxaphene	210	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S6

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009003

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A025,21070514B025

% Moisture: 38 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.7	U
319-85-7	beta-BHC	2.7	U
319-86-8	delta-BHC	2.7	U
58-89-9	gamma-BHC (Lindane)	~~2.7~~ ~~0.070~~	~~JP~~ U
76-44-8	Heptachlor	~~2.7~~ ~~0.20~~	~~JP~~ U
309-00-2	Aldrin	2.7	U
1024-57-3	Heptachlor epoxide	2.7	U
959-98-8	Endosulfan I	2.7	U
60-57-1	Dieldrin	5.3	U
72-55-9	4,4'-DDE	~~5.3~~ ~~0.088~~	~~JP~~ U
72-20-8	Endrin	5.3	U
33213-65-9	Endosulfan II	~~5.3~~ ~~0.057~~	~~JP~~ U
72-54-8	4,4'-DDD	5.3	U
1031-07-8	Endosulfan sulfate	5.3	U
50-29-3	4,4'-DDT	~~5.3~~ ~~0.31~~	~~JP~~ U
72-43-5	Methoxychlor	27	U
53494-70-5	Endrin ketone	5.3	U
7421-93-4	Endrin aldehyde	5.3	U
5103-71-9	alpha-Chlordane	2.7	U
5103-74-2	gamma-Chlordane	~~2.7~~ ~~0.11~~	~~JP~~ U
8001-35-2	Toxaphene	270	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S7

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009004

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A026,21070514B026

% Moisture: 30 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.4	U
319-85-7	beta-BHC	2.4	U
319-86-8	delta-BHC	2.4	U
58-89-9	gamma-BHC (Lindane)	2.4	U
76-44-8	Heptachlor	2.4	U
309-00-2	Aldrin	2.4	U
1024-57-3	Heptachlor epoxide	2.4	U
959-98-8	Endosulfan I	2.4	U
60-57-1	Dieldrin	4.7	U
72-55-9	4,4'-DDE	4.7	U
72-20-8	Endrin	4.7	U
33213-65-9	Endosulfan II	4.7	U
72-54-8	4,4'-DDD	4.7	U
1031-07-8	Endosulfan sulfate	4.7	U
50-29-3	4,4'-DDT	4.7	U
72-43-5	Methoxychlor	24	U
53494-70-5	Endrin ketone	4.7	U
7421-93-4	Endrin aldehyde	4.7	U
5103-71-9	alpha-Chlordane	2.4	U
5103-74-2	gamma-Chlordane	2.4 ~~0.054~~	~~JP~~ U
8001-35-2	Toxaphene	240	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S8

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009005

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A027,21070514B027

% Moisture: 29 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.4	U
319-85-7	beta-BHC	24 ~~0.17~~	~~JP~~ U
319-86-8	delta-BHC	2.4	U
58-89-9	gamma-BHC (Lindane)	2.4	U
76-44-8	Heptachlor	2.4	U
309-00-2	Aldrin	2.4	U
1024-57-3	Heptachlor epoxide	0.12	J
959-98-8	Endosulfan I	2.4	U
60-57-1	Dieldrin	4.7	U
72-55-9	4,4'-DDE	1.1	J
72-20-8	Endrin	4.7	U
33213-65-9	Endosulfan II	4.7 ~~0.079~~	~~JP~~ U
72-54-8	4,4'-DDD	4.7 ~~0.52~~	~~JP~~ U
1031-07-8	Endosulfan sulfate	4.7	U
50-29-3	4,4'-DDT	4.7 ~~0.30~~	~~JP~~ U
72-43-5	Methoxychlor	0.63	J
53494-70-5	Endrin ketone	4.7	U
7421-93-4	Endrin aldehyde	4.7	U
5103-71-9	alpha-Chlordane	2.4	U
5103-74-2	gamma-Chlordane	24 ~~0.60~~	~~JP~~ U
8001-35-2	Toxaphene	240	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S9

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009006

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A028,21070514B028

% Moisture: 19 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.1	U
72-55-9	4,4'-DDE	4.1	U
72-20-8	Endrin	4.1	U
33213-65-9	Endosulfan II	4.1	U
72-54-8	4,4'-DDD	4.1	U
1031-07-8	Endosulfan sulfate	4.1	U
50-29-3	4,4'-DDT	4.1	U
72-43-5	Methoxychlor	0.44	J
53494-70-5	Endrin ketone	4.1	U
7421-93-4	Endrin aldehyde	4.1	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	0.066	JP
8001-35-2	Toxaphene	210	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T0

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009007

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A029,21070514B029

% Moisture: 40 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.8	U
319-85-7	beta-BHC	2.8 ~~0.13~~	~~JP~~ U
319-86-8	delta-BHC	2.8	U
58-89-9	gamma-BHC (Lindane)	2.8	U
76-44-8	Heptachlor	2.8	U
309-00-2	Aldrin	2.8	U
1024-57-3	Heptachlor epoxide	2.8	U
959-98-8	Endosulfan I	2.8	U
60-57-1	Dieldrin	5.5 ~~0.10~~	~~JP~~ U
72-55-9	4,4'-DDE	1.2	JP
72-20-8	Endrin	5.5	U
33213-65-9	Endosulfan II	0.42	JP
72-54-8	4,4'-DDD	5.5 ~~0.22~~	~~JP~~ U
1031-07-8	Endosulfan sulfate	0.34	JP
50-29-3	4,4'-DDT	5.5 ~~0.85~~	~~JP~~ U
72-43-5	Methoxychlor	28	U
53494-70-5	Endrin ketone	5.5	U
7421-93-4	Endrin aldehyde	5.5	U
5103-71-9	alpha-Chlordane	2.8	U
5103-74-2	gamma-Chlordane	2.8 ~~0.34~~	~~JP~~ U
8001-35-2	Toxaphene	280	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T1

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009010

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A032,21070514B032

% Moisture: 33 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.5	U
319-85-7	beta-BHC	2.5	U
319-86-8	delta-BHC	2.5	U
58-89-9	gamma-BHC (Lindane)	2.5	U
76-44-8	Heptachlor	2.5	U
309-00-2	Aldrin	2.5	U
1024-57-3	Heptachlor epoxide	2.5	U
959-98-8	Endosulfan I	2.5	U
60-57-1	Dieldrin	0.21	JP
72-55-9	4,4'-DDE	~~4.9~~ ~~0.24~~	~~JP~~ U
72-20-8	Endrin	4.9	U
33213-65-9	Endosulfan II	~~4.9~~ ~~0.093~~	~~JP~~ U
72-54-8	4,4'-DDD	~~4.9~~ ~~0.14~~	~~JP~~ U
1031-07-8	Endosulfan sulfate	4.9	U
50-29-3	4,4'-DDT	~~4.9~~ ~~0.11~~	~~JP~~ U
72-43-5	Methoxychlor	1.6	JP
53494-70-5	Endrin ketone	4.9	U
7421-93-4	Endrin aldehyde	4.9	U
5103-71-9	alpha-Chlordane	2.5	U
5103-74-2	gamma-Chlordane	~~2.5~~ ~~0.11~~	~~JP~~ U
8001-35-2	Toxaphene	250	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T2

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009011

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A033,21070514B033

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.6	U
319-85-7	beta-BHC	2.6	U
319-86-8	delta-BHC	2.6	U
58-89-9	gamma-BHC (Lindane)	2.6	U
76-44-8	Heptachlor	2.6	U
309-00-2	Aldrin	2.6	U
1024-57-3	Heptachlor epoxide	2.6	U
959-98-8	Endosulfan I	2.6	U
60-57-1	Dieldrin	0.18	JP
72-55-9	4,4'-DDE	5.1 ~~0.11~~	~~JP~~ U
72-20-8	Endrin	5.1	U
33213-65-9	Endosulfan II	0.14	J
72-54-8	4,4'-DDD	5.1	U
1031-07-8	Endosulfan sulfate	5.1	U
50-29-3	4,4'-DDT	5.1 ~~0.32~~	~~JP~~ U
72-43-5	Methoxychlor	0.77	JP
53494-70-5	Endrin ketone	5.1	U
7421-93-4	Endrin aldehyde	5.1	U
5103-71-9	alpha-Chlordane	2.6	U
5103-74-2	gamma-Chlordane	2.6 ~~0.10~~	~~JP~~ U
8001-35-2	Toxaphene	260	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T3

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009012

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A034,21070514B034

% Moisture: 37 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.7	U
319-85-7	beta-BHC	2.7	U
319-86-8	delta-BHC	2.7	U
58-89-9	gamma-BHC (Lindane)	~~2.7~~ ~~0.057~~	~~JP~~ U
76-44-8	Heptachlor	2.7	U
309-00-2	Aldrin	2.7	U
1024-57-3	Heptachlor epoxide	2.7	U
959-98-8	Endosulfan I	2.7	U
60-57-1	Dieldrin	5.2	U
72-55-9	4,4'-DDE	5.2	U
72-20-8	Endrin	5.2	U
33213-65-9	Endosulfan II	5.2	U
72-54-8	4,4'-DDD	5.2	U
1031-07-8	Endosulfan sulfate	5.2	U
50-29-3	4,4'-DDT	5.2	U
72-43-5	Methoxychlor	27	U
53494-70-5	Endrin ketone	5.2	U
7421-93-4	Endrin aldehyde	5.2	U
5103-71-9	alpha-Chlordane	2.7	U
5103-74-2	gamma-Chlordane	~~2.7~~ ~~0.19~~	~~JP~~ U
8001-35-2	Toxaphene	270	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T4

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009013

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A035,21070514B035

% Moisture: 32 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.5	U
319-85-7	beta-BHC	2.5	U
319-86-8	delta-BHC	2.5	U
58-89-9	gamma-BHC (Lindane)	2.5	U
76-44-8	Heptachlor	2.5	U
309-00-2	Aldrin	2.5	U
1024-57-3	Heptachlor epoxide	2.5	U
959-98-8	Endosulfan I	2.5	U
60-57-1	Dieldrin	4.9	U
72-55-9	4,4'-DDE	~~4.9~~ 0.28	~~JP~~ U
72-20-8	Endrin	4.9	U
33213-65-9	Endosulfan II	4.9	U
72-54-8	4,4'-DDD	~~4.9~~ 0.13	~~JP~~ U
1031-07-8	Endosulfan sulfate	4.9	U
50-29-3	4,4'-DDT	4.9	U
72-43-5	Methoxychlor	0.61	JP
53494-70-5	Endrin ketone	4.9	U
7421-93-4	Endrin aldehyde	4.9	U
5103-71-9	alpha-Chlordane	2.5	U
5103-74-2	gamma-Chlordane	~~2.5~~ 0.085	~~JP~~ U
8001-35-2	Toxaphene	250	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009014

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A036,21070514B036

% Moisture: 23 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	2.2	U
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	2.2	U
1024-57-3	Heptachlor epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	0.054	JP
72-55-9	4,4'-DDE	4.3 ~~0.10~~	~~JP~~ U
72-20-8	Endrin	4.3	U
33213-65-9	Endosulfan II	4.3	U
72-54-8	4,4'-DDD	0.14	J
1031-07-8	Endosulfan sulfate	4.3	U
50-29-3	4,4'-DDT	4.3 ~~0.15~~	~~JP~~ U
72-43-5	Methoxychlor	22 ~~0.35~~	~~JP~~ U
53494-70-5	Endrin ketone	4.3	U
7421-93-4	Endrin aldehyde	4.3	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	0.062	JP
8001-35-2	Toxaphene	220	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T7

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009015

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A037,21070514B037

% Moisture: 40 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.8	U
319-85-7	beta-BHC	2.8	U
319-86-8	delta-BHC	2.8	U
58-89-9	gamma-BHC (Lindane)	2.8 ~~0.067~~	~~JP~~ U
76-44-8	Heptachlor	2.8	U
309-00-2	Aldrin	2.8	U
1024-57-3	Heptachlor epoxide	2.8 ~~0.24~~	~~JP~~ U
959-98-8	Endosulfan I	2.8 ~~0.11~~	~~JP~~ U
60-57-1	Dieldrin	5.5	U
72-55-9	4,4'-DDE	1.3	~~JP~~
72-20-8	Endrin	0.30	J
33213-65-9	Endosulfan II	5.5 ~~0.89~~	~~JP~~ U
72-54-8	4,4'-DDD	5.5	U
1031-07-8	Endosulfan sulfate	5.5	U
50-29-3	4,4'-DDT	2.8	J
72-43-5	Methoxychlor	28	U
53494-70-5	Endrin ketone	5.5	U
7421-93-4	Endrin aldehyde	5.5	U
5103-71-9	alpha-Chlordane	2.8	U
5103-74-2	gamma-Chlordane	2.8	U
8001-35-2	Toxaphene	280	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T8

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009016

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A038,21070514B038

% Moisture: 39 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.8	U
319-85-7	beta-BHC	0.37	J
319-86-8	delta-BHC	2.8	U
58-89-9	gamma-BHC (Lindane)	2.8	U
76-44-8	Heptachlor	2.8	U
309-00-2	Aldrin	2.8	U
1024-57-3	Heptachlor epoxide	2.8	U
959-98-8	Endosulfan I	2.8	U
60-57-1	Dieldrin	0.39	J
72-55-9	4,4'-DDE	1.1	J
72-20-8	Endrin	5.4	U
33213-65-9	Endosulfan II	5.4 ~~0.061~~	~~JP~~ U
72-54-8	4,4'-DDD	5.4 ~~0.45~~	~~JP~~ U
1031-07-8	Endosulfan sulfate	5.4	U
50-29-3	4,4'-DDT	5.4 ~~0.68~~	~~JP~~ U
72-43-5	Methoxychlor	28 ~~1.9~~	~~JP~~ U
53494-70-5	Endrin ketone	5.4	U
7421-93-4	Endrin aldehyde	5.4	U
5103-71-9	alpha-Chlordane	2.8	U
5103-74-2	gamma-Chlordane	2.8 ~~0.76~~	~~JP~~ U
8001-35-2	Toxaphene	280	U

6/12/07

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
J86W4

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009017

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A039,21070514B039

% Moisture: 32 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.5	U
319-85-7	beta-BHC	2.5	U
319-86-8	delta-BHC	2.5	U
58-89-9	gamma-BHC (Lindane)	2.5	U
76-44-8	Heptachlor	2.5	U
309-00-2	Aldrin	2.5	U
1024-57-3	Heptachlor epoxide	2.5	U
959-98-8	Endosulfan I	2.5	U
60-57-1	Dieldrin	4.8	U
72-55-9	4,4'-DDE	4.8	U
72-20-8	Endrin	4.8	U
33213-65-9	Endosulfan II	4.8	U
72-54-8	4,4'-DDD	4.8	U
1031-07-8	Endosulfan sulfate	4.8	U
50-29-3	4,4'-DDT	4.8	U
72-43-5	Methoxychlor	0.44	JP
53494-70-5	Endrin ketone	4.8	U
7421-93-4	Endrin aldehyde	4.8	U
5103-71-9	alpha-Chlordane	2.5	U
5103-74-2	gamma-Chlordane	2.5 ~~0.074~~	~~JP~~ U
8001-35-2	Toxaphene	250	U

6/12/07

Repeat

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86W5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009018

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A040,21070514B040

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.7	U
319-85-7	beta-BHC	2.7	U
319-86-8	delta-BHC	2.7	U
58-89-9	gamma-BHC (Lindane)	2.7	U
76-44-8	Heptachlor	2.7	U
309-00-2	Aldrin	2.7 ~~0.41~~	~~JP~~ U
1024-57-3	Heptachlor epoxide	2.7	U
959-98-8	Endosulfan I	2.7	U
60-57-1	Dieldrin	5.2	U
72-55-9	4,4'-DDE	5.2	U
72-20-8	Endrin	5.2	U
33213-65-9	Endosulfan II	5.2	U
72-54-8	4,4'-DDD	5.2	U
1031-07-8	Endosulfan sulfate	5.2	U
50-29-3	4,4'-DDT	5.2	U
72-43-5	Methoxychlor	27	U
53494-70-5	Endrin ketone	5.2	U
7421-93-4	Endrin aldehyde	5.2	U
5103-71-9	alpha-Chlordane	2.7	U
5103-74-2	gamma-Chlordane	2.7	U
8001-35-2	Toxaphene	270	U

6/12/07

REPORT J86W5

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86W5RX

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009018RX

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070517A020,21070517B020

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/14/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/18/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.7	U
319-85-7	beta-BHC	2.7	U
319-86-8	delta-BHC	2.7	U
58-89-9	gamma-BHC (Lindane)	2.7	U
76-44-8	Heptachlor	2.7	U
309-00-2	Aldrin	2.7	U
1024-57-3	Heptachlor epoxide	2.7	U
959-98-8	Endosulfan I	2.7	U
60-57-1	Dieldrin	5.2	U
72-55-9	4,4'-DDE	5.2	U
72-20-8	Endrin	5.2	U
33213-65-9	Endosulfan II	5.2	U
72-54-8	4,4'-DDD	5.2	U
1031-07-8	Endosulfan sulfate	5.2	U
50-29-3	4,4'-DDT	5.2	U
72-43-5	Methoxychlor	27	U
53494-70-5	Endrin ketone	5.2	U
7421-93-4	Endrin aldehyde	5.2	U
5103-71-9	alpha-Chlordane	2.7	U
5103-74-2	gamma-Chlordane	0.066	J
8001-35-2	Toxaphene	270	U

6/12/07

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86W6

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009019

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 21070514A041,21070514B041

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/15/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
319-84-6	alpha-BHC	2.6	U
319-85-7	beta-BHC	2.6	U
319-86-8	delta-BHC	2.6	U
58-89-9	gamma-BHC (Lindane)	2.6 ~~0.071~~	~~JP~~ U
76-44-8	Heptachlor	2.6	U
309-00-2	Aldrin	2.6	U
1024-57-3	Heptachlor epoxide	2.6	U
959-98-8	Endosulfan I	2.6	U
60-57-1	Dieldrin	5.1	U
72-55-9	4,4'-DDE	5.1	U
72-20-8	Endrin	5.1	U
33213-65-9	Endosulfan II	5.1	U
72-54-8	4,4'-DDD	5.1	U
1031-07-8	Endosulfan sulfate	5.1	U
50-29-3	4,4'-DDT	5.1	U
72-43-5	Methoxychlor	0.37	JP
53494-70-5	Endrin ketone	5.1	U
7421-93-4	Endrin aldehyde	5.1	U
5103-71-9	alpha-Chlordane	2.6	U
5103-74-2	gamma-Chlordane	2.6	U
8001-35-2	Toxaphene	260	U

6/12/07

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86R0

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009001

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A038,20070515B038

% Moisture: 19 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	41	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	41	U
11096-82-5	Aroclor-1260	41	U
37324-23-5	Aroclor-1262	41	U
11100-14-4	Aroclor-1268	41	U

6/12/07

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009002

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A039,20070515B039

% Moisture: 19 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	41	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	41	U
11096-82-5	Aroclor-1260	41	U
37324-23-5	Aroclor-1262	41	U
11100-14-4	Aroclor-1268	41	U

6/12/07

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S6

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009003

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A040,20070515B040

% Moisture: 38 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	53	U
11104-28-2	Aroclor-1221	53	U
11141-16-5	Aroclor-1232	53	U
53469-21-9	Aroclor-1242	53	U
12672-29-6	Aroclor-1248	53	U
11097-69-1	Aroclor-1254	53	U
11096-82-5	Aroclor-1260	53	U
37324-23-5	Aroclor-1262	53	U
11100-14-4	Aroclor-1268	53	U

6/12/07

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S7

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009004

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A045,20070515B045

% Moisture: 30 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	47	U
11104-28-2	Aroclor-1221	47	U
11141-16-5	Aroclor-1232	47	U
53469-21-9	Aroclor-1242	47	U
12672-29-6	Aroclor-1248	47	U
11097-69-1	Aroclor-1254	47	U
11096-82-5	Aroclor-1260	47	U
37324-23-5	Aroclor-1262	47	U
11100-14-4	Aroclor-1268	47	U

6/12/07

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S8

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009005

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A046,20070515B046

% Moisture: 29 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.3 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	47	U
11104-28-2	Aroclor-1221	47	U
11141-16-5	Aroclor-1232	47	U
53469-21-9	Aroclor-1242	47	U
12672-29-6	Aroclor-1248	47	U
11097-69-1	Aroclor-1254	47	U
11096-82-5	Aroclor-1260	47	U
37324-23-5	Aroclor-1262	47	U
11100-14-4	Aroclor-1268	47	U

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1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86S9

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009006

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A047,20070515B047

% Moisture: 19 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	41	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	41	U
11096-82-5	Aroclor-1260	41	U
37324-23-5	Aroclor-1262	41	U
11100-14-4	Aroclor-1268	41	U

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1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T0

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009007

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A048,20070515B048

% Moisture: 40 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	55	U
11104-28-2	Aroclor-1221	55	U
11141-16-5	Aroclor-1232	55	U
53469-21-9	Aroclor-1242	55	U
12672-29-6	Aroclor-1248	55	U
11097-69-1	Aroclor-1254	55	U
11096-82-5	Aroclor-1260	55	U
37324-23-5	Aroclor-1262	55	U
11100-14-4	Aroclor-1268	55	U

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1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T1

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009010

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A051,20070515B051

% Moisture: 33 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	49	U
11104-28-2	Aroclor-1221	49	U
11141-16-5	Aroclor-1232	49	U
53469-21-9	Aroclor-1242	49	U
12672-29-6	Aroclor-1248	49	U
11097-69-1	Aroclor-1254	49	U
11096-82-5	Aroclor-1260	49	U
37324-23-5	Aroclor-1262	49	U
11100-14-4	Aroclor-1268	49	U

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AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T2

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009011

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A052,20070515B052

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	51	U
11104-28-2	Aroclor-1221	51	U
11141-16-5	Aroclor-1232	51	U
53469-21-9	Aroclor-1242	51	U
12672-29-6	Aroclor-1248	51	U
11097-69-1	Aroclor-1254	51	U
11096-82-5	Aroclor-1260	51	U
37324-23-5	Aroclor-1262	51	U
11100-14-4	Aroclor-1268	51	U

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1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T3

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009012

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A053,20070515B053

% Moisture: 37 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	52	U
11104-28-2	Aroclor-1221	52	U
11141-16-5	Aroclor-1232	52	U
53469-21-9	Aroclor-1242	52	U
12672-29-6	Aroclor-1248	52	U
11097-69-1	Aroclor-1254	52	U
11096-82-5	Aroclor-1260	52	U
37324-23-5	Aroclor-1262	52	U
11100-14-4	Aroclor-1268	52	U

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AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T4

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009013

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A054,20070515B054

% Moisture: 32 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	49	U
11104-28-2	Aroclor-1221	49	U
11141-16-5	Aroclor-1232	49	U
53469-21-9	Aroclor-1242	49	U
12672-29-6	Aroclor-1248	49	U
11097-69-1	Aroclor-1254	49	U
11096-82-5	Aroclor-1260	49	U
37324-23-5	Aroclor-1262	49	U
11100-14-4	Aroclor-1268	49	U

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AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009014

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A055,20070515B055

% Moisture: 23 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	43	U
11104-28-2	Aroclor-1221	43	U
11141-16-5	Aroclor-1232	43	U
53469-21-9	Aroclor-1242	43	U
12672-29-6	Aroclor-1248	43	U
11097-69-1	Aroclor-1254	43	U
11096-82-5	Aroclor-1260	43	U
37324-23-5	Aroclor-1262	43	U
11100-14-4	Aroclor-1268	43	U

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REPORT FROM J86T7RE

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AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T7

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009015

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A056,20070515B056

% Moisture: 40 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	55	U
11104-28-2	Aroclor-1221	55	U
11141-16-5	Aroclor-1232	55	U
53469-21-9	Aroclor-1242	55	U
12672-29-6	Aroclor-1248	55	U
11097-69-1	Aroclor-1254	30	JS
11096-82-5	Aroclor-1260	55	U
37324-23-5	Aroclor-1262	55	U
11100-14-4	Aroclor-1268	55	U

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REPORT

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AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T7RE

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009015RE

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A072,20070515B072

% Moisture: 40 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/17/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016		U
11104-28-2	Aroclor-1221		U
11141-16-5	Aroclor-1232		U
53469-21-9	Aroclor-1242		U
12672-29-6	Aroclor-1248		U
11097-69-1	Aroclor-1254	33	J
11096-82-5	Aroclor-1260		U
37324-23-5	Aroclor-1262		U
11100-14-4	Aroclor-1268		U

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AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86T8

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009016

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A057,20070515B057

% Moisture: 39 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	54	U
11104-28-2	Aroclor-1221	54	U
11141-16-5	Aroclor-1232	54	U
53469-21-9	Aroclor-1242	54	U
12672-29-6	Aroclor-1248	54	U
11097-69-1	Aroclor-1254	54	U
11096-82-5	Aroclor-1260	54	U
37324-23-5	Aroclor-1262	54	U
11100-14-4	Aroclor-1268	54	U

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AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86W4

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009017

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A058,20070515B058

% Moisture: 32 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	48	U
11104-28-2	Aroclor-1221	48	U
11141-16-5	Aroclor-1232	48	U
53469-21-9	Aroclor-1242	48	U
12672-29-6	Aroclor-1248	48	U
11097-69-1	Aroclor-1254	48	U
11096-82-5	Aroclor-1260	48	U
37324-23-5	Aroclor-1262	48	U
11100-14-4	Aroclor-1268	48	U

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Report

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86W5

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009018

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A059,20070515B059

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	52	U
11104-28-2	Aroclor-1221	52	U
11141-16-5	Aroclor-1232	52	U
53469-21-9	Aroclor-1242	52	U
12672-29-6	Aroclor-1248	52	U
11097-69-1	Aroclor-1254	52	U
11096-82-5	Aroclor-1260	52	U
37324-23-5	Aroclor-1262	52	U
11100-14-4	Aroclor-1268	52	U

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REPORT FROM J86W5

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86W5RX

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009018RX

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070517A021,20070517B021

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/14/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/18/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	52	U
11104-28-2	Aroclor-1221	52	U
11141-16-5	Aroclor-1232	52	U
53469-21-9	Aroclor-1242	52	U
12672-29-6	Aroclor-1248	52	U
11097-69-1	Aroclor-1254	52	U
11096-82-5	Aroclor-1260	52	U
37324-23-5	Aroclor-1262	52	U
11100-14-4	Aroclor-1268	52	U

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1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J86W6

Lab Name: DataChem Laboratories, Inc. Contract: EP-W-05-026

Lab Code: DATAC Case No.: 36345 Mod. Ref No.: _____ SDG No.: J86R0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 7120009019

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 20070515A060,20070515B060

% Moisture: 36 Decanted: (Y/N) N Date Received: 04/30/2007

Extraction: (Type) SONC Date Extracted: 05/01/2007

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/17/2007

Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3 Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
12674-11-2	Aroclor-1016	51	U
11104-28-2	Aroclor-1221	51	U
11141-16-5	Aroclor-1232	51	U
53469-21-9	Aroclor-1242	51	U
12672-29-6	Aroclor-1248	51	U
11097-69-1	Aroclor-1254	51	U
11096-82-5	Aroclor-1260	51	U
37324-23-5	Aroclor-1262	51	U
11100-14-4	Aroclor-1268	51	U

6/12/07

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

QUALITY ASSURANCE MEMORANDUM FOR GRAIN SIZE ANALYSES

Date: October 15, 2007

To: Joanne Labaw, SAM
Office of Environmental Cleanup, USEPA Region 10

From: Chris Pace, Chemist
Office of Environmental Assessment, USEPA Region 10 Laboratory

Subject: Quality Assurance Review for the Grain Size Analysis of Samples from the Drums Marine Dr NE project

Project Code: TEC-895A
Account Code: 08T10P302DD2C10ZZLA00

The following is a quality assurance review of the data for grain size analysis of 2 sediment samples from the above referenced site. The analyses were performed by EPA Region 10 Laboratory ESAT contractor using Manchester Environmental Laboratory guidelines and ASTM D 421 – 85 (Standard Practice for Dry Preparation of Soil Samples for Particle Size Analysis and Determination of Soil Constants).

The original laboratory request was to select one representative sample for grain size analysis. However, after a thorough visual check of all 33 samples, approximately half were clay/silt samples and the other half were coarse sand/small gravel samples (see Results section). The decision was to do 2 grain size fractions using the following representative samples:

07174003 07174036

Should questions arise regarding the data, contact Chris Pace at the Region 10 Laboratory, phone number (360) 871 - 8703.

1. Sample Transport and Receipt

Upon sample receipt, no conditions were noted that would impact data quality.

2. Sample Preparation

Samples were prepared according to the method and summarized below.

Each sediment sample came in an 8 oz glass container and the preparation involved: (1) Transferring each sediment sample into drying trays and mixing the separated water back into the sediment of each sample. (2) Recording the total wet weight minus tray tare. (3) Air drying each sample for approximately two days until dry weights were within 1%. (4) Recording the total dry weight minus the tray tare. (5) Sieving 4 fractions (3/8, 10, 30, and 170) for each sample using a Roto-tapper under a lab hood. (6) Weighing each sieved fraction. (7) Recording the percentage of each fraction to the original total dry weight of whole sample.

3. Results

Grain Size	**Sample#**	**Sample#**
	07174003	07174036
>3/8" Fraction (greater than 9.4 mm - Large Gravel)	0%	0%
<3/8" but >10 Fraction (between 2.0 mm and 9.5 mm - Gravel)	3%	3%
<10 but >30 Fraction (between 0.59 mm and 2.0 mm – Coarse Sand)	18%	24%
<30 but >170 Fraction (between 0.088 mm and 0.59 mm – Fine to Medium Sand)	78%	33%
<170 Fraction (less than 0.088 mm – Clay and Silt)	0%	39%

4. Representative Samples

Sample **07174003** was a mostly coarse sand/small gravel sample that was similar to the following samples:

07174000, 07174002, 07174004, 07174005, 07174006, 07174007, 07174008, 07174011, 07174014, 07174015, 07174016, 07174024 and 07174027.

Sample **07174036** was a mostly clay/silt sample that was similar to the following samples:

07174009, 07174010, 07174012, 07174013, 07174017, 07174018, 07174019, 07174020, 07174021, 07174022, 07174023, 07174025, 07174026, 07174028, 07174029, 07174034, 07174035, and 07174037.

APPENDIX D
SAMPLE ALTERATION FORMS

Sample Plan Alteration Form

Project Name and TDD Number:
Drums - NE Marine Drive
TDD 06-07-0006

Material to be Sampled:
Sediment from the Columbia River

Measurement Parameter: SVOCs, TAL Metals, PCBs, Pesticides, + total organic carbons, + mercury

Standard Procedure for Field Collection and Laboratory Analysis (cite reference):
Samples will be submitted for off-site analysis of SVOCs, Pesticides, + PCBs, + TAL metals. (TechLaw SQAP 2007)

Reason for Change in Field Procedure or Analysis Variation:
To better assess contamination an extra analysis was added.

Variation from Field or Analytical Procedure:
Total Organic Carbons analysis was added

Special Equipment, Materials, or Personnel Required:
~~An~~ A SQAP addendum letter was submitted to EPA May 8, 2007.

Initiator's Name: Lesa E Nelson Date: 5/30/07

Project Manager: Lesa E Nelson Date: 5/30/07

QA Officer: Thomas Pearson Date: 5-30-07

Sample Plan Alteration Form

Project Name and TDD Number:
Drums - NE Marine Drive
TDD 06-07-0006

Material to be Sampled:
Sediment from the Columbia River

Measurement Parameter: SVOCs, Pesticides, PCBs, TAL Metals, + total organic carbons + mercury

Standard Procedure for Field Collection and Laboratory Analysis (cite reference):
Collect 29 Sediment Samples (DMD-SD-01 to DMD-SD-29)
(TechLaw SQAP 2007)

Reason for Change in Field Procedure or Analysis Variation:
Collected four extra samples to better assess the extent of contamination (DMD-SD-30 to DMD-SD-33) + DMD-SD-31

Variation from Field or Analytical Procedure:
Sample DMD-SD-30* was collected to finish a complete survey of drum contamination. DMD-SD-32 was collected to compare a silty background sample to a silty sediment sample collected w/in the drum area. *

Special Equipment, Materials, or Personnel Required:
None

Initiator's Name: Lesa E. Nelson Date: 5/30/07

Project Manager: Lesa E. Nelson Date: 5/30/07

QA Officer: Thomas Braun Date: 5.30.07

* DMD-SD-33 was collected as a downstream sample 1.5 miles from the furthest west drum sighting.

Sample Plan Alteration Form

Project Name and TDD Number:
Drums - NE Marine Drive
TDD CG-07-0006

Material to be Sampled:
Sediment from the Columbia River

Measurement Parameter: SVOCs, Pesticides, PCBs, TAL metals, and Total Organic Carbons & Mercury

Standard Procedure for Field Collection and Laboratory Analysis (cite reference):
The Sample Locations will be determined using Trimble Pro-XR GPS Units. (TechLaw SQAP 2007)

Reason for Change in Field Procedure or Analysis Variation:
Due to the limited space* and the ~~tar~~ in size of the Trimble Pro-XR GPS unit, the Trimble Pro-XR GPS Unit was only used for Samples DMD-SD-02 to DMD-SD-06 *on the boat

Variation from Field or Analytical Procedure:
Instead DMD-SD-01 and DMD-SD-07 to DMD-SD-33 sample locations were determined using the boats GP1650 DF, the EPA dive teams Garmin 276C (differential connection built in), & START-3 Garmin handheld GPCS

Special Equipment, Materials, or Personnel Required:
GPS1650-DF, GARMIN 276C, & Garmin handheld GPCS

Initiator's Name: Lesa E. Nelson Date: 5/30/07

Project Manager: Lesa E. Nelson Date: 5/30/07

QA Officer: Thomas Gamm Date: 5.30.07

Sample Plan Alteration Form

Project Name and TDD Number:
Drum - NE Marine Drive
TDD 06-07-0006

Material to be Sampled:
Sediment from the Columbia River

Measurement Parameter: SVOCs, Pesticides, PCBs, TAL Metals, and Total Organic Carbons + Mercury

Standard Procedure for Field Collection and Laboratory Analysis (cite reference):
DMD-SD-07 to DMD-SD-11 were sample IDs for samples collected in drum area. DMD-SD-12 to DMD-SD-26 were sample IDs for samples collected from the area surrounding the drums. (TechLaw SQAP 2007)

Reason for Change in Field Procedure or Analysis Variation:
Due to low visibility for the EPA dive team, it was difficult to distinguish between the drum area + the area surrounding the drums.

Variation from Field or Analytical Procedure:
Samples DMD-SD-07 to DMD-SD-26, and DMD-SD-28, DMD-SD-29, DMD-SD-30 to DMD-SD-31 were Samples collected in the Drum area + the area surrounding the drum area.

Special Equipment, Materials, or Personnel Required:
None

Initiator's Name: Lesa E. Nelson Date: 5/30/07

Project Manager: Lesa E. Nelson Date: 5/30/07

QA Officer: [signature] Date: 5-30-07

APPENDIX E
EPA DIVE REPORT

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

DIVE REPORT – May 8, 2007

From: Rob Pedersen, Unit Diving Officer, Divemaster **Dates of dive: April 24-26, 2007**
To: Keven McDermott, Dive Team Sponsor, Unit Manager, IEU
Bill Riley, OEA Director

Project: Columbia River drums
Requested by: Superfund program
Purpose: Scientific Investigation/Sampling
Location: **Location:** Approx. N45 34.914 W122 33.582 110-112 RM, south channel, just downstream of I-205 bridge, between Lemon Island (part of Government Island Complex) and mainland Oregon, near Portland airport.

Scientific Objectives: We supported the Superfund program investigation to characterize the extent of sediment contamination (metals, hydrocarbons - see Dive Plan for background details) in and around an area of discarded drums. Scores of decaying drums and the presence of hazardous substances was documented by ODEQ. Divers collected sediments cores: downstream of, amongst, and upstream of the drum depot. Analysis results from core and grab samples (the latter were collected prior to diving at background stations by petite Ponar) will be published under separate cover by TechLaw for Superfund.

Dive observations: Figure 1 depicts the general area of the drums (see the Dive Plan for a map showing the proposed sampling area). Figures 2 and 3 give more detail in areas where dives were clustered. Table 1 lists the GPS waypoint data; this locational information can be used with the data report, when available. Divers estimated there were dozens of drums in conditions ranging from highly decomposed to intact but rusted. Previous reports were of scores or hundreds of drums.

Afternoon on April 24. The first dive was done in mid-channel based on the previously reported GPS location (see Fig. 1, "DRUMS"). High current limited the possible sweep range to a total sweep angle of 45 degrees (diver swimming left and right on the tether). No drums were found. The bottom at about 20' consists of shifting sand. The second dive was conducted closer to shore in less current and where the bottom consisted more of clay, and silty-sand (seep angle of about 60-90 degrees). Sweeping away from shore to 13' deep, the diver noted a steep drop-off to 20-25'. A variety of metal garbage was noted, but no drums.

April 25. With the assistance of the Portland Fire Department dive team, two dives were made upstream of the GPS flagging ("DRUMS"). No drums were located, only other metal debris. Two cores were obtained on the second dive of the day. A core's diameter was four inches, one end was capped pre-dive, and numbered. The diver reported the sample number and where the core was taken. The diver also gave descriptions of the substrate type and waste debris found. The core were carried in a goodie bag. Two full cores in the bag made diver movement difficult on the tether, in current.

Based on a site picture (using landmarks on Lemon Island) the operation moved downstream and closer to shore. In the first area searched - downstream of waypoints 143-145, many drums were found (a few in clusters ranging to singles, most in an advanced state of decay). On dive #5, a core sample was obtained by a drum, 10 meters out on the tether line. Several more cores were taken around drums farther out on the tether (to about 37 meters). Dives and coring proceeded from downstream to upstream. Due to poor visibility (until just off the bottom, 2-3' depending on if the sun was out), an accurate drum count was not possible.

April 26. To further characterize the study zone, diving and sampling was planned for downstream of the previous day's work and moving upstream to the lower boundary of dive number eight. The diver estimated one to two dozen drums were in this area. On dive number nine, two cores were taken near drums. An intact drum was noted at about 16 meters on the tether with other open/broken drums on dive #10; a core was obtained. A

media event occurred during dives 11 and 12 (waypoints 148 and 149). Many drums were located and cores were taken including two cores from inside of two drums (full of silt and sand). One intact drum had a bulging end. Dives 13-15, waypoints 150-152 proceeded upstream. At 150, two drums were noted and cores obtained (difficult to sample here given the mostly clay-like bottom). Two cores were taken at 151 and 152 each, but no drums were seen. The final diving was for one of the upstream "background" samples for methods comparison to the Ponar grab sampling. Station 153 was more off-shore than most of the sampling to obtain a core of a sandy-silt substrate. Site 154 was in a clay-sand substrate. Although referred to as "clay" for description purposes, the material was unlikely true clay due to current and the type of material that could settle out.

Figure 1. Approximate drum deposition area. Yellow ovals demarcate the area of located drums.

Figure 2. GPS locations of anchor points for dive surveys and core sampling.

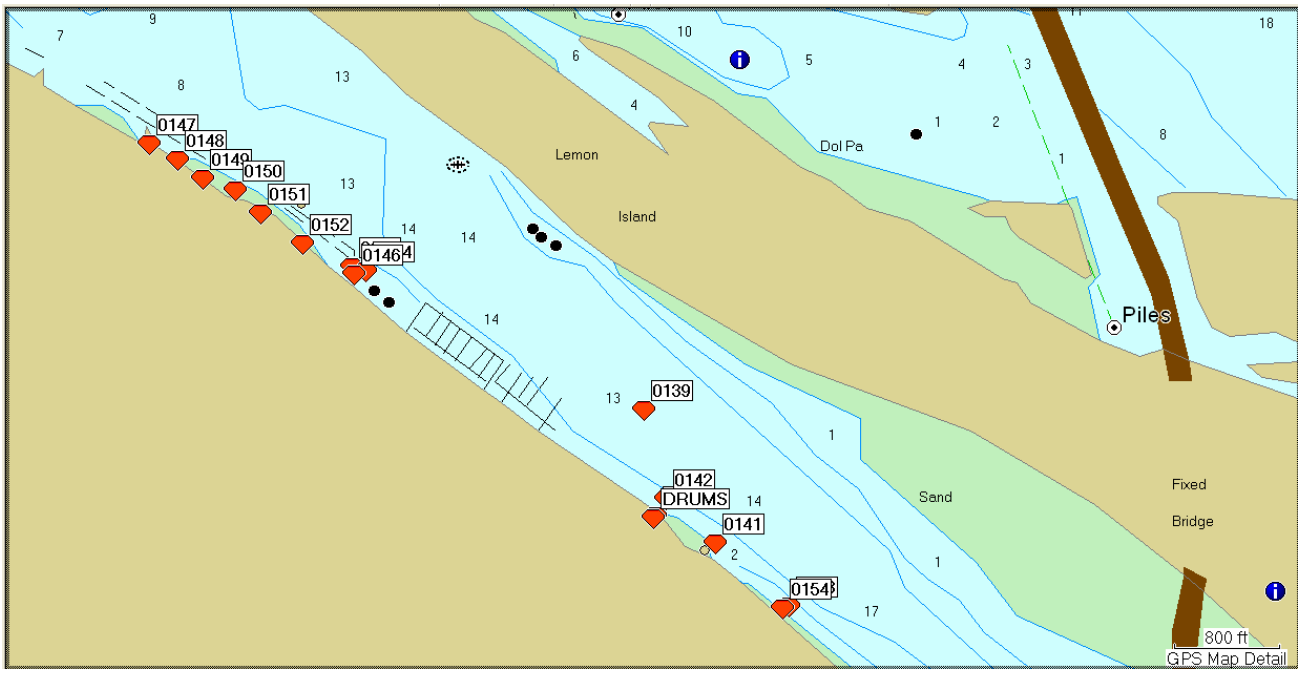


Table 1. Locational data for anchor points and dives.

N45 34.914 W122 33.582 "DRUMS" (GPS location reported by Sheriff Dept. and ODEQ).

0139	24-APR-07 15:04	N45 35.050 W122 33.600	7 ft
0140	24-APR-07 16:20	N45 34.917 W122 33.578	13 ft
0141	25-APR-07 10:39	N45 34.882 W122 33.472	2 ft
0142	25-APR-07 11:54	N45 34.938 W122 33.559	6 ft
0143	25-APR-07 13:16	N45 35.228 W122 34.120	4 ft
0144	25-APR-07 16:08	N45 35.223 W122 34.097	-8 ft
0145	25-APR-07 16:45	N45 35.219 W122 34.118	5 ft
0146	25-APR-07 16:46	N45 35.219 W122 34.118	8 ft
0147	26-APR-07 09:41	N45 35.381 W122 34.483	10 ft
0148	26-APR-07 11:14	N45 35.362 W122 34.434	10 ft
0149	26-APR-07 11:57	N45 35.339 W122 34.388	17 ft
0150	26-APR-07 12:58	N45 35.324 W122 34.330	15 ft
0151	26-APR-07 14:04	N45 35.295 W122 34.285	7 ft
0152	26-APR-07 15:04	N45 35.256 W122 34.210	9 ft
0153	26-APR-07 15:46	N45 34.804 W122 33.339	9 ft
0154	26-APR-07 16:14	N45 34.801 W122 33.352	11 ft

Figure 2. Detail of anchor/dive locations.

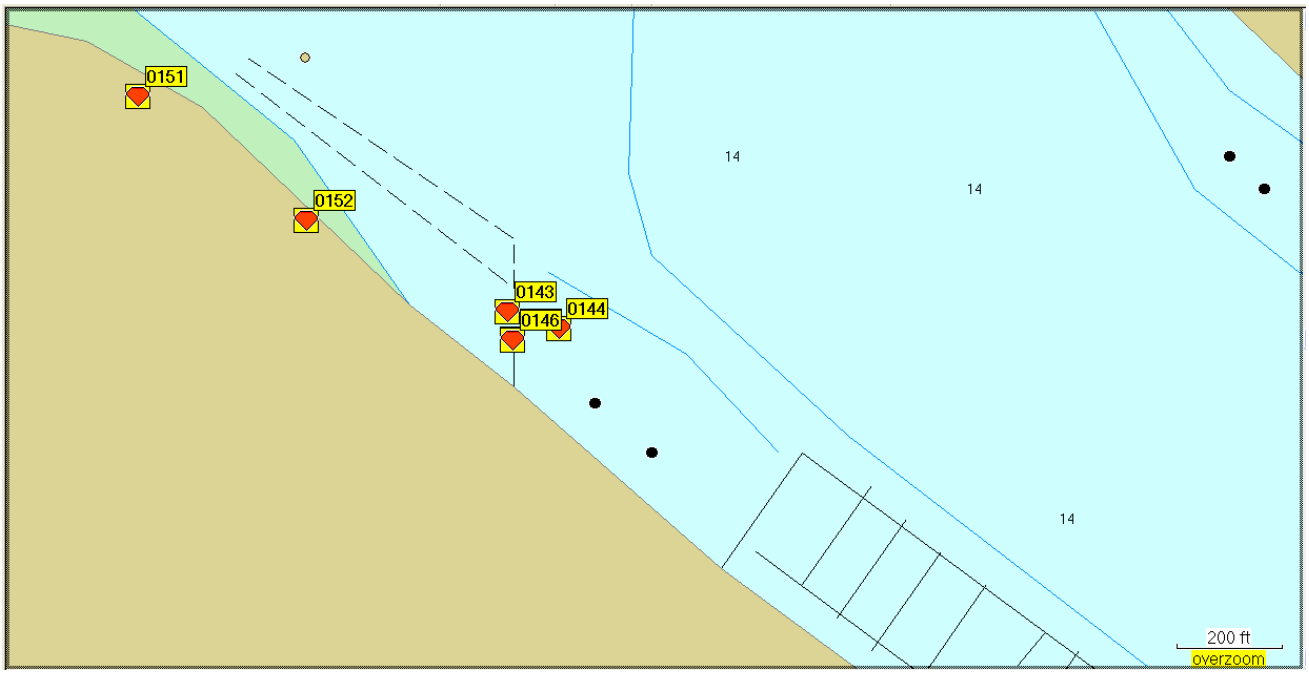
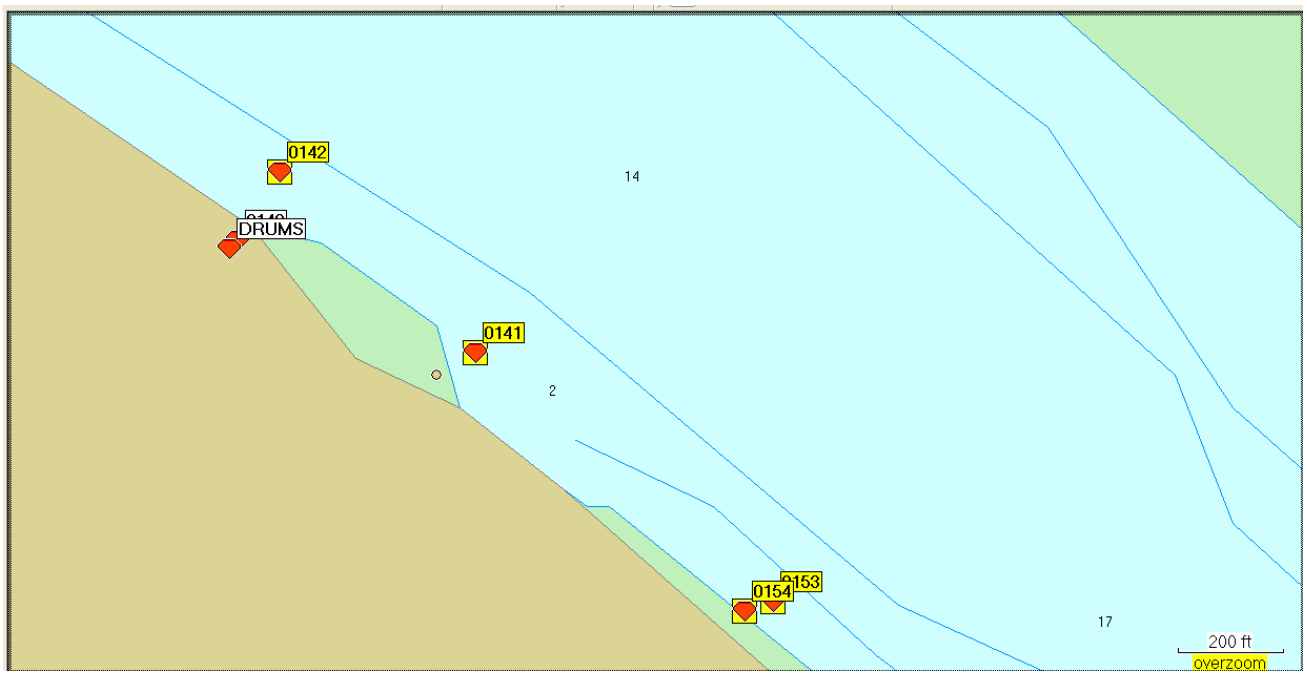


Figure 3. Initial search area and final core (upstream background) locations.



Personnel:
Divers: Tim Siwiec (TS), Sean Sheldrake (SS), Rob Pedersen (RP)
Boat Operator: Curt Black, Dave Terpening

Dive Details: see Summary Table, below.

Hazards: Diver entanglement in debris, potential for suit/body puncture. Rapid ascent due to current/tethering. Injury potential exiting water in high current (for mid-channel dive).

Exposures: Sediment – heavy metals and hazardous hydrocarbons (see Dive Plan). Water – unknown contaminants in site-related water discharging from outfalls.

Diver/Equipment Issues – Assignments (in bold):
-SS with a bad cold and sinus issues – self treated with meds.
-RP's Viking exhaust valve (left arm) leaked; cleaned in sink that PM and orally blew through the valve; no further problems. Divers need to periodically remove and clean these valves especially diving in sandy/silty conditions.
-Need to check for spare clip-rings ("carabineers") in cooler/DM kit.
-AGA clean, reassemble (RP, done).
-Hang/dry tether, stow (SS, done).
-Recharge batteries (SS, done).
-Fill tanks, leaving ones needing hydro (TS, done/in progress).

A hole in the starboard side of the Monitor (occurred while trailering) the first morning of diving caused the divers to use the samplers' boat the Wooldridge. Samples were processed on shore at the boat ramp. The Monitor was repaired by that afternoon and was used for the rest of the dive operations.

First Aid Supplies Expended: none

Decontamination: Freshwater rinse.

Table 2 - Dive Summaries:

Date/dive event	Divers	Max Depth/ft	Bottom Time/min	Comments
Dive 1 5/24	RP	22	35	Anchor 1, waypoint 139, midchannel.
Dive 2 5/24	RP	20	41	Anchor 2, WP140 midchannel, E of anch.1.
Dive 3 5/25	TS	18	34	Anchor 3, WP141 L bank, near/upstream GPS flag.
Dive 4 5/25	TS	25	30	Anchor 4, WP142 L bk, deeper bet. 2 & 3, 2 core samples.
Dive 5 5/25	SS	13	7	Anchor 5, WP143 L bk, dwnstr. per picture, core at drum, 10m out.
Dive 6 5/25	SS	13	22	Anchor 6, WP143(same) L bk, 4 cores in lg. drum area, 2 trips, ~37m out.
Dive 7/8 (same dive) 5/25	SS	12	37	Anchor 7&8, WP144 &145, L bk, uptr., no samples.

Dive 9 5/26	RP	13	37	Anchor 9, WP147 L bk, dwnstr. or 5/25, drums, 2 cores.
Dive 10 5/26	RP	13	7	Same loc., return to sample in drum, 16m out. Lots of drums.
Dive 11 5/26	RP	11	24	Anchor 11, WP148 L bk, cores in/around drums (1 in drum).
Dive 12 5/26	RP	13	27	Anchor 12, WP149 L bk, 2 cores.
Dive 13 5/26	TS	14	30	Anchor 13, WP150 L bk, cont.upstr, 2 drums & 2 cores.
Dive 14 5/26	TS	14	29	Anchor 14, WP151 L bk, no drums, 2 samples.
Dive 15 5/26	TS	14	16	Anchor 15, WP152 L bk, less sweeping, no drums, 2 cores.
Dive 16/17 (same dive) 5/26	TS	8	31	Anchor 16&17, WP153 & 154 uprstr.2 bkground cores, towards channel, more sand, then L bk,

Site charge account code: 07T 10N 302DD2C 10ZZQB00.