3.7.2.4

Kennedy/Jenks Consultants

South Tacoma Field
Superfund Site
Tacoma, WA

Surface Water and Sediment Investigation Report DATA APPENDIX

K/J Project No. 916055.10

1021432

SURFACE WATER AND SEDIMENT INVESTIGATION REPORT

SOUTH TACOMA FIELD SUPERFUND SITE

REMEDIAL INVESTIGATION/FEASIBILITY STUDY

DATA APPENDIX

Prepared for

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1.0 INTRODUCTION

This Data Appendix contains explanatory information and analytical results pertinent to the South Tacoma Field (STF) Surface Water and Sediment Investigation. This investigation consisted of the following sampling events:

- Background surface water sampling at five offsite locations during dry and wet seasons (August 1991 and January 1992, respectively)
- Onsite surface water and sediment sampling in surface water channel during a transitional season (April 1991), and dry and wet seasons (August 1991 and January 1992, respectively)
- Biweekly surface water runoff sampling at one downgradient location
- Monthly surface water runon sampling at two upgradient locations
- Storm event sampling at the biweekly/runoff location and at the two monthly/runon locations.

The Surface Water and Sediment Investigation is one of several components of the STF Remedial Investigation (RI), which is being conducted in accordance with the following EPA-approved planning documents: STF Document and Data Management Plan, STF Field Sampling and Analysis Plan, STF Quality Assurance Project Plan, STF Site Safety and Health Plan, and the STF Wetlands Field Sampling and Analysis Plan Amendment (Kennedy/Jenks/Chilton 1991a,b,c,d,e).

1.1 DATA APPENDIX ORGANIZATION

This Data Appendix has been organized into 10 tabbed sections to allow ready access to explanatory material and analytical data printouts. The analytical data printouts (Section 7.0) have been organized by analyte group using a subset of blue-colored tabs. A description of the contents of each appendix section is provided in Sections 1.2 through 1.8.

1.2 SAMPLE CODE DESCRIPTION

A sample code was developed to enable the data reviewer to identify pertinent information regarding the sample based on this code. The sample identification used on sample forms and sample labels was a concatenation of the location number (see Section 1.2.1) plus the sample code. In addition, data are sorted and retrieved using key components of the code.

The sample code is a 19-character code composed of the following five components:

- Location code (four-digit code)
- Matrix (two-letter code)
- Sample type (six-digit code)
- Depth (five-digit code, which includes a decimal point at the fourth position of this code)
- Event (two-digit code).

Each component of the STF sample code is described in Sections 1.2.1 through 1.2.5. Additional details regarding the sample code are provided in Section 2.0.

1.2.1 Location Code

A unique four-digit number was assigned to each location where a sample was collected. Geographic information (i.e., northing coordinate, easting coordinate, and elevation) was calculated or collected for each location by a licensed land surveyor (PEI/Barrett). Location codes were used to relate the geographic information database with the analytical database for the purposes of mapping chemical distributions for the STF site using a geographic information system (GIS) (see Sections 1.3 and 3.0 for additional information regarding the location code).

1.2.2 Matrix Code

A two-letter code was used to identify each matrix sampled during the STF RI. The following codes were assigned to sample matrices:

- SS Surface soil
- SB Subsurface soil
- SD Sediment
- GF Groundwater, filtered
- GU Groundwater, unfiltered
- SF Surface water, filtered
- SU Surface water, unfiltered

- BB Blackberry
- TS TCLP extraction for soil
- WS Water extraction for soil
- CS Coarse-sieved soil (0.075-2.0 mm)
- FS Fine-sieved soil (less than 0.075 mm)
- WW Quality assurance/quality control (QA/QC) blank (water).

1.2.3 Sample Type Code

The sample type code [a.k.a. System Multipurpose Key (SMK)] is a six-digit number that identifies whether the sample is a regular environmental sample, a multiple sample, a duplicate sample, or a blank (or some combination of one or more of those sample types). The first four digits were used for differentiating among the first three sample types and the last two digits are reserved for identification of blanks. A regular environmental sample is denoted as "000000." The blanks were identified using the following numbers in the last two places of the sample type code:

- 00 Regular environmental sample (not a blank)
- 01 Field blank
- 02 Rinsate blank
- 03 Trip/transfer blank.

Additional explanatory information for the SMK is provided in Section 2.0.

1.2.4 Depth

Depth is a 5-digit number that identifies the depth in feet below the ground surface. The fourth "digit" of this five-digit code is a decimal point. Surface water samples were collected as grab samples near the water surface. Sediment samples were collected from the top 2 inches of sediment at the water/sediment interface. Surface soil samples were collected from the surface to a 6-inch depth. For subsurface samples, the entire length of a split-spoon sampler was used when sampling an interval, but the depth at the top of the core was used to reference depth. Groundwater samples were collected from an approximate depth measured from the top of casing at elevation above sea level to the depth of the dedicated submersible pump.

1.2.5 Event Code

Some matrix investigations had multiple sampling events. Those events were differentiated using the two-digit event code. The first sampling event was assigned "00" and 1 was added to each subsequent sampling event. For example, 2nd event surface water and sediment samples were assigned an event code of "01" and 3rd event samples were assigned "02." However, the first biweekly/monthly surface water sampling event was assigned "50" and 1 was added to each subsequent event. The first storm sampling event was assigned a "20" and 1 was added to each subsequent event. Investigations with only one scheduled event were assigned an event code of "00" (e.g., Phase I Surface Soil Investigation and the Blackberry Investigation).

1.3 SAMPLE LOCATION DATA

The boundary of the STF site was surveyed by a licensed land surveyor (PEI/Barrett). Horizontal survey control is based on the City of Tacoma coordinates, which were converted to 1983 NAD datum and Washington State Plane Coordinate datum. Vertical datum for the site is NGVD29 (National Geodetic Vertical Datum of 1929), which is also the datum for the City of Tacoma.

The surface soil sampling grid from the Work Plan (ICF 1990b) was overlaid onto the site, and northing and easting coordinates were calculated for each sample node (for medium- and low-perceived risk areas) or grid center (for high-perceived risk areas). Each set of coordinates was assigned a unique four-digit location code. Location codes and corresponding coordinates were loaded into the electronic surveying instruments and each location was marked in the field with a stake.

Geographic information (northing and easting coordinates, and elevation) was obtained for each surface water/sediment sample location and is presented in the location data printout (see Section 3.0). Geographic information for surface water and sediment sample locations was obtained after samples were collected.

Each investigation was assigned the following unique range of numbers:

Investigation	Location Number
Surface Soil	
• Onsite	0251-0953
• Background	0960-0971
Subsurface Soil	
• Dry Wells	1000-1009
• Pioneer Builders Supply	
- Phase I	1760
- Phase II	1100-1103
Groundwater	
• Phase I	1750-1788
Surface Water/Sediment	
• Phase I	2501-2530
• Background	2500, 2540, 2541, 2542, 2543
Blackberry	
• Onsite	2051-2056
• Background	2061-2066

Each four-digit location code was converted into a three-digit hexadecimal equivalent to facilitate merging of Kennedy/Jenks Consultants database into the EPA CERCLA Information System (CERCLIS) database. The location field in the CERCLIS database allows for only 15 characters. The EPA CERCLIS location numbers, as shown in the printout in Section 3.0, are situated to the left of the four-digit location code. The first 12 characters of the EPA CERCLIS location code identify the unique EPA CERCLIS site number for STF, WAD980726301, and the last three are the hexadecimal equivalent of the location code (shown in bold type in Section 3.0 sample location data printout).

1.4 ANALYTICAL REQUIREMENTS

Analytical requirements for the STF RI are detailed in Section 4.0 (Tables 4-1 through 4-6). Laboratories, analyses, and analytical methods are provided in Table 4-1. The STF RI target compound list (TCL) suite of chemicals and their associated contract required quantitation/detection limits (CRQLs and CRDLs) are presented in Table 4-2 (volatiles), Table 4-3 (semivolatiles), Table 4-4 (pesticides/PCBs), and Table 4-5 (metals and cyanide). Analytical parameters for all events associated with surface water and sediment sampling are provided in Table 4-6.

Surface water samples were collected from five background locations once during the dry season (August 1991) and once during the wet season (January 1992).

Background surface water samples were analyzed for TCL constituents, boron, and fecal bacteria (i.e., fecal coliform and fecal streptococcus).

Surface water runon samples were collected monthly from two upgradient locations and analyzed for polynuclear aromatic hydrocarbons (PAHs; Method 8310), metals, boron, fecal bacteria, and total suspended solids (TSS).

Surface water runoff samples were scheduled to be collected biweekly from the downgradient location and analyzed for TCL constituents, boron, and fecal bacteria. However, because surface water flow was seldom observed at the downgradient location, a total of four samples was collected (i.e., approximately 22 samples less than anticipated).

In addition, surface water runon samples were collected from the two upgradient locations during 11 storm events (i.e., one storm less than originally scheduled for sampling). These stormwater runon samples were analyzed for PAH (Method 8310), metals, boron, fecal bacteria, and TSS. Surface water runoff samples were scheduled to be collected from the downgradient location during these same storm events. As discussed above, because surface water flow was seldom observed at the downgradient location, only one stormwater runoff sample was collected (i.e., 11 samples less than anticipated). The stormwater runoff sample was analyzed for TCL constituents, boron, and fecal bacteria.

Surface water and sediment samples were collected from the onsite surface water drainage during three separate sampling events [i.e., transitional season (1st event/April 1991), dry season (2nd event/August 1991), and wet season (3rd event/January 1992)]. Analytical parameters for these three sampling events are listed below:

- Transitional event surface water samples - TCL constituents and fecal bacteria
- Transitional event sediment samples - TCL constituents only (including chromium VI)
- Dry season event surface water samples - TCL constituents, boron, and fecal bacteria
- Dry season event sediment samples - TCL constituents, boron, and grain size distribution
- Wet season event surface water samples - TCL constituents, boron, and fecal bacteria
- Wet season event sediment samples - TCL constituents, boron, grain size distribution, and total organic matter (TOM) using USDA Handbook No. 60, Method 24.

Hardness was also calculated for all surface water samples collected during the Surface Water and Sediment Investigation.

1.5 DATABASE INDEX

The STF database index is provided in Section 5.0. This index was developed to organize the magnetic media of all analytical data associated with the STF RI. Basically, the index is a table of database filenames (and associated disk numbers) organized by analyte group (columns) and by investigation (rows). Analytical data were organized by matrix (e.g., surface water, sediment, groundwater, soil) by event (e.g., 1st event, 2nd event, 3rd event), and by analyte group (e.g., volatiles, pesticides/PCBs, metals). A database filename was assigned for each analyte group and each matrix, investigative task, event, or associated activity. To date, the STF database index comprises approximately 292 separate files and 49 disks. Database files for each analyte group associated with a specific investigation have been copied from the master STF database to 3.5-inch magnetic disks. Magnetic disks were assigned alphanumeric designations based on sample matrix. Two sets of magnetic disks for each investigation will be transmitted to EPA with this Data Appendix.

1.6 LABORATORY AND DATA VALIDATION QUALIFIERS

Laboratory data qualifiers and data validation qualifiers (both types of qualifiers may be assigned to analytical data) are provided in Section 6.0.

Laboratory data qualifiers for inorganic and organic analyses are listed in Table 6-1 and Table 6-2, respectively. A laboratory analyst assigns these qualifiers to data using the criteria provided in the Contract Laboratory Program (CLP) Statements of Work (SOWs) for EPA (1988b, 1990a,b). Laboratory data qualifiers for PAH analyses (non-CLP methods) are provided in Table 6-3. Laboratory qualifiers for a chemical, if assigned, are situated to the left of the concentration value in the analytical data printouts (see example format in Table 1-1).

Analytical data were subjected to a rigorous data validation review to evaluate procedural compliance to quality assurance objectives and to assess a laboratory's performance in meeting quality control specifications for detection limits, accuracy, precision, and completeness as outlined in the CLP SOWs for pesticides/PCBs, organics, and inorganics (EPA 1988b, 1990a,b). Data validation was performed by EcoChem, Inc. (EcoChem). These qualifiers were assigned by an experienced data validation reviewer using the criteria provided in the functional guidelines for evaluating inorganic and organic analyses (EPA 1988c,d,e).

Data validation qualifiers for all analytical data are provided in Table 6-4. In addition, data validation qualifiers for organic analyses only are provided in Table 6-5. Data validation qualifiers, if assigned, are situated to the right of the concentration value in the analytical data printouts (see example format in Table 1-1).

TABLE 1-1

EXAMPLE FORMAT FOR PRESENTATION OF ANALYTICAL RESULTS

Site Location Code LOC_NO + K/J_CODE	Lab Sample No. TRA_NUM	Al			Sb			As			Ba		
		Lab Q[a]	Conc.[b]	DVQ[c]	Lab Q	Conc.	DVQ	Lab Q	Conc.	DVQ	Lab Q	Conc.	DV Q
(19 characters)													

(a) Lab Q = Laboratory qualifier.
(b) Conc. = Concentration (units will be shown).
(c) DVQ = Data validation qualifier.

Note: Because analytical results are so extensive and in most cases will not print onto one page, results will be printed in their entirety for the grouping of analytes that fits onto one page before the next grouping of analytes is presented. For example, as shown in this table, all results for Al, Sb, As, and Ba will be presented before introducing the next analyte grouping (e.g., Be, Cd, Ca, Cr, and so on).

1.7 ANALYTICAL RESULTS

Analytical results for the Surface Water and Sediment Investigation are presented in Section 7.0 of this Data Appendix. Data are presented by analyte group (separated by blue-colored tabs) and are arranged in order of increasing STF location number (i.e., 4-digit number). Note that on the data printouts if the four-digit location number started with "0" (e.g., 0253), the "0" was not printed as part of the complete STF number.

Data printouts for tentatively identified compounds (TICs) for volatiles and semi-volatiles are presented immediately after the printout for TCL volatiles and semi-volatiles compounds, respectively. However, they are presented in a different format than TCL chemicals because a different suite of TICs were detected at each location.

Analyte groups are presented in the following order and are separated by blue-colored tabs:

- Volatiles
- Semivolatiles
- PAH compounds
- Pesticides/PCBs
- Cyanide
- Metals
- Total organic carbon [using method for total organic matter (TOM)]
- Fecal bacteria (coliform and streptococcus)
- Geotechnical (grain size distribution)
- Field data.

Within each analyte group, surface water and sediment sampling events and associated QA results are presented in the following order and are separated by color divider sheets:

- Onsite transitional event surface water
- Onsite transitional event sediment
- Onsite dry season event surface water
- Onsite dry season event sediment
- Onsite wet season event surface water
- Onsite wet season event sediment
- Biweekly/monthly surface water
- Storm event surface water
- Background surface water

- QA/QC duplicates for surface water
- QA/QC duplicates for sediment
- QA/QC blanks.

If a chemical was not analyzed for, a value of "0" was placed in the concentration field.

The values shown in the database printouts (Section 7.0) may not represent the actual number of significant figures in the concentrations as presented on the Form I sheets of the CLP deliverable packages from the laboratories. The concentration field in the database was set for a maximum of 11 significant digits (i.e., seven digits preceding the decimal point and four digits following the decimal point) to accommodate the largest concentrations anticipated during the STF RI. If the actual concentration has fewer than four significant digits, the database automatically fills in zeros in the remaining spaces of the field.

Occasionally the laboratory had to dilute or re-analyze a sample to achieve quality control limits. The diluted or re-analyzed sample is designated in the database with a "D" or an "R," respectively (printed after the Lab Number). These data are located immediately below those for the original sample.

1.8 DATA VALIDATION REPORTS

The Surface Water and Sediment Investigation includes three separate Data Validation Reports for the transitional season (April 1991), dry season (August 1991), and wet season (January 1992). Background samples collected during the dry and wet season sampling events were included in the data validation for those events. These reports were prepared by EcoChem. One-hundred percent of the analytical data were validated for this investigation. The Surface Water and Sediment Investigation Data Validation Reports are presented in Section 8.0 of this Data Appendix.

In addition, a Data Validation Report will be prepared for the biweekly/monthly and storm sampling events. This Report will be submitted when data validation has been completed by EcoChem.

2.0 SAMPLE CODE DESCRIPTION

2.1 DESCRIPTION OF SYSTEM MULTIPURPOSE KEY (SMK)

The SMK is a six-digit code used to distinguish the manner in which multiple samples are obtained. Each of the first four-digit positions of the code signify a specific piece of information regarding multiple samples. Because EPA has not assigned specific pieces of information for the last two digits, Kennedy/Jenks Consultants has incorporated these digits into its code to distinguish blank samples.

The information conveyed in the first six-digit positions of the SMK is summarized below.

Digit Position	Definition
1	Identifies whether the sample is an individual sample or one of a multiple sample set. For example, the sample in question could be one of a set of samples taken from a location and not further divided, one of a set of multiple samples divided in the field, one of a set of multiple samples divided in the laboratory, or a combination of the above. The actual number placed in the first-digit position will be a value ranging from 0 to 7. The meaning attached to the first-digit position number is shown in Table 2-1.
2	Identifies which sample has been retrieved from the set of multiple samples. For example, if a sampling event from a single sample point has resulted in four undivided samples, the data values reported for the first sample would have "1" in the second-digit position of the SMK code, the data values reported for the second sample would have "2" in the second-digit position of the SMK code, etc.
3	Identifies which field replicate has been retrieved from the data set. For example, if one sample was collected at the sample point and divided into several sample containers for analysis in the field, the data values reported for the first "field replicate" would have "1" in the third-digit position of the SMK code, the second field replicate would have "2" in the third-digit position of the SMK code, etc.

4 — Identifies which lab replicate has been retrieved from the data set. For example, if one sample was collected at the sample point and divided into several sample containers for analysis in the lab, the data values reported for the first "lab replicate" would have "1" in the fourth-digit position of the SMK code, the second lab replicate would have "2" in the fourth-digit position of the SMK, etc.

5 and 6 — Identifies blank samples taken during a sampling event. There are three types of blank samples that can be obtained in the field: field blank (01), rinsate blank (02), and trip blank (03).

The following table will enable the user to determine the significance of the value appearing in the first-digit position of the SMK code.

TABLE 2-1

SMK NOTATION

First-Digit Code	Multiple Sample	Field Replicate	Lab Replicate
0	No	No	No
1	No	No	Yes
2	No	Yes	No
3	Yes	No	No
4	No	Yes	Yes
5	Yes	Yes	No
6	Yes	No	Yes
7	Yes	Yes	Yes

To illustrate, if the first value of the SMK code is 3, the user would know that several separate samples were taken at the sample location. None of these samples were further divided in either the field or the lab. If the first value of the SMK code is 5, the user would know that several samples were taken at the sample location and that one or all of the samples were subsequently divided in the field (i.e., data you retrieved are from a field replicate). If the first value of the SMK

code is 1, the user would know that only one sample was obtained from the sample location, but it was divided into several portions in the lab (i.e., data you retrieved are from one of the lab replicates).

The SMK code illustrated below indicates that the sample is one of a multiple sample set; this particular sample was the first in the lot; it was divided in the field; it is the first of the field replicates; it was not divided in the lab; and it is not a blank.

511000
|||| |
ABCD E

KEY

A 5 indicates that this sample is one of a set of multiple samples that was subsequently divided into field replicates.

B 1 indicates that this sample is the first replicate of the set of samples for this particular station.

C 1 indicates that this sample is the first field replicate.

D 0 indicates that the original samples were not divided in the lab.

E 00 indicates that this sample is not a blank. These fields are currently defined as:

00: Regular sample (not a blank)
01: Field Blank
02: Rinsate Blank
03: Trip Blank.

Note: Material presented in Section 2.1 has been adapted from U.S. Environmental Protection Agency. 1986. Groundwater Data Management with STORET. EPA/600/M-86/007.

TABLE 2-2

EXAMPLE OF SAMPLE CODE DESCRIPTION (19-Character Code)

Sample Code Explanation					Explanation
Location Code	Matrix	Sample Type[a]	Depth[b]	Event	
2506	SU	310000	000.0	00	Regular surface water sample collected at location 2506
2506	SU	320000	000.0	00	The second surface water sample of a multiple sample collected at location 2506
2530	SU	201000	000.0	01	Duplicate surface water sample collected during 2nd sampling event at location 2530
3198[c]	SU	202000	000.0	01	
2525	SD	000000	000.0	02	Regular sediment sample collected during 3rd sampling event at location 2525
2500	SU	000000	000.0	20	Regular stormwater sample collected at location 2500 during the 1st storm event (storm sampling events began with Event #20)
2501	SU	000000	000.0	21	Regular stormwater sample collected at location 2501 during the 2nd storm event
2515	SU	000000	000.0	51	Regular biweekly water sample collected at location 2515 during the 2nd biweekly event (biweekly events began with Event #50)

(a) See description of SMK (Section 2.1 of this Data Appendix).
(b) The decimal point is considered a digit in the 19-character code.
(c) Example "dummy" location code assigned to duplicate sample.

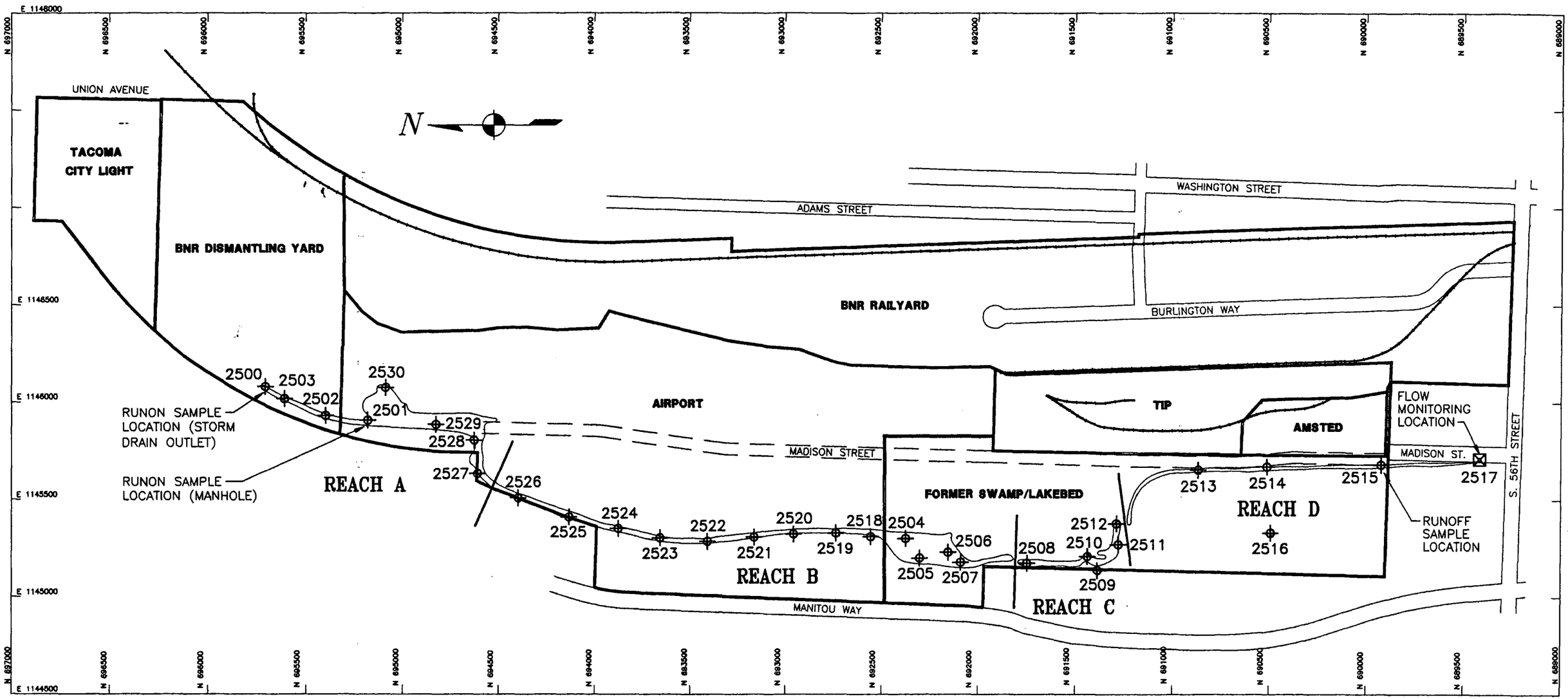
3.0 SAMPLE LOCATION DATA

Sample location data for the Surface Water and Sediment Investigation are provided in the printout following this page (see Section 1.3 for description of sample location data). Onsite surface water and sediment sample locations are shown in Figure 3-1. Background surface water sample locations are shown in Figure 3-2. In addition, sample locations, sampling events, and the number of samples collected for the STF Surface Water and Sediment Investigation are summarized in Table 3-1.

SOUTH TACOMA FIELD
Location Data for Surface Water/Sediment

EPA Storet Code	Location	1983 NAD Coordinate Data Northing	Easting	Elevation
WAD9807263019C4	2500	695708.45	1146078.37	240.93
WAD9807263019C5	2501	695181.52	1145905.45	235.84
WAD9807263019C6	2502	695399.17	1145929.65	235.49
WAD9807263019C7	2503	695610.05	1146016.09	235.19
WAD9807263019C8	2504	692376.02	1145298.34	230.31
WAD9807263019C9	2505	692304.73	1145198.84	227.40
WAD9807263019CA	2506	692157.50	1145229.72	-1.00
WAD9807263019CB	2507	692090.89	1145176.64	225.38
WAD9807263019CC	2508	691748.31	1145172.38	224.29
WAD9807263019CD	2509	691384.97	1145135.45	-1.00
WAD9807263019CE	2510	691437.04	1145206.25	226.07
WAD9807263019CF	2511	691278.50	1145267.29	-1.00
WAD9807263019D0	2512	691287.39	1145374.74	226.40
WAD9807263019D1	2513	690867.09	1145651.98	230.47
WAD9807263019D2	2514	690511.67	1145668.09	228.69
WAD9807263019D3	2515	689924.12	1145678.81	230.35
WAD9807263019D4	2516	690492.71	1145328.36	-1.00
WAD9807263019D5	2517	689418.77	1145709.77	228.34
WAD9807263019D6	2518	692556.46	1145307.72	230.21
WAD9807263019D7	2519	692738.21	1145326.32	230.40
WAD9807263019D8	2520	692957.44	1145321.35	230.43
WAD9807263019D9	2521	693163.04	1145305.36	230.52
WAD9807263019DA	2522	693409.07	1145283.40	231.04
WAD9807263019DB	2523	693658.10	1145301.05	231.22
WAD9807263019DC	2524	693877.06	1145349.58	231.23
WAD9807263019DD	2525	694133.36	1145408.68	231.97
WAD9807263019DE	2526	694398.22	1145506.39	232.35
WAD9807263019DF	2527	694609.69	1145632.00	231.84
WAD9807263019E0	2528	694627.38	1145803.31	232.36
WAD9807263019E1	2529	694828.09	1145883.98	232.72
WAD9807263019E2	2530	695088.76	1146073.11	233.84
WAD9807263019EC	2540	NO SURVEY	NO SURVEY	NO SURVEY
WAD9807263019ED	2541	NO SURVEY	NO SURVEY	NO SURVEY
WAD9807263019EE	2542	NO SURVEY	NO SURVEY	NO SURVEY
WAD9807263019EF	2543	NO SURVEY	NO SURVEY	NO SURVEY

DATA VALIDATION
DATE RECEIVED _____
VALIDATED BY _____ DATE _____
KEYED BY _____ DATE _____
CHECKED BY JBM DATE 4/16/92



LEGEND

2502 ⌖ SURFACE WATER/SEDIMENT SAMPLE LOCATIONS

2517 ⊠ FLOW MONITORING LOCATION ONLY

250 125 0 250 500 750

SCALE IN FEET

NOTE:

LOCATION 2500 ALSO CONSIDERED BACKGROUND SAMPLE LOCATION.

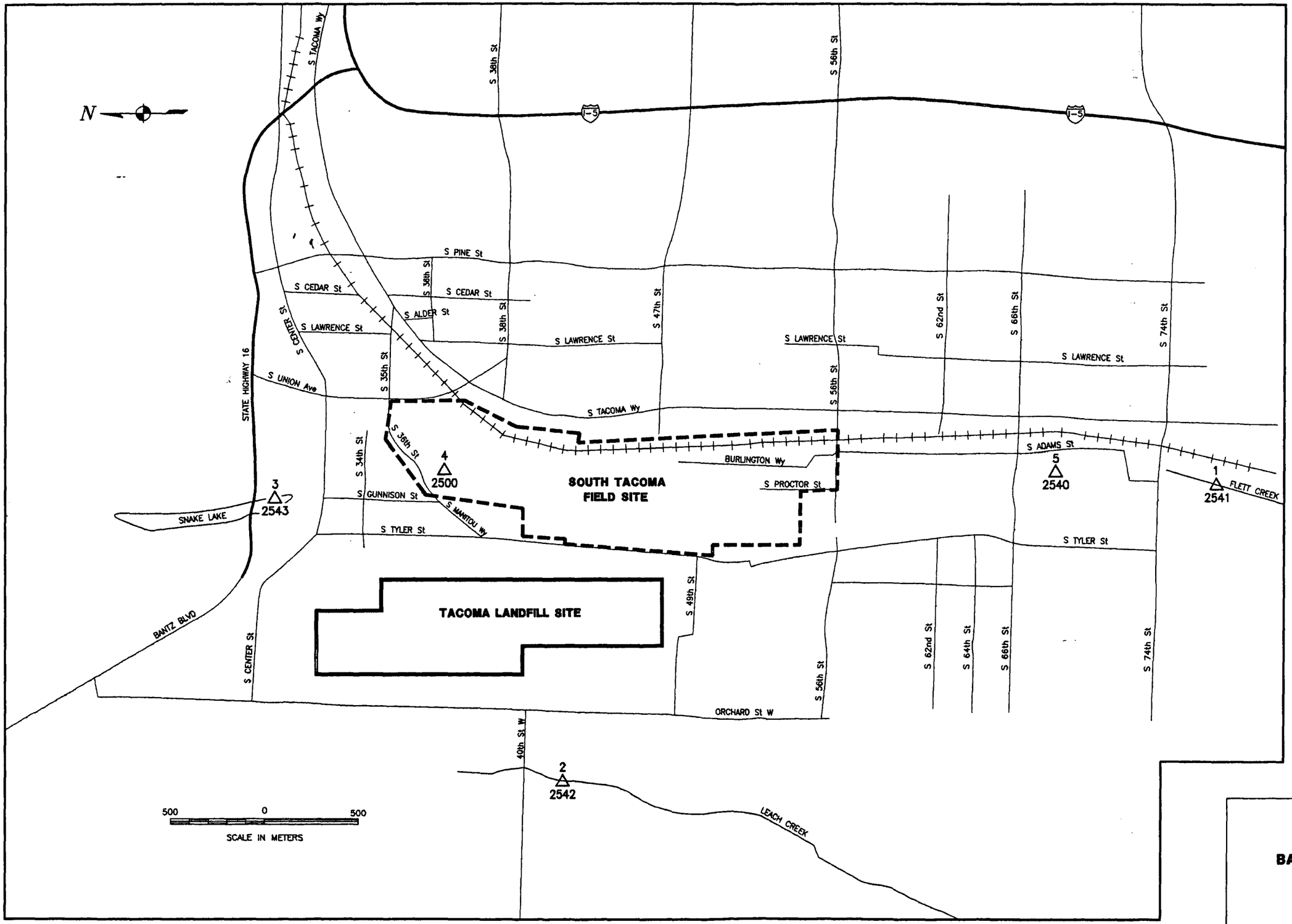
Kennedy/Jenks Consultants

SOUTH TACOMA FIELD
TACOMA, WA

ONSITE SURFACE WATER AND SEDIMENT SAMPLE LOCATIONS

916055.10/P2SK061

FIGURE 3-1



LEGEND

3
2543 BACKGROUND SURFACE WATER SAMPLING LOCATION

SOUTH TACOMA FIELD SITE BOUNDARY

TACOMA LANDFILL SITE BOUNDARY

NOTES:

1. ALL LOCATIONS ARE APPROXIMATE.

BASE MAP REFERENCE

AMERICAN DIGITAL CARTOGRAPHY SOUTH TACOMA, WA QUAD AND STEILACOOM, WA QUAD

Kennedy/Jenke Consultants

SOUTH TACOMA FIELD
TACOMA, WA

BACKGROUND SURFACE WATER SAMPLE LOCATIONS

916055.10/P2SK060

FIGURE 3-2

TABLE 3-1

SUMMARY OF SAMPLE LOCATIONS, SAMPLING EVENTS, AND NUMBER OF SAMPLES COLLECTED FOR THE STF SURFACE WATER AND SEDIMENT INVESTIGATION

Sample Location	Surface Water			Surface Water[d]			Sediment[d]			Background[e] Surface Water	
	Biweekly[a]	Monthly[b]	Storm[c]	Transitional Season (4/91)	Dry Season (8/91)	Wet Season (1/92)	Transitional Season (4/91)	Dry Season (8/91)	Wet Season (1/92)	Dry Season (8/91)	Wet Season (1/92)
Onsite											
2500[f]		11	11								
2501		10	11		1	1		1	1		
2502					1	1		1	1		
2503					1	1		1	1		
2504					NS[g]			1	1		
2505					NS	1		1	NS[h]		
2506[i]				2	NS	2	1	2	1		
2507					NS	1		1	1		
2508					1	1		1	1		
2509[i]				2	NS	2	1	2	2		
2510					1	1		1	1		
2511[i]				2	NS	2	1	2	2		
2512					NS	1		1	1		
2513					NS			1	1		
2514					NS			1	1		
2515	4		1		NS			1	1		
2516[i]				2	NS	2	2	2	2		
2517[j]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2518					NS	1		1	1		
2519					NS	1		1	1		
2520					NS	1		1	1		
2521					NS	1		1	1		
2522					NS	NS		1	1		
2523					NS	NS		1	1		
2524					NS	NS		1	1		
2525					NS	NS		1	1		
2526					NS	NS		1	1		
2527					1	1		1	1		
2528					1	1		1	1		
2529					1	1		1	1		
2530					1	1		1	1		

TABLE 3-1

SUMMARY OF SAMPLE LOCATIONS, SAMPLING EVENTS, AND NUMBER OF SAMPLES COLLECTED FOR THE STF SURFACE WATER AND SEDIMENT INVESTIGATION

Sample Location	Surface Water			Surface Water[d]			Sediment[d]			Background[e] Surface Water	
	Biweekly[a]	Monthly[b]	Storm[c]	Transitional Season (4/91)	Dry Season (8/91)	Wet Season (1/92)	Transitional Season (4/91)	Dry Season (8/91)	Wet Season (1/92)	Dry Season (8/91)	Wet Season (1/92)
Background											
2500[f]										1	1
2540										1	1
2541										1	1
2542										1	1
2543										1	1

(a) Surface water runoff samples were scheduled to be collected biweekly from Location 2515. However, because surface water flow was seldom observed at Location 2515, only 4 samples were collected.

(b) Surface water runon samples were collected monthly from Locations 2500 and 2501.

(c) Surface water runon samples were collected during 11 separate storm events from Locations 2500 and 2501. Surface water runoff samples were scheduled to be collected during the same storm events from Location 2515. Because surface flow was seldom observed at Location 2515, only 1 stormwater runoff sample was collected.

(d) Surface water and sediment samples were collected during three sampling events: transitional season (April 1991), dry season (August 1991), and wet season (January 1992). These samples were collected from the onsite surface water channel.

(e) Surface water samples were collected from five background locations once during the dry season (August 1991) and once during the wet season (January 1992). Location 2500 is an onsite location that was also sampled as a background location (see footnote f).

(f) Location 2500 is an onsite location that was also sampled as a background location. The outlet of the storm drain at Location 2500 carries surface water runoff from residential and commercial areas located north of the site.

(g) NS - No sample collected. Surface water not present at sample location.

(h) Surface debris prohibited collected of sediment sample at this location.

(i) Two samples were collected in one sampling grid for Locations 2506, 2509, 2511, and 2516.

(j) Location 2517 is an offsite location. The flow monitoring gage was installed at Location 2517. No samples were collected from this location.

4.0 ANALYTICAL REQUIREMENTS

Analytical requirements for the Surface Water and Sediment Investigation are presented in the following summary tables:

- Table 4-1 Laboratories, analyses, and analytical methods for the STF Superfund site
- Table 4-2 Volatile organic compounds and CRQLs
- Table 4-3 Semivolatile organic compounds and CRQLs
- Table 4-4 Pesticides and PCB compounds and CRQLs
- Table 4-5 Metals and cyanide and CRDLs
- Table 4-6 Analytical parameters for samples collected during the Surface Water and Sediment Investigation.

TABLE 4-1

LABORATORIES, ANALYSES, AND ANALYTICAL METHODS FOR THE STF SUPERFUND SITE

Laboratory	Analysis	Method
Pacific Environmental Laboratory (San Francisco, California)	Metals	ILM01.0
	Copper (water)	EPA Method 7211
	Chromium (VI)	EPA Methods 1311 (extraction) and 7197
and	Boron	EPA Method 6010
	Hardness	SM 2340B
	Moisture	EPA Method 160.3
SVL, Inc. [formerly Silver Valley Laboratories (Kellogg, Idaho)]	Cyanide	ILM01.0
	TOC (groundwater)	EPA Method 9060
	TOC (sediment using TOM method)	USDA Handbook No. 60, Method No. 24
	Grain size distribution	Methods of Soil Analysis ASA-SSSA 15-5
	TCLP[a]	EPA Method 1311 (extraction)
	Metals	ILM01.0
	MWEP[a]	SW-924 (extraction)
	Metals	ILM01.0
Analytical Technologies, Inc.[b]	Volatiles	OLM01.0
	Semivolatiles	
	BNA	OLM01.0
	PAH	EPA Method 8310
	Pesticides/PCBs	SOW No. 2/88
San Diego (until 10/8/91)	Cyanide	ILM01.0
	TCLP[a]	EPA Method 1311 (extraction)
	PAH	EPA Method 8310
	MWEP[a]	SW-924 (extraction)
	PAH	EPA Method 8310
San Diego (until 10/8/91)	TOC	EPA Method 9060
	TDS	EPA Method 160.1
	TSS	EPA Method 160.2
	Moisture	EPA Method 160.3
Triangle Laboratories[c]	Dioxin and Furans	EPA Method 8290
Golder Associates[c]	Permeability/hydraulic conductivity	
	Non-permeable soil	EPA Method 9100
	Permeable soil	ASTM D-2434, D-5084
	Particle size distribution	ASTM C-117, C-136 or ASTM D-422
	Porosity-specific gravity	ASTM D-854
	In-situ density	ASTM D-2922
	In-situ moisture	ASTM D-3017
	Compaction	ASTM D-1557
	Atterberg limits	ASTM D-4318
	Moisture	ASTM D-2216
Water Management Laboratories	Fecal Coliform	SM 908C or 909C
	Fecal Streptococcus	SM 910A or 910B

TABLE 4-1

LABORATORIES, ANALYSES, AND ANALYTICAL METHODS FOR THE STF SUPERFUND SITE

(a) TCLP = Toxicity Characteristic Leachate Procedure.
MWEP = Monofilled Waste Extraction Procedure.

(b) Except as indicated for cyanide and TOC analyses by ATI's San Diego laboratory, samples were analyzed either by ATI's Renton, WA or San Diego, CA laboratory (until 10/8/91) as specified in ATI's SOP for Work Transfer (see STF QAPjP, Appendix F, Kennedy/Jenks/Chilton 1991).

(c) Triangle Laboratories and Golder Associates were ATI's subcontractors for the STF project.

TABLE 4-2

VOLATILE ORGANIC COMPOUNDS
CONTRACT REQUIRED QUANTITATION LIMITS (CRQL)

Volatiles	Quantitation Limits(a) Water	Low Soil	Medium Soil
	ug/L	ug/kg	ug/kg
Chloromethane	10	10	1,200
Bromomethane	10	10	1,200
Vinyl Chloride	1	10	1,200
Chloroethane	10	10	1,200
Methylene Chloride	2	10	1,200
Acetone	10	10	1,200
Carbon Disulfide	10	10	1,200
1,1-Dichloroethene	10	10	1,200
1,1-Dichloroethane	10	10	1,200
1,2-Dichloroethene (total)	10	10	1,200
Chloroform	10	10	1,200
1,2-Dichloroethane	10	10	1,200
2-Butanone	10	10	1,200
1,1,1-Trichloroethane	10	10	1,200
Carbon Tetrachloride	10	10	1,200
Dibromochloromethane	10	10	1,200
1,2-Dichloropropane	10	10	1,200
cis-1,3-Dichloropropene	10	10	1,200
Trichloroethene	10	10	1,200
Dibromochloromethane	10	10	1,200
1,1,2-Trichloroethane	10	10	1,200
Benzene	10	10	1,200
trans-1,3-Dichloropropene	10	10	1,200
Bromoform	10	10	1,200
4-Methyl-2-pentanone	10	10	1,200
2-Hexanone	10	10	1,200
Tetrachloroethene	10	10	1,200
Toluene	10	10	1,200
1,1,2,2-Tetrachloroethane	10	10	1,200
Chlorobenzene	10	10	1,200
Ethyl Benzene	10	10	1,200
Styrene	10	10	1,200
Xylenes (Total)	10	10	1,200

Notes:

The CRQL were obtained from the EPA CLP SOW organic analysis (EPA 1990a), except for the CRQL for vinyl chloride and methylene chloride for water which were obtained from the STF RI/FS Final Work Plan (ICF 1990b). Although lower detection limits are required for vinyl chloride and methylene chloride, the detection limits can be met by the EPA-CLP method for volatiles.

(a) Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment (calculated on dry-weight basis as required by the contract) will be higher.

TABLE 4-3

SEMIVOLATILE ORGANIC COMPOUNDS
CONTRACT REQUIRED QUANTITATION LIMITS (CRQL)

Semivolatiles	Quantitation Limits(a) Water	Low Soil	Medium Soil
	ug/L	ug/kg	ug/kg
Phenol	10	330	10,000
bis (2-Chloroethyl) ether	10	330	10,000
2-Chlorophenol	10	330	10,000
1,3-Dichlorobenzene	10	330	10,000
1,4-Dichlorobenzene	10	330	10,000
1,2-Dichlorobenzene	10	330	10,000
2-Methylphenol	10	330	10,000
2,2'-oxybis(1-Chloropropane)	10	330	10,000
4-Methylphenol	10	330	10,000
N-Nitroso-di-n-propylamine	10	330	10,000
Hexachloroethane	10	330	10,000
Nitrobenzene	10	330	10,000
Isophorone	10	330	10,000
2-Nitrophenol	10	330	10,000
2,4-Dimethylphenol	10	330	10,000
bis(2-Chloroethoxy)methane	10	330	10,000
2,4-Dichlorophenol	10	330	10,000
1,2,4-Trichlorobenzene	10	330	10,000
Naphthalene	10	330	10,000
4-Chloroaniline	10	330	10,000
Hexachlorobutadiene	10	330	10,000
4-Chloro-3-methylphenol	10	330	10,000
2-Methylnaphthalene	10	330	10,000
Hexachlorocyclopentadiene	10	330	10,000
2,4,6-Trichlorophenol	10	330	10,000
2,4,5-Trichlorophenol	50	1,700	50,000
2-Chloronaphthalene	10	330	10,000
2-Nitroaniline	50	1,700	50,000
Dimethylphthalate	10	330	10,000
Acenaphthylene	10	330	10,000
2,6-Dinitrotoluene	10	330	10,000
3-Nitroaniline	50	1,700	50,000
Acenaphthene	10	330	10,000
2,4-Dinitrophenol	50	1,700	50,000
4-Nitrophenol	50	1,700	50,000
Dibenzofuran	10	330	10,000

TABLE 4-3 (Continued)

SEMIVOLATILE ORGANIC COMPOUNDS
CONTRACT REQUIRED QUANTITATION LIMITS (CRQL)

	Quantitation Limits(a)		
Semivolatiles (Continued)	Water	Low Soil	Medium Soil
	ug/L	ug/kg	ug/kg
2,4-Dinitrotoluene	10	330	10,000
Diethylphthalate	10	330	10,000
4-Chlorophenyl-phenylether	10	330	10,000
Fluorene	10	330	10,000
4-Nitroaniline	50	1,700	50,000
4,6-Dinitro-2-methylphenol	50	1,700	50,000
N-Nitrosodiphenylamine	10	330	10,000
4-Bromophenyl-phenylether	10	330	10,000
Hexachlorobenzene	10	330	10,000
Pentachlorophenol	50	1,700	50,000
Phenanthrene	10	330	10,000
Anthracene	10	330	10,000
Carbazole	10	330	10,000
Di-n-butylphthalate	10	330	10,000
Fluoranthene	10	330	10,000
Pyrene	10	330	10,000
Butylbenzylphthalate	10	330	10,000
3,3'-Dichlorobenzidine	10	330	10,000
Benzo(a)anthracene	1(b)	10(b)	10,000
Chrysene	1(b)	100(b)	10,000
bis(2-Ethylhexyl)phthalate	10	330	10,000
Di-n-octylphthalate	10	330	10,000
Benzo(b)fluoranthene	1(b)	10(b)	10,000
Benzo(k)fluoranthene	1(b)	10(b)	10,000
Benzo(a)pyrene	1(b)	10(b)	10,000
Indeno(1,2,3-cd)pyrene	1(b)	30(b)	10,000
Dibenzo(a,h)anthracene	1(b)	20(b)	10,000
Benzo(g,h,i)perylene	10	330	10,000

Notes:

The CRQL were obtained from the EPA CLP SOW for organics analysis (EPA 1990a), except for those compounds that require lower detection limits. The CRQL for the specific analytical methods were obtained from Appendix C of the STF RI/FS Final Work Plan (ICF 1990b).

(a) Quantitative limits listed for soil/sediment are based on wet weight. The quantitative limits calculated in the laboratory for soil/sediment (calculated on dry-weight basis as required by the contact) will be higher.

(b) PAHs will be analyzed by EPA Method 8310.

TABLE 4–4

PESTICIDES AND PCB COMPOUNDS
CONTRACT REQUIRED QUANTITATION LIMITS (CRQL)

Pesticides/PCBs	Quantitation Limits(a) Water	Soil(b)
	ug/L	ug/kg
alpha-BHC	0.05	1.7
beta-BHC	0.05	1.7
delta-BHC	0.05	1.7
gamma-BHC (Lindane)	0.05	1.7
Heptachlor	0.05	1.7
Aldrin	0.05	1.7
Heptachlor epoxide	0.05	1.7
Endosulfan I	0.05	1.7
Dieldrin	0.10	3.3
4,4'-DDE	0.10	3.3
Endrin	0.10	3.3
Endosulfan II	0.10	3.3
4,4'-DDD	0.10	3.3
Endosulfan sulfate	0.10	3.3
4,4'-DDT	0.10	3.3
Methoxychlor	0.50	17.0
Endrin ketone	0.10	3.3
alpha-Chlordane	0.05	1.7
gamma-Chlordane	0.05	1.7
Toxaphene	5.00	170.0
Aroclor-1016	1.00	33.0
Aroclor-1221	1.00	33.0
Aroclor-1232	2.00	67.0
Aroclor-1242	1.00	33.0
Aroclor-1248	1.00	33.0
Aroclor-1254	1.00	33.0
Aroclor-1260	1.00	33.0

Notes:

The CRQL were obtained from the EPA CLP SOW for organics analysis (EPA 1990a).

(a) Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment (calculated on dry-weight basis as required by the contract) will be higher.

(b) There is no difference between the preparation of low and medium soil samples in this method for the analysis of pesticides/PCBs.

TABLE 4-5

METALS AND CYANIDE
CONTRACT REQUIRED DETECTION LIMITS (CRDL)

Analyte	Detection Limits (a) Water	Soil
	ug/L	mg/kg
Aluminum	200	40
Antimony	60	12
Arsenic	10	2
Barium	200	40
Beryllium	5	1
Cadmium	5	1
Calcium	5000	1,000
Chromium (III)	(b)	(c)
Chromium (VI)	(b)	0.2(d)
Chromium (Total)	10	2
Cobalt	50	10
Copper	1(e)	5
Iron	100	20
Lead	3	1
Magnesium	5000	1,000
Manganese	15	3
Mercury	0.2	0.1
Nickel	40	8
Potassium	5000	1,000
Selenium	5	1
Silver	10	2
Sodium	5000	1,000
Thallium	10	2
Vanadium	50	10
Zinc	20	4
Cyanide	10	5
Boron	20	4

Notes:

The CRDL for water were obtained from the EPA CLP SOW for inorganics analysis (EPA 1990b), except for the CRDL for copper and chromium (VI), which were obtained from Appendix C of the STF RI/FS Final Work Plan (ICF 1990b). The CRDL for soil were also obtained from Appendix C of the Final Work Plan.

(a) Detection limits for samples may be considerably higher depending on the sample matrix.

(b) Only soil samples that require the full TCL will be analyzed for chromium (VI).

(c) Chromium (III) will be calculated from the total chromium value minus the chromium (VI) value.

(d) Chromium (VI) will be analyzed by EPA Method 1311 (the extraction) and EPA Method 7197.

(e) Copper for water samples will be analyzed by EPA Method 7211.

TABLE 4-6

ANALYTICAL PARAMETERS FOR SAMPLES COLLECTED DURING STF SURFACE WATER AND SEDIMENT INVESTIGATION

Analytical Parameters[a]	1st Event (4/91)	2nd Event (8/91)	3rd Event (1/92)	Background Events (8/91 and 1/92)	Biweekly Events	Monthly Events	Storm Events	
							Runon	Runoff
Surface Water								
Target Compound List								
• Volatile Organic Compounds	X	X	X	X	X	X[b]	X[b]	X
• Semivolatiles (BNA and PAH)	X	X	X	X	X			X
• Pesticides/PCBs	X	X	X	X	X			X
• Metals	X	X	X	X	X	X	X	X
• Cyanide (total)	X	X	X	X	X			X
Ancillary Parameters								
• Boron[c]		X	X	X	X	X	X	X
• Hardness	X	X	X	X	X	X	X	X
• Fecal Bacteria	X	X	X	X	X	X	X	X
• Total Suspended Solids (TSS)[d]					X	X	X	X
Sediment								
Target Compound List								
• Volatile	X	X	X					
• Semivolatiles (BNA and PAH)	X	X	X					
• Pesticides/PCBs	X	X	X					
• Metals (includes CrVI)	X	X	X					
• Cyanide (total)	X	X	X					
• Moisture Content	X	X	X					
Ancillary Parameters								
• Boron[c]		X	X					
• Grain Size Distribution[e]		X	X					
• Total Organic Carbon (TOC)[e]			X					

(a) Method numbers for these analytical parameters are presented in Table 4-1.

(b) Runon surface water samples collected for monthly and storm events were analyzed for PAH only using EPA Method 8310.

(c) Boron analysis was not required in the Final Work Plan (ICF 1990b), but was performed on both surface water and sediment samples upon EPA request.

(d) Runon surface water samples collected for monthly and storm events and runoff surface water samples collected for biweekly and storm events were analyzed for TSS beginning November 1991.

(e) Sediment samples were analyzed for TOC [using USDA Handbook No. 60, Method 24 for total organic matter (TOM)] and grain size distribution (Method ASA-SSSA 15-5) for normalizing sediment concentration to account for possible spatial concentration gradients.

5.0 DATABASE INDEX

The STF Database Index for Surface Water and Sediment Investigation is presented in Table 5-1. The filenames associated with this investigation have been highlighted for reference. Two sets of magnetic disks (i.e., Disks SW1 through SW10) will be transmitted to EPA with this Data Appendix.

TABLE 5-1

STF DATABASE INDEX

Investigation	ANALYTE GROUP												
	Volatiles	TICs for Volatiles	Semi-volatiles	TICs for Semivolatiles	PAH	Pest/PCBs	Cyanide	Metals	TDS/TSS	TOC	Fecal Bacteria	Geo-technical	Field Data
Groundwater	*DISK GW1*	*DISK GW2*	*DISK GW3*	*DISK GW4*	*DISK GW5*	*DISK GW6*	*DISK GW7*	*DISK GW8*	*DISK GW9*	*DISK GW10*			*DISK GW11*
1st Quarter	STFGUV1[a]	STFGUVT1	NA[b]	NA	STFGUP1	NA	NA	STFGUM1	NA	NA	NA	NA	STFGUF1
2nd Quarter	STFGUV2	STFGUVT2	STFGUSV2	STFGUST2	STFGUP2	STFGUPT2	STFGUCN2	STFGUM2	STFGUTS2	STFGUOC2	NA	NA	STFGUF2
3rd Quarter	STFGUV3	STFGUVT3	STFGUSV3	STFGUST3	STFGUP3	NA	STFGUCN3	STFGUM3	NA	NA	NA	NA	STFGUF3
4th Quarter	STFGUV4	STFGUVT4	STFGUSV4	STFGUST4	STFGUP4	STFGUPT4	STFGUCN4	STFGUM4	STFGUTS4	STFGUOC4	NA	NA	STFGUF4
Upgradient	STFGUVU	STFGUVTU	STFGUSVU	STFGUSTU	STFGUPU	STFGUPTU	STFGUCNU	STFGUMU	STFGUTSU	STFGUOCU	NA	NA	NA
Background	STFGUVB	STFGUVTB*	STFGUSVB	STFGUSTB	STFGUPB	STFGUPTB	STFGUCNB	STFGUMB	STFGUTSB	STFGUOCB	NA	NA	NA
Duplicates[c]	STFGUVD	STFGUVTD	STFGUSVD	STFGUSTD	STFGUPD	STFGUPTD	STFGUCND	STFGUMD	STFGUTSD	STFGUOCD	NA	NA	NA
Blanks[d]	STFGWWV	STFGWWVT	STFGWWSV	STFGWWST	STFGWWP	STFGWWPT	STFGWWCN	STFGWWM	STFGWWTS	STFGWWOC	NA	NA	NA
Installation	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	STFGWINS
Water Levels	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	STFGWLEV
Surface Water/Sediment	*DISK SW1*	*DISK SW2*	*DISK SW3*	*DISK SW4*	*DISK SW5*	*DISK SW6*	*DISK SW7*	*DISK SW8*			*DISK SW9*		*DISK SW10*
1st Event (transitional season/April 1991)	STFSUV1	STFSUVT1*	STFSUSV1	STFSUST1	STFSUP1	STFSUPT1	STFSUCN1	STFSUM1	NA	NA	STFSUFS1	NA	STFSUF1
	STFSDV1	STFSDVT1*	STFSDSV1	STFSDST1	STFSDP1	STFSDPT1	STFSDCN1	STFSDM1	NA	NA	NA	NA	NA
2nd Event (dry season/ August 1991)	STFSUV2	STFSUVT2	STFSUSV2	STFSUST2	STFSUP2	STFSUPT2	STFSUCN2	STFSUM2	NA	NA	STFSUFS2	NA	STFSUF2
	STFSDV2	STFSDVT2	STFSDSV2	STFSDST2	STFSDP2	STFSDPT2	STFSDCN2	STFSDM2	NA	NA	NA	NA	NA
3rd Event (wet season/ January 1992)	STFSUV3	STFSUVT3	STFSUSV3	STFSUST3	STFSUP3	STFSUPT3	STFSUCN3	STFSUM3	NA	NA	STFSUFS3	NA	STFSUF3
	STFSDV3	STFSDVT3	STFSDSV3	STFSDST3	STFSDP3	STFSDPT3	STFSDCN3	STFSDM3	NA	NA	NA	NA	NA
Storm Events	STFSTV	STFSTVT	STFSTSV	STFSTST	STFSTP	STFSTPT	STFSTCN	STFSTM	NA	NA	STFSTFS	NA	STFSTF
Biweekly/Monthly Events	STFBWV	STFBWVT	STFBWSV	STFBWST	STFBWP	STFBWPT	STFBWCN	STFBWM	NA	NA	STFBWFS	NA	STFBWF
Background	STFSUVB	STFSUVTB	STFSUSVB	STFSUSTB	STFSUPB	STFSUPTB	STFSUCNB	STFSUMB	NA	NA	STFSUFSB	NA	NA
SU Duplicates[c]	STFSUVD	STFSUVTD	STFSUSVD	STFSUSTD	STFSUPD	STFSUPTD	STFSUCND	STFSUMD	NA	NA	STFSUFSD	NA	NA
SD Duplicates[c]	STFSDVD	STFSDVTD	STFSDSVD	STFSDSTD	STFSDPD	STFSDPTD	STFSDCND	STFSDMD	NA	NA	NA	NA	NA
Blanks[d]	STFWWWV	STFWWWVT	STFWWWSV	STFWWWST	STFWWWP	STFWWWPT	STFWWWCN	STFWWWM	NA	NA	STFWWWFS	NA	NA
Blackberries[e]								*DISK BB1*					
Onsite	NA	NA	NA	NA	NA	NA	NA	STFBBM	NA	NA	NA	NA	NA
Background	NA	NA	NA	NA	NA	NA	NA	STFBBMB	NA	NA	NA	NA	NA
Duplicates[c]	NA	NA	NA	NA	NA	NA	NA	STFBBMD	NA	NA	NA	NA	NA
Blanks[d]	NA	NA	NA	NA	NA	NA	NA	STFBBWWM	NA	NA	NA	NA	NA
Phase I Soil	*DISK SS1*	*DISK SS2*	*DISK SS3*	*DISK SS4*	*DISK SS5*	*DISK SS6*	*DISK SS7*	*DISK SS8*		*DISK SS9*		*DISK SS10*	*DISK SS11*
Surface	STFSSV	STFSSVT	STFSSSV	STFSSST	STFSSP	STFSSPT	STFSSCN	STFSSM	NA	STFSSOC	NA	STFSSGE	STFSSF
Dry Wells	STFDWV1	STFDWVT1	STFDWSV1	STFDWST	STFDWP1	STFDWPT1	STFDWCN1	STFDWM1	NA	NA	NA	NA	STFDWF1
Pioneer Builders	STFPBV	STFPBVT	STFPBSV	STFPBST	STFPBP	STFPBPT	STFPBCN	STFPBM	NA	NA	NA	NA	STFPBF
Background	STFSSVB	STFSSVTB*	STFSSSVB	STFSSSTB	STFSSPB	STFSSPTB	STFSSCNB	STFSSMB	NA	NA	NA	NA	NA
Duplicates[c]	STFSSVD	STFSSVTD	STFSSSVD	STFSSSTD	STFSSPD	STFSSPTD	STFSSCND	STFSSMD	NA	NA	NA	NA	NA
Blanks[d]	STFSWWV	STFSWWVT	STFSWWSV	STFSWWST	STFSWWP	STFSWWPT	STFSWWCN	STFSWWM	NA	NA	NA	NA	NA
Phase II Soil	*DISK SB1*	*DISK SB2*	*DISK SB3*	*DISK SB4*	*DISK SB5*	*DISK SB6*	*DISK SB7*	*DISK SB8*		*DISK SB9*		*DISK SB10*	*DISK SB11*
Subsurface	STFSBV	STFSBVT	STFSBSV	STFSBST	STFSBP	STFSBPT	STFSBCN	STFSBM	NA	STFSBOC	NA	STFSBGE	STFSBF
Dry Wells[f]	NA	NA	NA	NA	STFDWP2	NA	NA	STFDWM2	NA	NA	NA	NA	STFDWF2
Background	STFSBVB	STFSBVTB	STFSBSVB	STFSBSTB	STFSBPB	STFSBPTB	STFSBCNB	STFSBMB	NA	NA	NA	NA	NA
Duplicates[c]	STFSBVD	STFSBVTD	STFSBSVD	STFSBSTD	STFSBPD	STFSBPTD	STFSBCND	STFSBMD	NA	NA	NA	NA	NA
Blanks[d]	STFBWWV	STFBWWVT	STFBWWSV	STFBWWST	STFBWWP	STFBWWPT	STFBWWCN	STFBWWM	NA	NA	NA	NA	NA
Air					*DISK AIR1*			*DISK AIR2*					
Particle Size	NA	NA	NA	NA	STFCSFSP	NA	NA	STFCSFSM	NA	NA	NA	NA	NA

(a) All database filenames have a .DBF extension.
(b) Not applicable.
(c) Includes all duplicate data collected for each investigation (e.g., database file STFSSVD contains duplicate data for Phase I surface soil, dry well, and Pioneer Builders sampling events).
(d) Includes all blank data (field, trip, rinsate) collected for each investigation.
(e) Filenames on blackberry database printouts are PRTBBM, PRTBBMB, PRTBBMD, and PRTBBWWM. These printouts were created using a program written to print only priority pollutant metals (vs full TCL metals) and boron.
(f) Analyte groups to be determined after evaluation of analytical results from Phase I dry well sampling event.
Notes: As database files are transmitted to EPA on 3.5-inch magnetic disks, the filenames will be shaded on this table.
* = No records associated with this database file.

6.0 LABORATORY AND DATA VALIDATION QUALIFIERS

Laboratory and data validation qualifiers are presented in the following tables:

- Table 6-1 Laboratory data qualifiers for inorganic analyses
- Table 6-2 Laboratory data qualifiers for organic analyses
- Table 6-3 Laboratory data qualifiers for PAH (non-CLP) analyses only
- Table 6-4 Data validation qualifiers for all analytical data
- Table 6-5 Data validation qualifiers for organic analyses only.

TABLE 6-1

LABORATORY DATA QUALIFIERS FOR INORGANIC ANALYSES

Inorganic compound qualifiers are a combination of the "Q" and "C" qualifiers:

Qualifier ("Q")	Explanation
E	The reported value is estimated because of interference.
M	Duplicate injection precision not met.
N	Spiked sample recovery not within control limits.
S	The reported value was determined by the Method of Standard Additions (MSA).
W	Post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.
*	Duplicate analysis is not within control limits.
+	Correlation coefficient for the MSA is less than 0.995.

Note:

Values of "S," "W," and "+" are mutually exclusive. No combination of these qualifiers can occur in the same field for an analyte.

Concentration Qualifier ("C")	Explanation
B	Reported value is less than EPA Contract Required Detection Limit, but greater than, or equal to, the Instrument Detection Limit.
U	Analyte was analyzed for, but not detected.

Reference: EPA (1990b).

TABLE 6-2

LABORATORY DATA QUALIFIERS FOR ORGANIC ANALYSES

Qualifier	Explanation
U	This flag indicates compound was analyzed for, but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
J	This flag indicates estimated value.
N	This flag indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search.
P	This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported and flagged with a "P."
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, do not apply this flag, instead use a laboratory-defined flag.
B	This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. The data validation auditor will evaluate data and decide whether data are valid for analysis. If not, the data validation auditor will flag the data as R (as defined in Table 6-5, Data Validation Qualifiers for all Analytical Data).
E	This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor. If re-analyzed at a higher dilution factor, the "DL" suffix is appended to the sample number. This flag alerts the user of the data that any discrepancies between the concentrations reported may be due to dilution of the sample or extract.
A	This flag indicates that a tentatively identified compound (TIC) is a suspected aldol-condensation product.
X,Y,Z	Special flags may be required to properly define the results. These flags will be fully described in an attachment to the original data results from the laboratory.

Reference: EPA (1990a).

TABLE 6-3

LABORATORY DATA QUALIFIERS FOR PAH (NON-CLP) ANALYSES ONLY

The following data qualifiers are used by ATI for in-house data reporting only. Use of any other data flags must be approved by the Supervisor/Group Leader and the QA Coordinator through a Corrective Action Form. EPA CLP or other contracts override these flags.

Qualifier	Explanation
B	Analyte is found in the associated blank as well as the sample.
C	Estimated, value above linear range.
NA	Not applicable.
NC	Not calculable.
ND	Not detected.
F	Out of limits due to matrix interference.
G	Result unattainable due to high levels of target analytes in sample.
H	Out of limits.
I	Surrogate not recovered due to sample dilution.
J	Estimated value.
D1	Value from a 2-fold diluted analysis.
D2	Value from a 4-fold diluted analysis.
D3	Value from a 5-fold diluted analysis.
D4	Value from a 10-fold diluted analysis.
D5	Value from a 20-fold diluted analysis.
D6	Value from a 50-fold diluted analysis.
D7	Value from a 100-fold diluted analysis.
D8	Value from a 250-fold diluted analysis.
D9	Value from a 500-fold diluted analysis.
D0	Value from a _____-fold diluted analysis.
D*	Value from a _____-fold diluted analysis. (Used when more than one large dilution is reported on a same data sheet.)
D**	Value from a _____-fold diluted analysis. (Used as the second large dilution when more than one is reported on a same data sheet.)

TABLE 6-3

LABORATORY DATA QUALIFIERS FOR PAH (NON-CLP) ANALYSES ONLY

Notes:

When using the dilution factor qualifiers, report the qualifier with the dilution factor in parentheses, [i.e., D6(50)]. This will act as a double check on the qualifier and the dilution factor. Dilutions, other than the ones listed above, should be flagged DO with the dilution factor noted in parentheses. For the diluted flags, the D will show up on the final report unless more than one dilution is reported. In that case the D and the code number will appear on the report. The numbers will allow data management to key in the correct data qualifier explanation.

Explanation of the data flags will appear at the bottom of the data page.

The following qualifiers require corrective action forms (properly filled out and signed off) before they can be used: B, C, F, G, and H.

The G qualifier is used when the spike concentration is far exceeded by target compounds in the sample and a spike recovery can not be calculated.

Reference: ATI. 5 September 1991. Memorandum to ATI Laboratory and Data Management Personnel from K. Gunderson, ATI QA Coordinator, Renton, Washington.

TABLE 6-4

DATA VALIDATION QUALIFIERS FOR ALL ANALYTICAL DATA

Data validation qualifiers are defined in EPA's Functional Guidelines for Evaluating Organic/Inorganic Analyses (EPA 1988c,d,e). The following validation qualifiers will be used for all data:

Qualifier	Explanation
U	The analyte was analyzed for and is not present above the level associated value. The associated numerical value indicates the approximate concentration necessary to detect the analyte in this sample. If a decision requires quantitation of the analyte below the associated numerical level, reanalysis or alternative analytical methods should be considered.
J	The analyte was analyzed for and was positively identified, but the associated numerical value may not be consistent with the amount actually present in the environmental sample. The data should be seriously considered for decision-making and are useable for many purposes. The following subscripts may be appended to the "J" that indicates which of the following quality control criteria were not met:
1	Blank Contamination: indicates possible high bias and/or false positives.
2	Calibration range exceeded: indicates possible low bias.
3	Holding times not met: indicates low bias for most analytes with the exception of common contaminants and chlorinated ethenes (i.e., trichloroethene, 1,1-dichloroethene, vinyl chloride).
4	Other QC outside control limits: bias not readily determined.
R	Data are unusable for all purposes. The analyte was analyzed for, but the presence or absence of the analyte has not been verified.
UJ	A combination of the "U" and the "J" qualifier. The analyte was analyzed for and was not present above the level of the associated value. The associated numerical value may not accurately or precisely represent the concentration necessary to detect the analyte in this sample.

TABLE 6-5

DATA VALIDATION QUALIFIERS FOR ORGANIC ANALYSES ONLY

The following qualifiers are applicable to organic analyses only:

Qualifier	Explanation
N	The analysis indicates that an analyte is present, and there are strong indications that the identity is correct. Confirmation requires further analysis.
NJ	A combination of the "N" and "J" qualifier. The analysis indicates that the analyte is tentatively identified and the associated numerical value may not be consistent with the amount actually present in the environmental sample. A subscript may be appended to the "NJ" that indicates which of the following situations applies:
1	DDT/Endrin breakdown evident.
2	Interference from other sample components.
3	Non-Target Compound List (non-TCL) compounds. (Confirmation is necessary using specific target compound methods to accurately determine the concentration and identity of the detected compounds).
4	A confirmation analysis was missing or quality control criteria were not met for the confirmation analysis.

7.0 ANALYTICAL RESULTS

Data printouts of the analytical results for the Surface Water and Sediment Investigation (including laboratory and data validation qualifiers) are provided herein. Results are organized by analyte group (blue-colored tabs) and further separated by sampling event and QA/QC results (colored divider sheets).

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

TRANSITIONAL SEASON (APRIL 1991)
SURFACE WATER ANALYTICAL RESULTS

STF Number	Lab Number	Chloromethane (ug/L)	Bromomethane (ug/L)	Vinyl Chloride (ug/L)	Chloroethane (ug/L)	Methylene Chloride (ug/L)	Acetone (ug/L)	Carbon Disulfide (ug/L)	1,1-Dichloroethene (ug/L)
2506 SU310000000.000	104378-001	U 10.0000	U 10.0000	U 1.0000	U 10.0000	B 4.0000 UJ	U 10.0000	U 10.0000	U 10.0000
2506 SU320000000.000	104360-002	U 10.0000	U 10.0000	U 1.0000	U 10.0000	U 2.0000 UJ	U 10.0000	U 10.0000	U 10.0000
2509 SU310000000.000	104330-005	U 10.0000	U 10.0000	U 1.0000	U 10.0000	B 3.0000 UJ	U 10.0000	U 10.0000	U 10.0000
2509 SU320000000.000	104330-001	U 10.0000	U 10.0000	U 1.0000	U 10.0000	B 6.0000 UJ	U 10.0000	U 10.0000	U 10.0000
2511 SU320000000.000	104330-002	U 10.0000	U 10.0000	U 1.0000	U 10.0000	B 2.0000 UJ	U 10.0000	U 10.0000	U 10.0000
2511 SU511000000.000	104330-003	U 10.0000	U 10.0000	U 1.0000	U 10.0000	B 4.0000 UJ	U 10.0000	U 10.0000	U 10.0000
2516 SU310000000.000	104360-001	U 10.0000	U 10.0000	U 1.0000	U 10.0000	U 2.0000 UJ	U 10.0000	U 10.0000	U 10.0000
2516 SU320000000.000	104360-003	U 10.0000	U 10.0000	U 1.0000	U 10.0000	U 2.0000 UJ	U 10.0000	U 10.0000	U 10.0000

DATA VALIDATION
DATE RECEIVED
VALIDATED BY D
KEYED BY D
CHECKED BY JRM DATE 12/17/91

STF Number	Lab Number	1,1-Dichloroethane (ug/L)	1,2-Dichloroethene (total) (ug/L)	Chloroform (ug/L)	1,2-Dichloroethane (ug/L)	2-Butanone (ug/L)	1,1,1-Trichloroethane (ug/L)	Carbon Tetrachloride (ug/L)	Bromodichloromethane (ug/L)
2506 SU310000000.000	104378-001	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506 SU320000000.000	104360-002	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU310000000.000	104330-005	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU320000000.000	104330-001	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU320000000.000	104330-002	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU511000000.000	104330-003	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU310000000.000	104360-001	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU320000000.000	104360-003	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	1,2-Dichloropropane (ug/L)	cis-1,3-Dichloropropene (ug/L)	Trichloroethene (ug/L)	Dibromochloromethane (ug/L)	1,1,2-Trichloroethane (ug/L)	Benzene (ug/L)	trans-1,3-Dichloropropene (ug/L)	Bromoform (ug/L)
2506 SU310000000.000	104378-001	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506 SU320000000.000	104360-002	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU310000000.000	104330-005	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU320000000.000	104330-001	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU320000000.000	104330-002	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU511000000.000	104330-003	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU310000000.000	104360-001	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU320000000.000	104360-003	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	4-Methyl-2-pentanone (ug/L)	2-Hexanone (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	Chlorobenzene (ug/L)	Ethyl Benzene (ug/L)	Styrene (ug/L)
2506 SU310000000.000	104378-001	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506 SU320000000.000	104360-002	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU310000000.000	104330-005	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU320000000.000	104330-001	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU320000000.000	104330-002	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU511000000.000	104330-003	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU310000000.000	104360-001	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU320000000.000	104360-003	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	Xylenes (total) (ug/L)	
2506 SU310000000.000	104378-001	U	10.0000
2506 SU320000000.000	104360-002	U	10.0000
2509 SU310000000.000	104330-005	U	10.0000
2509 SU320000000.000	104330-001	U	10.0000
2511 SU320000000.000	104330-002	U	10.0000
2511 SU511000000.000	104330-003	U	10.0000
2516 SU310000000.000	104360-001	U	10.0000
2516 SU320000000.000	104360-003	U	10.0000

There are no records associated with database file STFSUVT1.DBF, which is assigned to the transitional season (April 1991) volatile TIC results for surface water samples.

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

TRANSITIONAL SEASON (APRIL 1991)
SEDIMENT ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for VOLATILES for file STFSDV1.DBF 12/17/91 23:00:00 6,921 bytes

STF Number	Lab Number	Chloromethane (ug/kg)	Bromomethane (ug/kg)	Vinyl Chloride (ug/kg)	Chloroethane (ug/kg)	Methylene Chloride (ug/kg)	Acetone (ug/kg)	Carbon Disulfide (ug/kg)	1,1-Dichloroethene (ug/kg)
2506 SD320000000.000	I04360-014	U 38.0000	U 38.0000	U 38.0000	U 38.0000	B 220.0000 UJ	140.0000 UJ	U 38.0000	U 38.0000
2509 SD320000000.000	I04330-007	U 23.0000	U 23.0000	U 23.0000	U 23.0000	B 40.0000 UJ	U 23.0000	U 23.0000	U 23.0000
2511 SD320000000.000	I04330-008	U 19.0000	U 19.0000	U 19.0000	U 19.0000	B 160.0000 UJ	U 19.0000	U 19.0000	U 19.0000
2516 SD310000000.000	I04360-015	U 20.0000	U 20.0000	U 20.0000	U 20.0000	B 110.0000 UJ	57.0000 UJ	U 20.0000	U 20.0000
2516 SD320000000.000	I04360-016	U 12.0000	U 12.0000	U 12.0000	U 12.0000	B 45.0000 UJ	U 12.0000	U 12.0000	U 12.0000

DATA VALIDATION
DATE RECEIVED _____
VALIDATED BY _____
KEYED BY _____
CHECKED BY JRM DATE 12/17/91

Analytical data for VOLATILES for file STFSDV1.DBF 12/17/91 23:00:00 6,921 bytes

STF Number	Lab Number	1,1-Dichloroethane (ug/kg)	1,2-Dichloroethene (total) (ug/kg)	Chloroform (ug/kg)	1,2-Dichloroethane (ug/kg)	2-Butanone (ug/kg)	1,1,1-Trichloroethane (ug/kg)	Carbon Tetrachloride (ug/kg)	Bromodichloromethane (ug/kg)
2506 SD320000000.000	104360-014	U 38.0000	U 38.0000	140.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000
2509 SD320000000.000	104330-007	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000
2511 SD320000000.000	104330-008	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000
2516 SD310000000.000	104360-015	U 20.0000	U 20.0000	U 20.0000	U 20.0000	J 15.0000 UJ	U 20.0000	U 20.0000	U 20.0000
2516 SD320000000.000	104360-016	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000	22.0000 J4	U 12.0000	U 12.0000

STF Number	Lab Number	1,2-Dichloro-propane (ug/kg)	cis-1,3-Dichloro-propene (ug/kg)	Trichloroethene (ug/kg)	Dibromochloro-methane (ug/kg)	1,1,2-Trichloro-ethane (ug/kg)	Benzene (ug/kg)	trans-1,3-Dichloropropene (ug/kg)	Bromoform (ug/kg)
2506 SD320000000.000	104360-014	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000
2509 SD320000000.000	104330-007	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000
2511 SD320000000.000	104330-008	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000
2516 SD310000000.000	104360-015	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000
2516 SD320000000.000	104360-016	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000

STF Number	Lab Number	4-Methyl-2-pentanone (ug/kg)	2-Hexanone (ug/kg)	Tetrachloroethene (ug/kg)	Toluene (ug/kg)	1,1,2,2-Tetra-chloroethane (ug/kg)	Chlorobenzene (ug/kg)	Ethyl Benzene (ug/kg)	Styrene (ug/kg)
2506 SD320000000.000	104360-014	U 38.0000	U 38.0000	U 38.0000	2300.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000
2509 SD320000000.000	104330-007	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000
2511 SD320000000.000	104330-008	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000
2516 SD310000000.000	104360-015	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000
2516 SD320000000.000	104360-016	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000

STF	Number	Lab Number	Xylenes (total) (ug/kg)	
2506	SD320000000.000	104360-014	J	33.0000
2509	SD320000000.000	104330-007	U	23.0000
2511	SD320000000.000	104330-008	U	19.0000
2516	SD310000000.000	104360-015	U	20.0000
2516	SD320000000.000	104360-016	U	12.0000

There are no records associated with database file STFSDVT1.DBF, which is assigned to the transitional season (April 1991) volatile TIC results for sediment samples.

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

DRY SEASON (AUGUST 1991)
SURFACE WATER ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for VOLATILES for file STFSUV2.DBF 01/02/92 23:00:00 9,461 bytes

STF Number	Lab Number	Chloromethane (ug/L)	Bromomethane (ug/L)	Vinyl Chloride (ug/L)	Chloroethane (ug/L)	Methylene Chloride (ug/L)	Acetone (ug/L)	Carbon Disulfide (ug/L)	1,1-Dichloroethene (ug/L)
2501 SU000000000.001	9108-190-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	JB 8.0000 UJ	U 10.0000	U 10.0000	U 10.0000
2502 SU000000000.001	9108-190-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	B 13.0000 UJ	U 10.0000	U 10.0000	U 10.0000
2503 SU000000000.001	9108-205-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	JB 4.0000 UJ	U 10.0000	U 10.0000	U 10.0000
2508 SU310000000.001	9108-153-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	B 11.0000 UJ	U 10.0000	U 10.0000	U 10.0000
2510 SU511000000.001	9108-153-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	B 10.0000 UJ	U 10.0000	U 10.0000	U 10.0000
2527 SU000000000.001	9108-172-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	JB 5.0000 UJ	U 10.0000	U 10.0000	U 10.0000
2528 SU000000000.001	9108-172-13	U 10.0000	U 10.0000	U 10.0000	U 10.0000	JB 4.0000 UJ	U 10.0000	U 10.0000	U 10.0000
2529 SU000000000.001	9108-172-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	JB 8.0000 UJ	JB 7.0000 UJ	U 10.0000	U 10.0000
2530 SU201000000.001	9108-172-9	U 10.0000	U 10.0000	U 10.0000	U 10.0000	JB 5.0000 UJ	U 10.0000	U 10.0000	U 10.0000

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Analytical data for VOLATILES for file STFSUV2.DBF 01/02/92 23:00:00 9,461 bytes

STF Number	Lab Number	1,1-Dichloroethane (ug/L)	1,2-Dichloroethene (total) (ug/L)	Chloroform (ug/L)	1,2-Dichloroethane (ug/L)	2-Butanone (ug/L)	1,1,1-Trichloroethane (ug/L)	Carbon Tetrachloride (ug/L)	Bromodichloromethane (ug/L)
2501 SU000000000.001	9108-190-7	U 10.0000	U 20.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2502 SU000000000.001	9108-190-2	U 10.0000	U 20.0000	J 3.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2503 SU000000000.001	9108-205-2	U 10.0000	U 20.0000	J 5.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2508 SU310000000.001	9108-153-3	U 10.0000	U 20.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2510 SU511000000.001	9108-153-7	U 10.0000	U 20.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2527 SU000000000.001	9108-172-11	U 10.0000	U 20.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2528 SU000000000.001	9108-172-13	U 10.0000	U 20.0000	J 1.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 SU000000000.001	9108-172-6	U 10.0000	U 20.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2530 SU201000000.001	9108-172-9	U 10.0000	U 20.0000	J 2.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	1,2-Dichloropropane (ug/L)	cis-1,3-Dichloropropene (ug/L)	Trichloroethene (ug/L)	Dibromochloromethane (ug/L)	1,1,2-Trichloroethane (ug/L)	Benzene (ug/L)	trans-1,3-Dichloropropene (ug/L)	Bromoform (ug/L)
2501 SU0000000000.001	9108-190-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2502 SU0000000000.001	9108-190-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2503 SU0000000000.001	9108-205-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2508 SU3100000000.001	9108-153-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2510 SU5110000000.001	9108-153-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2527 SU0000000000.001	9108-172-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2528 SU0000000000.001	9108-172-13	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 SU0000000000.001	9108-172-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2530 SU2010000000.001	9108-172-9	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF	Number	Lab Number	4-Methyl-2-pentanone (ug/L)	2-Hexanone (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	Chlorobenzene (ug/L)	Ethyl Benzene (ug/L)	Styrene (ug/L)
2501	SU000000000.001	9108-190-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2502	SU000000000.001	9108-190-2	U 10.0000	U 10.0000	U 10.0000	J 7.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2503	SU000000000.001	9108-205-2	U 10.0000	U 10.0000 UJ	U 10.0000	J 2.0000 UJ	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2508	SU310000000.001	9108-153-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2510	SU511000000.001	9108-153-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2527	SU300000000.001	9108-172-11	U 10.0000	U 10.0000 UJ	U 10.0000	J 4.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2528	SU000000000.001	9108-172-13	U 10.0000	U 10.0000 UJ	U 10.0000	J 4.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529	SU000000000.001	9108-172-6	U 10.0000	U 10.0000 UJ	U 10.0000	J 2.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2530	SU201000000.001	9108-172-9	U 10.0000	U 10.0000 UJ	U 10.0000	J 2.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF	Number	Lab Number	Xylenes (total) (ug/L)	
2501	SU0000000000.001	9108-190-7	U	20.0000
2502	SU0000000000.001	9108-190-2	U	20.0000
2503	SU0000000000.001	9108-205-2	U	20.0000
2508	SU3100000000.001	9108-153-3	U	20.0000
2510	SU5110000000.001	9108-153-7	U	20.0000
2527	SU0000000000.001	9108-172-11	U	20.0000
2528	SU0000000000.001	9108-172-13	U	20.0000
2529	SU0000000000.001	9108-172-6	U	20.0000
2530	SU2010000000.001	9108-172-9	U	20.0000

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/L)	Validation
2501SU000000000.001	9108-190-7	HEXANE	JN	6.00	
2502SU000000000.001	9108-190-2	HEXANE	JN	6.00	
		UNKNOWN	JN	8.00	
		UNKNOWN	JN	9.00	
2503SU000000000.001	9108-205-2	ETHANE, 1,1,2-TRICHLORO-1,2,	JN	7.00	
2508SU310000000.001	9108-153-3	HEXANE	JN	7.00	
2510SU511000000.001	9108-153-7	HEXANE	JN	8.00	
2527SU000000000.001	9108-172-11	2-HEXANAMINE	JN	72.00	
		ETHANE, 1,1,2-TRICHLORO-1,2,	JN	7.00	

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CHECKED BY JRM DATE 1/24/92

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

DRY SEASON (AUGUST 1991)
SEDIMENT ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for VOLATILES for file STFSDV2.DBF 01/02/92 23:00:00 32,321 bytes

STF Number	Lab Number	Chloromethane (ug/kg)	Bromomethane (ug/kg)	Vinyl Chloride (ug/kg)	Chloroethane (ug/kg)	Methylene Chloride (ug/kg)	Acetone (ug/kg)	Carbon Disulfide (ug/kg)	1,1-Dichloroethene (ug/kg)
2501 SD000000000.001	9108-190-6	U 13.0000	U 13.0000	U 13.0000	U 13.0000	B 85.0000 J4	210.0000 UJ	U 13.0000	U 13.0000
2502 SD000000000.001	9108-190-1	J 39.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	B 380.0000 R	1700.0000 R	U 42.0000 R	U 42.0000 R
2502 SD000000000.001	9108-190-1DL	U 42.0000	U 42.0000	U 42.0000	U 42.0000	DB 440.0000 UJ	D 1400.0000 UJ	U 42.0000	U 42.0000
2502 SD000000000.001	9108-190-1RI	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	B 1400.0000 R	700.0000 R	U 42.0000 R	U 42.0000 R
2503 SD000000000.001	9108-205-1DL	U 23.0000	U 23.0000	U 23.0000	U 23.0000	DB 320.0000 UJ	D 1000.0000 J4	U 23.0000	U 23.0000
2503 SD000000000.001	9108-205-1	J 19.0000 R	U 23.0000 R	U 23.0000 R	U 23.0000 R	B 180.0000 R	630.0000 R	U 23.0000 R	U 23.0000 R
2504 SD000000000.001	9108-138-3	U 32.0000	U 32.0000	U 32.0000	U 32.0000	B 180.0000 UJ	B 280.0000 UJ	U 32.0000	U 32.0000
2505 SD000000000.001	9108-088-1	U 26.0000	U 26.0000	U 26.0000	U 26.0000	80.0000 J4	J 7.0000	U 26.0000	U 26.0000
2506 SD310000000.001	9108-088-2	U 25.0000	U 25.0000	U 25.0000	U 25.0000	B 400.0000 J4	J 8.0000	U 25.0000	U 25.0000
2506 SD310000000.001	9108-088-2RA	U 25.0000 R	U 25.0000 R	U 25.0000 R	U 25.0000 R	BE 1900.0000 R	U 25.0000 R	U 25.0000 R	U 25.0000 R
2506 SD320000000.001	9108-088-3	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	B 380.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R
2506 SD320000000.001	9108-088-3RA	U 28.0000	U 28.0000	U 28.0000	U 28.0000	BE 1700.0000 J4	U 28.0000 UJ	U 28.0000	U 28.0000
2507 SD000000000.001	9108-088-4RA	U 14.0000	U 14.0000	U 14.0000	U 14.0000	BE 950.0000 J4	B 15.0000 UJ	U 14.0000	U 14.0000
2507 SD000000000.001	9108-088-4	U 14.0000 R	U 14.0000 R	U 14.0000 R	U 14.0000 R	B 260.0000 R	U 14.0000 R	U 14.0000 R	U 14.0000 R
2508 SD310000000.001	9108-153-2	U 59.0000	U 59.0000	U 59.0000	U 59.0000	B 150.0000 UJ	B 140.0000 UJ	U 59.0000	U 59.0000
2509 SD310000000.001	9108-088-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	B 160.0000 J4	U 10.0000	U 10.0000	U 10.0000
2509 SD320000000.001	9108-088-6	U 16.0000	U 16.0000	U 16.0000	U 16.0000	B 670.0000 J4	B 34.0000 UJ	U 16.0000	U 16.0000
2510 SD511000000.001	9108-153-6	U 14.0000	U 14.0000	U 14.0000	U 14.0000	B 140.0000 UJ	B 52.0000 UJ	U 14.0000	U 14.0000
2511 SD310000000.001	9108-088-7	U 16.0000	U 16.0000	U 16.0000	U 16.0000	E 1600.0000 J4	81.0000	U 16.0000	U 16.0000
2511 SD320000000.001	9108-088-8	U 20.0000	U 20.0000	U 20.0000	U 20.0000	1280.0000 J4	73.0000	U 20.0000	U 20.0000
2512 SD000000000.001	9108-088-9	U 21.0000	U 21.0000	U 21.0000	U 21.0000	760.0000 J4	66.0000	U 21.0000	U 21.0000
2513 SD000000000.001	9108-088-10	U 11.0000	U 11.0000	U 11.0000	U 11.0000	130.0000 J4	42.0000	U 11.0000	U 11.0000
2514 SD000000000.001	9108-088-11	U 12.0000 R	U 12.0000 R	U 12.0000 R	U 12.0000 R	B 660.0000 R	U 12.0000 R	U 12.0000 R	U 12.0000 R
2514 SD000000000.001	9108-088-11D	U 12.0000	U 12.0000	U 12.0000	U 12.0000	BD 350.0000 UJ	U 12.0000	U 12.0000	U 12.0000
2515 SD000000000.001	9108-088-12	U 14.0000	U 14.0000	U 14.0000	U 14.0000	B 430.0000 UJ	41.0000	U 14.0000	U 14.0000
2516 SD310000000.001	9108-088-13	U 10.0000	U 10.0000	U 10.0000	U 10.0000	200.0000 J4	70.0000	U 10.0000	U 10.0000
2516 SD320000000.001	9108-088-14	U 10.0000	U 10.0000	U 10.0000	U 10.0000	52.0000 J4	73.0000	U 10.0000	U 10.0000
2518 SD000000000.001	9108-138-4	U 30.0000	U 30.0000	U 30.0000	U 30.0000	B 79.0000 UJ	B 220.0000 UJ	U 30.0000	U 30.0000
2519 SD000000000.001	9108-138-5	U 53.0000	U 53.0000	U 53.0000	U 53.0000	B 130.0000 UJ	180.0000 UJ	U 53.0000	U 53.0000
2520 SD000000000.001	9108-138-6	U 30.0000	U 30.0000	U 30.0000	U 30.0000	B 99.0000 UJ	U 30.0000	U 30.0000	U 30.0000
2521 SD000000000.001	9108-138-7	U 23.0000	U 23.0000	U 23.0000	U 23.0000	B 340.0000 UJ	28.0000 UJ	U 23.0000	U 23.0000
2522 SD000000000.001	9108-138-8	U 21.0000	U 21.0000	U 21.0000	U 21.0000	B 2000.0000 J4	U 21.0000	U 21.0000	U 21.0000
2523 SD000000000.001	9108-138-9DL	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	DB 620.0000 R	D 92.0000 R	U 27.0000 R	U 27.0000 R
2523 SD000000000.001	9108-138-9	U 27.0000	U 27.0000	U 27.0000	U 27.0000	180.0000 UJ	180.0000 UJ	U 27.0000	U 27.0000
2524 SD000000000.001	9108-138-10	U 30.0000	U 30.0000	U 30.0000	U 30.0000	B 73.0000 UJ	41.0000 UJ	U 30.0000	U 30.0000
2525 SD000000000.001	9108-172-3	U 53.0000	U 53.0000	U 53.0000	U 53.0000	B 360.0000 UJ	B 420.0000 J4	U 53.0000	U 53.0000
2526 SD000000000.001	9108-172-4	U 53.0000	U 53.0000	U 53.0000	U 53.0000	B 320.0000 UJ	B 640.0000 J4	U 53.0000	U 53.0000
2527 SD000000000.001	9108-172-10R	U 27.0000	U 27.0000	U 27.0000	U 27.0000	B 190.0000 UJ	1300.0000 J4	U 27.0000	U 27.0000
2527 SD000000000.001	9108-172-10	U 24.0000 R	U 24.0000 R	U 24.0000 R	U 24.0000 R	B 220.0000 R	E 1100.0000 R	U 24.0000 R	U 24.0000 R
2528 SD000000000.001	9108-172-12D	U 27.0000	U 27.0000	U 27.0000	U 27.0000	DB 220.0000 UJ	D 770.0000 J4	U 27.0000	U 27.0000
2528 SD000000000.001	9108-172-12	48.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	B 74.0000 R	B 240.0000 R	U 27.0000 R	U 27.0000 R
2529 SD000000000.001	9108-172-5	J 36.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	B 330.0000 R	B 1300.0000 R	U 40.0000 R	U 40.0000 R
2529 SD000000000.001	9108-172-5DL	U 40.0000	U 40.0000	U 40.0000	U 40.0000	DB 360.0000 UJ	D 920.0000 J4	U 40.0000	U 40.0000
2530 SD201000000.001	9108-172-8RI	J 8.0000	U 27.0000	U 27.0000	U 27.0000	B 250.0000 J4	600.0000 J4	U 27.0000	U 27.0000
2530 SD201000000.001	9108-172-8	32.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	B 280.0000 R	B 890.0000 R	U 27.0000 R	U 27.0000 R

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Analytical data for VOLATILES for file STFSDV2.DBF 01/02/92 23:00:00 32,321 bytes

STF Number	Lab Number	1,1-Dichloroethane (ug/kg)	1,2-Dichloroethene (total) (ug/kg)	Chloroform (ug/kg)	1,2-Dichloroethane (ug/kg)	2-Butanone (ug/kg)	1,1,1-Trichloroethane (ug/kg)	Carbon Tetrachloride (ug/kg)	Bromodichloromethane (ug/kg)
2501 SD000000000.001	9108-190-6	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000
2502 SD000000000.001	9108-190-1	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	150.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R
2502 SD000000000.001	9108-190-1DL	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000
2502 SD000000000.001	9108-190-1RI	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R
2503 SD000000000.001	9108-205-1DL	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000
2503 SD000000000.001	9108-205-1	U 23.0000 R	U 23.0000 R	U 23.0000 R	U 23.0000 R	U 23.0000 R	U 23.0000 R	U 23.0000 R	U 23.0000 R
2504 SD000000000.001	9108-138-3	U 32.0000	U 32.0000	U 32.0000	U 32.0000	U 32.0000	U 32.0000	U 32.0000	U 32.0000
2505 SD000000000.001	9108-088-1	U 26.0000	U 26.0000	U 26.0000	U 26.0000	U 26.0000	U 26.0000	U 26.0000	U 26.0000
2506 SD310000000.001	9108-088-2	U 25.0000	U 25.0000	U 25.0000	U 25.0000	U 25.0000	U 25.0000	U 25.0000	U 25.0000
2506 SD310000000.001	9108-088-2RA	U 25.0000 R	U 25.0000 R	U 25.0000 R	U 25.0000 R	U 25.0000 R	U 25.0000 R	U 25.0000 R	U 25.0000 R
2506 SD320000000.001	9108-088-3	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R
2506 SD320000000.001	9108-088-3RA	U 28.0000	U 28.0000	U 28.0000	U 28.0000	U 28.0000 UJ	U 28.0000	U 28.0000	U 28.0000
2507 SD000000000.001	9108-088-4RA	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000 UJ	U 14.0000	U 14.0000	U 14.0000
2507 SD000000000.001	9108-088-4	U 14.0000 R	U 14.0000 R	U 14.0000 R	U 14.0000 R	U 14.0000 R	U 14.0000 R	U 14.0000 R	U 14.0000 R
2508 SD310000000.001	9108-153-2	U 59.0000	U 59.0000	U 59.0000	U 59.0000	U 59.0000	U 59.0000	U 59.0000	U 59.0000
2509 SD310000000.001	9108-088-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SD320000000.001	9108-088-6	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000 UJ	U 16.0000	U 16.0000	U 16.0000
2510 SD511000000.001	9108-153-6	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000
2511 SD310000000.001	9108-088-7	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000
2511 SD320000000.001	9108-088-8	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000
2512 SD000000000.001	9108-088-9	U 21.0000	U 21.0000	U 21.0000	U 21.0000	U 21.0000	U 21.0000	U 21.0000	U 21.0000
2513 SD000000000.001	9108-088-10	U 11.0000	U 11.0000	U 11.0000	U 11.0000	U 11.0000	U 11.0000	U 11.0000	U 11.0000
2514 SD000000000.001	9108-088-11	U 12.0000 R	U 12.0000 R	U 12.0000 R	U 12.0000 R	U 12.0000 R	U 12.0000 R	U 12.0000 R	U 12.0000 R
2514 SD000000000.001	9108-088-11D	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000
2515 SD000000000.001	9108-088-12	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000
2516 SD310000000.001	9108-088-13	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SD320000000.001	9108-088-14	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2518 SD000000000.001	9108-138-4	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000
2519 SD000000000.001	9108-138-5	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000
2520 SD000000000.001	9108-138-6	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000
2521 SD000000000.001	9108-138-7	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000
2522 SD000000000.001	9108-138-8	U 21.0000	U 21.0000	U 21.0000	U 21.0000	U 21.0000	U 21.0000	U 21.0000	U 21.0000
2523 SD000000000.001	9108-138-9DL	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R
2523 SD000000000.001	9108-138-9	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000
2524 SD000000000.001	9108-138-10	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000
2525 SD000000000.001	9108-172-3	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000
2526 SD000000000.001	9108-172-4	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000
2527 SD000000000.001	9108-172-10R	U 27.0000	U 27.0000	U 27.0000	U 27.0000	580.0000 J4	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ
2527 SD000000000.001	9108-172-10	U 24.0000 R	U 24.0000 R	U 24.0000 R	U 24.0000 R	450.0000 R	U 24.0000 R	U 24.0000 R	U 24.0000 R
2528 SD000000000.001	9108-172-12D	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000
2528 SD000000000.001	9108-172-12	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R
2529 SD000000000.001	9108-172-5	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R
2529 SD000000000.001	9108-172-5DL	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000
2530 SD201000000.001	9108-172-8RI	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000
2530 SD201000000.001	9108-172-8	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R

STF Number	Lab Number	1,2-Dichloropropane (ug/kg)	cis-1,3-Dichloropropene (ug/kg)	Trichloroethene (ug/kg)	Dibromochloromethane (ug/kg)	1,1,2-Trichloroethane (ug/kg)	Benzene (ug/kg)	trans-1,3-Dichloropropene (ug/kg)	Bromoform (ug/kg)
2501 SD000000000.001	9108-190-6	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000
2502 SD000000000.001	9108-190-1	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	J 18.0000 R	U 42.0000 R	U 42.0000 R
2502 SD000000000.001	9108-190-1DL	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000	DJ 26.0000	U 42.0000	U 42.0000
2502 SD000000000.001	9108-190-1RI	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R
2503 SD000000000.001	9108-285-1DL	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000
2503 SD000000000.001	9108-285-1	U 23.0000 R	U 23.0000 R	U 23.0000 R	U 23.0000 R	U 23.0000 R	U 23.0000 R	U 23.0000 R	U 23.0000 R
2504 SD000000000.001	9108-138-3	U 32.0000	U 32.0000	U 32.0000	U 32.0000	U 32.0000	U 32.0000	U 32.0000	U 32.0000
2505 SD000000000.001	9108-088-1	U 26.0000	U 26.0000	U 26.0000	U 26.0000	U 26.0000	U 26.0000	U 26.0000	U 26.0000
2506 SD310000000.001	9108-088-2	U 25.0000	U 25.0000	U 25.0000	U 25.0000	U 25.0000	U 25.0000	U 25.0000	U 25.0000
2506 SD310000000.001	9108-088-2RA	U 25.0000 R	U 25.0000 R	U 25.0000 R	U 25.0000 R	U 25.0000 R	U 25.0000 R	U 25.0000 R	U 25.0000 R
2506 SD320000000.001	9108-088-3	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R
2506 SD320000000.001	9108-088-3RA	U 28.0000	U 28.0000	U 28.0000	U 28.0000	U 28.0000	U 28.0000	U 28.0000	U 28.0000
2507 SD000000000.001	9108-088-4RA	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000
2507 SD000000000.001	9108-088-4	U 14.0000 R	U 14.0000 R	U 14.0000 R	U 14.0000 R	U 14.0000 R	U 14.0000 R	U 14.0000 R	U 14.0000 R
2508 SD310000000.001	9108-153-2	U 59.0000	U 59.0000	U 59.0000	U 59.0000	U 59.0000	U 59.0000	U 59.0000	U 59.0000
2509 SD310000000.001	9108-088-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SD320000000.001	9108-088-6	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000
2510 SD511000000.001	9108-153-6	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000
2511 SD310000000.001	9108-088-7	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000
2511 SD320000000.001	9108-088-8	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000
2512 SD000000000.001	9108-088-9	U 21.0000	U 21.0000	U 21.0000	U 21.0000	U 21.0000	U 21.0000	U 21.0000	U 21.0000
2513 SD000000000.001	9108-088-10	U 11.0000	U 11.0000	U 11.0000	U 11.0000	U 11.0000	U 11.0000	U 11.0000	U 11.0000
2514 SD000000000.001	9108-088-11	U 12.0000 R	U 12.0000 R	U 12.0000 R	U 12.0000 R	U 12.0000 R	U 12.0000 R	U 12.0000 R	U 12.0000 R
2514 SD000000000.001	9108-088-11D	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000
2515 SD000000000.001	9108-088-12	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000
2516 SD310000000.001	9108-088-13	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SD320000000.001	9108-088-14	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2518 SD000000000.001	9108-138-4	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000
2519 SD000000000.001	9108-138-5	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000
2528 SD000000000.001	9108-138-6	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000
2521 SD000000000.001	9108-138-7	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000
2522 SD000000000.001	9108-138-8	U 21.0000	U 21.0000	U 21.0000	U 21.0000	U 21.0000	U 21.0000	U 21.0000	U 21.0000
2523 SD000000000.001	9108-138-9DL	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R
2523 SD000000000.001	9108-138-9	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000
2524 SD000000000.001	9108-138-10	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000
2525 SD000000000.001	9108-172-3	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000
2526 SD000000000.001	9108-172-4	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000
2527 SD000000000.001	9108-172-10R	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ
2527 SD000000000.001	9108-172-10	U 24.0000 R	U 24.0000 R	U 24.0000 R	U 24.0000 R	U 24.0000 R	J 10.0000 R	U 24.0000 R	U 24.0000 R
2528 SD000000000.001	9108-172-12D	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000
2528 SD000000000.001	9108-172-12	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R
2529 SD000000000.001	9108-172-5	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R
2529 SD000000000.001	9108-172-5DL	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000
2530 SD201000000.001	9108-172-8RI	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000
2530 SD201000000.001	9108-172-8	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R

STF	Number	Lab Number	4-Methyl-2-pentanone (ug/kg)	2-Hexanone (ug/kg)	Tetrachloroethene (ug/kg)	Toluene (ug/kg)	1,1,2,2-Tetrachloroethane (ug/kg)	Chlorobenzene (ug/kg)	Ethyl Benzene (ug/kg)	Styrene (ug/kg)
2501	SD000000000.001	9108-190-6	U 13.0000	U 13.0000	U 13.0000	26.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000
2502	SD000000000.001	9108-190-1	J 25.0000 R	73.0000 R	U 42.0000 R	1800.0000 R	U 42.0000 R	U 42.0000 R	240.0000 R	U 42.0000 R
2502	SD000000000.001	9108-190-1DL	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	D 1300.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	D 170.0000 J4	U 42.0000 UJ
2502	SD000000000.001	9108-190-1RI	U 42.0000 R	U 42.0000 R	U 42.0000 R	1100.0000 R	U 42.0000 R	U 42.0000 R	160.0000 R	U 42.0000 R
2503	SD000000000.001	9108-205-1DL	U 23.0000	U 23.0000	U 23.0000	D 840.0000	U 23.0000	U 23.0000	D 35.0000	U 23.0000
2503	SD000000000.001	9108-205-1	U 23.0000 R	U 23.0000 R	U 23.0000 R	1000.0000 R	U 23.0000 R	U 23.0000 R	U 23.0000 R	U 23.0000 R
2504	SD000000000.001	9108-138-3	U 32.0000	U 32.0000 UJ	U 32.0000	U 32.0000	U 32.0000	U 32.0000	U 32.0000	U 32.0000
2505	SD000000000.001	9108-088-1	U 26.0000	U 26.0000 UJ	U 26.0000	U 26.0000	U 26.0000	U 26.0000	U 26.0000	U 26.0000
2506	SD310000000.001	9108-088-2	U 25.0000 UJ	U 25.0000 UJ	U 25.0000 UJ	U 25.0000 UJ	U 25.0000 UJ	U 25.0000 UJ	U 25.0000 UJ	U 25.0000 UJ
2506	SD310000000.001	9108-088-2RA	U 25.0000 R	U 25.0000 R	U 25.0000 R	U 25.0000 R	U 25.0000 R	U 25.0000 R	U 25.0000 R	U 25.0000 R
2506	SD320000000.001	9108-088-3	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R
2506	SD320000000.001	9108-088-3RA	U 28.0000 UJ	U 28.0000 UJ	U 28.0000 UJ	U 28.0000 UJ	U 28.0000 UJ	U 28.0000 UJ	U 28.0000 UJ	U 28.0000 UJ
2507	SD000000000.001	9108-088-4RA	U 14.0000 UJ	U 14.0000 UJ	U 14.0000 UJ	J 6.0000 J4	U 14.0000 UJ	U 14.0000 UJ	U 14.0000 UJ	U 14.0000 UJ
2507	SD000000000.001	9108-088-4	U 14.0000 R	U 14.0000 R	U 14.0000 R	U 14.0000 R	U 14.0000 R	U 14.0000 R	U 14.0000 R	U 14.0000 R
2508	SD310000000.001	9108-153-2	U 59.0000	U 59.0000	U 59.0000	U 59.0000	U 59.0000	U 59.0000	U 59.0000	U 59.0000
2509	SD310000000.001	9108-088-5	U 10.0000	U 10.0000 UJ	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509	SD320000000.001	9108-088-6	U 16.0000	U 16.0000 UJ	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000
2510	SD511000000.001	9108-153-6	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000
2511	SD310000000.001	9108-088-7	U 16.0000	U 16.0000 UJ	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000
2511	SD320000000.001	9108-088-8	U 20.0000	U 20.0000 UJ	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000
2512	SD000000000.001	9108-088-9	U 21.0000 UJ	U 21.0000 UJ	U 21.0000 UJ	U 21.0000 UJ	U 21.0000 UJ	U 21.0000 UJ	U 21.0000 UJ	U 21.0000 UJ
2513	SD000000000.001	9108-088-10	U 11.0000	U 11.0000 UJ	U 11.0000	U 11.0000	U 11.0000	U 11.0000	U 11.0000	U 11.0000
2514	SD000000000.001	9108-088-11	U 12.0000 R	U 12.0000 R	U 12.0000 R	U 12.0000 R	U 12.0000 R	U 12.0000 R	U 12.0000 R	U 12.0000 R
2514	SD000000000.001	9108-088-11D	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ
2515	SD000000000.001	9108-088-12	U 14.0000	U 14.0000 UJ	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000
2516	SD310000000.001	9108-088-13	U 10.0000	U 10.0000 UJ	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516	SD320000000.001	9108-088-14	U 10.0000	U 10.0000 UJ	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2518	SD000000000.001	9108-138-4	U 30.0000	U 30.0000 UJ	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000
2519	SD000000000.001	9108-138-5	U 53.0000	U 53.0000 UJ	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000
2520	SD000000000.001	9108-138-6	U 30.0000	U 30.0000 UJ	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000
2521	SD000000000.001	9108-138-7	U 23.0000	U 23.0000 UJ	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000	U 23.0000
2522	SD000000000.001	9108-138-8	U 21.0000	U 21.0000 UJ	U 21.0000	U 21.0000	U 21.0000	U 21.0000	U 21.0000	U 21.0000
2523	SD000000000.001	9108-138-9DL	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R
2523	SD000000000.001	9108-138-9	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ
2524	SD000000000.001	9108-138-10	U 30.0000	U 30.0000 UJ	U 30.0000	32.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000
2525	SD000000000.001	9108-172-3	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000
2526	SD000000000.001	9108-172-4	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000
2527	SD000000000.001	9108-172-10R	J 16.0000 J4	820.0000 J4	U 27.0000 R	E 6400.0000 J4	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R
2527	SD000000000.001	9108-172-10	J 22.0000 R	E 1500.0000 R	U 26.0000 R	E 11000.0000 R	U 26.0000 R	U 26.0000 R	U 26.0000 R	U 26.0000 R
2528	SD000000000.001	9108-172-12D	U 27.0000	U 27.0000	U 27.0000	D 1000.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000
2528	SD000000000.001	9108-172-12	U 27.0000 R	U 27.0000 R	U 27.0000 R	980.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R
2529	SD000000000.001	9108-172-5	U 40.0000 R	U 40.0000 R	U 40.0000 R	E 2900.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R
2529	SD000000000.001	9108-172-5DL	U 40.0000	U 40.0000	U 40.0000	D 1300.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000
2530	SD201000000.001	9108-172-8RI	U 27.0000	U 27.0000	U 27.0000	73.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000
2530	SD201000000.001	9108-172-8	U 27.0000 R	U 27.0000 R	U 27.0000 R	140.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R

STF	Number	Lab Number	Xylenes (total) (ug/kg)		
2501	SD000000000.001	9108-190-6	U	13.0000	
2502	SD000000000.001	9108-190-1		1140.0000	R
2502	SD000000000.001	9108-190-1DL	D	890.0000	J4
2502	SD000000000.001	9108-190-1HI		780.0000	R
2503	SD000000000.001	9108-205-1DL	D	153.0000	
2503	SD000000000.001	9108-205-1		131.0000	R
2504	SD000000000.001	9108-138-3	U	32.0000	
2505	SD000000000.001	9108-088-1	U	26.0000	
2506	SD310000000.001	9108-088-2	U	25.0000	UJ
2506	SD310000000.001	9108-088-2RA	U	25.0000	R
2506	SD320000000.001	9108-088-3	U	28.0000	R
2506	SD320000000.001	9108-088-3RA	U	28.0000	UJ
2507	SD000000000.001	9108-088-4RA	U	14.0000	UJ
2507	SD000000000.001	9108-088-4	U	14.0000	R
2508	SD310000000.001	9108-153-2	U	59.0000	
2509	SD310000000.001	9108-088-5	U	10.0000	
2509	SD320000000.001	9108-088-6	U	16.0000	
2510	SD511000000.001	9108-153-6	U	14.0000	
2511	SD310000000.001	9108-088-7	U	16.0000	
2511	SD320000000.001	9108-088-8	U	20.0000	
2512	SD000000000.001	9108-088-9	U	21.0000	UJ
2513	SD000000000.001	9108-088-10	U	11.0000	
2514	SD000000000.001	9108-088-11	U	12.0000	R
2514	SD000000000.001	9108-088-11D	U	12.0000	UJ
2515	SD000000000.001	9108-088-12	U	14.0000	
2516	SD310000000.001	9108-088-13	U	10.0000	
2516	SD320000000.001	9108-088-14	U	10.0000	
2518	SD000000000.001	9108-138-4	U	30.0000	
2519	SD000000000.001	9108-138-5	U	53.0000	
2520	SD000000000.001	9108-138-6	U	30.0000	
2521	SD000000000.001	9108-138-7	U	23.0000	
2522	SD000000000.001	9108-138-8	U	21.0000	
2523	SD000000000.001	9108-138-9DL	U	27.0000	R
2523	SD000000000.001	9108-138-9	U	27.0000	UJ
2524	SD000000000.001	9108-138-10	U	30.0000	
2525	SD000000000.001	9108-172-3	U	53.0000	
2526	SD000000000.001	9108-172-4	U	53.0000	
2527	SD000000000.001	9108-172-10R	J	42.0000	J4
2527	SD000000000.001	9108-172-10	J	52.0000	R
2528	SD000000000.001	9108-172-12D	U	27.0000	
2528	SD000000000.001	9108-172-12	U	27.0000	R
2529	SD000000000.001	9108-172-5	U	40.0000	R
2529	SD000000000.001	9108-172-5DL	U	40.0000	
2530	SD201000000.001	9108-172-8HI	U	27.0000	
2530	SD201000000.001	9108-172-8	U	27.0000	R

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/kg)	Validation
2501SD000000000.001	9108-190-6	Heptane, 4-ethyl-2,2,6,6-tet	JN	16.00	
2502SD000000000.001	9108-190-1	Hexane, 2,2,5,5,-tetramethyl-	JN	660.00	
		Unknown	JN	230.00	
		Heptane, 2,5-dimethyl	JN	120.00	
		Nonane, 3-methyl-	JN	410.00	
		Undecane, 3,6-dimethyl-	JN	1800.00	
		Decane, 2,6,7-trimethyl-	JN	380.00	
		Pentane, 2,2,3-trimethyl	JN	160.00	
		Undecane	JN	2500.00	
		Decane, 2,6,7-trimethyl-	JN	1100.00	
		Nonane, 3,7-dimethyl-	JN	810.00	
2502SD000000000.001	9108-190-1D	Nonane, 3-methyl-	JND	300.00	
		Decane, 2,5,6-trimethyl-	JND	1300.00	
		Octane, 2,6-dimethyl-	JND	280.00	
		Cyclopropa[3,4]pentaleno[1,2	JND	420.00	
		Octane, 3,6-dimethyl-	JND	830.00	
		Undecane, 4,6-dimethyl-	JND	590.00	
		Octane, 2,2,6-trimethyl-	JND	380.00	
2502SD000000000.001	9108-190-1R	Nonane, 3-methyl-	JN	220.00	
		Octane, 2,5,6-trimethyl-	JN	800.00	
		Decane, 2,6,7-trimethyl-	JN	160.00	
		Thiophene, 2-(2-methylpropyl	JN	280.00	
		Decane, 2,6,7-trimethyl-	JN	570.00	
		Nonane, 3-methyl-5-propyl-	JN	410.00	
		Benzene, 1,2,3-trimethyl-	JN	140.00	
2503SD000000000.001	9108-205-1	Decane, 2,5,9-trimethyl-	JN	1900.00	
		Hexane, 2,2,3-trimethyl-	JN	540.00	
		2,4-Hexadiene, 2-methyl-	JN	1300.00	
		Hexane, 2,2,5-trimethyl-	JN	1200.00	
		Nonane, 3-methyl-5-propyl-	JN	1300.00	
		1-Hexene, 5,5-dimethyl-	JN	420.00	
		Hexane, 2,2,5-trimethyl-	JN	920.00	
2503SD000000000.001	9108-205-1D	Octane, 2,2,6-trimethyl-	JND	1700.00	
		Pentane, 2,2,3,4-tetramethyl	JND	480.00	
		Thiophene, 2-butyl-	JND	890.00	
		Hexane, 2,2,5-trimethyl-	JND	1300.00	
		Nonane, 3-methyl-5-propyl-	JND	1200.00	
		1-Hexanol, 2-ethyl-	JND	380.00	
		Heptane, 2,2,3,4,6,6-hexamet	JND	760.00	
2507SD000000000.001	9108-088-4	UNKNOWN	JN	21.00	
2524SD000000000.001	9108-138-10	UNKNOWN	JN	180.00	
		UNKNOWN	JN	100.00	
2526SD000000000.001	9108-172-4	UNKNOWN	JN	160.00	
		Octane, 2,5,6-trimethyl-	JN	78.00	
		Octane, 3-ethyl-2,7-dimethyl	JN	65.00	
2527SD000000000.001	9108-172-10	Pentane	JN	210.00	
		Octane	JN	310.00	
		2-Heptanone	JN	300.00	
		3-Heptanone, 5-methyl-	JN	60.00	
		1-Tetradecanamine, N,N-dimet	JN	280.00	

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STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/kg)	Validation
2527SD000000000.001	9108-172-10R	Pentane	JN	250.00	
		Octane	JN	270.00	
		Hexanal	JN	140.00	
		2-Heptanone	JN	2000.00	
		3-Heptanone, 5-methyl-	JN	380.00	
		2-Heptanone, 6-methyl-	JN	1800.00	
		Octanal	JN	220.00	
2528SD000000000.001	9108-172-12	UNKNOWN	JN	100.00	
2529SD000000000.001	9108-172-5	UNKNOWN	JN	160.00	
		Octane, 2,2,6-trimethyl-	JN	200.00	
		Pentane, 2,2,3-trimethyl-	JN	80.00	
		Decane, 2,2-dimethyl-	JN	140.00	
		Nonane, 3-methyl-5-propyl-	JN	190.00	
2529SD000000000.001	9108-172-5D	Octane, 2,2,6-trimethyl-	JND	120.00	
2530SD201000000.001	9108-172-8	Methane, thiobis-	JN	55.00	
		Octane, 2,2,6-trimethyl-	JN	69.00	
		Decane, 2,2,8-trimethyl-	JN	48.00	
		Nonane, 3,7-dimethyl-	JN	76.00	
2530SD201000000.001	9108-172-8R	Octane, 2,2,6-trimethyl-	JN	73.00	
		Decane, 2,2-dimethyl-	JN	66.00	
		Nonane, 3-methyl-5-propyl-	JN	79.00	
		Hexane, 2,2,5-trimethyl-	JN	79.00	

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

WET SEASON (JANUARY 1992)
SURFACE WATER ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for VOLATILES for file STFSUV3.DBF 03/27/92 23:00:00 18,986 bytes

STF Number	Lab Number	Chloromethane (ug/L)	Bromomethane (ug/L)	Vinyl Chloride (ug/L)	Chloroethane (ug/L)	Methylene Chloride (ug/L)	Acetone (ug/L)	Carbon Disulfide (ug/L)	1,1-Dichloroethene (ug/L)
2501 SU0000000000.002	9201-169-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2502 SU3100000000.002	9201-220-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	JB 3.0000 UJ	U 10.0000	U 10.0000	U 10.0000
2503 SU0000000000.002	9201-220-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	JB 4.0000 UJ	U 10.0000	U 10.0000	U 10.0000
2505 SU0000000000.002	9201-110-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	J 8.0000 J4	U 10.0000	U 10.0000	U 10.0000
2506 SU3100000000.002	9201-110-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506 SU3200000000.002	9201-110-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2507 SU2010000000.002	9201-110-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2508 SU0000000000.002	9201-110-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU3100000000.002	9201-095-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU3200000000.002	9201-095-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2510 SU0000000000.002	9201-095-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	J 8.0000 J4	U 10.0000	U 10.0000	U 10.0000
2511 SU3100000000.002	9201-095-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU3200000000.002	9201-095-9	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2512 SU0000000000.002	9201-095-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU3200000000.002	9201-220-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU5110000000.002	9201-220-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2518 SU0000000000.002	9201-156-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2519 SU0000000000.002	9201-156-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2520 SU0000000000.002	9201-156-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2521 SU0000000000.002	9201-156-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2527 SU0000000000.002	9201-156-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2528 SU2010000000.002	9201-169-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 SU0000000000.002	9201-169-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2530 SU0000000000.002	9201-169-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

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STF Number	Lab Number	1,1-Dichloroethane (ug/L)	1,2-Dichloroethene (total) (ug/L)	Chloroform (ug/L)	1,2-Dichloroethane (ug/L)	2-Butanone (ug/L)	1,1,1-Trichloroethane (ug/L)	Carbon Tetrachloride (ug/L)	Bromodichloromethane (ug/L)
2501 SU0000000000.002	9201-169-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2502 SU3100000000.002	9201-220-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2503 SU0000000000.002	9201-220-4	U 10.0000	U 10.0000	J 2.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2505 SU0000000000.002	9201-110-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000 R	U 10.0000	U 10.0000	U 10.0000
2506 SU3100000000.002	9201-110-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000 R	U 10.0000	U 10.0000	U 10.0000
2506 SU3200000000.002	9201-110-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2507 SU2010000000.002	9201-110-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2508 SU0000000000.002	9201-110-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU3100000000.002	9201-095-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000 R	U 10.0000	U 10.0000	U 10.0000
2509 SU3200000000.002	9201-095-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000 R	U 10.0000	U 10.0000	U 10.0000
2510 SU0000000000.002	9201-095-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000 R	U 10.0000	U 10.0000	U 10.0000
2511 SU3100000000.002	9201-095-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000 R	U 10.0000	U 10.0000	U 10.0000
2511 SU3200000000.002	9201-095-9	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000 R	U 10.0000	U 10.0000	U 10.0000
2512 SU0000000000.002	9201-095-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000 R	U 10.0000	U 10.0000	U 10.0000
2516 SU3200000000.002	9201-220-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU5110000000.002	9201-220-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2518 SU0000000000.002	9201-156-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2519 SU0000000000.002	9201-156-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2520 SU0000000000.002	9201-156-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2521 SU0000000000.002	9201-156-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2527 SU0000000000.002	9201-156-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2528 SU2010000000.002	9201-169-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 SU0000000000.002	9201-169-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2530 SU0000000000.002	9201-169-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	1,2-Dichloropropane (ug/L)	cis-1,3-Dichloropropene (ug/L)	Trichloroethene (ug/L)	Dibromochloromethane (ug/L)	1,1,2-Trichloroethane (ug/L)	Benzene (ug/L)	trans-1,3-Dichloropropene (ug/L)	Bromoform (ug/L)
2501 SU0000000000.002	9201-169-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2502 SU3100000000.002	9201-220-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2503 SU0000000000.002	9201-220-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2505 SU0000000000.002	9201-110-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506 SU3100000000.002	9201-110-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506 SU3200000000.002	9201-110-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2507 SU2810000000.002	9201-110-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2508 SU0000000000.002	9201-110-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU3100000000.002	9201-095-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU3200000000.002	9201-095-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2510 SU0000000000.002	9201-095-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU3100000000.002	9201-095-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU3200000000.002	9201-095-9	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2512 SU0000000000.002	9201-095-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU3200000000.002	9201-220-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU5110000000.002	9201-220-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2518 SU0000000000.002	9201-156-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2519 SU0000000000.002	9201-156-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2520 SU0000000000.002	9201-156-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2521 SU0000000000.002	9201-156-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2527 SU0000000000.002	9201-156-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2528 SU2810000000.002	9201-169-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 SU0000000000.002	9201-169-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2530 SU0000000000.002	9201-169-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	4-Methyl-2-pentanone (ug/L)	2-Hexanone (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	Chlorobenzene (ug/L)	Ethyl Benzene (ug/L)	Styrene (ug/L)
2501 SU0000000000.002	9201-169-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2502 SU3100000000.002	9201-220-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2503 SU0000000000.002	9201-220-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2505 SU0000000000.002	9201-110-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506 SU3100000000.002	9201-110-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506 SU3200000000.002	9201-110-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2507 SU2010000000.002	9201-110-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2508 SU0000000000.002	9201-110-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU3100000000.002	9201-095-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU3200000000.002	9201-095-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2510 SU0000000000.002	9201-095-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU3100000000.002	9201-095-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU3200000000.002	9201-095-9	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2512 SU0000000000.002	9201-095-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU3200000000.002	9201-220-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU5110000000.002	9201-220-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2518 SU0000000000.002	9201-156-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2519 SU0000000000.002	9201-156-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2520 SU0000000000.002	9201-156-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2521 SU0000000000.002	9201-156-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2527 SU0000000000.002	9201-156-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2528 SU2010000000.002	9201-169-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 SU0000000000.002	9201-169-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2530 SU0000000000.002	9201-169-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	Xylenes (total) (ug/L)	
2501 SU0000000000.002	9201-169-2	U	10.0000
2502 SU3100000000.002	9201-220-2	U	10.0000
2503 SU0000000000.002	9201-220-4	U	10.0000
2505 SU0000000000.002	9201-110-1	U	10.0000
2506 SU3100000000.002	9201-110-3	U	10.0000
2506 SU3200000000.002	9201-110-4	U	10.0000
2507 SU2010000000.002	9201-110-6	U	10.0000
2508 SU0000000000.002	9201-110-8	U	10.0000
2509 SU3100000000.002	9201-095-2	U	10.0000
2509 SU3200000000.002	9201-095-3	U	10.0000
2510 SU0000000000.002	9201-095-5	U	10.0000
2511 SU3100000000.002	9201-095-8	U	10.0000
2511 SU3200000000.002	9201-095-9	U	10.0000
2512 SU0000000000.002	9201-095-11	U	10.0000
2516 SU3200000000.002	9201-220-7	U	10.0000
2516 SU5110000000.002	9201-220-8	U	10.0000
2518 SU0000000000.002	9201-156-2	U	10.0000
2519 SU0000000000.002	9201-156-3	U	10.0000
2520 SU0000000000.002	9201-156-4	U	10.0000
2521 SU0000000000.002	9201-156-5	U	10.0000
2527 SU0000000000.002	9201-156-7	U	10.0000
2528 SU2010000000.002	9201-169-4	U	10.0000
2529 SU0000000000.002	9201-169-6	U	10.0000
2530 SU0000000000.002	9201-169-8	U	10.0000

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/L)	Validation
2501SU000000000.002	9201-169-2	Hexane	JNB	9.00	R
		UNKNOWN	JN	7.00	
2502SU310000000.002	9201-220-2	Hexane	JNB	7.00	R
2503SU000000000.002	9201-220-4	Hexane	JNB	8.00	R
		UNKNOWN	JN	10.00	
2505SU000000000.002	9201-110-1	Hexane	JNB	8.00	R
2506SU310000000.002	9201-110-3	Hexane	JNB	6.00	R
2506SU320000000.002	9201-110-4	Hexane	JNB	8.00	R
2507SU201000000.002	9201-110-6	Hexane	JNB	8.00	R
2508SU000000000.002	9201-110-8	Hexane	JNB	8.00	R
2509SU310000000.002	9201-095-2	Hexane	JNB	8.00	R
2509SU320000000.002	9201-095-3	Hexane	JNB	8.00	R
2510SU000000000.002	9201-095-5	Hexane	JNB	8.00	R
2511SU310000000.002	9201-095-8	Hexane	JNB	9.00	R
		Phenol, 2,6-bis(1,1-dimethyl	JN	10.00	
2511SU320000000.002	9201-095-9	Hexane	JNB	8.00	R
2512SU000000000.002	9201-095-11	Hexane	JNB	8.00	R
2516SU320000000.002	9201-220-7	Hexane	JNB	8.00	R
2516SU511000000.002	9201-220-8	Hexane	JNB	9.00	R
2518SU000000000.002	9201-156-2	Hexane	JNB	8.00	R
		Pentadecane	JN	19.00	
		Tridecane	JN	8.00	
2519SU000000000.002	9201-156-3	Hexane	JNB	8.00	R
		Pentadecane	JN	38.00	
2520SU000000000.002	9201-156-4	Hexane	JNB	7.00	R
		Tetradecane	JN	67.00	
		Dodecane	JN	6.00	
2521SU000000000.002	9201-156-5	Hexane	JNB	8.00	R
		Pentadecane	JN	19.00	
2527SU000000000.002	9201-156-7	Hexane	JNB	9.00	R
		Pentadecane	JN	22.00	
2528SU201000000.002	9201-169-4	Hexane	JNB	9.00	R
2529SU000000000.002	9201-169-6	Hexane	JNB	8.00	R
		Tetradecane	JN	9.00	
2530SU000000000.002	9201-169-8	Hexane	JNB	9.00	R
		UNKNOWN	JN	7.00	

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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

WET SEASON (JANUARY 1992)
SEDIMENT ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for VOLATILES for file STFSDV3.DBF 03/27/92 23:00:00 31,686 bytes

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STF Number	Lab Number	Chloromethane (ug/kg)	Bromomethane (ug/kg)	Vinyl Chloride (ug/kg)	Chloroethane (ug/kg)	Methylene Chloride (ug/kg)	Acetone (ug/kg)	Carbon Disulfide (ug/kg)	1,1-Dichloroethene (ug/kg)
2501 SD0000000000.002	9201-169-1	U 12.0000	U 12.0000	U 12.0000	U 12.0000	JB 10.0000 UJ	JB 6.0000 UJ	U 12.0000	U 12.0000
2502 SD3100000000.002	9201-220-1	U 42.0000	U 42.0000	U 42.0000	U 42.0000	B 43.0000 UJ	B 230.0000 UJ	U 42.0000	U 42.0000
2503 SD0000000000.002	9201-220-3	U 33.0000	U 33.0000	U 33.0000	U 33.0000	B 58.0000 UJ	B 270.0000 UJ	U 33.0000	U 33.0000
2504 SD0000000000.002	9201-086-1	U 42.0000	U 42.0000	U 42.0000	U 42.0000	B 60.0000 UJ	B 800.0000	U 42.0000	U 42.0000
2504 SD0000000000.002	9201-086-1RE	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	JB 27.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R
2506 SD3200000000.002	9201-110-2	U 38.0000	U 38.0000	U 38.0000	U 38.0000	JB 25.0000 UJ	B 89.0000 UJ	U 38.0000	U 38.0000
2507 SD2010000000.002	9201-110-5	U 71.0000	U 71.0000	U 71.0000	U 71.0000	B 230.0000 UJ	U 71.0000	U 71.0000	U 71.0000
2508 SD0000000000.002	9201-110-7	J 18.0000	U 43.0000	U 43.0000	U 43.0000	B 170.0000 UJ	340.0000 J4	U 43.0000	U 43.0000
2508 SD0000000000.002	9201-110-7RE	U 43.0000 R	U 43.0000 R	U 43.0000 R	U 43.0000 R	JB 38.0000 R	B 120.0000 R	U 43.0000 R	U 43.0000 R
2509 SD3100000000.002	9201-095-1	U 13.0000	U 13.0000	U 13.0000	U 13.0000	B 22.0000 UJ	24.0000 J4	U 13.0000	U 13.0000
2509 SD3200000000.002	9201-110-9	U 40.0000	U 40.0000	U 40.0000	U 40.0000	B 130.0000 UJ	130.0000 J4	U 40.0000	U 40.0000
2509 SD3200000000.002	9201-110-9RE	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	JB 26.0000 R	B 77.0000 R	U 40.0000 R	U 40.0000 R
2510 SD0000000000.002	9201-110-10	U 29.0000	U 29.0000	U 29.0000	U 29.0000	JB 19.0000 UJ	B 510.0000 UJ	U 29.0000	U 29.0000
2511 SD3100000000.002	9201-095-6	U 14.0000	U 14.0000	U 14.0000	U 14.0000	B 330.0000	270.0000 J4	U 14.0000	U 14.0000
2511 SD3200000000.002	9201-095-7	U 31.0000	U 31.0000	U 31.0000	U 31.0000	B 380.0000	60.0000 J4	U 31.0000	U 31.0000
2512 SD0000000000.002	9201-095-10R	U 19.0000 R	U 19.0000 R	U 19.0000 R	U 19.0000 R	B 210.0000 R	73.0000 R	U 19.0000 R	U 19.0000 R
2512 SD0000000000.002	9201-095-10	U 19.0000	U 19.0000	U 19.0000	U 19.0000	B 130.0000 UJ	40.0000	U 19.0000	U 19.0000
2513 SD0000000000.002	9201-086-2	U 14.0000	U 14.0000	U 14.0000	U 14.0000	B 38.0000 UJ	B 360.0000	U 14.0000	U 14.0000
2514 SD0000000000.002	9201-086-3	U 16.0000	U 16.0000	U 16.0000	U 16.0000	B 34.0000 UJ	B 580.0000	U 16.0000	U 16.0000
2515 SD0000000000.002	9201-086-4	U 15.0000	U 15.0000	U 15.0000	U 15.0000	B 34.0000 UJ	B 400.0000	U 15.0000	U 15.0000
2516 SD3200000000.002	9201-220-5	U 28.0000	U 28.0000	U 28.0000	U 28.0000	B 37.0000 UJ	B 59.0000 UJ	U 28.0000	U 28.0000
2516 SD5110000000.002	9201-220-6	U 13.0000	U 13.0000	U 13.0000	U 13.0000	B 13.0000 UJ	B 19.0000 UJ	U 13.0000	U 13.0000
2518 SD0000000000.002	9201-086-5	U 29.0000	U 29.0000	U 29.0000	U 29.0000	JB 25.0000 UJ	B 180.0000 UJ	U 29.0000	U 29.0000
2519 SD0000000000.002	9201-086-6RE	U 31.0000 R	U 31.0000 R	U 31.0000 R	U 31.0000 R	B 31.0000 R	B 150.0000 R	U 31.0000 R	U 31.0000 R
2519 SD0000000000.002	9201-086-6	U 31.0000	U 31.0000	U 31.0000	U 31.0000	B 54.0000 UJ	B 680.0000	U 31.0000	U 31.0000
2520 SD0000000000.002	9201-086-7	U 30.0000	U 30.0000	U 30.0000	U 30.0000	B 52.0000 UJ	B 820.0000	U 30.0000	U 30.0000
2520 SD0000000000.002	9201-086-7RE	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R	B 33.0000 R	B 110.0000 R	U 30.0000 R	U 30.0000 R
2521 SD0000000000.002	9201-086-8	U 32.0000	U 32.0000	U 32.0000	U 32.0000	B 33.0000 UJ	B 130.0000 UJ	U 32.0000	U 32.0000
2522 SD0000000000.002	9201-086-9	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	B 65.0000 R	B 480.0000 R	U 27.0000 R	U 27.0000 R
2522 SD0000000000.002	9201-086-9RE	U 27.0000	U 27.0000	U 27.0000	U 27.0000	JB 20.0000 UJ	U 27.0000	U 27.0000	U 27.0000
2523 SD0000000000.002	9201-086-10	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	JB 19.0000 R	B 44.0000 R	U 28.0000 R	U 28.0000 R
2523 SD0000000000.002	9201-086-10R	U 28.0000	U 28.0000	U 28.0000	U 28.0000	B 43.0000 UJ	U 28.0000	U 28.0000	U 28.0000
2524 SD0000000000.002	9201-086-11	U 36.0000	U 36.0000	U 36.0000	U 36.0000	B 44.0000 UJ	U 36.0000	U 36.0000	U 36.0000
2525 SD0000000000.002	9201-086-12	U 48.0000	U 48.0000	U 48.0000	U 48.0000	JB 30.0000 UJ	B 140.0000 UJ	U 48.0000	U 48.0000
2525 SD0000000000.002	9201-086-12R	U 48.0000 R	U 48.0000 R	U 48.0000 R	U 48.0000 R	B 65.0000 R	U 48.0000 R	U 48.0000 R	U 48.0000 R
2526 SD0000000000.002	9201-086-13	J 29.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	JB 27.0000 R	B 110.0000 R	U 42.0000 R	U 42.0000 R
2526 SD0000000000.002	9201-086-13R	J 22.0000	U 42.0000	U 42.0000	U 42.0000	B 47.0000 UJ	U 42.0000	U 42.0000	U 42.0000
2527 SD0000000000.002	9201-156-6	J 19.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R	JB 17.0000 R	B 240.0000 R	U 33.0000 R	U 33.0000 R
2527 SD0000000000.002	9201-156-6RE	U 33.0000	U 33.0000	U 33.0000	U 33.0000	J 17.0000 UJ	B 390.0000 UJ	U 33.0000	U 33.0000
2528 SD2010000000.002	9201-169-3	J 19.0000 R	U 36.0000 R	U 36.0000 R	U 36.0000 R	JB 26.0000 R	B 110.0000 R	U 36.0000 R	U 36.0000 R
2528 SD2010000000.002	9201-169-3RE	U 36.0000	U 36.0000	U 36.0000	U 36.0000	JB 19.0000 UJ	B 340.0000 UJ	U 36.0000	U 36.0000
2529 SD0000000000.002	9201-169-5	65.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R
2529 SD0000000000.002	9201-169-5RE	J 28.0000	U 40.0000	U 40.0000	U 40.0000	JB 22.0000 UJ	B 140.0000 UJ	U 40.0000	U 40.0000
2530 SD0000000000.002	9201-169-7	J 39.0000	U 48.0000	U 48.0000	U 48.0000	JB 29.0000 UJ	B 160.0000 UJ	U 48.0000	U 48.0000

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Analytical data for VOLATILES for file STFSDV3.DBF 03/27/92 23:00:00 31,686 bytes

STF Number	Lab Number	1,1-Dichloroethane (ug/kg)	1,2-Dichloroethene (total) (ug/kg)	Chloroform (ug/kg)	1,2-Dichloroethane (ug/kg)	2-Butanone (ug/kg)	1,1,1-Trichloroethane (ug/kg)	Carbon Tetrachloride (ug/kg)	Bromodichloromethane (ug/kg)
2501 SD0000000000.002	9201-169-1	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000 UJ	U 12.0000	U 12.0000	U 12.0000
2502 SD3100000000.002	9201-220-1	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000
2503 SD0000000000.002	9201-220-3	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000
2504 SD0000000000.002	9201-086-1	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000
2504 SD0000000000.002	9201-086-1RE	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R
2506 SD3200000000.002	9201-110-2	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000
2507 SD2010000000.002	9201-110-5	U 71.0000	U 71.0000	U 71.0000	U 71.0000	U 71.0000	U 71.0000	U 71.0000	U 71.0000
2508 SD0000000000.002	9201-110-7	U 43.0000	U 43.0000	U 43.0000	U 43.0000	U 43.0000	U 43.0000	U 43.0000	U 43.0000
2508 SD0000000000.002	9201-110-7RE	U 43.0000 R	U 43.0000 R	U 43.0000 R	U 43.0000 R	U 43.0000 R	U 43.0000 R	U 43.0000 R	U 43.0000 R
2509 SD3100000000.002	9201-095-1	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000
2509 SD3200000000.002	9201-110-9	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000
2509 SD3200000000.002	9201-110-9RE	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R
2510 SD0000000000.002	9201-110-10	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000
2511 SD3100000000.002	9201-095-6	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000
2511 SD3200000000.002	9201-095-7	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000
2512 SD0000000000.002	9201-095-10RE	U 19.0000 R	U 19.0000 R	U 19.0000 R	U 19.0000 R	U 19.0000 R	U 19.0000 R	U 19.0000 R	U 19.0000 R
2512 SD0000000000.002	9201-095-10	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000
2513 SD0000000000.002	9201-086-2	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000
2514 SD0000000000.002	9201-086-3	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000
2515 SD0000000000.002	9201-086-4	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000
2516 SD3200000000.002	9201-220-5	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000
2516 SD5110000000.002	9201-220-6	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000
2518 SD0000000000.002	9201-086-5	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000
2519 SD0000000000.002	9201-086-6RE	U 31.0000 R	U 31.0000 R	U 31.0000 R	U 31.0000 R	U 31.0000 R	U 31.0000 R	U 31.0000 R	U 31.0000 R
2519 SD0000000000.002	9201-086-6	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000
2520 SD0000000000.002	9201-086-7	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000
2520 SD0000000000.002	9201-086-7RE	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R
2521 SD0000000000.002	9201-086-8	U 32.0000	U 32.0000	U 32.0000	U 32.0000	U 32.0000	U 32.0000	U 32.0000	U 32.0000
2522 SD0000000000.002	9201-086-9	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R
2522 SD0000000000.002	9201-086-9RE	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ
2523 SD0000000000.002	9201-086-10	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R
2523 SD0000000000.002	9201-086-10RE	U 28.0000	U 28.0000	U 28.0000	U 28.0000	U 28.0000	U 28.0000	U 28.0000	U 28.0000
2524 SD0000000000.002	9201-086-11	U 36.0000	U 36.0000	U 36.0000	U 36.0000	U 36.0000	U 36.0000	U 36.0000	U 36.0000
2525 SD0000000000.002	9201-086-12	U 48.0000	U 48.0000	U 48.0000	U 48.0000	U 48.0000	U 48.0000	U 48.0000	U 48.0000
2525 SD0000000000.002	9201-086-12RE	U 48.0000 R	U 48.0000 R	U 48.0000 R	U 48.0000 R	U 48.0000 R	U 48.0000 R	U 48.0000 R	U 48.0000 R
2526 SD0000000000.002	9201-086-13	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R
2526 SD0000000000.002	9201-086-13RE	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000
2527 SD0000000000.002	9201-156-6	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R
2527 SD0000000000.002	9201-156-6RE	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000
2528 SD2010000000.002	9201-169-3	U 36.0000 R	U 36.0000 R	U 36.0000 R	U 36.0000 R	U 36.0000 R	U 36.0000 R	U 36.0000 R	U 36.0000 R
2528 SD2010000000.002	9201-169-3RE	U 36.0000	U 36.0000	U 36.0000	U 36.0000	U 36.0000	U 36.0000	U 36.0000	U 36.0000
2529 SD0000000000.002	9201-169-5	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R
2529 SD0000000000.002	9201-169-5RE	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000
2530 SD0000000000.002	9201-169-7	U 48.0000	U 48.0000	U 48.0000	U 48.0000	U 48.0000	U 48.0000	U 48.0000	U 48.0000

STF Number	Lab Number	1,2-Dichloropropane (ug/kg)	cis-1,3-Dichloropropene (ug/kg)	Trichloroethene (ug/kg)	Dibromochloromethane (ug/kg)	1,1,2-Trichloroethane (ug/kg)	Benzene (ug/kg)	trans-1,3-Dichloropropene (ug/kg)	Bromoform (ug/kg)
2501 SD0000000000.002	9201-169-1	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000
2502 SD3100000000.002	9201-220-1	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000
2503 SD0000000000.002	9201-220-3	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000
2504 SD0000000000.002	9201-086-1	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000
2504 SD0000000000.002	9201-086-1RE	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R
2506 SD3200000000.002	9201-110-2	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000
2507 SD2010000000.002	9201-110-5	U 71.0000	U 71.0000	U 71.0000	U 71.0000	U 71.0000	U 71.0000	U 71.0000	U 71.0000
2508 SD0000000000.002	9201-110-7	U 43.0000	U 43.0000	U 43.0000	U 43.0000	U 43.0000	U 43.0000	U 43.0000	U 43.0000
2508 SD0000000000.002	9201-110-7RE	U 43.0000 R	U 43.0000 R	U 43.0000 R	U 43.0000 R	U 43.0000 R	U 43.0000 R	U 43.0000 R	U 43.0000 R
2509 SD3100000000.002	9201-095-1	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000
2509 SD3200000000.002	9201-110-9	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000
2509 SD3200000000.002	9201-110-9RE	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R
2510 SD0000000000.002	9201-110-10	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000
2511 SD3100000000.002	9201-095-6	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000
2511 SD3200000000.002	9201-095-7	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000
2512 SD0000000000.002	9201-095-10R	U 19.0000 R	U 19.0000 R	U 19.0000 R	U 19.0000 R	U 19.0000 R	U 19.0000 R	U 19.0000 R	U 19.0000 R
2512 SD0000000000.002	9201-095-10	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000
2513 SD0000000000.002	9201-086-2	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000
2514 SD0000000000.002	9201-086-3	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000
2515 SD0000000000.002	9201-086-4	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000
2516 SD3200000000.002	9201-220-5	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000
2516 SD5110000000.002	9201-220-6	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000
2518 SD0000000000.002	9201-086-5	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000
2519 SD0000000000.002	9201-086-5RE	U 31.0000 R	U 31.0000 R	U 31.0000 R	U 31.0000 R	U 31.0000 R	U 31.0000 R	U 31.0000 R	U 31.0000 R
2519 SD0000000000.002	9201-086-6	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000
2520 SD0000000000.002	9201-086-7	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000
2520 SD0000000000.002	9201-086-7RE	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R
2521 SD0000000000.002	9201-086-8	U 32.0000	U 32.0000	U 32.0000	U 32.0000	U 32.0000	U 32.0000	U 32.0000	U 32.0000
2522 SD0000000000.002	9201-086-9	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R
2522 SD0000000000.002	9201-086-9RE	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ
2523 SD0000000000.002	9201-086-10	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R
2523 SD0000000000.002	9201-086-10R	U 28.0000	U 28.0000	U 28.0000	U 28.0000	U 28.0000	U 28.0000	U 28.0000	U 28.0000
2524 SD0000000000.002	9201-086-11	U 36.0000	U 36.0000	U 36.0000	U 36.0000	U 36.0000	U 36.0000	U 36.0000	U 36.0000
2525 SD0000000000.002	9201-086-12	U 48.0000	U 48.0000	U 48.0000	U 48.0000	U 48.0000	U 48.0000	U 48.0000	U 48.0000
2525 SD0000000000.002	9201-086-12R	U 48.0000 R	U 48.0000 R	U 48.0000 R	U 48.0000 R	U 48.0000 R	U 48.0000 R	U 48.0000 R	U 48.0000 R
2526 SD0000000000.002	9201-086-13	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R
2526 SD0000000000.002	9201-086-13R	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000
2527 SD0000000000.002	9201-156-6	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R
2527 SD0000000000.002	9201-156-6RE	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000
2528 SD2010000000.002	9201-169-3	U 36.0000 R	U 36.0000 R	U 36.0000 R	U 36.0000 R	U 36.0000 R	U 36.0000 R	U 36.0000 R	U 36.0000 R
2528 SD2010000000.002	9201-169-3RE	U 36.0000	U 36.0000	U 36.0000	U 36.0000	U 36.0000	U 36.0000	U 36.0000	U 36.0000
2529 SD0000000000.002	9201-169-5	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R
2529 SD0000000000.002	9201-169-5RE	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000
2530 SD0000000000.002	9201-169-7	U 48.0000	U 48.0000	U 48.0000	U 48.0000	U 48.0000	U 48.0000	U 48.0000	U 48.0000

STF Number	Lab Number	4-Methyl-2-pentanone (ug/kg)	2-Hexanone (ug/kg)	Tetrachloroethene (ug/kg)	Toluene (ug/kg)	1,1,2,2-Tetrachloroethane (ug/kg)	Chlorobenzene (ug/kg)	Ethyl Benzene (ug/kg)	Styrene (ug/kg)
2501 SD000000000.002	9201-169-1	U 12.0000 UJ	U 12.0000 UJ	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000
2502 SD310000000.002	9201-220-1	U 42.0000	U 42.0000	U 42.0000	J 15.0000	U 42.0000	U 42.0000	U 42.0000	U 42.0000
2503 SD000000000.002	9201-220-3	U 33.0000	U 33.0000	U 33.0000	120.0000	U 33.0000	U 33.0000	60.0000	U 33.0000
2504 SD000000000.002	9201-086-1	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ
2504 SD000000000.002	9201-086-1RE	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R
2506 SD320000000.002	9201-110-2	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000
2507 SD201000000.002	9201-110-5	U 71.0000	U 71.0000	U 71.0000	U 71.0000	U 71.0000	U 71.0000	U 71.0000	U 71.0000
2508 SD000000000.002	9201-110-7	U 43.0000 UJ	U 43.0000 UJ	U 43.0000 UJ	96.0000 J4	U 43.0000 UJ	U 43.0000 UJ	U 43.0000 UJ	U 43.0000 UJ
2508 SD000000000.002	9201-110-7RE	U 43.0000 R	U 43.0000 R	U 43.0000 R	82.0000 R	U 43.0000 R	U 43.0000 R	U 43.0000 R	U 43.0000 R
2509 SD310000000.002	9201-095-1	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000
2509 SD320000000.002	9201-110-9	U 40.0000 UJ	U 40.0000 UJ	U 40.0000 UJ	U 40.0000 UJ	U 40.0000 UJ	U 40.0000 UJ	U 40.0000 UJ	U 40.0000 UJ
2509 SD320000000.002	9201-110-9RE	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R
2510 SD000000000.002	9201-110-10	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000
2511 SD310000000.002	9201-095-6	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000
2511 SD320000000.002	9201-095-7	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000
2512 SD000000000.002	9201-095-10R	U 19.0000 R	U 19.0000 R	U 19.0000 R	U 19.0000 R	U 19.0000 R	U 19.0000 R	U 19.0000 R	U 19.0000 R
2512 SD000000000.002	9201-095-10	U 19.0000 UJ	U 19.0000 UJ	U 19.0000 UJ	U 19.0000 UJ	U 19.0000 UJ	U 19.0000 UJ	U 19.0000 UJ	U 19.0000 UJ
2513 SD000000000.002	9201-086-2	U 14.0000	U 14.0000	U 14.0000	48.0000	U 14.0000	U 14.0000	U 14.0000	U 14.0000
2514 SD000000000.002	9201-086-3	U 16.0000	U 16.0000	U 16.0000	110.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000
2515 SD000000000.002	9201-086-4	U 15.0000	U 15.0000	U 15.0000	J 5.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000
2516 SD320000000.002	9201-220-5	U 20.0000	U 20.0000	U 20.0000	110.0000	U 20.0000	U 20.0000	J 6.0000	U 20.0000
2516 SD511000000.002	9201-220-6	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000	U 13.0000
2518 SD000000000.002	9201-086-5	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000
2519 SD000000000.002	9201-086-6RE	U 31.0000 R	U 31.0000 R	U 31.0000 R	U 31.0000 R	U 31.0000 R	U 31.0000 R	U 31.0000 R	U 31.0000 R
2519 SD000000000.002	9201-086-6	U 31.0000 UJ	U 31.0000 UJ	U 31.0000 UJ	U 31.0000 UJ	U 31.0000 UJ	U 31.0000 UJ	U 31.0000 UJ	U 31.0000 UJ
2520 SD000000000.002	9201-086-7	U 30.0000 UJ	U 30.0000 UJ	U 30.0000 UJ	U 30.0000 UJ	U 30.0000 UJ	U 30.0000 UJ	U 30.0000 UJ	U 30.0000 UJ
2520 SD000000000.002	9201-086-7RE	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R
2521 SD000000000.002	9201-086-8	U 32.0000	U 32.0000	U 32.0000	J 8.0000	U 32.0000	U 32.0000	U 32.0000	U 32.0000
2522 SD000000000.002	9201-086-9	U 27.0000 R	U 27.0000 R	U 27.0000 R	J 19.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R	U 27.0000 R
2522 SD000000000.002	9201-086-9RE	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ
2523 SD000000000.002	9201-086-10	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R	U 28.0000 R
2523 SD000000000.002	9201-086-10R	U 28.0000 UJ	U 28.0000 UJ	U 28.0000 UJ	U 28.0000 UJ	U 28.0000 UJ	U 28.0000 UJ	U 28.0000 UJ	U 28.0000 UJ
2524 SD000000000.002	9201-086-11	U 36.0000	U 36.0000	U 36.0000	U 36.0000	U 36.0000	U 36.0000	U 36.0000	U 36.0000
2525 SD000000000.002	9201-086-12	U 48.0000 UJ	U 48.0000 UJ	U 48.0000 UJ	U 48.0000 UJ	U 48.0000 UJ	U 48.0000 UJ	U 48.0000 UJ	U 48.0000 UJ
2525 SD000000000.002	9201-086-12R	U 48.0000 R	U 48.0000 R	U 48.0000 R	U 48.0000 R	U 48.0000 R	U 48.0000 R	U 48.0000 R	U 48.0000 R
2526 SD000000000.002	9201-086-13	U 42.0000 R	U 42.0000 R	U 42.0000 R	86.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R	U 42.0000 R
2526 SD000000000.002	9201-086-13R	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	73.0000 J4	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ
2527 SD000000000.002	9201-156-6	U 33.0000 R	U 33.0000 R	U 33.0000 R	96.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R
2527 SD000000000.002	9201-156-6RE	U 33.0000 UJ	U 33.0000 UJ	U 33.0000 UJ	91.0000 J4	U 33.0000 UJ	U 33.0000 UJ	U 33.0000 UJ	U 33.0000 UJ
2528 SD201000000.002	9201-169-3	U 36.0000 R	U 36.0000 R	U 36.0000 R	U 36.0000 R	U 36.0000 R	U 36.0000 R	U 36.0000 R	U 36.0000 R
2528 SD201000000.002	9201-169-3RE	U 36.0000 UJ	U 36.0000 UJ	U 36.0000 UJ	U 36.0000 UJ	U 36.0000 UJ	U 36.0000 UJ	U 36.0000 UJ	U 36.0000 UJ
2529 SD000000000.002	9201-169-5	U 40.0000 R	U 40.0000 R	U 40.0000 R	J 22.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R	U 40.0000 R
2529 SD000000000.002	9201-169-5RE	U 40.0000 UJ	U 40.0000 UJ	U 40.0000 UJ	J 27.0000 J4	U 40.0000 UJ	U 40.0000 UJ	U 40.0000 UJ	U 40.0000 UJ
2530 SD000000000.002	9201-169-7	U 48.0000	U 48.0000	U 48.0000	J 29.0000	U 48.0000	U 48.0000	U 48.0000	U 48.0000

STF Number	Lab Number	Xylenes (total) (ug/kg)		
2501 SD000000000.002	9201-169-1	U	12.0000	
2502 SD310000000.002	9201-220-1	U	42.0000	
2503 SD000000000.002	9201-220-3		320.0000	
2504 SD000000000.002	9201-086-1	U	42.0000	UJ
2504 SD000000000.002	9201-086-1RE	U	42.0000	R
2506 SD320000000.002	9201-110-2	U	38.0000	
2507 SD201000000.002	9201-110-5	U	71.0000	
2508 SD000000000.002	9201-110-7	U	43.0000	UJ
2508 SD000000000.002	9201-110-7RE	U	43.0000	R
2509 SD310000000.002	9201-095-1	U	13.0000	
2509 SD320000000.002	9201-110-9	U	40.0000	UJ
2509 SD320000000.002	9201-110-9RE	U	40.0000	R
2510 SD000000000.002	9201-110-10	U	29.0000	
2511 SD310000000.002	9201-095-6	U	14.0000	
2511 SD320000000.002	9201-095-7	U	31.0000	
2512 SD000000000.002	9201-095-10RE	U	19.0000	R
2512 SD000000000.002	9201-095-10	U	19.0000	UJ
2513 SD000000000.002	9201-086-2	U	14.0000	
2514 SD000000000.002	9201-086-3	U	16.0000	
2515 SD000000000.002	9201-086-4	U	15.0000	
2516 SD320000000.002	9201-220-5	J	13.0000	
2516 SD511000000.002	9201-220-6	J	12.0000	
2518 SD000000000.002	9201-086-5	U	29.0000	
2519 SD000000000.002	9201-086-6RE	U	31.0000	R
2519 SD000000000.002	9201-086-6	U	31.0000	UJ
2520 SD000000000.002	9201-086-7	U	30.0000	UJ
2520 SD000000000.002	9201-086-7RE	U	30.0000	R
2521 SD000000000.002	9201-086-8	U	32.0000	
2522 SD000000000.002	9201-086-9	U	27.0000	R
2522 SD000000000.002	9201-086-9RE	U	27.0000	UJ
2523 SD000000000.002	9201-086-10	U	28.0000	R
2523 SD000000000.002	9201-086-10R	U	28.0000	UJ
2524 SD000000000.002	9201-086-11	U	36.0000	
2525 SD000000000.002	9201-086-12	U	48.0000	UJ
2525 SD000000000.002	9201-086-12R	U	48.0000	R
2526 SD000000000.002	9201-086-13	U	42.0000	R
2526 SD000000000.002	9201-086-13R	U	42.0000	UJ
2527 SD000000000.002	9201-156-6	U	33.0000	R
2527 SD000000000.002	9201-156-6RE	U	33.0000	UJ
2528 SD201000000.002	9201-169-3	U	36.0000	R
2528 SD201000000.002	9201-169-3RE	U	36.0000	UJ
2529 SD000000000.002	9201-169-5	U	40.0000	R
2529 SD000000000.002	9201-169-5RE	U	40.0000	UJ
2530 SD000000000.002	9201-169-7	U	48.0000	

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/kg)	Validation
2501SD000000000.002	9201-169-1	Nonane, 3,7-dimethyl-	JN	18.00	
2502SD320000000.002	9201-220-1	UNKNOWN	JN	190.00	
		Octane, 2,2,6-trimethyl-	JN	1500.00	
		Decane, 3,4-dimethyl-	JN	270.00	
		Decane, 2,2,3-trimethyl-	JN	440.00	
		DODECANE	JN	1700.00	
		Heptane, 4-ethyl-2,2,6,6-tet	JN	1200.00	
		Decane, 2,2-dimethyl-	JN	340.00	
		Nonane, 3-methyl-5-propyl-	JN	1200.00	
		Undecane, 2,9-dimethyl-	JN	420.00	
		Pentane, 2,2,3,4-tetramethyl	JN	1300.00	
2503SD000000000.002	9201-220-3	Nonane, 3-methyl-	JN	190.00	
		Octane, 2,2,6-trimethyl-	JN	1300.00	
		Octane, 3,6-dimethyl-	JN	310.00	
		Hexane, 2,2,3-trimethyl-	JN	350.00	
		DECANE	JN	1400.00	
		Octane, 2,5,6-trimethyl-	JN	1100.00	
		Decane, 2,2,4-trimethyl-	JN	280.00	
		Nonane, 3-methyl-5-propyl-	JN	910.00	
		OCTANE, 2,5,6-TRIMETHYL-	JN	500.00	
		Decane, 2,2,8-trimethyl-	JN	1000.00	
2516SD320000000.002	9201-220-5	UNKNOWN	JN	46.00	
2522SD000000000.002	9201-086-9	Heptane, 2,2,4-trimethyl-	JN	34.00	
2522SD000000000.002	9201-086-9RE	Octane, 2,2,6-trimethyl-	JN	33.00	
2526SD000000000.002	9201-086-13	UNKNOWN	JN	290.00	
		Decane, 2,2,8-trimethyl-	JN	73.00	
		Heptane, 2,2,4-trimethyl-	JN	73.00	
		3-Hexanone, 2,2-dimethyl-	JN	94.00	
		Heptane, 2,2-dimethyl-	JN	83.00	
2526SD000000000.002	9201-086-13R	UNKNOWN	JN	210.00	
		Octane, 2,3,7-trimethyl-	JN	60.00	
2527SD000000000.002	9201-156-6	Carbon oxide sulfide (cos)	JN	230.00	
		3-Undecene, 6-methyl-, (E)-	JN	81.00	
		Octane, 2,2,6-trimethyl-	JN	280.00	
		Octane, 2,2,6-trimethyl-	JN	49.00	
		Dodecane	JN	1500.00	
		Decane, 2,2-dimethyl-	JN	150.00	
		Nonane, 3-methyl-5-propyl-	JN	280.00	
		Heptane, 2,2,3,4,6,6-hexamet	JN	210.00	
2527SD000000000.002	9201-156-6RE	Octane, 2,2,6-trimethyl-	JN	120.00	
		Heptane, 2,2,4,6,6-pentameth	JN	95.00	
		Nonane, 3-methyl-5-propyl-	JN	130.00	
		Hexane, 2,2,5,5-tetramethyl-	JN	71.00	
2528SD201000000.002	9201-169-3	Carbon oxide sulfide (cos)	JN	310.00	
		Heptane, 2,2,4-trimethyl-	JN	120.00	
		Undecane	JN	440.00	
		Hexane, 2,2,3,4,5,5-Hexameth	JN	67.00	
		Nonane, 3-methyl-5-propyl-	JN	140.00	
		Heptane, 2,2,4-trimethyl-	JN	110.00	
2528SD201000000.002	9201-169-3RE	Heptane, 2,2,4-trimethyl-	JN	81.00	
		Undecane	JN	250.00	
		Decane, 2,2,9-trimethyl-	JN	63.00	
		Octane, 2,4,6-trimethyl-	JN	90.00	

DATA VALIDATION
DATE RECEIVED _____
VALIDATED BY _____ DATE _____
KEYED BY _____ DATE _____
CHECKED BY QRM DATE 3/27/92

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/kg)	Validation
2529SD000000000.002	9201-169-5	Carbon oxide sulfide (cos)	JN	580.00	
		Cyclopentanol, 3-methyl-	JN	310.00	
		Undecane, 2,2-dimethyl-	JN	73.00	
		Undecane	JN	590.00	
		Decane, 2,2,4-trimethyl-	JN	170.00	
		Heptane, 2,2,4,6,6-pentameth	JN	64.00	
		Nonane, 3-methyl-5-propyl-	JN	290.00	
		Hexane, 2,2,5-trimethyl-	JN	200.00	
2529SD000000000.002	9201-169-5RE	Carbon oxide sulfide (COS)	JN	160.00	
		Hexane, 2,2,4-trimethyl-	JN	150.00	
		Undecane	JN	400.00	
		Heptane, 4-ethyl-2,2,6,6-tet	JN	110.00	
		Nonane, 3,7-dimethyl	JN	170.00	
2530SD000000000.002	9201-169-7	Octane, 2,2,6-trimethyl-	JN	260.00	
		Decane, 2,2,9-trimethyl-	JN	90.00	
		Undecane	JN	240.00	
		Heptane, 2,2-dimethyl-	JN	190.00	
		Nonane, 3,7-dimethyl-	JN	240.00	

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

STORM EVENTS
SURFACE WATER ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for VOLATILES for file STFSTV.DBF 05/13/92 23:00:00 4,381 bytes

STF Number	Lab Number	Chloromethane (ug/L)	Bromomethane (ug/L)	Vinyl Chloride (ug/L)	Chloroethane (ug/L)	Methylene Chloride (ug/L)	Acetone (ug/L)	Carbon Disulfide (ug/L)	1,1-Dichloroethene (ug/L)
2515 SU2810000000.027	9201-227-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

DATA VALIDATION
DATE RECEIVED
VALIDATED BY DATE
KEYED BY DATE
CHECKED BY DATE 4/30/92

Analytical data for VOLATILES for file STFSTV.DBF 05/13/92 23:00:00 4,381 bytes

STF Number	Lab Number	1,1-Dichloroethane (ug/L)	1,2-Dichloroethene (total) (ug/L)	Chloroform (ug/L)	1,2-Dichloroethane (ug/L)	2-Butanone (ug/L)	1,1,1-Trichloro-ethane (ug/L)	Carbon Tetrachloride (ug/L)	Bromodichloro-methane (ug/L)
2515 SU2610000000.027	9201-227-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	1,2-Dichloro-propane (ug/L)	cis-1,3-Dichloro-propene (ug/L)	Trichloroethene (ug/L)	Dibromochloro-methane (ug/L)	1,1,2-Trichloro-ethane (ug/L)	Benzene (ug/L)	trans-1,3-Dichloropropene (ug/L)	Bromoform (ug/L)
2515 SU201000000.027	9201-227-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	4-Methyl-2-pentanone (ug/L)	2-Hexanone (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	Chlorobenzene (ug/L)	Ethyl Benzene (ug/L)	Styrene (ug/L)
2515 SU201000000.027	9201-227-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	Xylenes (total) (ug/L)	
2515 SU201000000.027	9201-227-1	U	10.0000

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/L)	Validation
2515SU201000000.027	9201-227-1	HEXANE	JNB	6.00	R

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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

BIWEEKLY/MONTHLY
SURFACE WATER ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for VOLATILES for file STFBWV.DBF 05/13/92 23:00:00 6,286 bytes

STF Number	Lab Number	Chloromethane (ug/L)	Bromomethane (ug/L)	Vinyl Chloride (ug/L)	Chloroethane (ug/L)	Methylene Chloride (ug/L)	Acetone (ug/L)	Carbon Disulfide (ug/L)	1,1-Dichloroethene (ug/L)
2515 SU080000000.051	104268-001	U 10.0000	U 10.0000	U 1.0000	U 10.0000	U 2.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU080000000.068	9111-296-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU080000000.073	9202-011-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU201000000.074	9202-164-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

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Analytical data for VOLATILES for file STFBWV.DBF 05/13/92 23:00:00 6,286 bytes

STF Number	Lab Number	1,1-Dichloroethane (ug/L)	1,2-Dichloroethene (total) (ug/L)	Chloroform (ug/L)	1,2-Dichloroethane (ug/L)	2-Butanone (ug/L)	1,1,1-Trichloroethane (ug/L)	Carbon Tetrachloride (ug/L)	Bromodichloromethane (ug/L)
2515 SU000000000.051	104268-001	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU000000000.068	9111-296-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU000000000.073	9202-011-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU201000000.074	9202-164-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	1,2-Dichloro-propane (ug/L)	cis-1,3-Dichloro-propene (ug/L)	Trichloroethene (ug/L)	Dibromochloro-methane (ug/L)	1,1,2-Trichloro-ethane (ug/L)	Benzene (ug/L)	trans-1,3-Dichloropropene (ug/L)	Bromoform (ug/L)
2515 SU0000000000.051	104268-001	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU0000000000.068	9111-296-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU0000000000.073	9202-011-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU2010000000.074	9202-164-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	4-Methyl-2-pentanone (ug/L)	2-Hexanone (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	Chlorobenzene (ug/L)	Ethyl Benzene (ug/L)	Styrene (ug/L)
2515 SU0000000000.051	104268-001	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU0000000000.068	9111-296-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU0000000000.073	9202-011-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU2010000000.074	9202-164-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	Xylenes (total) (ug/L)	
2515 SU0000000000.051	184268-001	U	10.0000
2515 SU0000000000.068	9111-296-1	U	10.0000
2515 SU0000000000.073	9202-011-1	U	10.0000
2515 SU2010000000.074	9202-164-1	U	10.0000

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/L)	Validation
2515SU000000000.068	9111-296-1	Hexane	JBN	7.00	R
2515SU000000000.073	9202-011-1	Hexane	JNB	9.00	R
2515SU201000000.074	9202-164-1	Hexane	JBN	10.00	R

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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

DRY SEASON (AUGUST 1991) AND WET SEASON (JANUARY 1992)
BACKGROUND SURFACE WATER ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for VOLATILES for file STFSUVB.DBF 03/27/92 23:00:00 10,096 bytes

STF Number	Lab Number	Chloromethane (ug/L)	Bromomethane (ug/L)	Vinyl Chloride (ug/L)	Chloroethane (ug/L)	Methylene Chloride (ug/L)	Acetone (ug/L)	Carbon Disulfide (ug/L)	1,1-Dichloroethene (ug/L)
2500 SU0000000000.001	9108-107-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	J 7.0000 UJ	U 10.0000	U 10.0000	U 10.0000
2500 SU0000000000.002	9201-156-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2540 SU0000000000.001	9108-107-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	J 8.0000 UJ	U 10.0000	U 10.0000	U 10.0000
2540 SU0000000000.002	9201-176-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2541 SU0000000000.001	9108-107-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	J 6.0000 UJ	J 9.0000 J4	U 10.0000	U 10.0000
2541 SU0000000000.002	9201-176-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2542 SU0000000000.001	9108-190-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	JB 8.0000 UJ	U 10.0000	U 10.0000	U 10.0000
2542 SU0000000000.002	9201-176-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2543 SU0000000000.001	9108-190-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	JB 8.0000 UJ	U 10.0000	U 10.0000	U 10.0000
2543 SU0000000000.002	9201-176-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

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Analytical data for VOLATILES for file STFSUVB.DBF 03/27/92 23:00:00 10,096 bytes

STF Number	Lab Number	1,1-Dichloroethane (ug/L)	1,2-Dichloroethene (total) (ug/L)	Chloroform (ug/L)	1,2-Dichloroethane (ug/L)	2-Butanone (ug/L)	1,1,1-Trichloroethane (ug/L)	Carbon Tetrachloride (ug/L)	Bromodichloromethane (ug/L)
2500 SU0000000000.001	9108-107-4	U 10.0000	U 20.0000	J 7.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2500 SU0000000000.002	9201-156-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2540 SU0000000000.001	9108-107-1	U 10.0000	U 20.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2540 SU0000000000.002	9201-176-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2541 SU0000000000.001	9108-107-2	U 10.0000	U 20.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2541 SU0000000000.002	9201-176-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2542 SU0000000000.001	9108-190-4	U 10.0000	U 20.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2542 SU0000000000.002	9201-176-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2543 SU0000000000.001	9108-190-5	U 10.0000	U 20.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2543 SU0000000000.002	9201-176-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	1,2-Dichloropropane (ug/L)	cis-1,3-Dichloropropene (ug/L)	Trichloroethene (ug/L)	Dibromochloromethane (ug/L)	1,1,2-Trichloroethane (ug/L)	Benzene (ug/L)	trans-1,3-Dichloropropene (ug/L)	Bromoform (ug/L)
2500 SU000000000.001	9108-107-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2500 SU000000000.002	9201-156-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2540 SU000000000.001	9108-107-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2540 SU000000000.002	9201-176-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2541 SU000000000.001	9108-107-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2541 SU000000000.002	9201-176-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2542 SU000000000.001	9108-190-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2542 SU000000000.002	9201-176-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2543 SU000000000.001	9108-190-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2543 SU000000000.002	9201-176-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	4-Methyl-2-pentanone (ug/L)	2-Hexanone (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	Chlorobenzene (ug/L)	Ethyl Benzene (ug/L)	Styrene (ug/L)
2538 SU0000000000.001	9108-187-4	U 10.0000	U 10.0000	U 10.0000	J 6.0000 UJ	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2538 SU0000000000.002	9201-156-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2540 SU0000000000.001	9108-187-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2540 SU0000000000.002	9201-176-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2541 SU0000000000.001	9108-187-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2541 SU0000000000.002	9201-176-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2542 SU0000000000.001	9108-190-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2542 SU0000000000.002	9201-176-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2543 SU0000000000.001	9108-190-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2543 SU0000000000.002	9201-176-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	Xylenes (total) (ug/L)	
2538 SU0000000000.001	9108-107-4	U	20.0000
2538 SU0000000000.002	9201-156-1	U	10.0000
2540 SU0000000000.001	9108-107-1	U	20.0000
2540 SU0000000000.002	9201-176-1	U	10.0000
2541 SU0000000000.001	9108-107-2	U	20.0000
2541 SU0000000000.002	9201-176-2	U	10.0000
2542 SU0000000000.001	9108-190-4	U	20.0000
2542 SU0000000000.002	9201-176-3	U	10.0000
2543 SU0000000000.001	9108-190-5	U	20.0000
2543 SU0000000000.002	9201-176-4	U	10.0000

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/L)	Validation
2500SU000000000.002	9201-156-1	Hexane	JNB	7.00	R
2540SU000000000.002	9201-176-1	Hexane	JNB	9.00	R
2541SU000000000.002	9201-176-2	Hexane	JNB	9.00	R
2542SU000000000.001	9108-190-4	HEXANE	JN	6.00	
2542SU000000000.002	9201-176-3	Hexane	JNB	8.00	R
2543SU000000000.001	9108-190-5	HEXANE	JN	6.00	
2543SU000000000.002	9201-176-4	Hexane	JNB	8.00	R

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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

QA/QC DUPLICATE
SURFACE WATER ANALYTICAL RESULTS

STF Number	Lab Number	Chloromethane (ug/L)	Bromomethane (ug/L)	Vinyl Chloride (ug/L)	Chloroethane (ug/L)	Methylene Chloride (ug/L)	Acetone (ug/L)	Carbon Disulfide (ug/L)	1,1-Dichloroethene (ug/L)
3188 SU202000000.074	9202-164-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3189 SU202000000.027	9201-227-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3196 SU202000000.002	9201-169-10	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3197 SU202000000.002	9201-110-12	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3198 SU202000000.001	9108-172-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	JB 7.0000 UJ	B 18.0000 UJ	U 10.0000	U 10.0000
3199 SU512000000.001	9108-153-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	B 12.0000 UJ	U 10.0000	U 10.0000	U 10.0000
3200 SU512000000.000	104330-004	U 10.0000	U 10.0000	U 1.0000	U 10.0000	U 2.0000 UJ	U 10.0000	U 10.0000	U 10.0000

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SOUTH TACOMA FIELD

Analytical data for VOLATILES for file STFSUVD.DBF 05/13/92 23:00:00 8,191 bytes

STF Number	Lab Number	1,1-Dichloroethane (ug/L)	1,2-Dichloroethene (total) (ug/L)	Chloroform (ug/L)	1,2-Dichloroethane (ug/L)	2-Butanone (ug/L)	1,1,1-Trichloroethane (ug/L)	Carbon Tetrachloride (ug/L)	Bromodichloromethane (ug/L)
3188 SU202000000.074	9202-164-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3189 SU202000000.027	9201-227-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3196 SU202000000.002	9201-169-10	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3197 SU202000000.002	9201-110-12	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3198 SU202000000.001	9108-172-2	U 10.0000	U 20.0000	J 2.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3199 SU512000000.001	9108-153-5	U 10.0000	U 20.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3200 SU512000000.000	104338-004	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	1,2-Dichloropropane (ug/L)	cis-1,3-Dichloropropene (ug/L)	Trichloroethene (ug/L)	Dibromochloromethane (ug/L)	1,1,2-Trichloroethane (ug/L)	Benzene (ug/L)	trans-1,3-Dichloropropene (ug/L)	Bromoform (ug/L)
3188 SU202000000.074	9202-164-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3189 SU202000000.027	9201-227-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3196 SU202000000.002	9201-169-10	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3197 SU202000000.002	9201-110-12	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3198 SU202000000.001	9108-172-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3199 SU512000000.001	9108-153-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3200 SU512000000.000	104330-004	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	4-Methyl-2-pentanone (ug/L)	2-Hexanone (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	Chlorobenzene (ug/L)	Ethyl Benzene (ug/L)	Styrene (ug/L)
3188 SU202000000.074	9202-164-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3189 SU202000000.027	9201-227-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3196 SU202000000.002	9201-169-10	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3197 SU202000000.002	9201-110-12	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3198 SU202000000.001	9108-172-2	U 10.0000	U 10.0000 UJ	U 10.0000	J 2.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3199 SU512000000.001	9108-153-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3200 SU512000000.000	104330-004	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	Xylenes (total) (µg/L)	
3188 SU202000000.074	9202-164-2	U	10.0000
3189 SU202000000.027	9201-227-2	U	10.0000
3196 SU202000000.002	9201-169-10	U	10.0000
3197 SU202000000.002	9201-110-12	U	10.0000
3198 SU202000000.001	9108-172-2	U	20.0000
3199 SU512000000.001	9108-153-5	U	20.0000
3200 SU512000000.000	104330-004	U	10.0000

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/L)	Validation
3188SU202000000,074	9202-164-2	Hexane	JBN	11.00	R
3189SU202000000,027	9201-227-2	HEXANE	JNB	8.00	R
3196SU202000000,002	9201-169-10	Hexane	JNB	8.00	R
		Pentadecane	JN	17.00	
3197SU202000000,002	9201-110-12	Hexane	JNB	8.00	R
3199SU512000000,001	9108-153-5	HEXANE	JN	7.00	

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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

QA/QC DUPLICATE
SEDIMENT ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for VOLATILES for file STFSDVD.DBF 03/27/92 23:00:00 7,556 bytes

STF Number	Lab Number	Chloromethane (ug/kg)	Bromomethane (ug/kg)	Vinyl Chloride (ug/kg)	Chloroethane (ug/kg)	Methylene Chloride (ug/kg)	Acetone (ug/kg)	Carbon Disulfide (ug/kg)	1,1-Dichloroethene (ug/kg)
3196 SD202000000.002	9201-169-9	36.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R	JB 21.0000 R	B 430.0000 R	U 33.0000 R	U 33.0000 R
3196 SD202000000.002	9201-169-9RE	U 33.0000	U 33.0000	U 33.0000	U 33.0000	JB 18.0000 UJ	B 120.0000 UJ	U 33.0000	U 33.0000
3197 SD202000000.002	9201-110-11	U 33.0000	U 33.0000	U 33.0000	U 33.0000	JB 21.0000 UJ	U 33.0000 UJ	U 33.0000	U 33.0000
3198 SD202000000.001	9108-172-1	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R	B 240.0000 R	B 750.0000 R	U 30.0000 R	U 30.0000 R
3198 SD202000000.001	9108-172-1RE	U 30.0000	U 30.0000	U 30.0000	U 30.0000	B 140.0000 UJ	530.0000 J4	U 30.0000	U 30.0000
3199 SD512000000.001	9108-153-4	U 15.0000	U 15.0000	U 15.0000	U 15.0000	B 42.0000 UJ	B 38.0000 UJ	U 15.0000	U 15.0000

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Analytical data for VOLATILES for file STFSDVD.DBF 03/27/92 23:00:00 7,556 bytes

STF Number	Lab Number	1,1-Dichloroethane (ug/kg)	1,2-Dichloroethene (total) (ug/kg)	Chloroform (ug/kg)	1,2-Dichloroethane (ug/kg)	2-Butanone (ug/kg)	1,1,1-Trichloroethane (ug/kg)	Carbon Tetrachloride (ug/kg)	Bromodichloromethane (ug/kg)
3196 SD202000000.002	9201-169-9	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R
3196 SD202000000.002	9201-169-9RE	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000
3197 SD202000000.002	9201-110-11	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000 UJ	U 33.0000	U 33.0000	U 33.0000
3198 SD202000000.001	9108-172-1	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R
3198 SD202000000.001	9108-172-1RI	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000
3199 SD512000000.001	9108-153-4	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000

STF Number	Lab Number	1,2-Dichloropropane (ug/kg)	cis-1,3-Dichloropropene (ug/kg)	Trichloroethene (ug/kg)	Dibromochloromethane (ug/kg)	1,1,2-Trichloroethane (ug/kg)	Benzene (ug/kg)	trans-1,3-Dichloropropene (ug/kg)	Bromoform (ug/kg)
3196 SD202000000.002	9201-169-9	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R
3196 SD202000000.002	9201-169-9RE	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000
3197 SD202000000.002	9201-110-11	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000
3198 SD202000000.001	9108-172-1	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R
3198 SD202000000.001	9108-172-1RE	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000
3199 SD512000000.001	9108-153-4	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000

STF Number	Lab Number	4-Methyl-2-pentanone (ug/kg)	2-Hexanone (ug/kg)	Tetrachloroethene (ug/kg)	Toluene (ug/kg)	1,1,2,2-Tetrachloroethane (ug/kg)	Chlorobenzene (ug/kg)	Ethyl Benzene (ug/kg)	Styrene (ug/kg)
3196 SD202000000.002	9201-169-9	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R	U 33.0000 R
3196 SD202000000.002	9201-169-9RE	U 33.0000 UJ	U 33.0000 UJ	U 33.0000 UJ	U 33.0000 UJ	U 33.0000 UJ	U 33.0000 UJ	U 33.0000 UJ	U 33.0000 UJ
3197 SD202000000.002	9201-110-11	U 33.0000	U 33.0000 UJ	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000
3198 SD202000000.001	9108-172-1	J 10.0000 R	U 30.0000 R	U 30.0000 R	160.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R	U 30.0000 R
3198 SD202000000.001	9108-172-1RI	U 30.0000	U 30.0000	U 30.0000	92.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000
3199 SD512000000.001	9108-153-4	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000

STF Number	Lab Number	Xylenes (total) (ug/kg)		
3196	SD202000000.002	9201-169-9	U	33.0000 R
3196	SD202000000.002	9201-169-9RE	U	33.0000 UJ
3197	SD202000000.002	9201-110-11	U	33.0000
3198	SD202000000.001	9108-172-1	U	30.0000 R
3198	SD202000000.001	9108-172-1RI	U	30.0000
3199	SD512000000.001	9108-153-4	U	15.0000

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/kg)	Validation
3196SD202000000.002	9201-169-9	Carbon oxide sulfide (cos)	JN	700.00	
		Acetic acid, methyl ester	JN	39.00	
		Decane, 2,2,7-trimethyl-	JN	220.00	
		Decane, 2,2,3-trimethyl-	JN	63.00	
		Decane	JN	1100.00	
		Heptane, 2,2,4,6,6-pentameth	JN	100.00	
		Nonane, 3-methyl-5-propyl-	JN	200.00	
		Pentane, 2,2,3,4-tetramethyl	JN	270.00	
3196SD202000000.002	9201-169-9RE	Carbon oxide sulfide (COS)	JN	86.00	
		Heptane, 2,2,4,6,6-pentameth	JN	70.00	
		Decane	JN	260.00	
		Decane, 2,2,9-trimethyl-	JN	39.00	
		Decane, 3-methyl-	JN	70.00	
		Hexane, 2,2,5,5-tetramethyl-	JN	70.00	
3198SD202000000.001	9108-172-1	Octane, 2,2,6-trimethyl-	JN	52.00	
		Nonane, 3-methyl-5-propyl-	JN	45.00	
3198SD202000000.001	9108-172-1R	Decane, 2,2,6-trimethyl-	JN	45.00	

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SURFACE WATER AND SEDIMENT INVESTIGATION

QA/QC BLANK ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for VOLATILES for file STFWWWV.DBF 05/13/92 23:00:00 13,906 bytes

STF Number	Lab Number	Chloromethane (ug/L)	Bromomethane (ug/L)	Vinyl Chloride (ug/L)	Chloroethane (ug/L)	Methylene Chloride (ug/L)	Acetone (ug/L)	Carbon Disulfide (ug/L)	1,1-Dichloroethene (ug/L)
2509 WW0000001000.002	9201-095-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 WW0000001000.000	104378-002	U 10.0000	U 10.0000	U 1.0000	U 10.0000	B 3.0000	U 10.0000	U 10.0000	U 10.0000
2524 WW0000001000.001	9108-138-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	B 11.0000	U 10.0000	U 10.0000	U 10.0000
2529 WW0000001000.001	9108-172-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	JB 4.0000	B 15.0000 J4	U 10.0000	U 10.0000
2529 WW0000001000.002	9201-169-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3600 WW0000002000.000	104330-006	U 10.0000	U 10.0000	U 1.0000	U 10.0000	B 10.0000	U 10.0000	U 10.0000	U 10.0000
3604 WW0000002000.001	9108-088-15	U 10.0000	U 10.0000	U 10.0000	U 10.0000	J 2.0000	16.0000	U 10.0000	U 10.0000
3605 WW0000001000.001	9108-190-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	JB 8.0000	19.0000	U 10.0000	U 10.0000
3606 WW0000002000.002	9201-176-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3607 WW0000002000.002	9201-110-13	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3650 WW0000003000.000	104378-003	U 10.0000	U 10.0000	U 1.0000	U 10.0000	B 7.0000	17.0000	U 10.0000	U 10.0000
3651 WW0000003000.001	9108-153-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	JB 9.0000	J 5.0000	U 10.0000	U 10.0000
3652 WW0000003000.001	9108-107-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	10.0000	U 10.0000	U 10.0000	U 10.0000
3653 WW0000003000.001	9108-205-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	J 7.0000	J 5.0000 J4	U 10.0000	U 10.0000
3654 WW0000003000.002	9201-086-14	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3655 WW0000003000.002	9201-156-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

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Analytical data for VOLATILES for file STFWWWV.DBF 05/13/92 23:00:00 13,906 bytes

STF Number	Lab Number	1,1-Dichloroethane (ug/L)	1,2-Dichloroethene (total) (ug/L)	Chloroform (ug/L)	1,2-Dichloroethane (ug/L)	2-Butanone (ug/L)	1,1,1-Trichloroethane (ug/L)	Carbon Tetrachloride (ug/L)	Bromodichloromethane (ug/L)
2509 WW0000001000.002	9201-095-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000 R	U 10.0000	U 10.0000	U 10.0000
2516 WW0000001000.000	104378-002	U 10.0000	U 10.0000	U 10.0000	U 10.0000	10.0000	U 10.0000	U 10.0000	U 10.0000
2524 WW0000001000.001	9108-138-11	U 10.0000	U 20.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 WW0000001000.001	9108-172-7	U 10.0000	U 20.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 WW0000001000.002	9201-169-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3600 WW0000002000.000	104330-006	U 10.0000	U 10.0000	11.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3604 WW0000002000.001	9108-088-15	U 10.0000	U 20.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3605 WW0000001000.001	9108-190-3	U 10.0000	U 20.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3606 WW0000002000.002	9201-176-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3607 WW0000002000.002	9201-110-13	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3650 WW0000003000.000	104378-003	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3651 WW0000003000.001	9108-153-8	U 10.0000	U 20.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3652 WW0000003000.001	9108-107-3	U 10.0000	U 20.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3653 WW0000003000.001	9108-205-3	U 10.0000	U 20.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3654 WW0000003000.002	9201-086-14	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000 R	U 10.0000	U 10.0000	U 10.0000
3655 WW0000003000.002	9201-156-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	1,2-Dichloropropane (ug/L)	cis-1,3-Dichloropropene (ug/L)	Trichloroethene (ug/L)	Dibromochloromethane (ug/L)	1,1,2-Trichloroethane (ug/L)	Benzene (ug/L)	trans-1,3-Dichloropropene (ug/L)	Bromoform (ug/L)
2509 WW0000001000.002	9201-095-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 WW0000001000.000	104378-002	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2524 WW0000001000.001	9108-138-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 WW0000001000.001	9108-172-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 WW0000001000.002	9201-169-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3600 WW0000002000.000	104330-006	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3604 WW0000002000.001	9108-088-15	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3605 WW0000001000.001	9108-190-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3606 WW0000002000.002	9201-176-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3607 WW0000002000.002	9201-110-13	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3650 WW0000003000.000	104378-003	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3651 WW0000003000.001	9108-153-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3652 WW0000003000.001	9108-107-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3653 WW0000003000.001	9108-205-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	J 0.4000	U 10.0000	U 10.0000
3654 WW0000003000.002	9201-086-14	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3655 WW0000003000.002	9201-156-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	4-Methyl-2-pentanone (ug/L)	2-Hexanone (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	Chlorobenzene (ug/L)	Ethyl Benzene (ug/L)	Styrene (ug/L)
2509 WW0000001000.002	9201-095-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 WW0000001000.000	104378-002	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2524 WW0000001000.001	9108-138-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 WW0000001000.001	9108-172-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 WW0000001000.002	9201-169-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3600 WW0000002000.000	104330-006	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3604 WW0000002000.001	9108-088-15	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3605 WW0000001000.001	9108-198-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3606 WW0000002000.002	9201-176-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3607 WW0000002000.002	9201-110-13	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3650 WW0000003000.000	104378-003	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3651 WW0000003000.001	9108-153-8	U 10.0000	U 10.0000	U 10.0000	J 3.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3652 WW0000003000.001	9108-107-3	U 10.0000	U 10.0000	U 10.0000	J 3.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3653 WW0000003000.001	9108-205-3	U 10.0000	J 8.0000	U 10.0000	J 5.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3654 WW0000003000.002	9201-086-14	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3655 WW0000003000.002	9201-156-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF	Number	Lab Number	Xylenes (total) (ug/L)	
2509	WW0000001000.002	9201-095-4	U	10.0000
2516	WW0000001000.000	104378-002	U	10.0000
2524	WW0000001000.001	9108-138-11	U	20.0000
2529	WW0000001000.001	9108-172-7	U	20.0000
2529	WW0000001000.002	9201-169-11	U	10.0000
3600	WW0000002000.000	104338-006	U	10.0000
3604	WW0000002000.001	9108-088-15	U	20.0000
3605	WW0000001000.001	9108-190-3	U	20.0000
3606	WW0000002000.002	9201-176-5	U	10.0000
3607	WW0000002000.002	9201-110-13	U	10.0000
3650	WW0000003000.000	104378-003	U	10.0000
3651	WW0000003000.001	9108-153-8	U	20.0000
3652	WW0000003000.001	9108-107-3	U	20.0000
3653	WW0000003000.001	9108-205-3	U	20.0000
3654	WW0000003000.002	9201-086-14	U	10.0000
3655	WW0000003000.002	9201-156-8	U	10.0000

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/L)	Validation
2509WW000001000.002	9201-095-4	Hexane	JNB	8.00	R
2524WW000001000.001	9108-138-11	HEXANE	JN	7.00	
2529WW000001000.001	9108-172-7	ETHANE, 1,1,2-TRICHLORO-1,2,	JN	6.00	
2529WW000001000.002	9201-169-11	Hexane	JNB	8.00	R
3604WW000002000.001	9108-088-15	UNKNOWN	JNB	5.00	
3605WW000001000.001	9108-190-3	HEXANE	JN	6.00	
3606WW000002000.002	9201-176-5	Hexane	JNB	8.00	R
3607WW000002000.002	9201-110-13	Hexane	JNB	8.00	R
3652WW000003000.001	9108-107-3	HEXANE	JN	5.00	
3653WW000003000.001	9108-205-3	ETHANE, 1,1,2-TRICHLORO-1,2,	JN	12.00	
3654WW000003000.002	9201-086-14	Hexane	JNB	8.00	R
3655WW000003000.002	9201-156-8	Hexane	JNB	10.00	R

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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

TRANSITIONAL SEASON (APRIL 1991)
SURFACE WATER ANALYTICAL RESULTS

STF Number	Lab Number	Phenol (ug/L)	bis(2-Chloro-ethyl) ether (ug/L)	2-Chlorophenol (ug/L)	1,3-Dichloro-benzene (ug/L)	1,4-Dichloro-benzene (ug/L)	1,2-Dichloro-benzene (ug/L)	2-Methylphenol (ug/L)	2,2'-oxybis (1-Chloropropane) (ug/L)
2506 SU310000000.000	9104-226-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506 SU320000000.000	9104-225-2	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ
2509 SU310000000.000	9104-207-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU320000000.000	9104-204-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU320000000.000	9104-205-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU511000000.000	9104-206-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU310000000.000	9104-223-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU320000000.000	9104-243-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

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STF	Number	Lab Number	4-Methylphenol (ug/L)	N-Nitroso-di-n-dipropylamine (ug/L)	Hexachloroethane (ug/L)	Nitrobenzene (ug/L)	Isophorone (ug/L)	2-Nitrophenol (ug/L)	2,4-Dimethylphenol (ug/L)	bis(2-Chloro-ethoxy) methane (ug/L)
2506	SU310000000.000	9104-226-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506	SU320000000.000	9104-225-2	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ
2509	SU310000000.000	9104-207-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509	SU320000000.000	9104-204-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511	SU320000000.000	9104-205-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511	SU511000000.000	9104-206-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516	SU310000000.000	9104-223-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516	SU320000000.000	9104-243-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	2,4-Dichlorophenol (ug/L)	1,2,4-Trichloro-benzene (ug/L)	Naphthalene (ug/L)	4-Chloroaniline (ug/L)	Hexachloro-butadiene (ug/L)	4-Chloro-3-methylphenol (ug/L)	2-Methyl-naphthalene (ug/L)	Hexachlorocyclo-pentadiene (ug/L)
2506 SU310000000.000	9104-226-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506 SU320000000.000	9104-225-2	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ
2509 SU310000000.000	9104-207-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU320000000.000	9104-204-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU320000000.000	9104-205-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU511000000.000	9104-206-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU310000000.000	9104-223-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU320000000.000	9104-243-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	2,4,6-Trichlorophenol (ug/L)	2,4,5-Trichlorophenol (ug/L)	2-Chloronaphthalene (ug/L)	2-Nitroaniline (ug/L)	Dimethylphthalate (ug/L)	Acenaphthylene (ug/L)	2,6-Dinitrotoluene (ug/L)	3-Nitroaniline (ug/L)
2506 SU310000000.000	9104-226-1	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2506 SU320000000.000	9104-225-2	U 10.0000 UJ	U 25.0000 UJ	U 10.0000 UJ	U 25.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 25.0000 UJ
2509 SU310000000.000	9104-207-1	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2509 SU320000000.000	9104-204-1	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2511 SU320000000.000	9104-205-1	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2511 SU511000000.000	9104-206-1	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2516 SU310000000.000	9104-223-1	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2516 SU320000000.000	9104-243-1	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000

STF	Number	Lab Number	Acenaphthene (ug/L)	2,4-Dinitrophenol (ug/L)	4-Nitrophenol (ug/L)	Dibenzofuran (ug/L)	2,4-Dinitrotoluene (ug/L)	Diethylphthalate (ug/L)	4-Chlorophenyl-phenylether (ug/L)	Fluorene (ug/L)
2506	SU310000000.000	9104-226-1	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506	SU320000000.000	9104-225-2	U 10.0000 UJ	U 25.0000 UJ	U 25.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ
2509	SU310000000.000	9104-207-1	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509	SU320000000.000	9104-204-1	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511	SU320000000.000	9104-205-1	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511	SU511000000.000	9104-206-1	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516	SU310000000.000	9104-223-1	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516	SU320000000.000	9104-243-1	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	4-Nitroaniline (ug/L)	4,6-Dinitro-2-methylphenol (ug/L)	N-nitrosodiphenylamine (ug/L)	4-Bromophenylphenylether (ug/L)	Hexachlorobenzene (ug/L)	Pentachlorophenol (ug/L)	Phenanthrene (ug/L)	Anthracene (ug/L)
2506 SU310000000.000	9104-226-1	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2506 SU320000000.000	9104-225-2	U 25.0000 UJ	U 25.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 25.0000 UJ	U 10.0000 UJ	U 10.0000 UJ
2509 SU310000000.000	9104-207-1	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2509 SU320000000.000	9104-204-1	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2511 SU320000000.000	9104-205-1	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2511 SU511000000.000	9104-206-1	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2516 SU310000000.000	9104-223-1	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2516 SU320000000.000	9104-243-1	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000

STF Number	Lab Number	Carbazole (ug/L)	Di-n-butyl-phthalate (ug/L)	Fluoranthene (ug/L)	Pyrene (ug/L)	Butylbenzyl-phthalate (ug/L)	3,3'-Dichloro-benzidine (ug/L)	Benzo(a)anthracene (ug/L)	Chrysene (ug/L)
2506 SU310000000.000	9104-226-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506 SU320000000.000	9104-225-2	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ
2509 SU310000000.000	9104-207-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU320000000.000	9104-204-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU320000000.000	9104-205-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU511000000.000	9104-206-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU310000000.000	9104-223-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU320000000.000	9104-243-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	bis(2-Ethylhexyl) phthalate (ug/L)	Di-n-octyl-phthalate (ug/L)	Benzo(b)-fluoranthene (ug/L)	Benzo(k)-fluoranthene (ug/L)	Benzo(a)pyrene (ug/L)	Indeno(1,2,3-cd)-pyrene (ug/L)	Dibenzo(a,h)-anthracene (ug/L)	Benzo(g,h,i)-perylene (ug/L)
2506 SU310000000.000	9104-226-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506 SU320000000.000	9104-225-2	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ
2509 SU310000000.000	9104-207-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU320000000.000	9104-204-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU320000000.000	9104-205-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU511000000.000	9104-206-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU310000000.000	9104-223-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU320000000.000	9104-243-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/L)	Validation
2506SU310000000.000	9104-226-1	3-PENTEN-2-ONE, 4-METHYL-	JN	43.00	R
		2-PROPANONE	JN	8.00	R
		UNKNOWN HYDROCARBON	JN	11.00	
		UNKNOWN HYDROCARBON	JN	11.00	
		DOCOSANE	JN	4.00	
		EICOSANE, 7-HEXYL-	JN	4.00	
		EICOSANE, 10-METHYL	JN	4.00	
		TRITETRACONTANE	JN	4.00	
		NONACOSANE	JN	4.00	
2506SU320000000.000	9104-225-2	UNKNOWN HYDROCARBON	JN	6.00	
		1-PROPENE 3,3,3-TRICHLORO-	JN	8.00	
		FURAN, TETRAHYDRO-2-1 METHOXYMETHY-	JN	6.00	
2509SU310000000.000	9104-207-1	1-PROPENE, 1,2,3-TRICHLORO-	JN	8.00	
		FURAN, TETRAHYDRO-2-(METHOXYME	JN	5.00	
2509SU320000000.000	9104-204-1	1-PROPENE, 3,3,3-TRICHLORO	JN	5.00	
		3-BROMO PENTANE	JN	5.00	
		BENZENE, 1-BROMO-3-CHLORO-	JN	4.00	
		CYCLOBUTANE, ETHYL	JN	13.00	
		PENTANOIC ACID, 4-OXO-	JN	11.00	
		EICOSANE	JN	6.00	
		DOCOSANE	JN	4.00	
2511SU320000000.000	9104-205-1	CYCLOPROPANE, 1,1,2,2-TETRA	JN	48.00	
		UNKNOWN	JN	7.00	
		FURAN, 2-BUTYLTETRAHYDRO-	JN	5.00	
2511SU511000000.000	9104-206-1	1-PROPENE, 1,2,3-TRICHLORO	JN	10.00	
		FURAN, TETRAHYDRO-2-(METHYL	JN	4.00	
		FURAN, TETRAHYDRO-2-(METHYOXY	JN	8.00	
2516SU000000000.000	9104-243-1	2-PENTANONE, 4-HYDROXY-4-METHYL-	JN	5.00	
		1-PROPENE, 3,3,3-TRICHLORO-	JN	11.00	
		UNKNOWN HYDROCARBON	JN	5.00	
		UNKNOWN HYDROCARBON	JN	8.00	
2516SU310000000.000	9104-223-1	3-PENTEN-2-ONE, 4-METHYL	JN	42.00	R
		UNKNOWN	JN	6.00	
		UNKNOWN HYDROCARBON	JN	7.00	
		UNKNOWN	JN	5.00	
		UNKNOWN	JN	4.00	

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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

TRANSITIONAL SEASON (APRIL 1991)
SEDIMENT ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for SEMIVOLATILES for file STFSDSV1.DBF 12/17/91 23:00:00 12,097 bytes

STF Number	Lab Number	Phenol (ug/kg)	bis(2-Chloroethyl) ether (ug/kg)	2-Chlorophenol (ug/kg)	1,3-Dichlorobenzene (ug/kg)	1,4-Dichlorobenzene (ug/kg)	1,2-Dichlorobenzene (ug/kg)	2-Methylphenol (ug/kg)	2,2'-oxybis(1-Chloropropane) (ug/kg)
2506 SD320000000.000	9104-225-1	U 1300.0000	U 1300.0000	U 1300.0000	U 1300.0000	U 1300.0000	U 1300.0000	U 1300.0000	U 1300.0000
2509 SD320000000.000	9104-209-1	U 720.0000	U 720.0000	U 720.0000	U 720.0000	U 720.0000	U 720.0000	U 720.0000	U 720.0000
2511 SD320000000.000	9104-209-2	J 260.0000	U 770.0000	U 770.0000	U 770.0000	U 770.0000	U 770.0000	U 770.0000	U 770.0000
2516 SD310000000.000	9104-225-3	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000
2516 SD320000000.000	9104-225-4 A	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000

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STF Number	Lab Number	4-Methylphenol (ug/kg)	N-Nitroso-di-n-dipropylamine (ug/kg)	Hexachloroethane (ug/kg)	Nitrobenzene (ug/kg)	Isophorone (ug/kg)	2-Nitrophenol (ug/kg)	2,4-Dimethylphenol (ug/kg)	bis(2-Chloro-ethoxy) methane (ug/kg)
2506 SD320000000.000	9104-225-1	5000.0000	U 1300.0000	U 1300.0000	U 1300.0000	U 1300.0000	U 1300.0000	U 1300.0000	U 1300.0000
2509 SD320000000.000	9104-209-1	U 720.0000	U 720.0000	U 720.0000	U 720.0000	U 720.0000	U 720.0000	U 720.0000	U 720.0000
2511 SD320000000.000	9104-209-2	U 770.0000	U 770.0000	U 770.0000	U 770.0000	U 770.0000	U 770.0000	U 770.0000	U 770.0000
2516 SD310000000.000	9104-225-3	4200.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000
2516 SD320000000.000	9104-225-4 A	J 54.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000

STF Number	Lab Number	2,4-Dichlorophenol (ug/kg)	1,2,4-Trichloro-benzene (ug/kg)	Naphthalene (ug/kg)	4-Chloroaniline (ug/kg)	Hexachloro-butadiene (ug/kg)	4-Chloro-3-methylphenol (ug/kg)	2-Methyl-naphthalene (ug/kg)	Hexachlorocyclo-pentadiene (ug/kg)
2506 SD320000000.000	9104-225-1	U 1300.0000	U 1300.0000	U 1300.0000	U 1300.0000	U 1300.0000	U 1300.0000	U 1300.0000	U 1300.0000
2509 SD320000000.000	9104-209-1	U 720.0000	U 720.0000	J 280.0000 UJ	U 720.0000	U 720.0000	U 720.0000	J 80.0000	U 720.0000
2511 SD320000000.000	9104-209-2	U 770.0000	U 770.0000	J 310.0000 UJ	U 770.0000	U 770.0000	U 770.0000	U 770.0000	U 770.0000
2516 SD310000000.000	9104-225-3	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000
2516 SD320000000.000	9104-225-4 A	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000

STF Number	Lab Number	2,4,6-Trichlorophenol (ug/kg)	2,4,5-Trichlorophenol (ug/kg)	2-Chloronaphthalene (ug/kg)	2-Nitroaniline (ug/kg)	Dimethylphthalate (ug/kg)	Acenaphthylene (ug/kg)	2,6-Dinitrotoluene (ug/kg)	3-Nitroaniline (ug/kg)
2506 SD320000000.000	9104-225-1	U 1300.0000	U 3100.0000	U 1300.0000	U 3100.0000	U 1300.0000	U 1300.0000	U 1300.0000	U 3100.0000
2509 SD320000000.000	9104-209-1	U 720.0000	U 1700.0000	U 720.0000	U 1700.0000	U 720.0000	U 720.0000	U 720.0000	U 1700.0000
2511 SD320000000.000	9104-209-2	U 770.0000	U 1900.0000	U 770.0000	U 1900.0000	U 770.0000	U 770.0000	U 770.0000	U 1900.0000
2516 SD310000000.000	9104-225-3	U 1400.0000	U 3500.0000	U 1400.0000	U 3500.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 3500.0000
2516 SD320000000.000	9104-225-4 A	U 450.0000	U 1100.0000	U 450.0000	U 1100.0000	U 450.0000	U 450.0000	U 450.0000	U 1100.0000

STF	Number	Lab Number	Acenaphthene (ug/kg)	2,4-Dinitrophenol (ug/kg)	4-Nitrophenol (ug/kg)	Dibenzofuran (ug/kg)	2,4-Dinitrotoluene (ug/kg)	Diethylphthalate (ug/kg)	4-Chlorophenyl-phenylether (ug/kg)	Fluorene (ug/kg)
2506	SD320000000.000	9104-225-1	U 1300.0000	U 3100.0000	U 3100.0000	U 1300.0000	U 1300.0000	U 1300.0000	U 1300.0000	U 1300.0000
2509	SD320000000.000	9104-209-1	U 720.0000	U 1700.0000	U 1700.0000	U 720.0000	U 720.0000	U 720.0000	U 720.0000	U 720.0000
2511	SD320000000.000	9104-209-2	U 770.0000	U 1900.0000	U 1900.0000	U 770.0000	U 770.0000	U 770.0000	U 770.0000	U 770.0000
2516	SD310000000.000	9104-225-3	U 1400.0000	U 3500.0000	U 3500.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000
2516	SD320000000.000	9104-225-4 A	U 450.0000	U 1100.0000	U 1100.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000

STF Number	Lab Number	4-Nitroaniline (ug/kg)	4,6-Dinitro-2-methylphenol (ug/kg)	N-nitrosodiphenylamine (ug/kg)	4-Bromophenylphenylether (ug/kg)	Hexachlorobenzene (ug/kg)	Pentachlorophenol (ug/kg)	Phenanthrene (ug/kg)	Anthracene (ug/kg)
2506 SD320000000.000	9104-225-1	U 3100.0000	U 3100.0000	U 1300.0000	U 1300.0000	U 1300.0000	U 3100.0000	J 270.0000	U 1300.0000
2509 SD320000000.000	9104-209-1	U 1700.0000	U 1700.0000	U 720.0000	U 720.0000	U 720.0000	U 1700.0000	U 720.0000	U 720.0000
2511 SD320000000.000	9104-209-2	U 1900.0000	U 1900.0000	U 770.0000	U 770.0000	U 770.0000	U 1900.0000	U 770.0000	U 770.0000
2516 SD310000000.000	9104-225-3	U 3500.0000	U 3500.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 3500.0000	U 1400.0000	U 1400.0000
2516 SD320000000.000	9104-225-4 A	U 1100.0000	U 1100.0000	U 450.0000	U 450.0000	U 450.0000	U 1100.0000	U 450.0000	U 450.0000

STF Number	Lab Number	Carbazole (ug/kg)	Di-n-butyl-phthalate (ug/kg)	Fluoranthene (ug/kg)	Pyrene (ug/kg)	Butylbenzyl-phthalate (ug/kg)	3,3'-Dichloro-benzidine (ug/kg)	Benzo(a)anthracene (ug/kg)	Chrysene (ug/kg)
2506 SD320000000.000	9104-225-1	U 1300.0000	6400.0000 UJ	J 610.0000	J 600.0000	U 1300.0000	U 1300.0000	J 280.0000	J 670.0000
2509 SD320000000.000	9104-209-1	U 720.0000	B 2100.0000 UJ	J 210.0000	J 170.0000	U 720.0000	U 720.0000	U 720.0000	J 140.0000
2511 SD320000000.000	9104-209-2	U 770.0000	4500.0000 UJ	U 770.0000	U 770.0000	1400.0000 J4	U 770.0000	U 770.0000	U 770.0000
2516 SD310000000.000	9104-225-3	U 1400.0000	B 5400.0000 UJ	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000
2516 SD320000000.000	9104-225-4 A	U 450.0000	B 1500.0000 UJ	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000

STF Number	Lab Number	bis(2-Ethylhexyl) phthalate (ug/kg)	Di-n-octyl-phthalate (ug/kg)	Benzo(b)-fluoranthene (ug/kg)	Benzo(k)-fluoranthene (ug/kg)	Benzo(a)pyrene (ug/kg)	Indeno(1,2,3-cd)-pyrene (ug/kg)	Dibenzo(a,h)-anthracene (ug/kg)	Benzo(g,h,i)-perylene (ug/kg)
2506 SD320000000.000	9104-225-1	B 3600.0000 UJ	U 1300.0000	J 660.0000	U 1300.0000	J 420.0000	J 370.0000	U 1300.0000	J 330.0000
2509 SD320000000.000	9104-209-1	U 720.0000	U 720.0000	U 720.0000	J 360.0000	J 160.0000	J 460.0000	J 430.0000	J 470.0000
2511 SD320000000.000	9104-209-2	J 390.0000 UJ	U 770.0000	U 770.0000	J 370.0000	U 770.0000	J 240.0000	J 220.0000	J 260.0000
2516 SD310000000.000	9104-225-3	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000
2516 SD320000000.000	9104-225-4 A	JB 74.0000 UJ	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/kg)	Validation
2506SD320000000.000	9104-225-1	ETHANE, 1,1,2-TRICHLORO-	JN.	667.00	
		UNKNOWN HYDROCARBON	JN	533.00	
		ETHANE, 1,1,2,2-TETRACHLORO-	JN	967.00	
		UNKNOWN HYDROCARBON	JN	333.00	
		PENTADECANOIC ACID	JN	500.00	
		UNKNOWN HYDROCARBON	JN	767.00	
		9-HEXADECANOIC ACID	JN	933.00	
		1,13-TETRADECADIENE	JN	800.00	
		PHYTOL	JN	533.00	
		HEPTACOSANE	JN	2770.00	
		UNKNOWN HYDROCARBON	JN	700.00	
		DOCOSANE	JN	1200.00	
		1-HEXADECANOL	JN	1270.00	
		(Z)14-TRICOSENYL FORMATE	JN	800.00	
		UNKNOWN HYDROCARBON	JN	600.00	
		UNKNOWN HYDROCARBON	JN	933.00	
		13-OCTADECENAL	JN	1070.00	
		ETHANOL, 2-(TETRADECYLOXY	JN	400.00	
		UNKNOWN HYDROCARBON	JN	300.00	
2509SD320000000.000	9104-209-1	PROPANIOC ACID, 2-HYDOXY-,METHYL	JN	600.00	
		BENZALDEHYDE	JN	167.00	
		CYCLOPROPANE, OCTYL	JN	67.00	
		UNDECANE	JN	67.00	
		TETRADECANE	JN	100.00	
		DODECANE, 2,7,10-TRIMETHYL	JN	67.00	
		DECANE, 5-PROPYL	JN	167.00	
		TETRADECANE	JN	133.00	
		DODECANE, 2,7,10-TRIMETHYL	JN	133.00	
		UNKNOWN	JN	67.00	
		EICOSANE	JN	100.00	
		PENTADECANE	JN	67.00	
		HEPTADECANE, 2,6,10,15-TRIMETH	JN	100.00	
		HEXANEDIOIC ACID, DIOCTYLESTER	JN	167.00	
		5-UNDECENE	JN	100.00	
		16-OCTADECENAL	JN	200.00	
		HEXADECANE	JN	233.00	
		UNKNOWN	JN	300.00	

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STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/kg)	Validation
2511SD320000000.000	9104-209-2	2-PENTANOL	JN	3670.00	
		UNKNOWN	JN	333.00	
		BENZALDEHYDE	JN	566.00	
		ETHANONE, 1-PHENYL	JN	400.00	
		CYCLOPROPENE, 1-HEPTYL-2-METHYL	JN	333.00	
		1,3-DIOXOLANE, 4-METHYL-2-PHENYL	JN	300.00	
		DODECANOIC ACID	JN	333.00	
		UNKNOWN	JN	133.00	
		FLUORANTHENE	JN	267.00	
		UNDECANE, 3,8-DIMETHYL	JN	167.00	
		UNKNOWN	JN	300.00	
		5-UNDECENE	JN	367.00	
		HEPTACOSANE	JN	300.00	
		3-EICOSENE, (E)-	JN	233.00	
		17-PENTATRICONTENE	JN	367.00	
		BENZOFURAN, 2,4,5,6,7,7A,-HEXA	JN	2630.00	
		BENZENE, TRIS(1-METHYLETHYL)	JN	1670.00	
		UNKNOWN HYDROCARBON	JN	1970.00	
		UNKNOWN HYDROCARBON	JN	300.00	
2516SD310000000.000	9104-225-3	ETHANE, 1,1,2-TRICHLORO	JN	600.00	R
		ETHANE, 1,1,2,2-TETRACHLORO	JN	1000.00	R
		BENZENEACETIC ACID	JN	467.00	
		9-HEXADECENOIC ACID	JN	967.00	
		2-OCTADECENAL	JN	1000.00	
		1-DOTRIACONTANOL	JN	433.00	
		UNKNOWN	JN	367.00	
		DOCOSANE	JN	500.00	
		CYCLOHEXADECANE	JN	667.00	
		CYCLOTETRADECANE	JN	500.00	
		PENTATRIACONTANE	JN	800.00	
		ISOHEPTADECANOL	JN	467.00	
		CYCLOHEXADECANE	JN	833.00	
		1-DOCOSENE	JN	400.00	
		HEPTACOSANE	JN	667.00	
		UNKNOWN	JN	633.00	
		CYCLOHEXADECANE	JN	867.00	
		UNKNOWN	JN	1700.00	
		OCTADECANE, 3-METHYL	JN	467.00	
		UNKNOWN	JN	467.00	
2516SD320000000.000	9104-225-4	ETHANE, 1,1,2-TRICHLORO-	JN	190.00	R
		UNKNOWN	JN	110.00	
		ETHANE, 1,1,2,2,-TETRACHLORO	JN	400.00	R
		9-OCTADECEN-1-OL, (Z)	JN	220.00	
		9-HEXADECENOIC ACID	JN	160.00	
		DOCOSANE	JN	94.00	

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/kg)	Validation
2516SD320000000.000	9104-225-4 A	ETHANE, 1,1,2-TRICHLORO-	JN	533.00	R
		UNKNOWN HYDROCARBON	JN	333.00	
		ETHANE, 1,1,2,2,-TETRACHLORO-	JN	1170.00	R
		9-HEXADECENOIC ACID	JN	633.00	
		9-OCTADEN-1-OL, (Z)	JN	633.00	
		9-HEXADECENOIC ACID	JN	400.00	
		DOCOSANE	JN	267.00	
		OCTADECANAL	JN	333.00	
		NONACOSANE	JN	407.00	
		1-HEXADECANOL	JN	367.00	
		1-DOCOSENE	JN	500.00	
		17-PENTATRICONTENE	JN	267.00	
		TETRACOSANE, 11-DECYL-	JN	300.00	
		UNKNOWN HYDROCARBON	JN	333.00	
		1-HEPTACOSANOL	JN	633.00	
		CYCLOHEXADECANE	JN	233.00	
		UNKNOWN HYDROCARBON	JN	833.00	
		UNKNOWN HYDROCARBON	JN	233.00	
		ETHANOL, 2-(TETRADECYLOXY-	JN	333.00	
		1-DOCOSENE	JN	267.00	

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

DRY SEASON (AUGUST 1991)
SURFACE WATER ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for SEMIVOLATILES for file STFSUSV2.DBF 01/02/92 23:00:00 16,397 bytes

01/03/92

STF Number	Lab Number	Phenol (ug/L)	bis(2-Chloro-ethyl) ether (ug/L)	2-Chlorophenol (ug/L)	1,3-Dichloro-benzene (ug/L)	1,4-Dichloro-benzene (ug/L)	1,2-Dichloro-benzene (ug/L)	2-Methylphenol (ug/L)	2,2'-oxybis (1-Chloropropane) (ug/L)
2501 SU000000000.001	9108-190-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2502 SU000000000.001	9108-190-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2503 SU000000000.001	9108-205-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2508 SU310000000.001	9108-153-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2510 SU511000000.001	9108-153-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2527 SU000000000.001	9108-172-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2528 SU000000000.001	9108-172-13	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000
2529 SU000000000.001	9108-172-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2530 SU201000000.001	9108-172-9	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

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Analytical data for SEMIVOLATILES for file STFSUSV2.DBF 01/02/92 23:00:00 16,397 bytes

STF	Number	Lab Number	4-Methylphenol (ug/L)	N-Nitroso-di-n-dipropylamine (ug/L)	Hexachloroethane (ug/L)	Nitrobenzene (ug/L)	Isophorone (ug/L)	2-Nitrophenol (ug/L)	2,4-Dimethylphenol (ug/L)	bis(2-Chloro-ethoxy) methane (ug/L)
2501	SU000000000.001	9108-190-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2502	SU000000000.001	9108-190-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2503	SU000000000.001	9108-205-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2508	SU310000000.001	9108-153-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2510	SU511000000.001	9108-153-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2527	SU000000000.001	9108-172-11	J 4.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2528	SU000000000.001	9108-172-13	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000
2529	SU000000000.001	9108-172-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2530	SU201000000.001	9108-172-9	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF	Number	Lab Number	2,4-Dichlorophenol (ug/L)	1,2,4-Trichloro-benzene (ug/L)	Naphthalene (ug/L)	4-Chloroaniline (ug/L)	Hexachloro-butadiene (ug/L)	4-Chloro-3-methylphenol (ug/L)	2-Methyl-naphthalene (ug/L)	Hexachlorocyclo-pentadiene (ug/L)
2501	SU000000000.001	9108-190-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2502	SU000000000.001	9108-190-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2503	SU000000000.001	9108-205-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2508	SU318000000.001	9108-153-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2510	SU511000000.001	9108-153-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2527	SU000000000.001	9108-172-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2528	SU000000000.001	9108-172-13	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000
2529	SU000000000.001	9108-172-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2530	SU201000000.001	9108-172-9	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	2,4,6-Trichlorophenol (ug/L)	2,4,5-Trichlorophenol (ug/L)	2-Chloronaphthalene (ug/L)	2-Nitroaniline (ug/L)	Dimethylphthalate (ug/L)	Acenaphthylene (ug/L)	2,6-Dinitrotoluene (ug/L)	3-Nitroaniline (ug/L)
2501 SU0000000000.001	9108-190-7	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2502 SU0000000000.001	9108-190-2	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2503 SU0000000000.001	9108-205-2	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2508 SU3100000000.001	9108-153-3	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2510 SU5110000000.001	9108-153-7	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2527 SU0000000000.001	9108-172-11	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2528 SU0000000000.001	9108-172-13	U 40.0000	U 100.0000	U 40.0000	U 100.0000	U 40.0000	U 40.0000	U 40.0000	U 100.0000
2529 SU0000000000.001	9108-172-6	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2530 SU2010000000.001	9108-172-9	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000

STF	Number	Lab Number	Acenaphthene (ug/L)	2,4-Dinitrophenol (ug/L)	4-Nitrophenol (ug/L)	Dibenzofuran (ug/L)	2,4-Dinitrotoluene (ug/L)	Diethylphthalate (ug/L)	4-Chlorophenyl-phenylether (ug/L)	Fluorene (ug/L)
2501	SU0000000000.001	9108-190-7	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2502	SU0000000000.001	9108-190-2	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2503	SU0000000000.001	9108-205-2	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2508	SU3100000000.001	9108-153-3	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2510	SU5110000000.001	9108-153-7	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2527	SU0000000000.001	9108-172-11	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2528	SU0000000000.001	9108-172-13	U 40.0000	U 100.0000	U 100.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000
2529	SU0000000000.001	9108-172-6	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2530	SU2010000000.001	9108-172-9	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	4-Nitroaniline (ug/L)	4,6-Dinitro-2-methylphenol (ug/L)	N-nitrosodiphenylamine (ug/L)	4-Bromophenylphenylether (ug/L)	Hexachlorobenzene (ug/L)	Pentachlorophenol (ug/L)	Phenanthrene (ug/L)	Anthracene (ug/L)
2501 SU000000000.001	9108-190-7	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2502 SU000000000.001	9108-190-2	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	J 2.0000	U 10.0000
2503 SU000000000.001	9108-205-2	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2508 SU310000000.001	9108-153-3	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2510 SU511000000.001	9108-153-7	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2527 SU000000000.001	9108-172-11	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2528 SU000000000.001	9108-172-13	U 100.0000	U 100.0000	U 40.0000	U 40.0000	U 40.0000	U 100.0000	J 12.0000	U 40.0000
2529 SU000000000.001	9108-172-6	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2530 SU201000000.001	9108-172-9	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000

STF	Number	Lab Number	Carbazole (ug/L)	Di-n-butyl-phthalate (ug/L)	Fluoranthene (ug/L)	Pyrene (ug/L)	Butylbenzyl-phthalate (ug/L)	3,3'-Dichloro-benzidine (ug/L)	Benzo(a)anthracene (ug/L)	Chrysene (ug/L)
2501	SU000000000.001	9108-190-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2502	SU000000000.001	9108-190-2	U 10.0000	U 10.0000	J 5.0000	J 3.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2503	SU000000000.001	9108-285-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2508	SU310000000.001	9108-153-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2510	SU511000000.001	9108-153-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2527	SU000000000.001	9108-172-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2528	SU000000000.001	9108-172-13	U 40.0000	U 40.0000	J 23.0000	J 18.0000	U 40.0000	U 40.0000	U 40.0000	J 15.0000
2529	SU000000000.001	9108-172-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2530	SU201000000.001	9108-172-9	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF	Number	Lab Number	bis(2-Ethylhexyl) phthalate (ug/L)	Di-n-octyl-phthalate (ug/L)	Benzo(b)-fluoranthene (ug/L)	Benzo(k)-fluoranthene (ug/L)	Benzo(a)pyrene (ug/L)	Indeno(1,2,3-cd)-pyrene (ug/L)	Dibenzo(a,h)-anthracene (ug/L)	Benzo(g,h,i)-perylene (ug/L)
2501	SU000000000.001	9108-190-7	J 5.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2502	SU000000000.001	9108-190-2	10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2503	SU000000000.001	9108-205-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2508	SU310000000.001	9108-153-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2510	SU511000000.001	9108-153-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2527	SU000000000.001	9108-172-11	J 5.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2528	SU000000000.001	9108-172-13	55.0000	U 40.0000	U 40.0000	J 26.0000	U 40.0000	U 40.0000	U 40.0000	U 40.0000
2529	SU000000000.001	9108-172-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2530	SU201000000.001	9108-172-9	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/L)	Validation
2501SU000000000.001	9108-190-7	Tetradecanoic acid	JN	2.00	
		UNKNOWN	JN	2.00	
		9-Hexadecenoic acid	JN	4.00	
		UNKNOWN	JN	4.00	
		UNKNOWN	JN	15.00	
		Docosane	JN	6.00	
		UNKNOWN	BJN	21.00	
		Heptacosane	JN	10.00	
		Iron, tricarbonyl[N-(phenyl-	JN	12.00	
		Pentatriacontane	JN	18.00	
		Hexadecane	JN	16.00	
		Hexatriacontane	JN	10.00	
		Tetratetracontane	JN	8.00	
		Eicosane, 7-hexyl-	JN	7.00	
		UNKNOWN	JN	3.00	
2502SU000000000.001	9108-190-2	UNKNOWN	BJN	2.00	
		Dodecane, 2,7,10-trimethyl-	JN	3.00	
		Phenol, 4-[2-(methylamino)pr	JN	2.00	
		Dodecanamide, N,N-bis(2-hydr	JN	6.00	
		1,9-Nonanediol, dimethanesul	JN	4.00	
		UNKNOWN	JN	2.00	
		TETRADECANE	JN	2.00	
		UNKNOWN	JN	2.00	
		HEXADECANOIC ACID	JN	100.00	
		UNKNOWN	JN	36.00	
		OCTADECANOIC ACID	JN	12.00	
		UNKNOWN	JN	2.00	
		UNKNOWN	JN	7.00	
2503SU000000000.001	9108-205-2	UNKNOWN	JN	7.00	
		3-Pentanol, 2-methyl-	JN	2.00	
		UNKNOWN	JN	2.00	
		UNKNOWN	JN	4.00	
		UNKNOWN	JN	4.00	
		UNKNOWN	JN	7.00	
		UNKNOWN	JN	15.00	
		UNKNOWN	JN	6.00	
		UNKNOWN	JN	8.00	
		UNKNOWN	JN	13.00	
		UNKNOWN	JN	9.00	
		5H-Inden-5-one, octahydro-,	JN	22.00	
		UNKNOWN	JN	10.00	
		Ethane, 1,1'-oxybis[2-methox	JN	20.00	
		Spiro[3.5]nonan-1-one, 5-met	JN	9.00	
		UNKNOWN	JN	12.00	
		2-Propanol, 1-(2-methoxy-1-m	JN	10.00	
		2(1H)-Naphthalenone, octahyd	JN	15.00	
		UNKNOWN	JN	19.00	
		UNKNOWN	JN	18.00	

DATA VALIDATION
DATE RECEIVED _____
VALIDATED BY _____ DATE _____
KEYED BY _____ DATE _____
CHECKED BY CRM DATE 1/24/92

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/L)	Validation
2508SU310000000.001	9108-153-3	2-Pentanone, 4-hydroxy-4-met	JN	4.00	
		UNKNOWN	BJN	4.00	
		UNKNOWN	JN	4.00	
		9-Hexadecenoic acid	JN	4.00	
		Bromacil (ACN)	JN	4.00	
		Sulfur, mol. (S8)	JN	2.00	
		Cyclohexadecane	JN	2.00	
		UNKNOWN	JN	4.00	
2510SU511000000.001	9108-153-7	UNKNOWN	BJN	4.00	
		UNKNOWN	BJN	6.00	
		UNKNOWN	JN	6.00	
		UNKNOWN	JN	2.00	
		Benzene, 1,4-dichloro-2-isoc	JN	2.00	
		UNKNOWN	JN	2.00	
		9,12,15-Octadecatrienal	JN	3.00	
2527SU000000000.001	9108-172-11	Butanoic acid	JN	3.00	
		Butanoic acid, 2-methyl-	JN	2.00	
		Propanedioic acid, phenyl-	JN	22.00	
		Propanoic acid, 2-methyl-, 2	JN	4.00	
		Benzenesulfonamide, 4-methyl	JN	4.00	
		Tetradecanoic acid	JN	7.00	
		UNKNOWN	JN	7.00	
		2-Pentadecanone, 6,10,14-tri	JN	2.00	
		UNKNOWN	JN	4.00	
		9-Hexadecenoic acid	JN	14.00	
		Hexadecanoic acid	JN	20.00	
		UNKNOWN	JN	4.00	
		2-Propanol, 1-[1-methyl-2-(2	JN	18.00	
		UNKNOWN	BJN	8.00	
		UNKNOWN	BJN	42.00	
		Octacosane	JN	6.00	
		UNKNOWN	BJN	8.00	
		Eicosane, 7-hexyl-	JN	9.00	
		UNKNOWN	JN	9.00	
		UNKNOWN	JN	10.00	
2528SU000000000.001	9108-172-13	Tetradecanoic acid	JN	3.00	
		Cyclopentane, 1,2-dimethyl-3	JN	6.00	
		UNKNOWN	JN	2.00	
		9-Hexadecenoic acid	JN	9.00	
		Hexadecanoic acid	JN	17.00	
		UNKNOWN	JN	6.00	
2529SU000000000.001	9108-172-6	UNKNOWN	BJN	2.00	
		UNKNOWN	BJN	4.00	
		UNKNOWN	BJN	4.00	
		9-Hexadecenoic acid	JN	5.00	
		Hexadecanoic acid	JN	4.00	
		Octadecanoic acid	JN	4.00	

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/L)	Validation
2530SU201000000.001	9108-172-9	UNKNOWN	BJN	2.00	
		UNKNOWN	BJN	3.00	
		Propanoic acid, 2-methyl-, 2	JN	3.00	
		UNKNOWN	JN	3.00	
		9-Hexadecenoic acid	JN	4.00	
		UNKNOWN	JN	2.00	
		UNKNOWN	BJN	20.00	
		UNKNOWN	JN	3.00	
		UNKNOWN	JN	14.00	
		UNKNOWN	JN	12.00	
		UNKNOWN	JN	28.00	
		UNKNOWN	BJN	8.00	
		UNKNOWN	BJN	7.00	
		UNKNOWN	JN	3.00	

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

DRY SEASON (AUGUST 1991)
SEDIMENT ANALYTICAL RESULTS

STF	Number	Lab Number	Phenol (ug/kg)	bis(2-Chloroethyl) ether (ug/kg)	2-Chlorophenol (ug/kg)	1,3-Dichlorobenzene (ug/kg)	1,4-Dichlorobenzene (ug/kg)	1,2-Dichlorobenzene (ug/kg)	2-Methylphenol (ug/kg)	2,2'-oxybis(1-Chloropropane) (ug/kg)
2501	SD3000000000.001	9108-190-5	U 4200.0000	U 4200.0000	U 4200.0000	U 4200.0000	U 4200.0000	U 4200.0000	U 4200.0000	U 4200.0000
2502	SD0000000000.001	9108-190-1	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000
2503	SD3000000000.001	9108-285-1	U 30000.0000	U 30000.0000	U 30000.0000	U 30000.0000	U 30000.0000	U 30000.0000	U 30000.0000	U 30000.0000
2504	SD0000000000.001	9108-138-3	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000
2505	SD0000000000.001	9108-088-1	U 3500.0000	U 3500.0000	U 3500.0000	U 3500.0000	U 3500.0000	U 3500.0000	U 3500.0000	U 3500.0000
2506	SD3100000000.001	9108-088-2	U 3300.0000	U 3300.0000	U 3300.0000	U 3300.0000	U 3300.0000	U 3300.0000	U 3300.0000	U 3300.0000
2506	SD3200000000.001	9108-088-3	U 9200.0000	U 9200.0000	U 9200.0000	U 9200.0000	U 9200.0000	U 9200.0000	U 9200.0000	U 9200.0000
2507	SD0000000000.001	9108-088-4	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000
2508	SD3100000000.001	9108-153-2	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000
2509	SD3100000000.001	9108-088-5	J 900.0000	U 1700.0000	U 1700.0000	U 1700.0000	U 1700.0000	U 1700.0000	U 1700.0000	U 1700.0000
2509	SD3200000000.001	9108-088-6	J 650.0000	U 2700.0000	U 2700.0000	U 2700.0000	U 2700.0000	U 2700.0000	U 2700.0000	U 2700.0000
2510	SD5110000000.001	9108-153-6	U 2400.0000	U 2400.0000	U 2400.0000	U 2400.0000	U 2400.0000	U 2400.0000	U 2400.0000	U 2400.0000
2511	SD3100000000.001	9108-088-7	J 430.0000	U 520.0000	U 520.0000	U 520.0000	U 520.0000	U 520.0000	U 520.0000	U 520.0000
2511	SD3200000000.001	9108-088-8	U 660.0000	U 660.0000	U 660.0000	U 660.0000	U 660.0000	U 660.0000	U 660.0000	U 660.0000
2512	SD0000000000.001	9108-088-9	U 700.0000	U 700.0000	U 700.0000	U 700.0000	U 700.0000	U 700.0000	U 700.0000	U 700.0000
2513	SD0000000000.001	9108-088-10	U 1800.0000	U 1800.0000	U 1800.0000	U 1800.0000	U 1800.0000	U 1800.0000	U 1800.0000	U 1800.0000
2514	SD0000000000.001	9108-088-11	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000
2515	SD0000000000.001	9108-088-12	U 2300.0000	U 2300.0000	U 2300.0000	U 2300.0000	U 2300.0000	U 2300.0000	U 2300.0000	U 2300.0000
2516	SD3100000000.001	9108-088-13	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000
2516	SD3200000000.001	9108-088-14	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000
2518	SD0000000000.001	9108-138-4	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000
2519	SD0000000000.001	9108-138-5	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000
2520	SD0000000000.001	9108-138-6	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000
2521	SD0000000000.001	9108-138-7	U 7500.0000	U 7500.0000	U 7500.0000	U 7500.0000	U 7500.0000	U 7500.0000	U 7500.0000	U 7500.0000
2522	SD0000000000.001	9108-138-8	U 14000.0000	U 14000.0000	U 14000.0000	U 14000.0000	U 14000.0000	U 14000.0000	U 14000.0000	U 14000.0000
2523	SD0000000000.001	9108-138-9	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000
2524	SD0000000000.001	9108-138-10	U 19000.0000	U 19000.0000	U 19000.0000	U 19000.0000	U 19000.0000	U 19000.0000	U 19000.0000	U 19000.0000
2525	SD0000000000.001	9108-172-3	U 35000.0000	U 35000.0000	U 35000.0000	U 35000.0000	U 35000.0000	U 35000.0000	U 35000.0000	U 35000.0000
2526	SD0000000000.001	9108-172-4	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000
2527	SD0000000000.001	9108-172-10	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ
2528	SD0000000000.001	9108-172-12	U 36000.0000	U 36000.0000	U 36000.0000	U 36000.0000	U 36000.0000	U 36000.0000	U 36000.0000	U 36000.0000
2529	SD0000000000.001	9108-172-5	U 26000.0000	U 26000.0000	U 26000.0000	U 26000.0000	U 26000.0000	U 26000.0000	U 26000.0000	U 26000.0000
2530	SD2010000000.001	9108-172-8	U 8900.0000	U 8900.0000	U 8900.0000	U 8900.0000	U 8900.0000	U 8900.0000	U 8900.0000	U 8900.0000

DATA VALIDATION
DATE RECEIVED _____
VALIDATED BY _____ DATE _____
KEYED BY _____ DATE _____
CHECKED BY JRM DATE 1/3/92

STF	Number	Lab Number	4-Methylphenol (ug/kg)	N-Nitroso-di-n-dipropylamine (ug/kg)	Hexachloroethane (ug/kg)	Nitrobenzene (ug/kg)	Isophorone (ug/kg)	2-Nitrophenol (ug/kg)	2,4-Dimethylphenol (ug/kg)	bis(2-Chloro-ethoxy) methane (ug/kg)
2501	SD000000000.001	9108-190-6	U 4200.0000	U 4200.0000	U 4200.0000	U 4200.0000	U 4200.0000	U 4200.0000	U 4200.0000	U 4200.0000
2502	SD000000000.001	9108-190-1	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000
2503	SD000000000.001	9108-205-1	U 30000.0000	U 30000.0000	U 30000.0000	U 30000.0000	U 30000.0000	U 30000.0000	U 30000.0000	U 30000.0000
2504	SD000000000.001	9108-138-3	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000
2505	SD000000000.001	9108-088-1	U 3500.0000	U 3500.0000	U 3500.0000	U 3500.0000	U 3500.0000	U 3500.0000	U 3500.0000	U 3500.0000
2506	SD310000000.001	9108-088-2	U 3300.0000	U 3300.0000	U 3300.0000	U 3300.0000	U 3300.0000	U 3300.0000	U 3300.0000	U 3300.0000
2506	SD320000000.001	9108-088-3	U 9200.0000	U 9200.0000	U 9200.0000	U 9200.0000	U 9200.0000	U 9200.0000	U 9200.0000	U 9200.0000
2507	SD000000000.001	9108-088-4	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000
2508	SD310000000.001	9108-153-2	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000
2509	SD310000000.001	9108-088-5	U 1700.0000	U 1700.0000	U 1700.0000	U 1700.0000	U 1700.0000	U 1700.0000	U 1700.0000	U 1700.0000
2509	SD320000000.001	9108-088-6	U 2700.0000	U 2700.0000	U 2700.0000	U 2700.0000	U 2700.0000	U 2700.0000	U 2700.0000	U 2700.0000
2510	SD511000000.001	9108-153-6	U 2400.0000	U 2400.0000	U 2400.0000	U 2400.0000	U 2400.0000	U 2400.0000	U 2400.0000	U 2400.0000
2511	SD310000000.001	9108-088-7	U 520.0000	U 520.0000	U 520.0000	U 520.0000	U 520.0000	U 520.0000	U 520.0000	U 520.0000
2511	SD320000000.001	9108-088-8	U 660.0000	U 660.0000	U 660.0000	U 660.0000	U 660.0000	U 660.0000	U 660.0000	U 660.0000
2512	SD000000000.001	9108-088-9	U 700.0000	U 700.0000	U 700.0000	U 700.0000	U 700.0000	U 700.0000	U 700.0000	U 700.0000
2513	SD000000000.001	9108-088-10	U 1800.0000	U 1800.0000	U 1800.0000	U 1800.0000	U 1800.0000	U 1800.0000	U 1800.0000	U 1800.0000
2514	SD000000000.001	9108-088-11	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000
2515	SD000000000.001	9108-088-12	U 2300.0000	U 2300.0000	U 2300.0000	U 2300.0000	U 2300.0000	U 2300.0000	U 2300.0000	U 2300.0000
2516	SD310000000.001	9108-088-13	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000
2516	SD320000000.001	9108-088-14	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000
2518	SD000000000.001	9108-138-4	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000
2519	SD000000000.001	9108-138-5	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000
2520	SD000000000.001	9108-138-6	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000
2521	SD000000000.001	9108-138-7	U 7500.0000	U 7500.0000	U 7500.0000	U 7500.0000	U 7500.0000	U 7500.0000	U 7500.0000	U 7500.0000
2522	SD000000000.001	9108-138-8	U 14000.0000	U 14000.0000	U 14000.0000	U 14000.0000	U 14000.0000	U 14000.0000	U 14000.0000	U 14000.0000
2523	SD000000000.001	9108-138-9	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000
2524	SD000000000.001	9108-138-10	U 19000.0000	U 19000.0000	U 19000.0000	U 19000.0000	U 19000.0000	U 19000.0000	U 19000.0000	U 19000.0000
2525	SD000000000.001	9108-172-3	U 35000.0000	U 35000.0000	U 35000.0000	U 35000.0000	U 35000.0000	U 35000.0000	U 35000.0000	U 35000.0000
2526	SD000000000.001	9108-172-4	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000
2527	SD000000000.001	9108-172-10	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ
2528	SD000000000.001	9108-172-12	U 36000.0000	U 36000.0000	U 36000.0000	U 36000.0000	U 36000.0000	U 36000.0000	U 36000.0000	U 36000.0000
2529	SD000000000.001	9108-172-5	U 26000.0000	U 26000.0000	U 26000.0000	U 26000.0000	U 26000.0000	U 26000.0000	U 26000.0000	U 26000.0000
2530	SD201000000.001	9108-172-9	U 8900.0000	U 8900.0000	U 8900.0000	U 8900.0000	U 8900.0000	U 8900.0000	U 8900.0000	U 8900.0000

STF	Number	Lab Number	2,4-Dichlorophenol (ug/kg)	1,2,4-Trichloro-benzene (ug/kg)	Naphthalene (ug/kg)	4-Chloroaniline (ug/kg)	Hexachloro-butadiene (ug/kg)	4-Chloro-3-methylphenol (ug/kg)	2-Methyl-naphthalene (ug/kg)	Hexachlorocyclo-pentadiene (ug/kg)
2501	SD000000006.001	9108-190-6	U 4200.0000	U 4200.0000	U 4200.0000	U 4200.0000	U 4200.0000	U 4200.0000	U 4200.0000	U 4200.0000
2502	SD000000000.001	9108-190-1	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000
2503	SD000000000.001	9108-205-1	U 30000.0000	U 30000.0000	U 30000.0000	U 30000.0000	U 30000.0000	U 30000.0000	U 30000.0000	U 30000.0000
2504	SD000000000.001	9108-138-3	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000
2505	SD000000000.001	9108-088-1	U 3500.0000	U 3500.0000	U 3500.0000	U 3500.0000	U 3500.0000	U 3500.0000	U 3500.0000	U 3500.0000
2506	SD310000000.001	9108-088-2	U 3300.0000	U 3300.0000	U 3300.0000	U 3300.0000	U 3300.0000	U 3300.0000	U 3300.0000	U 3300.0000
2506	SD320000000.001	9108-088-3	U 9200.0000	U 9200.0000	U 9200.0000	U 9200.0000	U 9200.0000	U 9200.0000	U 9200.0000	U 9200.0000
2507	SD060000000.001	9108-088-4	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000
2508	SD310000000.001	9108-153-2	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000
2509	SD310000000.001	9108-088-5	U 1700.0000	U 1700.0000	J 230.0000	U 1700.0000	U 1700.0000	U 1700.0000	J 340.0000	U 1700.0000
2509	SD320000000.001	9108-088-6	U 2700.0000	U 2700.0000	J 190.0000	U 2700.0000	U 2700.0000	U 2700.0000	J 280.0000	U 2700.0000
2510	SD511000000.001	9108-153-6	U 2400.0000	U 2400.0000	U 2400.0000	U 2400.0000	U 2400.0000	U 2400.0000	U 2400.0000	U 2400.0000
2511	SD310000000.001	9108-088-7	U 520.0000	U 520.0000	J 160.0000	U 520.0000	U 520.0000	U 520.0000	J 180.0000	U 520.0000
2511	SD320000000.001	9108-088-8	U 660.0000	U 660.0000	J 75.0000	U 660.0000	U 660.0000	U 660.0000	J 37.0000	U 660.0000
2512	SD000000000.001	9108-088-9	U 700.0000	U 700.0000	J 46.0000	U 700.0000	U 700.0000	U 700.0000	U 700.0000	U 700.0000
2513	SD000000000.001	9108-088-10	U 1800.0000	U 1800.0000	U 1800.0000	U 1800.0000	U 1800.0000	U 1800.0000	U 1800.0000	U 1800.0000
2514	SD000000000.001	9108-088-11	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000
2515	SD000000000.001	9108-088-12	U 2300.0000	U 2300.0000	U 2300.0000	U 2300.0000	U 2300.0000	U 2300.0000	U 2300.0000	U 2300.0000
2516	SD310000000.001	9108-088-13	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000
2516	SD320000000.001	9108-088-14	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000
2518	SD020000000.001	9108-138-4	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000
2519	SD000000000.001	9108-138-5	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000
2520	SD000000000.001	9108-138-6	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000
2521	SD000000000.001	9108-138-7	U 7500.0000	U 7500.0000	U 7500.0000	U 7500.0000	U 7500.0000	U 7500.0000	U 7500.0000	U 7500.0000
2522	SD000000000.001	9108-138-8	U 14000.0000	U 14000.0000	U 14000.0000	U 14000.0000	U 14000.0000	U 14000.0000	U 14000.0000	U 14000.0000
2523	SD000000000.001	9108-138-9	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000
2524	SD000000000.001	9108-138-10	U 19000.0000	U 19000.0000	U 19000.0000	U 19000.0000	U 19000.0000	U 19000.0000	U 19000.0000	U 19000.0000
2525	SD000000000.001	9108-172-3	U 35000.0000	U 35000.0000	U 35000.0000	U 35000.0000	U 35000.0000	U 35000.0000	U 35000.0000	U 35000.0000
2526	SD000000000.001	9108-172-4	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000
2527	SD000000000.001	9108-172-10	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ
2528	SD000000000.001	9108-172-12	U 36000.0000	U 36000.0000	U 36000.0000	U 36000.0000	U 36000.0000	U 36000.0000	U 36000.0000	U 36000.0000
2529	SD000000000.001	9108-172-5	U 26000.0000	U 26000.0000	U 26000.0000	U 26000.0000	U 26000.0000	U 26000.0000	U 26000.0000	U 26000.0000
2530	SD201000000.001	9108-172-8	U 8900.0000	U 8900.0000	U 8900.0000	U 8900.0000	U 8900.0000	U 8900.0000	U 8900.0000	U 8900.0000

STF Number	Lab Number	2,4,6-Trichloro-phenol (ug/kg)	2,4,5-Trichloro-phenol (ug/kg)	2-Chloro-naphthalene (ug/kg)	2-Nitroaniline (ug/kg)	Dimethylphthalate (ug/kg)	Acenaphthylene (ug/kg)	2,6-Dinitrotoluene (ug/kg)	3-Nitroaniline (ug/kg)
2501 SD000000000.001	9108-190-6	U 4200.0000	U 10000.0000	U 4200.0000	U 10000.0000	U 4200.0000	U 4200.0000	U 4200.0000	U 10000.0000
2502 SD000000000.001	9108-190-1	U 55000.0000	U 130000.0000	U 55000.0000	U 130000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 130000.0000
2503 SD000000000.001	9108-205-1	U 30000.0000	U 73000.0000	U 30000.0000	U 73000.0000	U 30000.0000	U 30000.0000	U 30000.0000	U 73000.0000
2504 SD000000000.001	9108-138-3	U 11000.0000	U 26000.0000	U 11000.0000	U 26000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 26000.0000
2505 SD000000000.001	9108-088-1	U 3500.0000	U 8400.0000	U 3500.0000	U 8400.0000	U 3500.0000	U 3500.0000	U 3500.0000	U 8400.0000
2506 SD310000000.001	9108-088-2	U 3300.0000	U 8000.0000	U 3300.0000	U 8000.0000	U 3300.0000	U 3300.0000	U 3300.0000	U 8000.0000
2506 SD320000000.001	9108-088-3	U 9200.0000	U 22000.0000	U 9200.0000	U 22000.0000	U 9200.0000	U 9200.0000	U 9200.0000	U 22000.0000
2507 SD000000000.001	9108-088-4	U 4700.0000	U 11000.0000	U 4700.0000	U 11000.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 11000.0000
2508 SD310000000.001	9108-153-2	U 1900.0000	U 4700.0000	U 1900.0000	U 4700.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 4700.0000
2509 SD310000000.001	9108-088-5	U 1700.0000	U 4100.0000	U 1700.0000	U 4100.0000	U 1700.0000	U 1700.0000	U 1700.0000	U 4100.0000
2509 SD320000000.001	9108-088-6	U 2700.0000	U 6400.0000	U 2700.0000	U 6400.0000	U 2700.0000	U 2700.0000	U 2700.0000	U 6400.0000
2510 SD511000000.001	9108-153-6	U 2400.0000	U 5800.0000	U 2400.0000	U 5800.0000	U 2400.0000	U 2400.0000	U 2400.0000	U 5800.0000
2511 SD310000000.001	9108-088-7	U 520.0000	U 1200.0000	U 520.0000	U 1200.0000	U 520.0000	J 44.0000	U 520.0000	U 1200.0000
2511 SD320000000.001	9108-088-8	U 660.0000	U 1600.0000	U 660.0000	U 1600.0000	U 660.0000	U 660.0000	U 660.0000	U 1600.0000
2512 SD000000000.001	9108-088-9	U 700.0000	U 1700.0000	U 700.0000	U 1700.0000	U 700.0000	U 700.0000	U 700.0000	U 1700.0000
2513 SD000000000.001	9108-088-10	U 1800.0000	U 4400.0000	U 1800.0000	U 4400.0000	U 1800.0000	U 1800.0000	U 1800.0000	U 4400.0000
2514 SD000000000.001	9108-088-11	U 2100.0000	U 5000.0000	U 2100.0000	U 5000.0000	J 190.0000	U 2100.0000	U 2100.0000	U 5000.0000
2515 SD000000000.001	9108-088-12	U 2300.0000	U 5600.0000	U 2300.0000	U 5600.0000	J 1800.0000	J 160.0000	U 2300.0000	U 5600.0000
2516 SD310000000.001	9108-088-13	U 340.0000	U 820.0000	U 340.0000	U 820.0000	U 340.0000	U 340.0000	U 340.0000	U 820.0000
2516 SD320000000.001	9108-088-14	U 340.0000	U 820.0000	U 340.0000	U 820.0000	U 340.0000	U 340.0000	U 340.0000	U 820.0000
2518 SD000000000.001	9108-138-4	U 10000.0000	U 24000.0000	U 10000.0000	U 24000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 24000.0000
2519 SD000000000.001	9108-138-5	U 17000.0000	U 42000.0000	U 17000.0000	U 42000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 42000.0000
2520 SD000000000.001	9108-138-6	U 10000.0000	U 24000.0000	U 10000.0000	U 24000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 24000.0000
2521 SD000000000.001	9108-138-7	U 7500.0000	U 18000.0000	U 7500.0000	U 18000.0000	U 7500.0000	U 7500.0000	U 7500.0000	U 18000.0000
2522 SD000000000.001	9108-138-8	U 14000.0000	U 33000.0000	U 14000.0000	U 33000.0000	U 14000.0000	U 14000.0000	U 14000.0000	U 33000.0000
2523 SD000000000.001	9108-138-9	U 17000.0000	U 42000.0000	U 17000.0000	U 42000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 42000.0000
2524 SD000000000.001	9108-138-10	U 19000.0000	U 47000.0000	U 19000.0000	U 47000.0000	U 19000.0000	U 19000.0000	U 19000.0000	U 47000.0000
2525 SD000000000.001	9108-172-3	U 35000.0000	U 84000.0000	U 35000.0000	U 84000.0000	U 35000.0000	U 35000.0000	U 35000.0000	U 84000.0000
2526 SD000000000.001	9108-172-4	U 17000.0000	U 42000.0000	U 17000.0000	U 42000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 42000.0000
2527 SD000000000.001	9108-172-10	U 31000.0000 UJ	U 76000.0000 UJ	U 31000.0000 UJ	U 76000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ	U 76000.0000 UJ
2528 SD000000000.001	9108-172-12	U 36000.0000	U 86000.0000	U 36000.0000	U 86000.0000	U 36000.0000	U 36000.0000	U 36000.0000	U 86000.0000
2529 SD000000000.001	9108-172-5	U 26000.0000	U 64000.0000	U 26000.0000	U 64000.0000	U 26000.0000	U 26000.0000	U 26000.0000	U 64000.0000
2530 SD201000000.001	9108-172-8	U 8900.0000	U 22000.0000	U 8900.0000	U 22000.0000	U 8900.0000	U 8900.0000	U 8900.0000	U 22000.0000

STF Number	Lab Number	Acenaphthene (ug/kg)	2,4-Dinitrophenol (ug/kg)	4-Nitrophenol (ug/kg)	Dibenzofuran (ug/kg)	2,4-Dinitrotoluene (ug/kg)	Diethylphthalate (ug/kg)	4-Chlorophenyl-phenylether (ug/kg)	Fluorene (ug/kg)
2501 SD000000000.001	9108-190-6	U 4200.0000	U 10000.0000	U 10000.0000	U 4200.0000	U 4200.0000	U 4200.0000	U 4200.0000	U 4200.0000
2502 SD000000000.001	9108-190-1	U 55000.0000	U 130000.0000	U 130000.0000	J 2900.0000	U 55000.0000	U 55000.0000	U 55000.0000	J 7400.0000
2503 SD000000000.001	9108-205-1	J 4800.0000 J4	U 73000.0000	U 73000.0000	J 2900.0000 J4	U 30000.0000	U 30000.0000	U 30000.0000	J 6300.0000 J4
2504 SD000000000.001	9108-138-3	U 11000.0000	U 26000.0000	U 26000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000
2505 SD000000000.001	9108-088-1	U 3500.0000	U 8400.0000	U 8400.0000	U 3500.0000	U 3500.0000	U 3500.0000	U 3500.0000	U 3500.0000
2506 SD310000000.001	9108-088-2	U 3300.0000	U 8000.0000	U 8000.0000	U 3300.0000	U 3300.0000	U 3300.0000	U 3300.0000	U 3300.0000
2506 SD320000000.001	9108-088-3	U 9200.0000	U 22000.0000	U 22000.0000	U 9200.0000	U 9200.0000	U 9200.0000	U 9200.0000	U 9200.0000
2507 SD000000000.001	9108-088-4	U 4700.0000	U 11000.0000	U 11000.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000
2508 SD310000000.001	9108-153-2	U 1900.0000	U 4700.0000	U 4700.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000
2509 SD310000000.001	9108-088-5	U 1700.0000	U 4100.0000	U 4100.0000	U 1700.0000	U 1700.0000	U 1700.0000	U 1700.0000	U 1700.0000
2509 SD320000000.001	9108-088-6	U 2700.0000	U 6400.0000	U 6400.0000	U 2700.0000	U 2700.0000	U 2700.0000	U 2700.0000	U 2700.0000
2510 SD511000000.001	9108-153-6	U 2400.0000	U 5800.0000	U 5800.0000	U 2400.0000	U 2400.0000	U 2400.0000	U 2400.0000	U 2400.0000
2511 SD310000000.001	9108-088-7	J 28.0000	U 1200.0000	U 1200.0000	J 31.0000	U 520.0000	U 520.0000	U 520.0000	J 28.0000
2511 SD320000000.001	9108-088-8	U 660.0000	U 1600.0000	U 1600.0000	U 660.0000	U 660.0000	U 660.0000	U 660.0000	U 660.0000
2512 SD000000000.001	9108-088-9	J 42.0000	U 1700.0000	U 1700.0000	U 700.0000	U 700.0000	U 700.0000	U 700.0000	U 700.0000
2513 SD000000000.001	9108-088-10	U 1800.0000	U 4400.0000	U 4400.0000	U 1800.0000	U 1800.0000	U 1800.0000	U 1800.0000	U 1800.0000
2514 SD000000000.001	9108-088-11	U 2100.0000	U 5000.0000	U 5000.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000
2515 SD000000000.001	9108-088-12	U 2300.0000	U 5600.0000	U 5600.0000	U 2300.0000	U 2300.0000	U 2300.0000	U 2300.0000	U 2300.0000
2516 SD310000000.001	9108-088-13	U 340.0000	U 820.0000	U 820.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000
2516 SD320000000.001	9108-088-14	U 340.0000	U 820.0000	U 820.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000
2518 SD000000000.001	9108-138-4	U 10000.0000	U 24000.0000	U 24000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000
2519 SD000000000.001	9108-138-5	U 17000.0000	U 42000.0000	U 42000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000
2520 SD000000000.001	9108-138-6	U 10000.0000	U 24000.0000	U 24000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000
2521 SD000000000.001	9108-138-7	U 7500.0000	U 18000.0000	U 18000.0000	U 7500.0000	U 7500.0000	U 7500.0000	U 7500.0000	U 7500.0000
2522 SD000000000.001	9108-138-8	U 14000.0000	U 33000.0000	U 33000.0000	U 14000.0000	U 14000.0000	U 14000.0000	U 14000.0000	U 14000.0000
2523 SD000000000.001	9108-138-9	U 17000.0000	U 42000.0000	U 42000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000
2524 SD000000000.001	9108-138-10	U 19000.0000	U 47000.0000	U 47000.0000	U 19000.0000	U 19000.0000	U 19000.0000	U 19000.0000	U 19000.0000
2525 SD000000000.001	9108-172-3	U 35000.0000	U 84000.0000	U 84000.0000	U 35000.0000	U 35000.0000	U 35000.0000	U 35000.0000	U 35000.0000
2526 SD000000000.001	9108-172-4	U 17000.0000	U 42000.0000	U 42000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 17000.0000
2527 SD000000000.001	9108-172-10	U 31000.0000 UJ	U 76000.0000 UJ	U 76000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ
2528 SD000000000.001	9108-172-12	U 36000.0000	U 86000.0000	U 86000.0000	U 36000.0000	U 36000.0000	U 36000.0000	U 36000.0000	U 36000.0000
2529 SD000000000.001	9108-172-5	U 26000.0000	U 64000.0000	U 64000.0000	U 26000.0000	U 26000.0000	U 26000.0000	U 26000.0000	U 26000.0000
2530 SD201000000.001	9108-172-8	U 8900.0000	U 22000.0000	U 22000.0000	U 8900.0000	U 8900.0000	U 8900.0000	U 8900.0000	U 8900.0000

STF	Number	Lab Number	4-Nitroaniline (ug/kg)	4,6-Dinitro-2-methylphenol (ug/kg)	N-nitrosodiphenylamine (ug/kg)	4-Bromophenyl-phenylether (ug/kg)	Hexachlorobenzene (ug/kg)	Pentachlorophenol (ug/kg)	Phenanthrene (ug/kg)	Anthracene (ug/kg)
2501	SD000000000.001	9108-190-6	U 10000.0000	U 10000.0000	U 4200.0000	U 4200.0000	U 4200.0000	U 10000.0000	U 4200.0000	U 4200.0000
2502	SD000000000.001	9108-190-1	U 130000.0000	U 130000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 130000.0000	88000.0000	J 18000.0000
2503	SD000000000.001	9108-205-1	U 73000.0000	U 73000.0000	U 30000.0000	U 30000.0000	U 30000.0000	U 73000.0000	80000.0000 J4	J 11000.0000 J4
2504	SD000000000.001	9108-138-3	U 26000.0000	U 26000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 26000.0000	J 800.0000	U 11000.0000
2505	SD000000000.001	9108-088-1	U 8400.0000	U 8400.0000	U 3500.0000	U 3500.0000	U 3500.0000	U 8400.0000	J 360.0000	U 3500.0000
2506	SD310000000.001	9108-088-2	U 8000.0000	U 8000.0000	U 3300.0000	U 3300.0000	U 3300.0000	U 8000.0000	J 290.0000	U 3300.0000
2506	SD320000000.001	9108-088-3	U 22000.0000	U 22000.0000	U 9200.0000	U 9200.0000	U 9200.0000	U 22000.0000	U 9200.0000	U 9200.0000
2507	SD000000000.001	9108-088-4	U 11000.0000	U 11000.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 11000.0000	J 690.0000	U 4700.0000
2508	SD310000000.001	9108-153-2	U 4700.0000	U 4700.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 4700.0000	U 1900.0000	U 1900.0000
2509	SD310000000.001	9108-088-5	U 4100.0000	U 4100.0000	U 1700.0000	U 1700.0000	U 1700.0000	U 4100.0000	J 130.0000	U 1700.0000
2509	SD320000000.001	9108-088-6	U 6400.0000	U 6400.0000	U 2700.0000	U 2700.0000	U 2700.0000	U 6400.0000	U 2700.0000	U 2700.0000
2510	SD511000000.001	9108-153-6	U 5800.0000	U 5800.0000	U 2400.0000	U 2400.0000	U 2400.0000	U 5800.0000	J 470.0000	U 2400.0000
2511	SD310000000.001	9108-086-7	U 1200.0000	U 1200.0000	U 520.0000	U 520.0000	U 520.0000	U 1200.0000	J 200.0000	J 88.0000
2511	SD320000000.001	9108-088-8	U 1600.0000	U 1600.0000	U 660.0000	U 660.0000	U 660.0000	U 1600.0000	J 140.0000	J 42.0000
2512	SD000000000.001	9108-088-9	U 1700.0000	U 1700.0000	U 700.0000	U 700.0000	U 700.0000	U 1700.0000	J 180.0000	U 700.0000
2513	SD000000000.001	9108-088-10	U 4400.0000	U 4400.0000	U 1800.0000	U 1800.0000	U 1800.0000	U 4400.0000	J 130.0000	U 1800.0000
2514	SD000000000.001	9108-088-11	U 5000.0000	U 5000.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 5000.0000	J 340.0000	U 2100.0000
2515	SD000000000.001	9108-088-12	U 5600.0000	U 5600.0000	U 2300.0000	U 2300.0000	U 2300.0000	U 5600.0000	J 800.0000	J 180.0000
2516	SD310000000.001	9108-086-13	U 820.0000	U 820.0000	U 340.0000	U 340.0000	U 340.0000	U 820.0000	U 340.0000	U 340.0000
2516	SD320000000.001	9108-088-14	U 820.0000	U 820.0000	U 340.0000	U 340.0000	U 340.0000	U 820.0000	U 340.0000	U 340.0000
2518	SD000000000.001	9108-138-4	U 24000.0000	U 24000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 24000.0000	U 10000.0000	U 10000.0000
2519	SD000000000.001	9108-138-5	U 42000.0000	U 42000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 42000.0000	J 1100.0000	U 17000.0000
2520	SD000000000.001	9108-138-6	U 24000.0000	U 24000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 24000.0000	J 1100.0000	U 10000.0000
2521	SD000000000.001	9108-138-7	U 18000.0000	U 18000.0000	U 7500.0000	U 7500.0000	U 7500.0000	U 18000.0000	U 7500.0000	U 7500.0000
2522	SD000000000.001	9108-138-8	U 33000.0000	U 33000.0000	U 14000.0000	U 14000.0000	U 14000.0000	U 33000.0000	J 1200.0000	U 14000.0000
2523	SD000000000.001	9108-138-9	U 42000.0000	U 42000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 42000.0000	J 2500.0000	U 17000.0000
2524	SD000000000.001	9108-138-10	U 47000.0000	U 47000.0000	U 19000.0000	U 19000.0000	U 19000.0000	U 47000.0000	J 2900.0000	U 19000.0000
2525	SD000000000.001	9108-172-3	U 84000.0000	U 84000.0000	U 35000.0000	U 35000.0000	U 35000.0000	U 84000.0000	J 4100.0000	U 35000.0000
2526	SD000000000.001	9108-172-4	U 42000.0000	U 42000.0000	U 17000.0000	U 17000.0000	U 17000.0000	U 42000.0000	J 4400.0000	U 17000.0000
2527	SD000000000.001	9108-172-10	U 76000.0000 UJ	U 76000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ	U 76000.0000 UJ	J 2300.0000 J4	U 31000.0000 UJ
2528	SD000000000.001	9108-172-12	U 86000.0000	U 86000.0000	U 36000.0000	U 36000.0000	U 36000.0000	U 86000.0000	J 10000.0000	U 36000.0000
2529	SD000000000.001	9108-172-5	U 64000.0000	U 64000.0000	U 26000.0000	U 26000.0000	U 26000.0000	U 64000.0000	J 8100.0000	U 26000.0000
2530	SD201000000.001	9108-172-8	U 22000.0000	U 22000.0000	U 8900.0000	U 8900.0000	U 8900.0000	U 22000.0000	J 2000.0000	U 8900.0000

STF Number	Lab Number	Carbazole (ug/kg)	Di-n-butyl-phthalate (ug/kg)	Fluoranthene (ug/kg)	Pyrene (ug/kg)	Butylbenzyl-phthalate (ug/kg)	3,3'-Dichloro-benzidine (ug/kg)	Benzo(a)anthracene (ug/kg)	Chrysene (ug/kg)
2501 SD000000000.001	9108-190-6	U 4200.0000	U 4200.0000	J 230.0000 J4	U 4200.0000	U 4200.0000	U 4200.0000	U 4200.0000	U 4200.0000
2502 SD000000000.001	9108-190-1	J 15000.0000	U 55000.0000	150000.0000	120000.0000	J 3600.0000	U 55000.0000	J 41000.0000 J4	75000.0000 J4
2503 SD000000000.001	9108-205-1	J 14000.0000 J4	U 30000.0000	120000.0000 J4	97000.0000 J4	J 3500.0000 J4	U 30000.0000	37000.0000 J4	59000.0000 J4
2504 SD000000000.001	9108-138-3	U 11000.0000	U 11000.0000	J 1300.0000	J 1400.0000	U 11000.0000	U 11000.0000	U 11000.0000	J 1200.0000
2505 SD000000000.001	9108-088-1	J 210.0000 J4	U 3500.0000	J 610.0000	J 810.0000	J 190.0000	U 3500.0000	J 220.0000	J 750.0000
2506 SD310000000.001	9108-088-2	U 3300.0000	U 3300.0000	J 500.0000	J 620.0000	U 3300.0000	U 3300.0000	J 560.0000	J 640.0000
2506 SD320000000.001	9108-088-3	U 9200.0000	U 9200.0000	U 9200.0000	J 770.0000	U 9200.0000	U 9200.0000	U 9200.0000	J 920.0000
2507 SD000000000.001	9108-088-4	J 270.0000 J4	U 4700.0000	J 1300.0000	J 1300.0000	U 4700.0000	U 4700.0000	J 480.0000	J 1400.0000
2508 SD310000000.001	9108-153-2	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000
2509 SD310000000.001	9108-088-5	U 1700.0000	U 1700.0000	J 220.0000	J 230.0000	U 1700.0000	U 1700.0000	J 120.0000	J 170.0000
2509 SD320000000.001	9108-088-6	U 2700.0000	U 2700.0000	U 2700.0000	J 240.0000	U 2700.0000	U 2700.0000	U 2700.0000	J 150.0000
2510 SD511000000.001	9108-153-6	U 2400.0000	U 2400.0000	J 510.0000	J 720.0000	U 2400.0000	U 2400.0000	J 290.0000	J 460.0000
2511 SD310000000.001	9108-088-7	J 66.0000 J4	U 520.0000	J 230.0000	J 310.0000	U 520.0000	U 520.0000	J 150.0000	J 320.0000
2511 SD320000000.001	9108-088-8	J 48.0000 J4	U 660.0000	J 160.0000	J 260.0000	J 54.0000	U 660.0000	J 100.0000	J 250.0000
2512 SD000000000.001	9108-088-9	J 52.0000 J4	U 700.0000	J 330.0000	J 470.0000	J 120.0000	U 700.0000	J 260.0000	J 480.0000
2513 SD000000000.001	9108-088-10	U 1800.0000	U 1800.0000	J 370.0000	J 470.0000	U 1800.0000	U 1800.0000	J 390.0000	J 620.0000
2514 SD000000000.001	9108-088-11	U 2100.0000	J 130.0000	J 630.0000	J 810.0000	J 1100.0000	U 2100.0000	J 450.0000	J 790.0000
2515 SD000000000.001	9108-088-12	U 2300.0000	U 2300.0000	J 780.0000	J 1100.0000	J 820.0000	U 2300.0000	J 380.0000	J 660.0000
2516 SD310000000.001	9108-088-13	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000
2516 SD320000000.001	9108-088-14	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000
2518 SD000000000.001	9108-138-4	U 10000.0000	U 10000.0000	J 820.0000	J 850.0000	U 10000.0000	U 10000.0000	U 580.0000	J 590.0000
2519 SD000000000.001	9108-138-5	U 17000.0000	U 17000.0000	J 2100.0000	J 2000.0000	U 17000.0000	U 17000.0000	U 17000.0000	J 1600.0000
2520 SD000000000.001	9108-138-6	U 10000.0000	U 10000.0000	J 2000.0000	J 2300.0000	U 10000.0000	U 10000.0000	J 690.0000 J4	J 1800.0000 J4
2521 SD000000000.001	9108-138-7	U 7500.0000	U 7500.0000	J 540.0000	J 530.0000	U 7500.0000	U 7500.0000	U 7500.0000	J 400.0000
2522 SD000000000.001	9108-138-8	U 14000.0000	U 14000.0000	J 2000.0000	J 2000.0000	U 14000.0000	U 14000.0000	J 530.0000	J 1400.0000
2523 SD000000000.001	9108-138-9	U 17000.0000	U 17000.0000	J 2900.0000	J 3500.0000	U 17000.0000	U 17000.0000	J 1000.0000	J 2400.0000
2524 SD000000000.001	9108-138-10	U 19000.0000	U 19000.0000	J 5700.0000	J 5200.0000	U 19000.0000	U 19000.0000	J 1600.0000	J 4400.0000
2525 SD000000000.001	9108-172-3	U 35000.0000	U 35000.0000	J 7700.0000	J 6100.0000	U 35000.0000	U 35000.0000	J 2100.0000	J 6000.0000
2526 SD000000000.001	9108-172-4	J 930.0000	U 17000.0000	J 8600.0000	J 8800.0000	J 1200.0000	U 17000.0000	J 2600.0000 J4	J 7400.0000 J4
2527 SD000000000.001	9108-172-10	U 31000.0000 UJ	U 31000.0000 UJ	J 4600.0000 J4	J 3000.0000 J4	U 31000.0000 UJ	U 31000.0000 UJ	U 31000.0000 UJ	J 3900.0000 J4
2528 SD000000000.001	9108-172-12	U 36000.0000	U 36000.0000	J 19000.0000	J 17000.0000	J 2000.0000	U 36000.0000	J 6300.0000	J 15000.0000 J4
2529 SD000000000.001	9108-172-5	U 26000.0000	U 26000.0000	J 14000.0000	J 14000.0000	J 2000.0000	U 26000.0000	J 4800.0000 J4	J 11000.0000
2530 SD201000000.001	9108-172-8	U 8900.0000	U 8900.0000	J 4000.0000	J 3800.0000	U 8900.0000	U 8900.0000	J 1500.0000 J4	J 3400.0000 J4

STF	Number	Lab Number	bis(2-Ethylhexyl) phthalate (ug/kg)	Di-n-octyl-phthalate (ug/kg)	Benzo(b)-fluoranthene (ug/kg)	Benzo(k)-fluoranthene (ug/kg)	Benzo(a)pyrene (ug/kg)	Indeno(1,2,3-cd)-pyrene (ug/kg)	Dibenzo(a,h)-anthracene (ug/kg)	Benzo(g,h,i)-perylene (ug/kg)
2501	SD000000000.001	9108-190-6	J 1000.0000 J4	U 4200.0000	U 4200.0000	U 4200.0000	U 4200.0000	U 4200.0000	U 4200.0000	U 4200.0000
2502	SD000000000.001	9108-190-1	160000.0000	J 6200.0000	86000.0000	U 55000.0000	J 43000.0000	J 34000.0000	J 13000.0000	J 34000.0000
2503	SD000000000.001	9108-205-1	91000.0000 J4	J 2800.0000 J4	75000.0000 J4	U 30000.0000	42000.0000 J4	J 28000.0000 J4	J 14000.0000 J4	30000.0000 J4
2504	SD000000000.001	9108-138-3	BJ 2700.0000 UJ	U 11000.0000	J 1800.0000	J 1100.0000	J 1100.0000	J 1300.0000	U 11000.0000	J 1500.0000
2505	SD000000000.001	9108-088-1	J 1600.0000	U 3500.0000	J 1200.0000	U 3500.0000	J 460.0000	J 490.0000	J 280.0000	J 570.0000
2506	SD310000000.001	9108-088-2	J 1600.0000	U 3300.0000	J 850.0000	J 2400.0000	J 270.0000	J 300.0000	U 3300.0000	J 330.0000
2506	SD320000000.001	9108-088-3	J 2400.0000	J 830.0000	J 1100.0000	J 2800.0000	U 9200.0000	J 570.0000	U 9200.0000	J 820.0000
2507	SD000000000.001	9108-088-4	J 2900.0000	U 4700.0000	J 2600.0000	U 4700.0000	J 830.0000	J 1400.0000	J 450.0000	J 1700.0000
2508	SD310000000.001	9108-153-2	J 210.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000	U 1900.0000
2509	SD310000000.001	9108-086-5	J 160.0000	U 1700.0000	J 180.0000	U 1700.0000	J 130.0000	J 92.0000	U 1700.0000	J 98.0000
2509	SD320000000.001	9108-088-6	J 390.0000	U 2700.0000	U 2700.0000	J 140.0000	U 2700.0000	U 2700.0000	U 2700.0000	U 2700.0000
2510	SD511000000.001	9108-153-6	J 260.0000	U 2400.0000	J 420.0000	J 160.0000 J4	J 350.0000	J 180.0000	U 2400.0000	J 210.0000
2511	SD310000000.001	9108-088-7	J 240.0000	U 520.0000	J 370.0000	U 520.0000	J 230.0000	J 150.0000	U 520.0000	J 170.0000
2511	SD320000000.001	9108-088-8	J 440.0000	U 660.0000	J 320.0000	U 660.0000	J 160.0000	J 130.0000	J 56.0000	J 150.0000
2512	SD000000000.001	9108-088-9	J 500.0000	U 700.0000	750.0000	U 700.0000	J 480.0000	J 340.0000	J 170.0000	J 380.0000
2513	SD000000000.001	9108-088-10	J 380.0000	U 1800.0000	J 950.0000	J 280.0000	J 800.0000	J 630.0000	J 270.0000	J 700.0000
2514	SD000000000.001	9108-088-11	J 610.0000	U 2100.0000	J 1200.0000	U 2100.0000	J 930.0000	J 740.0000	J 310.0000	J 850.0000
2515	SD000000000.001	9108-088-12	J 730.0000	U 2300.0000	J 730.0000	J 180.0000	J 530.0000	J 370.0000	J 160.0000	J 460.0000
2516	SD310000000.001	9108-088-13	J 61.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000
2516	SD320000000.001	9108-088-14	BJ 48.0000 UJ	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000	U 340.0000
2518	SD000000000.001	9108-138-4	BJ 1700.0000 UJ	U 10000.0000	J 830.0000	J 880.0000	J 620.0000	J 730.0000	U 10000.0000	J 980.0000
2519	SD000000000.001	9108-138-5	BJ 8500.0000 UJ	U 17000.0000	J 2300.0000	J 1400.0000	J 1400.0000	J 1500.0000	U 17000.0000	J 1900.0000
2520	SD000000000.001	9108-138-6	BJ 5200.0000 UJ	U 10000.0000	J 2000.0000	J 1500.0000	J 1400.0000	J 1700.0000	U 10000.0000	J 2000.0000
2521	SD000000000.001	9108-138-7	BJ 1700.0000 UJ	U 7500.0000	J 570.0000	U 7500.0000	U 7500.0000	U 7500.0000	U 7500.0000	J 510.0000
2522	SD000000000.001	9108-138-8	BJ 4000.0000 UJ	U 14000.0000	J 2600.0000	J 1800.0000	J 1400.0000	J 1700.0000	U 14000.0000	J 2100.0000
2523	SD000000000.001	9108-138-9	BJ 10000.0000 UJ	U 17000.0000	J 4400.0000	J 2200.0000	J 2600.0000	J 2500.0000	J 1000.0000	J 2900.0000
2524	SD000000000.001	9108-138-10	B 22000.0000 UJ	U 19000.0000	J 13000.0000	J 4100.0000	J 3500.0000	J 3400.0000	J 1200.0000	J 3700.0000
2525	SD000000000.001	9108-172-3	JB 27000.0000 UJ	U 35000.0000	J 9000.0000	J 5700.0000	J 4600.0000	J 5100.0000	U 35000.0000	J 6100.0000
2526	SD000000000.001	9108-172-4	26000.0000	U 17000.0000	J 6900.0000	J 5000.0000	J 5000.0000	J 5100.0000	J 1800.0000	J 5400.0000
2527	SD000000000.001	9108-172-10	J 16000.0000 J4	U 31000.0000 UJ	J 3500.0000 J4	J 1800.0000 J4	J 1800.0000 J4	U 31000.0000 UJ	U 31000.0000 UJ	J 1800.0000 J4
2528	SD000000000.001	9108-172-12	53000.0000	J 840.0000	J 25000.0000	U 36000.0000	J 12000.0000	J 12000.0000	J 4700.0000	J 14000.0000
2529	SD000000000.001	9108-172-5	38000.0000	U 26000.0000	J 14000.0000	J 6400.0000	J 8300.0000	J 6900.0000	J 2600.0000	J 6900.0000
2530	SD201000000.001	9108-172-8	J 8400.0000	U 8900.0000	J 4100.0000	J 2500.0000	J 2600.0000	J 2000.0000	J 760.0000	J 2100.0000

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/kg)	Validation
2501SD000000000.001	9108-190-6	Sulfur, mol. (S8)	JN	1900.00	
2502SD000000000.001	9108-190-1	Phenol, 4-(2,2,3,3-tetrameth	JN	14000.00	
		Heptadecane	JN	17000.00	
		Tridecane, 5-propyl-	JN	39000.00	
		UNKNOWN HYDROCARBON	JN	14000.00	
		UNKNOWN	JN	14000.00	
		Heptadecane, 2,6,10,15-tetra	JN	14000.00	
		UNKNOWN HYDROCARBON	JN	11000.00	
		9,10-Anthracenedione	JN	28000.00	
		UNKNOWN HYDROCARBON	JN	22000.00	
2503SD000000000.001	9108-205-1	Heptane, 2,2,3,4,6,6-hexamet	JN	6100.00	
		Pentane, 2,2,3,4-tetramethyl	JN	9100.00	
		Undecane	JN	9100.00	
		Docosane	JN	9100.00	
		Tridecane, 5-propyl-	JN	14000.00	
		Nonadecane	JN	7600.00	
		1H-Indene, 2-phenyl-	JN	6100.00	
		UNKNOWN	JN	11000.00	
		9,10-Anthracenedione	JN	24000.00	
		UNKNOWN HYDROCARBON	JN	7600.00	
		Sulfur, mol. (S8)	JN	15000.00	
		Heptadecane, 2,6,10,15-tetra	JN	12000.00	
2504SD000000000.001	9108-138-3	Pentadecanoic acid	JN	2700.00	
		Docosane	JN	11000.00	
		Tetratriacontane	JN	22000.00	
2505SD000000000.001	9108-088-1	UNKNOWN	JN	1000.00	
		UNKNOWN	JN	880.00	
		UNKNOWN	JN	700.00	
		UNKNOWN	JN	2100.00	
		UNKNOWN HYDROCARBON	JN	6800.00	
		UNKNOWN HYDROCARBON	JN	7000.00	
		UNKNOWN HYDROCARBON	JN	7700.00	
		15-Octadecenal	JN	5600.00	
		UNKNOWN	JN	9500.00	
2506SD310000000.001	9108-088-2	UNKNOWN HYDROCARBON	JN	670.00	
		Heptadecane	JN	670.00	
		UNKNOWN	JN	2700.00	
		2-Pentadecanone, 6,10,14-tri	JN	1000.00	
		1-Eicosyne	JN	2200.00	
		UNKNOWN HYDROCARBON	JN	2500.00	
		(Z)14-TRICOSENYL FORMATE	JN	2300.00	
		UNKNOWN HYDROCARBON	JN	11000.00	
		UNKNOWN HYDROCARBON	JN	15000.00	
		Palmitaldehyde, diisopropyl	JN	10000.00	
		UNKNOWN	JN	5800.00	
		UNKNOWN HYDROCARBON	JN	6800.00	
		UNKNOWN	JN	7500.00	
2506SD320000000.001	9108-088-3	UNKNOWN HYDROCARBON	JN	2300.00	
		UNKNOWN HYDROCARBON	JN	2300.00	
		UNKNOWN HYDROCARBON	JN	12000.00	

DATA VALIDATION
DATE RECEIVED
VALIDATED BY DATE
KEYED BY DATE
CHECKED BY SRM DATE 1/29/92

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/kg)	Validation
2507SD000000000.001	9108-088-4	UNKNOWN	JN	1700.00	
		2-Pentadecanone, 6,10,14-tri	JN	950.00	
		Cyclohexanol, 1-ethynyl-	JN	1700.00	
		UNKNOWN	JN	1200.00	
		Heptadecane, 2,6,10,15-tetra	JN	1900.00	
		UNKNOWN	JN	8100.00	
		UNKNOWN	JN	9800.00	
2508SD310000000.001	9108-153-2	UNKNOWN	JN	690.00	
		UNKNOWN	JN	2600.00	
		UNKNOWN HYDROCARBON	JN	2500.00	
		UNKNOWN	JN	490.00	
		UNKNOWN	JN	690.00	
		UNKNOWN	JN	490.00	
		UNKNOWN	JN	3400.00	
		UNKNOWN	JN	880.00	
		UNKNOWN	JN	8100.00	
		UNKNOWN HYDROCARBON	JN	780.00	
		UNKNOWN	JN	1200.00	
		UNKNOWN	JN	13000.00	
		UNKNOWN HYDROCARBON	JN	1900.00	
		UNKNOWN	JN	2000.00	
		UNKNOWN HYDROCARBON	JN	690.00	
		UNKNOWN	JN	2700.00	
		D-Friedoolean-14-en-3-one	JN	2000.00	
		UNKNOWN	JN	3800.00	
		STIGMAST-4-EN-3-ONE	JN	2600.00	
		UNKNOWN	JN	980.00	
2509SD310000000.001	9108-088-5	Benzene, 1,2,3,4-tetramethyl	JN	510.00	
		Tridecane, 6-propyl-	JN	510.00	
		Eicosane	JN	420.00	
		Dodecane, 2,7,10-trimethyl-	JN	340.00	
		NONADECANE	JN	420.00	
		HEXANEDIOIC ACID, MONO(2-ETH	JNB	2800.00	
2509SD320000000.001	9108-088-6	Tetradecane	JN	1500.00	
		UNKNOWN	JN	810.00	
		UNKNOWN	JN	940.00	
		UNKNOWN	JN	670.00	
		UNKNOWN	JN	1300.00	
		1-Undecene, 4-methyl-	JN	1600.00	
		UNKNOWN	JN	1500.00	
		UNKNOWN	JN	940.00	
		Heptadecane, 2,6,10,15-tetra	JN	1600.00	
		Hexadecane	JN	9300.00	
		Undecane, 4,6-dimethyl-	JN	9100.00	
		Nonadecane	JN	6200.00	
		UNKNOWN	JN	5200.00	
		Eicosane, 7-hexyl-	JN	1300.00	
		Hexanedioic acid, dioctyl es	JNB	2300.00	
		Docosane	JN	2700.00	
		UNKNOWN	JN	2300.00	
		UNKNOWN	JN	1500.00	

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/kg)	Validation
2510SD511000000.001	9108-153-6	9-Octadecen-1-ol, (Z)-	JNB	2000.00	
		3-Eicosene, (E)-	JN	1900.00	
		UNKNOWN HYDROCARBON	JN	1200.00	
		UNKNOWN	JN	2000.00	
2511SD310000000.001	9108-088-7	Benzene, 1,2,3,4-tetramethyl	JN	180.00	
		1H-Indene, 1-ethylidene-	JN	210.00	
		UNKNOWN HYDROCARBON	JN	470.00	
		Pyridine, 4-(3-phenylpropyl)	JN	180.00	
		1,2-Benzenedicarboxylic acid	JN	260.00	
		Nonadecane	JN	130.00	
		UNKNOWN	JN	260.00	
		UNKNOWN	JN	160.00	
		Hexadecanoic acid	JN	180.00	
		UNKNOWN HYDROCARBON	JN	180.00	
		ISOMER	JN	210.00	
		UNKNOWN	JN	180.00	
		UNKNOWN HYDROCARBON	JN	180.00	
		UNKNOWN	JNB	260.00	
		UNKNOWN HYDROCARBON	JN	600.00	
		UNKNOWN HYDROCARBON	JN	1000.00	
		UNKNOWN	JN	1000.00	
		UNKNOWN	JN	5500.00	
		UNKNOWN	JN	3100.00	
		UNKNOWN	JN	570.00	
2511SD320000000.001	9108-088-8	UNKNOWN	JN	130.00	
		UNKNOWN	JN	330.00	
		UNKNOWN	JN	370.00	
		UNKNOWN	JN	330.00	
		UNKNOWN	JN	330.00	
		UNKNOWN HYDROCARBON	JN	330.00	
		UNKNOWN HYDROCARBON	JN	230.00	
		UNKNOWN HYDROCARBON	JN	230.00	
		UNKNOWN HYDROCARBON	JN	500.00	
		UNKNOWN HYDROCARBON	JN	2600.00	
		UNKNOWN HYDROCARBON	JN	530.00	
		UNKNOWN HYDROCARBON	JN	3300.00	
		UNKNOWN	JN	830.00	
		UNKNOWN HYDROCARBON	JN	2200.00	
		UNKNOWN	JN	670.00	
		UNKNOWN	JN	700.00	
		UNKNOWN	JN	730.00	
		UNKNOWN	JN	1300.00	
		UNKNOWN	JN	1500.00	
		UNKNOWN	JN	1300.00	

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/kg)	Validation
2512SD000000000.001	9108-088-9	UNKNOWN	JN	500.00	
		Benzoic acid, phenylmethyl e	JN	390.00	
		Pentadecanoic acid	JN	320.00	
		UNKNOWN	JN	320.00	
		UNKNOWN	JN	1100.00	
		UNKNOWN	JN	460.00	
		UNKNOWN	JN	1900.00	
		UNKNOWN	JN	320.00	
		UNKNOWN HYDROCARBON	JN	500.00	
		UNKNOWN HYDROCARBON	JN	250.00	
		UNKNOWN HYDROCARBON	JN	350.00	
		UNKNOWN	JN	180.00	
		Eicosane, 7-hexyl-	JN	2900.00	
		UNKNOWN HYDROCARBON	JN	1100.00	
		UNKNOWN	JN	6400.00	
		15-Octadecenal	JN	2200.00	
		Heptadecane, 2,6,10,15-tetra	JN	530.00	
		UNKNOWN HYDROCARBON	JN	990.00	
		15-Octadecenal	JN	850.00	
		UNKNOWN	JN	1400.00	
2513SD000000000.001	9108-088-10	UNKNOWN	JN	560.00	
		Docosane	JN	740.00	
		UNKNOWN	JN	1100.00	
2514SD000000000.001	9108-088-11	UNKNOWN	JN	420.00	
		UNKNOWN	JN	730.00	
		Docosane	JN	1900.00	
2515SD000000000.001	9108-088-12	UNKNOWN	JN	810.00	
2516SD310000000.001	9108-088-13	Propanoic acid, 2-methyl-, 1	JNB	120.00	R
		UNKNOWN	JN	68.00	
		UNKNOWN	JN	220.00	
		Octacosane	JN	85.00	
		Hexanedioic acid, dioctyl es	JNB	120.00	
		Heptacosane	JN	200.00	
		UNKNOWN	JN	120.00	
		Octacosane	JN	120.00	
		Nonacosane	JN	490.00	
		UNKNOWN	JN	150.00	
		Eicosane, 7-hexyl-	JN	370.00	
		UNKNOWN	JN	200.00	
		UNKNOWN	JN	270.00	
		Stigmast-4-en-3-one	JN	460.00	

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/kg)	Validation
2516SD320000000.001	9108-088-14	2-Pentanone, 4-hydroxy-4-met	JNB	220.00	R
		UNKNOWN	JNB	120.00	
		Hexadecanoic acid	JN	120.00	
		UNKNOWN	JN	460.00	
		UNKNOWN HYDROCARBON	JN	120.00	
		Hexanedioic acid, dioctyl es	JNB	140.00	R
		UNKNOWN HYDROCARBON	JN	270.00	
		UNKNOWN HYDROCARBON	JN	320.00	
		Hexadecanal	JN	220.00	
		UNKNOWN HYDROCARBON	JN	990.00	
		UNKNOWN HYDROCARBON	JN	100.00	
		Eicosane	JN	310.00	
		UNKNOWN	JN	150.00	
		UNKNOWN HYDROCARBON	JN	200.00	
		UNKNOWN	JN	100.00	
		UNKNOWN	JN	340.00	
		UNKNOWN	JN	200.00	
		UNKNOWN	JN	170.00	
2518SD000000000.001	9108-138-4	Hexadecane, 3-methyl-	JN	20000.00	
		(Z)14-TRICOSENYL FORMATE	JN	13000.00	
2519SD000000000.001	9108-138-5	Tetratriacontane	JN	10000.00	
		UNKNOWN	JN	19000.00	
		UNKNOWN	JN	61000.00	
		UNKNOWN	JN	13000.00	
2520SD000000000.001	9108-138-6	UNKNOWN	JN	35000.00	
		UNKNOWN	JN	20000.00	
		UNKNOWN	JN	22000.00	
2521SD000000000.001	9108-138-7	Tridecane, 6-propyl-	JN	5700.00	
		UNKNOWN	JN	13000.00	
2522SD000000000.001	9108-138-8	UNKNOWN	JN	3500.00	
2524SD000000000.001	9108-138-10	Hexadecanoic acid	JN	3900.00	R
2526SD000000000.001	9108-172-4	UNKNOWN	JN	11000.00	
2527SD000000000.001	9108-172-10	NONANOIC ACID	JN	40000.00	
		THIAZOLE	JN	9500.00	
		DECANOIC ACID	JN	11000.00	
		PENTADECANE	JN	27000.00	
		5-OCTADECENE, (E)-	JN	65000.00	
		HEPTADECANE	JN	19000.00	
		TETRADECANOIC ACID	JN	51000.00	
		UNKNOWN	JN	12000.00	
		9-HEXADECENOIC ACID	JN	24000.00	
		DODECANAMIDE, N,N-BIS(2-HYDR	JN	980000.00	
		UNKNOWN	JN	25000.00	
		11-OCTADECENOIC ACID, METHYL	JN	1700000.00	
		UNKNOWN	JN	160000.00	
		UNKNOWN	JN	160000.00	
		UNKNOWN	JN	19000.00	
		UNKNOWN	JN	19000.00	
		UNKNOWN	JN	27000.00	
		OLEIC ACID, EICOSYL ESTER	JN	27000.00	
		9-OCTADECENOIC ACID (Z)-, OC	JN	14000.00	
		UNKNOWN	JN	12000.00	
2528SD000000000.001	9108-172-12	UNKNOWN	JN	7200.00	
2530SD201000000.001	9108-172-8	UNKNOWN	JN	2200.00	

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

WET SEASON (JANUARY 1992)
SURFACE WATER ANALYTICAL RESULTS

STF	Number	Lab Number	Phenol (ug/L)	bis(2-Chloroethyl) ether (ug/L)	2-Chlorophenol (ug/L)	1,3-Dichlorobenzene (ug/L)	1,4-Dichlorobenzene (ug/L)	1,2-Dichlorobenzene (ug/L)	2-Methylphenol (ug/L)	2,2'-oxybis(1-Chloropropane) (ug/L)
2501	SU0000000000.002	9201-169-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2502	SU3100000000.002	9201-220-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2503	SU0000000000.002	9201-220-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2505	SU0000000000.002	9201-110-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506	SU3100000000.002	9201-110-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506	SU3200000000.002	9201-110-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2507	SU2010000000.002	9201-110-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2508	SU0000000000.002	9201-110-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509	SU3100000000.002	9201-095-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509	SU3200000000.002	9201-095-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2510	SU0000000000.002	9201-095-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511	SU3100000000.002	9201-095-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511	SU3200000000.002	9201-095-9	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2512	SU0000000000.002	9201-095-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516	SU3200000000.002	9201-220-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516	SU5110000000.002	9201-220-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2518	SU0000000000.002	9201-156-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2519	SU0000000000.002	9201-156-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2520	SU0000000000.002	9201-156-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2521	SU0000000000.002	9201-156-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2527	SU0000000000.002	9201-156-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2528	SU2010000000.002	9201-169-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529	SU0000000000.002	9201-169-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2530	SU0000000000.002	9201-169-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

DATA VALIDATION
DATE RECEIVED _____
VALIDATED BY _____ DATE _____
KEYED BY _____ DATE _____
CHECKED BY [signature] DATE 3/27/92

STF Number	Lab Number	4-Methylphenol (ug/L)	N-Nitroso-di-n-dipropylamine (ug/L)	Hexachloroethane (ug/L)	Nitrobenzene (ug/L)	Isophorone (ug/L)	2-Nitrophenol (ug/L)	2,4-Dimethylphenol (ug/L)	bis(2-Chloro-ethoxy) methane (ug/L)
2501 SU000000000.002	9201-169-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2502 SU310000000.002	9201-220-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2503 SU000000000.002	9201-220-4	J 0.7000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2505 SU000000000.002	9201-110-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506 SU310000000.002	9201-110-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506 SU320000000.002	9201-110-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2507 SU201000000.002	9201-110-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2508 SU000000000.002	9201-110-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU310000000.002	9201-095-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU320000000.002	9201-095-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2510 SU000000000.002	9201-095-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU310000000.002	9201-095-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU320000000.002	9201-095-9	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2512 SU000000000.002	9201-095-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU320000000.002	9201-220-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU511000000.002	9201-220-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2518 SU000000000.002	9201-156-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2519 SU000000000.002	9201-156-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2520 SU000000000.002	9201-156-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2521 SU000000000.002	9201-156-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2527 SU000000000.002	9201-156-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2528 SU201000000.002	9201-169-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 SU000000000.002	9201-169-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2530 SU000000000.002	9201-169-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	2,4-Dichlorophenol (ug/L)	1,2,4-Trichlorobenzene (ug/L)	Naphthalene (ug/L)	4-Chloroaniline (ug/L)	Hexachlorobutadiene (ug/L)	4-Chloro-3-methylphenol (ug/L)	2-Methylnaphthalene (ug/L)	Hexachlorocyclopentadiene (ug/L)
2501 SU000000000.002	9201-169-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2502 SU310000000.002	9201-220-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2503 SU000000000.002	9201-220-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2505 SU000000000.002	9201-110-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506 SU310000000.002	9201-110-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506 SU320000000.002	9201-110-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2507 SU201000000.002	9201-110-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2508 SU000000000.002	9201-110-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU310000000.002	9201-095-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU320000000.002	9201-095-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2510 SU000000000.002	9201-095-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU310000000.002	9201-095-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU320000000.002	9201-095-9	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2512 SU000000000.002	9201-095-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU320000000.002	9201-220-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU511000000.002	9201-220-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2518 SU000000000.002	9201-156-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2519 SU000000000.002	9201-156-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2520 SU000000000.002	9201-156-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2521 SU000000000.002	9201-156-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2527 SU000000000.002	9201-156-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2528 SU201000000.002	9201-169-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 SU000000000.002	9201-169-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2530 SU000000000.002	9201-169-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF	Number	Lab Number	2,4,6-Trichlorophenol (ug/L)		2,4,5-Trichlorophenol (ug/L)		2-Chloronaphthalene (ug/L)		2-Nitroaniline (ug/L)		Dimethylphthalate (ug/L)		Acenaphthylene (ug/L)		2,6-Dinitrotoluene (ug/L)		3-Nitroaniline (ug/L)	
2501	SU0000000000.002	9201-169-2	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000
2502	SU3100000000.002	9201-220-2	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000
2503	SU0000000000.002	9201-220-4	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000
2505	SU0000000000.002	9201-110-1	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000
2506	SU3100000000.002	9201-110-3	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000
2506	SU3200000000.002	9201-110-4	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000
2507	SU2010000000.002	9201-110-6	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000
2508	SU0000000000.002	9201-110-8	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000
2509	SU3100000000.002	9201-095-2	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000
2509	SU3200000000.002	9201-095-3	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000
2510	SU0000000000.002	9201-095-5	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000
2511	SU3100000000.002	9201-095-8	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000
2511	SU3200000000.002	9201-095-9	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000
2512	SU0000000000.002	9201-095-11	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000
2516	SU3200000000.002	9201-220-7	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000
2516	SU5110000000.002	9201-220-8	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000
2518	SU0000000000.002	9201-156-2	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000
2519	SU0000000000.002	9201-156-3	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000
2520	SU0000000000.002	9201-156-4	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000
2521	SU0000000000.002	9201-156-5	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000
2527	SU0000000000.002	9201-156-7	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000
2528	SU2010000000.002	9201-169-4	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000
2529	SU0000000000.002	9201-169-6	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000
2530	SU0000000000.002	9201-169-8	U	10.0000	U	25.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000

STF Number	Lab Number	Acenaphthene (ug/L)	2,4-Dinitrophenol (ug/L)	4-Nitrophenol (ug/L)	Dibenzofuran (ug/L)	2,4-Dinitrotoluene (ug/L)	Diethylphthalate (ug/L)	4-Chlorophenyl-phenylether (ug/L)	Fluorene (ug/L)
2501 SU0000000000.002	9201-169-2	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	J 0.6000	U 10.0000	U 10.0000
2502 SU3100000000.002	9201-220-2	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2503 SU0000000000.002	9201-220-4	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2505 SU0000000000.002	9201-110-1	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506 SU3100000000.002	9201-110-3	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506 SU3200000000.002	9201-110-4	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2507 SU2010000000.002	9201-110-6	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2508 SU0000000000.002	9201-110-8	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU3100000000.002	9201-095-2	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU3200000000.002	9201-095-3	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2510 SU0000000000.002	9201-095-5	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU3100000000.002	9201-095-8	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU3200000000.002	9201-095-9	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2512 SU0000000000.002	9201-095-11	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU3200000000.002	9201-220-7	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU5110000000.002	9201-220-8	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2518 SU0000000000.002	9201-156-2	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2519 SU0000000000.002	9201-156-3	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2520 SU0000000000.002	9201-156-4	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2521 SU0000000000.002	9201-156-5	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2527 SU0000000000.002	9201-156-7	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2528 SU2010000000.002	9201-169-4	U 10.0000	U 25.0000	J 2.0000 J4	U 10.0000	U 10.0000	J 0.9000	U 10.0000	U 10.0000
2529 SU0000000000.002	9201-169-6	U 10.0000	U 25.0000	J 1.0000 J4	U 10.0000	U 10.0000	J 0.6000	U 10.0000	U 10.0000
2530 SU0000000000.002	9201-169-8	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	J 0.6000	U 10.0000	U 10.0000

STF Number	Lab Number	4-Nitroaniline (ug/L)	4,6-Dinitro-2-methylphenol (ug/L)	N-nitrosodiphenylamine (ug/L)	4-Bromophenyl-phenylether (ug/L)	Hexachlorobenzene (ug/L)	Pentachlorophenol (ug/L)	Phenanthrene (ug/L)	Anthracene (ug/L)
2501 SU000000000.002	9201-169-2	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	J 8.7000	U 10.0000
2502 SU310000000.002	9201-220-2	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	J 6.0000	J 0.9000	U 10.0000
2503 SU000000000.002	9201-220-4	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	J 5.0000	J 1.0000	U 10.0000
2505 SU000000000.002	9201-110-1	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2506 SU310000000.002	9201-110-3	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2506 SU320000000.002	9201-110-4	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2507 SU201000000.002	9201-110-6	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2508 SU000000000.002	9201-110-8	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2509 SU310000000.002	9201-095-2	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2509 SU320000000.002	9201-095-3	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2510 SU000000000.002	9201-095-5	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2511 SU310000000.002	9201-095-8	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2511 SU320000000.002	9201-095-9	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2512 SU000000000.002	9201-095-11	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2516 SU320000000.002	9201-220-7	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2516 SU511000000.002	9201-220-8	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2518 SU000000000.002	9201-156-2	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2519 SU000000000.002	9201-156-3	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2520 SU000000000.002	9201-156-4	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2521 SU000000000.002	9201-156-5	U 25.0000	U 25.0000	J 1.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2527 SU000000000.002	9201-156-7	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	J 1.0000	U 10.0000
2528 SU201000000.002	9201-169-4	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2529 SU000000000.002	9201-169-6	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2530 SU000000000.002	9201-169-8	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000

STF Number	Lab Number	Carbazole (ug/L)	Di-n-butyl-phthalate (ug/L)	Fluoranthene (ug/L)	Pyrene (ug/L)	Butylbenzyl-phthalate (ug/L)	3,3'-Dichloro-benzidine (ug/L)	Benzo(a)anthracene (ug/L)	Chrysene (ug/L)
2501 SU0000000000.002	9201-169-2	U 10.0000	J 0.5000 UJ	J 2.0000	J 2.0000	J 0.6000	U 10.0000	U 10.0000	J 1.0000
2502 SU3100000000.002	9201-220-2	U 10.0000	U 10.0000	J 3.0000	J 2.0000	U 10.0000	U 10.0000	J 0.7000	J 1.0000
2503 SU0000000000.002	9201-220-4	U 10.0000	U 10.0000	J 3.0000	J 3.0000	J 0.5000	U 10.0000	J 0.5000	J 2.0000
2505 SU0000000000.002	9201-110-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506 SU3100000000.002	9201-110-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506 SU3200000000.002	9201-110-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2507 SU2010000000.002	9201-110-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2508 SU0000000000.002	9201-110-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU3100000000.002	9201-095-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU3200000000.002	9201-095-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2510 SU0000000000.002	9201-095-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU3100000000.002	9201-095-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU3200000000.002	9201-095-9	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2512 SU0000000000.002	9201-095-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU3200000000.002	9201-220-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU5110000000.002	9201-220-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2518 SU0000000000.002	9201-156-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2519 SU0000000000.002	9201-156-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2520 SU0000000000.002	9201-156-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2521 SU0000000000.002	9201-156-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2527 SU0000000000.002	9201-156-7	U 10.0000	U 10.0000	J 3.0000	J 2.0000	U 10.0000	U 10.0000	J 0.7000	J 2.0000
2528 SU2010000000.002	9201-169-4	U 10.0000	U 10.0000	J 0.6000	J 0.5000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 SU0000000000.002	9201-169-6	U 10.0000	U 10.0000	J 0.7000	J 0.6000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2530 SU0000000000.002	9201-169-8	U 10.0000	U 10.0000	J 0.6000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	bis(2-Ethylhexyl) phthalate (ug/L)	Di-n-octyl-phthalate (ug/L)	Benzo(b)-fluoranthene (ug/L)	Benzo(k)-fluoranthene (ug/L)	Benzo(a)pyrene (ug/L)	Indeno(1,2,3-cd)-pyrene (ug/L)	Dibenzo(a,h)-anthracene (ug/L)	Benzo(g,h,i)-perylene (ug/L)
2501 SU0000000000.002	9201-169-2	J 5.0000	U 10.0000	J 0.9000	J 0.7000	J 0.6000	J 0.6000	U 10.0000	J 0.6000
2502 SU3100000000.002	9201-220-2	J 5.0000	U 10.0000	J 1.0000	J 1.0000	J 0.7000	J 0.7000	U 10.0000	J 0.7000
2503 SU0000000000.002	9201-220-4	J 7.0000	J 0.6000 J4	J 2.0000	J 0.9000	J 0.8000	J 0.9000	U 10.0000	J 1.0000
2505 SU0000000000.002	9201-110-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506 SU3100000000.002	9201-110-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2506 SU3200000000.002	9201-110-4	J 0.9000 UJ	J 0.7000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2507 SU2010000000.002	9201-110-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2508 SU0000000000.002	9201-110-8	J 0.7000 UJ	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU3100000000.002	9201-095-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SU3200000000.002	9201-095-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2510 SU0000000000.002	9201-095-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU3100000000.002	9201-095-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2511 SU3200000000.002	9201-095-9	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2512 SU0000000000.002	9201-095-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU3200000000.002	9201-220-7	37.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 SU5110000000.002	9201-220-8	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2518 SU0000000000.002	9201-156-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2519 SU0000000000.002	9201-156-3	J 0.6000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2520 SU0000000000.002	9201-156-4	J 1.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2521 SU0000000000.002	9201-156-5	J 0.7000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2527 SU0000000000.002	9201-156-7	J 7.0000	U 10.0000	J 1.0000	J 1.0000	J 1.0000	J 1.0000	J 0.5000	U 10.0000
2528 SU2010000000.002	9201-169-4	J 6.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 SU0000000000.002	9201-169-6	J 2.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2530 SU0000000000.002	9201-169-8	J 1.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/L)	Validation
2501SU000000000.002	9201-169-2	1-Propene, 3,3,3-trichloro-	JNB	6.00	R
		Ethanol, 2-(2-butoxyethoxy)-	JN	3.00	
		Unknown	JN	2.00	
		Ethanol, 2,2'-[oxybis(2,1-et	JN	4.00	
		Unknown	JN	4.00	
		Unknown	JN	3.00	
		Unknown	JN	2.00	
		3,6,9,12-Tetraoxahexadecan-1	JN	4.00	
		9,10-Anthracenedione	JN	2.00	
		Unknown	JN	4.00	
2502SU310000000.002	9201-220-2	Unknown	JNB	2.00	
		1-Propene, 3,3,3-trichloro-	JNB	3.00	R
		Unknown	JN	7.00	
		PROPANEDINITRILE, DICYCLOHEX	JNB	2.00	R
		Ethanol, 2-[2-(2-methoxyetho	JN	7.00	
		Triethylene glycol (ACN)(8CI	JN	4.00	
		2-Cyclohexen-1-one, 2-methyl	JN	3.00	
		Ethanol, 2-[2-(2-ethoxyethox	JN	8.00	
		Unknown	JN	2.00	
		3,6,9,12-Tetraoxahexadecan-1	JN	4.00	
		Pentatriacontane	JN	4.00	
2503SU000000000.002	9201-220-4	PROPANOIC ACID, 2-HYDOXY-, M	JN	2.00	
		Propanedioic acid, dimethyl-	JN	2.00	
		Unknown	JN	8.00	
		1-Propene, 3,3,3-trichloro-	JNB	4.00	R
		Unknown	JN	3.00	
		Unknown	JN	4.00	
		Propanedinitrile, dicyclohex	JNB	3.00	R
		Ethanol, 2-[2-(2-methoxyetho	JN	4.00	
		2-Cyclohexen-1-one, 2-methyl	JN	2.00	
		Ethanol, 2-[2-(2-ethoxyethox	JN	4.00	
		Ethanol, 2-[2-(2-butoxyethox	JN	2.00	
		Ethanol, 2-[2-(2-methoxyetho	JN	2.00	
		Phenol, 2,6-bis(1,1-dimethyl	JN	2.00	
		3,6,9,12-Tetraoxahexadecan-1	JN	4.00	
		Heptadecane, 8-methyl-	JN	9.00	
2505SU000000000.002	9201-110-1	2-PENTANONE, 4-HYDROXY-4-MET	JNB	6.00	R
		Unknown	JNB	6.00	
		2-CYCLOHEXEN-1-OL	JN	2.00	
		1-PROPENE, 3,3,3-TRICHLORO-	JNB	8.00	R
		OCTANE, 2,2,6-TRIMETHYL-	JN	2.00	
		DECANE, 2,2,7-TRIMETHYL-	JN	2.00	
		HEXANE, 2,2,5,5-TETRAMETHYL-	JN	2.00	
		2-HEXENE, 4,4,5-TRIMETHYL-	JN	2.00	
2506SU310000000.002	9201-110-3	2-PENTANONE, 4-HYDROXY-4-MET	JNB	5.00	R
		Unknown	JNB	6.00	
		1-PROPENE, 3,3,3-TRICHLORO	JNB	5.00	R
		Unknown	JN	2.00	
2506SU320000000.002	9201-110-4	2-PENTANONE, 4-hydroxy-3-met	JNB	4.00	R
		Unknown	JNB	4.00	
		1-Propene, 3,3,3-trichloro-	JNB	8.00	R
		Hexanoic acid, 2-ethyl-	JN	3.00	
		PROPANEDINITRILE, DICYCLOHEX	JNB	2.00	R

DATA VALIDATION
DATE RECEIVED _____
VALIDATED BY _____ DATE _____
KEYED BY _____ DATE _____
CHECKED BY JRM DATE 3/27/92

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/L)	Validation
2507SU201000000.002	9201-110-6	2-Pentanone, 4-hydroxy-4-met	JNB	4.00	R
		Unknown	JNB	4.00	
		2-Cyclohexen-1-ol	JN	2.00	
		1-PROPENE, 3,3,3-TRICHLORO-	JNB	4.00	R
		Propanedinitrile, dicyclohex	JNB	2.00	R
2508SU000000000.002	9201-110-8	2-Pentanone, 4-hydroxy-4-met	JNB	4.00	R
		Unknown	JNB	4.00	
		1-Propene, 3,3,3-trichloro-	JNB	12.00	R
		PROPANEDINITRILE, DICYCLOHEX	JNB	4.00	R
2509SU310000000.002	9201-095-2	2-Pentanone, 4-hydroxy-4-met	JNB	6.00	R
		Unknown	JNB	6.00	
		1-Propene, 3,3,3-trichloro-	JNB	8.00	R
		PROPANEDINITRILE, DICYCLOHEX	JNB	3.00	R
2509SU320000000.002	9201-095-3	1-PROPENE, 3,3,3-TRICHLORO-	JNB	10.00	R
		Propanedinitrile, dicyclohex	JNB	3.00	R
2510SU000000000.002	9201-095-5	2-PENTANONE, 4-HYDROXY-4-MET	JNB	4.00	R
		Unknown	JNB	5.00	
		1-PROPENE, 3,3,3-TRICHLORO-	JNB	8.00	R
		PROPANEDINITRILE, DICYCLOHEX	JNB	2.00	R
2511SU310000000.002	9201-095-8	2-PENTANONE, 4-HYDROXY-4-MET	JNB	4.00	R
		Unknown	JNB	4.00	
		3-CYCLOHEXEN-1-OL	JN	2.00	
		1-PROPENE, 3,3,3-TRICHLORO-	JNB	8.00	R
		HEXANEDIOIC ACID, DIOCTYL ES	JN	2.00	
2511SU320000000.002	9201-095-9	2-PENTANONE, 4-HYDROXY-4-MET	JNB	6.00	R
		Unknown	JNB	4.00	
		1-PROPENE, 3,3,3-TRICHLORO-	JNB	4.00	R
		CYCLODODECANE	JN	7.00	
		1-HEXADECANOL	JN	8.00	
		CYCLOHEXADECANE	JN	2.00	
		HEXADECANOIC ACID, 2-HYDROXY	JN	3.00	
		OCTADECANOIC ACID, 2-HYDROXY	JN	2.00	
2512SU000000000.002	9201-095-11	2-PENTANONE, 4-HYDROXY-4-MET	JNB	4.00	R
		1-PROPENE, 3,3,3-TRICHLORO-	JNB	2.00	R
		3-CYCLOHEXEN-1-OL	JN	6.00	
		HEXADECANOIC ACID, 1,2-ETHAN	JN	14.00	
		OCTADECANOIC ACID, 2-[(1-OXO	JN	20.00	
2516SU320000000.002	9201-220-7	Unknown	JNB	4.00	
		1-Propene, 3,3,3-trichloro-	JNB	9.00	R
		Propanedinitrile, dicyclohex	JNB	8.00	R
		1-Propanol, 2-(2-methoxyprop	JN	2.00	
		Unknown	JN	2.00	
2516SU511000000.002	9201-220-8	Unknown	JNB	4.00	
		1-Propene, 3,3,3-trichloro-	JNB	14.00	R
		Propanedinitrile, dicyclohex	JNB	11.00	R
		2-Propanol, 1-[1-methyl-2-(2	JN	3.00	
2518SU000000000.002	9201-156-2	1-PROPENE, 3,3,3-TRICHLORO-	JNB	8.00	R
		PROPANEDINITRILE, DICYCLOHEX	JNB	2.00	R
		UNKNOWN	JN	2.00	
		Phenol, 2,6-bis(1,1-dimethyl	JNB	2.00	R
		1-Propanol, 2-(2-methoxyprop	JNB	6.00	R
		Unknown	JNB	8.00	
		Docosane	JN	3.00	

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/L)	Validation
2519SU000000000.002	9201-156-3	Unknown	JN	5.00	
		1-PROPENE, 3,3,3,-TRICHLORO-	JNB	4.00	R
		PROPANEDINITILE, DICYCLOHEX	JNB	2.00	R
		Phenol, 2,6-bis(1,1-dimethyl	JNB	2.00	R
2520SU000000000.002	9201-156-4	1-Propene, 3,3,3-trichloro-	JNB	4.00	R
		PROPANEDINITRILE, DICYCLOHEX	JNB	2.00	R
		Nonacosane	JN	2.00	
2521SU000000000.002	9201-156-5	1-Propene, 3,3,3-trichloro-	JNB	4.00	R
		PROPANEDINITRILE, DICYCLOHEX	JNB	4.00	R
		1-Propanol, 2-(2-methoxyprop	JNB	11.00	R
		Unknown	JNB	16.00	
		Nonacosane	JN	6.00	
		Unknown	JN	2.00	
2527SU000000000.002	9201-156-7	1-Propene, 3,3,3-trichloro-	JNB	4.00	R
		PROPANEDINITRILE, DICYCLOHEX	JNB	2.00	R
		Unknown	JN	2.00	
		Unknown	JN	4.00	
		Hexadecanoic acid	JN	2.00	
		Sulfur, mol. (S8)	JN	4.00	
2528SU201000000.002	9201-169-4	Unknown	JN	4.00	
		1-Propene, 3,3,3-trichloro-	JNB	4.00	R
		Unknown	JN	4.00	
		Unknown	JN	4.00	
		PROPANEDINITRILE, DICYCLOHEX	JNB	2.00	R
		Unknown	JN	3.00	
		Unknown	JN	8.00	
		PROPANE, 2-METHYL-1-PROPOXY-	JN	6.00	
		Unknown	JN	2.00	
		Unknown	JN	4.00	
		Unknown	JN	3.00	
		Ethanol, 2-[2-(2-butoxyethox	JN	4.00	
		Ethanol, 2-[2-(2-methoxyetho	JN	4.00	
		Phenol, 2,6-bis(1,1-dimethyl	JNB	3.00	R
		3,6,9,12-Tetraoxahexadecan-1	JN	6.00	
		Hexanedioic acid, dioctyl es	JN	4.00	
		Unknown	JN	3.00	

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/L)	Validation
2529SU000000000.002	9201-169-6	Unknown	JN	4.00	
		1-Propene, 3,3,3-trichloro-	JNB	6.00	R
		2-Butanol, 3,3'-oxybis-	JN	4.00	
		Unknown	JN	2.00	
		2-Hexene, 4,4,5-trimethyl-	JN	3.00	
		Unknown	JN	3.00	
		Unknown	JN	2.00	
		Propane, 2-methyl-1-propoxy-	JN	5.00	
		Unknown	JN	2.00	
		Unknown	JN	4.00	
		Ethanol, 2-[2-(2-butoxyethox	JN	4.00	
		Ethanol, 2-[2-(2-methoxyetho	JN	2.00	
		Phenol, 2,6-bis(1,1-dimethyl	JNB	2.00	R
		2,5,8,11,14,17-HEXAOXAOCTADE	JN	2.00	
		3,6,9,12-Tetraoxahexadecan-1	JN	5.00	
		Caffeine (8CI)	JN	2.00	
		Eicosane, 10-methyl-	JN	2.00	
		Unknown	JN	4.00	
		Hexadecane	JN	2.00	
2530SU000000000.002	9201-169-8	1-Propene, 3,3,3-trichloro-	JNB	9.00	R
		Propanoic acid, 2-hydroxy-2-	JN	4.00	
		Unknown	JN	6.00	
		PROPANEDINITRILE, DICYCLOHEX	JNB	3.00	R
		Unknown	JN	4.00	
		Unknown	JN	8.00	
		Unknown	JN	3.00	
		Ethanol, 2-[2-(2-ethoxyethox	JN	8.00	
		Unknown	JN	6.00	
		Unknown	JN	4.00	
		Unknown	JN	4.00	
		Ethanol, 2-[2-(2-butoxyethox	JN	8.00	
		2,5,8,11,14-Pentaoxahexadeca	JN	4.00	
		Phenol, 2,6-bis(1,1-dimethyl	JNB	2.00	R
		3,6,9,12-Tetraoxahexadecan-1	JN	8.00	
		Caffeine (8CI)	JN	2.00	
		Ethanol, 2-butoxy-, phosphat	JN	4.00	
		Unknown	JN	3.00	

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

WET SEASON (JANUARY 1992)
SEDIMENT ANALYTICAL RESULTS

STF Number	Lab Number		Phenol (ug/kg)		bis(2-Chloro-ethyl) ether (ug/kg)		2-Chlorophenol (ug/kg)		1,3-Dichloro-benzene (ug/kg)		1,4-Dichloro-benzene (ug/kg)		1,2-Dichloro-benzene (ug/kg)		2-Methylphenol (ug/kg)		2,2'-oxybis (1-Chloropropane) (ug/kg)	
2501 SD000000000.002	9201-169-1	U	770.0000	U	770.0000	U	770.0000	U	770.0000	U	770.0000	U	770.0000	U	770.0000	U	770.0000	
2502 SD310000000.002	9201-220-1	U	55000.0000	U	55000.0000	U	55000.0000	U	55000.0000	U	55000.0000	U	55000.0000	U	55000.0000	U	55000.0000	
2503 SD000000000.002	9201-220-3	U	44000.0000	U	44000.0000	U	44000.0000	U	44000.0000	U	44000.0000	U	44000.0000	U	44000.0000	U	44000.0000	
2504 SD000000000.002	9201-086-1	U	1400.0000	U	1400.0000	U	1400.0000	U	1400.0000	U	1400.0000	U	1400.0000	U	1400.0000	U	1400.0000	
2506 SD320000000.002	9201-110-2	U	2500.0000	U	2500.0000	U	2500.0000	U	2500.0000	U	2500.0000	U	2500.0000	U	2500.0000	U	2500.0000	
2507 SD201000000.002	9201-110-5	U	4700.0000	U	4700.0000	U	4700.0000	U	4700.0000	U	4700.0000	U	4700.0000	U	4700.0000	U	4700.0000	
2508 SD000000000.002	9201-110-7	U	2900.0000	U	2900.0000	U	2900.0000	U	2900.0000	U	2900.0000	U	2900.0000	U	2900.0000	U	2900.0000	
2509 SD310000000.002	9201-095-1		420.0000	U	420.0000	U	420.0000	U	420.0000	U	420.0000	U	420.0000	U	420.0000	U	420.0000	
2509 SD310000000.002	9201-095-1DL	U	10000.0000 R	U	10000.0000 R	U	10000.0000 R	U	10000.0000 R	U	10000.0000 R	U	10000.0000 R	U	10000.0000 R	U	10000.0000 R	
2509 SD320000000.002	9201-110-9	J	1900.0000	U	6600.0000	U	6600.0000	U	6600.0000	U	6600.0000	U	6600.0000	U	6600.0000	U	6600.0000	
2510 SD000000000.002	9201-110-10	U	4900.0000	U	4900.0000	U	4900.0000	U	4900.0000	U	4900.0000	U	4900.0000	U	4900.0000	U	4900.0000	
2511 SD310000000.002	9201-095-6	U	450.0000	U	450.0000	U	450.0000	U	450.0000	U	450.0000	U	450.0000	U	450.0000	U	450.0000	
2511 SD320000000.002	9201-095-7	U	1000.0000	U	1000.0000	U	1000.0000	U	1000.0000	U	1000.0000	U	1000.0000	U	1000.0000	U	1000.0000	
2512 SD000000000.002	9201-095-10	U	610.0000	U	610.0000	U	610.0000	U	610.0000	U	610.0000	U	610.0000	U	610.0000	U	610.0000	
2513 SD000000000.002	9201-086-2	U	450.0000	U	450.0000	U	450.0000	U	450.0000	U	450.0000	U	450.0000	U	450.0000	U	450.0000	
2514 SD000000000.002	9201-086-3	U	520.0000	U	520.0000	U	520.0000	U	520.0000	U	520.0000	U	520.0000	U	520.0000	U	520.0000	
2515 SD000000000.002	9201-086-4	U	990.0000	U	990.0000	U	990.0000	U	990.0000	U	990.0000	U	990.0000	U	990.0000	U	990.0000	
2516 SD320000000.002	9201-220-5	U	670.0000	U	670.0000	U	670.0000	U	670.0000	U	670.0000	U	670.0000	U	670.0000	U	670.0000	
2516 SD511000000.002	9201-220-6	U	430.0000	U	430.0000	U	430.0000	U	430.0000	U	430.0000	U	430.0000	U	430.0000	U	430.0000	
2518 SD000000000.002	9201-086-5	U	3800.0000	U	3800.0000	U	3800.0000	U	3800.0000	U	3800.0000	U	3800.0000	U	3800.0000	U	3800.0000	
2519 SD000000000.002	9201-086-6	U	5200.0000	U	5200.0000	U	5200.0000	U	5200.0000	U	5200.0000	U	5200.0000	U	5200.0000	U	5200.0000	
2520 SD000000000.002	9201-086-7	U	2000.0000	U	2000.0000	U	2000.0000	U	2000.0000	U	2000.0000	U	2000.0000	U	2000.0000	U	2000.0000	
2521 SD000000000.002	9201-086-8	U	2100.0000	U	2100.0000	U	2100.0000	U	2100.0000	U	2100.0000	U	2100.0000	U	2100.0000	U	2100.0000	
2522 SD000000000.002	9201-086-9	U	4500.0000	U	4500.0000	U	4500.0000	U	4500.0000	U	4500.0000	U	4500.0000	U	4500.0000	U	4500.0000	
2523 SD000000000.002	9201-086-10	U	7300.0000	U	7300.0000	U	7300.0000	U	7300.0000	U	7300.0000	U	7300.0000	U	7300.0000	U	7300.0000	
2524 SD000000000.002	9201-086-11	U	9400.0000	U	9400.0000	U	9400.0000	U	9400.0000	U	9400.0000	U	9400.0000	U	9400.0000	U	9400.0000	
2525 SD000000000.002	9201-086-12	U	7900.0000	U	7900.0000	U	7900.0000	U	7900.0000	U	7900.0000	U	7900.0000	U	7900.0000	U	7900.0000	
2526 SD000000000.002	9201-086-13	U	11000.0000	U	11000.0000	U	11000.0000	U	11000.0000	U	11000.0000	U	11000.0000	U	11000.0000	U	11000.0000	
2527 SD000000000.002	9201-156-6	U	16000.0000	U	16000.0000	U	16000.0000	U	16000.0000	U	16000.0000	U	16000.0000	U	16000.0000	U	16000.0000	
2528 SD201000000.002	9201-169-3	U	12000.0000	U	12000.0000	U	12000.0000	U	12000.0000	U	12000.0000	U	12000.0000	U	12000.0000	U	12000.0000	
2529 SD000000000.002	9201-169-5	U	6600.0000	U	6600.0000	U	6600.0000	U	6600.0000	U	6600.0000	U	6600.0000	U	6600.0000	U	6600.0000	
2530 SD000000000.002	9201-169-7	U	7900.0000	U	7900.0000	U	7900.0000	U	7900.0000	U	7900.0000	U	7900.0000	U	7900.0000	U	7900.0000	

DATA VALIDATION
DATE RECEIVED
VALIDATED BY DATE
KEYED BY DATE
CHECKED BY ARM DATE 3/27/92

STF Number	Lab Number	4-Methylphenol (ug/kg)	N-Nitroso-di-n-dipropylamine (ug/kg)	Hexachloroethane (ug/kg)	Nitrobenzene (ug/kg)	Isophorone (ug/kg)	2-Nitrophenol (ug/kg)	2,4-Dimethylphenol (ug/kg)	bis(2-Chloroethoxy) methane (ug/kg)
2501 SD000000000.002	9201-169-1	J 110.0000	U 770.0000	U 770.0000	U 770.0000	U 770.0000	U 770.0000	U 770.0000	U 770.0000
2502 SD310000000.002	9201-220-1	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000
2503 SD000000000.002	9201-220-3	U 44000.0000	U 44000.0000	U 44000.0000	U 44000.0000	U 44000.0000	U 44000.0000	U 44000.0000	U 44000.0000
2504 SD000000000.002	9201-086-1	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000
2506 SD320000000.002	9201-110-2	J 1300.0000	U 2500.0000	U 2500.0000	U 2500.0000	U 2500.0000	U 2500.0000	U 2500.0000	U 2500.0000
2507 SD201000000.002	9201-110-5	J 720.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000
2508 SD000000000.002	9201-110-7	J 2500.0000	U 2900.0000	U 2900.0000	U 2900.0000	U 2900.0000	U 2900.0000	U 2900.0000	U 2900.0000
2509 SD310000000.002	9201-095-1	U 420.0000	U 420.0000	U 420.0000	U 420.0000	U 420.0000	U 420.0000	U 420.0000	U 420.0000
2509 SD310000000.002	9201-095-1DL	U 10000.0000 R	U 10000.0000 R	U 10000.0000 R	U 10000.0000 R	U 10000.0000 R	U 10000.0000 R	U 10000.0000 R	U 10000.0000 R
2509 SD320000000.002	9201-110-9	U 6600.0000	U 6600.0000	U 6600.0000	U 6600.0000	U 6600.0000	U 6600.0000	U 6600.0000	U 6600.0000
2510 SD000000000.002	9201-110-10	U 4900.0000	U 4900.0000	U 4900.0000	U 4900.0000	U 4900.0000	U 4900.0000	U 4900.0000	U 4900.0000
2511 SD310000000.002	9201-095-6	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000
2511 SD320000000.002	9201-095-7	U 1000.0000	U 1000.0000	U 1000.0000	U 1000.0000	U 1000.0000	U 1000.0000	U 1000.0000	U 1000.0000
2512 SD000000000.002	9201-095-10	J 53.0000	U 610.0000	U 610.0000	U 610.0000	U 610.0000	U 610.0000	U 610.0000	U 610.0000
2513 SD000000000.002	9201-086-2	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000
2514 SD000000000.002	9201-086-3	U 520.0000	U 520.0000	U 520.0000	U 520.0000	U 520.0000	U 520.0000	U 520.0000	U 520.0000
2515 SD000000000.002	9201-086-4	U 990.0000	U 990.0000	U 990.0000	U 990.0000	U 990.0000	U 990.0000	U 990.0000	U 990.0000
2516 SD320000000.002	9201-220-5	U 670.0000	U 670.0000	U 670.0000	U 670.0000	U 670.0000	U 670.0000	U 670.0000	U 670.0000
2516 SD511000000.002	9201-220-6	U 430.0000	U 430.0000	U 430.0000	U 430.0000	U 430.0000	U 430.0000	U 430.0000	U 430.0000
2518 SD000000000.002	9201-086-5	U 3800.0000	U 3800.0000	U 3800.0000	U 3800.0000	U 3800.0000	U 3800.0000	U 3800.0000	U 3800.0000
2519 SD000000000.002	9201-086-6	U 5200.0000	U 5200.0000	U 5200.0000	U 5200.0000	U 5200.0000	U 5200.0000	U 5200.0000	U 5200.0000
2520 SD000000000.002	9201-086-7	U 2000.0000	U 2000.0000	U 2000.0000	U 2000.0000	U 2000.0000	U 2000.0000	U 2000.0000	U 2000.0000
2521 SD000000000.002	9201-086-8	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000
2522 SD000000000.002	9201-086-9	U 4500.0000	U 4500.0000	U 4500.0000	U 4500.0000	U 4500.0000	U 4500.0000	U 4500.0000	U 4500.0000
2523 SD000000000.002	9201-086-10	U 7300.0000	U 7300.0000	U 7300.0000	U 7300.0000	U 7300.0000	U 7300.0000	U 7300.0000	U 7300.0000
2524 SD000000000.002	9201-086-11	U 9400.0000	U 9400.0000	U 9400.0000	U 9400.0000	U 9400.0000	U 9400.0000	U 9400.0000	U 9400.0000
2525 SD000000000.002	9201-086-12	U 7900.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 7900.0000
2526 SD000000000.002	9201-086-13	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000
2527 SD000000000.002	9201-156-6	U 16000.0000	U 16000.0000	U 16000.0000	U 16000.0000	U 16000.0000	U 16000.0000	U 16000.0000	U 16000.0000
2528 SD201000000.002	9201-169-3	U 12000.0000	U 12000.0000	U 12000.0000	U 12000.0000	U 12000.0000	U 12000.0000	U 12000.0000	U 12000.0000
2529 SD000000000.002	9201-169-5	U 6600.0000	U 6600.0000	U 6600.0000	U 6600.0000	U 6600.0000	U 6600.0000	U 6600.0000	U 6600.0000
2530 SD000000000.002	9201-169-7	J 520.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 7900.0000

STF	Number	Lab Number	2,4-Dichlorophenol (ug/kg)	1,2,4-Trichlorobenzene (ug/kg)	Naphthalene (ug/kg)	4-Chloroaniline (ug/kg)	Hexachlorobutadiene (ug/kg)	4-Chloro-3-methylphenol (ug/kg)	2-Methylnaphthalene (ug/kg)	Hexachlorocyclopentadiene (ug/kg)
2501	SD000000000.002	9201-169-1	U 770.0000	U 770.0000	U 770.0000	U 770.0000	U 770.0000	U 770.0000	U 770.0000	U 770.0000
2502	SD310000000.002	9201-220-1	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000
2503	SD000000000.002	9201-220-3	U 44000.0000	U 44000.0000	U 44000.0000	U 44000.0000	U 44000.0000	U 44000.0000	U 44000.0000	U 44000.0000
2504	SD000000000.002	9201-086-1	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000
2506	SD320000000.002	9201-110-2	U 2500.0000	U 2500.0000	U 2500.0000	U 2500.0000	U 2500.0000	U 2500.0000	U 2500.0000	U 2500.0000
2507	SD201000000.002	9201-110-5	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000
2508	SD000000000.002	9201-110-7	U 2900.0000	U 2900.0000	U 2900.0000	U 2900.0000	U 2900.0000	U 2900.0000	U 2900.0000	U 2900.0000
2509	SD310000000.002	9201-095-1	U 420.0000	U 420.0000	J 110.0000	U 420.0000	U 420.0000	U 420.0000	J 110.0000	U 420.0000
2509	SD310000000.002	9201-095-1DL	U 10000.0000 R	U 10000.0000 R	U 10000.0000 R	U 10000.0000 R	U 10000.0000 R	U 10000.0000 R	U 10000.0000 R	U 10000.0000 R
2509	SD320000000.002	9201-110-9	U 6600.0000	U 6600.0000	J 530.0000	U 6600.0000	U 6600.0000	U 6600.0000	J 710.0000	U 6600.0000
2510	SD000000000.002	9201-110-10	U 4900.0000	U 4900.0000	U 4900.0000	U 4900.0000	U 4900.0000	U 4900.0000	U 4900.0000	U 4900.0000
2511	SD310000000.002	9201-095-6	U 450.0000	U 450.0000	J 49.0000	U 450.0000	U 450.0000	U 450.0000	J 37.0000	U 450.0000
2511	SD320000000.002	9201-095-7	U 1000.0000	U 1000.0000	U 1000.0000	U 1000.0000	U 1000.0000	U 1000.0000	U 1000.0000	U 1000.0000
2512	SD000000000.002	9201-095-10	U 610.0000	U 610.0000	J 43.0000	U 610.0000	U 610.0000	U 610.0000	U 610.0000	U 610.0000
2513	SD000000000.002	9201-086-2	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000
2514	SD000000000.002	9201-086-3	U 520.0000	U 520.0000	J 36.0000	U 520.0000	U 520.0000	U 520.0000	J 26.0000	U 520.0000
2515	SD000000000.002	9201-086-4	U 990.0000	U 990.0000	U 990.0000	U 990.0000	U 990.0000	U 990.0000	U 990.0000	U 990.0000
2516	SD320000000.002	9201-220-5	U 670.0000	U 670.0000	U 670.0000	U 670.0000	U 670.0000	U 670.0000	U 670.0000	U 670.0000
2516	SD511000000.002	9201-220-6	U 430.0000	U 430.0000	U 430.0000	U 430.0000	U 430.0000	U 430.0000	U 430.0000	U 430.0000
2518	SD000000000.002	9201-086-5	U 3800.0000	U 3800.0000	U 3800.0000	U 3800.0000	U 3800.0000	U 3800.0000	U 3800.0000	U 3800.0000
2519	SD000000000.002	9201-086-6	U 5200.0000	U 5200.0000	U 5200.0000	U 5200.0000	U 5200.0000	U 5200.0000	U 5200.0000	U 5200.0000
2520	SD000000000.002	9201-086-7	U 2000.0000	U 2000.0000	U 2000.0000	U 2000.0000	U 2000.0000	U 2000.0000	U 2000.0000	U 2000.0000
2521	SD000000000.002	9201-086-8	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000
2522	SD000000000.002	9201-086-9	U 4500.0000	U 4500.0000	U 4500.0000	U 4500.0000	U 4500.0000	U 4500.0000	U 4500.0000	U 4500.0000
2523	SD000000000.002	9201-086-10	U 7300.0000	U 7300.0000	U 7300.0000	U 7300.0000	U 7300.0000	U 7300.0000	U 7300.0000	U 7300.0000
2524	SD000000000.002	9201-086-11	U 9400.0000	U 9400.0000	U 9400.0000	U 9400.0000	U 9400.0000	U 9400.0000	U 9400.0000	U 9400.0000
2525	SD000000000.002	9201-086-12	U 7900.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 7900.0000
2526	SD000000000.002	9201-086-13	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000
2527	SD000000000.002	9201-156-6	U 16000.0000	U 16000.0000	U 16000.0000	U 16000.0000	U 16000.0000	U 16000.0000	U 16000.0000	U 16000.0000
2528	SD201000000.002	9201-169-3	U 12000.0000	U 12000.0000	U 12000.0000	U 12000.0000	U 12000.0000	U 12000.0000	U 12000.0000	U 12000.0000
2529	SD000000000.002	9201-169-5	U 6600.0000	U 6600.0000	U 6600.0000	U 6600.0000	U 6600.0000	U 6600.0000	U 6600.0000	U 6600.0000
2530	SD000000000.002	9201-169-7	U 7900.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 7900.0000

STF Number	Lab Number	2,4,6-Trichlorophenol (ug/kg)	2,4,5-Trichlorophenol (ug/kg)	2-Chloronaphthalene (ug/kg)	2-Nitroaniline (ug/kg)	Dimethylphthalate (ug/kg)	Acenaphthylene (ug/kg)	2,6-Dinitrotoluene (ug/kg)	3-Nitroaniline (ug/kg)
2501 SD000000000.002	9201-169-1	U 770.0000	U 1900.0000	U 770.0000	U 1900.0000	U 770.0000	U 770.0000	U 770.0000	U 1900.0000
2502 SD310000000.002	9201-220-1	U 55000.0000	U 130000.0000	U 55000.0000	U 130000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 130000.0000
2503 SD000000000.002	9201-220-3	U 44000.0000	U 110000.0000	U 44000.0000	U 110000.0000	U 44000.0000	U 44000.0000	U 44000.0000	U 110000.0000
2504 SD000000000.002	9201-086-1	U 1400.0000	U 3300.0000	U 1400.0000	U 3300.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 3300.0000
2506 SD320000000.002	9201-110-2	U 2500.0000	U 6200.0000	U 2500.0000	U 6200.0000	U 2500.0000	U 2500.0000	U 2500.0000	U 6200.0000
2507 SD201000000.002	9201-110-5	U 4700.0000	U 11000.0000	U 4700.0000	U 11000.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 11000.0000
2508 SD000000000.002	9201-110-7	U 2900.0000	U 7000.0000	U 2900.0000	U 7000.0000	U 2900.0000	U 2900.0000	U 2900.0000	U 7000.0000
2509 SD310000000.002	9201-095-1	U 420.0000	U 1000.0000	U 420.0000	U 1000.0000	U 420.0000	U 420.0000	U 420.0000	U 1000.0000
2509 SD310000000.002	9201-095-1DL	U 10000.0000 R	U 25000.0000 R	U 10000.0000 R	U 25000.0000 R	U 10000.0000 R	U 10000.0000 R	U 10000.0000 R	U 25000.0000 R
2509 SD320000000.002	9201-110-9	U 6600.0000	U 16000.0000	U 6600.0000	U 16000.0000	U 6600.0000	U 6600.0000	U 6600.0000	U 16000.0000
2510 SD000000000.002	9201-110-10	U 4900.0000	U 12000.0000	U 4900.0000	U 12000.0000	U 4900.0000	U 4900.0000	U 4900.0000	U 12000.0000
2511 SD310000000.002	9201-095-6	U 450.0000	U 1100.0000	U 450.0000	U 1100.0000	U 450.0000	U 450.0000	U 450.0000	U 1100.0000
2511 SD320000000.002	9201-095-7	U 1000.0000	U 2500.0000	U 1000.0000	U 2500.0000	U 1000.0000	U 1000.0000	U 1000.0000	U 2500.0000
2512 SD000000000.002	9201-095-10	U 610.0000	U 1500.0000	U 610.0000	U 1500.0000	U 610.0000	U 610.0000	U 610.0000	U 1500.0000
2513 SD000000000.002	9201-086-2	U 450.0000	U 1100.0000	U 450.0000	U 1100.0000	U 450.0000	U 450.0000	U 450.0000	U 1100.0000
2514 SD000000000.002	9201-086-3	U 520.0000	U 1200.0000	U 520.0000	U 1200.0000	J 88.0000	U 520.0000	U 520.0000	U 1200.0000
2515 SD000000000.002	9201-086-4	U 990.0000	U 2400.0000	U 990.0000	U 2400.0000	J 910.0000 J4	U 990.0000	U 990.0000	U 2400.0000
2516 SD320000000.002	9201-220-5	U 670.0000	U 1600.0000	U 670.0000	U 1600.0000	U 670.0000	U 670.0000	U 670.0000	U 1600.0000
2516 SD511000000.002	9201-220-6	U 430.0000	U 1000.0000	U 430.0000	U 1000.0000	U 430.0000	U 430.0000	U 430.0000	U 1000.0000
2518 SD000000000.002	9201-086-5	U 3800.0000	U 9100.0000	U 3800.0000	U 9100.0000	U 3800.0000	U 3800.0000	U 3800.0000	U 9100.0000
2519 SD000000000.002	9201-086-6	U 5200.0000	U 12000.0000	U 5200.0000	U 12000.0000	U 5200.0000	U 5200.0000	U 5200.0000	U 12000.0000
2520 SD000000000.002	9201-086-7	U 2000.0000	U 4800.0000	U 2000.0000	U 4800.0000	U 2000.0000	U 2000.0000	U 2000.0000	U 4800.0000
2521 SD000000000.002	9201-086-8	U 2100.0000	U 5200.0000	U 2100.0000	U 5200.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 5200.0000
2522 SD000000000.002	9201-086-9	U 4500.0000	U 11000.0000	U 4500.0000	U 11000.0000	U 4500.0000	U 4500.0000	U 4500.0000	U 11000.0000
2523 SD000000000.002	9201-086-10	U 7300.0000	U 18000.0000	U 7300.0000	U 18000.0000	U 7300.0000	U 7300.0000	U 7300.0000	U 18000.0000
2524 SD000000000.002	9201-086-11	U 9400.0000	U 23000.0000	U 9400.0000	U 23000.0000	U 9400.0000	U 9400.0000	U 9400.0000	U 23000.0000
2525 SD000000000.002	9201-086-12	U 7900.0000	U 19000.0000	U 7900.0000	U 19000.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 19000.0000
2526 SD000000000.002	9201-086-13	U 11000.0000	U 27000.0000	U 11000.0000	U 27000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 27000.0000
2527 SD000000000.002	9201-156-6	U 16000.0000	U 40000.0000	U 16000.0000	U 40000.0000	U 16000.0000	U 16000.0000	U 16000.0000	U 40000.0000
2528 SD201000000.002	9201-169-3	U 12000.0000	U 29000.0000	U 12000.0000	U 29000.0000	U 12000.0000	U 12000.0000	U 12000.0000	U 29000.0000
2529 SD000000000.002	9201-169-5	U 6600.0000	U 16000.0000	U 6600.0000	U 16000.0000	U 6600.0000	U 6600.0000	U 6600.0000	U 16000.0000
2530 SD000000000.002	9201-169-7	U 7900.0000	U 19000.0000	U 7900.0000	U 19000.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 19000.0000

STF	Number	Lab Number	Acenaphthene (ug/kg)	2,4-Dinitrophenol (ug/kg)	4-Nitrophenol (ug/kg)	Dibenzofuran (ug/kg)	2,4-Dinitrotoluene (ug/kg)	Diethylphthalate (ug/kg)	4-Chlorophenyl-phenylether (ug/kg)	Fluorene (ug/kg)
2501	SD000000000.002	9201-169-1	U 770.0000	U 1900.0000	U 1900.0000	U 770.0000	U 770.0000	U 770.0000	U 770.0000	U 770.0000
2502	SD310000000.002	9201-220-1	U 55000.0000	U 130000.0000	U 130000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 55000.0000	J 3200.0000
2503	SD000000000.002	9201-220-3	J 4600.0000	U 110000.0000	U 110000.0000	J 3300.0000	U 44000.0000	U 44000.0000	U 44000.0000	J 6500.0000
2504	SD000000000.002	9201-086-1	U 1400.0000	U 3300.0000	U 3300.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 1400.0000
2506	SD320000000.002	9201-110-2	U 2500.0000	U 6200.0000	U 6200.0000	U 2500.0000	U 2500.0000	U 2500.0000	U 2500.0000	U 2500.0000
2507	SD201000000.002	9201-110-5	U 4700.0000	U 11000.0000	U 11000.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 4700.0000
2508	SD000000000.002	9201-110-7	U 2900.0000	U 7000.0000	U 7000.0000	U 2900.0000	U 2900.0000	U 2900.0000	U 2900.0000	U 2900.0000
2509	SD310000000.002	9201-095-1	J 55.0000	U 1000.0000	U 1000.0000	U 420.0000	U 420.0000	BJ 33.0000 UJ	U 420.0000	J 48.0000
2509	SD310000000.002	9201-095-1DL	U 10000.0000 R	U 25000.0000 R	U 25000.0000 R	U 10000.0000 R	U 10000.0000 R	U 10000.0000 R	U 10000.0000 R	U 10000.0000 R
2509	SD320000000.002	9201-110-9	U 6600.0000	U 16000.0000	U 16000.0000	U 6600.0000	U 6600.0000	U 6600.0000	U 6600.0000	U 6600.0000
2510	SD000000000.002	9201-110-10	U 4900.0000	U 12000.0000	U 12000.0000	U 4900.0000	U 4900.0000	U 4900.0000	U 4900.0000	U 4900.0000
2511	SD310000000.002	9201-095-6	U 450.0000	U 1100.0000	U 1100.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000
2511	SD320000000.002	9201-095-7	U 1000.0000	U 2500.0000	U 2500.0000	U 1000.0000	U 1000.0000	U 1000.0000	U 1000.0000	U 1000.0000
2512	SD000000000.002	9201-095-10	J 62.0000	U 1500.0000	U 1500.0000	U 610.0000	U 610.0000	U 610.0000	U 610.0000	U 610.0000
2513	SD000000000.002	9201-086-2	J 26.0000	U 1100.0000	U 1100.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000	U 450.0000
2514	SD000000000.002	9201-086-3	J 54.0000	U 1200.0000	U 1200.0000	U 520.0000	U 520.0000	U 520.0000	U 520.0000	U 520.0000
2515	SD000000000.002	9201-086-4	U 990.0000	U 2400.0000	U 2400.0000	U 990.0000	U 990.0000	U 990.0000	U 990.0000	U 990.0000
2516	SD320000000.002	9201-220-5	U 670.0000	U 1600.0000	U 1600.0000	U 670.0000	U 670.0000	U 670.0000	U 670.0000	U 670.0000
2516	SD511000000.002	9201-220-6	U 430.0000	U 1000.0000	U 1000.0000	U 430.0000	U 430.0000	U 430.0000	U 430.0000	U 430.0000
2518	SD000000000.002	9201-086-5	U 3800.0000	U 9100.0000	U 9100.0000	U 3800.0000	U 3800.0000	U 3800.0000	U 3800.0000	U 3800.0000
2519	SD000000000.002	9201-086-6	U 5200.0000	U 12000.0000	U 12000.0000	U 5200.0000	U 5200.0000	U 5200.0000	U 5200.0000	U 5200.0000
2520	SD000000000.002	9201-086-7	U 2000.0000	U 4800.0000	U 4800.0000	U 2000.0000	U 2000.0000	U 2000.0000	U 2000.0000	U 2000.0000
2521	SD000000000.002	9201-086-8	U 2100.0000	U 5200.0000	U 5200.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 2100.0000
2522	SD000000000.002	9201-086-9	U 4500.0000	U 11000.0000	U 11000.0000	U 4500.0000	U 4500.0000	U 4500.0000	U 4500.0000	U 4500.0000
2523	SD000000000.002	9201-086-10	U 7300.0000	U 18000.0000	U 18000.0000	U 7300.0000	U 7300.0000	U 7300.0000	U 7300.0000	U 7300.0000
2524	SD000000000.002	9201-086-11	U 9400.0000	U 23000.0000	U 23000.0000	U 9400.0000	U 9400.0000	U 9400.0000	U 9400.0000	U 9400.0000
2525	SD000000000.002	9201-086-12	U 7900.0000	U 19000.0000	U 19000.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 7900.0000
2526	SD000000000.002	9201-086-13	U 11000.0000	U 27000.0000	U 27000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 11000.0000
2527	SD000000000.002	9201-156-6	U 16000.0000	U 40000.0000	U 40000.0000	U 16000.0000	U 16000.0000	U 16000.0000	U 16000.0000	U 16000.0000
2528	SD201000000.002	9201-169-3	U 12000.0000	U 29000.0000	U 29000.0000	U 12000.0000	U 12000.0000	U 12000.0000	U 12000.0000	U 12000.0000
2529	SD000000000.002	9201-169-5	U 6600.0000	U 16000.0000	U 16000.0000	U 6600.0000	U 6600.0000	U 6600.0000	U 6600.0000	U 6600.0000
2530	SD000000000.002	9201-169-7	U 7900.0000	U 19000.0000	U 19000.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 7900.0000

STF	Number	Lab Number	4-Nitroaniline (ug/kg)	4,6-Dinitro-2-methylphenol (ug/kg)	N-nitrosodiphenylamine (ug/kg)	4-Bromophenyl-phenylether (ug/kg)	Hexachlorobenzene (ug/kg)	Pentachlorophenol (ug/kg)	Phenanthrene (ug/kg)	Anthracene (ug/kg)
2501	SD000000000.002	9201-169-1	U 1900.0000	U 1900.0000	U 770.0000	U 770.0000	U 770.0000	U 1900.0000	J 110.0000	U 770.0000
2502	SD310000000.002	9201-220-1	U 130000.0000	U 130000.0000	U 55000.0000	U 55000.0000	U 55000.0000	U 130000.0000	J 44000.0000	J 5000.0000
2503	SD000000000.002	9201-220-3	U 110000.0000	U 110000.0000	U 44000.0000	U 44000.0000	U 44000.0000	U 110000.0000	73000.0000	J 8900.0000
2504	SD000000000.002	9201-086-1	U 3300.0000	U 3300.0000	U 1400.0000	U 1400.0000	U 1400.0000	U 3300.0000	J 320.0000	U 1400.0000
2506	SD320000000.002	9201-110-2	U 6200.0000	U 6200.0000	U 2500.0000	U 2500.0000	U 2500.0000	U 6200.0000	U 2500.0000	U 2500.0000
2507	SD201000000.002	9201-110-5	U 11000.0000	U 11000.0000	U 4700.0000	U 4700.0000	U 4700.0000	U 11000.0000	J 330.0000	U 4700.0000
2508	SD000000000.002	9201-110-7	U 7000.0000	U 7000.0000	U 2900.0000	U 2900.0000	U 2900.0000	U 7000.0000	J 170.0000	U 2900.0000
2509	SD310000000.002	9201-095-1	U 1000.0000	U 1000.0000	U 420.0000	U 420.0000	U 420.0000	U 1000.0000	790.0000	J 230.0000
2509	SD310000000.002	9201-095-1DL	U 25000.0000 R	U 25000.0000 R	U 10000.0000 R	U 10000.0000 R	U 10000.0000 R	U 25000.0000 R	J 720.0000 R	U 10000.0000 R
2509	SD320000000.002	9201-110-9	U 16000.0000	U 16000.0000	U 6600.0000	U 6600.0000	U 6600.0000	U 16000.0000	J 510.0000	U 6600.0000
2510	SD000000000.002	9201-110-10	U 12000.0000	U 12000.0000	U 4900.0000	U 4900.0000	U 4900.0000	U 12000.0000	J 450.0000	U 4900.0000
2511	SD310000000.002	9201-095-6	U 1100.0000	U 1100.0000	U 450.0000	U 450.0000	U 450.0000	U 1100.0000	J 74.0000	J 31.0000
2511	SD320000000.002	9201-095-7	U 2500.0000	U 2500.0000	U 1000.0000	U 1000.0000	U 1000.0000	U 2500.0000	U 1000.0000	U 1000.0000
2512	SD000000000.002	9201-095-10	U 1500.0000	U 1500.0000	U 610.0000	U 610.0000	U 610.0000	U 1500.0000	J 130.0000	J 32.0000
2513	SD000000000.002	9201-086-2	U 1100.0000	U 1100.0000	U 450.0000	U 450.0000	U 450.0000	U 1100.0000	J 95.0000	U 450.0000
2514	SD000000000.002	9201-086-3	U 1200.0000	U 1200.0000	U 520.0000	U 520.0000	U 520.0000	U 1200.0000	J 200.0000	J 35.0000
2515	SD000000000.002	9201-086-4	U 2400.0000	U 2400.0000	U 990.0000	U 990.0000	U 990.0000	U 2400.0000	J 370.0000 J4	J 60.0000 J4
2516	SD320000000.002	9201-220-5	U 1600.0000	U 1600.0000	U 670.0000	U 670.0000	U 670.0000	U 1600.0000	U 670.0000	U 670.0000
2516	SD511000000.002	9201-220-6	U 1000.0000	U 1000.0000	U 430.0000	U 430.0000	U 430.0000	U 1000.0000	U 430.0000	U 430.0000
2518	SD000000000.002	9201-086-5	U 9100.0000	U 9100.0000	U 3800.0000	U 3800.0000	U 3800.0000	U 9100.0000	J 210.0000	U 3800.0000
2519	SD000000000.002	9201-086-6	U 12000.0000	U 12000.0000	U 5200.0000	U 5200.0000	U 5200.0000	U 12000.0000	U 5200.0000	U 5200.0000
2520	SD000000000.002	9201-086-7	U 4800.0000	U 4800.0000	U 2000.0000	U 2000.0000	U 2000.0000	U 4800.0000	J 280.0000	U 2000.0000
2521	SD000000000.002	9201-086-8	U 5200.0000	U 5200.0000	U 2100.0000	U 2100.0000	U 2100.0000	U 5200.0000	J 130.0000	U 2100.0000
2522	SD000000000.002	9201-086-9	U 11000.0000	U 11000.0000	U 4500.0000	U 4500.0000	U 4500.0000	U 11000.0000	J 1100.0000	U 4500.0000
2523	SD000000000.002	9201-086-10	U 18000.0000	U 18000.0000	U 7300.0000	U 7300.0000	U 7300.0000	U 18000.0000	J 1900.0000 J4	U 7300.0000
2524	SD000000000.002	9201-086-11	U 23000.0000	U 23000.0000	U 9400.0000	U 9400.0000	U 9400.0000	U 23000.0000	J 2100.0000 J4	U 9400.0000
2525	SD000000000.002	9201-086-12	U 19000.0000	U 19000.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 19000.0000	J 2800.0000	U 7900.0000
2526	SD000000000.002	9201-086-13	U 27000.0000	U 27000.0000	U 11000.0000	U 11000.0000	U 11000.0000	U 27000.0000	J 2800.0000 J4	U 11000.0000
2527	SD000000000.002	9201-156-6	U 40000.0000	U 40000.0000	U 16000.0000	U 16000.0000	U 16000.0000	U 40000.0000	J 5600.0000	U 16000.0000
2528	SD201000000.002	9201-169-3	U 29000.0000	U 29000.0000	U 12000.0000	U 12000.0000	U 12000.0000	U 29000.0000	J 5400.0000	J 660.0000
2529	SD000000000.002	9201-169-5	U 16000.0000	U 16000.0000	U 6600.0000	U 6600.0000	U 6600.0000	U 16000.0000	J 2700.0000	U 6600.0000
2530	SD000000000.002	9201-169-7	U 19000.0000	U 19000.0000	U 7900.0000	U 7900.0000	U 7900.0000	U 19000.0000	J 3100.0000	U 7900.0000

STF Number	Lab Number	Carbazole (ug/kg)	Di-n-butyl-phthalate (ug/kg)	Fluoranthene (ug/kg)	Pyrene (ug/kg)	Butylbenzyl-phthalate (ug/kg)	3,3'-Dichloro-benzidine (ug/kg)	Benzo(a)anthracene (ug/kg)	Chrysene (ug/kg)
2501 SD000000000.002	9201-169-1	U 770.0000	U 770.0000	J 240.0000	J 250.0000	U 770.0000	U 770.0000	J 84.0000	J 150.0000
2502 SD310000000.002	9201-220-1	U 55000.0000	U 55000.0000	83000.0000	65000.0000	U 55000.0000	U 55000.0000	J 21000.0000	J 40000.0000
2503 SD000000000.002	9201-220-3	J 5500.0000	U 44000.0000	110000.0000	88000.0000	U 44000.0000	U 44000.0000	J 32000.0000	50000.0000
2504 SD000000000.002	9201-086-1	U 1400.0000	J 83.0000	J 650.0000	J 610.0000	J 82.0000	U 1400.0000	J 410.0000	J 470.0000
2506 SD320000000.002	9201-110-2	U 2500.0000	U 2500.0000	J 290.0000	J 230.0000	U 2500.0000	U 2500.0000	U 2500.0000	J 270.0000
2507 SD201000000.002	9201-110-5	U 4700.0000	U 4700.0000	J 690.0000	J 840.0000	U 4700.0000	U 4700.0000	J 300.0000	J 650.0000
2508 SD000000000.002	9201-110-7	U 2900.0000	U 2900.0000	J 360.0000	J 420.0000	J 190.0000	U 2900.0000	J 150.0000	J 350.0000
2509 SD310000000.002	9201-095-1	J 110.0000	J 96.0000	1200.0000	910.0000	23000.0000 R	U 420.0000	490.0000	520.0000
2509 SD310000000.002	9201-095-1DL	U 10000.0000 R	U 10000.0000 R	J 1200.0000 R	J 880.0000 R	48000.0000	U 10000.0000 R	U 10000.0000 R	U 10000.0000 R
2509 SD320000000.002	9201-110-9	U 6600.0000	U 6600.0000	J 880.0000	J 1200.0000	U 6600.0000	U 6600.0000	J 410.0000	J 750.0000
2510 SD000000000.002	9201-110-10	U 4900.0000	U 4900.0000	J 660.0000	J 760.0000	U 4900.0000	U 4900.0000	U 4900.0000	J 490.0000
2511 SD310000000.002	9201-095-6	U 450.0000	U 450.0000	J 86.0000	J 89.0000	J 380.0000	U 450.0000	J 59.0000	J 110.0000
2511 SD320000000.002	9201-095-7	U 1000.0000	U 1000.0000	J 78.0000	J 87.0000	U 1000.0000	U 1000.0000	U 1000.0000	J 84.0000
2512 SD000000000.002	9201-095-10	U 610.0000	U 610.0000	J 380.0000	J 470.0000	J 100.0000	U 610.0000	J 430.0000	J 580.0000
2513 SD000000000.002	9201-086-2	U 450.0000	J 29.0000	J 230.0000	J 280.0000	J 79.0000	U 450.0000	J 180.0000	J 310.0000
2514 SD000000000.002	9201-086-3	U 520.0000	J 72.0000	J 420.0000	J 440.0000	J 450.0000	U 520.0000	J 290.0000	J 480.0000
2515 SD000000000.002	9201-086-4	U 990.0000	J 130.0000 J4	J 580.0000 J4	J 650.0000 J4	J 600.0000 J4	U 990.0000	J 220.0000 J4	J 380.0000 J4
2516 SD320000000.002	9201-220-5	U 670.0000	U 670.0000	J 45.0000	J 46.0000 J4	U 670.0000	U 670.0000	J 35.0000 J4	J 52.0000 J4
2516 SD511000000.002	9201-220-6	U 430.0000	U 430.0000	U 430.0000	U 430.0000	U 430.0000	U 430.0000	U 430.0000	U 430.0000
2518 SD000000000.002	9201-086-5	U 3800.0000	U 3800.0000	J 350.0000	J 390.0000	U 3800.0000	U 3800.0000	U 3800.0000	J 590.0000
2519 SD000000000.002	9201-086-6	U 5200.0000	U 5200.0000	J 320.0000	J 470.0000	U 5200.0000	U 5200.0000	U 5200.0000	J 420.0000
2520 SD000000000.002	9201-086-7	U 2000.0000	U 2000.0000	J 480.0000	J 570.0000	U 2000.0000	U 2000.0000	J 150.0000	J 370.0000
2521 SD000000000.002	9201-086-8	U 2100.0000	U 2100.0000	J 250.0000	J 350.0000	U 2100.0000	U 2100.0000	U 2100.0000	J 260.0000
2522 SD000000000.002	9201-086-9	U 4500.0000	U 4500.0000	J 2300.0000	J 2500.0000	J 260.0000	U 4500.0000	J 720.0000	J 1700.0000
2523 SD000000000.002	9201-086-10	U 7300.0000	U 7300.0000	J 3900.0000 J4	J 4000.0000 J4	J 400.0000 J4	U 7300.0000	J 1100.0000 J4	J 3200.0000 J4
2524 SD000000000.002	9201-086-11	U 9400.0000	U 9400.0000	J 4100.0000 J4	J 4000.0000 J4	U 9400.0000	U 9400.0000	J 1500.0000 J4	J 4200.0000 J4
2525 SD000000000.002	9201-086-12	J 410.0000	U 7900.0000	J 5600.0000	J 5500.0000	J 460.0000	U 7900.0000	J 1400.0000	J 4300.0000
2526 SD000000000.002	9201-086-13	U 11000.0000	U 11000.0000	J 5900.0000 J4	J 5600.0000 J4	J 560.0000 J4	U 11000.0000	J 1800.0000 J4	J 5000.0000 J4
2527 SD000000000.002	9201-156-6	U 16000.0000	U 16000.0000	J 10000.0000	J 13000.0000	U 16000.0000	U 16000.0000	J 4100.0000	J 10000.0000
2528 SD201000000.002	9201-169-3	U 12000.0000	U 12000.0000	J 10000.0000	J 11000.0000	J 960.0000	U 12000.0000	J 3500.0000	J 8700.0000
2529 SD000000000.002	9201-169-5	U 6600.0000	U 6600.0000	J 4900.0000	J 5600.0000	J 600.0000	U 6600.0000	J 1700.0000 J4	J 3700.0000
2530 SD000000000.002	9201-169-7	U 7900.0000	U 7900.0000	J 6200.0000	J 6200.0000	U 7900.0000	U 7900.0000	J 1800.0000 J4	J 4200.0000

STF Number	Lab Number	bis(2-Ethylhexyl) phthalate (ug/kg)	Di-n-octyl-phthalate (ug/kg)	Benzo(b)-fluoranthene (ug/kg)	Benzo(k)-fluoranthene (ug/kg)	Benzo(a)pyrene (ug/kg)	Indeno(1,2,3-cd)-pyrene (ug/kg)	Dibenzo(a,h)-anthracene (ug/kg)	Benzo(g,h,i)-perylene (ug/kg)
2501 SD000000000.002	9201-169-1	J 560.0000	U 770.0000	J 130.0000	J 80.0000	J 89.0000	J 65.0000	U 770.0000	J 75.0000
2502 SD310000000.002	9201-220-1	120000.0000 J4	J 4300.0000 J4	J 40000.0000	J 33000.0000	J 29000.0000	J 23000.0000	J 6300.0000	J 23000.0000
2503 SD000000000.002	9201-220-3	91000.0000 J4	J 4600.0000 J4	53000.0000	48000.0000	45000.0000	J 33000.0000	J 13000.0000	J 32000.0000
2504 SD000000000.002	9201-086-1	J 970.0000	U 1400.0000	J 630.0000	J 470.0000	J 410.0000	J 300.0000	J 180.0000	J 300.0000
2506 SD320000000.002	9201-110-2	J 1000.0000	U 2500.0000	J 330.0000	J 280.0000	U 2500.0000	J 190.0000	U 2500.0000	J 230.0000
2507 SD201000000.002	9201-110-5	J 2600.0000	U 4700.0000	J 780.0000	J 750.0000	J 450.0000	J 780.0000	U 4700.0000	J 970.0000
2508 SD000000000.002	9201-110-7	J 1600.0000	J 100.0000 J4	J 290.0000	J 250.0000	U 2900.0000	U 2900.0000	U 2900.0000	J 390.0000
2509 SD310000000.002	9201-095-1	650.0000	U 420.0000	460.0000	J 340.0000	490.0000	J 180.0000	J 110.0000	J 150.0000
2509 SD310000000.002	9201-095-1DL	J 840.0000 R	U 10000.0000 R	U 10000.0000 R	U 10000.0000 R	U 10000.0000 R	U 10000.0000 R	U 10000.0000 R	U 10000.0000 R
2509 SD320000000.002	9201-110-9	J 4000.0000	U 6600.0000	J 760.0000	J 510.0000	J 600.0000	J 510.0000	U 6600.0000	J 440.0000
2510 SD000000000.002	9201-110-10	J 2600.0000	J 160.0000	J 690.0000	J 330.0000	J 380.0000	J 310.0000	U 4900.0000	U 4900.0000
2511 SD310000000.002	9201-095-6	J 330.0000	U 450.0000	J 110.0000	J 87.0000	J 97.0000	J 57.0000	J 32.0000	J 52.0000
2511 SD320000000.002	9201-095-7	J 180.0000	U 1000.0000	J 120.0000	J 82.0000	J 97.0000	U 1000.0000	U 1000.0000	U 1000.0000
2512 SD000000000.002	9201-095-10	J 150.0000	U 610.0000	1100.0000	J 440.0000	920.0000	J 400.0000	J 240.0000	J 130.0000
2513 SD000000000.002	9201-086-2	J 280.0000	U 450.0000	490.0000	J 330.0000	J 410.0000	J 190.0000	J 130.0000	J 190.0000
2514 SD000000000.002	9201-086-3	J 380.0000	U 520.0000	800.0000	J 370.0000	670.0000	J 410.0000	J 200.0000	U 520.0000
2515 SD000000000.002	9201-086-4	J 510.0000 J4	U 990.0000	J 320.0000 J4	J 300.0000 J4	J 330.0000 J4	J 200.0000 J4	J 84.0000 J4	J 200.0000 J4
2516 SD320000000.002	9201-220-5	J 150.0000 J4	U 670.0000	J 68.0000	J 77.0000	J 76.0000	J 67.0000	U 670.0000	J 76.0000
2516 SD511000000.002	9201-220-6	J 110.0000 J4	U 430.0000	U 430.0000	U 430.0000	U 430.0000	U 430.0000	U 430.0000	U 430.0000
2518 SD000000000.002	9201-086-5	J 1200.0000	U 3800.0000	J 640.0000	J 410.0000	J 500.0000	J 330.0000	U 3800.0000	J 520.0000
2519 SD000000000.002	9201-086-6	J 1100.0000	J 370.0000	J 330.0000	J 350.0000	U 5200.0000	U 5200.0000	U 5200.0000	J 300.0000
2520 SD000000000.002	9201-086-7	J 1100.0000	U 2000.0000	J 560.0000	J 440.0000	J 340.0000	J 290.0000	J 110.0000	U 2000.0000
2521 SD000000000.002	9201-086-8	J 750.0000	U 2100.0000	J 280.0000	J 290.0000	J 390.0000	J 270.0000	U 2100.0000	J 390.0000
2522 SD000000000.002	9201-086-9	4500.0000	U 4500.0000	J 1600.0000	J 2100.0000	J 1400.0000	J 1200.0000	J 450.0000	J 1300.0000
2523 SD000000000.002	9201-086-10	J 6800.0000 J4	U 7300.0000	J 4200.0000 J4	J 2600.0000 J4	J 2700.0000 J4	J 2500.0000 J4	J 850.0000 J4	J 2900.0000 J4
2524 SD000000000.002	9201-086-11	15000.0000 J4	U 9400.0000	J 4700.0000 J4	J 3700.0000 J4	J 3000.0000 J4	J 2600.0000 J4	J 900.0000 J4	J 2800.0000 J4
2525 SD000000000.002	9201-086-12	18000.0000	U 7900.0000	J 4300.0000	J 4600.0000	J 3100.0000	J 2700.0000	J 960.0000	J 2700.0000
2526 SD000000000.002	9201-086-13	20000.0000 J4	U 11000.0000	J 6500.0000 J4	J 3200.0000 J4	J 3600.0000 J4	J 3400.0000 J4	J 1200.0000 J4	J 3800.0000 J4
2527 SD000000000.002	9201-156-6	35000.0000 J4	J 1200.0000 J4	J 11000.0000	J 8300.0000	J 7200.0000	J 6600.0000	J 2800.0000	J 7000.0000
2528 SD201000000.002	9201-169-3	28000.0000 J4	J 800.0000 J4	13000.0000	J 6900.0000	J 7400.0000	J 7100.0000	J 2900.0000	J 7400.0000
2529 SD000000000.002	9201-169-5	15000.0000	U 6600.0000	J 6300.0000	J 2800.0000	J 3500.0000	J 2700.0000	J 1200.0000	J 2800.0000
2530 SD000000000.002	9201-169-7	21000.0000	J 620.0000	J 5100.0000	J 4300.0000	J 3200.0000	J 2900.0000	J 1200.0000	J 3100.0000

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/kg)	Validation
2501SD000000000.002	9201-169-1	2-Cyclohexen-1-one	JNB	156.00	R
		Dodecanamide, N,N-bis(2-hydr	JN	194.00	
		Docosane	JN	320.00	
		Unknown	JN	700.00	
2502SD320000000.002	9201-220-1	Tridecane, 5-propyl-	JN	24000.00	
2503SD000000000.002	9201-220-3	Phenol, 4-(2,2,3,3-tetrameth	JN	11200.00	
		Octadecane, 2,6-dimethyl-	JN	24000.00	
		Unknown	JN	15600.00	
		9,10-Anthracenedione	JN	13400.00	
		1-Phenanthrenecarboxaldehyde	JN	8800.00	
2504SD000000000.002	9201-086-1	2-Cyclohexen-1-one	JNB	1520.00	R
		Unknown	JNB	340.00	
		Ethanone, 1-phenyl-	JN	280.00	
		Dodecanamide, N,N-bis(2-hydr	JN	420.00	
		Heptadecane, 9-octyl-	JN	420.00	
		5-Octadecene, (E)-	JN	1040.00	
		Hexadecane, 7,9-dimethyl-	JN	2800.00	
2506SD320000000.002	9201-110-2	Unknown	JN	760.00	
		2-Cyclohexen-1-one	JNB	1020.00	R
		Propanedioic acid, phenyl-	JN	760.00	
		Unknown	JN	520.00	
		DOCOSANE	JN	2200.00	
		HEXADECANE	JN	3800.00	
		Unknown	JN	4000.00	
		Unknown	JN	4400.00	
		Unknown	JN	1420.00	
		Unknown	JN	5200.00	
		Unknown	JN	2000.00	
		Unknown	JN	3000.00	
		Unknown	JN	1020.00	
2507SD201000000.002	9201-110-5	3-EICOSENE, (E)-	JN	960.00	
		17-Octadecenal	JN	1660.00	
		Heptacosane	JN	6400.00	
		1-Docosanol, acetate	JN	6200.00	
		NONACOSANOL	JN	24000.00	
		1-HENEICOSYL FORMATE	JN	11600.00	
		Octadecanal	JN	38000.00	
		Phosphonic acid, dioctadecyl	JN	6600.00	
		Unknown	JN	4000.00	
		1-HEXACOSANOL	JN	7200.00	
		Unknown	JN	4200.00	
		Unknown	JN	19200.00	
		.beta.-Amyrin	JN	54000.00	
		Unknown	JN	28000.00	
		.ALPHA.-AMYRIN	JN	24000.00	
		Unknown	JN	28000.00	
		Unknown	JN	9200.00	
		Unknown	JN	7200.00	
		Unknown	JN	9000.00	
		Unknown	JN	4000.00	

DATA VALIDATION
DATE RECEIVED _____
VALIDATED BY _____ DATE _____
REVIEWED BY _____ DATE _____
APPROVED BY JRM DATE 3/27/92

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/kg)	Validation
2508SD000000000.002	9201-110-7	Unknown	JN	860.00	
		Unknown	JN	580.00	
		Benzeneacetic acid	JN	1300.00	
		Dodecanamide, N,N-bis(2-hydr	JN	860.00	
		Octadecanal	JN	1160.00	
		Heptacosane	JN	7200.00	
		Octacosane	JN	14200.00	
		16-OCTADECENAL	JN	1880.00	
		UNKNOWN	JN	4000.00	
		Unknown	JN	5000.00	
		Unknown	JN	4200.00	
2509SD310000000.002	9201-095-1	Benzene, 1,2,3,5-tetramethyl	JN	148.00	
		Benzene, 1,3-dimethyl-5-(1-m	JN	106.00	
		Pentadecane	JN	126.00	
		Unknown	JN	126.00	
		Docosane	JN	168.00	
		Tridecane, 5-propyl-	JN	106.00	
		1H-Indene, 2,3-dihydro-1,1,3	JN	540.00	
		Pyridine, 4-(3-phenylpropyl)	JN	380.00	
		HEPTADECANE, 9-OCTYL-	JN	148.00	
		Unknown	JN	126.00	
		11H-Benzo[b]fluorene	JN	190.00	
		Unknown	JN	220.00	
		Unknown	JN	840.00	
		Unknown	JN	340.00	
		1H-Indene, 1-(1,5-dimethyl-2	JN	460.00	
		Benzene, 1,1'-(1,4-dimethyl-	JN	480.00	
2509SD310000000.002	9201-095-1DL	Hexanedioic acid, dioctyl es	JNB	2200.00	R
		Unknown	JN	4200.00	
2509SD320000000.002	9201-110-9	Unknown	JN	1660.00	
		Tridecane	JN	3000.00	
		UNKNOWN	JN	2000.00	
		Tetradecane	JN	4000.00	
		Tridecane, 6-propyl-	JN	6400.00	
		Undecane, 3,6-dimethyl-	JN	10400.00	
		Heptadecane	JN	13400.00	
		Hexadecane, 2,6,10-trimethyl	JN	17400.00	
		Hexadecane, 7,9-dimethyl-	JN	11400.00	
		Heptadecane, 2,6,10,15-tetra	JN	15000.00	
		Unknown	JN	6400.00	
		Tridecane, 4-methyl-	JN	10400.00	
		Eicosane	JN	8600.00	
		Docosane	JN	15000.00	
		Heptadecane, 2,3-DIMETHYL-	JN	8400.00	
		TRIDECANE, 4-METHYL-	JN	10000.00	
		Hexanedioic acid, dioctyl es	JNB	19600.00	R
		Pentatriacontane	JN	7600.00	
		Hexadecanal	JN	6400.00	
		Unknown	JN	7400.00	

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/kg)	Validation
2510SD000000000.002	9201-110-10	Tetradecane	JN	4400.00	
		Hexadecane	JN	5200.00	
		Heptadecane	JN	11800.00	
		Octacosane	JN	4200.00	
		Dodecane, 2,7,10-trimethyl-	JN	4000.00	
		1-Eicosyne	JN	6400.00	
		TETRACOSANE, 11-DECYL-	JN	5000.00	
		Unknown	JN	7600.00	
		Decane, 5-propyl-	JN	5800.00	
		15-Octadecenal	JN	6200.00	
		Phosphonic acid, dioctadecyl	JN	16400.00	
		EICOSANE, 7-HEXYL-	JN	12400.00	
		16-Octadecenal	JN	40000.00	
		HEPTACOSANE	JN	15600.00	
		OCTADECANAL	JN	11600.00	
		17-OCTADECENAL	JN	5400.00	
		Iron, tricarbonyl[N-(phenyl-	JN	5200.00	
		Unknown	JN	3600.00	
		Unknown	JN	3200.00	
		Unknown	JN	5400.00	
2511SD310000000.002	9201-095-6	2-cyclohexen-1-one	JNB	182.00	R
		Dodecane, 2,7,10-trimethyl-	JN	160.00	
		Unknown	JN	300.00	
		Unknown	JN	200.00	
		Phenanthrene, 2,5-dimethyl-	JN	160.00	
		Phenanthrene, 2,3,5-trimethy	JN	200.00	
		Phenanthrene, 1-methyl-7-(1-	JN	340.00	
		Nonacosane	JN	280.00	
		Hexanedioic acid, dioctyl es	JNB	260.00	R
		Tridecane, 6-propyl-	JN	660.00	
		Pentatriacontane	JN	320.00	
		(Z)14-TRICOSENYL FORMATE	JN	420.00	
		Heptacosane	JN	2600.00	
		Unknown	JN	680.00	
		OCTADECANAL	JN	460.00	
		Unknown	JN	340.00	
		Unknown	JN	340.00	
		Unknown	JN	182.00	

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/kg)	Validation
2511SD320000000.002	9201-095-7	Docosane	JN	1200.00	
		Pentadecane, 3-methyl-	JN	6800.00	
		14-Octadecenal	JN	2600.00	
		Heptacosane	JN	5200.00	
		(Z)14-TRICOSENYL FORMATE	JN	2600.00	
		Nonacosanol	JN	460.00	
		14-OCTADECENAL	JN	1660.00	
		1-HENEICOSYL FORMATE	JN	520.00	
		Unknown	JN	1360.00	
		16-Octadecenal	JN	360.00	
		D-Friedoolean-14-en-3-one	JN	680.00	
		Unknown	JN	980.00	
		Unknown	JN	1040.00	
		.beta.-Amyrin	JN	1140.00	
		Unknown	JN	1100.00	
		D:B-Friedo-B':A'-neogammacer	JN	1400.00	
		Cyclopropa[d]naphthalen-2(4a	JN	420.00	
		Unknown	JN	460.00	
		HEXADECANOIC ACID, TETRADECY	JN	420.00	
2512SD000000000.002	9201-095-10	2,5-Furandione, 3-methyl-	JN	10800.00	
		Ethanone, 1-(4-hydroxyphenyl	JN	1460.00	
		Benzoic acid, phenylmethyl e	JN	1320.00	
		Benzenemethanesulfonamide	JN	8400.00	
		Unknown	JN	6800.00	
		Benzeneacetic acid, phenylme	JN	1580.00	
		Benzaldehyde, 4-(phenylmetho	JN	1660.00	
		Docosane	JN	1940.00	
		2-Propen-1-one, 1-(2,6-dihyd	JN	1300.00	
		Octacosane	JN	1480.00	
		Tetratetracontane	JN	500.00	
		2-Nonanone, 9-hydroxy-	JN	460.00	
		D-Friedoolean-14-en-3-one	JN	620.00	
		Unknown	JN	680.00	
		Unknown	JN	500.00	
		Unknown	JN	840.00	
		Unknown	JN	440.00	
		Unknown	JN	520.00	
		Unknown	JN	1860.00	
		Stigmast-4-en-3-one	JN	580.00	
2513SD000000000.002	9201-086-2	2-Cyclohexen-1-one	JNB	460.00	R
		9,10-Anthracenedione	JN	136.00	
		Heptadecane, 9-octyl-	JN	90.00	
		Unknown	JN	180.00	
		Tetradecane, 6,9-dimethyl-	JN	960.00	
		Octacosane	JN	300.00	
		(Z)14-TRICOSENYL FORMATE	JN	420.00	
		Unknown	JN	220.00	
		HEXATRIACONTANE	JN	300.00	
		Unknown	JN	220.00	

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/kg)	Validation
2514SD000000000.002	9201-086-3	2-Cyclohexen-1-one	JNB	360.00	R
		Hexanoic acid, 2-ethyl-	JN	104.00	
		1-HEXADECANOL	JN	104.00	
		11H-Benzo[b]fluorene	JN	620.00	
		5-OCTADECENE, (E)-	JN	660.00	
		HEPTACOSANE	JN	1240.00	
		Unknown	JN	980.00	
		Docosane	JN	1480.00	
		Unknown	JN	800.00	
2515SD000000000.002	9201-086-4	2-Cyclohexen-1-one	JNB	340.00	R
		Unknown	JN	240.00	
		5-Eicosene, (E)-	JN	2600.00	
		Tetracosane	JN	1140.00	
		HEXADECANE	JN	1340.00	
2516SD320000000.002	9201-220-5	Unknown	JN	620.00	
		2-Cyclohexen-1-one	JNB	540.00	R
		Unknown	JN	2200.00	
		Unknown	JN	680.00	
		HEPTADECANE	JN	540.00	
		Docosane	JN	1360.00	
		Hexadecane	JN	820.00	
		Unknown	JN	820.00	
		Unknown	JN	740.00	
		Unknown	JN	2400.00	
		Unknown	JN	1160.00	
		Unknown	JN	480.00	
		Unknown	JN	1220.00	
		Unknown	JN	680.00	
		Unknown	JN	1160.00	
		Unknown	JN	1700.00	
		Unknown	JN	740.00	
		Unknown	JN	680.00	
		Unknown	JN	540.00	
25I6SD511000000.002	9201-220-6	Unknown	JN	152.00	
		Unknown	JN	240.00	
		2-Cyclohexen-1-one	JNB	260.00	R
		Heptacosane	JN	440.00	
		Eicosane, 7-hexyl-	JN	108.00	
		DOCOSANE	JN	1060.00	
		15-Octadecenal	JN	152.00	
		HEPTADECANE, 9-OCTYL-	JN	174.00	
		2-Heptadecanone	JN	220.00	
		Unknown	JN	194.00	
		Unknown	JN	720.00	
		Unknown	JN	130.00	
		Unknown	JN	194.00	
		Unknown	JN	220.00	
		Stigmast-4-en-3-one	JN	780.00	
		Unknown	JN	300.00	
		Unknown	JN	300.00	
		Unknown	JN	220.00	
		Unknown	JN	152.00	

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/kg)	Validation
2518SD000000000.002	9201-086-5	2-Cyclohexen-1-one	JNB	1140.00	R
		Pentatriacontane	JN	4400.00	
		Unknown	JN	9600.00	
2519SD000000000.002	9201-086-6	Unknown	JN	1560.00	
		Unknown	JN	10400.00	
2520SD000000000.002	9201-086-7	2-Cyclohexen-1-one	JNB	500.00	R
		TETRATRIACONTANE	JN	800.00	
		D-Friedoolean-14-en-3-one	JN	5800.00	
		Unknown	JN	2600.00	
		Unknown	JN	6800.00	
		D:B-Friedo-B':A'-neogammacer	JN	7800.00	
		Unknown	JN	4600.00	
2521SD000000000.002	9201-086-8	2-Pentanone, 4-hydroxy-4-met	JN	540.00	
		7-Oxabicyclo[4.1.0]heptane	JN	760.00	
		2-Cyclohexen-1-one	JNB	1080.00	R
		Unknown	JN	640.00	
		Unknown	JN	1500.00	
		Hexadecane	JN	760.00	
		5-OCTADECENE, (E)-	JN	1180.00	
		Heptacosane	JN	5000.00	
		Octacosane	JN	7600.00	
		(Z)14-TRICOSENYL FORMATE	JN	3000.00	
		D-Friedoolean-14-en-3-one	JN	5000.00	
		Unknown	JN	8200.00	
		Androstan-6-one, (5.alpha.)-	JN	4400.00	
		Unknown	JN	2000.00	
		Unknown	JN	3200.00	
		Unknown	JN	1620.00	
2522SD000000000.002	9201-086-9	Benzaldehyde, 4-hydroxy-	JN	1120.00	
		Unknown	JN	4200.00	
		Unknown	JN	2400.00	
		Benzoic acid, 2-hydroxy-, ph	JN	2200.00	
		Unknown	JN	7800.00	
		Tetracosane, 11-decyl-	JN	9000.00	
2523SD000000000.002	9201-086-10	Unknown	JN	3000.00	
		Heptadecane, 2,6,10,15-tetra	JN	6600.00	
2524SD000000000.002	9201-086-11	7-Hexadecene, (Z)-	JN	3400.00	
2525SD000000000.002	9201-086-12	9,10-Anthracenedione	JN	2400.00	
		Unknown	JN	1980.00	
		Unknown	JN	3600.00	
2526SD000000000.002	9201-086-13	HEPTADECANE, 9-OCTYL-	JN	3800.00	
		Unknown	JN	10000.00	
2527SD000000000.002	9201-156-6	Undecane	JN	5000.00	
		TRIDECANE	JN	3400.00	
		Tetradecane	JN	5800.00	
		7-TETRADECENE	JN	34000.00	
		HEPTADECANE	JN	5800.00	
		Unknown	JN	4200.00	
		1-Eicosyne	JN	5800.00	
		Unknown	JN	8400.00	
		Hexadecanoic acid	JN	920000.00	
		9-Hexadecenoic acid	JN	134000.00	

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/kg)	Validation
2528SD201000000.002	9201-169-3	Undecane	JN	4200.00	
		DODECANE	JN	3000.00	
		[1,1'-Biphenyl]-2-carbonitri	JN	4200.00	
2529SD000000000.002	9201-169-5	UNKNOWN ALKANE	JN	2000.00	
		Unknown	JN	1660.00	
2530SD000000000.002	9201-169-7	Undecane	JN	1980.00	
		Heptadecane	JN	1580.00	
		Unknown	JN	10000.00	

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

STORM EVENTS
SURFACE WATER ANALYTICAL RESULTS

STF Number	Lab Number	Phenol (ug/L)	bis(2-Chloro-ethyl) ether (ug/L)	2-Chlorophenol (ug/L)	1,3-Dichloro-benzene (ug/L)	1,4-Dichloro-benzene (ug/L)	1,2-Dichloro-benzene (ug/L)	2-Methylphenol (ug/L)	2,2'-oxybis (1-Chloropropane) (ug/L)
2515 SU201000000.027	9201-227-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

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STF Number	Lab Number	4-Methylphenol (ug/L)	N-Nitroso-di-n-dipropylamine (ug/L)	Hexachloroethane (ug/L)	Nitrobenzene (ug/L)	Isophorone (ug/L)	2-Nitrophenol (ug/L)	2,4-Dimethylphenol (ug/L)	bis(2-Chloro-ethoxy) methane (ug/L)
2515 SU2010000000.027	9201-227-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	2,4-Dichlorophenol (ug/L)	1,2,4-Trichlorobenzene (ug/L)	Naphthalene (ug/L)	4-Chloroaniline (ug/L)	Hexachlorobutadiene (ug/L)	4-Chloro-3-methylphenol (ug/L)	2-Methylnaphthalene (ug/L)	Hexachlorocyclopentadiene (ug/L)
2515 SU2810000000.827	9201-227-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	2,4,6-Trichlorophenol (ug/L)	2,4,5-Trichlorophenol (ug/L)	2-Chloronaphthalene (ug/L)	2-Nitroaniline (ug/L)	Dimethylphthalate (ug/L)	Acenaphthylene (ug/L)	2,6-Dinitrotoluene (ug/L)	3-Nitroaniline (ug/L)
2515	SU2910000000.027	9201-227-1	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000

STF Number	Lab Number	Acenaphthene (ug/L)	2,4-Dinitrophenol (ug/L)	4-Nitrophenol (ug/L)	Dibenzofuran (ug/L)	2,4-Dinitrotoluene (ug/L)	Diethylphthalate (ug/L)	4-Chlorophenyl-phenylether (ug/L)	Fluorene (ug/L)
2515 SU2810000000.027	9201-227-1	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	4-Nitroaniline (ug/L)	4,6-Dinitro-2-methylphenol (ug/L)	N-nitrosodiphenylamine (ug/L)	4-Bromophenylphenylether (ug/L)	Hexachlorobenzene (ug/L)	Pentachlorophenol (ug/L)	Phenanthrene (ug/L)	Anthracene (ug/L)
2515 SU201000000.027	9201-227-1	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	J 0.6000	U 10.0000	U 10.0000

STF Number	Lab Number	Carbazole (ug/L)	Di-n-butyl-phthalate (ug/L)	Fluoranthene (ug/L)	Pyrene (ug/L)	Butylbenzyl-phthalate (ug/L)	3,3'-Dichloro-benzidine (ug/L)	Benzo(a)anthracene (ug/L)	Chrysene (ug/L)
2515 SUZ01000000.027	9201-227-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	bis(2-Ethylhexyl) phthalate (ug/L)	Di-n-octyl-phthalate (ug/L)	Benzo(b)-fluoranthene (ug/L)	Benzo(k)-fluoranthene (ug/L)	Benzo(a)pyrene (ug/L)	Indeno(1,2,3-cd)-pyrene (ug/L)	Dibenzo(a,h)-anthracene (ug/L)	Benzo(g,h,i)-perylene (ug/L)
2515 SU2010000000.027	9201-227-1	J 0.5000 J4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/L)	Validation
2515SU201000000.027	9201-227-1	Unknown	JNB	4.00	
		1-Propene, 3,3,3-trichloro-	JNB	10.00	R
		PROPANEDINITRILE, DICYCLOHEX	JNB	8.00	R

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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

BIWEEKLY/MONTHLY
SURFACE WATER ANALYTICAL RESULTS

STF Number	Lab Number	Phenol (ug/L)	bis(2-Chloroethyl) ether (ug/L)	2-Chlorophenol (ug/L)	1,3-Dichlorobenzene (ug/L)	1,4-Dichlorobenzene (ug/L)	1,2-Dichlorobenzene (ug/L)	2-Methylphenol (ug/L)	2,2'-oxybis(1-Chloropropane) (ug/L)
2515 SU0000000000.051	9104-077-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU0000000000.068	9111-296-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU0000000000.073	9202-011-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU0000000000.073	9202-011-1DL	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R
2515 SU2010000000.074	9202-164-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

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STF Number	Lab Number	4-Methylphenol (ug/L)	N-Nitroso-di-n-dipropylamine (ug/L)	Hexachloroethane (ug/L)	Nitrobenzene (ug/L)	Isophorone (ug/L)	2-Nitrophenol (ug/L)	2,4-Dimethylphenol (ug/L)	bis(2-Chloro-ethoxy) methane (ug/L)
2515 SU0000000000.051	9104-077-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU0000000000.068	9111-296-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU0000000000.073	9202-011-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU0000000000.073	9202-011-1DL	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R
2515 SU2010000000.074	9202-164-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	2,4-Dichlorophenol (ug/L)	1,2,4-Trichlorobenzene (ug/L)	Naphthalene (ug/L)	4-Chloroaniline (ug/L)	Hexachlorobutadiene (ug/L)	4-Chloro-3-methylphenol (ug/L)	2-Methylnaphthalene (ug/L)	Hexachlorocyclopentadiene (ug/L)
2515 SU0000000000.051	9104-077-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU0000000000.068	9111-296-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU0000000000.073	9202-011-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU0000000000.073	9202-011-1DL	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R
2515 SU2010000000.074	9202-164-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	2,4,6-Trichlorophenol (ug/L)	2,4,5-Trichlorophenol (ug/L)	2-Chloronaphthalene (ug/L)	2-Nitroaniline (ug/L)	Dimethylphthalate (ug/L)	Acenaphthylene (ug/L)	2,6-Dinitrotoluene (ug/L)	3-Nitroaniline (ug/L)
2515 SU000000000.051	9104-077-3	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2515 SU000000000.068	9111-296-1	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000 UJ
2515 SU000000000.073	9202-011-1	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000 UJ
2515 SU000000000.073	9202-011-1DL	U 20.0000 R	U 50.0000 R	U 20.0000 R	U 50.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 50.0000 R
2515 SU201000000.074	9202-164-1	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000

STF Number	Lab Number	Acenaphthene (ug/L)	2,4-Dinitrophenol (ug/L)	4-Nitrophenol (ug/L)	Dibenzofuran (ug/L)	2,4-Dinitrotoluene (ug/L)	Diethylphthalate (ug/L)	4-Chlorophenyl-phenylether (ug/L)	Fluorene (ug/L)
2515 SU0000000000.051	9104-077-3	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU0000000000.068	9111-296-1	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU0000000000.073	9202-011-1	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU0000000000.073	9202-011-1DL	U 20.0000 R	U 50.0000 R	U 50.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R
2515 SU2010000000.074	9202-164-1	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	4-Nitroaniline (ug/L)	4,6-Dinitro-2-methylphenol (ug/L)	N-nitrosodiphenylamine (ug/L)	4-Bromophenylphenylether (ug/L)	Hexachlorobenzene (ug/L)	Pentachlorophenol (ug/L)	Phenanthrene (ug/L)	Anthracene (ug/L)
2515 SU000000000.051	9104-077-3	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2515 SU000000000.068	9111-296-1	U 25.0000 UJ	U 25.0000	U 10.0000	U 10.0000	U 10.0000	J 0.6000	U 10.0000	U 10.0000
2515 SU000000000.073	9202-011-1	U 25.0000 UJ	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2515 SU000000000.073	9202-011-1DL	U 50.0000 R	U 50.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 50.0000 R	U 20.0000 R	U 20.0000 R
2515 SU201000000.074	9202-164-1	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	J 0.7000	U 10.0000	U 10.0000

STF Number	Lab Number	Carbazole (ug/L)	Di-n-butyl-phthalate (ug/L)	Fluoranthene (ug/L)	Pyrene (ug/L)	Butylbenzyl-phthalate (ug/L)	3,3'-Dichloro-benzidine (ug/L)	Benzo(a)anthracene (ug/L)	Chrysene (ug/L)
2515 SU0000000000.051	9104-077-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000 UJ	U 10.0000	U 10.0000
2515 SU0000000000.068	9111-296-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU0000000000.073	9202-011-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU0000000000.073	9202-011-1DL	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R
2515 SU2010000000.074	9202-164-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	bis(2-Ethylhexyl) phthalate (ug/L)	Di-n-octyl-phthalate (ug/L)	Benzo(b)-fluoranthene (ug/L)	Benzo(k)-fluoranthene (ug/L)	Benzo(a)pyrene (ug/L)	Indeno(1,2,3-cd)-pyrene (ug/L)	Dibenzo(a,h)-anthracene (ug/L)	Benzo(g,h,i)-perylene (ug/L)
2515 SU0000000000.051	9104-077-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU0000000000.068	9111-296-1	J 1.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU0000000000.073	9202-011-1	R 93.0000 R	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2515 SU0000000000.073	9202-011-1DL	75.0000	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R	U 20.0000 R
2515 SU2010000000.074	9202-164-1	J 0.7000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/L)	Validation
2515SU000000000.051	9104-077-3	ALPHA-PINENE(ACN)	JN	22.00	
		BETA-PINENE	JN	30.00	
		BENZENE, METHYL(1-METHYLETHY	JN	5.00	
		1,4-CYCLOHEXADIENE,1-METHYL-	JN	8.00	
		MALTOL	JN	6.00	
		6-OCTEN-1-O1, 3,7-DIMETHYL-,	JN	4.00	
2515SU000000000.068	9111-296-1	2-Pentanone, 4-hydroxy-4-met	JNB	3.00	R
		1-Propene, 3,3,3-trichloro-	JNB	2.00	R
		UNKNOWN	JNB	2.00	
		UNKNOWN	JNB	4.00	
2515SU000000000.073	9202-011-1	Unknown	JNB	5.00	
		2-Cyclohexen-1-ol	JN	3.00	
		1-Propene, 3,3,3-trichloro-	JNB	10.00	R
		PROPANEDINITRILE, DICYCLOHEX	JNB	6.00	R
		Unknown	JN	4.00	
2515SU000000000.073	9202-011-1DL	Unknown	JNB	5.00	
		1-Propene, 3,3,3-trichloro-	JNB	9.00	R
		PROPANEDINITRILE, DICYCLOHEX	JNB	6.00	R
2515SU201000000.074	9202-164-1	Unknown	JN	2.00	
		1-Propene, 3,3,3-trichloro-	JNB	5.00	R
		2-Hexene, 4,4,5-trimethyl-	JNB	4.00	R
		Unknown	JNB	4.00	

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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

DRY SEASON (AUGUST 1991) AND WET SEASON (JANUARY 1992) BACKGROUND SURFACE WATER ANALYTICAL RESULTS

STF Number	Lab Number	Phenol (ug/L)	bis(2-Chloro-ethyl) ether (ug/L)	2-Chlorophenol (ug/L)	1,3-Dichloro-benzene (ug/L)	1,4-Dichloro-benzene (ug/L)	1,2-Dichloro-benzene (ug/L)	2-Methylphenol (ug/L)	2,2'-oxybis (1-Chloropropane) (ug/L)
2538 SU0000000000.001	9108-107-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2539 SU0000000000.002	9201-156-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2540 SU0000000000.001	9108-107-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2540 SU0000000000.002	9201-176-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2541 SU0000000000.001	9108-107-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2541 SU0000000000.002	9201-176-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2542 SU0000000000.001	9108-190-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2542 SU0000000000.002	9201-176-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2543 SU0000000000.001	9108-190-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2543 SU0000000000.002	9201-176-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

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STF Number	Lab Number	4-Methylphenol (ug/L)	N-Nitroso-di-n-dipropylamine (ug/L)	Hexachloroethane (ug/L)	Nitrobenzene (ug/L)	Isophorone (ug/L)	2-Nitrophenol (ug/L)	2,4-Dimethylphenol (ug/L)	bis(2-Chloroethoxy) methane (ug/L)
2500 SU0000000000.001	9108-107-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2500 SU0000000000.002	9201-156-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2540 SU0000000000.001	9108-107-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2540 SU0000000000.002	9201-176-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2541 SU0000000000.001	9108-107-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2541 SU0000000000.002	9201-176-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2542 SU0000000000.001	9108-190-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2542 SU0000000000.002	9201-176-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2543 SU0000000000.001	9108-190-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2543 SU0000000000.002	9201-176-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	2,4-Dichlorophenol (ug/L)	1,2,4-Trichlorobenzene (ug/L)	Naphthalene (ug/L)	4-Chloroaniline (ug/L)	Hexachlorobutadiene (ug/L)	4-Chloro-3-methylphenol (ug/L)	2-Methylnaphthalene (ug/L)	Hexachlorocyclopentadiene (ug/L)
2580 SU000000000.001	9108-107-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2580 SU000000000.002	9201-156-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2540 SU000000000.001	9108-107-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2540 SU000000000.002	9201-176-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2541 SU000000000.001	9108-107-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2541 SU000000000.002	9201-176-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2542 SU000000000.001	9108-198-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2542 SU000000000.002	9201-176-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2543 SU000000000.001	9108-198-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2543 SU000000000.002	9201-176-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	2,4,6-Trichlorophenol (ug/L)	2,4,5-Trichlorophenol (ug/L)	2-Chloronaphthalene (ug/L)	2-Nitroaniline (ug/L)	Dimethylphthalate (ug/L)	Acenaphthylene (ug/L)	2,6-Dinitrotoluene (ug/L)	3-Nitroaniline (ug/L)
2500 SU000000000.001	9108-107-4	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2500 SU000000000.002	9201-156-1	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2540 SU000000000.001	9108-107-1	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2540 SU000000000.002	9201-176-1	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2541 SU000000000.001	9108-107-2	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2541 SU000000000.002	9201-176-2	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2542 SU000000000.001	9108-198-4	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2542 SU000000000.002	9201-176-3	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2543 SU000000000.001	9108-198-5	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2543 SU000000000.002	9201-176-4	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000

STF Number	Lab Number	Acenaphthene (ug/L)	2,4-Dinitrophenol (ug/L)	4-Nitrophenol (ug/L)	Dibenzofuran (ug/L)	2,4-Dinitrotoluene (ug/L)	Diethylphthalate (ug/L)	4-Chlorophenyl-phenylether (ug/L)	Fluorene (ug/L)
2500 SU0000000000.001	9108-107-4	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2500 SU0000000000.002	9201-156-1	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2540 SU0000000000.001	9108-107-1	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2540 SU0000000000.002	9201-176-1	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2541 SU0000000000.001	9108-107-2	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2541 SU0000000000.002	9201-176-2	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2542 SU0000000000.001	9108-190-4	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2542 SU0000000000.002	9201-176-3	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2543 SU0000000000.001	9108-190-5	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2543 SU0000000000.002	9201-176-4	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	4-Nitroaniline (ug/L)	4,6-Dinitro-2-methylphenol (ug/L)	N-nitrosodiphenylamine (ug/L)	4-Bromophenyl-phenylether (ug/L)	Hexachlorobenzene (ug/L)	Pentachlorophenol (ug/L)	Phenanthrene (ug/L)	Anthracene (ug/L)
2500 SU000000000.001	9108-107-4	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2500 SU000000000.002	9201-156-1	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2540 SU000000000.001	9108-107-1	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2540 SU000000000.002	9201-176-1	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2541 SU000000000.001	9108-107-2	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2541 SU000000000.002	9201-176-2	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2542 SU000000000.001	9108-190-4	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2542 SU000000000.002	9201-176-3	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2543 SU000000000.001	9108-190-5	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
2543 SU000000000.002	9201-176-4	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000

STF Number	Lab Number	Carbazole (ug/L)	Di-n-butyl-phthalate (ug/L)	Fluoranthene (ug/L)	Pyrene (ug/L)	Butylbenzyl-phthalate (ug/L)	3,3'-Dichloro-benzidine (ug/L)	Benzo(a)anthracene (ug/L)	Chrysene (ug/L)
2500 SU000000000.001	9108-107-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2500 SU000000000.002	9201-156-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2540 SU000000000.001	9108-107-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2540 SU000000000.002	9201-176-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2541 SU000000000.001	9108-107-2	U 10.0000	U 10.0000	J 3.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2541 SU000000000.002	9201-176-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2542 SU000000000.001	9108-190-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2542 SU000000000.002	9201-176-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2543 SU000000000.001	9108-190-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2543 SU000000000.002	9201-176-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	bis(2-Ethylhexyl) phthalate (ug/L)	Di-n-octyl-phthalate (ug/L)	Benzo(b)-fluoranthene (ug/L)	Benzo(k)-fluoranthene (ug/L)	Benzo(a)pyrene (ug/L)	Indeno(1,2,3-cd)-pyrene (ug/L)	Dibenzo(a,h)-anthracene (ug/L)	Benzo(g,h,i)-perylene (ug/L)
2538 SU0000000000.001	9108-107-4	J 6.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2539 SU0000000000.002	9201-156-1	J 2.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2540 SU0000000000.001	9108-107-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2540 SU0000000000.002	9201-176-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2541 SU0000000000.001	9108-107-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2541 SU0000000000.002	9201-176-2	J 0.9000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2542 SU0000000000.001	9108-198-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2542 SU0000000000.002	9201-176-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2543 SU0000000000.001	9108-198-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2543 SU0000000000.002	9201-176-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/L)	Validation
2500SU000000000.001	9108-107-4	Octane, 2,2,6-trimethyl-	JN	10.00	
		Bicyclo[3.1.0]hex-2-ene, 4-m	JN	10.00	
		Heptane, 4-ethyl-2,2,6,6-tet	JN	4.00	
		Heptane, 2,2,3,4,6,6-hexamet	JN	6.00	
		Decane, 2,6,6-trimethyl-	JN	3.00	
		UNKNOWN ALKANE	JN	4.00	
		UNKNOWN	JN	10.00	
		UNKNOWN	JN	4.00	
		1H-Indole-3-ethanamine, 5-me	JN	35.00	
		Cyclodecene	JN	4.00	
		Amitriptyline	JN	26.00	
		Tetradecanoic acid	JN	8.00	
		UNKNOWN	JN	2.00	
		UNKNOWN	JN	2.00	
		UNKNOWN	JN	2.00	
		1-Tetradecanamine, N,N-dimet	JN	6.00	
		Hexadecanoic acid	JN	140.00	
		Pentatriacontane	JN	3.00	
		UNKNOWN	JN	14.00	
2500SU000000000.002	9201-156-1	1-Propene, 3,3,3-trichloro-	JNB	4.00	R
		Propanedinitrile, dicyclohex	JNB	4.00	R
		UNKNOWN	JN	2.00	
		Phenol, 2,6-bis(1,1-dimethyl	JNB	2.00	R
		1-Propanol, 2-[2-methoxyprop	JNB	5.00	R
		Unknown	JN	3.00	
		Unknown	JNB	6.00	
2540SU000000000.001	9108-107-1	2-Pentanone, 4-hydroxy-4-met	BJN	3.00	
		UNKNOWN	BJN	4.00	
		UNKNOWN	BJN	6.00	
		UNKNOWN	JN	3.00	
		Acetic acid, (triphenylphosp	JN	2.00	
		UNKNOWN	JN	5.00	
2540SU000000000.002	9201-176-1	Unknown	JN	2.00	
		1-Propene, 3,3,3-trichloro-	JNB	8.00	R
		PROPANEDINITRILE, DICYCLOHEX	JNB	2.00	R
		Phenol, 2,6-bis(1,1-dimethyl	JN	2.00	
		Unknown	JN	5.00	
		1-Hexacosanol	JN	4.00	

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DATE RECEIVED
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CHECKED BY RM DATE 3/27/92

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/L)	Validation
2541SU000000000.001	9108-107-2	1,3-Cyclopentanedione, 2-chl	JN	2.00	
		UNKNOWN	JN	2.00	
		UNKNOWN	JN	2.00	
		UNKNOWN	JN	2.00	
		UNKNOWN	JN	4.00	
		UNKNOWN	JN	2.00	
		UNKNOWN	JN	3.00	
		UNKNOWN	JN	2.00	
		UNKNOWN	JN	3.00	
		1H-Inden-1-one, 2,3-dihydro-	JN	4.00	
		Phthalic anhydride (8CI)	JN	2.00	
		Formamide, N-phenyl-	JN	2.00	
		UNKNOWN	JN	7.00	
		UNKNOWN	JN	2.00	
		UNKNOWN	JN	2.00	
		Ethanol, 2-(9-octadecenyloxy	JN	3.00	
		Ethanol, 2-butoxy-, phosphat	JN	5.00	
2541SU000000000.002	9201-176-2	1-Propene, 3,3,3-trichloro-	JNB	6.00	R
		PROPANEDINITRILE, DICYCLOHEX	JNB	2.00	R
2542SU000000000.001	9108-190-4	2-PENTANONE, 4-HYDROXY-4-MET	JN	2.00	
		UNKNOWN	JN	6.00	
		UNKNOWN	BJN	8.00	
		UNKNOWN	JN	2.00	
		1-Propanol, 2-(2-methoxyprop	JN	16.00	
		UNKNOWN	BJN	20.00	
		UNKNOWN	JN	4.00	
		UNKNOWN	JN	12.00	
		UNKNOWN	JN	5.00	
		UNKNOWN	JN	5.00	
2542SU000000000.002	9201-176-3	Unknown	JN	2.00	
		1-Propene, 3,3,3-trichloro-	JNB	10.00	R
		PROPANEDINITRILE, DICYCLOHEX	JNB	4.00	R
2543SU000000000.001	9108-190-5	UNKNOWN	JN	12.00	
		UNKNOWN	JN	8.00	
		UNKNOWN	JN	4.00	
		9-Hexadecenoic acid	JN	2.00	
		UNKNOWN	JN	4.00	
		2-Propanol, 1-[1-methyl-2-(2	JN	2.00	
		UNKNOWN	JN	4.00	
		UNKNOWN	JN	22.00	
		UNKNOWN	JN	4.00	
		UNKNOWN	BJN	8.00	
		UNKNOWN	JN	16.00	
		UNKNOWN	BJN	14.00	
		UNKNOWN	BJN	25.00	
		UNKNOWN	BJN	2.00	
		UNKNOWN	JN	4.00	
		UNKNOWN	JN	2.00	
2543SU000000000.002	9201-176-4	1-Propene, 3,3,3-trichloro-	JNB	5.00	R
		Propanedinitrile, dicyclohex	JNB	2.00	R
		Ethanol, 2-butoxy-, phosphat	JN	2.00	

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

QA/QC DUPLICATE
SURFACE WATER ANALYTICAL RESULTS

STF Number	Lab Number	Phenol (ug/L)	bis(2-Chloro-ethyl) ether (ug/L)	2-Chlorophenol (ug/L)	1,3-Dichloro-benzene (ug/L)	1,4-Dichloro-benzene (ug/L)	1,2-Dichloro-benzene (ug/L)	2-Methylphenol (ug/L)	2,2'-oxybis (1-Chloropropane) (ug/L)
3188 SU202000000.074	9202-164-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3189 SU202000000.027	9201-227-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3196 SU202000000.002	9201-169-10	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3197 SU202000000.002	9201-110-12	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3198 SU202000000.001	9108-172-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3199 SU512000000.001	9108-153-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3200 SU512000000.000	9104-206-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

DATA VALIDATION
DATE RECEIVED _____
VALIDATED BY _____ DATE _____
KEYED BY _____ DATE _____
CHECKED BY SRM DATE 4/30/92

STF Number	Lab Number	4-Methylphenol (ug/L)	N-Nitroso-di-n-dipropylamine (ug/L)	Hexachloroethane (ug/L)	Nitrobenzene (ug/L)	Isophorone (ug/L)	2-Nitrophenol (ug/L)	2,4-Dimethylphenol (ug/L)	bis(2-Chloro-ethoxy) methane (ug/L)
3188 SU202000000.074	9202-164-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3189 SU202000000.027	9201-227-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3196 SU202000000.002	9201-169-10	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3197 SU202000000.002	9201-110-12	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3198 SU202000000.001	9108-172-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3199 SU512000000.001	9108-153-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3200 SU512000000.000	9104-286-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	2,4-Dichlorophenol (ug/L)	1,2,4-Trichlorobenzene (ug/L)	Naphthalene (ug/L)	4-Chloroaniline (ug/L)	Hexachlorobutadiene (ug/L)	4-Chloro-3-methylphenol (ug/L)	2-Methylnaphthalene (ug/L)	Hexachlorocyclopentadiene (ug/L)
3188 SU202000000.074	9202-164-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3189 SU202000000.027	9201-227-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3196 SU202000000.002	9201-169-10	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3197 SU202000000.002	9201-110-12	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3198 SU202000000.001	9108-172-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3199 SU512000000.001	9108-153-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3200 SU512000000.000	9104-206-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	2,4,6-Trichlorophenol (ug/L)	2,4,5-Trichlorophenol (ug/L)	2-Chloronaphthalene (ug/L)	2-Nitroaniline (ug/L)	Dimethylphthalate (ug/L)	Acenaphthylene (ug/L)	2,6-Dinitrotoluene (ug/L)	3-Nitroaniline (ug/L)
3188 SU202000000.074	9202-164-2	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
3189 SU202000000.027	9201-227-2	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
3196 SU202000000.002	9201-169-10	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
3197 SU202000000.002	9201-110-12	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
3198 SU202000000.001	9108-172-2	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
3199 SU512000000.001	9108-153-5	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
3200 SU512000000.000	9104-206-2	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000

STF Number	Lab Number	Acenaphthene (ug/L)	2,4-Dinitrophenol (ug/L)	4-Nitrophenol (ug/L)	Dibenzofuran (ug/L)	2,4-Dinitrotoluene (ug/L)	Diethylphthalate (ug/L)	4-Chlorophenyl-phenylether (ug/L)	Fluorene (ug/L)
3188 SU202000000.074	9202-164-2	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3189 SU202000000.027	9201-227-2	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3196 SU202000000.002	9201-169-10	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3197 SU202000000.002	9201-110-12	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3198 SU202000000.001	9108-172-2	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3199 SU512000000.001	9108-153-5	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3200 SU512000000.000	9104-206-2	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	4-Nitroaniline (ug/L)	4,6-Dinitro-2-methylphenol (ug/L)	N-nitrosodiphenylamine (ug/L)	4-Bromophenylphenylether (ug/L)	Hexachlorobenzene (ug/L)	Pentachlorophenol (ug/L)	Phenanthrene (ug/L)	Anthracene (ug/L)
3188 SU202000000.074	9202-164-2	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	J 0.7000	U 10.0000	U 10.0000
3189 SU202000000.027	9201-227-2	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	J 0.5000	U 10.0000	U 10.0000
3196 SU202000000.002	9201-169-10	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
3197 SU202000000.002	9201-110-12	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
3198 SU202000000.001	9108-172-2	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
3199 SU512000000.001	9108-153-5	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000
3200 SU512000000.000	9104-206-2	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000

STF Number	Lab Number	Carbazole (ug/L)	Di-n-butyl-phthalate (ug/L)	Fluoranthene (ug/L)	Pyrene (ug/L)	Butylbenzyl-phthalate (ug/L)	3,3'-Dichloro-benzidine (ug/L)	Benzo(a)anthracene (ug/L)	Chrysene (ug/L)
3188 SU202000000.074	9202-164-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3189 SU202000000.027	9201-227-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3196 SU202000000.002	9201-169-10	U 10.0000	U 10.0000	J 0.5000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3197 SU202000000.002"	9201-110-12	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3198 SU202000000.001	9108-172-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3199 SU512000000.001	9108-153-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3200 SU512000000.000	9104-206-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	bis(2-Ethylhexyl) phthalate (ug/L)	Di-n-octyl-phthalate (ug/L)	Benzo(b)-fluoranthene (ug/L)	Benzo(k)-fluoranthene (ug/L)	Benzo(a)pyrene (ug/L)	Indeno(1,2,3-cd)-pyrene (ug/L)	Dibenzo(a,h)-anthracene (ug/L)	Benzo(g,h,i)-perylene (ug/L)
3188 SU202000000.074	9202-164-2	J 7.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3189 SU202000000.027	9201-227-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3196 SU202000000.002	9201-169-10	J 2.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3197 SU202000000.002	9201-110-12	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3198 SU202000000.001	9108-172-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3199 SU512000000.001	9108-153-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3200 SU512000000.000	9104-206-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/L)	Validation
3188SU202000000.074	9202-164-2	Unknown	JN	3.00	
		1-PROPENE, 3,3,3-TRICHLORO-	JNB	5.00	R
		2-HEXENE, 4,4,5-TRIMETHYL-	JNB	6.00	R
		Unknown	JNB	4.00	
		hexanedioic acid, dioctyl	JNB	3.00	
3189SU202000000.027	9201-227-2	Unknown	JNB	4.00	
		1-Propene, 3,3,3-trichloro-	JNB	16.00	R
		PROPANEDINITILE, DICYCLOHEXY	JNB	10.00	R
3196SU202000000.002	9201-169-10	Unknown	JN	4.00	
		1-Propene, 3,3,3-trichloro-	JNB	6.00	R
		2-Butanol, 3,3'-oxybis-	JN	4.00	
		Unknown	JN	4.00	
		PROPANEDINITRILE, DICYCLOHEX	JNB	2.00	R
		Unknown	JN	4.00	
		Unknown	JN	6.00	
		Unknown	JN	2.00	
		Ethanol, 2-[2-(2-ethoxyethox	JN	6.00	
		Unknown	JN	4.00	
		Unknown	JN	4.00	
		1-Propanol, 2-ethoxy-	JN	2.00	
		Ethanol, 2-[2-(2-butoxyethox	JN	6.00	
		Ethanol, 2-[2-(2-methoxyetho	JN	2.00	
		Phenol, 2,6-bis(1,1-dimethyl	JNB	2.00	R
		Ethane, 1,1'-oxybis[2-methox	JN	2.00	
		3,6,9,12-Tetraoxahexadecan-1	JN	6.00	
		Ethanol, 2-butoxy-, phosphat	JN	3.00	
3197SU202000000.002	9201-110-12	2-PENTANONE, 4-HYDROXY-4-MET	JNB	5.00	R
		Unknown	JNB	6.00	
		1-Propene, 3,3,3-trichloro-	JNB	6.00	R
		PROPANEDINITRILE, DICYCLOHEX	JNB	2.00	R
3198SU202000000.001	9108-172-2	UNKNOWN	BJN	3.00	
		UNKNOWN	BJN	3.00	
		Propanoic acid, 2-methyl-, 2	JN	3.00	
		UNKNOWN	JN	2.00	
		1-Propanol, 2-(2-methoxyprop	JN	6.00	
		UNKNOWN	JN	3.00	
		UNKNOWN	JN	2.00	
3199SU512000000.001	9108-153-5	2-Pentanone, 4-hydroxy-4-met	JN	4.00	
		UNKNOWN	BJN	6.00	
		UNKNOWN	JN	6.00	
		UNKNOWN	JN	2.00	
		3,4-DICHLOROPHENYL ISOCYANAT	JN	2.00	
		UNKNOWN	JN	2.00	
		9,12,15-Octadecatrienoic aci	JN	2.00	
		UNKNOWN	JN	2.00	
3200SU512000000.000	9104-206-2	3-PENTEN-2-ONE, 4-METHYL	JN	51.00	R

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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

QA/QC DUPLICATE
SEDIMENT ANALYTICAL RESULTS

STF Number	Lab Number	Phenol (ug/kg)	bis(2-Chloroethyl) ether (ug/kg)	2-Chlorophenol (ug/kg)	1,3-Dichlorobenzene (ug/kg)	1,4-Dichlorobenzene (ug/kg)	1,2-Dichlorobenzene (ug/kg)	2-Methylphenol (ug/kg)	2,2'-oxybis(1-Chloropropane) (ug/kg)
3196 SD202000000.002	9201-169-9	U 28000.0000	U 28000.0000	U 28000.0000	U 28000.0000	U 28000.0000	U 28000.0000	U 28000.0000	U 28000.0000
3197 SD202000000.002	9201-110-11	U 2200.0000	U 2200.0000	U 2200.0000	U 2200.0000	U 2200.0000	U 2200.0000	U 2200.0000	U 2200.0000
3198 SD202000000.001	9108-172-1	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000
3199 SD512000000.001	9108-153-4	U 500.0000	U 500.0000	U 500.0000	U 500.0000	U 500.0000	U 500.0000	U 500.0000	U 500.0000

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STF Number	Lab Number	4-Methylphenol (ug/kg)	N-Nitroso-di-n-dipropylamine (ug/kg)	Hexachloroethane (ug/kg)	Nitrobenzene (ug/kg)	Isophorone (ug/kg)	2-Nitrophenol (ug/kg)	2,4-Dimethylphenol (ug/kg)	bis(2-Chloro-ethoxy) methane (ug/kg)
3196 SD202000000.002	9201-169-9	U 28000.0000	U 28000.0000	U 28000.0000	U 28000.0000	U 28000.0000	U 28000.0000	U 28000.0000	U 28000.0000
3197 SD202000000.002	9201-110-11	J 220.0000	U 2200.0000	U 2200.0000	U 2200.0000	U 2200.0000	U 2200.0000	U 2200.0000	U 2200.0000
3198 SD202000000.001	9108-172-1	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000
3199 SD512000000.001	9108-153-4	U 500.0000	U 500.0000	U 500.0000	U 500.0000	U 500.0000	U 500.0000	U 500.0000	U 500.0000

STF Number	Lab Number	2,4-Dichlorophenol (ug/kg)	1,2,4-Trichlorobenzene (ug/kg)	Naphthalene (ug/kg)	4-Chloroaniline (ug/kg)	Hexachlorobutadiene (ug/kg)	4-Chloro-3-methylphenol (ug/kg)	2-Methylnaphthalene (ug/kg)	Hexachlorocyclopentadiene (ug/kg)
3196 SD202000000.002	9201-169-9	U 28000.0000	U 28000.0000	U 28000.0000	U 28000.0000	U 28000.0000	U 28000.0000	U 28000.0000	U 28000.0000
3197 SD202000000.002	9201-110-11	U 2200.0000	U 2200.0000	U 2200.0000	U 2200.0000	U 2200.0000	U 2200.0000	U 2200.0000	U 2200.0000
3198 SD202000000.001	9108-172-1	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000
3199 SD512000000.001	9108-153-4	U 500.0000	U 500.0000	J 40.0000	U 500.0000	U 500.0000	U 500.0000	J 29.0000	U 500.0000

STF Number	Lab Number	2,4,6-Trichlorophenol (ug/kg)	2,4,5-Trichlorophenol (ug/kg)	2-Chloronaphthalene (ug/kg)	2-Nitroaniline (ug/kg)	Dimethylphthalate (ug/kg)	Acenaphthylene (ug/kg)	2,6-Dinitrotoluene (ug/kg)	3-Nitroaniline (ug/kg)
3196 SD202000000.002	9201-169-9	U 28000.0000	U 67000.0000	U 28000.0000	U 67000.0000	U 28000.0000	U 28000.0000	U 28000.0000	U 67000.0000
3197 SD202000000.002	9201-110-11	U 2200.0000	U 5300.0000	U 2200.0000	U 5300.0000	U 2200.0000	U 2200.0000	U 2200.0000	U 5300.0000
3198 SD202000000.001	9108-172-1	U 10000.0000	U 24000.0000	U 10000.0000	U 24000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 24000.0000
3199 SD512000000.001	9108-153-4	U 500.0000	U 1200.0000	U 500.0000	U 1200.0000	U 500.0000	J 44.0000	J 340.0000 J4	U 1200.0000

STF Number	Lab Number	Acenaphthene (ug/kg)	2,4-Dinitrophenol (ug/kg)	4-Nitrophenol (ug/kg)	Dibenzofuran (ug/kg)	2,4-Dinitrotoluene (ug/kg)	Diethylphthalate (ug/kg)	4-Chlorophenyl-phenylether (ug/kg)	Fluorene (ug/kg)
3196 SD202000000.002	9201-169-9	U 28000.0000	U 67000.0000	U 67000.0000	U 28000.0000	U 28000.0000	U 28000.0000	U 28000.0000	U 28000.0000
3197 SD202000000.002	9201-110-11	U 2200.0000	U 5300.0000	U 5300.0000	U 2200.0000	U 2200.0000	U 2200.0000	U 2200.0000	U 2200.0000
3198 SD202000000.001	9108-172-1	U 10000.0000	U 24000.0000	U 24000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 10000.0000
3199 SD512000000.001	9108-153-4	U 500.0000	U 1200.0000	U 1200.0000	U 500.0000	U 500.0000	U 500.0000	U 500.0000	J 29.0000

STF Number	Lab Number	4-Nitroaniline (ug/kg)	4,6-Dinitro-2-methylphenol (ug/kg)	N-nitrosodiphenylamine (ug/kg)	4-Bromophenylphenylether (ug/kg)	Hexachlorobenzene (ug/kg)	Pentachlorophenol (ug/kg)	Phenanthrene (ug/kg)	Anthracene (ug/kg)
3196 SD202000000.002	9201-169-9	U 67000.0000	U 67000.0000	U 28000.0000	U 28000.0000	U 28000.0000	U 67000.0000	J 5700.0000	U 28000.0000
3197 SD202000000.002	9201-110-11	U 5300.0000	U 5300.0000	U 2200.0000	U 2200.0000	U 2200.0000	U 5300.0000	J 160.0000	U 2200.0000
3198 SD202000000.001	9108-172-1	U 24000.0000	U 24000.0000	U 10000.0000	U 10000.0000	U 10000.0000	U 24000.0000	J 2100.0000	U 10000.0000
3199 SD512000000.001	9108-153-4	U 1200.0000	U 1200.0000	U 500.0000	U 500.0000	U 500.0000	U 1200.0000	J 210.0000	J 79.0000

STF Number	Lab Number	Carbazole (ug/kg)	Di-n-butyl-phthalate (ug/kg)	Fluoranthene (ug/kg)	Pyrene (ug/kg)	Butylbenzyl-phthalate (ug/kg)	3,3'-Dichloro-benzidine (ug/kg)	Benzo(a)anthracene (ug/kg)	Chrysene (ug/kg)
3196 SD202000000.002	9201-169-9	U 28000.0000	U 28000.0000	J 12000.0000	J 12000.0000	U 28000.0000	U 28000.0000	J 4000.0000 J4	J 9300.0000
3197 SD202000000.002	9201-110-11	U 2200.0000	U 2200.0000	J 330.0000	J 380.0000	U 2200.0000	U 2200.0000	J 120.0000	J 310.0000
3198 SD202000000.001	9108-172-1	J 850.0000 J4	U 10000.0000	J 3800.0000	J 3200.0000	U 10000.0000	U 10000.0000	J 1000.0000	J 2700.0000
3199 SD512000000.001	9108-153-4	J 32.0000 J4	U 500.0000	J 290.0000	J 440.0000	U 500.0000	U 500.0000	J 190.0000	J 310.0000

STF Number	Lab Number	bis(2-Ethylhexyl) phthalate (ug/kg)	Di-n-octyl-phthalate (ug/kg)	Benzo(b)-fluoranthene (ug/kg)	Benzo(k)-fluoranthene (ug/kg)	Benzo(a)pyrene (ug/kg)	Indeno(1,2,3-cd)-pyrene (ug/kg)	Dibenzo(a,h)-anthracene (ug/kg)	Benzo(g,h,i)-perylene (ug/kg)
3196 SD202000000.002	9201-169-9	38000.0000	U 28000.0000	J 13000.0000	J 10000.0000	J 8600.0000	J 6900.0000	J 2800.0000	J 6900.0000
3197 SD202000000.002	9201-110-11	J 1400.0000	U 2200.0000	J 510.0000	J 380.0000	J 220.0000	J 380.0000	U 2200.0000	J 410.0000
3198 SD202000000.001	9108-172-1	JB 8200.0000	U 10000.0000	J 3300.0000	J 2600.0000	J 1800.0000	J 2000.0000	J 760.0000	J 2300.0000
3199 SD512000000.001	9108-153-4	J 220.0000	U 500.0000 UJ	J 360.0000 J4	U 500.0000 UJ	J 320.0000 J4	J 140.0000 J4	J 36.0000 J4	J 170.0000 J4

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/kg)	Validation
3197SD202000000.002	9201-110-11	Unknown	JN	560.00	
		2-Cyclohexen-1-one	JNB	780.00	R
		Unknown	JN	1220.00	
		Octadecanal	JN	560.00	
		Heptacosane	JN	2400.00	
		Docosane	JN	3400.00	
		(Z)14-TRICOSENYL FORMATE	JN	4800.00	
		HEXADECANE	JN	1780.00	
		Unknown	JN	2400.00	
		Unknown	JN	3200.00	
		Unknown	JN	2200.00	
		Stigmast-4-en-3-one	JN	2600.00	
3198SD202000000.001	9108-172-1	Tridecane	JN	2000.00	
3199SD512000000.001	9108-153-4	Benzoic acid, ammonium salt	JN	130.00	
		Benzenebutanenitrile	JN	130.00	
		Tetradecanoic acid	JN	130.00	
		UNKNOWN	JN	200.00	
		UNKNOWN	JN	100.00	
		UNKNOWN	JN	130.00	
		UNKNOWN ACID	JN	180.00	
		Hexadecanoic acid	JN	400.00	
		UNKNOWN HYDROCARBON	JN	180.00	
		UNKNOWN	JN	180.00	
		Pentacosane	JN	250.00	
		UNKNOWN HYDROCARBON	JN	200.00	
		UNKNOWN	JN	500.00	
		UNKNOWN	JN	1000.00	

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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

QA/QC BLANK ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for SEMIVOLATILES for file STFWWWSV.DBF 05/13/92 23:00:00 17,472 bytes

STF Number	Lab Number	Phenol (ug/L)	bis(2-Chloroethyl) ether (ug/L)	2-Chlorophenol (ug/L)	1,3-Dichlorobenzene (ug/L)	1,4-Dichlorobenzene (ug/L)	1,2-Dichlorobenzene (ug/L)	2-Methylphenol (ug/L)	2,2'-oxybis(1-Chloropropane) (ug/L)
2509 WW0000001000.002	9201-095-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 WW0000001000.000	9104-226-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2524 WW0000001000.001	9108-138-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 WW0000001000.001	9108-172-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 WW0000001000.002	9201-169-11	J 1.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3600 WW0000002000.000	9104-209-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3604 WW0000002000.001	9108-088-15	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3605 WW0000001000.001	9108-190-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3606 WW0000002000.002	9201-176-5	J 0.7000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3607 WW0000002000.002	9201-110-13	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

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STF Number	Lab Number	4-Methylphenol (ug/L)	N-Nitroso-di-n-dipropylamine (ug/L)	Hexachloroethane (ug/L)	Nitrobenzene (ug/L)	Isophorone (ug/L)	2-Nitrophenol (ug/L)	2,4-Dimethylphenol (ug/L)	bis(2-Chloro-ethoxy) methane (ug/L)
2509 WW0000001000.002	9201-095-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 WW0000001000.000	9104-226-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2524 WW0000001000.001	9108-138-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 WW0000001000.001	9108-172-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 WW0000001000.002	9201-169-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3600 WW0000002000.000	9104-209-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3604 WW0000002000.001	9108-088-15	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3605 WW0000001000.001	9108-190-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3606 WW0000002000.002	9201-176-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3607 WW0000002000.002	9201-110-13	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	2,4-Dichlorophenol (ug/L)		1,2,4-Trichloro-benzene (ug/L)		Naphthalene (ug/L)		4-Chloroaniline (ug/L)		Hexachloro-butadiene (ug/L)		4-Chloro-3-methylphenol (ug/L)		2-Methyl-naphthalene (ug/L)		Hexachlorocyclo-pentadiene (ug/L)	
2509 WW0000001000.002	9201-095-4	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000
2516 WW0000001000.000	9104-226-2	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000
2524 WW0000001000.001	9108-138-11	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000
2529 WW0000001000.001	9108-172-7	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000
2529 WW0000001000.002	9201-169-11	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000
3600 WW0000002000.000	9104-209-3	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000
3604 WW0000002000.001	9108-088-15	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000
3605 WW0000001000.001	9108-198-3	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000
3606 WW0000002000.002	9201-176-5	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000
3607 WW0000002000.002	9201-110-13	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000	U	10.0000

STF Number	Lab Number	2,4,6-Trichlorophenol (ug/L)	2,4,5-Trichlorophenol (ug/L)	2-Chloronaphthalene (ug/L)	2-Nitroaniline (ug/L)	Dimethylphthalate (ug/L)	Acenaphthylene (ug/L)	2,6-Dinitrotoluene (ug/L)	3-Nitroaniline (ug/L)
2509 WW000001000.002	9201-095-4	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2516 WW000001000.000	9104-226-2	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2524 WW000001000.001	9108-138-11	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2529 WW000001000.001	9108-172-7	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
2529 WW000001000.002	9201-169-11	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
3600 WW000002000.000	9104-209-3	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
3604 WW000002000.001	9108-088-15	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
3605 WW000001000.001	9108-190-3	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
3606 WW000002000.002	9201-176-5	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000
3607 WW000002000.002	9201-110-13	U 10.0000	U 25.0000	U 10.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 25.0000

STF Number	Lab Number	Acenaphthene (ug/L)	2,4-Dinitrophenol (ug/L)	4-Nitrophenol (ug/L)	Dibenzofuran (ug/L)	2,4-Dinitrotoluene (ug/L)	Diethylphthalate (ug/L)	4-Chlorophenyl-phenylether (ug/L)	Fluorene (ug/L)
2509 WW000001000.002	9201-095-4	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 WW000001000.000	9104-226-2	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2524 WW000001000.001	9108-138-11	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 WW000001000.001	9108-172-7	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 WW000001000.002	9201-169-11	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3600 WW000002000.000	9104-289-3	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3604 WW000002000.001	9108-088-15	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3605 WW000001000.001	9108-190-3	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3606 WW000002000.002	9201-176-5	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3607 WW000002000.002	9201-110-13	U 10.0000	U 25.0000	U 25.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	4-Nitroaniline (ug/L)		4,6-Dinitro-2-methylphenol (ug/L)		N-nitrosodiphenylamine (ug/L)		4-Bromophenyl-phenylether (ug/L)		Hexachlorobenzene (ug/L)		Pentachlorophenol (ug/L)		Phenanthrene (ug/L)		Anthracene (ug/L)	
2509 WW0000001000.002	9201-095-4	U	25.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000
2516 WW0000001000.000	9104-226-2	U	25.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000
2524 WW0000001000.001	9108-138-11	U	25.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000
2529 WW0000001000.001	9108-172-7	U	25.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000
2529 WW0000001000.002	9201-169-11	U	25.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000
3600 WW0000002000.000	9104-209-3	U	25.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000
3604 WW0000002000.001	9108-088-15	U	25.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000
3605 WW0000001000.001	9108-190-3	U	25.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000
3606 WW0000002000.002	9201-176-5	U	25.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000	U	10.0000	U	10.0000
3607 WW0000002000.002	9201-110-13	U	25.0000	U	25.0000	U	10.0000	U	10.0000	U	10.0000	U	25.0000	J	1.0000	U	10.0000

STF Number	Lab Number	Carbazole (ug/L)	Di-n-butyl-phthalate (ug/L)	Fluoranthene (ug/L)	Pyrene (ug/L)	Butylbenzyl-phthalate (ug/L)	3,3'-Dichloro-benzidine (ug/L)	Benzo(a)anthracene (ug/L)	Chrysene (ug/L)
2509 WW000001000.002	9201-095-4	U 10.0000	BJ 3.0000 UJ	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 WW000001000.000	9104-226-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2524 WW000001000.001	9108-138-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 WW000001000.001	9108-172-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 WW000001000.002	9201-169-11	U 10.0000	J 2.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3600 WW000002000.000	9104-209-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3604 WW000002000.001	9108-088-15	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3605 WW000001000.001	9108-190-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3606 WW000002000.002	9201-176-5	U 10.0000	J 2.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3607 WW000002000.002	9201-110-13	U 10.0000	B 10.0000	J 2.0000	J 1.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	bis(2-Ethylhexyl) phthalate (ug/L)	Di-n-octyl-phthalate (ug/L)	Benzo(b)-fluoranthene (ug/L)	Benzo(k)-fluoranthene (ug/L)	Benzo(a)pyrene (ug/L)	Indeno(1,2,3-cd)-pyrene (ug/L)	Dibenzo(a,h)-anthracene (ug/L)	Benzo(g,h,i)-perylene (ug/L)
2509 WW000001000.002	9201-095-4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2516 WW000001000.000	9104-226-2	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2524 WW000001000.001	9108-138-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 WW000001000.001	9108-172-7	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2529 WW000001000.002	9201-169-11	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3600 WW000002000.000	9104-289-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3604 WW000002000.001	9108-088-15	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3605 WW000001000.001	9108-190-3	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3606 WW000002000.002	9201-176-5	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
3607 WW000002000.002	9201-110-13	J 0.5000 J4	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/L)	Validation
2509WW000001000.002	9201-095-4	2-PENTANONE, 4-HYDROXY-4-MET	JNB	3.00	R
		ETHANOL, 2-BUTOXY-	JN	14.00	
		1-PROPENE, 3,3,3-TRICHLORO-	JNB	7.00	R
		BENZALDEHYDE	JN	3.00	
		1,2-CYCLOHEXANEDIOL	JN	3.00	
		BICYCLO[2.2.1]HEPTAN-2-OL, 1	JN	3.00	
		3-CYCLOHEXENE-1-METHANOL, .A	JN	4.00	
		UNKNOWN	JN	2.00	
		BENZALDEHYDE, 4-HYDROXY-3-ME	JN	4.00	
		1H-INDENE, 2,3-DIHYDRO-1,1,3	JN	4.00	
2516WW000001000.000	9104-226-2	3-PENTEN-2-ONE, 4-METHYL	JN	320.00	
		2-HEXENE, 3,5,5-TRIMETHYL	JN	7.00	
		2-PENTANONE, 4-HYDROXY-4-MET	JN	7.00	
		UNKNOWN	JN	4.00	
		1-PROPENE, 3,3,3-TRICHLORO	JN	5.00	
		FURAN, TETRAHYDRO-2-(METH	JN	4.00	
		UNKNOWN	JN	8.00	
		GUANIDINE, N,N,N',N'-TETRA	JN	6.00	
2524WW000001000.001	9108-138-11	Ethanol, 2-butoxy-	JN	20.00	
		PENTANE, 3-BROMO-	JN	8.00	
		UNKNOWN	JN	10.00	
		3-Cyclohexene-1-methanol, .a	JN	8.00	
		Propanoic acid, 2-methyl-, 2	JN	6.00	
		Benzaldehyde, 3-hydroxy-4-me	JN	2.00	
		Phenol, 2,6-bis(1,1-dimethyl	JN	2.00	
		1-Propanol, 2-(2-methoxyprop	JN	4.00	
		Hexanedioic acid, dioctyl es	JN	2.00	
		UNKNOWN	JN	4.00	
		UNKNOWN	JN	5.00	
2529WW000001000.001	9108-172-7	UNKNOWN	JN	4.00	
		UNKNOWN	JN	10.00	
		ETHANOL, 2-BUTOXY-	JN	25.00	
		UNKNOWN	BJN	10.00	
		UNKNOWN	BJN	10.00	
		Cyclohexene, 1-methyl-4-(1-m	JN	6.00	
		Propanoic acid, 2-methyl-, 2	JN	8.00	
		Benzaldehyde, 4-hydroxy-3-me	JN	4.00	
		2-Propanol, 1-[1-methyl-2-(2	JN	2.00	
		2,5,8,11-Tetraoxatetradecan-	JN	4.00	
		UNKNOWN	JN	10.00	
		UNKNOWN	JN	3.00	
		UNKNOWN	BJN	4.00	
		Hexanedioic acid, dioctyl es	BJN	2.00	
		UNKNOWN	BJN	26.00	
		UNKNOWN	JN	5.00	
		2-Propanol, 1-[1-methyl-2-(2	BJN	6.00	
		UNKNOWN	BJN	15.00	
		UNKNOWN	BJN	30.00	
		UNKNOWN	BJN	6.00	

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STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/L)	Validation
2529WW000001000.002	9201-169-11	Ethanol, 2-butoxy-	JN	22.00	
		1-Propene, 3,3,3-trichloro-	JN	12.00	
		Benzaldehyde	JN	3.00	
		Phenol, 4-methoxy-	JN	6.00	
		PROPANEDINITRILE, DICYCLOHEX	JNB	8.00	R
		Bicyclo[2.2.1]heptan-2-ol, 1	JN	3.00	
		3-Cyclohexene-1-methanol, .a	JN	7.00	
		Unknown	JN	2.00	
		Benzaldehyde, 4-hydroxy-3-me	JN	2.00	
		Phenol, 2,6-bis(1,1-dimethyl	JNB	5.00	R
		Unknown	JN	5.00	
3600WW000002000.000	9104-209-3	1-PROPENE, 1,2,3-TRICHLORO-	JN	19.00	
		FURAN, TETRAHYDRO-2-(METHOXY	JN	8.00	
		BUTANE, 2,2'-(METHYLENEBIS	JN	12.00	
		CAPROLACTAM	JN	85.00	
3604WW000002000.001	9108-088-15	Ethanol, 2-butoxy-	JN	12.00	
		UNKNOWN	JN	2.00	
		UNKNOWN	BJN	12.00	
		Pentane, 3-bromo-	BJN	16.00	
		Bicyclo[2.2.1]heptan-2-ol, 1	JN	2.00	
		3-Cyclohexene-1-methanol, .a	JN	4.00	
		UNKNOWN	JN	3.00	
		UNKNOWN	JN	2.00	
		UNKNOWN	JN	2.00	
		Acetic acid, (triphenylphosp	JN	3.00	
		UNKNOWN	JN	6.00	
3605WW000001000.001	9108-190-3	UNKNOWN	JN	4.00	
		Ethanol, 2-butoxy-	JN	13.00	
		UNKNOWN	JN	4.00	
		UNKNOWN	BJN	18.00	
		UNKNOWN	BJN	24.00	
		Bicyclo[2.2.1]heptan-2-ol, 1	JN	2.00	
		3-Cyclohexene-1-methanol, .a	JN	4.00	
		Propanoic acid, 2-methyl-, 2	JN	2.00	
		Benzaldehyde, 4-hydroxy-3-me	JN	4.00	
		UNKNOWN	JN	4.00	
		UNKNOWN	JN	4.00	
		UNKNOWN	BJN	26.00	
		UNKNOWN	JN	8.00	
3606WW000002000.002	9201-176-5	Unknown	JN	2.00	
		Unknown	JN	4.00	
		Unknown	JN	2.00	
		Ethanol, 2-butoxy-	JN	12.00	
		1-Propene, 3,3,3-trichloro-	JNB	21.00	R
		PROPANEDINITRILE, DICYCLOHEX	JNB	7.00	R
		Bicyclo[2.2.1]heptan-2-ol, 1	JN	6.00	
		3-Cyclohexene-1-methanol, .a	JN	4.00	
		1-Propen-2-ol, acetate	JN	2.00	
		Unknown	JN	2.00	
		Benzaldehyde, 4-hydroxy-3-me	JN	4.00	
		Unknown	JN	4.00	
		Phenol, 2,6-bis(1,1-dimethyl	JN	2.00	
		Unknown	JN	6.00	
		Unknown	JN	12.00	

STF Number	Lab Number	Tentatively Identified Compounds	Qualifier	Concentration (ug/L)	Validation
3607WW000002000.002	9201-110-13	Hexanal	JN	2.00	
		2-Pentanone, 4-hydroxy-4-met	JNB	4.00	R
		Unknown	JNB	8.00	
		Ethanol, 2-butoxy-	JN	22.00	
		2-Cyclohexen-1-one	JN	2.00	
		1-Propene, 3,3,3-trichloro-	JNB	9.00	R
		BENZALDEHYDE	JN	4.00	
		PROPANEDINITRILE, DICYCLOHEX	JNB	3.00	R
		Bicyclo[2.2.1]heptan-2-ol, 1	JN	3.00	
		3-CYCLOHEXENE-1-METHANOL, .A	JN	4.00	
		Unknown	JN	2.00	
		Benzaldehyde, 4-hydroxy-3-me	JN	6.00	
		Phenol, 2,6-bis(1,1-dimethyl	JN	2.00	
		Unknown	JN	2.00	
		Unknown	JN	5.00	
		Unknown	JN	4.00	

PAH Compounds

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

TRANSITIONAL SEASON (APRIL 1991)
SURFACE WATER ANALYTICAL RESULTS

STF Number	Lab Number	Naphthalene (ug/L)	Acenaphthylene (ug/L)	Acenaphthene (ug/L)	Fluorene (ug/L)	Phenanthrene (ug/L)	Anthracene (ug/L)	Fluoranthene (ug/L)	Pyrene (ug/L)
2506 SU310000000.000	9104-226-1	U 0.1000	U 0.1700	U 0.1000	U 0.0200	U 0.0100	0.0100	U 0.0200	U 0.0100
2506 SU320000000.000	9104-225-2	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
2509 SU310000000.000	9104-207-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
2509 SU320000000.000	9104-204-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
2511 SU320000000.000	9104-205-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
2511 SU511000000.000	9104-206-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
2516 SU310000000.000	9104-223-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
2516 SU320000000.000	9104-243-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000

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STF	Number	Lab Number	Benzo(a)anthracene (ug/L)	Chrysene (ug/L)	Benzo(b)-fluoranthene (ug/L)	Benzo(k)-fluoranthene (ug/L)	Benzo(a)pyrene (ug/L)	Indeno(1,2,3-cd)-pyrene (ug/L)	Dibenzo(a,h)-anthracene (ug/L)	Benzo(g,h,i)-perylene (ug/L)
2506	SU310000000.000	9104-226-1	U 0.0100	U 0.0100	U 0.0100	U 0.0100	U 0.0100	U 0.0100	U 0.0200	U 0.0200
2506	SU320000000.000	9104-225-2	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.2000	U 0.1000
2509	SU310000000.000	9104-207-1	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.2000	U 0.1000
2509	SU320000000.000	9104-204-1	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.2000	U 0.1000
2511	SU320000000.000	9104-205-1	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.2000	U 0.1000
2511	SU511000000.000	9104-206-1	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.2000	U 0.1000
2516	SU310000000.000	9104-223-1	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.2000	U 0.1000
2516	SU320000000.000	9104-243-1	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.2000	U 0.1000

Analytical data for POLYNUCLEAR AROMATIC HYDROCARBONS for file STFSUP1.DBF 12/17/91 23:00:00 5,418 bytes
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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

TRANSITIONAL SEASON (APRIL 1991)
SEDIMENT ANALYTICAL RESULTS

STF Number	Lab Number	Naphthalene (mg/kg)	Acenaphthylene (mg/kg)	Acenaphthene (mg/kg)	Fluorene (mg/kg)	Phenanthrene (mg/kg)	Anthracene (mg/kg)	Fluoranthene (mg/kg)	Pyrene (mg/kg)
2506 SD320000000.000	9104-225-1	U 0.3800	U 0.6500	U 0.3800	U 0.0770	0.0750	U 0.0380	0.2100	0.1700
2509 SD320000000.000	9104-209-1	U 0.2200	U 0.3700	U 0.2200	U 0.0430	0.1500	U 0.0220	0.1900	0.2700
2511 SD320000000.000	9104-209-2	U 0.2300	U 0.4000	U 0.2300	U 0.0460	0.0420	U 0.0230	0.0770	0.0910
2516 SD310000000.000	9104-225-3	U 0.4300	U 0.7400	U 0.4300	U 0.0870	U 0.0430	U 0.0430	U 0.0870	U 0.0430
2516 SD320000000.000	9104-225-4	U 0.1400	U 0.2300	U 0.1400	U 0.0270	U 0.0140	U 0.0140	U 0.0270	U 0.0140

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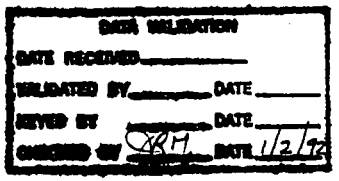
KEYED BY DATE
CHECKED BY JRM DATE 12/17/91

STF Number	Lab Number	Benzo(a)anthracene (mg/kg)	Chrysene (mg/kg)	Benzo(b)-fluoranthene (mg/kg)	Benzo(k)-fluoranthene (mg/kg)	Benzo(a)pyrene (mg/kg)	Indeno(1,2,3-cd)-pyrene (mg/kg)	Dibenzo(a,h)-anthracene (mg/kg)	Benzo(g,h,i)-perylene (mg/kg)
2506 SD320000000.000	9104-225-1	0.0550	0.1500	0.1900	0.0770	0.1100 J4	0.1600	U 0.0770	0.1100
2509 SD320000000.000	9104-209-1	U 0.0220	0.1300	0.1800	0.0720	0.1300 J4	0.1100	U 0.0430	0.1300
2511 SD320000000.000	9104-209-2	0.0310	0.0690	0.0890	0.0480	0.0850 J4	0.0770	U 0.0460	0.0760
2516 SD310000000.000	9104-225-3	U 0.0430	U 0.0430	U 0.0430	U 0.0430	U 0.0430	U 0.0430	U 0.0870	U 0.0870
2516 SD320000000.000	9104-225-4	U 0.0140	U 0.0140	U 0.0140	U 0.0140	U 0.0140	U 0.0140	U 0.0270	U 0.0270

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

DRY SEASON (AUGUST 1991)
SURFACE WATER ANALYTICAL RESULTS

STF Number	Lab Number	Naphthalene (ug/L)	Acenaphthylene (ug/L)	Acenaphthene (ug/L)	Fluorene (ug/L)	Phenanthrene (ug/L)	Anthracene (ug/L)	Fluoranthene (ug/L)	Pyrene (ug/L)
2501 SU000000000.001	9108-190-7	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.2600	B 0.0510 UJ	0.6500	0.7800
2502 SU000000000.001	9108-190-2	U 0.5000	U 1.0000	U 0.5000	0.4500	3.9000	B 0.2000 UJ	7.3000	6.2000
2503 SU000000000.001	9108-205-2	U 0.5000	U 1.0000	U 0.5000	U 0.1000	2.4000	B 0.2300 UJ	5.0000	4.4000
2508 SU310000000.001	9108-153-3	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
2510 SU511000000.001	9108-153-7	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
2527 SU000000000.001	9108-172-11	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.2400	U 0.0500	U 0.1000	0.3700
2528 SU000000000.001	9108-172-13	U 0.5000	U 1.0000	U 0.5000	U 0.1000	3.8000	B 0.2400 UJ	8.2000	7.5000
2529 SU000000000.001	9108-172-6	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.4300	0.0610	0.4700	0.9900
2530 SU201000000.001	9108-172-9	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.3000	0.0560	0.5500	0.3900



STF Number	Lab Number	Benzo(a)anthracene (ug/L)		Chrysene (ug/L)		Benzo(b)-fluoranthene (ug/L)		Benzo(k)-fluoranthene (ug/L)		Benzo(a)pyrene (ug/L)		Indeno(1,2,3-cd)-pyrene (ug/L)		Dibenzo(a,h)-anthracene (ug/L)		Benzo(g,h,i)-perylene (ug/L)	
2501 SU000000000.001	9108-190-7		0.1600		0.3500		0.2900		0.1300		0.2100	U	0.1000	U	0.2000	U	0.1000
2502 SU000000000.001	9108-190-2		1.5000		2.9000		2.2000		1.1000		2.0000		2.0000	U	0.2000		2.3000
2503 SU000000000.001	9108-205-2		1.2000		2.0000		1.5000		0.7500		1.4000		1.6000	U	0.2000		1.6000
2508 SU310000000.001	9108-153-3	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2510 SU511000000.001	9108-153-7	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2527 SU000000000.001	9108-172-11	U	0.1000		0.1600		0.1600	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2528 SU000000000.001	9108-172-13	U	0.1000		4.4000		3.9000		2.1000		3.8000	U	0.1000	U	0.2000		3.7000
2529 SU000000000.001	9108-172-6		0.3100		0.6200		0.6500		0.2800		0.4700		0.5900	U	0.2000		0.4000
2530 SU201000000.001	9108-172-9	U	0.1000		0.1500		0.1300	U	0.1000	U	0.1000		0.1200	U	0.2000	U	0.1000

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

DRY SEASON (AUGUST 1991)
SEDIMENT ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for POLYNUCLEAR AROMATIC HYDROCARBONS for file STFSDP2.DBF 01/02/92 23:00:00 15,743 bytes

STF Number	Lab Number	Naphthalene (mg/kg)	Acenaphthylene (mg/kg)	Acenaphthene (mg/kg)	Fluorene (mg/kg)	Phenanthrene (mg/kg)	Anthracene (mg/kg)	Fluoranthene (mg/kg)	Pyrene (mg/kg)
2501 SD000000000.001	9108-190-6	U 0.1300	U 0.2100	U 0.1300	U 0.0260	0.0620	U 0.0130	U 0.0260	0.1100
2502 SD000000000.001	9108-190-1	U 0.4200	U 0.6900	U 0.4200	1.4000 J4	D4 13.0000 J4	1.2000 J4	D4 26.0000 J4	D4 22.0000 J4
2503 SD000000000.001	9108-205-1	0.4100 J4	U 0.3900	1.5000 J4	2.6000 J4	D5 22.0000 J4	2.7000 J4	D5 41.0000 J4	D5 34.0000 J4
2504 SD000000000.001	9108-138-3	U 0.3200	U 0.5500	U 0.3200	U 0.0650	0.6600	0.0490	1.3000	1.3000
2505 SD000000000.001	9108-088-1	U 0.2600	U 0.4400	U 0.2600	U 0.0530	0.3400	U 0.0260	0.8100	0.8700
2506 SD310000000.001	9108-088-2	U 0.2500	U 0.4200	U 0.2500	U 0.0500	0.2500	U 0.0250	0.7600	0.7700
2506 SD320000000.001	9108-088-3	U 0.2800	U 0.4600	U 0.2800	U 0.0560	0.1900	U 0.0280	U 0.0560	0.6100
2507 SD000000000.001	9108-088-4	U 0.1400	U 0.2400	U 0.1400	U 0.0290	0.4000	0.0240	0.8400	0.7900
2508 SD310000000.001	9108-153-2	U 0.6000	U 1.0000	U 0.6000	U 0.1200	0.1100	U 0.0600	0.2200	0.1800
2509 SD310000000.001	9108-088-5	0.2200	U 0.1700	U 0.1000	U 0.0200	0.1600	0.0280	U 0.0200	0.3100
2509 SD320000000.001	9108-088-6	0.3900	U 0.2700	U 0.1600	U 0.0320	0.2700	0.0290	U 0.0320	1.5000
2510 SD511000000.001	9108-153-6RE	U 0.1400 R	U 0.2500 R	U 0.1400 R	U 0.0290 R	0.8910 R	0.0150 R	0.1100 R	0.1500 R
2511 SD310000000.001	9108-088-7	U 0.1600	U 0.2700	U 0.1600	0.0270	0.4100	0.0760	U 0.0310	0.8500
2511 SD320000000.001	9108-088-8	U 0.2000	U 0.3400	U 0.2000	U 0.0400	0.1900	0.0290	0.4600	0.5200
2512 SD000000000.001	9108-088-9	U 0.2100	U 0.3600	U 0.2100	U 0.0430	0.2000	U 0.0210	0.3400	0.4400
2513 SD000000000.001	9108-088-10	U 0.1100	U 0.1900	U 0.1100	U 0.0220	0.1200	U 0.0110	0.3200	0.4700
2514 SD000000000.001	9108-088-11	U 0.1300	U 0.2100	U 0.1300	U 0.0250	0.2200	0.0140	0.4600	0.6100
2515 SD000000000.001	9108-088-12	U 0.1400	U 0.2300	U 0.1400	U 0.0280	0.3100	0.0250	U 0.0280	0.6300
2516 SD310000000.001	9108-088-13	U 0.1000	U 0.1700	U 0.1000	U 0.0200	U 0.0100	U 0.0100	U 0.0200	0.0130
2516 SD320000000.001	9108-088-14	U 0.1000	U 0.1700	U 0.1000	U 0.0200	U 0.0100	U 0.0100	U 0.0200	U 0.0100
2518 SD000000000.001	9108-138-4	U 0.3000	U 0.5100	U 0.3000	U 0.0600	0.1000	U 0.0300	0.3700	0.4100
2519 SD000000000.001	9108-138-5	U 0.5200	U 0.8900	U 0.5200	U 0.1000	0.3600	U 0.0520	0.7800	0.8100
2520 SD000000000.001	9108-138-6	U 0.3000	U 0.5200	U 0.3000	U 0.0610	0.4500	0.0300	0.9600	1.0000
2521 SD000000000.001	9108-138-7	U 0.2300	U 0.3800	U 0.2300	U 0.0450	0.2400	U 0.0230	0.4100	0.4500
2522 SD000000000.001	9108-138-8	U 0.2100	U 0.3500	U 0.2100	0.0710	0.7900	0.0410	1.7000	1.6000
2523 SD000000000.001	9108-138-9	U 0.2700	U 0.4500	U 0.2700	0.1000	1.2000	0.0940	2.0000	1.9000
2524 SD000000000.001	9108-138-10	U 0.3000	U 0.5100	U 0.3000	0.1400	2.5000	0.1200	5.6000	5.0000
2525 SD000000000.001	9108-172-3	U 0.5200	U 0.8800	U 0.5200	U 0.1000	1.2000	0.0550	2.8000	2.5000
2526 SD000000000.001	9108-172-4	U 0.5300	U 0.9100	U 0.5300	U 0.1100	0.8800	0.0640	2.2000	2.0000
2527 SD000000000.001	9108-172-10	U 0.2400	U 0.4000	U 0.2400	0.0520	1.0000	0.0380	2.4000	2.0000
2528 SD000000000.001	9108-172-12	U 0.2600	U 0.4200	U 0.2600	0.1100	1.6000	0.1200	3.6000	3.3000
2529 SD000000000.001	9108-172-5	U 0.4000	U 0.6900	U 0.4000	0.2300	3.5000	0.3000	7.5000	6.9000
2530 SD201000000.001	9108-172-8	U 0.2700	U 0.4600	U 0.2700	0.1200	1.1000	0.1200	2.5000	2.4000

DATA VALIDATION
DATE RECEIVED
VALIDATED BY DATE
KEYED BY DATE
CHECKED BY DM DATE 1/2/92

Analytical data for POLYNUCLEAR AROMATIC HYDROCARBONS for file STFSDP2.DBF 01/02/92 23:00:00 15,743 bytes
01/02/92 Page 1

STF	Number	Lab Number	Benzo(a)anthracene (mg/kg)	Chrysene (mg/kg)	Benzo(b)-fluoranthene (mg/kg)	Benzo(k)-fluoranthene (mg/kg)	Benzo(a)pyrene (mg/kg)	Indeno(1,2,3-cd)-pyrene (mg/kg)	Dibenzo(a,h)-anthracene (mg/kg)	Benzo(g,h,i)-perylene (mg/kg)
2501	SD000000000.001	9108-190-6	0.0350	0.0570	0.0510	0.0250	U 0.0130	U 0.0130	U 0.0260	U 0.0260
2502	SD000000000.001	9108-190-1	D4 6.4000 J4	D4 10.0000 J4	9.6000 J4	5.3000 J4	D4 9.0000 J4	D4 7.1000 J4	U 0.0830	7.8000 J4
2503	SD000000000.001	9108-205-1	D5 11.0000 J4	D5 15.0000 J4	D5 12.0000 J4	D5 7.2000 J4	D5 13.0000 J4	D5 9.6000 J4	U 0.0450	D5 8.1000 J4
2504	SD000000000.001	9108-138-3	0.3000	0.7700	1.3000	0.5300	0.8700	1.4000	U 0.0650	1.5000
2505	SD000000000.001	9108-088-1	0.2800	0.6900	1.0000	0.4200	0.6500	0.9200	U 0.0530	0.9000
2506	SD310000000.001	9108-088-2	0.2600	0.6700	0.7000	0.2900	0.4100	0.6100	U 0.0500	0.4700
2506	SD320000000.001	9108-088-3	0.2200	0.5800	0.8400	0.2000	0.3700	0.5900	U 0.0560	U 0.0560
2507	SD000000000.001	9108-088-4	0.2100	0.5800	1.2000	0.4500	0.5700	1.1000	U 0.0290	1.0000
2508	SD310000000.001	9108-153-2	0.0950	0.1400	0.1600	U 0.0600	U 0.0600	U 0.0600	0.2500	U 0.1200
2509	SD310000000.001	9108-088-5	0.1300	0.1400	0.1300	0.0570	0.1500	0.1300	U 0.0200	0.1300
2509	SD320000000.001	9108-088-6	0.4700	0.6900	0.5900	0.2200	0.5900	0.5200	U 0.0320	0.4600
2510	SD511000000.001	9108-153-6RE	0.0590 R	0.0750 R	0.0510 R	0.0260 R	0.0970 R	0.0630 R	U 0.0290 R	0.0550 R
2511	SD310000000.001	9108-088-7	0.2700	0.4500	0.4100	0.1400	0.4200	0.3800	U 0.0310	0.2200
2511	SD320000000.001	9108-088-8	0.1900	0.3700	0.5300	0.2400	0.4300	0.6200	U 0.0400	0.4900
2512	SD000000000.001	9108-088-9	0.2200	0.3000	0.3800	0.1900	0.4500	0.4200	U 0.0430	0.4000
2513	SD000000000.001	9108-088-10	0.3400	0.4600	0.6200	0.3500	0.8500	0.7600	U 0.0220	0.7400
2514	SD000000000.001	9108-088-11	0.3300	0.4500	0.5900	0.3100	0.7300	0.7200	U 0.0250	0.7400
2515	SD000000000.001	9108-088-12	0.2000	0.3000	0.3300	0.1500	0.3100	0.4000	U 0.0280	0.3900
2516	SD310000000.001	9108-088-13	U 0.0100	U 0.0100	0.0120	U 0.0100	U 0.0100	U 0.0100	U 0.0200	U 0.0200
2516	SD320000000.001	9108-088-14	U 0.0100	U 0.0100	U 0.0100	U 0.0100	U 0.0100	U 0.0100	U 0.0200	U 0.0200
2518	SD000000000.001	9108-138-4	0.1100	0.2500	0.3900	0.1600	0.2800	0.4400	U 0.0600	0.4300
2519	SD000000000.001	9108-138-5	0.2200	0.5000	0.7500	0.3200	0.5600	0.7500	U 0.1000	0.7800
2520	SD000000000.001	9108-138-6	0.2800	0.5800	0.8800	0.3800	0.7800	1.1000	U 0.0610	1.2000
2521	SD000000000.001	9108-138-7	0.1100	0.2400	0.3800	0.1300	0.2600	0.3900	U 0.0450	0.4600
2522	SD000000000.001	9108-138-8	0.3900	0.9500	1.6000	0.6800	1.2000	1.9000	U 0.0420	2.2000
2523	SD000000000.001	9108-138-9	0.4900	1.2000	1.7000	0.7700	1.3000	1.8000	U 0.0530	1.7000
2524	SD000000000.001	9108-138-10	1.6000	3.7000	5.0000	2.4000	3.6000	4.6000	U 0.0600	4.2000
2525	SD000000000.001	9108-172-3	0.5700	1.3000	1.3000	0.9000	1.4000	U 0.0520	U 0.1000	1.4000
2526	SD000000000.001	9108-172-4	0.6400	1.4000	1.5000	0.7900	1.7000	1.6000	U 0.1100	1.7000
2527	SD000000000.001	9108-172-10	0.4600	1.5000	1.3000	0.5800	1.7300	1.2000	U 0.0470	1.1000
2528	SD000000000.001	9108-172-12	1.1000	2.3000	2.7000	1.5000	3.1000	2.8000	0.1500	2.8000
2529	SD000000000.001	9108-172-5	2.2000	4.4000	4.7000	2.4000	5.6000	4.7000	U 0.0910	4.9000
2530	SD201000000.001	9108-172-8	0.7300	1.6000	1.9000	0.8100	1.8000	1.7000	U 0.0540	1.7000

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

WET SEASON (JANUARY 1992)
SURFACE WATER ANALYTICAL RESULTS

STF Number	Lab Number	Naphthalene (ug/L)	Acenaphthylene (ug/L)	Acenaphthene (ug/L)	Fluorene (ug/L)	Phenanthrene (ug/L)	Anthracene (ug/L)	Fluoranthene (ug/L)	Pyrene (ug/L)
2501 SU0000000000.002	9201-169-2	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.4700	U 0.0500	1.8000	1.1000
2502 SU3100000000.002	9201-220-2	U 0.5000	U 1.0000	U 0.5000	0.1600	2.1000	0.1400	7.7000	5.0000
2503 SU0000000000.002	9201-220-4	U 0.5000	U 1.0000	U 0.5000	0.2100	1.1000	0.0520	4.0000	2.3000
2505 SU0000000000.002	9201-110-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
2506 SU3100000000.002	9201-110-3	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
2506 SU3200000000.002	9201-110-4	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
2507 SU2010000000.002	9201-110-6	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
2508 SU0000000000.002	9201-110-8	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
2509 SU3100000000.002	9201-095-2	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
2509 SU3200000000.002	9201-095-3	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
2510 SU0000000000.002	9201-095-5	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
2511 SU3100000000.002	9201-095-8	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.0670	U 0.0500	U 0.1000	U 0.1000
2511 SU3200000000.002	9201-095-9	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
2512 SU0000000000.002	9201-095-11	U 0.5100	U 1.0000	U 0.5100	U 0.1000	U 0.0510	U 0.0510	U 0.1000	U 0.1000
2516 SU3200000000.002	9201-220-7	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
2516 SU5110000000.002	9201-220-8	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
2518 SU0000000000.002	9201-156-2	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.3000	U 0.0500	0.6900	0.5800
2519 SU0000000000.002	9201-156-3	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.1100	U 0.0500	0.2400	0.2200
2520 SU0000000000.002	9201-156-4	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.1500	U 0.0500	0.3100	0.2700
2521 SU0000000000.002	9201-156-5	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.1500	U 0.0500	0.3300	0.3000
2527 SU0000000000.002	9201-156-7	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.6000	U 0.0500	1.5000	1.2000
2528 SU2010000000.002	9201-169-4	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.2200	U 0.0500	0.5800	0.4100
2529 SU0000000000.002	9201-169-6	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.2100	U 0.0500	0.5900	0.4200
2530 SU0000000000.002	9201-169-8	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.2100	U 0.0500	0.6400	0.4000

DATA VALIDATION
DATE RECEIVED
VALIDATED BY DATE
KEYED BY DATE
CHECKED BY DATE 3/27/92

STF	Number	Lab Number	Benzo(a)anthracene (ug/L)		Chrysene (ug/L)		Benzo(b)-fluoranthene (ug/L)		Benzo(k)-fluoranthene (ug/L)		Benzo(a)pyrene (ug/L)		Indeno(1,2,3-cd)-pyrene (ug/L)		Dibenzo(a,h)-anthracene (ug/L)		Benzo(g,h,i)-perylene (ug/L)	
2501	SU000000000.002	9201-169-2		0.3200		0.5200		0.4100		0.2600		0.2900		0.3200	U	0.2000		0.3700
2502	SU310000000.002	9201-220-2		0.8400		1.3000		2.0000		1.2000		2.0000		1.5000		1.0000		1.1000
2503	SU000000000.002	9201-220-4		0.9700		1.2000		0.7000		0.3700		0.9100		0.4200	U	0.2000	U	0.1000
2505	SU000000000.002	9201-110-1	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2506	SU310000000.002	9201-110-3	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2506	SU320000000.002	9201-110-4	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2507	SU201000000.002	9201-110-6	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2508	SU000000000.002	9201-110-8	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2509	SU310000000.002	9201-095-2	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2509	SU320000000.002	9201-095-3	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2510	SU000000000.002	9201-095-5	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2511	SU310000000.002	9201-095-8	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2511	SU320000000.002	9201-095-9	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2512	SU000000000.002	9201-095-11	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2516	SU320000000.002	9201-220-7	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2516	SU511000000.002	9201-220-8	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2518	SU000000000.002	9201-156-2		0.1400		0.2600		0.3200		0.2000		0.2600		0.3000	U	0.2000		0.3400
2519	SU000000000.002	9201-156-3	U	0.1000	U	0.1000		0.1100	U	0.1000	U	0.1000	U	0.1000	U	0.2000		0.1300
2520	SU000000000.002	9201-156-4	U	0.1000		0.1000		0.1400	U	0.1000	U	0.1000		0.1200	U	0.2000		0.1200
2521	SU000000000.002	9201-156-5	U	0.1000		0.1300		0.1600	U	0.1000		0.1200		0.1600	U	0.2000		0.1900
2527	SU000000000.002	9201-156-7		0.3600		0.6700		0.6600		0.4300		0.5600		0.5900	U	0.2000		0.6500
2528	SU201000000.002	9201-169-4		0.1300		0.2200		0.2100		0.1400		0.1500		0.1600	U	0.2000		0.1800
2529	SU000000000.002	9201-169-6	U	0.1000		0.2200		0.1900		0.1200		0.1300		0.1400	U	0.2000		0.1700
2530	SU000000000.002	9201-169-8	U	0.1000		0.1600		0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

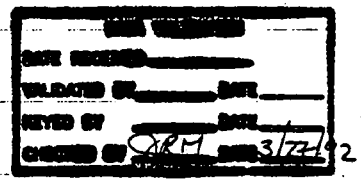
WET SEASON (JANUARY 1992)
SEDIMENT ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for POLYNUCLEAR AROMATIC HYDROCARBONS for file STFSDP3.DBF 03/27/92 23:00:00 14,917 bytes

03/25/92

STF Number	Lab Number	Naphthalene (mg/kg)	Acenaphthylene (mg/kg)	Acenaphthene (mg/kg)	Fluorene (mg/kg)	Phenanthrene (mg/kg)	Anthracene (mg/kg)	Fluoranthene (mg/kg)	Pyrene (mg/kg)
2501 SD000000000.002	9201-169-1	U 0.1200	U 0.2000	U 0.1200	U 0.0230	0.0640 J4	U 0.0120	0.1900	0.1900 J4
2502 SD320000000.002	9201-220-1	U 21.0000	U 35.0000	U 21.0000	U 4.2000	45.0000 J4	3.3000 J4	110.0000 J4	85.0000 J4
2503 SD000000000.002	9201-220-3	U 17.0000	U 28.0000	U 17.0000	U 3.3000	64.0000 J4	5.6000 J4	130.0000 J4	99.0000 J4
2504 SD000000000.002	9201-086-1	U 0.4200	U 0.7100	U 0.4200	U 0.0830	0.4000	U 0.0420	1.1000	0.8400
2506 SD320000000.002	9201-110-2	U 0.3800	U 0.6500	U 0.3800	U 0.0770	0.0530 J4	U 0.0380	0.1500	0.1600 J4
2507 SD201000000.002	9201-110-5	U 0.7100 UJ	U 1.2000 UJ	U 0.7100 UJ	U 0.1400 UJ	0.3100 J	U 0.0710 UJ	1.2000 J3	1.2000 J
2508 SD000000000.002	9201-110-7	U 0.4300	U 0.7400	U 0.4300	U 0.0870	0.1500 J4	U 0.0430	U 0.0870	0.3100 J4
2509 SD310000000.002	9201-095-1	U 0.1300	U 0.2200	U 0.1300	U 0.0250	0.1400	0.0210	0.2500	0.2200
2509 SD320000000.002	9201-110-9	U 0.4000	U 0.6800	U 0.4000	U 0.0800	0.1800 J4	U 0.0400	0.4800	0.5100 J4
2510 SD000000000.002	9201-110-10	U 0.2900	U 0.5000	U 0.2900	0.0680	0.2200 J4	U 0.0290	0.6400	0.3700 J4
2511 SD310000000.002	9201-095-6	U 0.1400	U 0.2300	U 0.1400	U 0.0270	0.0630	0.0150	0.2900	0.2100
2511 SD320000000.002	9201-095-7	U 0.3100	U 0.5300	U 0.3100	U 0.0630	0.0530	U 0.0310	0.1600	0.1400
2512 SD000000000.002	9201-095-10	U 0.1900	U 0.3100	U 0.1900	U 0.0370	0.1900	0.0290	0.3000	0.3400
2513 SD000000000.002	9201-086-2	U 0.1400	U 0.2300	U 0.1400	U 0.0270	0.1500	0.0230	0.4800	0.4200
2514 SD000000000.002	9201-086-3	U 0.1600	U 0.2700	U 0.1600	U 0.0310	U 0.0160	0.0260	0.5900	0.5400
2515 SD000000000.002	9201-086-4	U 0.1500	U 0.2500	U 0.1500	U 0.0300	0.1900	0.0180	0.4000	0.3200
2516 SD320000000.002	9201-220-5	U 0.2000	U 0.3500	U 0.2000	U 0.0410	0.0580 J4	U 0.0200	0.0620	0.1100 J4
2516 SD511000000.002	9201-220-6	U 0.1300	U 0.2200	U 0.1300	U 0.0260	0.0340 J4	U 0.0130	0.0480	0.0580 J4
2518 SD000000000.002	9201-086-5	U 0.2900	U 0.4900	U 0.2900	U 0.0570	0.1500	U 0.0290	0.3200	0.3000
2519 SD000000000.002	9201-086-6	U 0.3100	U 0.5300	U 0.3100	U 0.0630	1.2000	0.1700	U 0.0630	0.9800
2520 SD000000000.002	9201-086-7	U 0.3000	U 0.5200	U 0.3000	U 0.0610	0.2700	0.0350	0.6400	0.5400
2521 SD000000000.002	9201-086-8	U 0.3200	U 0.5500	U 0.3200	U 0.0650	0.1300	U 0.0320	0.3600	0.3000
2522 SD000000000.002	9201-086-9	U 2.7000	U 4.5000	U 2.7000	U 0.5400	1.2000	U 0.2700	2.3000	2.0000
2523 SD000000000.002	9201-086-10	U 2.8000	U 4.6000	U 2.8000	U 0.5600	2.0000	U 0.2800	4.2000	2.8000
2524 SD000000000.002	9201-086-11	U 3.6000	U 6.0000	U 3.6000	U 0.7100	1.5000	U 0.3600	3.9000	2.7000
2525 SD000000000.002	9201-086-12	U 4.8000	U 8.1000	U 4.8000	U 0.9500	2.0000	U 0.4800	5.4000	3.9000
2526 SD000000000.002	9201-086-13	U 4.2000	U 7.1000	U 4.2000	U 0.8300	1.7000	U 0.4200	4.6000	3.3000
2527 SD000000000.002	9201-156-6	U 3.3000	U 5.7000	U 3.3000	U 0.6700	4.7000 J4	U 0.3300	14.0000 J4	13.0000 J4
2528 SD201000000.002	9201-169-3	U 3.6000	U 6.1000	U 3.6000	U 0.7100	5.4000 J4	0.4200 J4	16.0000 J4	12.0000 J4
2529 SD000000000.002	9201-169-5	U 4.0000	U 6.8000	U 4.0000	U 0.8000	4.9000 J4	0.4100	13.0000	9.7000 J4
2530 SD000000000.002	9201-169-7	U 4.8000	U 8.1000	U 4.8000	U 0.9500	5.0000 J4	U 0.4800	15.0000	11.0000 J4



Analytical data for POLYNUCLEAR AROMATIC HYDROCARBONS for file STFSDP3.DBF 03/27/92 23:00:00 14,917 bytes

03/25/92 Page 1

STF Number	Lab Number	Benzo(a)anthracene (mg/kg)	Chrysene (mg/kg)	Benzo(b)-fluoranthene (mg/kg)	Benzo(k)-fluoranthene (mg/kg)	Benzo(a)pyrene (mg/kg)	Indeno(1,2,3-cd)-pyrene (mg/kg)	Dibenzo(a,h)-anthracene (mg/kg)	Benzo(g,h,i)-perylene (mg/kg)
2501 SD000000000.002	9201-169-1	0.0910	0.0860	0.0890	0.0590 J4	0.1100	0.0200	U 0.0230	0.0450
2502 SD320000000.002	9201-220-1	27.0000 J4	42.0000 J4	36.0000 J4	22.0000 J4	32.0000 J4	29.0000 J4	5.1000 J4	29.0000 J4
2503 SD000000000.002	9201-220-3	32.0000 J4	44.0000 J4	35.0000 J4	22.0000 J4	35.0000 J4	26.0000 J4	5.5000 J4	28.0000 J4
2504 SD000000000.002	9201-086-1	0.2400	0.4600	0.6500	0.3700	0.5000	0.6200	0.1300	0.6400
2506 SD320000000.002	9201-110-2	0.0520	0.0960	0.1500	0.0840	0.0840	0.1000	U 0.0770	0.1000
2507 SD201000000.002	9201-110-5	0.3900 J3	0.4600 J3	0.7600 J3	0.4400 J3	0.4700 J3	0.5700 J3	U 0.1400 UJ	0.6600 J3
2508 SD000000000.002	9201-110-7	0.1600	0.1300	0.1100	0.0830	0.0970	U 0.0430	U 0.0870	U 0.0870
2509 SD310000000.002	9201-095-1	0.1500	0.1300	0.1300	0.0710	0.1400	0.0510	U 0.0250	0.0800
2509 SD320000000.002	9201-110-9	0.1500	0.2500	0.2100	0.1400	0.2200	0.1100	U 0.0880	U 0.0880
2510 SD000000000.002	9201-110-10	U 0.1200	0.1700	0.2600	0.1400	0.1700	0.1100	U 0.0590	0.1300
2511 SD310000000.002	9201-095-6	0.1500	0.1300	0.1500	0.0910	0.1600	0.0980	U 0.0270	0.1000
2511 SD320000000.002	9201-095-7	0.0690	0.0910	0.1200	0.0700	0.1300	0.1200	U 0.0630	0.1100
2512 SD000000000.002	9201-095-10	0.2800	0.3200	0.4300	0.2700	0.5900	0.5000	0.0940	0.5400
2513 SD000000000.002	9201-086-2	0.2700	0.3500	0.4600	0.2800	0.5900	0.4800	0.1500	0.5100
2514 SD000000000.002	9201-086-3	0.3500	0.4300	0.5500	0.3500	0.7000	0.5800	0.1300	0.6100
2515 SD000000000.002	9201-086-4	0.1300	0.1700	0.1600	0.1000	0.1800	0.1500	0.0340	0.1500
2516 SD320000000.002	9201-220-5	0.0410	0.0470	0.0840	0.0350 J4	0.0790	0.0670	U 0.0410	0.0720
2516 SD511000000.002	9201-220-6	U 0.0130	U 0.0130	0.0230	U 0.0130	0.0140	U 0.0130	U 0.0260	U 0.0260
2518 SD000000000.002	9201-086-5	0.1000	0.1600	0.2100	0.1400	0.2000	0.1300	U 0.0570	0.2000
2519 SD000000000.002	9201-086-6	0.3000	0.3800	0.2700	0.2200	0.2600	0.1600	U 0.0630	0.2900
2520 SD000000000.002	9201-086-7	0.2100	0.3200	0.4000	0.2500	0.3700	0.3300	0.0750	0.3900
2521 SD000000000.002	9201-086-8	0.1100	0.1800	0.2600	0.1500	0.1800	0.2300	U 0.0650	0.2400
2522 SD000000000.002	9201-086-9	0.5300	1.0000	1.4000	0.7500	0.9200	1.3000	U 0.5400	1.3000
2523 SD000000000.002	9201-086-10	0.8400	1.6000	2.0000	1.2000	1.8000	1.8000	U 0.5600	1.9000
2524 SD000000000.002	9201-086-11	0.9800	2.0000	3.1000	1.8000	2.0000	2.6000	U 0.7100	2.5000
2525 SD000000000.002	9201-086-12	1.5000	2.7000	3.7000	2.1000	2.6000	2.9000	U 0.9500	3.0000
2526 SD000000000.002	9201-086-13	1.2000	2.1000	2.7000	1.5000	1.9000	2.2000	U 0.8300	2.2000
2527 SD000000000.002	9201-156-6	4.9000 J4	8.5000 J4	8.3000 J4	4.6000 J4	6.6000 J4	6.1000 J4	U 0.6700	6.5000
2528 SD201000000.002	9201-169-3	4.5000 J4	8.0000 J4	9.0000 J4	5.1000 J4	6.4000 J4	6.0000 J4	1.2000 J4	5.8000 J4
2529 SD000000000.002	9201-169-5	3.5000	5.9000	7.0000	4.0000 J4	5.3000	5.0000	0.9800 J4	4.9000
2530 SD000000000.002	9201-169-7	3.6000	6.6000	6.8000	4.0000 J4	4.6000	U 0.4800	U 0.9500	4.6000

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

STORM EVENTS
SURFACE WATER ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for POLYNUCLEAR AROMATIC HYDROCARBONS for file STFSTP.DBF 05/13/92 23:00:00 11,613 bytes

04/30/92

STF Number	Lab Number	Naphthalene (ug/L)	Acenaphthylene (ug/L)	Acenaphthene (ug/L)	Fluorene (ug/L)	Phenanthrene (ug/L)	Anthracene (ug/L)	Fluoranthene (ug/L)	Pyrene (ug/L)
2500 SU000000000.020	9104-034-20	U 0.5000	U 1.0000	U 0.5000	0.1600	2.3000	B 0.1200 UJ	5.4000	4.2000
2500 SU000000000.021	9105-249-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	1.0000	B 0.0960 UJ	3.4000	1.8000
2500 SU000000000.022	9107-284-1	U 0.5000	U 1.0000	U 0.5000	0.3600	2.5000	B 0.1400 UJ	3.4000	3.1000
2500 SU000000000.023	9108-122-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.0730	J 0.0400	0.3200	0.2400
2500 SU000000000.024	9110-281-1	U 0.5000	U 1.0000	U 0.5000	0.1600	1.3000	B 0.0750 UJ	2.6000	1.9000
2500 SU000000000.025	9111-117-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.5600	0.0730	1.1000	0.5900
2500 SU000000000.026	9112-164-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.9500	0.0650	2.9000	2.0000
2500 SU000000000.027	9201-286-4	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.7000	0.0540	2.5000	1.5000
2500 SU000000000.028	9202-112-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.6200	U 0.0500	2.7000	1.7000
2500 SU000000000.029	9202-135-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.9700	0.0500	2.9000	1.7000
2500 SU000000000.030	9203-149-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.5500	U 0.0500	2.1000	1.4000
2501 SU000000000.020	9104-034-21	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.8000	B 0.0980 UJ	2.3000	1.6000
2501 SU000000000.021	9105-249-2	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.3900	B 0.0780 UJ	1.7000	0.8000
2501 SU000000000.022	9107-284-2	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.2300	U 0.0500	U 0.1000	0.4700
2501 SU000000000.023	9108-122-2	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	J 0.0330	U 0.1000	U 0.1000
2501 SU000000000.024	9110-281-2	U 0.5000	U 1.0000	U 0.5000	0.1500	1.3000	B 0.2000 UJ	3.0000	2.1000
2501 SU000000000.025	9111-117-2	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.2800	0.0980	1.5000	0.9100
2501 SU000000000.026	9112-164-2	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.9400	0.1900	4.6000	2.8000
2501 SU000000000.027	9201-286-5	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.1500	U 0.0500	0.6800	0.5800
2501 SU000000000.028	9202-112-2	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.6000	0.1000	2.8000	1.7000
2501 SU000000000.029	9202-135-2	U 0.5000	U 1.0000	U 0.5000	0.4700	1.5000	U 0.0500	U 0.1000	0.9000
2501 SU000000000.030	9203-149-2	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.2200	U 0.0500	1.1000	0.6700
2515 SU201000000.027	9201-227-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.0870	U 0.0500	0.1000	0.1300

DATA VALIDATION
DATE RECEIVED _____
VALIDATED BY _____ DATE _____
KEYED BY _____ DATE _____
CHECKED BY KRM DATE 4/30/92

Analytical data for POLYNUCLEAR AROMATIC HYDROCARBONS for file STFSTP.DBF 05/13/92 23:00:00 11,613 bytes

04/30/92 Page 1

STF	Number	Lab Number	Benzo(a)anthracene (ug/L)		Chrysene (ug/L)		Benzo(b)-fluoranthene (ug/L)		Benzo(k)-fluoranthene (ug/L)		Benzo(a)pyrene (ug/L)		Indeno(1,2,3-cd)-pyrene (ug/L)		Dibenzo(a,h)-anthracene (ug/L)		Benzo(g,h,i)-perylene (ug/L)	
2500	SU0000000000.020	9104-034-20		0.3700		2.2000		2.0000		0.9000		1.0000		1.4000	U	0.2000		1.0000
2500	SU0000000000.021	9105-249-1		0.3700		0.9400		0.8300		0.5000		0.5200		0.5400	U	0.2000		0.6400
2500	SU0000000000.022	9107-284-1		0.5900		1.5000		1.2000		0.5500		0.7700		0.9500	U	0.2000		0.8400
2500	SU0000000000.023	9108-122-1	U	0.1000	J	0.0910	J	0.0590	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2500	SU0000000000.024	9110-281-1		0.3300		1.0000		0.8800		0.3500		0.5000		0.6400	U	0.2000		0.8200
2500	SU0000000000.025	9111-117-1		0.1300		0.3200		0.2700		0.1400		0.1600	U	0.1000	U	0.2000		0.2800
2500	SU0000000000.026	9112-164-1	U	0.1000		1.1000		0.9900		0.5000		0.6600		0.9300	U	0.2000		0.7500
2500	SU0000000000.027	9201-286-4		0.4000		0.7200		0.5400		0.3400		0.4100		0.4000	U	0.2000		0.4400
2500	SU0000000000.028	9202-112-1		0.5100		0.8900		0.6500		0.4200		0.4600		0.5400	U	0.2000		0.5500
2500	SU0000000000.029	9202-135-1		0.4900		0.7800		0.6100		0.3700		0.3900		0.4500	U	0.2000		0.4700
2500	SU0000000000.030	9203-149-1		0.2800		0.7200		0.5400		0.3500		0.3300		0.4100	U	0.2000		0.4200
2501	SU0000000000.020	9104-034-21		0.1900		0.8500		0.7400		0.3100		0.3300		0.4500	U	0.2000		0.2600
2501	SU0000000000.021	9105-249-2		0.2600		0.5000		0.3800		0.2200		0.1900	U	0.1000	U	0.2000		0.2600
2501	SU0000000000.022	9107-284-2	U	0.1000		0.1900		0.1900	U	0.1000		0.1000		0.1500	U	0.2000	U	0.1000
2501	SU0000000000.023	9108-122-2	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2501	SU0000000000.024	9110-281-2		0.4700		0.9100		0.6400		0.2700		0.3900		0.4200	U	0.2000		0.3700
2501	SU0000000000.025	9111-117-2		0.3200		0.4900		0.4300		0.2400		0.2900		0.3100	U	0.2000		0.3000
2501	SU0000000000.026	9112-164-2		0.9000		1.4000		1.1000		0.5500		0.8700		0.9200		0.2000		0.6900
2501	SU0000000000.027	9201-286-5		0.2300		0.2300		0.1600		0.1100		0.1400		0.1100	U	0.2000		0.1200
2501	SU0000000000.028	9202-112-2		0.4700		0.5000		0.3900		0.2700		0.3400		0.2900	U	0.2000		0.3000
2501	SU0000000000.029	9202-135-2	U	0.1000		0.4800		0.2700		0.2200		0.2600		0.1900	U	0.2000		0.2000
2501	SU0000000000.030	9203-149-2	U	0.1000		0.1700	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2515	SU2010000000.027	9201-227-1	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

BIWEEKLY/MONTHLY
SURFACE WATER ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for POLYNUCLEAR AROMATIC HYDROCARBONS for file STFBWP.DBF 05/13/92 23:00:00 12,439 bytes

04/30/92

STF Number	Lab Number	Naphthalene (ug/L)	Acenaphthylene (ug/L)	Acenaphthene (ug/L)	Fluorene (ug/L)	Phenanthrene (ug/L)	Anthracene (ug/L)	Fluoranthene (ug/L)	Pyrene (ug/L)
2500 SU0000000000.051	9104-077-1	0.3500	U 1.0000	U 0.5000	0.1000	1.1000	B 0.0960 UJ	2.3000	1.4000
2500 SU0000000000.053	105021-001	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.2800	0.0600	0.3800	0.1000
2500 SU0000000000.055	9105-277-22	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.2100	0.0670	0.2900	0.2000
2500 SU0000000000.057	9106-288-9	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.4700	0.0590	0.5300	0.4400
2500 SU0000000000.061	9108-250-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	1.3000	0.1300	2.2000	1.7000
2500 SU0000000000.065	9110-226-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.9800 J4	B 0.0800 UJ	1.5000	0.9500
2500 SU0000000000.067	9111-181-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.2300	B 0.0860 UJ	0.5300	0.3300
2500 SU0000000000.069	9112-109-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.8400	0.0660	2.4000	1.6000
2500 SU0000000000.071	9201-142-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.0740	U 0.0500	U 0.1000	U 0.1000
2500 SU0000000000.073	9202-070-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.1600	U 0.5000	0.2700	0.2100
2500 SU0000000000.075	9203-008-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.3200	U 0.5000	0.6400	0.4100
2501 SU0000000000.051	9104-077-2	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500 UJ	U 0.1000	U 0.1000
2501 SU0000000000.053	105021-002	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	0.1900
2501 SU0000000000.055	9105-277-23	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	0.0670	U 0.1000	U 0.1000
2501 SU0000000000.057	9106-288-10	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
2501 SU0000000000.065	9110-226-2	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.9800 J4	B 0.1600 UJ	3.0000	2.0000
2501 SU0000000000.067	9111-181-2	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	B 0.0670 UJ	0.2300	0.1400
2501 SU0000000000.069	9112-109-2	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.2300	U 0.0500	0.9600	0.6500
2501 SU0000000000.071	9201-142-2	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.0670	U 0.0500	0.2100	0.1500
2501 SU0000000000.073	9202-070-2	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.0890	U 0.0500	0.2300	0.2000
2501 SU0000000000.075	9203-008-2	U 0.5000	U 1.0000	U 0.5000	U 0.1000	0.1100	U 0.0500	0.2400	0.1800
2515 SU0000000000.051	9104-077-3	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500 UJ	U 0.1000	U 0.1000
2515 SU0000000000.068	9111-296-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	B 0.0550 UJ	U 0.1000	U 0.1000
2515 SU0000000000.073	9202-011-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
2515 SU2010000000.074	9202-164-1	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000

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Analytical data for POLYNUCLEAR AROMATIC HYDROCARBONS for file STFBWP.DBF 05/13/92 23:00:00 12,439 bytes

04/30/92 Page 1

STF	Number	Lab Number	Benzo(a)anthracene (ug/L)		Chrysene (ug/L)		Benzo(b)-fluoranthene (ug/L)		Benzo(k)-fluoranthene (ug/L)		Benzo(a)pyrene (ug/L)		Indeno(1,2,3-cd)-pyrene (ug/L)		Dibenzo(a,h)-anthracene (ug/L)		Benzo(g,h,i)-perylene (ug/L)	
2500	SU0000000000.051	9104-077-1		0.1200		0.6100		0.5100		0.2200		0.3100		0.3500	U	0.2000		0.2500
2500	SU0000000000.053	105021-001	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2500	SU0000000000.055	9105-277-22	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2500	SU0000000000.057	9106-288-9	U	0.1000		0.1300	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2500	SU0000000000.061	9108-258-1		0.4700		0.7600		0.6200		0.4000		0.5600	U	0.1000	U	0.2000		0.5500
2500	SU0000000000.065	9110-226-1		0.1100		0.4900		0.3600		0.1500		0.1700		0.2400	U	0.2000		0.3800
2500	SU0000000000.067	9111-181-1	U	0.1000		0.1800		0.1800	U	0.1000	U	0.1000		0.1100	U	0.2000		0.1600
2500	SU0000000000.069	9112-109-1		0.2500		0.7800		0.6200		0.3100		0.3600		0.5300	U	0.2000		0.4200
2500	SU0000000000.071	9201-142-1	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2500	SU0000000000.073	9202-070-1	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2500	SU0000000000.075	9203-008-1	U	0.1000		0.1700		0.1300	U	0.1000		0.1100	U	0.1000	U	0.2000		0.1100
2501	SU0000000000.051	9104-077-2	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2501	SU0000000000.053	105021-002	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2501	SU0000000000.055	9105-277-23	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2501	SU0000000000.057	9106-288-10	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2501	SU0000000000.065	9110-226-2		0.3500		1.0000		0.5200		0.2300		0.2200		0.3300	U	0.2000		0.5800
2501	SU0000000000.067	9111-181-2	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2501	SU0000000000.069	9112-109-2		0.1600		0.2600		0.1800	U	0.1000		0.1200		0.1300	U	0.2000	U	0.1000
2501	SU0000000000.071	9201-142-2	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2501	SU0000000000.073	9202-070-2	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2501	SU0000000000.075	9203-008-2	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2515	SU0000000000.051	9104-077-3	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2515	SU0000000000.068	9111-296-1	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2515	SU0000000000.073	9202-011-1	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2515	SU2010000000.074	9202-164-1	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

DRY SEASON (AUGUST 1991) AND WET SEASON (JANUARY 1992)
BACKGROUND SURFACE WATER ANALYTICAL RESULTS

STF Number	Lab Number	Naphthalene (ug/L)		Acenaphthylene (ug/L)		Acenaphthene (ug/L)		Fluorene (ug/L)		Phenanthrene (ug/L)		Anthracene (ug/L)		Fluoranthene (ug/L)		Pyrene (ug/L)	
2500 SU0000000000.001	9108-107-4	U	0.5000	U	1.0000	U	0.5000	U	0.1000		0.1900	U	0.0500		0.4000		0.3300
2500 SU0000000000.002	9201-156-1	U	0.5000	U	1.0000	U	0.5000	U	0.1000		0.0770	U	0.0500		0.1300	U	0.1000
2540 SU0000000000.001	9108-107-1	U	0.5000	U	1.0000	U	0.5000	U	0.1000	U	0.0500	B	0.0830 UJ	U	0.1000	U	0.1000
2540 SU0000000000.002	9201-176-1	U	0.5000	U	1.0000	U	0.5000	U	0.1000	U	0.0500	U	0.0500	U	0.1000	U	0.1000
2541 SU0000000000.001	9108-107-2	U	0.5000	U	1.0000	U	0.5000		0.3500		0.1200	B	0.1800 UJ		2.9000		1.8000
2541 SU0000000000.002	9201-176-2	U	0.5000	U	1.0000	U	0.5000	U	0.1000	U	0.0500	U	0.0500	U	0.1000	U	0.1000
2542 SU0000000000.001	9108-190-4	U	0.5000	U	1.0000	U	0.5000	U	0.1000	U	0.0500	B	0.0600 UJ	U	0.1000	U	0.1000
2542 SU0000000000.002	9201-176-3	U	0.5000	U	1.0000	U	0.5000	U	0.1000	U	0.0500	U	0.0500		0.1300		0.1100
2543 SU0000000000.001	9108-190-5	U	0.5000	U	1.0000	U	0.5000	U	0.1000	U	0.0500	B	0.0650 UJ	U	0.1000	U	0.1000
2543 SU0000000000.002	9201-176-4	U	0.5000	U	1.0000	U	0.5000	U	0.1000	U	0.0500	U	0.0500	U	0.1000	U	0.1000

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DATE RECEIVED [redacted]
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STF Number	Lab Number	Benzo(a)anthracene (ug/L)		Chrysene (ug/L)		Benzo(b)-fluoranthene (ug/L)		Benzo(k)-fluoranthene (ug/L)		Benzo(a)pyrene (ug/L)		Indeno(1,2,3-cd)-pyrene (ug/L)		Dibenzo(a,h)-anthracene (ug/L)		Benzo(g,h,i)-perylene (ug/L)	
2500 SU0000000000.001	9108-107-4	U	0.1000		0.1400	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2500 SU0000000000.002	9201-156-1	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2540 SU0000000000.001	9108-107-1	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2540 SU0000000000.002	9201-176-1	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2541 SU0000000000.001	9108-107-2		0.3100		0.2700		0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2541 SU0000000000.002	9201-176-2	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2542 SU0000000000.001	9108-190-4	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2542 SU0000000000.002	9201-176-3	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2543 SU0000000000.001	9108-190-5	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2543 SU0000000000.002	9201-176-4	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

QA/QC DUPLICATE
SURFACE WATER ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for POLYNUCLEAR AROMATIC HYDROCARBONS for file STFSUPD.DBF 05/13/92 23:00:00 5,005 bytes

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STF Number	Lab Number	Naphthalene (ug/L)		Acenaphthylene (ug/L)		Acenaphthene (ug/L)		Fluorene (ug/L)		Phenanthrene (ug/L)		Anthracene (ug/L)		Fluoranthene (ug/L)		Pyrene (ug/L)	
3188 SUZ02000000.074	9202-164-2	U	0.5000	U	1.0000	U	0.5000	U	0.1000	U	0.0500	U	0.0500	U	0.1000	U	0.1000
3189 SUZ02000000.027	9201-227-2	U	0.5000	U	1.0000	U	0.5000	U	0.1000		0.0900	U	0.0500		0.1600		0.1200
3196 SUZ02000000.002	9201-169-10	U	0.5000	U	1.0000	U	0.5000	U	0.1000		0.1800	U	0.0500		0.4800		0.3400
3197 SUZ02000000.002	9201-110-12	U	0.5000	U	1.0000	U	0.5000	U	0.1000		0.2600	U	0.0500		0.4300		0.3500
3198 SUZ02000000.001	9108-172-2	U	0.5000	U	1.0000	U	0.5000	U	0.1000		0.3300	U	0.0500		0.4700		0.3200
3199 SU512000000.001	9108-153-5	U	0.5000	U	1.0000	U	0.5000	U	0.1000	U	0.0500	U	0.0500	U	0.1000	U	0.1000
3200 SU512000000.000	9104-206-2	U	0.5000	U	1.0000	U	0.5000	U	0.1000	U	0.0500	U	0.0500	U	0.1000	U	0.1000

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Analytical data for POLYNUCLEAR AROMATIC HYDROCARBONS for file STFSUPD.DBF 05/13/92 23:00:00 5,005 bytes

04/30/92 Page 1

STF Number	Lab Number	Benzo(a)anthracene (ug/L)		Chrysene (ug/L)		Benzo(b)-fluoranthene (ug/L)		Benzo(k)-fluoranthene (ug/L)		Benzo(a)pyrene (ug/L)		Indeno(1,2,3-cd)-pyrene (ug/L)		Dibenzo(a,h)-anthracene (ug/L)		Benzo(g,h,i)-perylene (ug/L)	
3188 SU202000000.074	9202-164-2	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
3189 SU202000000.027	9201-227-2	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
3196 SU202000000.002	9201-169-10	U	0.1000		0.2000		0.1900		0.1300		0.1400		0.1400	U	0.2000		0.1600
3197 SU202000000.002	9201-110-12	U	0.1000		0.1000		0.1200	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
3198 SU202000000.001	9108-172-2	U	0.1000		0.1300		0.0970	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
3199 SU512000000.001	9108-153-5	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
3200 SU512000000.000	9104-206-2	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

QA/QC DUPLICATE
SEDIMENT ANALYTICAL RESULTS

STF Number	Lab Number	Naphthalene (mg/kg)	Acenaphthylene (mg/kg)	Acenaphthene (mg/kg)	Fluorene (mg/kg)	Phenanthrene (mg/kg)	Anthracene (mg/kg)	Fluoranthene (mg/kg)	Pyrene (mg/kg)
3196 SD282000000.002	9201-169-9	U 3.3000	U 5.7000	U 3.3000	U 0.6700	4.6000 J4	0.3600	13.0000	9.8000 J4
3197 SD282000000.002	9201-110-11	U 0.3300	U 0.5700	U 0.3300	U 0.0670	0.0840 J4	U 0.0330	0.2500	0.2500 J4
3198 SD282000000.001	9108-172-1	U 0.3000	U 0.5200	U 0.3000	U 0.0610	0.3800	U 0.0300	0.8800	0.8000
3199 SD512000000.001	9108-153-4	U 0.1500	U 0.2600	U 0.1500	U 0.0300	0.4300	0.1100	0.6300	0.7900

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STF Number	Lab Number	Benzo(a)anthracene (mg/kg)	Chrysene (mg/kg)	Benzo(b)-fluoranthene (mg/kg)	Benzo(k)-fluoranthene (mg/kg)	Benzo(a)pyrene (mg/kg)	Indeno(1,2,3-cd)-pyrene (mg/kg)	Dibenzo(a,h)-anthracene (mg/kg)	Benzo(g,h,i)-perylene (mg/kg)
3196 SD202000000.002	9201-169-9	3.7000	6.7000	7.2000	4.2000 J4	5.1000	4.6000	0.9700 J4	4.4000
3197 SD202000000.002	9201-110-11	0.0550	0.1100	0.1900	0.1300	0.1000	0.1400	U 0.0670	0.1600
3198 SD202000000.001	9108-172-1	0.2500	0.5000	0.5600	0.2700	0.5600	0.5000	U 0.0610	0.5200
3199 SD512000000.001	9108-153-4	0.3200	0.3800	0.2600	0.1300	0.5600	0.2900	U 0.0300	0.2900

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

QA/QC BLANK ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for POLYNUCLEAR AROMATIC HYDROCARBONS for file STFWWWP.DBF 05/13/92 23:00:00 6,657 bytes

04/30/92

STF Number	Lab Number	Naphthalene (ug/L)	Acenaphthylene (ug/L)	Acenaphthene (ug/L)	Fluorene (ug/L)	Phenanthrene (ug/L)	Anthracene (ug/L)	Fluoranthene (ug/L)	Pyrene (ug/L)
2509 WW000000000.002	9201-095-4	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
2516 WW000001000.000	9104-226-2	U 0.1000	U 0.1700	U 0.1000	U 0.0200	U 0.0100	U 0.0100	U 0.0200	U 0.0100
2524 WW000001000.001	9108-138-11	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	B 0.0630 UJ	U 0.1000	U 0.1000
2529 WW000001000.001	9108-172-7	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
2529 WW000001000.002	9201-169-11	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
3600 WW000002000.000	9104-209-3	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
3604 WW000002000.001	9108-088-15	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	B 0.0620 UJ	U 0.1000	U 0.1000
3605 WW000001000.001	9108-190-3	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	B 0.0550 UJ	U 0.1000	U 0.1000
3606 WW000002000.002	9201-176-5	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000
3607 WW000002000.002	9201-110-13	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	0.1100	U 0.1000
3620 WW000002000.073	9202-070-3	U 0.5000	U 1.0000	U 0.5000	U 0.1000	U 0.0500	U 0.0500	U 0.1000	U 0.1000

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Analytical data for POLYNUCLEAR AROMATIC HYDROCARBONS for file STFWWWP.DBF 05/13/92 23:00:00 6,657 bytes

04/30/92 Page 1

STF Number	Lab Number	Benzo(a)anthracene (ug/L)		Chrysene (ug/L)		Benzo(b)-fluoranthene (ug/L)		Benzo(k)-fluoranthene (ug/L)		Benzo(a)pyrene (ug/L)		Indeno(1,2,3-cd)-pyrene (ug/L)		Dibenzo(a,h)-anthracene (ug/L)		Benzo(g,h,i)-perylene (ug/L)	
2509 WW0000000000.002	9201-095-4	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2516 WW0000001000.000	9104-226-2	U	0.0100	U	0.0100	U	0.0100	U	0.0100	U	0.0100	U	0.0100	U	0.0200	U	0.0200
2524 WW0000001000.001	9108-138-11	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2529 WW0000001000.001	9108-172-7	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
2529 WW0000001000.002	9201-169-11	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
3600 WW0000002000.000	9104-209-3	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
3604 WW0000002000.001	9108-088-15	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
3605 WW0000001000.001	9108-190-3	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
3606 WW0000002000.002	9201-176-5	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
3607 WW0000002000.002	9201-110-13	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000
3620 WW0000002000.073	9202-070-3	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.2000	U	0.1000

Pesticides/PCBs

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

TRANSITIONAL SEASON (APRIL 1991)
SURFACE WATER ANALYTICAL RESULTS

STF Number	Lab Number	alpha-BHC (ug/L)	beta-BHC (ug/L)	delta-BHC (ug/L)	gamma-BHC (Lindane) (ug/L)	Heptachlor (ug/L)	Aldrin (ug/L)	Heptachlor epoxide (ug/L)	Endosulfan I (ug/L)
2506 SU31000000.000	9104-226-1	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470
2506 SU32000000.000	9104-225-2	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470
2509 SU31000000.000	9104-207-1	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470
2509 SU32000000.000	9104-204-1	U 0.0480	U 0.0480	U 0.0480	U 0.0480	U 0.0480	U 0.0480	U 0.0480	U 0.0480
2511 SU32000000.000	9104-205-1	U 0.0500 UJ	U 0.0500 UJ	U 0.0500 UJ	U 0.0500 UJ	U 0.0500 UJ	U 0.0500 UJ	U 0.0500 UJ	U 0.0500 UJ
2511 SU51100000.000	9104-207-2	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470
2516 SU31000000.000	9104-223-1	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470
2516 SU32000000.000	9104-243-1	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470

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STF Number	Lab Number	Dieldrin (ug/L)	4,4'-DDE (ug/L)	Endrin (ug/L)	Endosulfan II (ug/L)	4,4'-DDD (ug/L)	Endosulfan sulfate (ug/L)	4,4'-DDT (ug/L)	Methoxychlor (ug/L)
2506 SU310000000.000	9104-226-1	U 0.0950	U 0.0950	U 0.0950	U 0.0950	U 0.0950	U 0.0950	U 0.0950	U 0.4700
2506 SU320000000.000	9104-225-2	U 0.0940	U 0.0940	U 0.0940	U 0.0940	U 0.0940	U 0.0940	U 0.0940	U 0.4700
2509 SU310000000.000	9104-207-1	U 0.0940	U 0.0940	U 0.0940	U 0.0940	U 0.0940	U 0.0940	U 0.0940	U 0.4700
2509 SU320000000.000	9104-204-1	U 0.0950	U 0.0950	U 0.0950	U 0.0950	U 0.0950	U 0.0950	U 0.0950	U 0.4800
2511 SU320000000.000	9104-205-1	U 0.1000 UJ	U 0.1000 UJ	U 0.1000 UJ	U 0.1000 UJ	U 0.1000 UJ	U 0.1000 UJ	U 0.1000 UJ	U 0.5000 UJ
2511 SU511000000.000	9104-207-2	U 0.0940	U 0.0940	U 0.0940	U 0.0940	U 0.0940	U 0.0940	U 0.0940	U 0.4700
2516 SU310000000.000	9104-223-1	U 0.0940	U 0.0940	U 0.0940	U 0.0940	U 0.0940	U 0.0940	U 0.0940	U 0.4700
2516 SU320000000.000	9104-243-1	U 0.0940	U 0.0940	U 0.0940	U 0.0940	U 0.0940	U 0.0940	U 0.0940	U 0.4700

STF Number	Lab Number	Endrin ketone (ug/L)		alpha-Chlordane (ug/L)		gamma-Chlordane (ug/L)		Toxaphene (ug/L)		Aroclor-1016 (ug/L)		Aroclor-1221 (ug/L)		Aroclor-1232 (ug/L)		Aroclor-1242 (ug/L)	
2506 SU310000000.000	9104-226-1	U	0.0950	U	0.4700	U	0.4700	U	0.9500	U	0.4700	U	0.4700	U	0.4700	U	0.4700
2506 SU320000000.000	9104-225-2	U	0.0940	U	0.4700	U	0.4700	U	0.9400	U	0.4700	U	0.4700	U	0.4700	U	0.4700
2509 SU310000000.000	9104-207-1	U	0.0940	U	0.4700	U	0.4700	U	0.9400	U	0.4700	U	0.4700	U	0.4700	U	0.4700
2509 SU320000000.000	9104-204-1	U	0.0950	U	0.4800	U	0.4800	U	0.9500	U	0.4800	U	0.4800	U	0.4800	U	0.4800
2511 SU320000000.000	9104-205-1	U	0.1000 UJ	U	0.5000 UJ	U	0.5000 UJ	U	1.0000 UJ	U	0.5000 UJ	U	0.5000 UJ	U	0.5000 UJ	U	0.5000 UJ
2511 SU511000000.000	9104-207-2	U	0.0940	U	0.4700	U	0.4700	U	0.9400	U	0.4700	U	0.4700	U	0.4700	U	0.4700
2516 SU310000000.000	9104-223-1	U	0.0940	U	0.4700	U	0.4700	U	0.9400	U	0.4700	U	0.4700	U	0.4700	U	0.4700
2516 SU320000000.000	9104-243-1	U	0.0940	U	0.4700	U	0.4700	U	0.9400	U	0.4700	U	0.4700	U	0.4700	U	0.4700

STF Number	Lab Number	Aroclor-1248 (ug/L)		Aroclor-1254 (ug/L)		Aroclor-1260 (ug/L)	
2506 SU3100000000.000	9104-226-1	U	0.4700	U	0.9500	U	0.9500
2506 SU3200000000.000	9104-225-2	U	0.4700	U	0.9400	U	0.9400
2509 SU3100000000.000	9104-207-1	U	0.4700	U	0.9400	U	0.9400
2509 SU3200000000.000	9104-204-1	U	0.4800	U	0.9500	U	0.9500
2511 SU3200000000.000	9104-205-1	U	0.5000 UJ	U	1.0000 UJ	U	1.0000 UJ
2511 SU5110000000.000	9104-207-2	U	0.4700	U	0.9400	U	0.9400
2516 SU3100000000.000	9104-223-1	U	0.4700	U	0.9400	U	0.9400
2516 SU3200000000.000	9104-243-1	U	0.4700	U	0.9400	U	0.9400

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

TRANSITIONAL SEASON (APRIL 1991)
SEDIMENT ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for PESTICIDES/PCB for file STFSDPT1.DBF 12/17/91 23:00:00 6,195 bytes

STF Number	Lab Number	alpha-BHC (ug/kg)	beta-BHC (ug/kg)	delta-BHC (ug/kg)	gamma-BHC (Lindane) (ug/kg)	Heptachlor (ug/kg)	Aldrin (ug/kg)	Heptachlor epoxide (ug/kg)	Endosulfan I (ug/kg)
2506 SD320000000.000	9104-225-1	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000	U 31.0000
2509 SD320000000.000	9104-209-1	U 17.0000	U 17.0000	U 17.0000	U 17.0000	U 17.0000	U 17.0000	U 17.0000	U 17.0000
2511 SD320000000.000	9104-209-2	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000
2516 SD310000000.000	9104-225-3	U 35.0000	U 35.0000	U 35.0000	U 35.0000	U 35.0000	U 35.0000	U 35.0000	U 35.0000
2516 SD320000000.000	9104-225-4	U 11.0000	U 11.0000	U 11.0000	U 11.0000	U 11.0000	U 11.0000	U 11.0000	U 11.0000

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Analytical data for PESTICIDES/PCB for file STFSDPT1.DBF 12/17/91 23:00:00 6,195 bytes

STF Number	Lab Number	Dieldrin (ug/kg)	4,4'-DDE (ug/kg)	Endrin (ug/kg)	Endosulfan II (ug/kg)	4,4'-DDD (ug/kg)	Endosulfan sulfate (ug/kg)	4,4'-DDT (ug/kg)	Methoxychlor (ug/kg)
2506 SD320000000.000	9104-225-1	U 62.0000	U 62.0000	U 62.0000	U 62.0000	U 62.0000	U 62.0000	U 62.0000	U 310.0000
2509 SD320000000.000	9104-209-1	U 35.0000	U 35.0000	U 35.0000	U 35.0000	U 35.0000	U 35.0000	U 35.0000	U 170.0000
2511 SD320000000.000	9104-209-2	U 37.0000	U 37.0000	U 37.0000	U 37.0000	U 37.0000	U 37.0000	U 37.0000	U 190.0000
2516 SD310000000.000	9104-225-3	U 70.0000	U 70.0000	U 70.0000	U 70.0000	U 70.0000	U 70.0000	U 70.0000	U 350.0000
2516 SD320000000.000	9104-225-4	U 22.0000	U 22.0000	U 22.0000	U 22.0000	U 22.0000	U 22.0000	U 22.0000	U 110.0000

STF Number	Lab Number	Endrin ketone (ug/kg)	alpha-Chlordane (ug/kg)	gamma-Chlordane (ug/kg)	Toxaphene (ug/kg)	Aroclor-1016 (ug/kg)	Aroclor-1221 (ug/kg)	Aroclor-1232 (ug/kg)	Aroclor-1242 (ug/kg)
2506 SD320000000.000	9104-225-1	U 62.0000	U 310.0000	U 310.0000	U 620.0000	U 310.0000	U 310.0000	U 310.0000	U 310.0000
2509 SD320000000.000	9104-209-1	U 35.0000	U 170.0000	U 170.0000	U 350.0000	U 170.0000	U 170.0000	U 170.0000	U 170.0000
2511 SD320000000.000	9104-209-2	U 37.0000	U 190.0000	U 190.0000	U 370.0000	U 190.0000	U 190.0000	U 190.0000	U 190.0000
2516 SD310000000.000	9104-225-3	U 70.0000	U 350.0000	U 350.0000	U 700.0000	U 350.0000	U 350.0000	U 350.0000	U 350.0000
2516 SD320000000.000	9104-225-4	U 22.0000	U 110.0000	U 110.0000	U 220.0000	U 110.0000	U 110.0000	U 110.0000	U 110.0000

STF Number	Lab Number	Aroclor-1248 (ug/kg)	Aroclor-1254 (ug/kg)	Aroclor-1260 (ug/kg)
2506 SD320000000.000	9104-225-1	U 310.0000	U 620.0000	U 620.0000
2509 SD320000000.000	9104-209-1	U 170.0000	U 350.0000	U 350.0000
2511 SD320000000.000	9104-209-2	U 190.0000	U 370.0000	U 370.0000
2516 SD310000000.000	9104-225-3	U 350.0000	U 700.0000	U 700.0000
2516 SD320000000.000	9104-225-4	U 110.0000	U 220.0000	U 220.0000

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

DRY SEASON (AUGUST 1991)
SURFACE WATER ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for PESTICIDES/PCB for file STFSUPT2.DBF 01/02/92 23:00:00 8,615 bytes

STF Number	Lab Number	alpha-BHC (ug/L)	beta-BHC (ug/L)	delta-BHC (ug/L)	gamma-BHC (Lindane) (ug/L)	Heptachlor (ug/L)	Aldrin (ug/L)	Heptachlor epoxide (ug/L)	Endosulfan I (ug/L)
2501 SU0000000000.001	9108-190-7	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2502 SU0000000000.001	9108-190-2	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2503 SU0000000000.001	9108-285-2	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2508 SU3100000000.001	9108-153-3	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2510 SU5110000000.001	9108-153-7	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2527 SU0000000000.001	9108-172-11	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2528 SU0000000000.001	9108-172-13	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2529 SU0000000000.001	9108-172-6	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2530 SU2010000000.001	9108-172-9	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500

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STF Number	Lab Number	Dieldrin (ug/L)	4,4'-DDE (ug/L)	Endrin (ug/L)	Endosulfan II (ug/L)	4,4'-DDD (ug/L)	Endosulfan sulfate (ug/L)	4,4'-DDT (ug/L)	Methoxychlor (ug/L)
2501 SU000000000.001	9108-190-7	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2502 SU000000000.001	9108-190-2	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2503 SU000000000.001	9108-205-2	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2508 SU310000000.001	9108-153-3	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2510 SU511000000.001	9108-153-7	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2527 SU000000000.001	9108-172-11	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2528 SU000000000.001	9108-172-13	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2529 SU000000000.001	9108-172-6	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2530 SU281000000.001	9108-172-9	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000

STF Number	Lab Number	Endrin ketone (ug/L)		alpha-Chlordane (ug/L)		gamma-Chlordane (ug/L)		Toxaphene (ug/L)		Aroclor-1016 (ug/L)		Aroclor-1221 (ug/L)		Aroclor-1232 (ug/L)		Aroclor-1242 (ug/L)	
2501 SU0000000000.001	9108-190-7	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2502 SU0000000000.001	9108-190-2	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2503 SU0000000000.001	9108-205-2	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2508 SU3100000000.001	9108-153-3	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2510 SU3110000000.001	9108-153-7	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2527 SU0000000000.001	9108-172-11	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2528 SU0000000000.001	9108-172-13	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2529 SU0000000000.001	9108-172-6	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2530 SU2810000000.001	9108-172-9	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000

	STF Number	Lab Number	Aroclor-1248 (ug/L)		Aroclor-1254 (ug/L)		Aroclor-1260 (ug/L)	
2501	SU000000000.001	9108-190-7	U	0.5000	U	1.0000	U	1.0000
2502	SU000000000.001	9108-190-2	U	0.5000	U	1.0000	U	1.0000
2503	SU000000000.001	9108-205-2	U	0.5000	U	1.0000	U	1.0000
2508	SU310000000.001	9108-153-3	U	0.5000	U	1.0000	U	1.0000
2510	SU511000000.001	9108-153-7	U	0.5000	U	1.0000	U	1.0000
2527	SU000000000.001	9108-172-11	U	0.5000	U	1.0000	U	1.0000
2528	SU000000000.001	9108-172-13	U	0.5000	U	1.0000	U	1.0000
2529	SU000000000.001	9108-172-6	U	0.5000	U	1.0000	U	1.0000
2530	SU201000000.001	9108-172-9	U	0.5000	U	1.0000	U	1.0000

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

DRY SEASON (AUGUST 1991)
SEDIMENT ANALYTICAL RESULTS

STF Number	Lab Number	alpha-BHC (ug/kg)	beta-BHC (ug/kg)	delta-BHC (ug/kg)	gamma-BHC (Lindane) (ug/kg)	Heptachlor (ug/kg)	Aldrin (ug/kg)	Heptachlor epoxide (ug/kg)	Endosulfan I (ug/kg)
2501 SD000000000.001	9108-190-6	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ
2502 SD000000000.001	9108-190-1	U 33.0000 UJ	U 33.0000 UJ	U 33.0000 UJ	180.0000 R	U 33.0000 UJ	U 33.0000 UJ	U 33.0000 UJ	U 33.0000 UJ
2503 SD000000000.001	9108-285-1	U 18.0000 UJ	U 18.0000 UJ	U 18.0000 UJ	U 18.0000 UJ	U 18.0000 UJ	U 18.0000 UJ	U 18.0000 UJ	U 18.0000 UJ
2504 SD000000000.001	9108-138-3	U 26.0000 UJ	U 26.0000 UJ	U 26.0000 UJ	U 26.0000 UJ	U 26.0000 UJ	U 26.0000 UJ	U 26.0000 UJ	U 26.0000 UJ
2505 SD000000000.001	9108-088-1	U 21.0000 UJ	U 21.0000 UJ	U 21.0000 UJ	U 21.0000 UJ	U 21.0000 UJ	U 21.0000 UJ	U 21.0000 UJ	U 21.0000 UJ
2506 SD310000000.001	9108-088-2	U 20.0000 UJ	U 20.0000 UJ	U 20.0000 UJ	U 20.0000 UJ	U 20.0000 UJ	U 20.0000 UJ	U 20.0000 UJ	U 20.0000 UJ
2506 SD320000000.001	9108-088-3	U 22.0000 UJ	U 22.0000 UJ	U 22.0000 UJ	U 22.0000 UJ	U 22.0000 UJ	U 22.0000 UJ	U 22.0000 UJ	U 22.0000 UJ
2507 SD000000000.001	9108-088-4	U 57.0000 UJ	U 57.0000 UJ	U 57.0000 UJ	U 57.0000 UJ	U 57.0000 UJ	U 57.0000 UJ	U 57.0000 UJ	U 57.0000 UJ
2508 SD310000000.001	9108-153-2	U 47.0000 UJ	U 47.0000 UJ	U 47.0000 UJ	U 47.0000 UJ	U 47.0000 UJ	U 47.0000 UJ	U 47.0000 UJ	U 47.0000 UJ
2509 SD310000000.001	9108-088-5	U 8.2000 UJ	U 8.2000 UJ	U 8.2000 UJ	U 8.2000 UJ	U 8.2000 UJ	U 8.2000 UJ	U 8.2000 UJ	U 8.2000 UJ
2509 SD320000000.001	9108-088-6	U 13.0000 UJ	U 13.0000 UJ	U 13.0000 UJ	U 13.0000 UJ	U 13.0000 UJ	U 13.0000 UJ	U 13.0000 UJ	U 13.0000 UJ
2510 SD511000000.001	9108-153-6	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ
2511 SD310000000.001	9108-088-7	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ
2511 SD320000000.001	9108-088-8	U 16.0000 UJ	U 16.0000 UJ	U 16.0000 UJ	U 16.0000 UJ	U 16.0000 UJ	U 16.0000 UJ	U 16.0000 UJ	U 16.0000 UJ
2512 SD000000000.001	9108-088-9	U 17.0000 UJ	U 17.0000 UJ	U 17.0000 UJ	U 17.0000 UJ	U 17.0000 UJ	U 17.0000 UJ	U 17.0000 UJ	U 17.0000 UJ
2513 SD000000000.001	9108-088-10	U 8.9000 UJ	U 8.9000 UJ	U 8.9000 UJ	U 8.9000 UJ	U 8.9000 UJ	U 8.9000 UJ	U 8.9000 UJ	U 8.9000 UJ
2514 SD000000000.001	9108-088-11	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ	U 10.0000 UJ
2515 SD000000000.001	9108-088-12	U 11.0000 UJ	U 11.0000 UJ	U 11.0000 UJ	U 11.0000 UJ	U 11.0000 UJ	U 11.0000 UJ	U 11.0000 UJ	U 11.0000 UJ
2516 SD310000000.001	9108-088-13	U 8.2000 UJ	U 8.2000 UJ	U 8.2000 UJ	U 8.2000 UJ	U 8.2000 UJ	U 8.2000 UJ	U 8.2000 UJ	U 8.2000 UJ
2516 SD320000000.001	9108-088-14	U 8.1000 UJ	U 8.1000 UJ	U 8.1000 UJ	U 8.1000 UJ	U 8.1000 UJ	U 8.1000 UJ	U 8.1000 UJ	U 8.1000 UJ
2518 SD000000000.001	9108-138-4	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ
2519 SD000000000.001	9108-138-5	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ
2520 SD000000000.001	9108-138-6	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ
2521 SD000000000.001	9108-138-7	U 18.0000 UJ	U 18.0000 UJ	U 18.0000 UJ	U 18.0000 UJ	U 18.0000 UJ	U 18.0000 UJ	U 18.0000 UJ	U 18.0000 UJ
2522 SD000000000.001	9108-138-8	U 17.0000 UJ	U 17.0000 UJ	U 17.0000 UJ	U 17.0000 UJ	U 17.0000 UJ	U 17.0000 UJ	U 17.0000 UJ	U 17.0000 UJ
2523 SD000000000.001	9108-138-9	U 21.0000 UJ	U 21.0000 UJ	U 21.0000 UJ	U 21.0000 UJ	U 21.0000 UJ	U 21.0000 UJ	U 21.0000 UJ	U 21.0000 UJ
2524 SD000000000.001	9108-138-10	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ
2525 SD000000000.001	9108-172-3	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ
2526 SD000000000.001	9108-172-4	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ	U 42.0000 UJ
2527 SD000000000.001	9108-172-10	43.0000 J3	U 19.0000 UJ	U 19.0000 UJ	130.0000 R	U 19.0000 UJ	20.0000 J3	U 19.0000 UJ	U 19.0000 UJ
2528 SD000000000.001	9108-172-12	U 22.0000 UJ	U 22.0000 UJ	U 22.0000 UJ	U 22.0000 UJ	U 22.0000 UJ	U 22.0000 UJ	U 22.0000 UJ	U 22.0000 UJ
2529 SD000000000.001	9108-172-5	U 32.0000 UJ	U 32.0000 UJ	U 32.0000 UJ	U 32.0000 UJ	U 32.0000 UJ	U 32.0000 UJ	U 32.0000 UJ	U 32.0000 UJ
2530 SD201000000.001	9108-172-8	U 22.0000 UJ	U 22.0000 UJ	U 22.0000 UJ	U 22.0000 UJ	U 22.0000 UJ	U 22.0000 UJ	U 22.0000 UJ	U 22.0000 UJ

DATA VALIDATION
DATE RECEIVED
VALIDATED BY DATE
KEYED BY DATE
CHECKED BY RM DATE 4/16/92

STF	Number	Lab Number	Dieldrin (ug/kg)		4,4'-DDE (ug/kg)		Endrin (ug/kg)		Endosulfan II (ug/kg)		4,4'-DDD (ug/kg)		Endosulfan sulfate (ug/kg)		4,4'-DDT (ug/kg)		Methoxychlor (ug/kg)	
2501	SD000000000.001	9108-190-6	U	21.0000 UJ	U	21.0000 UJ	U	21.0000 UJ	U	21.0000 UJ	U	20.0000 UJ	U	20.0000 UJ	U	21.0000 UJ	U	100.0000 UJ
2502	SD000000000.001	9108-190-1	U	67.0000 UJ	U	67.0000 UJ		160.0000 J3		160.0000 J3	U	67.0000 UJ		310.0000 J3		260.0000 J		750.0000 R
2503	SD000000000.001	9108-205-1	U	36.0000 UJ	U	36.0000 UJ	U	36.0000 UJ	U	36.0000 UJ	U	36.0000 UJ	U	36.0000 UJ		85.0000 J	U	180.0000 UJ
2504	SD000000000.001	9108-138-3	U	52.0000 UJ	U	52.0000 UJ		60.0000 J3	U	52.0000 UJ	U	52.0000 UJ	U	52.0000 UJ	U	52.0000 UJ	U	260.0000 UJ
2505	SD000000000.001	9108-088-1	U	42.0000 UJ	U	42.0000 UJ	U	42.0000 UJ	U	42.0000 UJ	U	42.0000 UJ	U	42.0000 UJ	U	42.0000 UJ	U	210.0000 UJ
2506	SD310000000.001	9108-088-2	U	40.0000 UJ	U	40.0000 UJ	U	40.0000 UJ	U	40.0000 UJ	U	40.0000 UJ	U	40.0000 UJ	U	40.0000 UJ	U	200.0000 UJ
2506	SD320000000.001	9108-088-3	U	44.0000 UJ	U	44.0000 UJ	U	44.0000 UJ	U	44.0000 UJ	U	44.0000 UJ	U	44.0000 UJ	U	44.0000 UJ	U	220.0000 UJ
2507	SD000000000.001	9108-088-4	U	110.0000 UJ	U	110.0000 UJ	U	110.0000 UJ	U	110.0000 UJ	U	23.0000 UJ	U	23.0000 UJ	U	110.0000 UJ	U	570.0000 UJ
2508	SD310000000.001	9108-153-2	U	94.0000 UJ	U	94.0000 UJ	U	94.0000 UJ	U	94.0000 UJ	U	94.0000 UJ	U	94.0000 UJ	U	94.0000 UJ	U	470.0000 UJ
2509	SD310000000.001	9108-088-5	U	16.0000 UJ	U	16.0000 UJ	U	16.0000 UJ	U	16.0000 UJ	U	16.0000 UJ	U	16.0000 UJ	U	16.0000 UJ	U	82.0000 UJ
2509	SD320000000.001	9108-088-6	U	26.0000 UJ	U	26.0000 UJ	U	26.0000 UJ	U	26.0000 UJ	U	26.0000 UJ	U	26.0000 UJ	U	26.0000 UJ	U	130.0000 UJ
2510	SD511000000.001	9108-153-6	U	23.0000 UJ	U	23.0000 UJ	U	23.0000 UJ	U	23.0000 UJ	U	23.0000 UJ	U	23.0000 UJ	U	23.0000 UJ	U	120.0000 UJ
2511	SD310000000.001	9108-088-7	U	25.0000 UJ	U	25.0000 UJ	U	25.0000 UJ	U	25.0000 UJ	U	25.0000 UJ	U	25.0000 UJ	U	25.0000 UJ	U	120.0000 UJ
2511	SD320000000.001	9108-088-8	U	32.0000 UJ	U	32.0000 UJ	U	32.0000 UJ	U	32.0000 UJ	U	32.0000 UJ	U	32.0000 UJ	U	32.0000 UJ	U	160.0000 UJ
2512	SD000000000.001	9108-088-9	U	34.0000 UJ	U	34.0000 UJ	U	34.0000 UJ	U	34.0000 UJ	U	34.0000 UJ	U	34.0000 UJ	U	34.0000 UJ	U	170.0000 UJ
2513	SD000000000.001	9108-088-10	U	18.0000 UJ	U	18.0000 UJ	U	18.0000 UJ	U	18.0000 UJ	U	18.0000 UJ	U	18.0000 UJ	U	18.0000 UJ	U	89.0000 UJ
2514	SD000000000.001	9108-088-11	U	20.0000 UJ	U	20.0000 UJ	U	20.0000 UJ	U	20.0000 UJ	U	20.0000 UJ	U	20.0000 UJ	U	20.0000 UJ	U	100.0000 UJ
2515	SD000000000.001	9108-088-12	U	22.0000 UJ	U	22.0000 UJ	U	22.0000 UJ	U	22.0000 UJ	U	22.0000 UJ	U	22.0000 UJ	U	22.0000 UJ	U	110.0000 UJ
2516	SD310000000.001	9108-088-13	U	16.0000 UJ	U	16.0000 UJ	U	16.0000 UJ	U	16.0000 UJ	U	16.0000 UJ	U	16.0000 UJ	U	16.0000 UJ	U	82.0000 UJ
2516	SD320000000.001	9108-088-14	U	16.0000 UJ	U	16.0000 UJ	U	16.0000 UJ	U	16.0000 UJ	U	16.0000 UJ	U	16.0000 UJ	U	16.0000 UJ	U	81.0000 UJ
2518	SD000000000.001	9108-138-4	U	48.0000 UJ	U	48.0000 UJ	U	48.0000 UJ	U	48.0000 UJ	U	48.0000 UJ	U	48.0000 UJ	U	48.0000 UJ	U	240.0000 UJ
2519	SD000000000.001	9108-138-5	U	84.0000 UJ	U	84.0000 UJ	U	84.0000 UJ	U	84.0000 UJ	U	84.0000 UJ	U	84.0000 UJ	U	84.0000 UJ	U	420.0000 UJ
2520	SD000000000.001	9108-138-6	U	48.0000 UJ	U	48.0000 UJ	U	48.0000 UJ	U	48.0000 UJ	U	48.0000 UJ	U	48.0000 UJ	U	48.0000 UJ	U	240.0000 UJ
2521	SD000000000.001	9108-138-7	U	36.0000 UJ	U	36.0000 UJ	U	36.0000 UJ	U	36.0000 UJ	U	36.0000 UJ	U	36.0000 UJ	U	36.0000 UJ	U	180.0000 UJ
2522	SD000000000.001	9108-138-8	U	33.0000 UJ	U	33.0000 UJ		170.0000 J3		49.0000 J3		40.0000 J3	U	33.0000 UJ	U	33.0000 UJ	U	170.0000 UJ
2523	SD000000000.001	9108-138-9	U	42.0000 UJ	U	42.0000 UJ	U	42.0000 UJ	U	42.0000 UJ	U	42.0000 UJ	U	42.0000 UJ	U	42.0000 UJ	U	210.0000 UJ
2524	SD000000000.001	9108-138-10	U	47.0000 UJ	U	47.0000 UJ	U	47.0000 UJ	U	47.0000 UJ	U	47.0000 UJ	U	47.0000 UJ	J	24.0000 R	U	240.0000 UJ
2525	SD000000000.001	9108-172-3	U	84.0000 UJ	U	84.0000 UJ	U	84.0000 UJ	U	84.0000 UJ	U	84.0000 UJ	U	84.0000 UJ	U	84.0000 UJ	U	420.0000 UJ
2526	SD000000000.001	9108-172-4	U	84.0000 UJ	U	84.0000 UJ	U	84.0000 UJ	U	84.0000 UJ	U	84.0000 UJ	U	84.0000 UJ		110.0000 J3	U	420.0000 UJ
2527	SD000000000.001	9108-172-10	U	38.0000 UJ		42.0000 BJ		95.0000 J3		130.0000 J3	U	38.0000 UJ		140.0000 J3		220.0000 J		220.0000 J3
2528	SD000000000.001	9108-172-12	U	43.0000 UJ	U	43.0000 UJ	X	110.0000 J3	X	61.0000 J3	U	43.0000 UJ	U	43.0000 UJ	X	190.0000 J3	U	220.0000 UJ
2529	SD000000000.001	9108-172-5	U	64.0000 UJ	U	64.0000 UJ		140.0000 J3	U	64.0000 UJ	U	64.0000 UJ		140.0000 R		230.0000 J3	U	320.0000 UJ
2530	SD201000000.001	9108-172-8	U	43.0000 UJ	U	43.0000 UJ	U	43.0000 UJ	U	43.0000 UJ	U	43.0000 UJ	U	43.0000 UJ	U	43.0000 UJ	U	220.0000 UJ

STF Number	Lab Number	Endrin ketone (ug/kg)	alpha-Chlordane (ug/kg)	gamma-Chlordane (ug/kg)	Toxaphene (ug/kg)	Aroclor-1016 (ug/kg)	Aroclor-1221 (ug/kg)	Aroclor-1232 (ug/kg)	Aroclor-1242 (ug/kg)
2501 SD000000000.001	9108-198-6	U 21.0000 UJ	U 100.0000 UJ	U 100.0000 UJ	U 210.0000 UJ	U 100.0000 UJ	U 100.0000 UJ	U 100.0000 UJ	U 100.0000 UJ
2502 SD000000000.001	9108-198-1	210.0000 J3	U 330.0000 UJ	U 330.0000 UJ	U 670.0000 UJ	U 330.0000 UJ	U 330.0000 UJ	U 330.0000 UJ	U 330.0000 UJ
2503 SD000000000.001	9108-205-1	U 36.0000 UJ	U 180.0000 UJ	U 180.0000 UJ	U 360.0000 UJ	U 180.0000 UJ	U 180.0000 UJ	U 180.0000 UJ	U 180.0000 UJ
2504 SD000000000.001	9108-138-3	U 52.0000 UJ	U 260.0000 UJ	U 260.0000 UJ	U 520.0000 UJ	U 260.0000 UJ	U 260.0000 UJ	U 260.0000 UJ	U 260.0000 UJ
2505 SD000000000.001	9108-088-1	U 42.0000 UJ	U 210.0000 UJ	U 210.0000 UJ	U 420.0000 UJ	U 210.0000 UJ	U 210.0000 UJ	U 210.0000 UJ	U 210.0000 UJ
2506 SD310000000.001	9108-088-2	U 40.0000 UJ	U 200.0000 UJ	U 200.0000 UJ	U 400.0000 UJ	U 200.0000 UJ	U 200.0000 UJ	U 200.0000 UJ	U 200.0000 UJ
2506 SD320000000.001	9108-088-3	U 44.0000 UJ	U 220.0000 UJ	U 220.0000 UJ	U 440.0000 UJ	U 220.0000 UJ	U 220.0000 UJ	U 220.0000 UJ	U 220.0000 UJ
2507 SD000000000.001	9108-088-4	U 110.0000 UJ	U 570.0000 UJ	U 570.0000 UJ	U 1100.0000 UJ	U 570.0000 UJ	U 570.0000 UJ	U 570.0000 UJ	U 570.0000 UJ
2508 SD310000000.001	9108-153-2	U 94.0000 UJ	U 470.0000 UJ	U 470.0000 UJ	U 940.0000 UJ	U 470.0000 UJ	U 470.0000 UJ	U 470.0000 UJ	U 470.0000 UJ
2509 SD310000000.001	9108-088-5	U 16.0000 UJ	U 82.0000 UJ	U 82.0000 UJ	U 160.0000 UJ	U 82.0000 UJ	U 82.0000 UJ	U 82.0000 UJ	U 82.0000 UJ
2509 SD320000000.001	9108-088-6	U 26.0000 UJ	U 130.0000 UJ	U 130.0000 UJ	U 260.0000 UJ	U 130.0000 UJ	U 130.0000 UJ	U 130.0000 UJ	U 130.0000 UJ
2510 SD511000000.001	9108-153-6	U 23.0000 UJ	U 120.0000 UJ	U 120.0000 UJ	U 230.0000 UJ	U 120.0000 UJ	U 120.0000 UJ	U 120.0000 UJ	U 120.0000 UJ
2511 SD310000000.001	9108-088-7	U 25.0000 UJ	U 120.0000 UJ	U 120.0000 UJ	U 250.0000 UJ	U 120.0000 UJ	U 120.0000 UJ	U 120.0000 UJ	U 120.0000 UJ
2511 SD320000000.001	9108-088-8	U 32.0000 UJ	U 160.0000 UJ	U 160.0000 UJ	U 320.0000 UJ	U 160.0000 UJ	U 160.0000 UJ	U 160.0000 UJ	U 160.0000 UJ
2512 SD000000000.001	9108-088-9	U 34.0000 UJ	U 170.0000 UJ	U 170.0000 UJ	U 340.0000 UJ	U 170.0000 UJ	U 170.0000 UJ	U 170.0000 UJ	U 170.0000 UJ
2513 SD000000000.001	9108-088-10	U 18.0000 UJ	U 89.0000 UJ	U 89.0000 UJ	U 180.0000 UJ	U 89.0000 UJ	U 89.0000 UJ	U 89.0000 UJ	U 89.0000 UJ
2514 SD000000000.001	9108-088-11	U 20.0000 UJ	U 100.0000 UJ	U 100.0000 UJ	U 200.0000 UJ	U 100.0000 UJ	U 100.0000 UJ	U 100.0000 UJ	U 100.0000 UJ
2515 SD000000000.001	9108-088-12	U 22.0000 UJ	U 110.0000 UJ	U 110.0000 UJ	U 220.0000 UJ	U 110.0000 UJ	U 110.0000 UJ	U 110.0000 UJ	U 110.0000 UJ
2516 SD310000000.001	9108-088-13	U 16.0000 UJ	U 82.0000 UJ	U 82.0000 UJ	U 160.0000 UJ	U 82.0000 UJ	U 82.0000 UJ	U 82.0000 UJ	U 82.0000 UJ
2516 SD320000000.001	9108-088-14	U 16.0000 UJ	U 81.0000 UJ	U 81.0000 UJ	U 160.0000 UJ	U 81.0000 UJ	U 81.0000 UJ	U 81.0000 UJ	U 81.0000 UJ
2518 SD000000000.001	9108-138-4	U 48.0000 UJ	U 240.0000 UJ	U 240.0000 UJ	U 480.0000 UJ	U 240.0000 UJ	U 240.0000 UJ	U 240.0000 UJ	U 240.0000 UJ
2519 SD000000000.001	9108-138-5	U 84.0000 UJ	U 420.0000 UJ	U 420.0000 UJ	U 840.0000 UJ	U 420.0000 UJ	U 420.0000 UJ	U 420.0000 UJ	U 420.0000 UJ
2520 SD000000000.001	9108-138-6	U 48.0000 UJ	U 240.0000 UJ	U 240.0000 UJ	U 480.0000 UJ	U 240.0000 UJ	U 240.0000 UJ	U 240.0000 UJ	U 240.0000 UJ
2521 SD000000000.001	9108-138-7	U 36.0000 UJ	U 180.0000 UJ	U 180.0000 UJ	U 360.0000 UJ	U 180.0000 UJ	U 180.0000 UJ	U 180.0000 UJ	U 180.0000 UJ
2522 SD000000000.001	9108-138-8	80.0000 J3	U 170.0000 UJ	U 170.0000 UJ	U 330.0000 UJ	U 170.0000 UJ	U 170.0000 UJ	U 170.0000 UJ	U 170.0000 UJ
2523 SD000000000.001	9108-138-9	U 42.0000 UJ	U 210.0000 UJ	U 210.0000 UJ	U 420.0000 UJ	U 210.0000 UJ	U 210.0000 UJ	U 210.0000 UJ	U 210.0000 UJ
2524 SD000000000.001	9108-138-10	U 47.0000 UJ	U 240.0000 UJ	U 240.0000 UJ	U 470.0000 UJ	U 240.0000 UJ	U 240.0000 UJ	U 240.0000 UJ	U 240.0000 UJ
2525 SD000000000.001	9108-172-3	U 84.0000 UJ	U 420.0000 UJ	U 420.0000 UJ	U 840.0000 UJ	U 420.0000 UJ	U 420.0000 UJ	U 420.0000 UJ	U 420.0000 UJ
2526 SD000000000.001	9108-172-4	U 84.0000 UJ	U 420.0000 UJ	U 420.0000 UJ	U 840.0000 UJ	U 420.0000 UJ	U 420.0000 UJ	U 420.0000 UJ	U 420.0000 UJ
2527 SD000000000.001	9108-172-10	83.0000 J3	U 190.0000 UJ	U 190.0000 UJ	U 380.0000 UJ	U 190.0000 UJ	U 190.0000 UJ	U 190.0000 UJ	U 190.0000 UJ
2528 SD000000000.001	9108-172-12	U 43.0000 UJ	U 220.0000 UJ	U 220.0000 UJ	U 430.0000 UJ	U 220.0000 UJ	U 220.0000 UJ	U 220.0000 UJ	U 220.0000 UJ
2529 SD000000000.001	9108-172-5	90.0000 J3	U 320.0000 UJ	U 320.0000 UJ	U 640.0000 UJ	U 320.0000 UJ	U 320.0000 UJ	U 320.0000 UJ	U 320.0000 UJ
2530 SD201000000.001	9108-172-8	U 43.0000 UJ	U 220.0000 UJ	U 220.0000 UJ	U 430.0000 UJ	U 220.0000 UJ	U 220.0000 UJ	U 220.0000 UJ	U 220.0000 UJ

STF Number	Lab Number	Aroclor-1248 (ug/kg)	Aroclor-1254 (ug/kg)	Aroclor-1260 (ug/kg)
2501 SD000000000.001	9108-190-6	U 100.0000 UJ	U 210.0000 UJ	U 210.0000 UJ
2502 SD000000000.001	9108-190-1	U 330.0000 UJ	U 670.0000 UJ	U 670.0000 UJ
2503 SD000000000.001	9108-205-1	U 180.0000 UJ	U 360.0000 UJ	U 360.0000 UJ
2504 SD000000000.001	9108-138-3	U 260.0000 UJ	U 520.0000 UJ	U 520.0000 UJ
2505 SD000000000.001	9108-088-1	U 210.0000 UJ	910.0000 J	U 420.0000 UJ
2506 SD310000000.001	9108-088-2	U 200.0000 UJ	410.0000 J	U 400.0000 UJ
2506 SD320000000.001	9108-088-3	U 220.0000 UJ	U 440.0000 UJ	2700.0000 J
2507 SD000000000.001	9108-088-4	U 570.0000 UJ	U 1100.0000 UJ	U 1100.0000 UJ
2508 SD310000000.001	9108-153-2	U 470.0000 UJ	U 940.0000 UJ	U 940.0000 UJ
2509 SD310000000.001	9108-088-5	U 82.0000 UJ	U 160.0000 UJ	U 160.0000 UJ
2509 SD320000000.001	9108-088-6	U 130.0000 UJ	U 260.0000 UJ	U 260.0000 UJ
2510 SD511000000.001	9108-153-6	U 120.0000 UJ	U 230.0000 UJ	U 230.0000 UJ
2511 SD310000000.001	9108-088-7	U 120.0000 UJ	U 250.0000 UJ	U 250.0000 UJ
2511 SD320000000.001	9108-088-8	U 160.0000 UJ	U 320.0000 UJ	U 320.0000 UJ
2512 SD000000000.001	9108-088-9	U 170.0000 UJ	U 340.0000 UJ	U 340.0000 UJ
2513 SD000000000.001	9108-088-10	U 89.0000 UJ	U 180.0000 UJ	U 180.0000 UJ
2514 SD000000000.001	9108-088-11	U 100.0000 UJ	U 200.0000 UJ	U 200.0000 UJ
2515 SD000000000.001	9108-088-12	U 110.0000 UJ	U 220.0000 UJ	U 220.0000 UJ
2516 SD310000000.001	9108-088-13	U 82.0000 UJ	U 160.0000 UJ	U 160.0000 UJ
2516 SD320000000.001	9108-088-14	U 81.0000 UJ	U 160.0000 UJ	U 160.0000 UJ
2518 SD000000000.001	9108-138-4	U 240.0000 UJ	U 480.0000 UJ	U 480.0000 UJ
2519 SD000000000.001	9108-138-5	U 420.0000 UJ	U 840.0000 UJ	U 840.0000 UJ
2520 SD000000000.001	9108-138-6	U 240.0000 UJ	U 480.0000 UJ	U 480.0000 UJ
2521 SD000000000.001	9108-138-7	U 180.0000 UJ	U 360.0000 UJ	980.0000 J3
2522 SD000000000.001	9108-138-8	U 170.0000 UJ	U 330.0000 UJ	U 330.0000 UJ
2523 SD000000000.001	9108-138-9	U 210.0000 UJ	U 420.0000 UJ	840.0000 R
2524 SD000000000.001	9108-138-10	U 240.0000 UJ	U 470.0000 UJ	U 470.0000 UJ
2525 SD000000000.001	9108-172-3	U 420.0000 UJ	U 840.0000 UJ	U 840.0000 UJ
2526 SD000000000.001	9108-172-4	U 420.0000 UJ	U 840.0000 UJ	U 840.0000 UJ
2527 SD000000000.001	9108-172-10	U 190.0000 UJ	U 380.0000 UJ	U 380.0000 UJ
2528 SD000000000.001	9108-172-12	U 220.0000 UJ	U 430.0000 UJ	U 430.0000 UJ
2529 SD000000000.001	9108-172-5	U 320.0000 UJ	U 640.0000 UJ	U 640.0000 UJ
2530 SD201000000.001	9108-172-8	U 220.0000 UJ	U 430.0000 UJ	U 430.0000 UJ

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

WET SEASON (JANUARY 1992)
SURFACE WATER ANALYTICAL RESULTS

STF Number	Lab Number	alpha-BHC (ug/L)	beta-BHC (ug/L)	delta-BHC (ug/L)	gamma-BHC (Lindane) (ug/L)	Heptachlor (ug/L)	Aldrin (ug/L)	Heptachlor epoxide (ug/L)	Endosulfan I (ug/L)
2501 SU0000000000.002	9201-169-2	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2502 SU3100000000.002	9201-220-2	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2503 SU0000000000.002	9201-220-4	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2505 SU0000000000.002	9201-110-1	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2506 SU3100000000.002	9201-110-3	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2506 SU3200000000.002	9201-110-4	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2507 SU2010000000.002	9201-110-6	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2508 SU0000000000.002	9201-110-8	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2509 SU3100000000.002	9201-095-2	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2509 SU3200000000.002	9201-095-3	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2510 SU0000000000.002	9201-095-5	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2511 SU3100000000.002	9201-095-8	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2511 SU3200000000.002	9201-095-9	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2512 SU0000000000.002	9201-095-11	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2516 SU3200000000.002	9201-220-7	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2516 SU5110000000.002	9201-220-8	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2518 SU0000000000.002	9201-156-2	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2519 SU0000000000.002	9201-156-3	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2520 SU0000000000.002	9201-156-4	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2521 SU0000000000.002	9201-156-5	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2527 SU0000000000.002	9201-156-7	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2528 SU2010000000.002	9201-169-4	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2529 SU0000000000.002	9201-169-6	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2530 SU0000000000.002	9201-169-8	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500

DATA VALIDATION
DATE RECEIVED
VALIDATED BY DATE
KEYED BY DATE
CHECKED BY DATE 4/16/92

STF Number	Lab Number	Dieldrin (ug/L)	4,4'-DDE (ug/L)	Endrin (ug/L)	Endosulfan II (ug/L)	4,4'-DDD (ug/L)	Endosulfan sulfate (ug/L)	4,4'-DDT (ug/L)	Methoxychlor (ug/L)
2501 SU0000000000.002	9201-169-2	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2502 SU3100000000.002	9201-220-2	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2503 SU0000000000.002	9201-220-4	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2505 SU0000000000.002	9201-110-1	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2506 SU3100000000.002	9201-110-3	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2506 SU3200000000.002	9201-110-4	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2507 SU2010000000.002	9201-110-6	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2508 SU0000000000.002	9201-110-8	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2509 SU3100000000.002	9201-095-2	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2509 SU3200000000.002	9201-095-3	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2510 SU0000000000.002	9201-095-5	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2511 SU3100000000.002	9201-095-8	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2511 SU3200000000.002	9201-095-9	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2512 SU0000000000.002	9201-095-11	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2516 SU3200000000.002	9201-220-7	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2516 SU5110000000.002	9201-220-8	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2518 SU0000000000.002	9201-156-2	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2519 SU0000000000.002	9201-156-3	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2520 SU0000000000.002	9201-156-4	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2521 SU0000000000.002	9201-156-5	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2527 SU0000000000.002	9201-156-7	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2528 SU2010000000.002	9201-169-4	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2529 SU0000000000.002	9201-169-6	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2530 SU0000000000.002	9201-169-8	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000

STF Number	Lab Number	Endrin ketone (ug/L)		alpha-Chlordane (ug/L)		gamma-Chlordane (ug/L)		Toxaphene (ug/L)		Aroclor-1016 (ug/L)		Aroclor-1221 (ug/L)		Aroclor-1232 (ug/L)		Aroclor-1242 (ug/L)	
2501 SU000000000.002	9201-169-2	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2502 SU310000000.002	9201-220-2	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2503 SU000000000.002	9201-220-4	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2505 SU000000000.002	9201-110-1	U	0.1000	U	0.5000	U	0.5000	U	1.0000 R	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2506 SU310000000.002	9201-110-3	U	0.1000	U	0.5000	U	0.5000	U	1.0000 R	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2506 SU320000000.002	9201-110-4	U	0.1000	U	0.5000	U	0.5000	U	1.0000 R	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2507 SU201000000.002	9201-110-6	U	0.1000	U	0.5000	U	0.5000	U	1.0000 R	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2508 SU000000000.002	9201-110-8	U	0.1000	U	0.5000	U	0.5000	U	1.0000 R	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2509 SU310000000.002	9201-095-2	U	0.1000	U	0.5000	U	0.5000	U	1.0000 R	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2509 SU320000000.002	9201-095-3	U	0.1000	U	0.5000	U	0.5000	U	1.0000 R	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2510 SU000000000.002	9201-095-5	U	0.1000	U	0.5000	U	0.5000	U	1.0000 R	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2511 SU310000000.002	9201-095-8	U	0.1000	U	0.5000	U	0.5000	U	1.0000 R	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2511 SU320000000.002	9201-095-9	U	0.1000	U	0.5000	U	0.5000	U	1.0000 R	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2512 SU000000000.002	9201-095-11	U	0.1000	U	0.5000	U	0.5000	U	1.0000 R	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2516 SU320000000.002	9201-220-7	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2516 SU511000000.002	9201-220-8	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2518 SU000000000.002	9201-156-2	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2519 SU000000000.002	9201-156-3	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2520 SU000000000.002	9201-156-4	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2521 SU000000000.002	9201-156-5	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2527 SU000000000.002	9201-156-7	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2528 SU201000000.002	9201-169-4	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2529 SU000000000.002	9201-169-6	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2530 SU000000000.002	9201-169-8	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000

STF Number	Lab Number	Aroclor-1248 (ug/L)		Aroclor-1254 (ug/L)		Aroclor-1260 (ug/L)	
2501 SU0000000000.002	9201-169-2	U	0.5000	U	1.0000	U	1.0000
2502 SU3100000000.002	9201-220-2	U	0.5000	U	1.0000	U	1.0000
2503 SU0000000000.002	9201-220-4	U	0.5000	U	1.0000	U	1.0000
2505 SU0000000000.002	9201-110-1	U	0.5000	U	1.0000	U	1.0000
2506 SU3100000000.002	9201-110-3	U	0.5000	U	1.0000	U	1.0000
2506 SU3200000000.002	9201-110-4	U	0.5000	U	1.0000	U	1.0000
2507 SU2010000000.002	9201-110-6	U	0.5000	U	1.0000	U	1.0000
2508 SU0000000000.002	9201-110-8	U	0.5000	U	1.0000	U	1.0000
2509 SU3100000000.002	9201-095-2	U	0.5000	U	1.0000	U	1.0000
2509 SU3200000000.002	9201-095-3	U	0.5000	U	1.0000	U	1.0000
2510 SU0000000000.002	9201-095-5	U	0.5000	U	1.0000	U	1.0000
2511 SU3100000000.002	9201-095-8	U	0.5000	U	1.0000	U	1.0000
2511 SU3200000000.002	9201-095-9	U	0.5000	U	1.0000	U	1.0000
2512 SU0000000000.002	9201-095-11	U	0.5000	U	1.0000	U	1.0000
2516 SU3200000000.002	9201-220-7	U	0.5000	U	1.0000	U	1.0000
2516 SU5110000000.002	9201-220-8	U	0.5000	U	1.0000	U	1.0000
2518 SU0000000000.002	9201-156-2	U	0.5000	U	1.0000	U	1.0000
2519 SU0000000000.002	9201-156-3	U	0.5000	U	1.0000	U	1.0000
2520 SU0000000000.002	9201-156-4	U	0.5000	U	1.0000	U	1.0000
2521 SU0000000000.002	9201-156-5	U	0.5000	U	1.0000	U	1.0000
2527 SU0000000000.002	9201-156-7	U	0.5000	U	1.0000	U	1.0000
2528 SU2010000000.002	9201-169-4	U	0.5000	U	1.0000	U	1.0000
2529 SU0000000000.002	9201-169-6	U	0.5000	U	1.0000	U	1.0000
2530 SU0000000000.002	9201-169-8	U	0.5000	U	1.0000	U	1.0000

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

WET SEASON (JANUARY 1992)
SEDIMENT ANALYTICAL RESULTS

STF Number	Lab Number	alpha-BHC (ug/kg)	beta-BHC (ug/kg)	delta-BHC (ug/kg)	gamma-BHC (Lindane) (ug/kg)	Heptachlor (ug/kg)	Aldrin (ug/kg)	Heptachlor epoxide (ug/kg)	Endosulfan I (ug/kg)
2501 SD000000000.002	9201-169-1	U 9.3000	U 9.3000	U 9.3000	U 9.3000	U 9.3000	U 9.3000	U 9.3000	U 9.3000
2502 SD320000000.002	9201-220-1	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000
2503 SD000000000.002	9201-220-3	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000
2504 SD000000000.002	9201-086-1	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000
2506 SD320000000.002	9201-110-2	U 31.0000 UJ	U 31.0000 UJ	U 31.0000 UJ	U 31.0000 UJ	U 31.0000 UJ	U 31.0000 UJ	U 31.0000 UJ	U 31.0000 UJ
2507 SD201000000.002	9201-110-5	U 57.0000 UJ	U 57.0000 UJ	U 57.0000 UJ	U 57.0000 UJ	U 57.0000 UJ	U 57.0000 UJ	U 57.0000 UJ	U 57.0000 UJ
2508 SD000000000.002	9201-110-7	U 35.0000 UJ	U 35.0000 UJ	U 35.0000 UJ	U 35.0000 UJ	U 35.0000 UJ	U 35.0000 UJ	U 35.0000 UJ	U 35.0000 UJ
2509 SD310000000.002	9201-095-1	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2509 SD320000000.002	9201-110-9	U 32.0000 UJ	U 32.0000 UJ	U 32.0000 UJ	U 32.0000 UJ	U 32.0000 UJ	U 32.0000 UJ	U 32.0000 UJ	U 32.0000 UJ
2510 SD000000000.002	9201-110-10	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ
2511 SD310000000.002	9201-095-6	U 11.0000	U 11.0000	U 11.0000	U 11.0000	U 11.0000	U 11.0000	U 11.0000	U 11.0000
2511 SD320000000.002	9201-095-7	U 25.0000	U 25.0000	U 25.0000	U 25.0000	U 25.0000	U 25.0000	U 25.0000	U 25.0000
2512 SD000000000.002	9201-095-10	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000	U 15.0000
2513 SD000000000.002	9201-086-2	U 11.0000	U 11.0000	U 11.0000	U 11.0000	U 11.0000	U 11.0000	U 11.0000	U 11.0000
2514 SD000000000.002	9201-086-3	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000
2515 SD000000000.002	9201-086-4	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000	U 12.0000
2516 SD320000000.002	9201-220-5	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000	U 16.0000
2516 SD511000000.002	9201-220-6	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000	U 10.0000
2518 SD000000000.002	9201-086-5	U 91.0000	U 91.0000	U 91.0000	U 91.0000	U 91.0000	U 91.0000	U 91.0000	U 91.0000
2519 SD000000000.002	9201-086-6	U 100.0000	U 100.0000	U 100.0000	U 100.0000	U 100.0000	U 100.0000	U 100.0000	U 100.0000
2520 SD000000000.002	9201-086-7	U 24.0000	U 24.0000	U 24.0000	U 24.0000	U 24.0000	U 24.0000	U 24.0000	U 24.0000
2521 SD000000000.002	9201-086-8	U 26.0000	U 26.0000	U 26.0000	U 26.0000	U 26.0000	U 26.0000	U 26.0000	U 26.0000
2522 SD000000000.002	9201-086-9	U 22.0000	U 22.0000	U 22.0000	U 22.0000	U 22.0000	U 22.0000	U 22.0000	U 22.0000
2523 SD000000000.002	9201-086-10	U 22.0000	U 22.0000	U 22.0000	U 22.0000	U 22.0000	U 22.0000	U 22.0000	U 22.0000
2524 SD000000000.002	9201-086-11	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000
2525 SD000000000.002	9201-086-12	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000
2526 SD000000000.002	9201-086-13	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000
2527 SD000000000.002	9201-156-6	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000
2528 SD201000000.002	9201-169-3	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000	U 29.0000
2529 SD000000000.002	9201-169-5	U 32.0000	U 32.0000	U 32.0000	U 32.0000	U 32.0000	U 32.0000	U 32.0000	U 32.0000
2530 SD000000000.002	9201-169-7	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000	U 38.0000

DATA VALIDATION
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STF Number	Lab Number	Dieldrin (ug/kg)	4,4'-DDE (ug/kg)	Endrin (ug/kg)	Endosulfan II (ug/kg)	4,4'-DDD (ug/kg)	Endosulfan sulfate (ug/kg)	4,4'-DDT (ug/kg)	Methoxychlor (ug/kg)
2501 SD000000000.002	9201-169-1	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 19.0000	U 93.0000
2502 SD320000000.002	9201-220-1	U 67.0000	U 67.0000	U 67.0000	U 67.0000	U 67.0000	U 67.0000	U 67.0000	U 330.0000
2503 SD000000000.002	9201-220-3	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 270.0000
2504 SD000000000.002	9201-086-1	U 67.0000	U 67.0000	U 67.0000	U 67.0000	U 67.0000	U 67.0000	U 67.0000	U 330.0000
2506 SD320000000.002	9201-110-2	U 62.0000 UJ	U 62.0000 UJ	U 62.0000 UJ	U 62.0000 UJ	U 0.0620 UJ	U 0.0620 UJ	U 62.0000 UJ	U 310.0000 UJ
2507 SD201000000.002	9201-110-5	U 110.0000 UJ	U 110.0000 UJ	U 110.0000 UJ	U 110.0000 UJ	U 0.1100 UJ	U 0.1100 UJ	U 110.0000 UJ	U 570.0000 UJ
2508 SD000000000.002	9201-110-7	U 70.0000 UJ	U 70.0000 UJ	U 70.0000 UJ	U 70.0000 UJ	U 0.0700 UJ	U 0.0700 UJ	U 70.0000 UJ	U 350.0000 UJ
2509 SD310000000.002	9201-095-1	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 20.0000	U 100.0000
2509 SD320000000.002	9201-110-9	U 64.0000 UJ	U 64.0000 UJ	U 64.0000 UJ	U 64.0000 UJ	U 0.0640 UJ	U 0.0640 UJ	U 64.0000 UJ	U 320.0000 UJ
2510 SD000000000.002	9201-110-10	U 47.0000 UJ	U 47.0000 UJ	U 47.0000 UJ	U 47.0000 UJ	U 0.0470 UJ	U 0.0470 UJ	U 47.0000 UJ	U 240.0000 UJ
2511 SD310000000.002	9201-095-6	U 22.0000	U 22.0000	U 22.0000	U 22.0000	U 22.0000	U 22.0000	U 22.0000	U 110.0000
2511 SD320000000.002	9201-095-7	U 50.0000	U 50.0000	U 50.0000	U 50.0000	U 50.0000	U 50.0000	U 50.0000	U 250.0000
2512 SD000000000.002	9201-095-10	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 30.0000	U 150.0000
2513 SD000000000.002	9201-086-2	U 22.0000	U 22.0000	U 22.0000	U 22.0000	U 22.0000	U 22.0000	U 22.0000	U 110.0000
2514 SD000000000.002	9201-086-3	U 25.0000	U 25.0000	U 25.0000	U 25.0000	U 25.0000	U 25.0000	U 25.0000	U 120.0000
2515 SD000000000.002	9201-086-4	U 24.0000	U 24.0000	U 24.0000	U 24.0000	U 24.0000	U 24.0000	U 24.0000	U 120.0000
2516 SD320000000.002	9201-220-5	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 33.0000	U 160.0000
2516 SD511000000.002	9201-220-6	U 21.0000	U 21.0000	U 21.0000	U 21.0000	U 21.0000	U 21.0000	U 21.0000	U 100.0000
2518 SD000000000.002	9201-086-5	U 180.0000	U 180.0000	U 180.0000	U 180.0000	U 46.0000	U 46.0000	U 180.0000	U 910.0000
2519 SD000000000.002	9201-086-6	U 200.0000	U 200.0000	U 200.0000	U 200.0000	U 50.0000	U 50.0000	U 200.0000	U 1000.0000
2520 SD000000000.002	9201-086-7	U 48.0000	U 48.0000	U 48.0000	U 48.0000	U 48.0000	U 48.0000	U 48.0000	U 240.0000
2521 SD000000000.002	9201-086-8	U 52.0000	U 52.0000	U 52.0000	U 52.0000	U 52.0000	U 52.0000	U 52.0000	U 260.0000
2522 SD000000000.002	9201-086-9	U 43.0000	U 43.0000	U 43.0000	U 43.0000	U 43.0000	U 43.0000	U 43.0000	U 220.0000
2523 SD000000000.002	9201-086-10	U 44.0000	U 44.0000	U 44.0000	U 44.0000	U 44.0000	U 44.0000	U 44.0000	U 220.0000
2524 SD000000000.002	9201-086-11	U 57.0000	U 57.0000	U 57.0000	U 57.0000	U 57.0000	U 57.0000	U 57.0000	U 290.0000
2525 SD000000000.002	9201-086-12	U 76.0000	U 76.0000	U 76.0000	U 76.0000	U 76.0000	U 76.0000	U 76.0000	U 380.0000
2526 SD000000000.002	9201-086-13	U 67.0000	U 67.0000	U 67.0000	U 67.0000	U 67.0000	U 67.0000	U 67.0000	U 330.0000
2527 SD000000000.002	9201-156-6	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 270.0000
2528 SD201000000.002	9201-169-3	U 47.0000	U 47.0000	U 47.0000	U 47.0000	U 57.0000	U 57.0000	U 47.0000	U 240.0000
2529 SD000000000.002	9201-169-5	U 64.0000	U 64.0000	U 64.0000	U 64.0000	U 64.0000	U 64.0000	U 64.0000	U 320.0000
2530 SD000000000.002	9201-169-7	U 76.0000	U 76.0000	U 76.0000	U 76.0000	U 76.0000	U 76.0000	U 76.0000	U 380.0000

STF Number	Lab Number	Endrin ketone (ug/kg)	alpha-Chlordane (ug/kg)	gamma-Chlordane (ug/kg)	Toxaphene (ug/kg)	Aroclor-1016 (ug/kg)	Aroclor-1221 (ug/kg)	Aroclor-1232 (ug/kg)	Aroclor-1242 (ug/kg)
2501 SD000000000.002	9201-169-1	U 19.0000	U 93.0000	U 93.0000	U 190.0000	U 93.0000	U 93.0000	U 93.0000	U 93.0000
2502 SD320000000.002	9201-220-1	U 67.0000	U 330.0000	U 330.0000	U 670.0000	U 330.0000	U 330.0000	U 330.0000	U 330.0000
2503 SD000000000.002	9201-220-3	U 53.0000	U 270.0000	U 270.0000	U 530.0000	U 270.0000	U 270.0000	U 270.0000	U 270.0000
2504 SD000000000.002	9201-086-1	U 67.0000	U 330.0000	U 330.0000	U 670.0000	U 330.0000	U 330.0000	U 330.0000	U 330.0000
2506 SD320000000.002	9201-110-2	U 62.0000 UJ	U 310.0000 UJ	U 310.0000 UJ	U 620.0000 UJ	U 310.0000 UJ	U 310.0000 UJ	U 310.0000 UJ	U 310.0000 UJ
2507 SD201000000.002	9201-110-5	U 110.0000 UJ	U 570.0000 UJ	U 570.0000 UJ	U 1100.0000 UJ	U 570.0000 UJ	U 570.0000 UJ	U 570.0000 UJ	U 570.0000 UJ
2508 SD000000000.002	9201-110-7	U 70.0000 UJ	U 350.0000 UJ	U 350.0000 UJ	U 700.0000 UJ	U 350.0000 UJ	U 350.0000 UJ	U 350.0000 UJ	U 350.0000 UJ
2509 SD310000000.002	9201-095-1	U 20.0000	U 100.0000	U 100.0000	U 200.0000	U 100.0000	U 100.0000	U 100.0000	U 100.0000
2509 SD320000000.002	9201-110-9	U 64.0000 UJ	U 320.0000 UJ	U 320.0000 UJ	U 640.0000 UJ	U 320.0000 UJ	U 320.0000 UJ	U 320.0000 UJ	U 320.0000 UJ
2510 SD000000000.002	9201-110-10	U 47.0000 UJ	U 240.0000 UJ	U 240.0000 UJ	U 470.0000 UJ	U 240.0000 UJ	U 240.0000 UJ	U 240.0000 UJ	U 240.0000 UJ
2511 SD310000000.002	9201-095-6	U 22.0000	U 110.0000	U 110.0000	U 220.0000	U 110.0000	U 110.0000	U 110.0000	U 110.0000
2511 SD320000000.002	9201-095-7	U 50.0000	U 250.0000	U 250.0000	U 500.0000	U 250.0000	U 250.0000	U 250.0000	U 250.0000
2512 SD000000000.002	9201-095-10	U 30.0000	U 150.0000	U 150.0000	U 300.0000	U 150.0000	U 150.0000	U 150.0000	U 150.0000
2513 SD000000000.002	9201-086-2	U 22.0000	U 110.0000	U 110.0000	U 220.0000	U 110.0000	U 110.0000	U 110.0000	U 110.0000
2514 SD000000000.002	9201-086-3	U 25.0000	U 120.0000	U 120.0000	U 250.0000	U 120.0000	U 120.0000	U 120.0000	U 120.0000
2515 SD000000000.002	9201-086-4	U 24.0000	U 120.0000	U 120.0000	U 240.0000	U 120.0000	U 120.0000	U 120.0000	U 120.0000
2516 SD320000000.002	9201-220-5	U 33.0000	U 160.0000	U 160.0000	U 330.0000	U 160.0000	U 160.0000	U 160.0000	U 160.0000
2516 SD511000000.002	9201-220-6	U 21.0000	U 100.0000	U 100.0000	U 210.0000	U 100.0000	U 100.0000	U 100.0000	U 100.0000
2518 SD000000000.002	9201-086-5	U 180.0000	U 910.0000	U 910.0000	U 1800.0000	U 910.0000	U 910.0000	U 910.0000	U 910.0000
2519 SD000000000.002	9201-086-6	U 200.0000	U 1000.0000	U 1000.0000	U 2000.0000	U 1000.0000	U 1000.0000	U 1000.0000	U 1000.0000
2520 SD000000000.002	9201-086-7	U 48.0000	U 240.0000	U 240.0000	U 480.0000	U 240.0000	U 240.0000	U 240.0000	U 240.0000
2521 SD000000000.002	9201-086-8	U 52.0000	U 260.0000	U 260.0000	U 520.0000	U 260.0000	U 260.0000	U 260.0000	U 260.0000
2522 SD000000000.002	9201-086-9	U 43.0000	U 220.0000	U 220.0000	U 430.0000	U 220.0000	U 220.0000	U 220.0000	U 220.0000
2523 SD000000000.002	9201-086-10	U 44.0000	U 220.0000	U 220.0000	U 440.0000	U 220.0000	U 220.0000	U 220.0000	U 220.0000
2524 SD000000000.002	9201-086-11	U 57.0000	U 290.0000	U 290.0000	U 570.0000	U 290.0000	U 290.0000	U 290.0000	U 290.0000
2525 SD000000000.002	9201-086-12	U 76.0000	U 380.0000	U 380.0000	U 760.0000	U 380.0000	U 380.0000	U 380.0000	U 380.0000
2526 SD000000000.002	9201-086-13	U 67.0000	U 330.0000	U 330.0000	U 670.0000	U 330.0000	U 330.0000	U 330.0000	U 330.0000
2527 SD000000000.002	9201-156-6	U 53.0000	U 270.0000	U 270.0000	U 530.0000	U 270.0000	U 270.0000	U 270.0000	U 270.0000
2528 SD201000000.002	9201-169-3	U 47.0000	U 240.0000	U 240.0000	U 570.0000	U 240.0000	U 240.0000	U 240.0000	U 240.0000
2529 SD000000000.002	9201-169-5	U 64.0000	U 320.0000	U 320.0000	U 640.0000	U 320.0000	U 320.0000	U 320.0000	U 320.0000
2530 SD000000000.002	9201-169-7	U 76.0000	U 380.0000	U 380.0000	U 760.0000	U 380.0000	U 380.0000	U 380.0000	U 380.0000

STF	Number	Lab Number	Aroclor-1248 (ug/kg)		Aroclor-1254 (ug/kg)		Aroclor-1260 (ug/kg)	
2501	SD000000000.002	9201-169-1	U 93.0000		U 190.0000		U 190.0000	
2502	SD320000000.002	9201-220-1	U 330.0000		U 670.0000		U 670.0000	
2503	SD000000000.002	9201-220-3	U 270.0000		U 530.0000		U 530.0000	
2504	SD000000000.002	9201-086-1	U 330.0000		U 670.0000		790.0000	J4
2506	SD320000000.002	9201-110-2	U 310.0000	UJ	U 620.0000	UJ	U 620.0000	UJ
2507	SD201000000.002	9201-110-5	U 570.0000	UJ	U 1100.0000	UJ	U 1100.0000	UJ
2508	SD000000000.002	9201-110-7	U 350.0000	UJ	U 700.0000	UJ	U 700.0000	UJ
2509	SD310000000.002	9201-095-1	U 100.0000		U 200.0000		U 200.0000	
2509	SD320000000.002	9201-110-9	U 320.0000	UJ	U 640.0000	UJ	U 640.0000	UJ
2510	SD000000000.002	9201-110-10	U 240.0000	UJ	U 470.0000	UJ	U 470.0000	UJ
2511	SD310000000.002	9201-095-6	U 110.0000		U 220.0000		J 280.0000	J4
2511	SD320000000.002	9201-095-7	U 250.0000		U 500.0000		J 460.0000	J4
2512	SD000000000.002	9201-095-10	U 150.0000		U 300.0000		U 300.0000	
2513	SD000000000.002	9201-086-2	U 110.0000		U 220.0000		J 130.0000	J4
2514	SD000000000.002	9201-086-3	U 120.0000		J 190.0000	JN	U 250.0000	
2515	SD000000000.002	9201-086-4	U 120.0000		U 240.0000		U 240.0000	
2516	SD320000000.002	9201-220-5	U 160.0000		U 330.0000		U 330.0000	
2516	SD511000000.002	9201-220-6	U 100.0000		U 210.0000		U 210.0000	
2518	SD000000000.002	9201-086-5	U 910.0000		U 1800.0000		2200.0000	JN
2519	SD000000000.002	9201-086-6	U 1000.0000		U 2000.0000		4000.0000	J4
2520	SD000000000.002	9201-086-7	U 240.0000		U 480.0000		1000.0000	J4
2521	SD000000000.002	9201-086-8	U 260.0000		U 520.0000		1500.0000	JN
2522	SD000000000.002	9201-086-9	U 220.0000		U 430.0000		1300.0000	J4
2523	SD000000000.002	9201-086-10	U 220.0000		U 440.0000		980.0000	JN
2524	SD000000000.002	9201-086-11	U 290.0000		U 570.0000		1100.0000	JN
2525	SD000000000.002	9201-086-12	U 380.0000		U 760.0000		1000.0000	JN
2526	SD000000000.002	9201-086-13	U 330.0000		U 670.0000		1300.0000	JN
2527	SD000000000.002	9201-156-6	U 270.0000		U 530.0000		1500.0000	J4
2528	SD201000000.002	9201-169-3	U 240.0000		U 570.0000		2400.0000	JN
2529	SD000000000.002	9201-169-5	U 320.0000		U 640.0000		1200.0000	JN
2530	SD000000000.002	9201-169-7	U 380.0000		U 760.0000		U 760.0000	

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

STORM EVENTS
SURFACE WATER ANALYTICAL RESULTS

STF Number	Lab Number	alpha-BHC (ug/L)	beta-BHC (ug/L)	delta-BHC (ug/L)	gamma-BHC (Lindane) (ug/L)	Heptachlor (ug/L)	Aldrin (ug/L)	Heptachlor epoxide (ug/L)	Endosulfan I (ug/L)
2515 SU201000000.027	9201-227-1	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500

DATA VALIDATION
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STF Number	Lab Number	Dieldrin (ug/L)		4,4'-DDE (ug/L)		Endrin (ug/L)		Endosulfan II (ug/L)		4,4'-DDD (ug/L)		Endosulfan sulfate (ug/L)		4,4'-DDT (ug/L)		Methoxychlor (ug/L)	
2515 SU201000000.027	9201-227-1	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.5000

STF Number	Lab Number	Endrin ketone (ug/L)		alpha-Chlordane (ug/L)		gamma-Chlordane (ug/L)		Toxaphene (ug/L)		Aroclor-1016 (ug/L)		Aroclor-1221 (ug/L)		Aroclor-1232 (ug/L)		Aroclor-1242 (ug/L)	
2515 SU201000000.027	9201-227-1	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000

STF Number	Lab Number	Aroclor-1248 (ug/L)	Aroclor-1254 (ug/L)	Aroclor-1260 (ug/L)
2515 SU201000000.027	9201-227-1	U 0.5000	U 1.0000	U 1.0000

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

BIWEEKLY/MONTHLY
SURFACE WATER ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for PESTICIDES/PCB for file STFBWPT.DBF 05/13/92 23:00:00 5,590 bytes

STF Number	Lab Number	alpha-BHC (ug/L)		beta-BHC (ug/L)		delta-BHC (ug/L)		gamma-BHC (Lindane) (ug/L)		Heptachlor (ug/L)		Aldrin (ug/L)		Heptachlor epoxide (ug/L)		Endosulfan I (ug/L)	
2515 SU000000000.051	9104-077-3	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500
2515 SU000000000.060	9111-296-1	U	0.0500	U	0.0500	U	0.0500	B	0.0600 UJ	U	0.0500	U	0.0500	U	0.0500	U	0.0500
2515 SU000000000.073	9202-011-1	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500
2515 SU201000000.074	9202-164-1	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500

DATA VALIDATION
DATE RECEIVED
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CHECKED BY RM DATE 4/30/92

Analytical data for PESTICIDES/PCB for file STFBWPT.DBF 05/13/92 23:00:00 5,590 bytes

STF Number	Lab Number	Dieldrin (ug/L)		4,4'-DDE (ug/L)		Endrin (ug/L)		Endosulfan II (ug/L)		4,4'-DDD (ug/L)		Endosulfan sulfate (ug/L)		4,4'-DDT (ug/L)		Methoxychlor (ug/L)	
2515 SU000000000.051	9104-077-3	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.5000
2515 SU000000000.068	9111-296-1	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.5000
2515 SU000000000.073	9202-011-1	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.5000
2515 SU201000000.074	9202-164-1	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.5000

STF Number	Lab Number	Endrin ketone (ug/L)		alpha-Chlordane (ug/L)		gamma-Chlordane (ug/L)		Toxaphene (ug/L)		Aroclor-1016 (ug/L)		Aroclor-1221 (ug/L)		Aroclor-1232 (ug/L)		Aroclor-1242 (ug/L)	
2515 SU000000000.051	9104-077-3	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2515 SU000000000.068	9111-296-1	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2515 SU000000000.073	9202-011-1	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2515 SU201000000.074	9202-164-1	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000

STF Number	Lab Number	Aroclor-1248 (ug/L)		Aroclor-1254 (ug/L)		Aroclor-1260 (ug/L)	
2515 SU000000000.051	9104-077-3	U	0.5000	U	1.0000	U	1.0000
2515 SU000000000.068	9111-296-1	U	0.5000	U	1.0000	U	1.0000
2515 SU000000000.073	9202-011-1	U	0.5000	U	1.0000	U	1.0000
2515 SU201000000.074	9202-164-1	U	0.5000	U	1.0000	U	1.0000

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

DRY SEASON (AUGUST 1991) AND WET SEASON (JANUARY 1992) BACKGROUND SURFACE WATER ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for PESTICIDES/PCB for file STFSUPTB.DBF 03/27/92 23:00:00 9,220 bytes

STF Number	Lab Number	alpha-BHC (ug/L)	beta-BHC (ug/L)	delta-BHC (ug/L)	gamma-BHC (Lindane) (ug/L)	Heptachlor (ug/L)	Aldrin (ug/L)	Heptachlor epoxide (ug/L)	Endosulfan I (ug/L)
2500 SU000000000.001	9108-107-4	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2500 SU000000000.002	9201-156-1	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2540 SU000000000.001	9108-107-1	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2540 SU000000000.002	9201-176-1	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2541 SU000000000.001	9108-107-2	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2541 SU000000000.002	9201-176-2	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2542 SU000000000.001	9108-190-4	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2542 SU000000000.002	9201-176-3	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2543 SU000000000.001	9108-190-5	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2543 SU000000000.002	9201-176-4	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500

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STF Number	Lab Number	Dieldrin (ug/L)	4,4'-DDE (ug/L)	Endrin (ug/L)	Endosulfan II (ug/L)	4,4'-DDD (ug/L)	Endosulfan sulfate (ug/L)	4,4'-DDT (ug/L)	Methoxychlor (ug/L)
2539 SU0000000000.001	9108-107-4	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2539 SU0000000000.002	9201-156-1	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2540 SU0000000000.001	9108-107-1	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2540 SU0000000000.002	9201-176-1	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2541 SU0000000000.001	9108-107-2	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2541 SU0000000000.002	9201-176-2	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2542 SU0000000000.001	9108-190-4	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2542 SU0000000000.002	9201-176-3	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2543 SU0000000000.001	9108-190-5	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000
2543 SU0000000000.002	9201-176-4	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.1000	U 0.5000

STF Number	Lab Number	Endrin ketone (ug/L)		alpha-Chlordane (ug/L)		gamma-Chlordane (ug/L)		Toxaphene (ug/L)		Aroclor-1016 (ug/L)		Aroclor-1221 (ug/L)		Aroclor-1232 (ug/L)		Aroclor-1242 (ug/L)	
2500 SU000000000.001	9108-107-4	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2500 SU000000000.002	9201-156-1	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2540 SU000000000.001	9108-107-1	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2540 SU000000000.002	9201-176-1	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2541 SU000000000.001	9108-107-2	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2541 SU000000000.002	9201-176-2	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2542 SU000000000.001	9108-190-4	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2542 SU000000000.002	9201-176-3	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2543 SU000000000.001	9108-190-5	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2543 SU000000000.002	9201-176-4	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000

STF Number	Lab Number	Aroclor-1248 (ug/L)		Aroclor-1254 (ug/L)		Aroclor-1260 (ug/L)	
2500 SU0000000000.001	9108-107-4	U	0.5000	U	1.0000	U	1.0000
2500 SU0000000000.002	9201-156-1	U	0.5000	U	1.0000	U	1.0000
2540 SU0000000000.001	9108-107-1	U	0.5000	U	1.0000	U	1.0000
2540 SU0000000000.002	9201-176-1	U	0.5000	U	1.0000	U	1.0000
2541 SU0000000000.001	9108-107-2	U	0.5000	U	1.0000	U	1.0000
2541 SU0000000000.002	9201-176-2	U	0.5000	U	1.0000	U	1.0000
2542 SU0000000000.001	9108-190-4	U	0.5000	U	1.0000	U	1.0000
2542 SU0000000000.002	9201-176-3	U	0.5000	U	1.0000	U	1.0000
2543 SU0000000000.001	9108-190-5	U	0.5000	U	1.0000	U	1.0000
2543 SU0000000000.002	9201-176-4	U	0.5000	U	1.0000	U	1.0000

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

QA/QC DUPLICATE
SURFACE WATER ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for PESTICIDES/PCB for file STFSUPTD.DBF 05/13/92 23:00:00 7,405 bytes

STF Number	Lab Number	alpha-BHC (ug/L)	beta-BHC (ug/L)	delta-BHC (ug/L)	gamma-BHC (Lindane) (ug/L)	Heptachlor (ug/L)	Aldrin (ug/L)	Heptachlor epoxide (ug/L)	Endosulfan I (ug/L)
3188 SU202000000.074	9202-164-2	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
3189 SU202000000.027	9201-227-2	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
3196 SU202000000.002	9201-169-10	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
3197 SU202000000.002	9201-110-12	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
3198 SU202000000.001	9108-172-2	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
3199 SU512000000.001	9108-153-5	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
3200 SU512000000.000	9104-205-2	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470

DATA VALIDATION
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Analytical data for PESTICIDES/PCB for file STFSUPTD.DBF 05/13/92 23:00:00 7,405 bytes

STF Number	Lab Number	Dieldrin (ug/L)		4,4'-DDE (ug/L)		Endrin (ug/L)		Endosulfan II (ug/L)		4,4'-DDD (ug/L)		Endosulfan sulfate (ug/L)		4,4'-DDT (ug/L)		Methoxychlor (ug/L)	
3188 SU202000000.074	9202-164-2	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.5000
3189 SU202000000.027	9201-227-2	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.5000
3196 SU202000000.002	9201-169-10	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.5000
3197 SU202000000.002	9201-110-12	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.5000
3198 SU202000000.001	9108-172-2	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.5000
3199 SU512000000.001	9108-153-5	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.5000
3200 SU512000000.000	9104-205-2	U	0.0940	U	0.0940	U	0.0940	U	0.0940	U	0.0940	U	0.0940	U	0.0940	U	0.4700

STF Number	Lab Number	Endrin ketone (ug/L)		alpha-Chlordane (ug/L)		gamma-Chlordane (ug/L)		Toxaphene (ug/L)		Aroclor-1016 (ug/L)		Aroclor-1221 (ug/L)		Aroclor-1232 (ug/L)		Aroclor-1242 (ug/L)	
3188 SU202000000.074	9202-164-2	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
3189 SU202000000.027	9201-227-2	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
3196 SU202000000.002	9201-169-10	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
3197 SU202000000.002	9201-110-12	U	0.1000	U	0.5000	U	0.5000	U	1.0000 R	U	0.5000	U	0.5000	U	0.5000	U	0.5000
3198 SU202000000.001	9108-172-2	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
3199 SU512000000.001	9108-153-5	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
3200 SU512000000.000	9104-205-2	U	0.0940	U	0.4700	U	0.4700	U	0.9400	U	0.4700	U	0.4700	U	0.4700	U	0.4700

STF Number	Lab Number	Aroclor-1248 (ug/L)		Aroclor-1254 (ug/L)		Aroclor-1260 (ug/L)	
3188 SU202000000.074	9202-164-2	U	0.5000	U	1.0000	U	1.0000
3189 SU202000000.027	9201-227-2	U	0.5000	U	1.0000	U	1.0000
3196 SU202000000.002	9201-169-10	U	0.5000	U	1.0000	U	1.0000
3197 SU202000000.002	9201-110-12	U	0.5000	U	1.0000	U	1.0000
3198 SU202000000.001	9108-172-2	U	0.5000	U	1.0000	U	1.0000
3199 SU512000000.001	9108-153-5	U	0.5000	U	1.0000	U	1.0000
3200 SU512000000.000	9104-205-2	U	0.4700	U	0.9400	U	0.9400

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

QA/QC DUPLICATE
SEDIMENT ANALYTICAL RESULTS

STF Number	Lab Number	alpha-BHC (ug/kg)	beta-BHC (ug/kg)	delta-BHC (ug/kg)	gamma-BHC (Lindane) (ug/kg)	Heptachlor (ug/kg)	Aldrin (ug/kg)	Heptachlor epoxide (ug/kg)	Endosulfan I (ug/kg)
3196 SD202000000.002	9201-169-9	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000	U 27.0000
3197 SD202000000.002	9201-110-11	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ	U 27.0000 UJ
3198 SD202000000.001	9108-172-1	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ
3199 SD512000000.001	9108-153-4	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ	U 12.0000 UJ

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STF Number	Lab Number	Dieldrin (ug/kg)	4,4'-DDE (ug/kg)	Endrin (ug/kg)	Endosulfan II (ug/kg)	4,4'-DDD (ug/kg)	Endosulfan sulfate (ug/kg)	4,4'-DDT (ug/kg)	Methoxychlor (ug/kg)
3196 SD202000000.002	9201-169-9	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 53.0000	U 270.0000
3197 SD202000000.002	9201-110-11	U 53.0000 UJ	U 53.0000 UJ	U 53.0000 UJ	U 53.0000 UJ	U 0.0530 UJ	U 0.0530 UJ	U 53.0000 UJ	U 270.0000 UJ
3198 SD202000000.001	9108-172-1	U 48.0000 UJ	U 48.0000 UJ	U 48.0000 UJ	U 48.0000 UJ	U 48.0000 UJ	U 48.0000 UJ	U 48.0000 UJ	U 240.0000 UJ
3199 SD512000000.001	9108-153-4	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 24.0000 UJ	U 120.0000 UJ

STF Number	Lab Number	Endrin ketone (ug/kg)	alpha-Chlordane (ug/kg)	gamma-Chlordane (ug/kg)	Toxaphene (ug/kg)	Aroclor-1016 (ug/kg)	Aroclor-1221 (ug/kg)	Aroclor-1232 (ug/kg)	Aroclor-1242 (ug/kg)
3196 SD202000000.002	9201-169-9	U 53.0000	U 270.0000	U 270.0000	U 530.0000	U 270.0000	U 270.0000	U 270.0000	U 270.0000
3197 SD202000000.002	9201-110-11	U 53.0000 UJ	U 270.0000 UJ	U 270.0000 UJ	U 530.0000 UJ	U 270.0000 UJ	U 270.0000 UJ	U 270.0000 UJ	U 270.0000 UJ
3198 SD202000000.001	9108-172-1	U 48.0000 UJ	U 240.0000 UJ	U 240.0000 UJ	U 480.0000 UJ	U 240.0000 UJ	U 240.0000 UJ	U 240.0000 UJ	U 240.0000 UJ
3199 SD512000000.001	9108-153-4	U 24.0000 UJ	U 120.0000 UJ	U 120.0000 UJ	U 240.0000 UJ	U 120.0000 UJ	U 120.0000 UJ	U 120.0000 UJ	U 120.0000 UJ

STF Number	Lab Number	Aroclor-1248 (ug/kg)	Aroclor-1254 (ug/kg)	Aroclor-1260 (ug/kg)
3196 SD202000000.002	9201-169-9	U 270.0000	1000.0000 JB	U 530.0000
3197 SD202000000.002	9201-110-11	U 270.0000 UJ	U 530.0000 UJ	U 530.0000 UJ
3198 SD202000000.001	9108-172-1	U 240.0000 UJ	U 480.0000 UJ	U 480.0000 UJ
3199 SD512000000.001	9108-153-4	U 120.0000 UJ	U 240.0000 UJ	U 240.0000 UJ

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

QA/QC BLANK ANALYTICAL RESULTS

STF Number	Lab Number	alpha-BHC (ug/L)	beta-BHC (ug/L)	delta-BHC (ug/L)	gamma-BHC (Lindane) (ug/L)	Heptachlor (ug/L)	Aldrin (ug/L)	Heptachlor epoxide (ug/L)	Endosulfan I (ug/L)
2509 WW000000000.002	9201-095-4	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2516 WW000001000.000	9104-226-2	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470	U 0.0470
2524 WW000001000.001	9108-138-11	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2529 WW000001000.001	9108-172-7	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
2529 WW000001000.002	9201-169-11	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
3600 WW000002000.000	9104-209-3	U 0.0490	U 0.0490	U 0.0490	U 0.0490	U 0.0490	U 0.0490	U 0.0490	U 0.0490
3604 WW000002000.001	9108-088-15	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
3605 WW000001000.001	9108-190-3	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
3606 WW000002000.002	9201-176-5	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500
3607 WW000002000.002	9201-110-13	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500	U 0.0500

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STF Number	Lab Number	Dieldrin (ug/L)		4,4'-DDE (ug/L)		Endrin (ug/L)		Endosulfan II (ug/L)		4,4'-DDD (ug/L)		Endosulfan sulfate (ug/L)		4,4'-DDT (ug/L)		Methoxychlor (ug/L)	
2509 WW0000000000.002	9201-095-4	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.5000
2516 WW0000001000.000	9104-226-2	U	0.0950	U	0.0950	U	0.0950	U	0.0950	U	0.0950	U	0.0950	U	0.0950	U	0.4700
2524 WW0000001000.001	9108-138-11	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.5000
2529 WW0000001000.001	9108-172-7	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.5000
2529 WW0000001000.002	9201-169-11	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.5000
3600 WW0000002000.000	9104-209-3	U	0.0980	U	0.0980	U	0.0980	U	0.0980	U	0.0980	U	0.0980	U	0.0980	U	0.4900
3604 WW0000002000.001	9108-088-15	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.5000
3605 WW0000001000.001	9108-190-3	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.5000
3606 WW0000002000.002	9201-176-5	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.5000
3607 WW0000002000.002	9201-110-13	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.5000

STF Number	Lab Number	Endrin ketone (ug/L)		alpha-Chlordane (ug/L)		gamma-Chlordane (ug/L)		Toxaphene (ug/L)		Aroclor-1016 (ug/L)		Aroclor-1221 (ug/L)		Aroclor-1232 (ug/L)		Aroclor-1242 (ug/L)	
2509 WW000000000.002	9201-095-4	U	0.1000	U	0.5000	U	0.5000	U	1.0000 R	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2516 WW000001000.000	9104-226-2	U	0.0950	U	0.4700	U	0.4700	U	0.9500	U	0.4700	U	0.4700	U	0.4700	U	0.4700
2524 WW000001000.001	9108-138-11	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2529 WW000001000.001	9108-172-7	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
2529 WW000001000.002	9201-169-11	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
3600 WW000002000.000	9104-209-3	U	0.0980	U	0.4900	U	0.4900	U	0.9800	U	0.4900	U	0.4900	U	0.4900	U	0.4900
3604 WW000002000.001	9108-088-15	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
3605 WW000001000.001	9108-190-3	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
3606 WW000002000.002	9201-176-5	U	0.1000	U	0.5000	U	0.5000	U	1.0000	U	0.5000	U	0.5000	U	0.5000	U	0.5000
3607 WW000002000.002	9201-110-13	U	0.1000	U	0.5000	U	0.5000	U	1.0000 R	U	0.5000	U	0.5000	U	0.5000	U	0.5000

STF Number	Lab Number	Aroclor-1248 (ug/L)		Aroclor-1254 (ug/L)		Aroclor-1260 (ug/L)	
2509 WW0000000000.002	9201-095-4	U	0.5000	U	1.0000	U	1.0000
2516 WW0000001000.000	9104-226-2	U	0.4700	U	0.9500	U	0.9500
2524 WW0000001000.001	9108-138-11	U	0.5000	U	1.0000	U	1.0000
2529 WW0000001000.001	9108-172-7	U	0.5000	U	1.0000	U	1.0000
2529 WW0000001000.002	9201-169-11	U	0.5000	U	1.0000	U	1.0000
3600 WW0000002000.000	9104-209-3	U	0.4900	U	0.9800	U	0.9800
3604 WW0000002000.001	9108-088-15	U	0.5000	U	1.0000	U	1.0000
3605 WW0000001000.001	9108-198-3	U	0.5000	U	1.0000	U	1.0000
3606 WW0000002000.002	9201-176-5	U	0.5000	U	1.0000	U	1.0000
3607 WW0000002000.002	9201-110-13	U	0.5000	U	1.0000	U	1.0000

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

TRANSITIONAL SEASON (APRIL 1991)
SURFACE WATER ANALYTICAL RESULTS

STF	Number	Lab Number	Cyanide (ug/L)	
2506	SU310000000.000	104378-001	U	10.0000
2506	SU320000000.000	104360-002	U	10.0000
2509	SU310000000.000	104330-005	U	10.0000
2509	SU320000000.000	104330-001	U	10.0000
2511	SU320000000.000	104330-002	U	10.0000
2511	SU511000000.000	104330-003	U	10.0000
2516	SU310000000.000	104360-001	U	10.0000
2516	SU320000000.000	104360-003	U	10.0000

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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

TRANSITIONAL SEASON (APRIL 1991)
SEDIMENT ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for CYANIDE for file STFSDCN1.DBF 12/17/91 23:00:00 1,681 bytes

STF	Number	Lab Number		Cyanide (mg/kg)
2506	SD320000000.000	104360-014		0.8000
2509	SD320000000.000	104330-007		0.7000
2511	SD320000000.000	104330-008		0.9000
2516	SD310000000.000	104360-015	U	0.5000
2516	SD320000000.000	104360-016	U	0.5000

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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

DRY SEASON (AUGUST 1991)
SURFACE WATER ANALYTICAL RESULTS

STF Number	Lab Number		Cyanide (ug/L)
2501 SU0000000000.001	108257-7	U	10.0000
2502 SU0000000000.001	108257-3	U	10.0000
2503 SU0000000000.001	108318-2	U	10.0000
2508 SU3100000000.001	108258-5	U	20.0000
2510 SU5110000000.001	108258-7	U	20.0000
2527 SU0000000000.001	108234-5	U	10.0000
2528 SU0000000000.001	108234-6	U	100.0000
2529 SU0000000000.001	108234-2	U	10.0000
2530 SU2010000000.001	108234-4	U	10.0000

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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

DRY SEASON (AUGUST 1991)
SEDIMENT ANALYTICAL RESULTS

STF Number	Lab Number		Cyanide (mg/kg)	
2501 SD000000000.001	108257-2	U	0.6000	UJ
2502 SD000000000.001	108257-1	U	1.6000	UJ
2503 SD000000000.001	108318-1	UN	1.4000	UJ
2504 SD000000000.001	108168-3	U	1.5000	
2505 SD000000000.001	108130-1	U	0.7000	
2506 SD310000000.001	108130-2	U	1.0000	
2506 SD320000000.001	108130-3	U	0.9000	
2507 SD000003000.001	108130-4	U	1.4000	
2508 SD310000000.001	108258-2	U	2.9000	
2509 SD310000000.001	108130-5	U	0.5000	
2509 SD320000000.001	108130-6	U	0.5000	
2510 SD511000000.001	108258-4	U	0.7000	
2511 SD310000000.001	108130-7	U	0.8000	
2511 SD320000000.001	108130-8	U	1.0000	
2512 SD000000000.001	108130-9	U	0.7000	
2513 SD000000000.001	108130-10	U	0.5000	
2514 SD000000000.001	108130-11	U	0.6000	
2515 SD000000000.001	108130-12	U	0.7000	
2516 SD310000000.001	108130-13	U	0.5000	
2516 SD320000000.001	108130-14	U	0.5000	
2518 SD000000000.001	108168-4	U	2.2000	
2519 SD000000000.001	108168-5	U	1.9000	
2520 SD000000000.001	108168-6	U	1.7000	
2521 SD000000000.001	108168-7	U	1.4000	
2522 SD000000000.001	108168-8	U	1.0000	
2523 SD000000000.001	108168-9	U	1.3000	
2524 SD000000000.001	108168-10	U	1.4000	
2525 SD000000000.001	108234-8	UN	2.5000	
2526 SD000000000.001	108234-9	UN	2.1000	UJ
2527 SD000000000.001	108234-12	UN	1.0000	UJ
2528 SD000000000.001	108234-13	UN	1.2000	UJ
2529 SD000000000.001	108234-10	UN	1.8000	UJ
2530 SD201000000.001	108234-11	UN	1.0000	UJ

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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

WET SEASON (JANUARY 1992)
SURFACE WATER ANALYTICAL RESULTS

STF Number	Lab Number		Cyanide (ug/L)	
2501 SU0000000000.002	WZ1068	U	10.0000	UJ
2502 SU3100000000.002	WZ1069	U	10.0000	
2503 SU0000000000.002	WZ1070	U	10.0000	
2505 SU0000000000.002	WZ0857	U	10.0000	
2506 SU3100000000.002	WZ0858	U	10.0000	
2506 SU3200000000.002	WZ0859	U	10.0000	
2507 SU2010000000.002	WZ0860	U	10.0000	
2508 SU0000000000.002	WZ0861	U	10.0000	
2509 SU3100000000.002	WZ0862	U	10.0000	
2509 SU3200000000.002	WZ0863		10.4000	J3
2510 SU0000000000.002	WZ0865	U	10.0000	UJ
2511 SU3100000000.002	WZ0866	U	10.0000	UJ
2511 SU3200000000.002	WZ0867	U	10.0000	UJ
2512 SU0000000000.002	WZ0868	U	10.0000	UJ
2516 SU3200000000.002	WZ1071	U	10.0000	
2516 SU5110000000.002	WZ1072	U	10.0000	
2518 SU0000000000.002	WZ0869	U	10.0000	
2519 SU0000000000.002	WZ0870	U	10.0000	
2520 SU0000000000.002	WZ0871	U	10.0000	
2521 SU0000000000.002	WZ0872	U	10.0000	
2527 SU0000000000.002	WZ0873	U	10.0000	
2528 SU2010000000.002	WZ1073	U	10.0000	UJ
2529 SU0000000000.002	WZ1074	U	10.0000	UJ
2530 SU0000000000.002	WZ1076	U	10.0000	UJ

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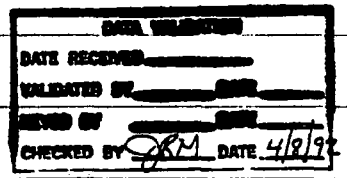
SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

WET SEASON (JANUARY 1992)
SEDIMENT ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for CYANIDE for file STFSDCN3.DBF 03/27/92 23:00:00 6,877 bytes

STF	Number	Lab Number		Cyanide (mg/kg)	
2501	SD000000000.002	S21046	U	1.2000	UJ
2502	SD310000000.002	S21047	U	3.0000	
2503	SD000000000.002	S21048	U	2.2000	
2504	SD000000000.002	S20745	U	2.7000	
2506	SD320000000.002	S20746	U	3.8000	
2507	SD201000000.002	S20747	U	1.2000	
2508	SD000000000.002	S20748	U	1.3000	
2509	SD310000000.002	S20749	U	1.1000	
2509	SD320000000.002	S20750	U	1.4000	
2510	SD000000000.002	S20751	U	1.4000	
2511	SD310000000.002	S20752		1.3000	
2511	SD320000000.002	S20753	U	1.8000	
2512	SD000000000.002	S20754	U	1.7000	
2513	SD000000000.002	S20755	U	1.0000	
2514	SD000000000.002	S20756	U	1.1000	
2515	SD000000000.002	S20757	U	1.1000	
2516	SD320000000.002	S21049	U	1.6000	
2516	SD511000000.002	S21051	U	1.3000	
2518	SD000000000.002	S20758	U	1.8000	
2519	SD000000000.002	S20759	U	2.3000	
2520	SD000000000.002	S20760	U	2.4000	
2521	SD000000000.002	S20761	U	2.3000	
2522	SD000000000.002	S20762	U	2.0000	
2523	SD000000000.002	S20763	U	1.8000	
2524	SD000000000.002	S20764	U	2.3000	
2525	SD000000000.002	S21052	U	4.9000	UJ
2526	SD000000000.002	S21053	U	3.9000	UJ
2527	SD000000000.002	S21054	U	3.0000	UJ
2528	SD201000000.002	S21055	U	3.2000	UJ
2529	SD000000000.002	S21056	U	2.7000	UJ
2530	SD000000000.002	S21057	U	2.7000	UJ



SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

STORM EVENTS
SURFACE WATER ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for CYANIDE for file STFSTCN.DBF 05/13/92 23:00:00 937 bytes

STF Number	Lab Number		Cyanide (ug/L)
2515 SU2010000000.027	W21044	U	10.0000

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Analytical data for CYANIDE for file STFSTCN.DBF 05/13/92 23:00:00 937 bytes

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

BIWEEKLY/MONTHLY
SURFACE WATER ANALYTICAL RESULTS

STF Number	Lab Number		Cyanide (ug/L)	
2515 SU0000000000.051	104136-001	U	10.0000	
2515 SU0000000000.068	W19484	U	10.0000	UJ
2515 SU0000000000.073	W21379	U	10.0000	
2515 SU2010000000.074	W21788	U	10.0000	

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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

DRY SEASON (AUGUST 1991) AND WET SEASON (JANUARY 1992) BACKGROUND SURFACE WATER ANALYTICAL RESULTS

STF Number	Lab Number		Cyanide (ug/L)	
2500 SU0000000000.001	108151-3	U	10.0000	
2500 SU0000000000.002	W20856	U	10.0000	
2540 SU0000000000.001	108151-1	U	10.0000	
2540 SU0000000000.002	W21077	U	10.0000	UJ
2541 SU0000000000.001	108151-2	U	10.0000	
2541 SU0000000000.002	W21078	U	10.0000	UJ
2542 SU0000000000.001	108257-5	U	10.0000	
2542 SU0000000000.002	W21079	U	10.0000	UJ
2543 SU0000000000.001	108257-6	U	10.0000	
2543 SU0000000000.002	W21080	U	10.0000	UJ

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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

QA/QC DUPLICATE
SURFACE WATER ANALYTICAL RESULTS

	STF Number	Lab Number		Cyanide (ug/L)	
3188	SU202000000.074	W21789	U	10.0000	
3189	SU202000000.027	W21845	U	10.0000	
3196	SU202000000.002	W21881	U	10.0000	UJ
3197	SU202000000.002	W20874	U	10.0000	
3198	SU202000000.001	108234-1	U	10.0000	
3199	SU512000000.001	108258-6	U	20.0000	
3200	SU512000000.000	104330-004	U	10.0000	

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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

QA/QC DUPLICATE
SEDIMENT ANALYTICAL RESULTS

STF Number	Lab Number		Cyanide (mg/kg)	
3196 SD202000000.002	S21058	U	2.2000	UJ
3197 SD202000000.002	S21059	U	1.6000	UJ
3198 SD202000000.001	108234-7	U N	0.8000	
3199 SD512000000.001	108258-3	U	0.7000	

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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

QA/QC BLANK ANALYTICAL RESULTS

STF	Number	Lab Number		Cyanide (ug/L)
2509	WW000000000.002	W20864		14.2000 J3
2516	WW000001000.000	104378-002	U	10.0000
2524	WW000001000.001	9108-138-11	U	10.0000
2529	WW000001000.001	9108-172-7	U	10.0000
2529	WW000001000.002	W21075	U	10.0000 UJ
3600	WW000002000.000	104330-006	U	10.0000
3604	WW000002000.001	9108-088-15	U	10.0000
3605	WW000001000.001	9108-190-3	U	10.0000
3606	WW000002000.002	W21082	U	10.0000 UJ
3607	WW000002000.002	W20875	U	10.0000 UJ

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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

TRANSITIONAL SEASON (APRIL 1991)
SURFACE WATER ANALYTICAL RESULTS

STF Number	Lab Number		Aluminum (ug/L)		Antimony (ug/L)		Arsenic (ug/L)		Barium (ug/L)		Beryllium (ug/L)		Cadmium (ug/L)		Calcium (ug/L)	Chromium +3 (ug/L)
2506 SU310000000.000	1260	B	123.0000	UJ	U N	43.3000 UJ	B NW	3.7000 J4	B	13.2000	U	1.1000	U	1.1000	7720.0000	0.0000
2506 SU320000000.000	1261	B	85.3000	UJ	U N	43.3000 UJ	U NW	3.3000	B	13.7000	U	1.1000	U	1.1000	7670.0000	0.0000
2509 SU310000000.000	1212		2510.0000		U	43.3000	B	3.9000	B	37.5000	U	1.1000	U	1.1000	11500.0000	0.0000
2509 SU320000000.000	1213	B	89.3000	UJ	U	43.3000	U M	3.3000	B	11.8000	U	1.1000	U	1.1000	7250.0000	0.0000
2511 SU320000000.000	1215	B	215.0000	UJ	U	43.3000	U W	3.3000	B	11.2000	U	1.1000	U	1.1000	6530.0000	0.0000
2511 SU511000000.000	1216	B	211.0000	UJ	U	43.3000	B	3.3000	B	11.0000	U	1.1000	U	1.1000	6460.0000	0.0000
2516 SU310000000.000	1264		339.0000		U N	43.3000 UJ	B N	4.0000 J4	B	36.9000	U	1.1000	U	1.1000	57600.0000	0.0000
2516 SU320000000.000	1265	B	128.0000	UJ	U N	43.3000 UJ	U N	3.3000	B	29.2000	U	1.1000	U	1.1000	59300.0000	0.0000

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STF	Number	Lab Number	Chromium +6 (ug/L)		Total Chromium (ug/L)		Cobalt (ug/L)		Copper (ug/L)		Iron (ug/L)		Lead (ug/L)		Magnesium (ug/L)		Manganese (ug/L)	
2506	SU310000000.000	1260	0.0000	U	3.3000	UJ	6.7000	B	5.0000	UJ	333.0000	J4	3.9000	UJ	2550.0000	J4	30.7000	
2506	SU320000000.000	1261	0.0000	U	3.3000	UJ	6.7000	B	4.0000	UJ	329.0000	J4	3.3000	UJ	2590.0000	J4	31.8000	
2509	SU310000000.000	1212	0.0000	B	6.9000	UJ	6.7000	B	13.0000	UJ	1960.0000	J4	8.3000		3160.0000		60.2000	
2509	SU320000000.000	1213	0.0000	U	3.3000	UJ	6.7000	B	9.0000	UJ	294.0000	J4	2.2000	UJ	1910.0000		21.5000	
2511	SU320000000.000	1215	0.0000	U	3.3000	UJ	6.7000	B	11.0000	UJ	344.0000	J4	4.6000	UJ	1760.0000		19.7000	
2511	SU511000000.000	1216	0.0000	U	3.3000	UJ	6.7000	B	9.0000	UJ	292.0000	J4	2.5000	UJ	1720.0000		16.0000	UJ
2516	SU310000000.000	1264	0.0000	B	4.1000	UJ	6.7000	B	2.0000	UJ	888.0000	J4	2.5000	UJ	10100.0000	J4	711.0000	
2516	SU320000000.000	1265	0.0000	U	3.3000	UJ	6.7000	B	2.0000	UJ	573.0000	J4	2.6000	UJ	9860.0000	J4	518.0000	

STF Number	Lab Number	Mercury (ug/L)	Nickel (ug/L)	Potassium (ug/L)	Selenium (ug/L)	Silver (ug/L)	Sodium (ug/L)	Thallium (ug/L)	Vanadium (ug/L)
2506 SU310000000.000	1260	U 0.1000	U 6.7000	B 2960.0000	B W N 3.1000	U 6.7000	33200.0000	U W 7.8000	B 5.5000 UJ
2506 SU320000000.000	1261	U 0.1000	U 6.7000	B 3060.0000	U 2.2000	U 6.7000	33200.0000	U W 7.8000	B 5.1000 UJ
2509 SU310000000.000	1212	B 0.1000	B 7.2000	B 4120.0000	U 2.2000	U 6.7000	77100.0000	U W 7.8000	U 3.3000
2509 SU320000000.000	1213	B 0.1000 UJ	U 6.7000	B 1720.0000	U 2.2000	U 6.7000	18400.0000	U W 7.8000	U 3.3000
2511 SU320000000.000	1215	B 0.1200 UJ	U 6.7000	B 1770.0000	U 2.2000	U 6.7000	16500.0000	U W 7.8000	U 3.3000
2511 SU511000000.000	1216	B 0.1300 UJ	U 6.7000	B 1630.0000	U W 2.2000	U 6.7000	15500.0000	U W 7.8000	U 3.3000
2516 SU310000000.000	1264	U 0.1000	B 7.2000	B 4490.0000	U 2.2000	U 6.7000	34500.0000	U W 7.8000	B 9.1000 UJ
2516 SU320000000.000	1265	U 0.1000	B 9.9000	B 4170.0000	U 2.2000	B 10.8000	33600.0000	U W 7.8000	B 3.8000 UJ

STF	Number	Lab Number		Zinc (ug/L)	Boron (ug/L)	Hardness SM 2340B (mg/L)
2506	SU310000000.000	1260		25.8000 UJ	0.0000	29.7800
2506	SU320000000.000	1261		36.2000 UJ	0.0000	29.8200
2509	SU310000000.000	1212		56.9000 UJ	0.0000	41.7300
2509	SU320000000.000	1213		29.6000 UJ	0.0000	25.9700
2511	SU320000000.000	1215		41.8000 UJ	0.0000	23.5500
2511	SU511000000.000	1216		28.5000 UJ	0.0000	23.2100
2516	SU310000000.000	1264	B	4.9000 UJ	0.0000	185.4200
2516	SU320000000.000	1265	B	12.8000 UJ	0.0000	188.6800

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

TRANSITIONAL SEASON (APRIL 1991)
SEDIMENT ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for METALS for file STFSDM1.DBF 12/17/91 23:00:00 12,243 bytes

STF Number	Lab Number	Aluminum (mg/kg)		Antimony (mg/kg)		Arsenic (mg/kg)		Barium (mg/kg)		Beryllium (mg/kg)		Cadmium (mg/kg)		Calcium (mg/kg)		Chromium +3 (mg/kg)
2506 SD320000000.000	1259	30100.0000	U N	16.6000 R	+	93.8000 J4		134.0000	B	0.8500 UJ		6.7000	E	5960.0000 J4		0.0000
2509 SD320000000.000	1211	17700.0000	U N	6.3000 R		59.9000 J4		158.0000		0.8500 UJ		1.0000 UJ	E	18300.0000 J4		0.0000
2511 SD320000000.000	1214	14900.0000	U N	9.0000 R		64.4000 J4		153.0000	B	0.9000 UJ		1.7000	E	6000.0000 J4		0.0000
2516 SD310000000.000	1262	15600.0000	U N	10.2000 R	B W	1.8000 J4		62.2000	B	0.5400 UJ	B	0.2700 UJ	E	4960.0000 J4		0.0000
2516 SD320000000.000	1263	8660.0000	U N	4.7000 R	B W	0.7100 J4		31.4000	B	0.3600 UJ	B	0.1600 UJ	E	3030.0000 J4		0.0000

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CHECKED BY DATE 12/17/91

STF Number	Lab Number	Chromium +6 (mg/kg)		Total Chromium (mg/kg)		Cobalt (mg/kg)		Copper (mg/kg)	Iron (mg/kg)		Lead (mg/kg)		Magnesium (mg/kg)		Manganese (mg/kg)	
2506 SD320000000.000	1259	U N	0.2000 R	E	73.2000 J4	B	10.7000	230.0000	19200.0000	N*	170.0000		4910.0000	E	289.0000 J4	
2509 SD320000000.000	1211	U N	0.2000 R	E	71.2000 J4		10.8000	62.1000	5330.0000	N*	54.7000		3750.0000	E	473.0000 J4	
2511 SD320000000.000	1214	U N	0.2000 R	E	66.4000 J4	B	9.3000	88.3000	25000.0000	N*	82.3000		4500.0000	E	319.0000 J4	
2516 SD310000000.000	1262	U N	0.2000 R	E	43.9000 J4	B	7.8000	28.0000	1590.0000	N*	47.8000		3490.0000	E	306.0000 J4	
2516 SD320000000.000	1263	U N	0.2000 R	E	24.2000 J4		6.5000	9.2000	12400.0000	N*	13.8000		3560.0000	E	206.0000 J4	

STF Number	Lab Number		Mercury (mg/kg)		Nickel (mg/kg)		Potassium (mg/kg)		Selenium (mg/kg)		Silver (mg/kg)		Sodium (mg/kg)		Thallium (mg/kg)		Vanadium (mg/kg)	
2506 SD320000000.000	1259		* 0.9000		61.6000	B	1210.0000	B	1.0000	U	2.5000	B	1780.0000	U W	3.0000		74.2000	
2509 SD320000000.000	1211		* 0.1600		61.8000	B	705.0000	U	0.3200	U	0.9700	B	352.0000	U W	1.1000		64.6000	
2511 SD320000000.000	1214		* 0.1800	UJ	50.4000	B	764.0000	B	0.6100	U	1.4000	B	340.0000	U W	1.6000		44.6000	
2516 SD310000000.000	1262	U	* 0.0800		30.5000	B	829.0000	U	0.5200	U	1.6000	B	255.0000	U W	1.8000		32.1000	
2516 SD320000000.000	1263	U	* 0.0300		25.9000	B	443.0000	U	0.2400	U	0.7200	B	148.0000	UJ U W	0.8400		22.6000	

STF Number	Lab Number	Zinc (mg/kg)			Boron (mg/kg)	Hardness SM 2340B (mg/kg)
2506 SD320000000.000	1259	E*	842.0000	J4	0.0000	0.0000
2509 SD320000000.000	1211	E*	174.0000	J4	0.0000	0.0000
2511 SD320000000.000	1214	E*	399.0000	J4	0.0000	0.0000
2516 SD310000000.000	1262	E*	64.5000	J4	0.0000	0.0000
2516 SD320000000.000	1263	E*	36.6000	J4	0.0000	0.0000

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

DRY SEASON (AUGUST 1991)
SURFACE WATER ANALYTICAL RESULTS

STF	Number	Lab Number	Aluminum (ug/L)		Antimony (ug/L)		Arsenic (ug/L)		Barium (ug/L)		Beryllium (ug/L)		Cadmium (ug/L)		Calcium (ug/L)	Chromium +3 (ug/L)
2501	SU0000000000.001	W12009	11300.0000	U	20.0000	B W	4.8000 UJ	B	68.5000 J4	U	1.0000	U	2.0000		15500.0000	0.0000
2502	SU0000000000.001	W12011	809.0000	U	20.0000	B W	4.5000 UJ	B	18.7000 J4	U	1.0000	U	2.0000		13300.0000	0.0000
2503	SU0000000000.001	W12013	474.0000	U	20.0000	U W	2.0000	B	10.9000 UJ	U	1.0000	U	2.0000		13500.0000	0.0000
2508	SU3100000000.001	W11780	201.0000 UJ	U	20.0000		10.4000	B	35.2000	U	1.0000	U	2.0000		19400.0000	0.0000
2510	SU5110000000.001	W11782	330.0000 J4	U	20.0000	B	2.8000	B	19.9000	U	1.0000	U	2.0000		11400.0000	0.0000
2527	SU0000000000.001	W12017	1440.0000	U	20.0000	B W	4.4000 UJ	B	31.9000 J4	U	1.0000	U	2.0000		23600.0000	0.0000
2528	SU0000000000.001	W12019	80900.0000	U	20.0000		24.8000		773.0000 J4	B	1.9000		18.3000		39500.0000	0.0000
2529	SU0000000000.001	W12021	2070.0000	U	20.0000	B W	8.5000 UJ	B	41.2000 J4	U	1.0000	U	2.0000		19500.0000	0.0000
2530	SU2010000000.001	W12024	674.0000	U	20.0000	B W	2.4000 UJ	B	14.8000 J4	U	1.0000	U	2.0000		15300.0000	0.0000

DATA VALIDATION
DATE RECEIVED _____
VALIDATED BY _____ DATE _____
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CHECKED BY JCM DATE 1/2/92

STF Number	Lab Number	Chromium +6 (ug/L)		Total Chromium (ug/L)		Cobalt (ug/L)		Copper (ug/L)		Iron (ug/L)		Lead (ug/L)		Magnesium (ug/L)		Manganese (ug/L)
2501 SU0000000000.001	W12009	0.0000		18.0000	U	5.0000	N	44.8000		8370.0000	S	107.0000	B	4990.0000		177.0000
2502 SU0000000000.001	W12011	0.0000	U	5.0000	U	5.0000	B N	15.9000		1310.0000		36.5000	B	4500.0000		70.7000
2503 SU0000000000.001	W12013	0.0000	U	5.0000	U	5.0000	B N	13.5000		693.0000		38.9000		5150.0000		58.4000
2508 SU3180000000.001	W11780	0.0000	U	5.0000	U	5.0000	SN	13.1000	J4	2370.0000	+N	17.2000	J4	B 2000.0000		225.0000
2510 SU5110000000.001	W11782	0.0000	U	5.0000	U	5.0000	SN	11.2000	J4	427.0000	WN	7.6000	J4	B 1290.0000		46.4000
2527 SU0000000000.001	W12017	0.0000	B	5.1000	U	5.0000	B N	9.2000		2990.0000		46.4000		6800.0000		398.0000
2528 SU0000000000.001	W12019	0.0000		193.0000	B	24.1000	N	2980.0000		58700.0000	U	1.0000		24400.0000		865.0000
2529 SU0000000000.001	W12021	0.0000	U	5.0000	U	5.0000	B SN	5.2000		4680.0000	S	68.4000		6410.0000		118.0000
2530 SU2010000000.001	W12024	0.0000	U	5.0000	U	5.0000	B N	9.0000		1430.0000		33.0000	B	4260.0000		80.9000

STF Number	Lab Number	Mercury (ug/L)		Nickel (ug/L)		Potassium (ug/L)		Selenium (ug/L)		Silver (ug/L)		Sodium (ug/L)		Thallium (ug/L)		Vanadium (ug/L)	
2501 SU0000000000.001	W12009	U	0.2000	B	34.3000	UJ	B	2860.0000	U N	30.0000	UJ	U	4.0000	27900.0000	U	1.0000	B	18.3000
2502 SU0000000000.001	W12011	U	0.2000	B	16.3000	UJ	B	3480.0000	U WN	3.0000	UJ	U	4.0000	73100.0000	U W	1.0000	U	6.0000
2503 SU0000000000.001	W12013	U	0.2000	B	21.5000	UJ	B	2280.0000	U WN	3.0000	UJ	U	4.0000	26300.0000	U	1.0000	U	6.0000
2508 SU3100000000.001	W11780	U	0.2000	U	15.0000		B	2860.0000	U	3.0000		U	4.0000	23300.0000	U	1.0000	U	6.0000
2510 SU5110000000.001	W11782	U	0.2000	U	15.0000		B	2750.0000	U	3.0000		U	4.0000	19200.0000	U	1.0000	B	7.4000
2527 SU0000000000.001	W12017	U	0.2000	B	19.7000	UJ		6550.0000	U WN	3.0000	UJ	U	4.0000	176000.0000	U W	1.0000	B	7.9000
2528 SU0000000000.001	W12019		0.4900		125.0000	UJ		11500.0000	U WN	30.0000	UJ	U	4.0000	149000.0000	U W	1.0000		146.0000
2529 SU3000000000.001	W12021	U	0.2000	U	15.0000		B	2460.0000	U WN	3.0000	UJ	U	4.0000	108000.0000	U	1.0000	U	6.0000
2530 SU2010000000.001	W12024	U	0.2000	U	15.0000			5410.0000	U WN	3.0000	UJ	U	4.0000	116000.0000	U	1.0000	B	9.1000

STF Number	Lab Number	Zinc (ug/L)		Boron (ug/L)	Hardness SM 2340B (mg/L)
2501 SU000000000.001	W12009	179.0000	B	30.4000	59.2500
2502 SU000000000.001	W12011	71.1000	B	28.8000	51.7400
2503 SU000000000.001	W12013	57.4000	B	32.8000	54.9200
2508 SU310000000.001	W11780	54.9000	U	19.0000	56.6800
2510 SU511000000.001	W11782	58.8000	U	19.0000	33.7800
2527 SU000000000.001	W12017	69.3000	U	19.0000	86.9300
2528 SU000000000.001	W12019	3160.0000	B	34.6000	199.1100
2529 SU000000000.001	W12021	126.0000	B	25.1000	75.0900
2530 SU201000000.001	W12024	35.7000	B	27.4000	55.7500

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

DRY SEASON (AUGUST 1991)
SEDIMENT ANALYTICAL RESULTS

STF Number	Lab Number	Aluminum (mg/kg)		Antimony (mg/kg)		Arsenic (mg/kg)		Barium (mg/kg)		Beryllium (mg/kg)		Cadmium (mg/kg)		Calcium (mg/kg)		Chromium +3 (mg/kg)
2501 SD000000000.001	S12008	12200.0000		U 4.6000		5.7000		B 45.7000		U 0.2300		U 0.4600		* 6850.0000		26.4000
2502 SD000000000.001	S12010	17700.0000		U 14.1000		23.1000		B 106.0000		U 0.7100		18.0000		* 5930.0000		65.8000
2503 SD000000000.001	S12012	10600.0000		B 11.8000 UJ		12.7000		B 76.7000		U 0.4800		B 2.4000		* 4760.0000		48.9000
2504 SD000000000.001	S11778	* 33000.0000		B N 20.8000 UJ		11.7000		B 131.0000		U 0.6600		B 2.6000		6840.0000		96.2000
2505 SD000000000.001	S11544	29800.0000		U N 9.4000 UJ		S 13.6000		133.0000		B 0.6400		2.3000 UJ		7060.0000		76.2000
2506 SD310000000.001	S11545	21700.0000		U N 10.3000 UJ		18.6000		118.0000		U 0.5100		4.5000 UJ		6570.0000		54.9000
2506 SD320000000.001	S11546	31000.0000		U N 8.9000 UJ		19.3000		131.0000		B 0.6500		4.8000		6640.0000		84.2000
2507 SD000000000.001	S11547	26100.0000		U N 5.6000 UJ		S 12.5000		117.0000		B 0.5800		3.7000		7840.0000		56.8000
2508 SD310000000.001	S11779	* 8010.0000		U N 25.5000 UJ		W 12.7000		B 87.4000		U 1.3000		U 2.5000		7370.0000		16.4000
2509 SD310000000.001	S11548	5690.0000		U N 4.1000 UJ		5.2000		106.0000		U 0.2000		U 0.4100		9310.0000		25.7000
2509 SD320000000.001	S11549	20500.0000		U N 6.3000 UJ		14.2000		216.0000		B 0.3700		U 0.6300		18200.0000		65.5000
2510 SD511000000.001	S11781	* 10800.0000		U N 6.6000 UJ		10.0000		84.3000		U 0.3300		U 0.6600		4070.0000		25.0000
2511 SD310000000.001	S11550	22100.0000		U N 6.2000 UJ		14.6000		331.0000		B 0.6000		B 1.2000 UJ		6880.0000		82.1000
2511 SD320000000.001	S11551	25900.0000		U N 6.2000 UJ		S 13.5000		243.0000		B 0.6300		2.6000 UJ		6130.0000		68.1000
2512 SD000000000.001	S11552	23600.0000		U N 8.4000 UJ		83.1000		141.0000		B 0.6200		B 1.2000 UJ		5360.0000		48.6000
2513 SD000000000.001	S11553	12500.0000		B N 6.5000 J4		B + 3.7000 J4		51.7000		B 0.3000		U 0.4400		2290.0000		27.5000
2514 SD000000000.001	S11554	16400.0000		U N 5.0000 UJ		S 11.5000		88.9000		B 0.3800		B 0.7100 UJ		3760.0000		48.0000
2515 SD000000000.001	S11555	13700.0000		B N 8.2000 J4		S 13.3000		79.7000		B 0.2800		B 0.6000 UJ		3580.0000		36.5000
2516 SD310000000.001	S11556	10400.0000		U N 4.1000 UJ		3.1000		42.1000		B 0.2500		U 0.4100		3820.0000		24.3000
2516 SD320000000.001	S11557	6320.0000		B N 4.4000 J4		2.3000		B 28.0000		U 0.2000		U 0.4000		2500.0000		16.5000
2518 SD000000000.001	S11783	* 33000.0000		B N 19.3000 UJ		S 25.6000		B 152.0000		U 0.9000		B 2.6000		7720.0000		98.9000
2519 SD000000000.001	S11784	* 28200.0000		B N 26.7000 UJ		17.6000		B 122.0000		U 0.7200		B 1.4000		6380.0000		93.5000
2520 SD000000000.001	S11785	* 29500.0000		U N 12.5000 UJ		S 18.3000		129.0000		U 0.6200		3.8000		5590.0000		103.0000
2521 SD000000000.001	S11786	* 26200.0000		B N 9.7000 UJ		S 16.3000		111.0000		B 0.5300		3.0000		5260.0000		102.0000
2522 SD000000000.001	S11787	* 38700.0000		U N 8.6000 UJ		S 18.3000		139.0000		B 0.7200		B 2.0000		6910.0000		143.0000
2523 SD000000000.001	S11788	* 25900.0000		B N 17.0000 UJ		S 13.8000		2550.0000		U 0.5300		B 2.1000		4940.0000		88.3000
2524 SD000000000.001	S11789	* 29700.0000		B N 26.6000 UJ		15.8000		140.0000		U 0.5800		B 2.4000		6020.0000		78.7000
2525 SD000000000.001	S12014	35400.0000		U 15.7000		20.0000		B 149.0000		U 0.7900		B 3.8000		* 6510.0000		99.2000
2526 SD000000000.001	S12015	15300.0000		U 21.1000		18.0000		B 86.0000		U 1.1000		B 3.6000		B * 3740.0000		43.3000
2527 SD000000000.001	S12016	11500.0000		U 10.2000		18.7000		B 76.0000		U 0.5100		B 2.4000		* 2640.0000		33.0000
2528 SD000000000.001	S12018	24500.0000		U 10.7000		12.6000		123.0000		U 0.5400		4.5000		* 5800.0000		73.3000
2529 SD000000000.001	S12020	11200.0000		U 15.4000		20.0000		B 60.1000		U 0.7700		B 3.3000		B * 3510.0000		38.5000
2530 SD201000000.001	S12023	35500.0000		B 28.8000 UJ		41.8000		229.0000		B 1.1000		B 3.7000		* 8020.0000		101.0000

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STF Number	Lab Number		Chromium +6 (mg/kg)		Total Chromium (mg/kg)		Cobalt (mg/kg)		Copper (mg/kg)		Iron (mg/kg)		Lead (mg/kg)		Magnesium (mg/kg)		Manganese (mg/kg)	
2501 SD000000000.001	S12008	U	2.0000		26.4000 J4	B	8.0000		20.6000	*	19200.0000	*	56.5800 J4		4940.0000	N	281.0000 J4
2502 SD000000000.001	S12010	U	2.0000		65.8000 J4	B	8.1000		224.0000	*	16500.0000	*	584.0000		4690.0000	N	194.0000 J4
2503 SD000000000.001	S12012	U	2.0000		48.9000 J4	B	5.9000		149.0000	*	12000.0000	*	450.0000		3100.0000	N	137.0000 J4
2504 SD000000000.001	S11778	U	2.0000	*	96.2000	B	10.7000		242.0000	*	23600.0000		1310.0000		6960.0000	*	282.0000	
2505 SD000000000.001	S11544	U	2.0000		76.2000	B	11.2000		179.0000		20000.0000	+*	1110.0000 J4		5610.0000		245.0000	
2506 SD310000000.001	S11545	U	2.0000		54.9000	B	9.8000		187.0000		13900.0000		860.0000		4080.0000		182.0000	
2506 SD320000000.001	S11546	U	2.0000		84.2000	B	11.3000		260.0000		19100.0000		1340.0000		6010.0000		220.0000	
2507 SD000000000.001	S11547	U	2.0000		56.8000	B	9.9000		226.0000		17500.0000		594.0000		5190.0000		269.0000	
2508 SD310000000.001	S11779	U	2.0000	*	16.4000 UJ	U	6.4000		88.8000	*	10100.0000		397.0000 J4	B	1110.0000	*	140.0000	
2509 SD310000000.001	S11548	U	2.0000		25.7000	B	4.2000		28.3000		13200.0000	*	4.0000 J4		2160.0000		297.0000	
2509 SD320000000.001	S11549	U	2.0000		65.5000	B	9.9000		64.4000		28900.0000		102.0000		4780.0000		814.0000	
2510 SD511000000.001	S11781	U	2.0000	*	25.0000 UJ	B	5.2000		57.9000	*	13900.0000		98.2000 J4		3250.0000	*	608.0000	
2511 SD310000000.001	S11550	U	2.0000		82.1000	B	10.4000		131.0000		29900.0000		174.0000		4920.0000		527.0000	
2511 SD320000000.001	S11551	U	2.0000		68.1000	B	10.2000		145.0000		30200.0000		341.0000		4930.0000		334.0000	
2512 SD000000000.001	S11552	U	2.0000		48.6000	B	3.9000		80.6000		12500.0000		160.0000	B	1620.0000		201.0000	
2513 SD000000000.001	S11553	U	2.0000		27.5000	B	6.8000		33.3000		11800.0000		68.6000 J4		3810.0000		340.0000	
2514 SD000000000.001	S11554	U	2.0000		48.0000	B	7.3000		65.5000		12100.0000		491.0000		3330.0000		419.0000	
2515 SD000000000.001	S11555	U	2.0000		36.5000	B	6.8000		110.0000		12500.0000		531.0000		3050.0000		480.0000	
2516 SD310000000.001	S11556	U	2.0000		24.3000	B	7.4000		17.8000		13600.0000	*	6.9000 J4		4470.0000		216.0000	
2516 SD320000000.001	S11557	U	2.0000		16.5000	B	6.0000		12.8000		10600.0000	*	7.7000 J4		3700.0000		187.0000	
2518 SD000000000.001	S11783	U	2.0000	*	90.9000	B	10.1000		251.0000	*	24500.0000		1520.0000		7460.0000	*	421.0000	
2519 SD000000000.001	S11784	U	2.0000	*	93.5000	B	10.0000		257.0000	*	20500.0000		1380.0000		6200.0000	*	272.0000	
2520 SD000000000.001	S11785	U	2.0000	*	103.0000	B	8.5000		271.0000	*	20000.0000		1530.0000		6460.0000	*	254.0000	
2521 SD000000000.001	S11786	U	2.0000	*	102.0000	B	9.5000		275.0000	*	20200.0000		1550.0000		5800.0000	*	239.0000	
2522 SD000000000.001	S11787	U	2.0000	*	143.0000	B	10.9000		327.0000	*	27400.0000		1760.0000		8470.0000	*	325.0000	
2523 SD000000000.001	S11788	U	2.0000	*	88.3000	B	7.8000		310.0000	*	18700.0000		1270.0000		5840.0000	*	214.0000	
2524 SD000000000.001	S11789	U	2.0000	*	78.7000	B	11.3000		202.0000	*	25200.0000		776.0000		7070.0000	*	284.0000	
2525 SD000000000.001	S12014	U	2.0000		99.2000 J4	B	13.1000		389.0000	*	25100.0000	*	320.0000		7580.0000	N	287.0000 J4
2526 SD000000000.001	S12015	U	2.0000		43.3000 J4	B	6.1000		156.0000	*	12100.0000	*	121.0000 J4	B	3440.0000	N	136.0000 J4
2527 SD000000000.001	S12016	U	2.0000		33.0000 J4	B	3.6000		126.0000	*	8350.0000	*	462.0000	B	2340.0000	N	89.9000 J4
2528 SD000000000.001	S12018	U	2.0000		73.3000 J4	B	8.9000		262.0000	*	17700.0000	*	962.0000		5580.0000	N	207.0000 J4
2529 SD000000000.001	S12020	U	2.0000		38.5000 J4	B	5.7000		178.0000	*	9340.0000	*	771.0000	B	2570.0000	N	95.2000 J4
2530 SD201000000.001	S12023	U	2.0000		101.0000 J4	B	13.2000		781.0000	*	59800.0000	*	2850.0000		7240.0000	N	415.0000 J4

STF Number	Lab Number	Mercury (mg/kg)	Nickel (mg/kg)	Potassium (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Sodium (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)
2501 SD000000000.001	S12008	U 0.1200	29.7000	B 813.0000	U W 0.6900	U 0.9300	B 302.0000 UJ	U W 0.2300	37.9000
2502 SD000000000.001	S12010	1.3000	47.0000 UJ	B 1140.0000	U 2.1000	U 2.8000	B 1810.0000 UJ	U 0.7100	58.5000
2503 SD000000000.001	S12012	0.6900	39.6000 UJ	B 831.0000	U 1.4000	U 1.9000	B 687.0000 UJ	U 0.4800	40.3000
2504 SD000000000.001	S11778	1.2000	61.2000	B 1220.0000	U * 2.0000	U 2.6000	B 774.0000	U 0.6600	65.0000
2505 SD000000000.001	S11544	* 1.0000 J4	69.3000	B 992.0000	U +N 1.4000	U * 1.9000	B 962.0000	U W 0.4700	87.9000
2506 SD310000000.001	S11545	* 0.9200 J4	56.2000 UJ	B 801.0000	U SN 1.5000	U * 2.1000	B 675.0000	U W 0.5100	76.7000
2506 SD320000000.001	S11546	* 0.9600 J4	68.2000	B 1250.0000	N 3.3000 J4	U * 1.8000	B 786.0000	U W 0.4400	87.3000
2507 SD000000000.001	S11547	* 0.7700 J4	56.9000	B 880.0000	U SN 0.8500	U * 1.1000	B 544.0000	U W 0.2800	47.4000
2508 SD310000000.001	S11779	U 0.6400	U 19.1000	U 1240.0000	U W* 3.8000	U 5.1000	B 440.0000 UJ	U 1.3000	B 32.5000
2509 SD310000000.001	S11548	U * 0.1000 UJ	30.6000	B 286.0000	B N 0.7700 J4	U * 0.8100	B 208.0000	U W 0.2000	27.8000
2509 SD320000000.001	S11549	* 0.2400 J4	68.3000	B 567.0000	U +N 0.9500	U * 1.3000	B 419.0000	U W 0.3200	52.4000
2510 SD511000000.001	S11781	U 0.1600	39.5000	U 320.0000	U * 0.9900	U 1.3000	B 220.0000	U 0.3300	28.4000
2511 SD310000000.001	S11550	* 0.2300 J4	74.9000	B 536.0000	U SN 0.9400	U * 1.2000	B 414.0000	U 0.3100	62.2000
2511 SD320000000.001	S11551	* 0.1900 J4	61.4000	B 952.0000	U WN 0.9400	U * 1.2000	B 409.0000	U 0.3100	65.6000
2512 SD000000000.001	S11552	* 0.3000 J4	37.7000	U 408.0000	B SN 1.4000 J4	U * 1.7000	B 345.0000	U 0.4200	81.0000
2513 SD000000000.001	S11553	U * 0.1100 UJ	31.4000	B 324.0000	U WN 0.6600	U * 0.8900	B 84.0000 UJ	U 0.2200	35.3000
2514 SD000000000.001	S11554	* 0.2400 J4	31.0000 UJ	B 388.0000	U WN 7.5000	U * 0.9900	B 156.0000	U 0.2500	38.3000
2515 SD000000000.001	S11555	* 0.5200 J4	26.6000 UJ	B 385.0000	U WN 0.8100	U * 1.1000	B 170.0000	U 0.2700	35.2000
2516 SD310000000.001	S11556	U * 0.1000 UJ	30.4000	B 495.0000	U N 0.6100	U * 0.8100	B 215.0000	U 0.2000	31.1000
2516 SD320000000.001	S11557	U * 0.1000 UJ	27.3000	B 421.0000	U N 0.6000	U * 0.8100	B 96.2000	U 0.2000	22.8000
2518 SD000000000.001	S11783	1.6000	62.9000 UJ	U 881.0000	U W* 2.7000	U 3.6000	B 923.0000	U 0.9000	66.0000
2519 SD000000000.001	S11784	1.1000	40.8000 UJ	B 1170.0000	U * 2.2000	U 2.9000	B 810.0000	U 0.7200	57.2000
2520 SD000000000.001	S11785	1.5000	66.3000	B 759.0000	S* 3.5000	U 2.5000	B 684.0000	U 0.6200	58.3000
2521 SD000000000.001	S11786	0.9700	49.2000	B 959.0000	+* 2.8000 J4	U 1.9000	B 584.0000	U W 0.4800	56.7000
2522 SD000000000.001	S11787	1.6000	59.3000	B 1220.0000	B * 1.4000	U 1.7000	B 704.0000	U 0.4300	72.9000
2523 SD000000000.001	S11788	1.3000	39.4000	B 875.0000	U W* 1.6000	U 2.1000	B 548.0000	U 0.5300	52.6000
2524 SD000000000.001	S11789	0.8100	58.7000	B 1540.0000	U * 1.7000	U 2.3000	B 736.0000	U 0.5800	66.1000
2525 SD000000000.001	S12014	1.3000	72.7000 UJ	B 1740.0000	U W 2.4000	U 3.1000	B 1050.0000 UJ	U W 0.7900	74.1000
2526 SD000000000.001	S12015	1.5000	B 36.0000 UJ	B 1350.0000	U 3.2000	U 4.2000	B 1190.0000 UJ	U W 1.1000	B 43.1000
2527 SD000000000.001	S12016	0.3100	23.3000 UJ	B 590.0000	U 1.5000	B 2.3000	B 561.0000 UJ	U W 0.5100	28.1000
2528 SD000000000.001	S12018	1.1000	53.3000 UJ	B 1210.0000	U 1.6000	U 2.1000	B 801.0000 UJ	U 0.5400	57.2000
2529 SD000000000.001	S12020	1.5000	35.3000 UJ	B 783.0000	U 2.3000	U 3.1000	B 802.0000 UJ	U 0.7700	B 37.1000
2530 SD201000000.001	S12023	1.4000	74.8000 UJ	B 1090.0000	U 3.0000	U 4.0000	B 1250.0000 UJ	U 0.9900	93.0000

STF	Number	Lab Number		Zinc (mg/kg)			Boron (mg/kg)		Hardness SM 2340B (mg/kg)
2501	SD000000000.001	S12008	N*	121.0000	J4	U	4.4000		0.0000
2502	SD000000000.001	S12010	N*	1080.0000	J4	U	13.4000		0.0000
2503	SD000000000.001	S12012	N*	606.0000	J4	U	9.1800		0.0000
2504	SD000000000.001	S11778		553.0000		U	12.5000		0.0000
2505	SD000000000.001	S11544		549.0000		U	8.9000		0.0000
2506	SD310000000.001	S11545		850.0000		U	9.7000		0.0000
2506	SD320000000.001	S11546		774.0000		U	8.4000		0.0000
2507	SD000000000.001	S11547		603.0000		U	5.4000		0.0000
2508	SD310000000.001	S11779		206.0000		U	24.2000		0.0000
2509	SD310000000.001	S11548		44.7000		U	3.9000		0.0000
2509	SD320000000.001	S11549		206.0000		U	6.0000		0.0000
2510	SD511000000.001	S11781		297.0000		U	6.2000		0.0000
2511	SD310000000.001	S11550		341.0000		U	5.9000		0.0000
2511	SD320000000.001	S11551		698.0000		U	5.9000		0.0000
2512	SD000000000.001	S11552		346.0000		U	8.0000		0.0000
2513	SD000000000.001	S11553		179.0000	UJ	U	4.2000		0.0000
2514	SD000000000.001	S11554		258.0000		U	4.7000		0.0000
2515	SD000000000.001	S11555		243.0000		U	5.1000		0.0000
2516	SD310000000.001	S11556		45.9000		U	3.9000		0.0000
2516	SD320000000.001	S11557		42.6000		U	3.8000		0.0000
2518	SD000000000.001	S11783		704.0000		U	17.2000		0.0000
2519	SD000000000.001	S11784		602.0000		U	13.6000		0.0000
2520	SD000000000.001	S11785		631.0000		U	11.9000		0.0000
2521	SD000000000.001	S11786		522.0000		U	9.2000		0.0000
2522	SD000000000.001	S11787		567.0000		U	8.1000		0.0000
2523	SD000000000.001	S11788		2460.0000		U	10.0000		0.0000
2524	SD000000000.001	S11789		566.0000		U	11.0000		0.0000
2525	SD000000000.001	S12014	N*	659.0000	J4	U	15.0000		0.0000
2526	SD000000000.001	S12015	N*	435.0000	J4	U	20.0000		0.0000
2527	SD000000000.001	S12016	N*	462.0000	J4	U	9.6700		0.0000
2528	SD000000000.001	S12018	N*	726.0000	J4	U	10.2000		0.0000
2529	SD000000000.001	S12020	N*	595.0000	J4	U	14.7000		0.0000
2530	SD201000000.001	S12023	N*	1800.0000	J4	U	18.8000		0.0000

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

WET SEASON (JANUARY 1992)
SURFACE WATER ANALYTICAL RESULTS

STF Number	Lab Number	Aluminum (ug/L)	Antimony (ug/L)	Arsenic (ug/L)	Barium (ug/L)	Beryllium (ug/L)	Cadmium (ug/L)	Calcium (ug/L)	Chromium +3 (ug/L)
2501 SU000000000.002	W21068	N 2550.0000 J4	U 11.0000	U 2.0000	B 27.9000	U 1.0000	U 1.0000	10500.0000	0.0000
2502 SU310000000.002	W21069	N 2000.0000 J4	U 11.0000	B 5.5000	B 18.7000	U 1.0000	U 1.0000	B 4960.0000	0.0000
2503 SU000000000.002	W21070	N 1450.0000 J4	U 11.0000	U W 2.0000	B 18.7000	U 1.0000	U 1.0000	5430.0000	0.0000
2505 SU000000000.002	W20857	681.0000	U 33.0000	U W 1.0000	B 12.8000	U 1.0000	U 3.0000	6810.0000	0.0000
2506 SU310000000.002	W20858	678.0000	U 33.0000	B W 1.2000	B 12.5000	U 1.0000	U 3.0000	6610.0000	0.0000
2506 SU320000000.002	W20859	505.0000	U 33.0000	B W 1.0000	B 9.9000	U 1.0000	U 3.0000	5830.0000	0.0000
2507 SU201000000.002	W20860	515.0000	U 33.0000	B W 1.2000	B 10.4000	U 1.0000	B 3.1000 UJ	5900.0000	0.0000
2508 SU000000000.002	W20861	663.0000	U 33.0000	U W 1.0000	B 13.9000	U 1.0000	U 3.0000	8520.0000	0.0000
2509 SU310000000.002	W20862	510.0000	U 33.0000	B 1.2000	B 13.4000	U 1.0000	U 3.0000	8660.0000	0.0000
2509 SU320000000.002	W20863	430.0000	U 33.0000	B W 1.1000	B 12.6000	U 1.0000	U 3.0000	8900.0000	0.0000
2510 SU000000000.002	W20865	494.0000	U 33.0000	B W 1.3000	B 13.1000	U 1.0000	B 3.6000 UJ	8680.0000	0.0000
2511 SU310000000.002	W20866	468.0000	U 33.0000	U W 1.0000	B 14.2000	U 1.0000	U 3.0000	9520.0000	0.0000
2511 SU320000000.002	W20867	309.0000	U 33.0000	B W 1.3000	B 14.2000	U 1.0000	B 3.3000 UJ	9630.0000	0.0000
2512 SU000000000.002	W20868	427.0000	U 33.0000	B W 1.5000	B 16.3000	U 1.0000	U 3.0000	10300.0000	0.0000
2516 SU320000000.002	W21071	N 418.0000 J4	U 11.0000	U 2.0000	B 10.4000	U 1.0000	U 1.0000	6790.0000	0.0000
2516 SU511000000.002	W21072	N 520.0000 J4	U 11.0000	U 2.0000	B 13.0000	U 1.0000	U 1.0000	6300.0000	0.0000
2518 SU000000000.002	W20869	1030.0000	U 33.0000	B W 1.8000	B 16.8000	U 1.0000	U 3.0000	10300.0000	0.0000
2519 SU000000000.002	W20870	1760.0000	U 33.0000	B W 2.3000	B 19.5000	U 1.0000	U 3.0000	10800.0000	0.0000
2520 SU000000000.002	W20871	3770.0000	U 33.0000	B W 5.4000	B 30.7000	U 1.0000	U 3.0000	10700.0000	0.0000
2521 SU000000000.002	W20872	4660.0000	U 33.0000	B W 8.0000	B 33.8000	U 1.0000	B 3.2000 UJ	11300.0000	0.0000
2527 SU000000000.002	W20873	5990.0000	U 33.0000	B 6.8000	B 43.5000	U 1.0000	U 3.0000	14600.0000	0.0000
2528 SU201000000.002	W21073	N 1640.0000 J4	U 11.0000	U W 2.0000	B 18.6000	U 1.0000	U 1.0000	12800.0000	0.0000
2529 SU000000000.002	W21074	N 1270.0000 J4	U 11.0000	U 2.0000	B 18.3000	U 1.0000	U 1.0000	10500.0000	0.0000
2530 SU000000000.002	W21076	N 1470.0000 J4	U 11.0000	U 2.0000	B 18.6000	U 1.0000	U 1.0000	11500.0000	0.0000

DATA VALIDATION
DATE RECEIVED _____
VALIDATED BY _____ DATE _____
KEYED BY _____ DATE _____
CHECKED BY JRM DATE 4/16/92

STF Number	Lab Number	Chromium +6 (ug/L)		Total Chromium (ug/L)		Cobalt (ug/L)		Copper (ug/L)		Iron (ug/L)		Lead (ug/L)		Magnesium (ug/L)		Manganese (ug/L)	
2501 SU000000000.002	W21068	0.0000	U *	7.0000	U	3.0000	B	14.8000		2370.0000	SN	41.7000	J4	B 4470.0000		104.0000	
2502 SU310000000.002	W21069	0.0000	*	10.1000	U	3.0000	B	19.5000		2810.0000	SN	52.4000	J4	B 1570.0000		41.5000	
2503 SU000000000.002	W21070	0.0000	*	10.8000	B	3.8000	UJ B	12.8000		1720.0000	SN	33.5000	J4	B 1430.0000		38.6000	
2505 SU000000000.002	W20857	0.0000	U	5.0000	U	5.0000	B N	5.0000	UJ	688.0000	WN	14.9000	J4	B 2730.0000	B	14.4000	UJ
2506 SU310000000.002	W20858	0.0000	U	5.0000	B	5.5000	B N	5.3000	UJ	679.0000	WN	14.5000	J4	B 2660.0000	B	9.9000	UJ
2506 SU320000000.002	W20859	0.0000	U	5.0000	U	5.0000	B N	6.0000	UJ	534.0000	WN	12.2000	J4	B 2240.0000	B	8.7000	UJ
2507 SU201000000.002	W20860	0.0000	B	7.0000	B	7.7000	B N	5.3000	UJ	517.0000	WN	12.2000	J4	B 2280.0000	B	8.5000	UJ
2508 SU000000000.002	W20861	0.0000	U	5.0000	U	5.0000	B N	11.2000	J4	773.0000	WN	15.8000	J4	B 2700.0000		21.3000	UJ
2509 SU310000000.002	W20862	0.0000	B	5.8000	B	5.7000	B N	6.2000	UJ	688.0000	WN	13.5000	J4	B 2660.0000		15.3000	UJ
2509 SU320000000.002	W20863	0.0000	U	5.0000	U	5.0000	B N	6.5000	J4	631.0000	WN	11.1000	J4	B 2750.0000	B	13.7000	UJ
2510 SU000000000.002	W20865	0.0000	U	5.0000	U	5.0000	B N	6.4000	UJ	685.0000	WN	12.1000	J4	B 2700.0000	B	13.6000	UJ
2511 SU310000000.002	W20866	0.0000	U	5.0000	U	5.0000	B N	6.4000	UJ	794.0000	WN	12.3000	J4	B 2710.0000		15.7000	UJ
2511 SU320000000.002	W20867	0.0000	U	5.0000	U	5.0000	B N	5.5000	UJ	689.0000	WN	8.7000	J4	B 2700.0000	B	13.7000	UJ
2512 SU000000000.002	W20868	0.0000	U	5.0000	U	5.0000	B N	6.9000	J4	929.0000	WN	18.1000	J4	B 2780.0000		40.3000	
2516 SU320000000.002	W21071	0.0000	U *	7.0000	U	3.0000	B	3.8000		516.0000	WN	3.4000	UJ	B 1770.0000		23.9000	
2516 SU511000000.002	W21072	0.0000	U *	7.0000	U	3.0000	B	3.8000		703.0000	N	3.6000	UJ	B 1750.0000		132.0000	
2518 SU000000000.002	W20869	0.0000	U	5.0000	U	5.0000	B SN	12.0000	J4	834.0000	SN	34.0000	J4	B 4080.0000		28.7000	
2519 SU000000000.002	W20870	0.0000	U	5.0000	U	5.0000	B N	20.9000	J4	1220.0000	SN	75.3000	J4	B 4370.0000		38.9000	
2520 SU000000000.002	W20871	0.0000		10.7000	B	5.1000	B SN	43.4000	J4	2880.0000	SN	171.0000	J4	B 4490.0000		68.1000	
2521 SU000000000.002	W20872	0.0000		14.9000	B	5.5000	B SN	61.1000	J4	4570.0000	N	97.8000	J4	B 4690.0000		122.0000	
2527 SU000000000.002	W20873	0.0000		15.5000	U	5.0000	B SN	48.0000	J4	4910.0000	SN	219.0000	J4	7350.0000		103.0000	
2528 SU201000000.002	W21073	0.0000	U *	7.0000	U	3.0000	B	11.6000		1380.0000	+N	39.6000	J4	5540.0000		45.5000	
2529 SU000000000.002	W21074	0.0000	B *	7.3000	U	3.0000	B	10.5000		1160.0000	SN	15.6000	J4	B 3890.0000		47.1000	
2530 SU000000000.002	W21076	0.0000	U *	7.0000	B	3.3000	UJ B	12.3000		1360.0000	SN	15.7000	J4	B 4620.0000		67.4000	

STF Number	Lab Number	Mercury (ug/L)		Nickel (ug/L)		Potassium (ug/L)		Selenium (ug/L)		Silver (ug/L)		Sodium (ug/L)		Thallium (ug/L)		Vanadium (ug/L)	
2501 SU000000000.002	W21068	U	0.2000	B	10.1000	UJ	B	2510.0000	U	2.0000	U	6.0000		12200.0000	U	2.0000	B	9.2000
2502 SU310000000.002	W21069	U	0.2000	U	8.0000		B	2750.0000	B	2.2000	U	6.0000		33100.0000	U	2.0000	B	4.8000
2503 SU000000000.002	W21070	U	0.2000	U	8.0000		B	2980.0000	U	2.0000	U	6.0000		34900.0000	U	2.0000	B	5.6000
2505 SU000000000.002	W20857	U	0.2000	U	9.0000		B	1940.0000	U N	1.0000	UJ	U	6.0000	UJ	15600.0000	U	2.0000	U	8.0000
2506 SU310000000.002	W20858	U	0.2000	B	16.8000		B	2380.0000	U N	1.0000	UJ	U	6.0000	UJ	15300.0000	U	2.0000	U	8.0000
2506 SU320000000.002	W20859	U	0.2000	U	9.0000		B	1710.0000	U N	1.0000	UJ	U	6.0000	UJ	13600.0000	U	2.0000	U	8.0000
2507 SU201000000.002	W20860	U	0.2000	U	9.0000		B	2980.0000	U N	1.0000	UJ	U	6.0000	UJ	13400.0000	U	2.0000	B	9.1000
2508 SU000000000.002	W20861	U	0.2000	U	9.0000		B	2160.0000	U N	1.0000	UJ	U	6.0000	UJ	15500.0000	U	2.0000	U	8.0000
2509 SU310000000.002	W20862	U	0.2000	U	9.0000		B	2890.0000	U N	1.0000	UJ	U	6.0000	UJ	15400.0000	U	2.0000	U	8.0000
2509 SU320000000.002	W20863	U	0.2000	U	9.0000		B	1930.0000	U N	1.0000	UJ	U	6.0000	UJ	16300.0000	U	2.0000	U	8.0000
2510 SU000000000.002	W20865	U	0.2000	B	9.7000		B	2280.0000	U N	1.0000	UJ	U	6.0000	UJ	15800.0000	U	2.0000	U	8.0000
2511 SU310000000.002	W20866	U	0.2000	U	9.0000		B	1650.0000	U N	1.0000	UJ	U	6.0000	UJ	16100.0000	U	2.0000	U	8.0000
2511 SU320000000.002	W20867	U	0.2000	B	9.8000		B	2170.0000	U WN	1.0000	UJ	U	6.0000	UJ	16200.0000	U	2.0000	U	8.0000
2512 SU000000000.002	W20868	U	0.2000	U	9.0000		B	1800.0000	U WN	1.0000	UJ	U	6.0000	UJ	16900.0000	U	2.0000	U	8.0000
2516 SU320000000.002	W21071	U	0.2000	B	10.1000	UJ	B	1330.0000	UJ	U	2.0000		U	6.0000	B	2100.0000	U	2.0000	U	4.0000
2516 SU511000000.002	W21072	U	0.2000	U	8.0000		B	1330.0000	UJ	U	2.0000		U	6.0000	B	1880.0000	U	2.0000	B	5.5000
2518 SU000000000.002	W20869	U	0.2000	U	9.0000		B	2690.0000		U WN	1.0000	UJ	U	6.0000	UJ	21500.0000	U	2.0000	U	8.0000
2519 SU000000000.002	W20870	U	0.2000	U	9.0000		B	2750.0000		U WN	1.0000	UJ	U	6.0000	UJ	23100.0000	U	2.0000	U	8.0000
2520 SU000000000.002	W20871	U	0.2000	B	11.5000		B	3340.0000		U WN	1.0000	UJ	U	6.0000	UJ	22900.0000	U	2.0000	B	10.6000
2521 SU000000000.002	W20872	U	0.2000	B	10.4000		B	3870.0000		U WN	1.0000	UJ	U	6.0000	UJ	35900.0000	U	2.0000	B	11.5000
2527 SU000000000.002	W20873		0.2000	B	10.2000		B	3000.0000		U WN	1.0000	UJ	U	6.0000	UJ	19200.0000	U	2.0000	B	14.8000
2528 SU201000000.002	W21073	U	0.2000	U	8.0000		B	3400.0000		U	2.0000		U	6.0000		29800.0000	U	2.0000	B	8.8000
2529 SU000000000.002	W21074	U	0.2000	U	8.0000		B	3420.0000		U W	2.0000		U	6.0000		31900.0000	U	2.0000	B	5.8000
2530 SU000000000.002	W21076	U	0.2000	U	8.0000		B	3220.0000		U	2.0000		U	6.0000		31100.0000	U	2.0000	B	6.9000

STF Number	Lab Number		Zinc (ug/L)		Boron (ug/L)		Hardness SM 2340B (mg/L)
2501 SU0000000000.002	WZ1068		140.0000	U	30.6000		44.6300
2502 SU3100000000.002	WZ1069		158.0000	U	17.9000		18.8500
2503 SU0000000000.002	WZ1070		132.0000	U	16.5000		19.4500
2505 SU0000000000.002	WZ0857		54.0000	B	35.7000		28.2500
2506 SU3100000000.002	WZ0858		110.0000	B	28.3000		27.4600
2506 SU3200000000.002	WZ0859		52.2000	B	29.6000		23.7800
2507 SU2010000000.002	WZ0860		54.0000	B	31.1000		24.1200
2508 SU0000000000.002	WZ0861		52.6000	B	28.2000		32.3900
2509 SU3100000000.002	WZ0862		47.9000	B	25.6000		32.5800
2509 SU3200000000.002	WZ0863		44.0000	B	47.4000		33.5500
2510 SU0000000000.002	WZ0865		47.2000	B	31.0000		32.7900
2511 SU3100000000.002	WZ0866		47.6000	B	25.1000		34.9300
2511 SU3200000000.002	WZ0867		44.3000	B	29.8000		35.1600
2512 SU0000000000.002	WZ0868		56.6000	B	40.9000		36.8400
2516 SU3200000000.002	WZ1071	B	12.5000 UJ	U	15.3000		24.2400
2516 SU5110000000.002	WZ1072	B	15.3000 UJ	U	15.4000		22.9400
2518 SU0000000000.002	WZ0869		99.1000	B	23.1000		42.5200
2519 SU0000000000.002	WZ0870		114.0000	B	29.0000		44.9600
2520 SU0000000000.002	WZ0871		159.0000	B	25.5000		45.2100
2521 SU0000000000.002	WZ0872		193.0000	B	34.4000		47.5300
2527 SU0000000000.002	WZ0873		215.0000	B	29.9000		66.7200
2528 SU2010000000.002	WZ1073		111.0000	U	28.0000		54.7000
2529 SU0000000000.002	WZ1074		112.0000	U	27.4000		42.2400
2530 SU0000000000.002	WZ1076		140.0000	U	31.7000		47.7400

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

WET SEASON (JANUARY 1992)
SEDIMENT ANALYTICAL RESULTS

STF Number	Lab Number	Aluminum (mg/kg)	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Calcium (mg/kg)	Chromium +3 (mg/kg)
2501 SD000000000.002	S21046	10500.0000	U N 2.5000 UJ	3.0000	B 29.9000	U 0.2300	U 0.2300 UJ	4330.0000	23.1000
2502 SD310000000.002	S21047	21100.0000	B N 8.0000 J4	24.6000	119.0000	U 0.5900	5.6000	6840.0000	84.3000
2503 SD000000000.002	S21048	11800.0000	B N 8.5000 J4	17.6000	93.1000	U 0.4300	2.5000 J4	4570.0000	62.4000
2504 SD000000000.002	S20745	26900.0000	B N 21.7000 UJ	N 9.7000 J4	B 100.0000	U 0.5400	U 1.6000	5720.0000	72.5000
2506 SD320000000.002	S20746	37600.0000	B N 38.4000 UJ	N 9.0000 J4	186.0000	U 0.7600	10.0000 J4	8500.0000	76.1000
2507 SD201000000.002	S20747	13700.0000	N 26.1000 UJ	N 3.3000 J4	50.0000	U 0.2500	U 0.7400	3580.0000	24.5000
2508 SD000000000.002	S20748	9380.0000	B N 12.3000 UJ	NS 3.2000 J4	73.1000	U 0.2700	U 0.8000	3770.0000	16.8000
2509 SD310000000.002	S20749	7480.0000	B N 8.0000 UJ	N 10.3000 J4	101.0000	U 0.2100	U 0.6400	13200.0000	43.0000
2509 SD320000000.002	S20750	13000.0000	N 18.6000 UJ	N 6.2000 J4	109.0000	U 0.2800	B 0.9800 J4	6900.0000	35.7000
2510 SD000000000.002	S20751	17800.0000	B N 11.9000 UJ	N 8.0000 J4	118.0000	B 0.2800 UJ	U 0.8200	16700.0000	34.5000
2511 SD310000000.002	S20752	12300.0000	B N 10.0000 UJ	NS 5.9000 J4	103.0000	U 0.2300	U 0.6900	4120.0000	44.6000
2511 SD320000000.002	S20753	17900.0000	B N 15.6000 UJ	N 7.6000 J4	132.0000	U 0.3500	U 1.1000	5720.0000	51.4000
2512 SD000000000.002	S20754	7990.0000	B N 15.8000 UJ	N 8.0000 J4	B 48.7000	U 0.3400	B 1.2000 J4	3580.0000	16.9000
2513 SD000000000.002	S20755	14100.0000	B N 9.5000 UJ	N 3.9000 J4	54.5000	B 0.2300 UJ	U 0.6300	3050.0000	29.4000
2514 SD000000000.002	S20756	15400.0000	B N 9.6000 UJ	N 11.8000 J4	74.1000	B 0.3000 UJ	1.4000 J4	3910.0000	41.0000
2515 SD000000000.002	S20757	12300.0000	B N 9.1000 UJ	N 9.8000 J4	61.7000	U 0.2300	U 0.6800	3410.0000	25.4000
2516 SD320000000.002	S21049	11000.0000	U N 3.5000 UJ	B 2.7000	67.1000	U 0.3200	U 0.3200 UJ	4760.0000	31.0000
2516 SD511000000.002	S21051	3410.0000	U N 2.8000 UJ	B 1.4000	B 39.7000	U 0.2600	U 0.2600 UJ	B 1170.0000	15.5000
2518 SD000000000.002	S20758	24900.0000	B N 14.0000 UJ	N 16.6000 J4	78.1000	B 0.4000 UJ	B 1.5000 J4	4560.0000	90.8000
2519 SD000000000.002	S20759	21100.0000	U N 15.4000 UJ	N 11.5000 J4	B 82.9000	U 0.4700	U 1.4000	4080.0000	76.2000
2520 SD000000000.002	S20760	28400.0000	B N 23.4000 UJ	N 14.6000 J4	B 88.8000	U 0.4800	U 1.4000	4690.0000	95.8000
2521 SD000000000.002	S20761	15900.0000	U N 15.1000 UJ	N 11.2000 J4	119.0000	U 0.4600	2.4000 J4	3580.0000	45.4000
2522 SD000000000.002	S20762	25300.0000	B N 18.4000 UJ	N 11.5000 J4	109.0000	B 0.4400 UJ	B 1.2000 J4	5500.0000	80.6000
2523 SD000000000.002	S20763	25900.0000	U N 12.1000 UJ	N 16.1000 J4	96.2000	B 0.4200 UJ	2.9000 J4	4810.0000	75.5000
2524 SD000000000.002	S20764	27800.0000	B N 15.9000 UJ	N 11.4000 J4	99.2000	U 0.4700	B 1.4000 J4	4400.0000	94.3000
2525 SD000000000.002	S21052	31600.0000	B N 15.9000 J4	17.0000	B 125.0000	U 0.9800	B 1.4000 J4	5830.0000	614.0000
2526 SD000000000.002	S21053	35300.0000	U N 8.6000 UJ	17.0000	171.0000	U 0.7800	B 3.3000 J4	7500.0000	107.0000
2527 SD000000000.002	S21054	29100.0000	B N 13.2000 J4	25.7000	160.0000	U 0.6100	4.5000 J4	6100.0000	97.3000
2528 SD201000000.002	S21055	29200.0000	U N 7.1000 UJ	19.6000	161.0000	U 0.6500	4.3000 J4	6910.0000	97.1000
2529 SD000000000.002	S21056	23400.0000	B N 11.9000 J4	18.3000	117.0000	U 0.5500	6.1000	5650.0000	83.3000
2530 SD000000000.002	S21057	20100.0000	N 33.9000 J4	S 23.2000	237.0000	B 0.5500	3.4000 J4	6280.0000	72.1000

DATA VALIDATION
DATE RECEIVED _____
VALIDATED BY _____ DATE _____
KEYED BY _____ DATE _____
CHECKED BY JRM DATE 4/16/92

STF Number	Lab Number		Chromium +6 (mg/kg)		Total Chromium (mg/kg)		Cobalt (mg/kg)		Copper (mg/kg)		Iron (mg/kg)		Lead (mg/kg)		Magnesium (mg/kg)		Manganese (mg/kg)	
2501 SD000000000.002	S21046	U	1.0000		23.1000	B	7.6000	E	18.7000 J4		13800.0000	S	75.2000		4240.0000		218.0000	
2502 SD310000000.002	S21047	U	1.0000		84.3000	B	11.6000	E	349.0000 J4		18900.0000		666.0000		5460.0000		283.0000	
2503 SD000000000.002	S21048	U	1.0000		62.4000	B	8.1000	E	170.0000 J4		12500.0000		581.0000		3390.0000		137.0000	
2504 SD000000000.002	S20745	U	1.0000		72.5000	B	11.9000 J4		146.0000		20700.0000		1040.0000		5730.0000	N	283.0000 J4	
2506 SD320000000.002	S20746	U	1.0000		76.1000	B	15.5000 J4		273.0000		24500.0000		1130.0000		7660.0000	N	385.0000 J4	
2507 SD201000000.002	S20747	U	1.0000		24.5000	B	8.6000 J4		32.4000 UJ		16200.0000		104.0000		5370.0000	N	206.0000 J4	
2508 SD000000000.002	S20748	U	1.0000		16.8000	B	5.1000 J4		29.5000 UJ		9330.0000		163.0000		2580.0000	N	120.0000 J4	
2509 SD310000000.002	S20749		1.0000		44.0000	B	7.7000 J4		32.0000 UJ		18400.0000	S*	35.9000 J4		2880.0000	N	313.0000 J4	
2509 SD320000000.002	S20750		1.0000		36.7000	B	9.4000 J4		50.3000		18600.0000		82.8000		2770.0000	N	301.0000 J4	
2510 SD000000000.002	S20751	U	1.0000		34.5000	B	10.0000 J4		70.0000		20700.0000		103.0000		3640.0000	N	318.0000 J4	
2511 SD310000000.002	S20752	U	1.0000		44.6000	B	9.9000 J4		43.0000		19300.0000	*	36.7000 J4		4110.0000	N	615.0000 J4	
2511 SD320000000.002	S20753	U	1.0000		51.4000	B	8.3000 J4		72.7000		17700.0000		201.0000		3970.0000	N	251.0000 J4	
2512 SD000000000.002	S20754	U	1.0000		16.9000	B	4.7000 J4		25.9000 UJ		5620.0000	*	63.6000 J4	B	1120.0000	N	95.2000 J4	
2513 SD000000000.002	S20755	U	1.0000		29.4000	B	8.0000 J4		24.7000 UJ		12100.0000		75.9000		3890.0000	N	342.0000 J4	
2514 SD000000000.002	S20756	U	1.0000		41.0000	B	7.8000 J4		59.5000		10600.0000		365.0000		2740.0000	N	403.0000 J4	
2515 SD000000000.002	S20757	U	1.0000		25.4000	B	6.5000 J4		65.4000		9800.0000		298.0000		2420.0000	N	360.0000 J4	
2516 SD320000000.002	S21049	U	1.0000		31.0000	B	9.2000	E	21.9000 J4		16400.0000	S	35.1000		5130.0000		253.0000	
2516 SD511000000.002	S21051	U	1.0000		15.5000	B	2.5000	E	13.8000 J4		4330.0000		11.3000	B	1230.0000		67.7000	
2518 SD000000000.002	S20758		1.0000		91.8000	B	9.7000 J4		149.0000		16200.0000		1150.0000		5130.0000	N	185.0000 J4	
2519 SD000000000.002	S20759	U	1.0000		76.2000	B	8.1000 J4		183.0000		14400.0000		955.0000		4390.0000	N	168.0000 J4	
2520 SD000000000.002	S20760	U	1.0000		95.8000	B	10.9000 J4		157.0000		18400.0000		1200.0000		5740.0000	N	199.0000 J4	
2521 SD000000000.002	S20761	U	1.0000		45.4000	B	6.4000 J4		108.0000		12700.0000		719.0000		3290.0000	N	129.0000 J4	
2522 SD000000000.002	S20762		1.0000		81.6000	B	13.2000 J4		214.0000		20100.0000		1000.0000		5510.0000	N	279.0000 J4	
2523 SD000000000.002	S20763	U	1.0000		75.5000	B	9.2000 J4		263.0000		17900.0000		981.0000		5120.0000	N	170.0000 J4	
2524 SD000000000.002	S20764	U	1.0000		94.3000	B	9.5000 J4		243.0000		20000.0000		1200.0000		5820.0000	N	204.0000 J4	
2525 SD000000000.002	S21052	U	1.0000		614.0000	B	15.5000	E	282.0000 J4		25000.0000		1030.0000		6710.0000		306.0000	
2526 SD000000000.002	S21053	U	1.0000		107.0000	B	15.7000	E	252.0000 J4		29200.0000		919.0000		8090.0000		340.0000	
2527 SD000000000.002	S21054	U	1.0000		97.3000	B	11.6000	E	277.0000 J4		22200.0000		1150.0000		6190.0000		235.0000	
2528 SD201000000.002	S21055	U	1.0000		97.1000	B	11.9000	E	302.0000 J4		21200.0000		1020.0000		6560.0000		245.0000	
2529 SD000000000.002	S21056	U	1.0000		83.3000	B	10.6000	E	290.0000 J4		18300.0000		1750.0000		5430.0000		283.0000	
2530 SD000000000.002	S21057	U	1.0000		72.1000	B	20.0000	E	884.0000 J4		105000.0000		1590.0000		6540.0000		584.0000	

STF Number	Lab Number	Mercury (mg/kg)	Nickel (mg/kg)	Potassium (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Sodium (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)
2501 SD000000000.002	S21046	0.4700	23.7000	B 446.0000	U WN 0.2300 UJ	U 1.4000	B 237.0000	U 0.4600	32.7000
2502 SD310000000.002	S21047	1.0000	60.5000	B 1210.0000	U WN 0.5900 UJ	U 3.6000	B 863.0000	U 1.2000	70.0000
2503 SD000000000.002	S21048	0.5500	36.4000	B 756.0000	U WN 0.4300 UJ	U 2.6000	B 571.0000	U 0.8700	44.7000
2504 SD000000000.002	S20745	0.8800 J3	48.3000	B 1230.0000	U 1.1000	U 3.2000	B 478.0000	U 1.1000	50.4000 J4
2506 SD320000000.002	S20746	0.8100 J3	65.1000	B 2080.0000	U 1.5000	U 4.5000	B 716.0000	U 1.5000	86.0000
2507 SD201000000.002	S20747	0.2800 J3	23.5000	B 617.0000	U 0.4900	U 1.5000	B 196.0000	U 0.4900	39.9000
2508 SD000000000.002	S20748	U 0.1300 UJ	17.4000 J4	B 525.0000	U 0.5300	U 1.6000	B 298.0000	U 0.5300	23.1000 J4
2509 SD310000000.002	S20749	U 0.1100 UJ	44.8000	B 544.0000	B W 0.4900	U 1.3000	B 200.0000	U 0.4200	37.3000
2509 SD320000000.002	S20750	0.1700 J3	40.9000	B 899.0000	U 0.5600	U 1.7000	B 288.0000	U 0.5600	45.8000
2510 SD000000000.002	S20751	0.3600 J3	41.9000	B 803.0000	+ 1.9000 J4	U 1.6000	B 363.0000	U 0.5400	43.8000
2511 SD310000000.002	S20752	0.1700 J3	47.7000	B 621.0000	U 0.4600	U 1.4000	B 173.0000	U 0.4600	31.5000
2511 SD320000000.002	S20753	0.1800 J3	40.2000	B 831.0000	B W 0.9600	U 2.1000	B 335.0000	U 0.7000	41.8000
2512 SD000000000.002	S20754	U 0.1700 UJ	15.7000 J4	B 373.0000	1.7000	U 2.0000	B 219.0000	U 0.6800	50.7000
2513 SD000000000.002	S20755	U 0.1800 UJ	29.3000	B 496.0000	U W 0.4200	U 1.3000	B 135.0000	U 0.4200	38.2000
2514 SD000000000.002	S20756	0.1500 J3	28.2000	B 492.0000	B + 0.7300 J4	U 1.3000	B 171.0000	U 0.4300	35.7000
2515 SD000000000.002	S20757	0.3200 J3	20.6000	B 449.0000	B W 0.5400	U 1.4000	B 156.0000	U 0.4500	29.8000
2516 SD320000000.002	S21049	U 0.1600	31.1000	B 738.0000	U N 0.3200 UJ	U 1.9000	B 249.0000	U 0.6300	36.6000
2516 SD511000000.002	S21051	U 0.1300	B 9.0000	B 252.0000	U N 0.2600 UJ	U 1.5000	B 71.8000	U 0.5100	B 9.3000
2518 SD000000000.002	S20758	0.5500 J3	40.5000	B 1020.0000	U 7.2000	U 2.2000	B 622.0000	U 0.7200	48.7000
2519 SD000000000.002	S20759	0.9300 J3	33.4000 J4	B 819.0000	B W 0.9600	U 2.8000	B 470.0000	U 0.9300	39.5000 J4
2520 SD000000000.002	S20760	0.9700 J3	47.6000	B 1290.0000	B W 1.1000	U 2.9000	B 508.0000	U W 0.9500	53.8000
2521 SD000000000.002	S20761	0.5600 J3	28.8000 J4	B 664.0000	U W 0.9200	U 2.7000	B 334.0000	U 0.9200	37.8000 J4
2522 SD000000000.002	S20762	0.7700 J3	45.2000	B 1520.0000	U W 0.8000	U 2.4000	B 520.0000	U 0.8000	51.2000
2523 SD000000000.002	S20763	0.7800 J3	40.5000	B 1220.0000	B W 0.8600	U 2.2000	B 479.0000	U 0.7300	59.5000
2524 SD000000000.002	S20764	1.2000 J3	46.1000	B 1050.0000	U W 0.9400	U 2.8000	B 496.0000	U 0.9400	56.9000
2525 SD000000000.002	S21052	1.1000	408.0000	B 1580.0000	U N 0.9800 UJ	U 5.9000	B 774.0000	U 2.0000	72.4000
2526 SD000000000.002	S21053	0.7400	69.3000	B 1820.0000	B WN 0.9200 J4	U 4.7000	B 987.0000	U 1.6000	77.8000
2527 SD000000000.002	S21054	0.8800	55.7000	B 1240.0000	B WN 0.7300 J4	U 3.6000	B 1250.0000	U 1.2000	72.7000
2528 SD201000000.002	S21055	0.9800	57.7000	B 1360.0000	U N 0.6500 UJ	U 3.9000	B 697.0000	U 1.3000	71.5000
2529 SD000000000.002	S21056	0.7400	48.3000	B 1290.0000	U N 0.5500 UJ	U 3.3000	B 813.0000	U 1.1000	65.0000
2530 SD000000000.002	S21057	0.4300	105.0000	B 1040.0000	U N 0.5300 UJ	U 3.2000	B 619.0000	U 1.1000	58.2000

STF	Number	Lab Number	Zinc (mg/kg)		Boron (mg/kg)		Hardness SM 2340B (mg/kg)
2501	SD000000000.002	S21046	69.6000	U	1.6000	UJ	0.0000
2502	SD310000000.002	S21047	1240.0000		47.6000	J4	0.0000
2503	SD000000000.002	S21048	807.0000	U	3.0000	UJ	0.0000
2504	SD000000000.002	S20745	395.0000	U	3.8000	UJ	0.0000
2506	SD320000000.002	S20746	1450.0000	U	5.3000	UJ	0.0000
2507	SD201000000.002	S20747	114.0000	U	1.7000	UJ	0.0000
2508	SD000000000.002	S20748	111.0000	U	1.9000	UJ	0.0000
2509	SD310000000.002	S20749	89.6000	U	1.5000	UJ	0.0000
2509	SD320000000.002	S20750	157.0000	U	1.9000	UJ	0.0000
2510	SD000000000.002	S20751	279.0000	U	1.9000	UJ	0.0000
2511	SD310000000.002	S20752	82.6000	U	1.6000	UJ	0.0000
2511	SD320000000.002	S20753	334.0000	U	2.5000	UJ	0.0000
2512	SD000000000.002	S20754	86.8000	U	2.4000	UJ	0.0000
2513	SD000000000.002	S20755	123.0000	U	1.5000	UJ	0.0000
2514	SD000000000.002	S20756	233.0000	U	1.5000	UJ	0.0000
2515	SD000000000.002	S20757	169.0000	U	1.6000	UJ	0.0000
2516	SD320000000.002	S21049	42.6000	U	2.2000	UJ	0.0000
2516	SD511000000.002	S21051	18.7000	U	1.8000	UJ	0.0000
2518	SD000000000.002	S20758	341.0000	U	2.5000	UJ	0.0000
2519	SD000000000.002	S20759	375.0000	U	3.3000	UJ	0.0000
2520	SD000000000.002	S20760	408.0000	U	3.3000	UJ	0.0000
2521	SD000000000.002	S20761	291.0000	U	3.2000	UJ	0.0000
2522	SD000000000.002	S20762	395.0000	U	2.8000	UJ	0.0000
2523	SD000000000.002	S20763	355.0000	U	2.6000	UJ	0.0000
2524	SD000000000.002	S20764	430.0000	U	3.3000	UJ	0.0000
2525	SD000000000.002	S21052	508.0000	B	7.8000	J4	0.0000
2526	SD000000000.002	S21053	793.0000	U	5.5000	UJ	0.0000
2527	SD000000000.002	S21054	1100.0000	U	4.2000	UJ	0.0000
2528	SD201000000.002	S21055	965.0000	U	4.5000	UJ	0.0000
2529	SD000000000.002	S21056	605.0000	U	3.8000	UJ	0.0000
2530	SD000000000.002	S21057	2060.0000	B	13.6000	J4	0.0000

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

STORM EVENTS
SURFACE WATER ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for METALS for file STFSTM.DBF 05/13/92 23:00:00 35,805 bytes

STF Number	Lab Number	Aluminum (ug/L)	Antimony (ug/L)	Arsenic (ug/L)	Barium (ug/L)	Beryllium (ug/L)	Cadmium (ug/L)	Calcium (ug/L)	Chromium +3 (ug/L)
2500 SU000000000.020	1137	4630.0000	U 43.3000	U W 3.3000	B 48.3000	U 1.1000	U 1.1000	B 4560.0000	0.0000
2500 SU000000000.021	1548	1730.0000	U 65.6000	B WN 2.2000 J4	B 20.4000	U 1.1000	U 2.2000	B 2580.0000	0.0000
2500 SU000000000.022	W11812	4460.0000	U 20.0000	B 6.3000 J4	B 41.1000	U 1.0000	U 2.0000	5020.0000	0.0000
2500 SU000000000.023	W11776	806.0000 J4	U 20.0000	B 3.8000	B 20.0000	U 1.0000	U 2.0000	B 3770.0000	0.0000
2500 SU000000000.024	W15544	1680.0000	U 37.0000	B 2.5000	B 27.4000	U 1.0000	U 2.0000	B 4430.0000	0.0000
2500 SU000000000.025	W17343	402.0000	U 37.0000	B 1.4000	B 11.0000	U 1.0000	U 2.0000	5820.0000	0.0000
2500 SU000000000.026	W19671	2580.0000	U 37.0000	U NW 2.0000 UJ	B 31.3000	U 1.0000	U 2.0000	B 3680.0000	0.0000
2500 SU000000000.027	W20974	E 1610.0000 J4	U 11.0000	B W 2.4000	B E 18.0000 J4	U 1.0000	U 1.0000	B B 4680.0000 J4	0.0000
2500 SU000000000.028	W21596	961.0000	B 19.0000 UJ	B W 1.1000	B 17.8000	U 1.0000	U 1.0000	8030.0000	0.0000
2500 SU000000000.029	W21696	600.0000	U 11.0000	U W 1.0000	B 10.2000	U 1.0000	U 1.0000	B 3350.0000	0.0000
2500 SU000000000.030	W22718	688.0000	U 33.0000	U 1.0000	B 13.1000	U 1.0000	U 3.0000	5960.0000	0.0000
2501 SU000000000.020	1138	38500.0000	U 43.3000	W 16.6000	252.0000	U 1.1000	U 1.1000	14700.0000	0.0000
2501 SU000000000.021	1549	16400.0000	U 65.6000	B WN 5.3000 J4	B 114.0000	U 1.1000	U 2.2000	6700.0000	0.0000
2501 SU000000000.022	W11813	6520.0000	U 20.0000	B 6.3000 J4	B 82.2000	U 1.0000	U 2.0000	6120.0000	0.0000
2501 SU000000000.023	W11777	7690.0000 J4	U 20.0000	B 4.8000	B 63.2000	U 1.0000	U 2.0000	8890.0000	0.0000
2501 SU000000000.024	W15545	21400.0000	U 37.0000	B 4.6000	B 153.0000	U 1.0000	U 2.0000	10200.0000	0.0000
2501 SU000000000.025	W17344	2830.0000	U 37.0000	B 1.2000	B 52.9000	U 1.0000	U 2.0000	B 3980.0000	0.0000
2501 SU000000000.026	W19672	20700.0000	U 37.0000	B NW 6.3000 J4	B 173.0000	U 1.0000	U 2.0000	9860.0000	0.0000
2501 SU000000000.027	W20975	E 8120.0000 J4	U 11.0000	B W 3.6000	B E 63.6000 J4	U 1.0000	U 1.0000	E 6650.0000 J4	0.0000
2501 SU000000000.028	W21597	17000.0000	B 26.1000 UJ	25.2000	B 128.0000	U 1.0000	U 1.0000	15900.0000	0.0000
2501 SU000000000.029	W21697	11100.0000	U 11.0000	B 3.0000	B 75.1000	U 1.0000	U 1.0000	6110.0000	0.0000
2501 SU000000000.030	W22719	9130.0000	U 33.0000	B 2.1000	B 78.3000	U 1.0000	U 4.4000	10900.0000	0.0000
2515 SU201000000.027	W21044	1200.0000	U 11.0000	B W 1.4000	B 16.8000	U 1.0000	U 1.0000	7200.0000	0.0000

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Analytical data for METALS for file STFSTM.DBF 05/13/92 23:00:00 35,805 bytes

STF Number	Lab Number	Chromium +6 (ug/L)	Total Chromium (ug/L)	Cobalt (ug/L)	Copper (ug/L)	Iron (ug/L)	Lead (ug/L)	Magnesium (ug/L)	Manganese (ug/L)
2500 SU000000000.020	1137	0.0000	12.6000	U 6.7000	29.1000	3670.0000	S 71.4000	B 1620.0000	89.7000
2500 SU000000000.021	1548	0.0000	B 6.5000	U 12.2000	7.8000	* 1500.0000 J4	N 21.3000 J4	B 758.0000	36.5000
2500 SU000000000.022	W11812	0.0000	U 5.0000 UJ	U 5.0000	52.2000 J4	4160.0000	95.6000	B 1300.0000	113.0000
2500 SU000000000.023	W11776	0.0000	U 5.0000	U 5.0000	N 12.6000 J4	977.0000	SN 27.3000 J4	B 840.0000	53.7000
2500 SU000000000.024	W15544	0.0000	B 5.3000	U 5.0000	B 24.0000	2160.0000	S* 61.8000 J4	B 1090.0000	64.1000
2500 SU000000000.025	W17343	0.0000	U 4.0000	U 5.0000	B 9.0000 J4	634.0000	N+ 16.8000 J4	B 1020.0000	24.1000
2500 SU000000000.026	W19671	0.0000	B 8.4000 UJ	U 5.0000	B N 14.9000 J4	3090.0000	N*S 37.2000 J4	B 1300.0000	59.8000
2500 SU000000000.027	W20974	0.0000	U 7.0000	U 3.0000	B 10.4000	E 1810.0000 J4	S 24.3000	B E 1290.0000 J4	E 37.2000 J4
2500 SU000000000.028	W21596	0.0000	U 7.0000	U 3.0000	B 13.0000	1410.0000	NS 21.8000 J4	B 3110.0000	45.4000
2500 SU000000000.029	W21696	0.0000	U 7.0000	U 3.0000	B 7.0000	678.0000	WN 15.6000 J4	B 1190.0000	19.9000
2500 SU000000000.030	W22718	0.0000	U 5.0000	U 5.0000	B S 12.3000	884.0000	S 17.2000	B 2600.0000	30.0000
2501 SU000000000.020	1138	0.0000	50.4000	B 13.3000	48.6000	26500.0000	S 186.0000 J4	8260.0000	453.0000
2501 SU000000000.021	1549	0.0000	21.6000	U 12.2000	14.0000	* 9670.0000 J4	N 28.6000 J4	B 3220.0000	207.0000
2501 SU000000000.022	W11813	0.0000	B 7.3000 J4	B 5.2000	B SN 39.4000 J4	6170.0000	124.0000	B 1730.0000	226.0000
2501 SU000000000.023	W11777	0.0000	B 8.6000 UJ	B 7.2000	SN 15.1000 J4	7150.0000	SN 16.3000 J4	B 3670.0000	273.0000
2501 SU000000000.024	W15545	0.0000	28.3000	B 11.8000	42.8000	19100.0000	* 63.8000 J4	6240.0000	412.0000
2501 SU000000000.025	W17344	0.0000	U 4.0000	U 5.0000	B 24.7000 J4	2510.0000	N 22.3000 J4	B 1570.0000	196.0000
2501 SU000000000.026	W19672	0.0000	33.0000	B 15.0000	N 37.7000 J4	19200.0000	N*+ 78.4000 J4	6420.0000	427.0000
2501 SU000000000.027	W20975	0.0000	12.3000 UJ	B 6.0000	B 14.8000	E 7110.0000 J4	S 19.4000	B E 3480.0000 J4	E 203.0000 J4
2501 SU000000000.028	W21597	0.0000	21.6000	B 10.2000	B 23.7100	13600.0000	N+ 48.4000 J4	6510.0000	425.0000
2501 SU000000000.029	W21697	0.0000	12.1000	B 4.8000	B 18.1000	8560.0000	N 25.2000 J4	B 3010.0000	186.0000
2501 SU000000000.030	W22719	0.0000	14.5000	B 6.1000	B 23.8000	8420.0000	21.8000	B 4970.0000	241.0000
2515 SU201000000.027	W21044	0.0000	U * 7.0000 UJ	U 3.0000	B 5.6000	E 1290.0000 J4	WN 4.5000 UJ	B 2170.0000	29.0000

STF Number	Lab Number	Mercury (ug/L)		Nickel (ug/L)		Potassium (ug/L)		Selenium (ug/L)		Silver (ug/L)		Sodium (ug/L)		Thallium (ug/L)		Vanadium (ug/L)	
2500 SU000000000.020	1137		0.2400	UJ	B	7.8000	B	2100.0000	U	2.2000	U	6.7000		29000.0000	U W	7.8000	B	8.6000
2500 SU000000000.021	1548	U	0.1000		U	22.2000	B	1900.0000	B W	1.9000	U	7.8000		14700.0000	U W	1.1000	U	5.6000
2500 SU000000000.022	W11812		0.2500		U	15.0000	UJ	B 1950.0000	U N	3.0000	UJ	U 4.0000		22100.0000	U	1.0000	U	6.0000
2500 SU000000000.023	W11776	U	0.2000		U	15.0000		B 1230.0000	U W	3.0000		U 4.0000		15700.0000	U	1.0000	U	6.0000
2500 SU000000000.024	W15544	U	0.2000		U	14.0000		B 2450.0000	UJ	U W	1.0000	B 3.5000		35800.0000	U	1.0000	B	9.4000
2500 SU000000000.025	W17343	U	0.2000		U	14.0000		B 3560.0000	J4	B	4.3000	UJ	U 3.0000		52900.0000	U	1.0000	U	4.0000
2500 SU000000000.026	W19671	U	0.2000		U	14.0000		B 1660.0000		U NW	3.0000	R	U 3.0000		15000.0000	U	2.0000	B	8.6000
2500 SU000000000.027	W20974	U	0.2000		U	8.0000		B 2290.0000		U N	1.0000	UJ	U 6.0000	E	27100.0000	J4	U W	2.0000	B	5.9000
2500 SU000000000.028	W21596	U	0.2000		U	8.0000		B 1770.0000		U	1.0000		U 6.0000		13200.0000	U	2.0000	U	4.0000
2500 SU000000000.029	W21696	U	0.2000		U	8.0000		B 914.0000		U	1.0000		U 6.0000		10900.0000	U W	1.0000	U	4.0000
2500 SU000000000.030	W22718	U	0.2000		U	9.0000		B 1550.0000		U	1.0000		U 6.0000		12600.0000	U	2.0000	U	8.0000
2501 SU000000000.020	1138		0.4300	UJ		49.0000		5580.0000		U	2.2000		U 6.7000		8890.0000	U W	7.8000		66.9000
2501 SU000000000.021	1549	B	0.1400		B	24.4000		B 3430.0000		B W	1.8000		U 7.8000	B	4490.0000	U	1.1000	B	26.7000
2501 SU000000000.022	W11813	U	0.2000		B	15.3000	J4	B 2770.0000		U N	3.0000	UJ	U 4.0000	B	2600.0000	U	1.0000	B	12.7000
2501 SU000000000.023	W11777	U	0.2000		U	15.0000		B 3810.0000		U	3.0000		U 4.0000	B	4370.0000	U	1.0000	B	18.5000
2501 SU000000000.024	W15545	U	0.2000			46.3000	UJ	B 4350.0000		U W	1.0000		U 3.0000		6210.0000	U W	1.0000	B	43.6000
2501 SU000000000.025	W17344	U	0.2000		U	14.0000		B 1870.0000	UJ	U W	10.0000		U 3.0000	B	2540.0000	U	1.0000	B	8.2000	UJ
2501 SU000000000.026	W19672		0.3100			43.7000		B 3510.0000		U NW	30.0000	R	U 3.0000	B	4280.0000	U	2.0000	B	42.2000
2501 SU000000000.027	W20975	U	0.2000		B	14.9000	UJ	B 2230.0000		U N	1.0000	UJ	U 6.0000	B E	4280.0000	J4	U W	2.0000	B	13.9000
2501 SU000000000.028	W21597		0.2400		B	33.8000		B 3880.0000		W	8.4000		U 6.0000		9660.0000	U	2.0000	B	22.0000
2501 SU000000000.029	W21697	U	0.2000		B	16.8000	UJ	B 1670.0000		U W	1.0000		U 6.0000	B	3140.0000	U W	1.0000	B	18.0000
2501 SU000000000.030	W22719	U	0.2000		B	22.2000		B 3170.0000		U	1.0000		U 6.0000		7370.0000	U	2.0000	B	18.2000
2515 SU201000000.027	W21044	U	0.2000		B	15.3000	UJ	B 1950.0000		U W	1.0000		U 6.0000		16200.0000	U	2.0000	U	4.0000

STF	Number	Lab Number	Zinc (ug/L)		Boron (ug/L)		Hardness SM 2340B (mg/L)
2500	SU000000000.020	1137	223.0000	U	22.2000		18.0600
2500	SU000000000.021	1548	82.0000	U N	17.8000		9.3600
2500	SU000000000.022	W11812	325.0000		23.8000		17.8900
2500	SU000000000.023	W11776	160.0000		0.0000		12.8700
2500	SU000000000.024	W15544	199.0000	U	31.0000		15.5500
2500	SU000000000.025	W17343	103.0000	U	31.0000		18.7300
2500	SU000000000.026	W19671	177.0000	U	31.0000		14.5400
2500	SU000000000.027	W20974	109.0000	B	18.0000	UJ	16.8000
2500	SU000000000.028	W21596	174.0000		36.4000		32.8600
2500	SU000000000.029	W21696	84.7000	U	7.0000	UJ	13.2700
2500	SU000000000.030	W22718	110.0000	U	18.0000		25.5900
2501	SU000000000.020	1138	240.0000	U	22.2000		70.7200
2501	SU000000000.021	1549	90.4000	U N	17.8000		29.9900
2501	SU000000000.022	W11813	241.0000		0.0000		22.4100
2501	SU000000000.023	W11777	80.1000		0.0000		35.3100
2501	SU000000000.024	W15545	208.0000	U	31.0000		51.1700
2501	SU000000000.025	W17344	57.5000	U	31.0000		16.4000
2501	SU000000000.026	W19672	210.0000		38.0000		51.0600
2501	SU000000000.027	W20975	62.9000	B	32.7000	UJ	30.9400
2501	SU000000000.028	W21597	175.0000		46.0000		66.5100
2501	SU000000000.029	W21697	84.7000	B	18.5000	J4	27.6500
2501	SU000000000.030	W22719	117.0000		102.0000		47.6800
2515	SU201000000.027	W21844	48.0000		25.8000	UJ	26.9100

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

BIWEEKLY/MONTHLY
SURFACE WATER ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for METALS for file STFBWM.DBF 05/13/92 23:00:00 38,423 bytes

STF Number	Lab Number	Aluminum (ug/L)	Antimony (ug/L)	Arsenic (ug/L)	Barium (ug/L)	Beryllium (ug/L)	Cadmium (ug/L)	Calcium (ug/L)	Chromium +3 (ug/L)
2500 SU0000000000.051	1139	1390.0000	U 43.3000	B 5.4000	B 20.7000	U 1.1000	U 1.1000	6510.0000	0.0000
2500 SU0000000000.053	1332	B 180.0000 UJ	U N 43.3000 UJ	U N 3.3000	U 7.8000	U 1.1000	U 1.1000	12200.0000	0.0000
2500 SU0000000000.055	1570	B 158.0000	U 65.6000	B N 1.2000 J4	B 4.0000	U 1.1000	U 2.2000	11900.0000	0.0000
2500 SU0000000000.057	1796	3180.0000	U 65.6000	B N 1.4000 J4	B 19.9000	U 1.1000	U 2.2000	14100.0000	0.0000
2500 SU0000000000.061	W12088	1130.0000	U 20.0000	B W 3.1000	B 25.6000	U 1.0000	U 2.0000	17700.0000	0.0000
2500 SU0000000000.065	W14965	559.0000	U 37.0000	B 2.0000	B 17.0000 UJ	U 1.0000	U 2.0000	10500.0000	0.0000
2500 SU0000000000.067	W17661	B E 95.0000 UJ	U 37.0000	U W 1.0000	B 8.2000	U 1.0000	U 2.0000	21900.0000	0.0000
2500 SU0000000000.069	W19624	E 696.0000 J4	U 37.0000	U W 2.0000	B 21.0000	U 1.0000	U 2.0000	E 11500.0000 J4	0.0000
2500 SU0000000000.071	W20823	U N 35.0000	U 33.0000	U W 2.0000	B 4.7000	U 1.0000	U 3.0000	10700.0000	0.0000
2500 SU0000000000.073	W21492	B 75.1000 UJ	B 15.9000	19.5000	B 7.5000	U 1.0000	U 1.0000	15300.0000	0.0000
2500 SU0000000000.075	W22048	B 83.8000	U 33.0000	U 1.0000	B 4.0000	U 1.0000	U 3.0000	12000.0000	0.0000
2501 SU0000000000.051	1140	3990.0000	U 43.3000	U W 3.3000	B 31.2000	U 1.1000	U 1.1000	B 3870.0000	0.0000
2501 SU0000000000.053	1333	B 35.7000 UJ	U 43.3000 UJ	U N 3.3000	B 13.9000	U 1.1000	U 1.1000	10300.0000	0.0000
2501 SU0000000000.055	1571	B 169.0000	U 65.6000	B WN 2.8000 J4	B 14.2000	U 1.1000	U 2.2000	8610.0000	0.0000
2501 SU0000000000.057	1797	6620.0000	U 65.6000	B WN 1.3000 J4	B 49.6000	U 1.1000	U 2.2000	6420.0000	0.0000
2501 SU0000000000.065	W14966	25200.0000	U 37.0000	B W 5.5000	B 176.0000	U 1.0000	B 2.4000	16300.0000	0.0000
2501 SU0000000000.067	W17662	E 8900.0000 J4	U 37.0000	B 2.2000	B 74.7000	U 1.0000	U 2.0000	14500.0000	0.0000
2501 SU0000000000.069	W19625	E 7160.0000 J4	U 37.0000	B 5.1000	B 71.9000	U 1.0000	U 2.0000	E 8090.0000 J4	0.0000
2501 SU0000000000.071	W20824	E 3500.0000 J4	U 33.0000	B 3.9000	B 38.9000	U 1.0000	U 3.0000	8040.0000	0.0000
2501 SU0000000000.073	W21493	1730.0000	U 11.0000	U 1.0000	B 24.9000	U 1.0000	U 1.0000	6930.0000	0.0000
2501 SU0000000000.075	W22049	4110.0000	U 33.0000	U 1.0000	B 41.8000	U 1.0000	U 3.0000	12300.0000	0.0000
2515 SU0000000000.051	1141	4040.0000	U 43.3000	B 4.0000	B 31.2000	U 1.1000	U 1.1000	B 3830.0000	0.0000
2515 SU0000000000.068	W19484	843.0000	U 37.0000	B N 2.1000 J4	B 17.6000	U 1.0000	U 2.0000	6440.0000	0.0000
2515 SU0000000000.073	W21379	1080.0000	U 11.0000	B 1.2000	B 18.1000	U 1.0000	U 1.0000	6780.0000	0.0000
2515 SU2010000000.074	W21788	1110.0000	U 11.0000	U 1.0000	B 15.7000	U 1.0000	U 1.0000	6790.0000	0.0000

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CHECKED BY QRM DATE 5/5/92

STF Number	Lab Number	Chromium +6 (ug/L)	Total Chromium (ug/L)	Cobalt (ug/L)	Copper (ug/L)	Iron (ug/L)	Lead (ug/L)	Magnesium (ug/L)	Manganese (ug/L)
2500 SU0000000000.051	1139	0.0000	B 7.2000	U 6.7000	B 11.6000 UJ	1290.0000	W 11.0000	B 1600.0000	34.1000
2500 SU0000000000.053	1332	0.0000	U 3.3000	U 6.7000	B 10.5000 UJ	N 298.0000 UJ	B N 3.2000 UJ	6290.0000	B 16.0000 J4
2500 SU0000000000.055	1570	0.0000	U 5.6000	U 12.2000	7.0000	* 226.0000 J4	B WN 2.8000 J4	6380.0000	B 8.2000 UJ
2500 SU0000000000.057	1796	0.0000	U 5.6000	U 12.2000	6.0000	* 1120.0000 J4	WN 7.6000 J4	B 1340.0000	80.6000
2500 SU0000000000.061	W12088	0.0000	U 5.0000	U 5.0000	38.5000	3830.0000	SN 77.7000 J4	B 4250.0000	121.0000
2500 SU0000000000.065	W14965	0.0000	U 4.0000	U 5.0000	25.1000	911.0000	NS 25.9000 J4	B 3020.0000	59.7000
2500 SU0000000000.067	W17661	0.0000	U 4.0000	997.0000	B 7.0000	E 338.0000 J4	W 4.6000 UJ	13700.0000	33.7000
2500 SU0000000000.069	W19624	0.0000	U 4.0000	U 5.0000	B 10.4000	E 1400.0000 J4	*S 21.1000 J4	B E 2760.0000 J4	E 44.1000 J4
2500 SU0000000000.071	W20823	0.0000	U 5.0000	U 5.0000	B 5.6000	B 58.4000 UJ	B W 1.2000 UJ	11900.0000	B E 2.9000 UJ
2500 SU0000000000.073	W21492	0.0000	U 7.0000	U 3.0000	B 23.4000	320.0000	NW 17.1000 J4	7130.0000	B 14.6000
2500 SU0000000000.075	W22048	0.0000	U 5.0000	U 5.0000	B 5.4000	453.0000	B NW 1.2000 UJ	5430.0000	B 14.8000
2501 SU0000000000.051	1140	0.0000	B 7.2000	U 6.7000	B 5.7000 UJ	2640.0000	W 4.1000	B 1210.0000	52.3000
2501 SU0000000000.053	1333	0.0000	U 3.3000	U 6.7000	B 3.7000 UJ	B N 94.1000 UJ	B N 1.7000 UJ	B 2170.0000	B 6.7000 J4
2501 SU0000000000.055	1571	0.0000	U 5.6000	U 12.2000	5.0000	* 218.0000 J4	B WN 2.8000 J4	B 1770.0000	B 9.3000 UJ
2501 SU0000000000.057	1797	0.0000	B 7.4000	U 12.2000	9.0000	* 3530.0000 J4	WN 7.8000 J4	B 1510.0000	153.0000
2501 SU0000000000.065	W14966	0.0000	34.9000	B 15.2000	46.1000	22500.0000	N 40.9000 J4	8710.0000	659.0000
2501 SU0000000000.067	W17662	0.0000	12.7000	B 5.8000	B S 5.6000	E 9580.0000 J4	10.9000	6920.0000	296.0000
2501 SU0000000000.069	W19625	0.0000	12.8000 UJ	B 8.0000	B 14.2000	E 7120.0000 J4	*+ 26.1000 J4	B E 3430.0000 J4	E 208.0000 J4
2501 SU0000000000.071	W20824	0.0000	U 5.0000	U 5.0000	B 6.3000	3500.0000	W 5.1000 UJ	B 3500.0000	E 111.0000 J4
2501 SU0000000000.073	W21493	0.0000	U 7.0000	U 3.0000	B 4.0000	1770.0000	B 3.6000 UJ	B 1950.0000	91.3000
2501 SU0000000000.075	W22049	0.0000	U 5.0000	U 5.0000	B 8.5000	4700.0000	B NW 2.8000 UJ	B 4400.0000	193.0000
2515 SU0000000000.051	1141	0.0000	B 8.0000	U 6.7000	B 4.7000 UJ	2610.0000	W 4.7000	B 1230.0000	52.6000
2515 SU0000000000.068	W19484	0.0000	U 4.0000	U 5.0000	9.2000	1040.0000	W* 8.9000 J4	B 1760.0000	28.1000
2515 SU0000000000.073	W21379	0.0000	U 7.0000	U 3.0000	B W 6.1000	1860.0000	B WN 2.7000 J4	B 1570.0000	28.5000
2515 SU2010000000.074	W21788	0.0000	U 7.0000	U 3.0000	B 5.2000	1060.0000	WN 9.5000 J4	B 1910.0000	21.1000

STF Number	Lab Number	Mercury (ug/L)	Nickel (ug/L)	Potassium (ug/L)	Selenium (ug/L)	Silver (ug/L)	Sodium (ug/L)	Thallium (ug/L)	Vanadium (ug/L)
2500 SU0000000000.051	1139	B 0.1300 UJ	U 6.7000	7650.0000	U W 2.2000	U 6.7000	181000.0000	U W 7.8000	U 3.3000
2500 SU0000000000.053	1332	U 0.1000	U 6.7000	B 2710.0000	U 2.2000	U 6.7000	29100.0000	U W 7.8000	B 4.4000 UJ
2500 SU0000000000.055	1570	U 0.1000	U 22.2000	B 2820.0000	B 1.5000	U 7.8000	26300.0000	U 1.1000	U 5.6000
2500 SU0000000000.057	1796	U 0.1000	U 22.2000	10900.0000	B W 1.2000	U 7.8000	U 533.0000	U 1.1000	U 5.6000
2500 SU0000000000.061	W12088	U 0.2000	U 15.0000	14500.0000	U 3.0000	U 4.0000	453000.0000	U W 1.0000	U 6.0000
2500 SU0000000000.065	W14965	U 0.2000 UJ	U 14.0000	B 4430.0000	U W 1.0000	U 3.0000	56400.0000	U W 1.0000	B 4.4000 UJ
2500 SU0000000000.067	W17661	U 0.2000	U 14.0000	B 3590.0000	B WN 1.1000 UJ	U 3.0000	19400.0000	U W 1.0000	B 7.2000
2500 SU0000000000.069	W19624	U 0.2000	U 14.0000	6750.0000	U N 3.0000 R	U 3.0000	B 102000.0000 J4	U 2.0000	U 4.0000
2500 SU0000000000.071	W20823	U 0.2000	U 9.0000	B 2630.0000	U WN 2.0000 UJ	U 6.0000	12000.0000	U 2.0000	U 8.0000
2500 SU0000000000.073	W21492	U 0.2000	U 8.0000	B 3380.0000	B NW 4.6000 J4	U 6.0000	35600.0000	19.5000	U 4.0000
2500 SU0000000000.075	W22048	U 0.2000	U 9.0000	B 2450.0000	U NW 1.0000 UJ	U 6.0000	31900.0000	U 1.0000	U 8.0000
2501 SU0000000000.051	1140	B 0.1200 UJ	U 6.7000	B 926.0000	U 2.2000	U 6.7000	B 2100.0000	U W 7.8000	U 3.3000
2501 SU0000000000.053	1333	U 0.1000	U 6.7000	B 2610.0000	U 2.2000	U 6.7000	6430.0000	U W 7.8000	U 3.3000
2501 SU0000000000.055	1571	U 0.1000	U 22.2000	B 2220.0000	U 1.1000	U 7.8000	6820.0000	U 1.1000	U 5.6000
2501 SU0000000000.057	1797	U 0.1000	U 22.2000	B 1780.0000	U 1.1000	U 7.8000	5600.0000	U 1.1000	B 10.0000
2501 SU0000000000.065	W14966	U 0.2000 UJ	52.6000	6320.0000	U 10.0000	U 3.0000	12600.0000	U 1.0000	B 48.1000
2501 SU0000000000.067	W17662	U 0.2000	B 31.7000	B 2380.0000 UJ	U WN 1.0000 UJ	U 3.0000	10400.0000	U W 1.0000	B 16.6000
2501 SU0000000000.069	W19625	U 0.2000	U 14.0000	B 2620.0000	U NW 3.0000 R	U 3.0000	B R 4760.0000 J4	U 2.0000	B 16.1000
2501 SU0000000000.071	W20824	U 0.2000	B 10.9000	B 2280.0000	U N 2.0000 UJ	U 6.0000	5070.0000	U 2.0000	U 8.0000
2501 SU0000000000.073	W21493	U 0.2000	B 19.8000 UJ	B 1570.0000	U WN 1.0000 UJ	U 6.0000	B 3410.0000	U 2.0000	U 4.0000
2501 SU0000000000.075	W22049	U 0.2000	B 9.8000	B 1990.0000	U NW 1.0000 UJ	U 6.0000	7400.0000	U 1.0000	U 8.0000
2515 SU0000000000.051	1141	B 0.1000 UJ	B 6.8000	B 1130.0000	U 2.2000	U 6.7000	B 2090.0000	U W 7.8000	U 3.3000
2515 SU0000000000.068	W19484	U 0.2000	U 14.0000	B 2350.0000	U N 2.0000 UJ	U 3.0000	14700.0000	U N 1.0000 UJ	U 4.0000
2515 SU0000000000.073	W21379	U 0.2000	B 10.1000	B 2130.0000	U 1.0000	U 6.0000	13200.0000	U 2.0000	B 5.1000 UJ
2515 SU2010000000.074	W21788	U 0.2000	B 8.0000 UJ	B 1600.0000	U 1.0000	U 6.0000	11200.0000	U 1.0000	B 4.2000

STF Number	Lab Number		Zinc (ug/L)		Boron (ug/L)		Hardness SM 2340B (mg/L)
2500 SU0000000000.051	1139		107.0000	U	22.2000		22.8400
2500 SU0000000000.053	1332	B	17.4000	UJ	0.0000		56.3700
2500 SU0000000000.055	1570		25.7000	N	25.7000		55.9900
2500 SU0000000000.057	1796		69.2000	U N	17.8000		40.7300
2500 SU0000000000.061	W12088		125.0000	B	46.9000		61.7000
2500 SU0000000000.065	W14965		271.0000		31.1000		38.6500
2500 SU0000000000.067	W17661		24.6000	U	31.0000		111.1000
2500 SU0000000000.069	W19624		197.0000		33.0000		40.0000
2500 SU0000000000.071	W20823		21.1000		31.6000		95.7000
2500 SU0000000000.073	W21492		43.2000	B	41.2000	UJ	67.5700
2500 SU0000000000.075	W22048		32.2000	B	28.3000		52.3200
2501 SU0000000000.051	1140	B	21.8000	U	22.2000		14.6500
2501 SU0000000000.053	1333		28.2000		0.0000		34.6600
2501 SU0000000000.055	1571	B	19.2000	N	28.8000		28.7900
2501 SU0000000000.057	1797	B	20.6000	U N	17.8000		22.2500
2501 SU0000000000.065	W14966		171.0000		174.4000		76.5700
2501 SU0000000000.067	W17662		49.1000		34.9000		64.7000
2501 SU0000000000.069	W19625		98.1000		54.0000		34.3300
2501 SU0000000000.071	W20824		33.9000		28.4000		34.4900
2501 SU0000000000.073	W21493		29.7000	B	22.2000	UJ	25.3300
2501 SU0000000000.075	W22049		38.5000	B	40.2000		48.8300
2515 SU0000000000.051	1141		22.4000	U	22.2000		14.6300
2515 SU0000000000.068	W19484		40.4000	B	39.8000		23.3300
2515 SU0000000000.073	W21379		39.2000	B	16.5000	UJ	23.3900
2515 SU2010000000.074	W21788		33.9000	U	7.8000		24.8200

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

DRY SEASON (AUGUST 1991) AND WET SEASON (JANUARY 1992) BACKGROUND SURFACE WATER ANALYTICAL RESULTS

SOUTH TAC[illegible]FIELD

Analytical data for METALS for file STFSUMB.DBF 04/16/92 23:00:00 18,788 bytes

STF Number	Lab Number	Aluminum (ug/L)	Antimony (ug/L)	Arsenic (ug/L)	Barium (ug/L)	Beryllium (ug/L)	Cadmium (ug/L)	Calcium (ug/L)	Chromium +3 (ug/L)
2538 SU000000000.001	W11543	377.0000	U 20.0000	U N* 2.0000	B 7.5000 UJ	U 1.0000	U 2.0000	10000.0000	0.0000
2538 SU000000000.002	W20856	B 48.0000	U 33.0000	B W 1.2000	B 5.1000 UJ	U 1.0000	U 3.0000	19400.0000	0.0000
2540 SU000000000.001	W11558	B 47.6000	U 20.0000	U SN* 2.0000	B 25.9000	U 1.0000	U 2.0000	79600.0000	0.0000
2540 SU000000000.002	W21077	B N 28.8000 J4	U 11.0000	B 2.9000	B 16.1000	U 1.0000	U 1.0000	76700.0000	0.0000
2541 SU000000000.001	W11559	B 148.0000	U 20.0000	B N* 3.9000 UJ	B 20.8000	U 1.0000	U 2.0000	22700.0000	0.0000
2541 SU000000000.002	W21078	N 1980.0000 J4	U 11.0000	U W 2.0000	B 26.9000	U 1.0000	U 1.0000	16200.0000	0.0000
2542 SU000000000.001	W12025	392.0000	B 20.0000	B W 6.2000 UJ	B 10.1000 UJ	U 1.0000	U 2.0000	52400.0000	0.0000
2542 SU000000000.002	W21079	N 345.0000 J4	B 12.7000	B W 3.6000	B 13.8000	U 1.0000	U 1.0000	43800.0000	0.0000
2543 SU000000000.001	W12026	B 121.0000	U 20.0000	B W 7.5000 UJ	B 28.0000 J4	U 1.0000	U 2.0000	5900.0000	0.0000
2543 SU000000000.002	W21080	B N 83.0000 J4	U 11.0000	U 2.0000	B 12.4000	U 1.0000	U 1.0000	B 4240.0000	0.0000

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STF Number	Lab Number	Chromium +6 (ug/L)	Total Chromium (ug/L)	Cobalt (ug/L)	Copper (ug/L)	Iron (ug/L)	Lead (ug/L)	Magnesium (ug/L)	Manganese (ug/L)
2500 SU000000000.001	W11543	0.0000	U 5.0000	U 5.0000	U W 10.0000 UJ	761.0000	19.3000	B 3170.0000	42.3000
2500 SU000000000.002	W20856	0.0000	U 5.0000	U 5.0000	B WN 5.1000 UJ	B 76.1000	WN 3.0000 UJ	12500.0000	U 1.0000
2540 SU000000000.001	W11558	0.0000	U 5.0000	U 5.0000	W 10.0000 J4	372.0000 UJ	B W 1.7000 UJ	7590.0000	27.3000
2540 SU000000000.002	W21077	0.0000	U * 7.0000	U 3.0000	U W 1.0000	120.0000	B WN 2.2000 UJ	7640.0000	B 4.2000
2541 SU000000000.001	W11559	0.0000	B 9.8900	U 5.0000	W 11.0000 J4	944.0000	W 13.6000	5520.0000	375.0000
2541 SU000000000.002	W21078	0.0000	U * 7.0000	U 3.0000	B 11.2000	1990.0000	WN 4.7000 UJ	5150.0000	176.0000
2542 SU000000000.001	W12025	0.0000	U 5.0000	U 5.0000	B NW 1.4000	617.0000	W 3.3000 UJ	39900.0000	1820.0000
2542 SU000000000.002	W21079	0.0000	U * 7.0000	U 3.0000	B W 1.2000	921.0000	SN 5.2000 UJ	33600.0000	1440.0000
2543 SU000000000.001	W12026	0.0000	U 5.0000	U 5.0000	B WN 5.3000	1220.0000	0.4000	B 949.0000	122.0000
2543 SU000000000.002	W21080	0.0000	U * 7.0000	U 3.0000	B 2.5000	630.0000	N 3.2000 UJ	B 687.0000	49.1000

STF Number	Lab Number	Mercury (ug/L)	Nickel (ug/L)	Potassium (ug/L)	Selenium (ug/L)	Silver (ug/L)	Sodium (ug/L)	Thallium (ug/L)	Vanadium (ug/L)
2500 SU0000000000.001	W11543	U 0.2000	U 15.0000	B 2090.0000	U N 3.0000	U 4.0000	56200.0000	U W 1.0000	U 6.0000
2500 SU0000000000.002	W20856	U 0.2000	U 9.0000	B 2770.0000	U WN 1.0000 UJ	U 6.0000 UJ	9940.0000	U 2.0000	U 8.0000
2540 SU0000000000.001	W11558	U 0.2000	U 15.0000	B 2500.0000	B 3.5000 UJ	U 4.0000	6920.0000	U 1.0000	U 6.0000
2540 SU0000000000.002	W21077	U 0.2000	B 13.4000 UJ	B 1640.0000 UJ	U W 2.0000	U 6.0000	B 4670.0000	U W 2.0000	B 9.1000
2541 SU0000000000.001	W11559	U 0.2000	U 15.0000	5840.0000	U W 3.0000	U 4.0000	15300.0000	U 1.0000	U 6.0000
2541 SU0000000000.002	W21078	U 0.2000	B 9.7000 UJ	B 3380.0000	U 2.0000	U 6.0000	7360.0000	U 2.0000	B 8.9000
2542 SU0000000000.001	W12025	U 0.2000	U 15.0000	B 3240.0000	U N 30.0000 UJ	U 4.0000	15400.0000	U 1.0000	U 6.0000
2542 SU0000000000.002	W21079	U 0.2000	B 8.6000 UJ	B 2920.0000	U W 2.0000	U 6.0000	12300.0000	U W 2.0000	B 7.8000
2543 SU0000000000.001	W12026	U 0.2000	B 16.7000 UJ	B 2120.0000	U N 3.0000 UJ	U 4.0000	B 2760.0000 UJ	U 1.0000	U 6.0000
2543 SU0000000000.002	W21080	U 0.2000	U 8.0000	B 1300.0000 UJ	U 2.0000	U 6.0000	B 1600.0000	U 2.0000	B 4.8000

STF Number	Lab Number		Zinc (ug/L)		Boron (ug/L)	Hardness SM 2340B (mg/L)
2538 SU000000000.001	W11543		43.6000	U	19.0000	38.0200
2538 SU000000000.002	W20856		28.4000	B	36.1000	99.9200
2540 SU000000000.001	W11558	B	12.5000 UJ	U	19.0000	230.0200
2540 SU000000000.002	W21077	B	11.1000 UJ	U	15.5000	222.9000
2541 SU000000000.001	W11559		75.7000	B	66.3000	79.4100
2541 SU000000000.002	W21078		96.4000	U	29.2000	61.6600
2542 SU000000000.001	W12025	B	8.2000 UJ	B	38.6000	295.1500
2542 SU000000000.002	W21079		30.1000	U	24.8000	247.7300
2543 SU000000000.001	W12026		35.1000	B	36.1000	18.6400
2543 SU000000000.002	W21080	B	19.5000	U	8.7000	13.4200

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

QA/QC DUPLICATE
SURFACE WATER ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for METALS for file STFSUMD.DBF 05/13/92 23:00:00 14,861 bytes

STF Number	Lab Number		Aluminum (ug/L)		Antimony (ug/L)		Arsenic (ug/L)		Barium (ug/L)		Beryllium (ug/L)		Cadmium (ug/L)		Calcium (ug/L)	Chromium +3 (ug/L)
3188 SU202000000.074	W21789		1080.0000	U	11.0000	U W	1.0000	B	15.7000	U	1.0000	U	1.0000		6810.0000	0.0000
3189 SU202000000.027	W21045		1220.0000	U	11.0000	U W	1.0000	B	17.4000	U	1.0000	U	1.0000		7230.0000	0.0000
3196 SU202000000.002	W21081	H	1260.0000 J4	U	11.0000	U W	2.0000	B	129.0000	U	1.0000	U	1.0000		13100.0000	0.0000
3197 SU202000000.002	W20874		568.0000	U	33.0000	B W	1.1000	B	14.4000	U	1.0000	U	3.0000		6150.0000	0.0000
3198 SU202000000.001	W12028		641.0000	U	20.0000	B W	7.1000	B	8.5000 UJ	U	1.0000	U	2.0000		15400.0000	0.0000
3199 SU512000000.001	W11792		337.0000 J4	B	21.2000 UJ	U W	2.0000	B	19.9000	U	1.0000	U	2.0000		11200.0000	0.0000
3200 SU512000000.000	1217	B	115.0000 UJ	U	43.3000	U W	3.3000	B	10.5000	U	1.1000	U	1.1000		6350.0000	0.0000

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Analytical data for METALS for file STFSUMD.DBF 05/13/92 23:00:00 14,861 bytes

STF Number	Lab Number	Chromium +6 (ug/L)	Total Chromium (ug/L)	Cobalt (ug/L)	Copper (ug/L)	Iron (ug/L)	Lead (ug/L)	Magnesium (ug/L)	Manganese (ug/L)
3188 SU202000000.074	WZ1789	0.0000	U 7.0000	U 3.0000	B 5.2000	1020.0000	WN 10.0000 J4	B 1920.0000	21.7000
3189 SU202000000.027	WZ1845	0.0000	* 289.0000 J4	U 3.0000	B 5.0000	E 2270.0000 J4	WN 4.3000 UJ	B 2190.0000	46.8000
3196 SU202000000.002	WZ1881	0.0000	U * 7.0000	B 5.7000 UJ	B 9.2000	1170.0000	SN 16.4000 J4	5630.0000	44.5000
3197 SU202000000.002	WZ0874	0.0000	U 5.0000	U 5.0000	B N 5.6000 UJ	627.0000	SN 47.0000 J4	B 2330.0000	B 11.5000 UJ
3198 SU202000000.001	WZ1028	0.0000	U 5.0000	U 5.0000	W 7.7000	1340.0000	SN* 32.2000	B 4310.0000	76.5000
3199 SU512000000.001	WZ1792	0.0000	U 5.0000	U 5.0000	SN 12.1000 J4	436.0000	WN 7.4000 J4	B 1290.0000	46.4000
3200 SU512000000.000	1217	0.0000	U 3.3000 UJ	U 6.7000	B 7.0000 UJ	242.0000 UJ	B W 2.5000 UJ	B 1750.0000	B 15.1000 UJ

	STF Number	Lab Number	Mercury (ug/L)		Nickel (ug/L)		Potassium (ug/L)		Selenium (ug/L)		Silver (ug/L)		Sodium (ug/L)	Thallium (ug/L)		Vanadium (ug/L)	
3188	SU202000000.074	WZ1789	U	0.2000	U	8.0000	B	1640.0000	U	1.0000	U	6.0000	9940.0000	U	1.0000	U	4.0000
3189	SU202000000.027	WZ1045	U	0.2000		136.0000	B	1810.0000	U W	1.0000	U	6.0000	16700.0000	U	2.0000	U	4.0000
3196	SU202000000.002	WZ1081	U	0.2000	B	8.6000 UJ	B	3420.0000	U	2.0000	U	6.0000	38800.0000	U	2.0000	B	7.1000
3197	SU202000000.002	WZ0874	U	0.2000	U	9.0000	B	1720.0000	U WN	1.0000 UJ	U	6.0000 UJ	13700.0000	U	2.0000	U	8.0000
3198	SU202000000.001	WZ1028	U	0.2000	U	15.0000		5160.0000	U	3.0000	U	4.0000	114000.0000	U	1.0000	B	11.6000
3199	SU512000000.001	WZ1792	U	0.2000	U	15.0000	B	2670.0000	U W	3.0000	U	4.0000	19200.0000	U W	1.0000	U	6.0000
3200	SU512000000.000	1217	B	0.1000 UJ	U	6.7000	B	1990.0000	U W	2.2000	U	6.7000	15700.0000	U W	7.8000	U	3.3000

	STF Number	Lab Number	Zinc (ug/L)		Boron (ug/L)	Hardness SM 2340B (mg/L)
3188	SU202000000.074	W21789	36.0000	U	7.0000	24.9100
3189	SU202000000.027	W21045	48.9000		22.9000 UJ	27.0700
3196	SU202000000.002	W21681	125.0000	U	29.1000	55.9000
3197	SU202000000.002	W20874	67.7000	B	33.0000	24.9500
3198	SU202000000.001	W12028	26.6000	B	58.7000	56.2000
3199	SU512000000.001	W11792	58.8000	U	19.0000	33.2800
3200	SU512000000.000	1217	28.4000 UJ		0.0000	23.0600

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

QA/QC DUPLICATE
SEDIMENT ANALYTICAL RESULTS

STF Number	Lab Number	Aluminum (mg/kg)	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Calcium (mg/kg)	Chromium +3 (mg/kg)
3196 SD202000000.002	S21058	16900.0000	B N 6.7000 J4	13.0000	92.1000	U 0.4500	2.3000 J4	3970.0000	51.3000
3197 SD202000000.002	S21059	16200.0000	B N 7.0000 J4	5.5000	101.0000	U 0.3100	U 0.3100 UJ	4250.0000	30.7000
3198 SD202000000.001	S12027	15200.0000	U 8.1000	15.2000	86.3000	B 0.4400	2.4000	* 3700.0000	28.6000 J4
3199 SD512000000.001	S11791	* 9720.0000	B N 9.8000 UJ	8.9000	B 51.4000	U 0.2900	U 0.5800	3300.0000	19.6000 UJ

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STF Number	Lab Number		Chromium +6 (mg/kg)		Total Chromium (mg/kg)		Cobalt (mg/kg)		Copper (mg/kg)		Iron (mg/kg)		Lead (mg/kg)		Magnesium (mg/kg)		Manganese (mg/kg)	
3196 SD202000000.002	S21058	U	1.0000		51.3000		B	7.1000	E	177.0000 J4		12000.0000		587.0000		3740.0000		139.0000
3197 SD202000000.002	S21059	U	1.0000		30.7000		B	8.6000	E	36.3000 J4		15100.0000		179.0000		5090.0000		227.0000
3198 SD202000000.001	S12027	U	2.0000		28.6000 J4		B	5.3000		301.0000	*	29700.0000	*	844.0000		2720.0000	N	158.0000 J4
3199 SD512000000.001	S11791	U	2.0000		* 19.6000 UJ		B	5.6000		979.0000	*	17200.0000		69.6000 J4		3860.0000	*	248.0000

STF Number	Lab Number		Mercury (mg/kg)		Nickel (mg/kg)		Potassium (mg/kg)		Selenium (mg/kg)		Silver (mg/kg)		Sodium (mg/kg)		Thallium (mg/kg)		Vanadium (mg/kg)
3196 SD202000000.002	S21058		0.5700		31.7000	B	826.0000	U N	0.4500 UJ	U	2.7000	B	431.0000	U	0.9000		41.0000
3197 SD202000000.002	S21059	U	0.1600		35.1000	B	655.0000	U N	0.3100 UJ	U	1.9000	B	224.0000	U	0.6300		39.2000
3198 SD202000000.001	S12027		0.5000		27.6000 UJ	B	401.0000	U W	1.2000	U	1.6000	B	506.0000 UJ	U	0.4000		39.5000
3199 SD512000000.001	S11791	U	0.1500		51.2000	U	283.0000	U W*	0.8700	U	1.2000	B	162.0000	U	0.2900		29.4000

STF Number	Lab Number		Zinc (mg/kg)		Boron (mg/kg)		Hardness SM 2340B (mg/kg)
3196 SD202000000.002	S21058		563.0000	U	3.1000 UJ		0.0000
3197 SD202000000.002	S21059		176.0000	U	2.2000 UJ		0.0000
3198 SD202000000.001	S12027	H*	666.0000 J4	U	7.7000		0.0000
3199 SD512000000.001	S11791		461.0000	U	5.5000		0.0000

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

QA/QC BLANK ANALYTICAL RESULTS

STF Number	Lab Number	Aluminum (ug/L)	Antimony (ug/L)	Arsenic (ug/L)	Barium (ug/L)	Beryllium (ug/L)	Cadmium (ug/L)	Calcium (ug/L)	Chromium +3 (ug/L)
2509 WW0000000000.002	W20864	U 35.0000	U 33.0000	U 1.0000	U 1.0000	U 1.0000	U 3.0000	B 59.0000	0.0000
2516 WW0000001000.000	1266	B 54.9000 UJ	U H 43.3000	U NW 3.3000	U 7.0000	U 1.1000	U 1.1000	B 192.0000	0.0000
2524 WW0000001000.001	H11790	U 33.0000	U 20.0000	U 2.0000	U 2.0000	U 1.0000	U 2.0000	U 25.0000	0.0000
2529 WW0000001000.001	H12022	U 33.0000	U 20.0000	U 2.0000	U 2.0000	U 1.0000	U 2.0000	B 39.2000	0.0000
2529 WW0000001000.002	W21075	U H 16.0000	U 11.0000	U 2.0000	U 1.0000	U 1.0000	U 1.0000	B 39.6000	0.0000
3600 WW0000002000.000	1218	B 54.9000 UJ	U 43.3000	U WR 3.3000	U 7.0000	U 1.1000	U 1.1000	B 60.3000	0.0000
3604 WW0000002000.001	H11560	U 33.0000	U 20.0000	U N* 2.0000	U 2.0000	U 1.0000	U 2.0000	B 120.0000	0.0000
3605 WW0000001000.001	W12029	U 33.0000	U 20.0000	U 2.0000	B 2.3000	U 1.0000	U 2.0000	B 29.1000	0.0000
3606 WW0000002000.002	W21082	B N 20.5000 J4	U 11.0000	U 2.0000	B 3.2000	U 1.0000	U 1.0000	B 61.0000	0.0000
3607 WW0000002000.002	W20875	U 35.0000	U 33.0000	U 1.0000	B 11.0000	U 1.0000	U 3.0000	B 48.3000	0.0000
3620 WW0000002000.073	W21494	U 16.0000	U 11.0000	U 1.0000	U 1.0000	U 1.0000	U 1.0000	U 17.0000	0.0000

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STF Number	Lab Number	Chromium +6 (ug/L)	Total Chromium (ug/L)	Cobalt (ug/L)	Copper (ug/L)	Iron (ug/L)	Lead (ug/L)	Magnesium (ug/L)	Manganese (ug/L)
2509 WW000000000.002	W20864	0.0000	U 5.0000	U 5.0000	U N 1.0000 UJ	B 15.9000	B N 1.1000 J4	U 55.0000	U 1.0000
2516 WW000001000.000	1266	0.0000	U 3.3000 UJ	U 6.7000	B 3.0000 UJ	B N 51.1000 J4	N 1.1000 UJ	U 34.4000	B 3.7000
2524 WW000001000.001	R11790	0.0000	U 5.0000	U 5.0000	U 1.0000	U 12.0000	U 1.0000	U 41.0000	U 1.0000
2529 WW000001000.001	R12022	0.0000	U 5.0000	U 5.0000	U N 1.0000	U 12.0000	U 1.0000	U 41.0000	B 1.0000
2529 WW000001000.002	W21075	0.0000	U * 7.0000	U 3.0000	U 1.0000	B 17.6000	U N 1.0000	U 19.0000	U 2.0000
3600 WW000002000.000	1218	0.0000	B 3.4000 UJ	U 6.7000	B 7.0000 UJ	B 72.6000 J4	B 1.1000 UJ	U 34.4000	U 1.1000
3604 WW000002000.001	R11560	0.0000	U 5.0000	U 5.0000	U W 1.0000	B 25.0000	B 1.2000	U 41.0000	U 1.0000
3605 WW000001000.001	W12029	0.0000	U 5.0000	U 5.0000	U W 1.0000	U 12.0000	B N* 1.1000	U 41.0000	U 1.0000
3606 WW000002000.002	W21082	0.0000	U * 7.0000	U 3.0000	U 1.0000	B 35.2000	B N 1.0000 J4	B 20.2000	U 2.0000
3607 WW000002000.002	W20875	0.0000	U 5.0000	U 5.0000	B N 1.2000 J4	B 18.6000	U N 1.0000	U 55.0000	U 1.0000
3620 WW000002000.073	W21494	0.0000	U 7.0000	U 3.0000	U 1.0000	U 6.0000	U N 1.0000 UJ	U 19.0000	U 2.0000

STF Number	Lab Number	Mercury (ug/L)	Nickel (ug/L)	Potassium (ug/L)	Selenium (ug/L)	Silver (ug/L)	Sodium (ug/L)	Thallium (ug/L)	Vanadium (ug/L)
2509 WW0000000000.002	W20864	U 0.2000	U 9.0000	U 864.0000	U N 1.0000 UJ	U 6.0000	B 531.0000	U 2.0000	U 8.0000
2516 WW0000001000.000	1266	U 0.1000	U 6.7000	U 319.0000	U 2.2000	U 6.7000	B 218.0000	U 7.8000	U 3.3000
2524 WW0000001000.001	R11790	U 0.2000	U 15.0000	U 973.0000	U 3.0000	U 4.0000	U 36.0000	U 1.0000	U 6.0000
2529 WW0000001000.001	R12022	U 0.2000	B 15.4000	U 973.0000	U N 3.0000	U 4.0000	B 61.7000	U 1.0000	U 6.0000
2529 WW0000001000.002	W21075	U 0.2000	U 8.0000	U 452.0000	U 2.0000	U 6.0000	B 182.0000	U 2.0000	U 4.0000
3600 WW0000002000.000	1218	B 0.1000	U 6.7000	U 319.0000	U W 2.2000	U 6.7000	U 138.0000	U W 7.8000	U 3.3000
3604 WW0000002000.001	R11560	U 0.2000	U 15.0000	U 973.0000	U 3.0000	U 4.0000	U 36.0000	U W 1.0000	U 6.0000
3605 WW0000001000.001	W12029	U 0.2000	U 15.0000	U 973.0000	U 3.0000	U 4.0000	B 85.7000	U 1.0000	U 6.0000
3606 WW0000002000.002	W21082	U 0.2000	U 8.0000	U 452.0000	U 2.0000	U 6.0000	B 198.0000	U 2.0000	B 5.0000
3607 WW0000002000.002	W20875	U 0.2000	U 9.0000	U 864.0000	U N 1.0000 UJ	U 6.0000	B 46.2000	U W 2.0000	U 8.0000
3628 WW0000002000.073	W21494	0.2000	U 8.0000	U 452.0000	U N 1.0000 UJ	U 6.0000	U 51.0000	U 2.0000	U 4.0000

STF Number	Lab Number	Zinc (ug/L)			Boron (ug/L)		Hardness SM 2340B (mg/L)		
2509 WW0000000000.002	W20864	B N	6.1000		B	25.6000	U	0.3700	
2516 WW0000001000.000	1266	B	18.8000	UJ		0.0000	U	0.6200	
2524 WW0000001000.001	R11790	B	2.9000			19.0000	U	0.2300	
2529 WW0000001000.001	R12022	B	2.9000		U	19.0000	U	0.2700	
2529 WW0000001000.002	W21075	B	9.4000	UJ	U	7.5000	U	0.1800	
3600 WW0000002000.000	1218	B	5.4000	UJ		0.0000	U	0.2900	
3604 WW0000002000.001	R11560	B	4.8000		U	19.0000	U	0.4700	
3605 WW0000001000.001	W12029	U	2.0000		U	19.0000	U	0.2400	
3606 WW0000002000.002	W21082	B	8.8000		U	14.6000		0.2400	
3607 WW0000002000.002	W20875	B	8.3000		B	22.5000	U	0.3500	
3620 WW0000002000.073	W21494	B	5.6000	UJ	U	7.0000	U	0.1200	

TOTAL ORGANIC MATTER ANALYTICAL RESULTS FOR SEDIMENT SAMPLES COLLECTED DURING WET SEASON[a]

Location Number	Reach (see Figure 3-1)	Total Organic Matter (%)
2501	A	0.44
2502	A	23.3
2503	A	10.1
2527	A	21.7
2528	A	11.4
2529	A	19.3
2530	A	19.3
2504	B	6.7
2505	B	NS[b]
2506	B	6.5
2507	B	4.5
2518	B	7.5
2519	B	7.1
2520	B	7.7
2521	B	18.2
2522	B	7.2
2523	B	7.6
2524	B	7.5
2525	B	0.70
2526	B	19.3
2508	C	22.8
2509	C	2.1/10.4[c]
2510	C	11.0
2511	C	3.0/16.0[c]
2512	C	21.8
2513	D	3.1
2514	D	8.0
2515	D	10.4
2516	NA[d]	2.27/0.44[c]

(a) Only sediment samples collected during the wet season (January 1992) event were analyzed for total organic matter (TOM) using USDA Handbook No. 60, Method 24.
(b) NS = No sample collected.
(c) Two samples were collected at one location.
(d) NA = Not applicable (Location 2516 is outside of surface water channel).

DATA VALIDATION
DATE RECEIVED _____
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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

TRANSITIONAL SEASON (APRIL 1991)
SURFACE WATER ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for FECAL BACTERIA for file STFSUFS1.DBF 12/17/91 23:00:00 2,554 bytes

STF Number	Lab Number	Fecal Coliform (MPN/100mL)		Fecal Streptococci (MPN/100mL)	
2506 SU31000000.000	89-10701		3.0000		5.0000
2506 SU32000000.000	89-10702		3.0000		3.0000
2509 SU31000000.000	89-10681	U	1.0000		1.0000
2509 SU32000000.000	89-10680	U	1.0000	U	1.0000
2511 SU32000000.000	89-10622	U	1.0000		1.0000
2511 SU51000000.000	89-10620		2.0000		2.0000
2516 SU31000000.000	89-10704		330.0000		22.0000
2516 SU32000000.000	89-10703		56.0000	U	1.0000

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Analytical data for FECAL BACTERIA for file STFSUFS1.DBF 12/17/91 23:00:00 2,554 bytes

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

DRY SEASON (AUGUST 1991)
SURFACE WATER ANALYTICAL RESULTS

STF Number	Lab Number	Fecal Coliform (MPN/100mL)	Fecal Streptococci (MPN/100mL)
2501 SU0000000000.001	89-15383	60000.0000	2100.0000
2502 SU0000000000.001	89-15384	12000.0000	13000.0000
2503 SU0000000000.001	89-15402	17000.0000	5200.0000
2508 SU3100000000.001	89-15148	3900.0000	390.0000
2510 SU5110000000.001	89-15149	2800.0000	180.0000
2527 SU0000000000.001	89-15254	270000.0000	240000.0000
2528 SU0000000000.001	89-15255	90000.0000	120000.0000
2529 SU0000000000.001	89-15256	6000.0000	6200.0000
2530 SU2810000000.001	89-15258	100000.0000	2400.0000

DATA VALIDATION
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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

WET SEASON (JANUARY 1992)
SURFACE WATER ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for FECAL BACTERIA for file STFSUFS3.DBF 03/27/92 23:00:00 6,058 bytes

STF	Number	Lab Number	Fecal Coliform (MPN/100mL)	Fecal Streptococci (MPN/100mL)
2501	SU0000000000.002	89-21730	16000.0000	37000.0000
2502	SU3100000000.002	89-21998	13.0000	3500.0000
2503	SU0000000000.002	89-21999	22000.0000	4500.0000
2505	SU0000000000.002	89-21686	U 2.0000	U 2.0000
2506	SU3100000000.002	89-21685	2.0000	2.0000
2506	SU3200000000.002	89-21684	4.0000	2.0000
2507	SU2010000000.002	89-21683	8.0000	2.0000
2508	SU0000000000.002	89-21681	16.0000	16.0000
2509	SU3100000000.002	89-21420	16.0000	36.0000
2509	SU3200000000.002	89-21421	24.0000	26.0000
2510	SU0000000000.002	89-21418	26.0000	42.0000
2511	SU3100000000.002	89-21417	110.0000	450.0000
2511	SU3200000000.002	89-21416	58.0000	465.0000
2512	SU0000000000.002	89-21415	30000.0000	240.0000
2516	SU3200000000.002	89-21997	10.0000	9000.0000
2516	SU5110000000.002	89-21996	30.0000	20000.0000
2518	SU0000000000.002	89-21736	4.0000	2.0000
2519	SU0000000000.002	89-21735	16.0000	24.0000
2520	SU0000000000.002	89-21734	320.0000	480.0000
2521	SU0000000000.002	89-21733	1100.0000	940.0000
2527	SU0000000000.002	89-21732	1800.0000	5300.0000
2528	SU2010000000.002	89-21727	5000.0000	5900.0000
2529	SU0000000000.002	89-21729	2900.0000	7000.0000
2530	SU0000000000.002	89-21737	2200.0000	2400.0000

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Analytical data for FECAL BACTERIA for file STFSUFS3.DBF 03/27/92 23:00:00 6,058 bytes

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

STORM EVENTS
SURFACE WATER ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for FECAL BACTERIA for file STFSTFS.DBF 05/13/92 23:00:00 5,401 bytes

04/30/92

STF	Number	Lab Number	Fecal Coliform (MPN/100mL)	Fecal Streptococci (MPN/100mL)
2500	SU000000000.020	89-10068	480.0000	2400.0000
2500	SU000000000.021	89-12070	1700.0000	2100.0000
2500	SU000000000.022	89-11402	2000.0000	4500.0000
2500	SU000000000.023	89-15088	10000.0000	45000.0000
2500	SU000000000.024	89-18357	4400.0000	31000.0000
2500	SU000000000.026	89-20550	1700.0000	5800.0000
2500	SU000000000.027	89-21946	1600.0000	680.0000
2500	SU000000000.028	89-22675	3900.0000	6300.0000
2500	SU000000000.029	89-22762	23000.0000	23000.0000
2500	SU000000000.030	89-23912	2600.0000	2500.0000
2501	SU000000000.020	89-10069	4700.0000	6800.0000
2501	SU000000000.021	89-12069	10000.0000	19000.0000
2501	SU000000000.022	89-11401	7000.0000	6600.0000
2501	SU000000000.023	89-15089	80000.0000	39000.0000
2501	SU000000000.024	89-18358	20000.0000	51000.0000
2501	SU000000000.026	89-20551	42000.0000	51000.0000
2501	SU000000000.027	89-21945	18000.0000	8800.0000
2501	SU000000000.028	89-22674	190000.0000	82000.0000
2501	SU000000000.029	89-22763	80000.0000	35000.0000
2501	SU000000000.030	89-23913	180000.0000	50000.0000
2515	SU201000000.027	89-22806	1500.0000	2300.0000

DATA VALIDATION
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Analytical data for FECAL BACTERIA for file STFSTFS.DBF 05/13/92 23:00:00 5,401 bytes

04/30/92 Page 1

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

BIWEEKLY/MONTHLY
SURFACE WATER ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for FECAL BACTERIA for file STFBWFS.DBF 05/13/92 23:00:00 6,058 bytes

STF Number	Lab Number	Fecal Coliform (MPN/100mL)	Fecal Streptococci (MPN/100mL)
2500 SU0000000000.051	89-10220	1400.0000	1500.0000
2500 SU0000000000.053	89-11110	30.0000	6.0000
2500 SU0000000000.055	89-12163	4.0000	550.0000
2500 SU0000000000.057	89-13345	12.0000	56.0000
2500 SU0000000000.061	89-15744	130000.0000	920000.0000
2500 SU0000000000.065	89-18296	200.0000	43000.0000
2500 SU0000000000.067	89-19195	9000.0000	46.0000
2500 SU0000000000.069	89-20297	900.0000	8300.0000
2500 SU0000000000.071	89-21667	120.0000	80.0000
2500 SU0000000000.073	89-22430	20.0000	2700.0000
2500 SU0000000000.075	89-23288	60.0000	3500.0000
2501 SU0000000000.051	89-10219	1700.0000	4100.0000
2501 SU0000000000.053	89-11109	3300.0000	240.0000
2501 SU0000000000.055	89-12164	200.0000	20.0000
2501 SU0000000000.057	89-13344	43000.0000	58000.0000
2501 SU0000000000.065	89-18297	24000.0000	60000.0000
2501 SU0000000000.067	89-19196	11000.0000	4400.0000
2501 SU0000000000.069	89-20298	44000.0000	73000.0000
2501 SU0000000000.071	89-21666	42000.0000	280.0000
2501 SU0000000000.073	89-22429	1400.0000	720.0000
2501 SU0000000000.075	89-23287	1900.0000	800.0000
2515 SU0000000000.051	89-10218	160.0000	160.0000
2515 SU0000000000.073	89-22228	52.0000	44.0000
2515 SU0000000000.074	89-22960	600.0000	520.0000

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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

DRY SEASON (AUGUST 1991) AND WET SEASON (JANUARY 1992)
BACKGROUND SURFACE WATER ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for FECAL BACTERIA for file STFSUFSB.DBF 04/17/92 23:00:00 2,992 bytes

STF Number	Lab Number	Fecal Coliform (MPN/100mL)	Fecal Streptococci (MPN/100mL)
2500 SU0000000000.001	89-15821	36000.0000	13000.0000
2500 SU0000000000.002	89-21731	3000.0000	8200.0000
2540 SU0000000000.001	89-15822	60.0000	18.0000
2540 SU0000000000.002	89-21820	U 2.0000	U 2.0000
2541 SU0000000000.001	89-15823	33000.0000	15000.0000
2541 SU0000000000.002	89-21821	3000.0000	31000.0000
2542 SU0000000000.001	89-15381	400.0000	8100.0000
2542 SU0000000000.002	89-21822	88.0000	92.0000
2543 SU0000000000.001	89-15382	140.0000	50.0000
2543 SU0000000000.002	89-21823	16.0000	12.0000

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Analytical data for FECAL BACTERIA for file STFSUFSB.DBF 04/17/92 23:00:00 2,992 bytes
04/08/92 Page 1

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

QA/QC DUPLICATE
SURFACE WATER ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for FECAL BACTERIA for file STFSUFSD.DBF 05/13/92 23:00:00 2,335 bytes

	STF Number	Lab Number	Fecal Coliform (MPN/100mL)		Fecal Streptococci (MPN/100mL)	
3188	SU202000000.074	89-22961		700.0000		340.0000
3189	SU202000000.027	89-22007		1400.0000		2900.0000
3196	SU202000000.002	89-21726		2900.0000		7500.0000
3197	SU202000000.002	89-21602		8.0000		10.0000
3198	SU202000000.001	89-15259		180000.0000		3100.0000
3199	SU512000000.001	89-15158		2600.0000		144.0000
3200	SU512000000.000	89-10621	U	1.0000	U	1.0000

DATA VALIDATION
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Analytical data for FECAL BACTERIA for file STFSUFSD.DBF 05/13/92 23:00:00 2,335 bytes

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

QA/QC BLANK ANALYTICAL RESULTS

SOUTH TACOMA FIELD

Analytical data for FECAL BACTERIA for file STFWWWFS.DBF 05/13/92 23:00:00 2,773 bytes

STF Number	Lab Number	Fecal Coliform (MPN/100mL)		Fecal Streptococci (MPN/100mL)	
2509 WW0000001000.002	89-21419	U	1.0000	U	1.0000
2516 WW0000001000.000	89-10705	U	1.0000	U	1.0000
2529 WW0000001000.001	89-15257	U	1.0000	U	1.0000
2529 WW0000001000.002	89-21728	U	2.0000	U	2.0000
3600 WW0000002000.000	89-10679	U	1.0000	U	1.0000
3605 WW0000002000.001	89-15385	U	1.0000	U	1.0000
3606 WW0000002000.002	89-21824	U	1.0000	U	1.0000
3607 WW0000002000.002	89-21607	U	2.0000	U	2.0000
3620 WW0000002000.073	89-22428	U	2.0000	U	2.0000

DATA VALIDATION
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Analytical data for FECAL BACTERIA for file STFWWWFS.DBF 05/13/92 23:00:00 2,773 bytes

GRAIN SIZE ANALYTICAL RESULTS FOR SEDIMENT SAMPLES

Location Number	Dry Season Event (August 1991)				Wet Season Event (January 1992)			
	% Sand	% Silt	% Clay	% Fine[a]	% Sand	% Silt	% Clay	% Fine[a]
2501	96	3	1	4	96	2	2	4
2502	50	48	2	50	64	36	0	36
2503	66	33	1	34	70	30	0	30
2504	77	20	3	23	73	24	3	27
2505	50	40	10	50	NS[b]	NS	NS	NS
2506[c]	56.5	39.5	4	43.5	61	35	4	39
2507	73	26	1	27	90	8	2	10
2508	70	27	3	30	70	28	2	30
2509[d]	69	27	4	31	72	27	1	28
2510	86	10	4	14	64	34	2	36
2511[d]	38.5	54	7.5	61.5	68	31	1	32
2512	43	50	7	57	66	34	0	34
2513	86	12	2	14	90	10	0	10
2514	78	18	4	22	74	26	0	26
2515	86	10	4	14	78	22	0	22
2516[d]	91	7.5	1.5	9	90	8	2	10
2518	77	20	3	23	70	30	0	30
2519	60	36	4	40	70	30	0	30
2520	60	33	7	40	72	28	0	28
2521	55	35	10	45	72	28	0	28
2522	77	20	3	23	82	18	0	18
2423	76	20	4	24	82	18	0	18
2524	60	33	7	40	78	22	0	22
2525	48	51	1	52	92	6	2	8
2526	44	55	1	56	72	28	0	28
2527	66	31	3	34	70	30	0	30
2528	35	64	1	65	48	52	0	52
2529	50	48	2	50	58	42	0	42
2530	82	16	2	18	80	20	0	20

(a) % Fine = % Clay + % Silt.
(b) NS = No sample collected.
(c) Average values for two samples collected at location 2506 during dry season only.
(d) Average values for two samples collected during dry and wet seasons.

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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

TRANSITIONAL SEASON (APRIL 1991)
FIELD DATA

SOUTH TACOMA FIELD

SURFACE WATER SAMPLING FIELD DATA for file STFSUF1.DBF 04/17/92 23:00:00 1,618 bytes

Location Number	Water Moving Y/N	Collection Date	Collection Time	Field Measurements/Visual Inspection pH units	Temperature ° Celsius	Turbidity Y/N	Color Y/N	Odor Y/N	Comments Y/N
2506 SU310000000.000	N	04/17/91	0800	6.7	10.2	N	N	N	
2506 SU320000000.000	N	04/17/91	0900	7.2	10.2	N	N	Y	
2509 SU310000000.000	Y	04/16/91	1330	7.9	14.7	N	Y	N	
2509 SU320000000.000	Y	04/16/91	1300	7.9	14.5	N	Y	N	
2511 SU320000000.000	N	04/16/91	1020	7.5	13.0	N	Y	N	
2511 SU511000000.000	N	04/16/91	0850	6.9	11.0	N	Y	N	
2516 SU310000000.000	N	04/17/91	1020	7.4	12.4	N	Y	N	
2516 SU320000000.000	N	04/17/91	1045	6.8	12.0	N	Y	N	

DATA VALIDATION
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SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

DRY SEASON (AUGUST 1991)
FIELD DATA

Location Number	Water Moving Y/N	Collection Date	Collection Time	Field Measurements/Visual Inspection: pH units	Temperature ° Celsius	Turbidity Y/N	Color Y/N	Odor Y/N	Comments Y/N
2500 SU0000000000.001	Y	08/08/91	0750	6.0	20.5	N	N	N	Y
2501 SU0000000000.001	Y	08/15/91	1120	6.8	22.0	Y	N	N	
2502 SU0000000000.001	Y	08/15/91	1220	6.4	27.5	Y	N	Y	
2503 SU0000000000.001	Y	08/16/91	0900	6.3	17.0	N	N	Y	
2508 SU3100000000.001	N	08/13/91	0900	6.6	17.2	N	Y	Y	Y
2510 SU5110000000.001	N	08/13/91	1020	6.9	17.8	N	Y	Y	Y
2527 SU0000000000.001	N	08/14/91	0820	6.5	18.3	Y	N	Y	
2528 SU0000000000.001	N	08/14/91	0930	6.6	17.6	Y	N	Y	
2529 SU0000000000.001	N	08/14/91	1015	6.1	17.8	Y	N	Y	Y
2530 SU2010000000.001	N	08/14/91	1110	9.5	23.3	Y	Y	N	Y
2540 SU0000000000.001	N	08/08/91	0905	6.2	24.1	N	Y	N	
2541 SU0000000000.001	N	08/08/91	1030	6.7	17.0	N	Y	N	
2542 SU0000000000.001	Y	08/15/91	0830	6.5	17.1	N	N	N	
2543 SU0000000000.001	N	08/15/91	0900	6.2	18.3	Y	N	N	

DATA VALIDATION
DATE RECEIVED
VALIDATED BY DATE
KEYED BY DATE
CHECKED BY DATE 4/8/92

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

WET SEASON (JANUARY 1992)
FIELD DATA

Location Number	Water Moving Y/N	Collection Date	Collection Time	Field Measurements/Visual Inspection pH units	Temperature ° Celsius	Turbidity Y/N	Color Y/N	Odor Y/N	Comments Y/N
2500 SU0000000000.002	Y	01/20/92	1200	6.7	5.0	N	N	N	
2501 SU0000000000.002	Y	01/21/92	1100	6.2	13.8	N	N	N	
2502 SU3100000000.002	Y	01/27/92	1000	6.8	8.0	Y	Y	N	Y
2503 SU0000000000.002	Y	01/27/92	1045	6.5	9.0	Y	Y	N	
2505 SU0000000000.002	Y	01/15/92	1210	6.8	7.0	Y	N	N	
2506 SU3100000000.002	Y	01/15/92	1120	6.4	7.0	Y	N	N	
2506 SU3200000000.002	Y	01/15/92	1100	6.4	7.0	Y	N	N	
2507 SU2010000000.002	Y	01/15/92	0945	6.3	6.0	N	N	N	Y
2508 SU0000000000.002	N	01/15/92	0845	5.7	6.5	N	N	N	
2509 SU3100000000.002	N	01/14/92	1010	6.8	6.0	N	N	N	
2509 SU3200000000.002	N	01/14/92	1100	7.0	6.0	N	N	N	
2510 SU0000000000.002	N	01/14/92	1140	6.8	7.0	N	N	N	
2511 SU3100000000.002	N	01/14/92	0935	6.9	5.5	N	N	N	
2511 SU3200000000.002	N	01/14/92	0925	6.8	5.5	N	N	N	
2512 SU0000000000.002	N	01/14/92	0900	6.0	6.0	N	N	N	
2516 SU3200000000.002	N	01/27/92	0915	6.7	6.7	Y	N	N	
2516 SU5110000000.002	N	01/27/92	0845	6.9	7.0	Y	N	N	Y
2518 SU0000000000.002	N	01/20/92	0930	6.5	2.0	N	N	N	
2519 SU0000000000.002	N	01/20/92	1000	6.6	2.0	Y	N	N	
2520 SU0000000000.002	N	01/20/92	1030	6.6	3.0	Y	N	N	
2521 SU0000000000.002	N	01/20/92	1045	6.5	2.0	Y	N	N	
2527 SU0000000000.002	N	01/20/92	1115	6.5	2.0	Y	N	N	Y
2528 SU2010000000.002	N	01/21/92	0915	6.1	13.5	Y	N	N	Y
2529 SU0000000000.002	N	01/21/92	1030	6.0	13.7	N	N	N	
2530 SU0000000000.002	N	01/21/92	1200	6.2	13.6	Y	N	N	
2540 SU0000000000.002	N	01/22/92	0915	6.7	2.4	N	Y	N	
2541 SU0000000000.002	N	01/22/92	1000	6.9	4.5	Y	Y	N	
2542 SU0000000000.002	N	01/22/92	1010	7.1	3.4	Y	N	N	
2543 SU0000000000.002	N	01/22/92	1030	7.2	2.3	N	Y	N	

DATA VALIDATION
DATE RECEIVED _____
VALIDATED BY _____ DATE _____
KEYED BY _____ DATE _____
CHECKED BY JRM DATE 4/9/92

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

STORM EVENTS FIELD DATA

SOUTH TACOMA FIELD

SURFACE WATER SAMPLING FIELD DATA for file STFSTF.DBF 04/17/92 23:00:00 3,388 bytes

Location Number	Water Moving Y/N	Collection Date	Collection Time	Field Measurements/Visual Inspection: pH units	Temperature ° Celsius	Turbidity Y/N	Color Y/N	Odor Y/N	Comments Y/N
2500 SU0000000000.020	Y	04/02/91	1100	5.0	0.0	Y	N	N	Y
2500 SU0000000000.021	Y	05/24/91	1005	6.3	12.4	Y	N	N	
2500 SU0000000000.022	Y	07/24/91	1510	5.8	20.5	Y	N	N	
2500 SU0000000000.023	Y	08/09/91	0915	6.1	19.5	Y	N	N	
2500 SU0000000000.024	Y	10/22/91	1155	6.2	11.2	Y	Y	N	
2500 SU0000000000.025	Y	11/11/91	0940	6.0	11.9	N	N	N	
2500 SU0000000000.026	Y	12/10/91	0945	6.2	5.5	Y	Y	N	
2500 SU0000000000.027	Y	01/23/92	0950	6.4	9.5	N	N	N	
2500 SU0000000000.028	Y	02/13/92	1040	6.3	13.5	N	N	N	N
2500 SU0000000000.029	Y	02/18/92	0930	4.7	6.5	Y	Y	N	
2500 SU0000000000.030	Y	03/17/92	1140	5.6	11.0	Y	Y	N	
2501 SU0000000000.020	Y	04/02/91	1035	5.0	0.0	Y	Y	N	
2501 SU0000000000.021	Y	05/24/91	0955	6.5	12.5	Y	Y	N	
2501 SU0000000000.022	Y	07/24/91	1455	5.8	20.0	Y	N	N	
2501 SU0000000000.023	Y	08/09/91	0930	6.8	18.5	Y	N	N	
2501 SU0000000000.024	Y	10/22/91	1130	7.0	11.0	Y	N	N	
2501 SU0000000000.025	Y	11/11/91	0920	5.3	11.6	Y	Y	N	
2501 SU0000000000.026	Y	12/10/91	0930	5.3	5.0	Y	Y	N	
2501 SU0000000000.027	Y	01/23/92	0925	6.4	9.1	N	N	N	
2501 SU0000000000.028	Y	02/13/92	1010	6.4	8.0	Y	Y	N	
2501 SU0000000000.029	Y	02/18/92	0950	0.0	7.0	Y	Y	N	
2501 SU0000000000.030	Y	03/17/92	1210	7.0	10.7	Y	Y	N	
2515 SU2010000000.027	Y	01/28/92	1030	6.2	8.9	Y	N	N	Y

DATA VALIDATION
DATE RECEIVED
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CHECKED BY DATE 4/9/92

SURFACE WATER SAMPLING FIELD DATA for file STFSTF.DBF 04/17/92 23:00:00 3,388 bytes

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

BIWEEKLY/MONTHLY FIELD DATA

SOUTH TACOMA FIELD

SURFACE WATER SAMPLING FIELD DATA for file STFBWF.DBF 04/17/92 23:00:00 3,624 bytes

Location Number	Water Moving Y/N	Collection Date	Collection Time	Field Measurements/Visual Inspection: pH units	Temperature ° Celsius	Turbidity Y/N	Color Y/N	Odor Y/N	Comments Y/N
2500 SU0000000000.051	Y	04/04/91	1045	4.5	10.1	Y	N	N	
2500 SU0000000000.053	Y	04/30/91	1410	7.3	13.5	N	N	N	
2500 SU0000000000.055	Y	05/29/91	0915	6.0	14.2	N	N	N	
2500 SU0000000000.057	Y	06/25/91	1445	6.0	15.0	Y	N	N	
2500 SU0000000000.061	Y	08/22/91	1200	6.2	23.4	Y	Y	N	
2500 SU0000000000.065	Y	10/16/91	1345	5.7	15.5	Y	N	N	
2500 SU0000000000.067	Y	11/14/91	1430	5.7	14.0	N	N	N	
2500 SU0000000000.069	Y	12/12/91	1010	5.6	10.1	N	N	N	
2500 SU0000000000.071	Y	01/17/92	1245	5.6	10.1	N	N	N	
2500 SU0000000000.073	Y	02/06/92	1430	5.0	0.0	Y	N	N	
2500 SU0000000000.075	Y	03/02/92	1415	5.7	12.8	N	N	N	
2501 SU0000000000.051	Y	04/04/91	1035	7.4	9.8	Y	Y	N	Y
2501 SU0000000000.053	Y	04/30/91	1400	6.9	12.8	N	N	N	
2501 SU0000000000.055	Y	05/29/91	0850	5.6	12.7	N	N	N	
2501 SU0000000000.057	Y	06/25/91	1430	5.9	13.6	Y	Y	N	
2501 SU0000000000.065	Y	10/16/91	1405	5.9	12.0	Y	Y	N	
2501 SU0000000000.067	Y	11/14/91	1455	6.3	12.0	Y	Y	Y	
2501 SU0000000000.069	Y	12/12/91	0935	5.4	8.4	Y	Y	N	
2501 SU0000000000.071	Y	01/17/92	1230	6.5	11.9	Y	N	N	
2501 SU0000000000.073	Y	02/06/92	1500	4.8	0.0	Y	N	N	
2501 SU0000000000.075	Y	03/02/92	1430	7.0	10.5	Y	Y	N	
2515 SU0000000000.051	Y	04/04/91	0910	6.2	9.0	Y	Y	N	
2515 SU0000000000.068	Y	11/27/91	0900	6.5	8.0	Y	Y	N	Y
2515 SU0000000000.073	Y	02/03/92	1235	7.2	0.0	Y	N	N	
2515 SU2010000000.074	Y	02/19/92	1415	5.6	0.0	Y	N	N	Y

DATA VALIDATION
DATE RECEIVED _____
VALIDATED BY _____ DATE _____
KEYED BY _____ DATE _____
CHECKED BY JBM DATE 4/8/92

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

TRANSITIONAL SEASON (APRIL 1991)
DATA VALIDATION REPORT

DATA VALIDATION REPORT

South Tacoma Field
Surface Water and Sediments
April, 1991

Prepared for:

Kennedy/Jenks Consultants
530 South 336th Street
Federal Way, Wa. 98003

Prepared by:

EcoChem, Inc.
911 Western Avenue
Suite 201A
Seattle, WA 98104

Contract: 2304 - 2

June 26, 1991
FINAL

South Tacoma Field
Surface Water and Sediments
April, 1991

CONTRACT LABORATORIES:

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Volatile Organics, Cyanide:
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TCL Metals, Chromium (VI), Low-Level Copper:
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San Francisco, CA 94107

Fecal Coliform and Fecal Streptococcus
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DATA VALIDATION
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INTRODUCTION

The submitted data packages have been reviewed by EcoChem, Inc. Data validation packets for the organics and inorganics analyses, which detail items reviewed, are on file at EcoChem. The quality assurance evaluations performed and the resulting data qualification recommendations are summarized in the following sections:

- Volatile Organic Analyses
- Semivolatile Organic Analyses
- Pesticide/PCB Analyses
- PAH Analyses
- Total Metals
- Cyanide, Chromium(VI), Low Level Copper Analyses
- Fecal Coliform and Fecal Streptococcus

Recommended data qualifiers are based on the EPA Contract Laboratory Program (CLP) Data Validation Functional Guidelines (U.S. EPA, 1988b, c, d). These guidelines require that the data reviewer use professional judgment to designate data qualifiers, but do not replace those assigned by the laboratory. Data may be qualified even though the laboratory fulfilled all the requirements stated in the EPA Statement of Work (SOW) for a particular analysis (U.S. EPA, 1988a, 1990a, b). Unless specifically stated in the text, data qualifications are not due to laboratory error or deviations from the analysis protocols defined in the EPA SOW, but are based on EPA CLP data validation guidelines.

EcoChem, Inc.'s goal in assigning data validation qualifiers is to assist in proper data interpretation. If values are assigned a "J", "JB" or "UJ", data can be used for site evaluation purposes, but reasons for data qualification should be taken into consideration when interpreting sample concentrations. If values are assigned an "R", the data are to be rejected and should not be used for any site evaluation purposes. If values have no data qualifier assigned, then the data meet all data quality goals as outlined in the EPA CLP Functional Guidelines and as required by the South Tacoma Field Superfund Site Quality Assurance Project Plan, March, 1991.

Holding times, sample integrity and required analyses were determined by review of the chain-of-custody sheets. Chain-of-custody records were received for all samples. A summary of the samples reviewed is provided in Table 1.

TABLE 1. SUMMARY OF ANALYSES REVIEWED

Kennedy/Jenks Sample Numbers	VOA	SV	P/PCB	METALS	CN	PAH	TCLP	FECAL COLI/ STREP	DIOXIN/ FURAN	CrVI	Cu
2509SU310000000.000	x	x	x	x	x	x		x			x
2509SU320000000.000	x	x	x	x	x	x		x			x
2511SU320000000.000	x	x	x	x	x	x		x			x
2511SU511000000.000	x	x	x	x	x	x		x			x
3200SU512000000.000	x	x	x	x	x	x		x			x
3600WW000002000.000	x	x	x	x	x	x		x			x
2509SD320000000.000	x	x	x	x	x	x				x	
2511SD320000000.000	x	x	x	x	x	x				x	
2506SD320000000.000	x	x	x	x	x	x				x	
2516SD310000000.000	x	x	x	x	x	x				x	
2516SD320000000.000	x	x	x	x	x	x				x	
2506SU310000000.000	x	x	x	x	x	x		x			x
2506SU320000000.000	x	x	x	x	x	x		x			x
2516SU310000000.000	x	x	x	x	x	x		x			x
2516SU320000000.000	x	x	x	x	x	x		x			x
2516WW000001000.000	x	x	x	x	x	x		x			x
3650WW000003000.000	x										

KEY

VOA = Volatile Organic Compounds
SV = Semivolatile Compounds
P/PCB = Toxic Contaminant List (TCL) Pesticide Compounds and Polychlorinated Biphenyls
METALS = TCL Metals
CN = Cyanide
PAH = Polynuclear aromatic Hydrocarbons
TCLP = Toxic Characteristics Leaching Procedure
FECAL COLI./STREP Fecal Coliform and Streptococcus
DIOXIN/FURAN Polychlorinated Dioxins and Polychlorinated Dibenzofurans
CrVI = Hexavalent Chromium
Cu = Low Level Copper

REFERENCES

Kennedy/Jenks/Chilton. 1991. Quality Assurance Project Plan South Tacoma Field Superfund Site, Tacoma, Wa. March.

U.S. Environmental Protection Agency. 1988a. Contract Laboratory Program Statement of Work for Pesticides/PCBs.

U.S. Environmental Protection Agency. 1988b. Functional Guidelines for Evaluating Inorganic Analyses.

U.S. Environmental Protection Agency. 1988c. Functional Guidelines for Evaluating Organic Analyses. R-582-5-5-01.

U.S. Environmental Protection Agency. 1988d. Functional Guidelines for Evaluating Pesticide/PCB Analyses. R-582-5-5-01.

U. S. Environmental Protection Agency. 1990a. Contract Laboratory Program Statements of Work for Inorganics. ILM01.0.

U. S. Environmental Protection Agency. 1990b. Contract Laboratory Program Statements of Work for Organics. OLM01.0.

NARRATIVE

DATA VALIDATION REPORT
VOLATILE ORGANIC ANALYSES

I. **Holding Times:** ACCEPTABLE/All criteria met.

II. **GC/MS Tuning:** ACCEPTABLE/All criteria met.

III. **Calibration:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
1,1,1 - trichloroethane	J4	2516SD320000000.000	%D greater than 25%
Acetone, 2-Butanone	J4	2516SD310000000.000	%D greater than 25%

Discussion

Under Functional Guidelines, the Relative Response Factor (RRF) and the Relative Standard Deviation (%RSD) for the initial calibration and the RRF and percent difference (%D) for the continuing calibration are evaluated. Criteria for %D between calibrations were not met for compounds listed above. Under Functional Guidelines only positive results are required to be assigned a J qualifier. The instrument sensitivity increased during the analysis. Therefore, positive results could be biased high, and detection limits were not affected.

IV. **Blank Analyses:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Methylene chloride	**UJ at reported value**	**2506SU310000000.000** **2509SD320000000.000** **2511SD320000000.000** **2509SU320000000.000** **2511SU320000000.000** **2511SU511000000.000** **3200SU512000000.000** **2509SU310000000.000** **2506SD320000000.000** **2516SD320000000.000** **2516SD310000000.000** **2516SU320000000.000** **2506SU320000000.000** **2516SU310000000.000**	**Sample value within 10 times laboratory blank contamination**

Discussion

Methylene chloride contamination was found in the laboratory method blanks. Because methylene chloride is a common laboratory contaminant, an action level is determined for data qualification at ten times the highest associated blank value. Under Functional Guidelines, samples with concentration less than the action level are qualified by elevating the detection limit to the reported concentration (UJ). Recommended data qualifiers are listed in the above table.

Methylene chloride concentrations in excess of 5 times the contract required quantitation limit were detected in the blank associated with sample numbers 2509SD320000000.000 and 2511SD320000000.000. The samples should have been reanalyzed according to the Organics SOW, but the laboratory noted that they did not reanalyze because holding times were exceeded by the time the contamination was noted.

V. **Field Blank Analysis:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Acetone	**UJ at reported value**	**2506SD320000000.000 2516SD310000000.000**	**Sample value within 10 times trip blank value.**
2-Butanone	**UJ at reported value**	**2516SD310000000.000**	**Sample value within than 10 times transfer blank value.**

Discussion

Three field blanks were submitted for volatile analysis with the sample set. Acetone was found in the trip blank indicating potential sample contamination. 2-Butanone was detected in the transfer blank indicating possible contamination during the sampling procedure. No contaminants were detected in the rinsate blank. Affected samples and recommended qualifiers are listed above.

VI. **Surrogate Recovery:** ACCEPTABLE/All criteria met.

VII. **Matrix Spike/Matrix Spike Duplicate Sample Analysis:** ACCEPTABLE/All criteria met.

VIII. **Field Duplicate Analysis:** ACCEPTABLE/All criteria met.

Discussion

One set of field duplicates was submitted. Methylene chloride was the only compound detected. Because methylene chloride was a laboratory contaminant, the results were qualified. Therefore, no evaluation of the relative percent difference between results was performed.

IX. **Tentatively Identified Compounds:** ACCEPTABLE/All criteria met.

X. **Internal Standards Performance:** ACCEPTABLE/All criteria met.

XI. Compound Quantitation and Reported Detection Limits: ACCEPTABLE/With the following exceptions.

Discussion

The Quality Assurance Project Plan calls for lower detection limits for vinyl chloride and methylene chloride than standard CLP CRQLs. The lower detection limit for vinyl chloride (1µg/L) was verified by the laboratory prior to project work and is on file. [J. Miller, (Kennedy/Jenks Consultants), personal communication on June 21, 1991.]

The ability to quantify low level methylene chloride concentrations is not possible with this data set because of laboratory contamination problems. The laboratory must isolate the source of methylene chloride contamination to enable quantification in the future.

XII. Overall Assessment of the Data.

With the exception of methylene chloride blank contamination problems, analyses were generally within contract requirements. The laboratory should evaluate blank analysis results for volatile organics soon enough for sample reanalysis, thus reducing requirements for data qualification.

DATA VALIDATION REPORT
SEMIVOLATILE ORGANICS

I. Sample Holding Times: ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
All Semivolatiles	**J3(+) UJ(-)**	**2506SU320000000.000**	**Extraction holding time exceeded by 2 days**

Discussion

All samples were analyzed within the recommended holding times except for one water sample, which was extracted two days late. Based on Functional Guidelines, if holding times are exceeded, then any detected compounds should be qualified as estimated (J) and sample quantitation limits should be qualified as estimated (UJ). Recommended qualifiers are listed above.

II. GC/MS System Performance Checks: ACCEPTABLE/All criteria met.

III. Initial and Continuing Calibration: ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Butylbenzylphthalate	**J4**	**2511SD320000000.000**	**Continuing calibration exceeded %D criteria. May be biased high.**

Discussion

Functional Guidelines criteria were met for the initial calibrations for semivolatiles except for high Relative Standard Deviations (%RSD) for hexachlorocyclopentadiene (40%) and 2,4 - dinitrophenol (48%) calibrations on April 5, 1991. These compounds were not detected in the samples. These slightly high %RSDs were judged not to affect the quantitation limits, therefore, no data qualifiers are recommended.

Criteria were met for continuing calibrations, except for high Percent Differences

(%D) between initial and continuing calibrations for a limited list of compounds. None of the compounds that showed high %D were detected in the samples except for butylbenzylphthalate in one sample (listed above). This result should be qualified as estimated (J). No data qualifiers are recommended for the other non-detected compounds that were outside of calibration limits as detection limits were judged not to be affected.

IV. **Laboratory Blank Analysis:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Di-n-butylphthalate	UJ at reported value	2516SD310000000.000 2506SD320000000.000 2516SD320000000.000 2509SD320000000.000 2511SD320000000.000	Sample value within 10 times blank contamination.
Bis(2-Ethylhexyl)phthalate	UJ at reported value	2516SD320000000.000 2511SD320000000.000 2506SD32.000000.000	Sample value within 10 times blank contamination.
Naphthalene	UJ at reported value	2509SD320000000.000 2511SD320000000.000	Sample value within 5 times blank contamination.

Discussion

Di-n-butylphthalate was detected in the three method blanks analyzed with the samples. Bis(2-ethylhexyl)phthalate was detected in two of the blanks, and naphthalene in one of the blanks. Because the phthalates are common laboratory contaminants, an action level is determined for data qualification at ten times the highest associated blank value. An action level is determined for data qualification at five times the associated blank value for naphthalene because it is not a common laboratory contaminant. Under Functional Guidelines, samples with a concentration less than the action level are qualified by elevating the detection limit to the reported concentration (UJ). Recommended data qualifiers are listed in the above table.

A transfer blank and a rinsate blank were submitted with the samples. No contaminants were detected in these field blanks.

V. **Surrogate Recovery:** ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Samples had acceptable recoveries for all standard surrogates except for phenol-d5 in a field blank, and 2-fluorobiphenyl in one sediment sample. Because the other surrogate recoveries were acceptable, no data qualifiers are recommended.

VI. **Matrix Spike/Matrix Spike Duplicate Sample Analysis:** ACCEPTABLE/All criteria met.

VII. **Field Duplicates:** ACCEPTABLE/No compounds detected.

Discussion

One surface water sample was submitted as a blind field duplicate to the laboratory. No semivolatile compounds were detected in either sample.

VIII. **Tentatively Identified Compounds (TICs):** ACCEPTABLE/With the following exceptions.

Qualified Data: All TIC results should be flagged as tentatively identified with estimated concentrations (JN) Additional qualifications are as follows:

Compound	Qualifier	Sample Number	Reason
1, 1, 2-trichloroethane 1,1,2,2-tetrachloroethane	R	2516SD310000000.000 2516SD320000000.000	Common analysis artifact.
3-Penten-2-one, 4-methyl	R	3200SU512000000.000 2516SU310000000.000 2506SU310000000.000	Common analysis artifact.
2-Propanone	R	2506SU310000000.000	Common analysis artifact.

Discussion

No TICs were detected in the laboratory blanks. Compounds listed for the samples were reviewed for common laboratory artifacts. These compounds are listed above, and should be rejected as TICs.

The laboratory failed to note the proper qualifier (JN) on the TIC report form. It is important to note that the compounds are only tentatively identified, and concentrations

are estimates. Also, the results for sediments are on a wet weight basis.

IX. Internal Standards Performance: ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

As noted in the laboratory case narrative, internal standards perylene-d12 and chrysene-d12 were degraded in the water samples due to low acidity of the extract. Because surrogates were not affected, it is believed that detection of target compounds would also not be affected. In addition, compounds potentially affected by this degradation would have been detected by Method 8310, which was also performed on these samples. None of the potentially affected compounds were detected by the more specific method.

X. Compound Quantitation and Reported Detection Limits: ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Semivolatiles Form 1s	**R**	**2509SU310000000.000 2509SD320000000.000 2511SD320000000.000 2506SD320000000.000 2516SD310000000.000 2516SD320000000.000 2516SU320000000.000**	**Laboratory submitted revised Form 1s. Use revised forms.**
Delete all digits following the decimal.	**---**	**All surface water and sediment samples.**	**Improper reporting format.**
Delete U associated with any laboratory reported J value.	**---**	**All surface water and sediment samples.**	**Improper reporting format.**

Discussion

Review of the laboratory Form 1 reports indicated a number of reporting discrepancies. The laboratory had reported estimated values for a number of compounds that did not adequately match with standard mass spectra. The laboratory was requested to review the data and the Forms Is listed above were revised and resubmitted by the laboratory. The prior forms should be rejected.

The Form 1 reports also indicate three digits following the decimal point. These digits should be deleted. It should be noted results are reported to only two significant figures.

Values reported by the laboratory as estimated (J), also have a "U" associated with them. The "U" should be dropped from the laboratory designation for "J" values. The qualifier "UJ" is a designation only given based on data validation review.

XI. System Performance: ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Benzo(b)fluoranthene and Benzo(k)fluoranthene	**---**	**Add footnote that results are for the sum of these compounds**	**Inadequate chromatographic system resolution.**

Discussion

Benzo(b)fluoranthene and benzo(k)fluroanthene could not be separated because of inadequate chromatographic system resolution. A footnote should be added to the data summary that concentrations reported are for the sum of benzo(b)fluoranthene and benzo(k)fluoranthene.

XI. Overall Assessment of Data:

Based on conversations with laboratory personnel, the software being used for generating the semivolatile data summaries has a number of problems which have not yet been resolved. This resulted in the previously described data summary format problems, and inaccurate data reporting. These problems make it critical that the laboratory manually review every data point prior to report submittal, until software problems are resolved.

DATA VALIDATION REPORT
PESTICIDES/PCBS ANALYSES

I. Sample Holding Times: ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
All pesticides	**J3(+)/UJ(-)**	**2511SU320000000.000**	**Extraction holding time exceeded by 15 days.**

Discussion

All samples were analyzed within recommended holding times except the above listed sample. Based on Functional Guidelines, samples exceeding sample extraction holding times should have detected compounds qualified as estimated (J) and undetected compounds qualified as UJ.

II. Instrument Performance: ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Standards did not fall within the retention time windows for some continuing calibration checks. The samples were reviewed and this did not affect compound identification. In addition, the DDT breakdown exceeded allowable criteria of 20% for some standard runs. No data qualifiers are recommended as DDT, DDE, and DDD were not detected in associated samples.

III. Calibration: ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

The percent difference (%D) between calibration factors was greater than the criteria of 15% for some continuing calibration checks. No positive sample results were effected by these differences and detection limits were judged not to be affected.

IV. **Blanks:** ACCEPTABLE/All criteria met.

Discussion

No contaminants were found in the method or field blanks.

V. **Surrogate Recovery:** ACCEPTABLE/All criteria met.

VI. **Matrix Spike/Matrix Spike Duplicate Sample Analyses:** ACCEPTABLE/All criteria met.

VII. **Field Duplicates:** ACCEPTABLE/All criteria met.

Discussion

One set of field duplicates was submitted. No pesticides or PCBs were detected in either field duplicate sample.

VIII. **Compound Identification:** ACCEPTABLE/All criteria met.

IX. **Compound Quantitation and Reported Detection Limits:** ACCEPTABLE/All criteria met.

Discussion

Reported quantitation limits met CLP 1988 Statement of Work for Pesticides/PCBs CRQL requirements.

X. **Overall Assessment of Pesticide/PCB Data**

No significant problems were found with the pesticide/PCB analyses.

DATA VALIDATION REPORT
POLYCYCLIC AROMATIC HYDROCARBON ANALYSES

I. Sample Holding Times: ACCEPTABLE/All criteria met.

II. Instrument Performance: ACCEPTABLE/All criteria met.

Discussion

Retention time windows for PAH compounds were consistent. Retention time shift for the surrogate compound was <1%.

III. Calibration: ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Benzo(a)pyrene	J4	2509SD320000000.000 2511SD320000000.000 2506SD320000000.000	Calibration drift

Discussion

The laboratory analyzed a 5-point calibration curve. Linearity was within the laboratory SOP guidelines (r^2>0.995) for all calibration curves.

Percent differences (%D) for continuing calibration checks (CCCs) were less than 15% from the initial calibration on either the UV or fluorescence detection except for two benzo(a)pyrene CCCs (16% and 18%). Detection limits were not affected by the slight instrument drift, therefore, only associated positive sample results are recommended to be qualified as estimated (J). Affected samples are listed above.

IV. Blanks: ACCEPTABLE/All criteria met.

Discussion

PAHs were not detected in the laboratory blanks. A field rinsate blank and a field transfer blank were analyzed, and all results were less than the detection limit.

V. **Surrogate Recovery:** ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Surrogate recoveries were all within the laboratory SOP guidelines, except for the field transfer blank sample results. Surrogate recovery was low (25%). This low recovery may have been related to the limited sample volume extracted (560mL vs. standard 1000mL samples). Because the sample was a field blank and limited sample was available , no data qualifiers are recommended.

VI. **Matrix Spike/Matrix Spike Duplicate (MS/MSD) Sample Analyses:** ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

The laboratory reported the PAH data in several different data packages. For several packages, the same blank spike/blank spike duplicate was reported, only labeled with different laboratory numbers. This was confusing to evaluate, and in the future the laboratory should assign a unique consistent number to each spike/spike duplicate.

One MS/MSD was performed on a surface water sample. All results were within the laboratory SOP guidelines. Additional blank spike/blank spike duplicates were performed. One duplicate showed poor precision, but recovery was acceptable for both spikes. No data qualifiers are recommended, based solely on one blank spike duplicate.

VII. **Field Duplicates:** ACCEPTABLE/All criteria met.

Discussion

No PAHs were detected in the field duplicates.

VIII. **Compound Identification:** ACCEPTABLE/All criteria met.

Discussion

Chromatograms were reviewed for both UV and fluorescence detectors. Results between the detectors corresponded well and limited interferences were noted.

IX. Compound Quantitation and Reported Detection Limits: ACCEPTABLE/All criteria met.

Discussion

Standards at detection limit concentrations were analyzed and instrument response was excellent. Calculations from raw data were spot checked, and no errors were found.

X. Overall Assessment of PAH Data

As Method 8310 is not a routine CLP method, specifications from the laboratory SOP were used for data evaluation purposes. Results were generally well within criteria.

DATA VALIDATION REPORT
TOTAL METALS ANALYSES

I. Sample Holding Times: ACCEPTABLE/All criteria met.

II. Instrument Calibration: ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Initial and Continuing Calibration Verification (ICV and CCV) standards used for all water and sediment samples determinations were within the control limits. Where CCV standards were flagged as outside the control limits, review of the raw data revealed that no samples were analyzed with those standards. The laboratory used one blank and three standards for the initial calibration of mercury. Under the Inorganics SOW, one blank and four standards should be used for initial calibration. No data qualifiers are recommended, however, the laboratory should use the correct number of standards in further analyses for this project.

III. Blanks: ACCEPTABLE/With the following exceptions.

Qualified Data: Waters and Sediments

Analyte	Qualifier	Sample Number	Reason
Aluminum	**UJ**	**All water samples except 2509SU310000000.000 and 2516SU310000000.000**	**Sample concentrations within 5 times the FB, RB, and PB contamination.**
Beryllium	**UJ**	**All sediment samples**	**Sample concentrations within 5 times the CCB contamination.**
Cadmium	**UJ**	**2509SD320000000.000 2516SD310000000.000 2516SD320000000.000**	**Sample concentrations within 5 times the CCB contamination.**
Chromium	**UJ**	**All water samples**	**Sample concentrations within 5 times the RB contamination.**
Copper	**UJ**	**All water samples**	**Sample concentrations within 5 times the CCB, PB, FB, and RB contamination.**

Iron	**UJ**	**3200SU512000000.000**	**Sample concentrations within 5 times the FB contamination.**
Lead	**UJ**	**All water samples except 2509SU310000000.000**	**Sample concentrations within 5 times the RB contamination.**
Manganese	**UJ**	**3200SU511000000.000 3200SU512000000.000**	**Sample concentrations within 5 times the FB contamination.**
Mercury	**UJ**	**2509SU320000000.000 2511SD320000000.000 2511SU320000000.000 3200SU511000000.000 3200SU512000000.000**	**Sample concentrations within 5 times the RB contamination.**
Sodium	**UJ**	**2516SD320000000.000**	**Sample concentrations within 5 times the FB contamination.**
Vanadium	**UJ**	**2506SU310000000.000 2506SU320000000.000 2516SU310000000.000 2516SU320000000.000**	**Sample concentrations within 5 times the CCB, and PB contamination.**
Zinc	**UJ**	**All water samples**	**Sample concentrations within 5 times the FB, and RB contamination.**

Discussion

Three types of blanks were evaluated for possible contamination affects. These blanks were: calibration blanks (CCB), preparation blanks (PB), and field quality control blanks [(rinsate blank (RB) and transfer (TB)].

For all blanks, both positive and negative blank values were evaluated, and an action limit of five times the highest associated blank concentration was determined for each affected analyte. For analytes with positive blank values, if the sample result is less than the action limit, it should be considered undetected at the reported concentration and assigned a UJ qualifier. No data qualifiers are required for undetected sample results. For analytes with negative blank values, the raw data were reviewed, and each sample raw data result was checked to see if a possible false negative or biased sample result was reported. No samples were judged to be affected by negative bias. Samples to be qualified, based on this review, are summarized in the above table.

IV. ICP Interference Check Sample (ICS) Analysis: ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

The ICP ICS analysis is performed to verify that the contract laboratory's interelement and background correction factors are adequate for the sample matrix. For this data package the laboratory reported only results for the analytes in the ICS, thus omitting other ICP elements which could show false negative or positive results due to interferences. Because the concentrations of interfering elements (aluminum, calcium, iron and magnesium) in the actual samples are lower than in the ICS, no qualifiers are required under Functional Guidelines. However, in the future the laboratory should report readouts for all ICP elements with the ICS results.

V. **Laboratory Control Sample (LCS) Analysis:** ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

The laboratory analyzed a water LCS with each set of surface water analyses. The percent recovery of the analytes in the LCS were all within the control limits (80% - 120%), except antimony recovery (75%) with one sample set. Antimony was not detected in the associated samples, and the detection limit was judged not to be affected. Therefore, no data qualifiers are recommended.

The laboratory also analyzed a water LCS with the sediment sample set. They stated in the case narrative that they were unable to obtain a solid LCS from EPA. Analysis of an LCS sample is performed to measure the overall performance of all steps in the analysis, including the sample preparation. Under the Inorganics SOW, if the EPA solid LCS is unavailable, other EPA Quality Assurance Check samples or other certified materials may be used. Because the SOW does not clearly state the substituted LCS must be a solid, and the water LCS results were all within the control limits, the data will not be qualified. However, it is recommended that the laboratory acquire a certified solid LCS to be analyzed with future samples submitted for this project.

VI. **Duplicate Sample Analysis:** ACCEPTABLE/With the following exceptions.

Qualified Data: Sediments

Analyte	Qualifier	Sample Number	Reason
Arsenic	J4	2509SD320000000.000 2511SD320000000.000 2506SD320000000.000 2516SD310000000.000 2516SD320000000.000	RPD between laboratory duplicates was outside the control limits indicating poor precision.

Discussion

The Relative Percent Differences (RPDs) between laboratory duplicate samples were all within the control limits, except for arsenic in the sediment samples. Because the initial sample result was less than the CRDL, the difference between the two results should be less than +/- the CRDL. The difference between the initial and duplicate arsenic results was greater than the CRDL. Samples to be qualified are summarized in the above table.

VII. **Spiked Sample Analysis:** ACCEPTABLE/With the following exceptions.

Qualified Data: Waters

Analyte	Qualifier	Sample Number	Reason
Antimony	J4(+) UJ(-)	2506SU310000000.000 2506SU320000000.000 2516SU310000000.000 2516SU320000000.000	MS percent recovery was 37%. All sample results were qualified.
Antimony	R	2509SD320000000.000 2511SD320000000.000 2506SD320000000.000 2516SD310000000.000 2516SD320000000.000	MS percent recovery was 9.8%. All sample results were qualified.
Arsenic	J4	2506SU310000000.000 2516SU310000000.000	MS percent recovery was 129%. All detected samples were qualified. All undetected sample results were acceptable. Possible false positive results.
Iron	J4(+) UJ(-)	2506SU310000000.000 2506SU320000000.000 2516SU310000000.000 2516SU320000000.000	MS percent recovery was 74%. All sample results were qualified.

Discussion

All matrix spike (MS) percent recoveries were within the control limits, except antimony, arsenic, and iron for one set of water analyses. Under the 1988 Inorganics Functional Guidelines, detected sample results associated with a MS percent recovery between 30% and 74% are to be considered approximate and assigned a J qualifier, and undetected sample results are to be reviewed to determine if they are affected by the out of control limit MS recovery. If the %R for the MS was less than 50%, the undetected sample results were qualified. Samples to be qualified are summarized in the above table.

The laboratory only used one digestion procedure to prepare the samples for analysis. Because of this, the analytes (arsenic, lead, selenium, and thallium) to be analyzed by graphite furnace atomic absorption (GFAA) were spiked at the level for ICP analysis. The Inorganics SOW calls for two digestion procedures, depending on how the samples are to be analyzed. The laboratory should have performed two separate digestion procedures, one for ICP analysis and one for GFAA analysis. It is recommended that two digestions be performed on future samples submitted for this project.

VIII. Furnace AA Quality Control Analysis: ACCEPTABLE/With the following exceptions.

Qualified Data: Sediments

Analyte	Qualifier	Sample Number	Reason
Arsenic	J4	2506SD320000000.000	MSA correlation coefficient was less than 0.995.
Arsenic	J4	2516SD310000000.000	Post spike recovery was less than 40% and the sample was not diluted and reanalyzed.

Discussion

According to the Inorganics SOW, if the sample result is less than 50% of the post spike concentration and the percent recovery greater than 40%, no further action is required by the laboratory, but the laboratory must flag the data with a W. The laboratory mis-labeled the samples requiring the W flag. Some samples that required the W flag were not flagged, and some that did not require the W flag were flagged. Copies of the Inorganics Form 1s are attached with the correct laboratory flags. For those samples with a percent recovery less than 40%, the laboratory is required to dilute the sample and reanalyze. If the diluted post spike recovery is greater than 40%, no further analyses are required, and the laboratory flags the result with a W. If the percent recovery is still below 40%, the laboratory must flag the result with an E. If the sample result is greater than 50% of the

post spike concentration and the percent recovery is less than 40%, the laboratory must analyze the sample by Methods of Standard Additions (MSA), and flag the data with an S. If the correlation coefficient of the MSA is less than 0.995, the laboratory must flag the data with a "+" (Sample 1259 for arsenic should be flagged with a "+" instead of an "S" laboratory flag).

Post digestion spikes were within control limits for all GFAA analyses, except arsenic for Sample 1262. For this sample, the post spike recovery was less than 40%, and the sample was not diluted and reanalyzed. For one sediment sample, the correlation coefficient for arsenic for the MSA analyses was less than 0.995. Samples to be qualified are summarized in the above table. The laboratory met all other GFAA quality control requirements.

IX. ICP Serial Dilution Analysis: ACCEPTABLE/With the following exceptions.

Qualified Data: Sediments

Analyte	Qualifier	Sample Number	Reason
Calcium	**J4**	**All sediment samples**	**The %D between initial and diluted sample result was outside the control limits.**
Chromium	**J4**	**All sediment samples**	**The %D between the initial and diluted sample result was outside the control limits.**
Iron	**J4**	**All water samples**	**The %D between the initial and diluted sample results was outside the control limits.**
Magnesium	**J4**	**2506SU310000000.000 2506SU320000000.000 2516SU310000000.000 2516SU320000000.000**	**The %D between the initial and diluted sample results was outside the control limits.**
Manganese	**J4**	**All sediment samples**	**The %D between initial and diluted sample result was outside the control limits.**
Zinc	**J4**	**All sediment samples**	**The %D between the initial and diluted sample result was outside the control limits.**

Discussion

The laboratory analyzed one serial dilution (SD) with the sediment samples, as required in the Inorganics SOW. Percent differences (%Ds) between SD results were outside the control limits for: calcium (17.4%), chromium (12.5%), manganese (15.0%), and zinc (46.2%). Under the 1988 Inorganics Functional Guidelines, for analytes outside the control limits and 50 times greater than the IDL, all sample results should be considered approximate (J). If the laboratory submits satisfactory ICP SD results for this matrix within the six months holding time, these qualifiers can be removed.

No serial dilution analysis was performed for the water samples. Because no serial dilution analysis was performed, the determination of physical or chemical interferences due to sample matrix was not possible. Therefore, all analytes with concentrations greater than 50 times the IDL are recommended to be qualified. Samples to be qualified are summarized on the above table. If the laboratory submits satisfactory ICP SD results for this matrix within the six months holding time, these qualiferis can be removed.

X. Sample Result Verification: ACCEPTABLE/All criteria met.

XI. Field Quality Controls: ACCEPTABLE/All criteria met.

XII. Quarterly Submissions: ACCEPTABLE/All criteria met.

XIII. Overall Data Quality:

The laboratory performed the metals analysis generally within the contract requirements. There were three areas where the laboratory did not meet the EPA contract requirements: 1) initial calibration for mercury, 2) analysis of a solid LCS, and 3) analysis of a serial dilution for the water samples. Data qualifiers were recommended primarily because blank contamination was found in both the laboratory blanks and the field blanks.

DATA VALIDATION REPORT
CYANIDE, CHROMIUM (VI) AND LOW-LEVEL COPPER ANALYSES

I. **Sample Holding Times:** ACCEPTABLE/All criteria met.

II. **Calibration:** ACCEPTABLE/All criteria met.

Discussion

Standard CLP forms were not submitted with the data for evaluation of these analyses. Raw data were reviewed, and initial and continuing calibration met criteria.

III. **Blank Analyses:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Copper	UJ	All surface water samples from first sampling event	Sample concentration within 5 times field blank contamination.

Discussion

No target analyses were detected in the laboratory blanks.

Cyanide was not detected in the field blank submitted. No field blanks were submitted for chromium (VI).

Copper was detected in the field rinsate (7µg/L) and transfer blanks (3µg/L). Such low level contamination from field sampling procedures or sample bottles is not uncommon. It is recommended that all low-level copper results be qualified as "UJ" at the reported concentration, as all results are within 5 times the highest blank concentration found.

IV. **Laboratory Control Sample (LCS) Analysis:** ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

An LCS sample was analyzed concurrently for cyanide. No LCS was analyzed for low level copper or chromium (VI). It is suggested that the laboratory prepare an LCS for copper from commercial sources in the future. An LCS is not available for chromium (VI) in soils, therefore, the matrix spike results are most critical for evaluating accuracy.

V. **Duplicate Sample Analysis:** ACCEPTABLE/All criteria met.

Discussion

Laboratory duplicates were within criteria for all analyses. Extra CLP Form VIs were submitted by the laboratory for the cyanide results that incorrectly reported duplicate results. Raw data indicated that the proper number of cyanide replicates were performed by the laboratory, but results were incorrectly summarized. The laboratory was requested to delete excess forms in the future.

VI. **Spiked Sample Analysis:** ACCEPTABLE/Except Chromium (VI), not acceptable.

Qualified Data:

Analyte	Qualifier	Sample Number	Reason
Chromium (VI)	R	All sediment samples, 1st event.	Matrix spike recovery <1%.

Discussion

Spike sample results were acceptable for cyanide and copper. As with the laboratory precision CLP forms, the cyanide spike results were not summarized properly. However, raw data indicated that the proper number of spikes were performed and were within criteria for cyanide.

For chromium (VI) analyses, the spike recovery was not recorded on the data summary form correctly. The spike result should read 0.17 rather <0.05 mg/kg. Matrix spike recovery was still less than 1%. A blank sand spike showed 80% recovery indicating the low sample spike recovery is an interference most likely associated with the sample matrix. It is recommended that the laboratory investigate further the extent of this interference by analyzing a series of sample spikes prior to reporting data for this matrix in the future. These spikes should also be closer to the detection limit than the 50 mg/L used. Based on recovery information all first event sediment samples chromium (VI) results should be rejected.

VII. **Furnace AA Quality Control Analysis:** ACCEPTABLE/All criteria met for low level copper analyses.

VIII. **Sample Result Verification:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Cyanide	Adjust all "<" data	Increase detection limit to 0.5 mg/kg (wet weight).	Standard absorbance at minimum level.

Discussion

Calculations from raw data were checked. All calculations were accurate, except chromium results were reported on a wet weight basis, rather than dry weight. These results are rejected because of poor MS recovery. Therefore, no corrections are necessary.

Detection limits were checked. Based on absorbance readouts for low standards for cyanide, detection limits are recommended to be increased. Recommended detection limits are listed above.

IX. **Field Duplicate Analysis:** ACCEPTABLE/All criteria met.

Discussion

Cyanide and chromium (VI) were not detected in the surface water field duplicates. Copper was found at low levels in both of the field duplicates (9µg/L and 7µg/L), resulting in a Relative Percent Difference (%RPD) of 25%, indicating good field precision.

X. **Overall Assessment of Data:**

Discussion

Cyanide - The laboratory was contacted to verify that potential sulfur interferences were being removed from the samples. It was also suggested that sample size be reduced to 1g from 5g in the future to avoid potential interferents. The laboratory agreed.

Low-Level Copper - Copper contamination in the field blanks was discussed with field personnel. The copper is potentially present in the deionized water that is used at the

site. It was recommended that water, which has been verified as "clean" by a trace metals laboratory, be used in the future.

Chromium (VI) - The chromium (VI) method needs method development work to eliminate potential interferences before verifiable results can be obtained. If the sediment samples are reductive in nature, chromium (VI) may not be a reasonable analysis to perform, as any chromium (VI) will be reduced to chromium (III) in the sediment matrix.

DATA VALIDATION REPORT
FECAL COLIFORM AND FECAL STREPTOCOCCUS TESTS

Results with backup laboratory sheets were submitted for fecal coliform and fecal streptococcus. One problem noted by the laboratory was that Sample number 2511SU512000000.000 read 3200SU512000000.000 on the bottle when received. No other problems were found.

One blind field replicate was submitted. Results were 2 colonies per 100 mLs for both coliform and streptococcus in one sample, versus zero colonies per 100 mLs for the duplicate. Laboratory controls all read zero counts. The difference in result could have been due to field variability or contamination during sampling. Because the field transfer and rinsate blanks both read zero counts, the results indicate possible field variability.

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

DRY SEASON (AUGUST 1991)
DATA VALIDATION REPORT

DATA VALIDATION REPORT

South Tacoma Field
Surface Water and Sediments
August, 1991

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Contract: 2304 - 3

January 10, 1992
FINAL

South Tacoma Field
Surface Water and Sediments
August, 1991

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INTRODUCTION

The submitted data packages have been reviewed by EcoChem, Inc. Data validation packets for the organics and inorganics analyses, which detail items reviewed, are on file at EcoChem. The quality assurance evaluations performed and the resulting data qualification recommendations are summarized in the following sections:

- Volatile Organic Analyses
- Semivolatile Organic Analyses
- Pesticide/PCB Analyses
- PAH Analyses
- Total Metals, Boron, Chromium (VI), Low-Level Copper Analyses
- Cyanide Analyses
- Fecal Coliform and Fecal Streptococcus

Recommended data qualifiers are based on the EPA Contract Laboratory Program (CLP) Data Validation Functional Guidelines (U.S. EPA, 1988b, c, d). These guidelines require that the data reviewer use professional judgment to designate data qualifiers, but do not replace those assigned by the laboratory. Data may be qualified even though the laboratory fulfilled all the requirements stated in the EPA Statement of Work (SOW) for a particular analysis (U.S. EPA, 1988a, 1990a, b). Unless specifically stated in the text, data qualifications are not due to laboratory error or deviations from the analysis protocols defined in the EPA SOW, but are based on EPA CLP data validation guidelines.

EcoChem, Inc.'s goal in assigning data validation qualifiers is to assist in proper data interpretation. If values are assigned a "J" or "UJ", data can be used for site evaluation purposes, but reasons for data qualification should be taken into consideration when interpreting sample concentrations. If values are assigned an "R", the data are to be rejected and should not be used for any site evaluation purposes. If values have no data qualifier assigned, then the data meet all data quality goals as outlined in the EPA CLP Functional Guidelines and as required by the South Tacoma Field Superfund Site Quality Assurance Project Plan, March, 1991.

Holding times, sample integrity and required analyses were determined by review of the chain-of-custody sheets. Chain-of-custody records were received for all samples. A summary of the samples reviewed is provided in Table 1.

Table 1. Surface Water and Sediment - Second Event

Sample Number	VOA	BNA	Pest/ PCBs	Metals	CN	PAH	COLI.
2500SU000000000.001	9/18 8-001	9/18 7-314	9/27 8-088	10/18 J08698	10/1 88	10/31 91	10-31 97
2500SU000000061.000				9/18 J08760			
2501SD000000000.001	10/31 8-153	10/31 8-061	11/12 8-153	10/18 J08750		10/31 93	
2501SU000000000.001	9/18 8-138	9/18 8-001	10/31 8-138	10/18 J08750	10/1 89	10/31 93	10-31 97
2502SD000000000.001	10/31 8-153	10/31 8-061	11/12 8-153	10/18 J08750	10/1 89	10/31 93	
2502SU000000000.001	9/18 8-138	9/18 8-001	10/31 8-138	10/18 J08750	10/1 89	10/31 93	10-31 97
2503SD000000000.001	10/31 8-153	10/31 8-061	11/12 8-153	10/18 J08750	10/1 89	10/31 92	
2503SU000000000.001		9/18 8-001	10/31 8-138	10/18 J08750	10/1 89	10/31 92	10-31 97
2504SD000000000.001	10/31 8-088	10/31 8-088	11/12 8-138	10/18 J08722	10/1 88	9/18 69	
2505SD000000000.001	10/31 8-088	10/31 8-088	10/31 8-088	10/18 J08698	10/1 85	10/31 94	
2506SD310000000.001	10/31 8-088	10/31 8-088	10/31 8-088	10/18 J08698	10/1 85	10/31 94	
2506SD320000000.001	10/31 8-088	10/31 8-088	10/31 8-088	10/18 J08698	10/1 85	10/31 94	
2507SD000000000.001	10/31 8-088	10/31 8-088	10/31 8-088	10/18 J08698	10/1 85	10/31 94	
2508SD310000000.001	10/31 8-153	10/31 8-061	11/12 8-138	10/18 J08722	10/1 89	10/31 90	
2508SU310000000.001	9/18 8-138	9/18 7-314	9/27 8-088	10/18 J08722	10/1 89	9/18 74	10-31 97
2509SD310000000.001	10/31 8-088	10/31 8-088	10/31 8-088	10/18 J08698	10/1 85	10/31 94	
2509SD320000000.001	10/31 8-088	10/31 8-088	10/31 8-088	10/18 J08698	10/1 85	10/31 94	
2510SD511000000.001	10/31 8-153	10/31 8-061	11/12 8-153	10/18 J08722	10/1 89	10/31 90	
2510SU511000000.001	9/18 8-138	9/18 7-314			10/1 89	9/18 74	10-31 97
2511SD310000000.001	10/31 8-088	10/31 8-088	10/31 8-088	10/18 J08698	10/1 85	10/31 94	
2511SD320000000.001	10/31 8-088	10/31 8-088	10/31 8-088	10/18 J08698	10/1 85	10/31 94	
2512SD000000000.001	10/31 8-088	10/31 8-088	10/31 8-088	10/18 J08698	10/1 85	10/31 94	

Table 1. Surface Water and Sediment - Second Event

Sample Number	VOA	BNA	Pest/ PCBs	Metals	CN	PAH	COLI.
2513SD000000000.001	10/31 8-088	10/31 8-088	10/31 8-088	10/18 J0B698	10/1 85	10/31 94	
2514SD000000000.001	10/31 8-088	10/31 8-088	10/31 8-088	10/18 J0B698	10/1 85	10/31 94	
2515SD000000000.001	10/31 8-088	10/31 8-088	10/31 8-088	10/18 J0B698	10/1 85	10/31 94	
2516SD310000000.001	10/31 8-088	10/31 8-088	10/31 8-088	10/18 J0B698	10/1 85	10/31 94	
2516SD320000000.001	10/31 8-088	10/31 8-088	10/31 8-088	10/18 J0B698	10/1 85	10/31 94	
2518SD000000000.001	10/31 8-088	10/31 8-088	11/12 8-138	10/18 J0B722	10/1 88	9/18 69	
2519SD000000000.001	10/31 8-088	10/31 8-088	11/12 8-138	10/18 J0B722	10/1 88	9/18 69	
2520SD000000000.001	10/31 8-088	10/31 8-088	11/12 8-138	10/18 J0B722	10/1 88	9/18 69	
2521SD000000000.001	10/31 8-088	10/31 8-088	11/12 8-138	10/18 J0B722	10/1 88	9/18 69	
2522SD000000000.001	10/31 8-088	10/31 8-088	11/12 8-153	10/18 J0B722	10/1 88	9/18 69	
2523SD000000000.001	10/31 8-088	10/31 8-088	11/12 8-138	10/18 J0B722	10/1 88	9/18 69	
2524SD000000000.001	10/31 8-088	10/31 8-088	11/12 8-138	10/18 J0B722	10/1 88	9/18 69	
2524WW000001000.001	9/18 8-138	9/18 7-314	9/27 8-088	10/18 J0B722	10/1 88	9/18 69	
2525SD000000000.001	10/31 8-153	10/31 8-061	11/12 8-153	10/18 J0B750	10/1 88	10/31 96	
2526SD000000000.001	10/31 8-153	10/31 8-061	11/12 8-153	10/18 J0B750	10/1 88	10/31 96	
2527SD000000000.001	10/31 8-153	10/31 8-061	11/12 8-153	10/18 J0B750		10/31 96	
2527SU000000000.001	9/18 8-138	9/18 8-001	10/31 8-138	10/18 J0B750		10/31 96	10-31 97
2528SD000000000.001	10/31 8-153	10/31 8-061	11/12 8-153	10/18 J0B750	10/1 88	10/31 96	
2528SU000000000.001	9/18 8-138	9/18 8-001	10/31 8-138	10/18 J0B750	10/1 88	10/31 96	10-31 97
2529SD000000000.001	10/31 8-153	10/31 8-061	11/12 8-153	10/18 J0B750	10/1 88	10/31 96	
2529SU000000000.001	9/18 8-138	9/18 8-001	10/31 8-138	10/18 J0B750	10/1 88	10/31 96	10-31 97
2529WW000001000.001	9/18 8-138	9/18 8-001	9/27 8-088	10/18 J0B750	10/1 88	10/31 96	10-31 97

Table 1. Surface Water and Sediment - Second Event

Sample Number	VOA	BNA	Pest/ PCBs	Metals	CN	PAH	COLI.
2530SD201000000.001	10/31 8-153	10/31 8-061	11/12 8-153	10/18 J08750	10/1 88	10/31 96	
2530SU201000000.001	9/18 8-138	9/18 8-001	10/31 8-138	10/18 J08750	10/1 88	10/31 96	10-31 97
2540SU000000000.001	9/18 8-001	9/18 7-314	9/27 8-088	10/18 J08698	10/1 88	10/31 91	10-31 97
2541SU000000000.001	9/18 8-001	9/18 7-314	9/27 8-088	10/18 J08698	10/1 88	10/31 91	10-31 97
2542SU000000000.001	9/18 8-138	9/18 8-001	10/31 8-138	10/18 J08750	10/1 89	10/31 93	10-31 97
2543SU000000000.001	9/18 8-138	9/18 8-001	10/31 8-138	10/18 J08750	10/1 89	10/31 93	10-31 97
3198SD202000000.001	10/31 8-153	10/31 8-061	11/12 8-153	10/18 J08750	10/1 88	10/31 96	
3198SU202000000.001	9/18 8-138	9/18 8-001	10/31 8-138	10/18 J08751	10/1 88	10/31 96	10-31 97
3199SD512000000.001	10/31 8-153	10/31 8-061	11/12 8-138	10/18 J08722	10/1 89	10/31 90	
3199SU512000000.001	9/18 8-138	9/18 7-314	9/27 8-088	10/18 J08722	10/1 89	9/18 74	10-31 97
3604WW000002000.001	9/18 8-001	9/18 7-314	9/27 8-088	10/18 J08698	10/1 85	10/31 94	
3605WW000001000.001	9/18 8-138	9/18 8-001	10/31 8-138	10/18 J08751	10/1 89	10/31 93	10-31 97
3651WW000003000.001	9/18 8-138						
3652WW000003000.001	9/18 8-001		9/27 8-088				
3653WW000003000.001	9/18 8-138						

KEY

VOA	=	Volatile Organic Compounds
BNA	=	Semivolatile Compounds
P/PCB	=	Toxic Contaminant List (TCL) Pesticide Compounds and Polychlorinated Biphenyls
METALS	=	TCL Metals and Low Level Copper
CN	=	Cyanide
PAH	=	Polynuclear Aromatic Hydrocarbons
TOC	=	Total Organic Carbon
TSS	=	Total Suspended Solids
TDS	=	Total Dissolved Solids

Note: If numbers noted in box, then sample results were reviewed. The first line in the box is the date sample results were received at EcoChem. The second line is the EcoChem sampling data group number used for file tracking purposes.

REFERENCES

Kennedy/Jenks/Chilton. 1991. Quality Assurance Project Plan South Tacoma Field Superfund Site, Tacoma, Wa. March.

U.S. Environmental Protection Agency. 1988a. Contract Laboratory Program Statement of Work for Pesticides/PCBs.

U.S. Environmental Protection Agency. 1988b. Functional Guidelines for Evaluating Inorganic Analyses.

U.S. Environmental Protection Agency. 1988c. Functional Guidelines for Evaluating Organic Analyses. R-582-5-5-01.

U.S. Environmental Protection Agency. 1988d. Functional Guidelines for Evaluating Pesticide/PCB Analyses. R-582-5-5-01.

U. S. Environmental Protection Agency. 1990a. Contract Laboratory Program Statements of Work for Inorganics. ILM01.0.

U. S. Environmental Protection Agency. 1990b. Contract Laboratory Program Statements of Work for Organics. OLM01.0.

NARRATIVE

DATA VALIDATION REPORT
VOLATILE ORGANIC ANALYSES

I. **Sample Holding Times:** ACCEPTABLE/All criteria met.

II. **GC/MS Instrument Performance Check:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
All Volatiles	J4(+) R(-)	9108-172-12	Analyzed after 12 hour BFB check.

Discussion

Sample 9108-172-12 was analyzed past the 12 hour instrument tune requirement of the method. Recommended data qualifiers are listed above. The positive values are qualified J4 because the quantitation was possibly affected, and the non-detected compounds rejected (R) because identification of the target compound might have been affected.

III. **Initial and Continuing Calibration:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Acetone	J4(+)	9108-107-2 9108-172-7 9108-172-2 9108-172-6 9108-205-3 9108-138-10 9108-138-9DL 9108-138-7 9108-138-5 9108-138-4 9108-138-3 9108-138-9 9108-172-12 9108-172-10 9108-172-8 9108-172-5 9108-172-4 9108-172-3 9108-172-1RI 9108-172-8RI 9108-172-10DL 9108-172-1 9108-153-6 9108-153-4 9108-153-2 9108-190-1 9108-190-6 9108-205-1 9108-190-1DL 9108-205-1DL 9108-172-5DL 9108-172-12DL	Continuing calibration %D > 25% and < 50%
Acetone	J4(+) UJ(-)	9108-088-2RA 9108-088-3RA 9108-088-4RA 9108-088-6 9108-088-11	Continuing calibration %D > 50%
2-Butanone	J4(+) UJ(-)	9108-088-2RA 9108-088-3RA 9108-088-4RA 9108-088-6 9108-088-11	Continuing calibration %D > 50%
2-Butanone	J4(+)	9108-172-10 9108-172-10RI 9108-190-1	Continuing calibration %D > 25% and < 50%

Methylene Chloride	**J4(+)**	**9108-190-2 9108-190-4 9108-190-5 9108-190-7 9108-088-11DL 9108-088-10 9108-088-12 9108-088-13 9108-088-14 9108-088-7 9108-088-8 9108-088-9**	**Continuing calibration %D > 25% and < 50%**
Methylene Chloride	**J4(+) UJ(-)**	**9108-153-3 9108-153-5 9108-153-7**	**Continuing calibration %D > 50%**
Methylene Chloride	**J4(+) UJ(-)**	**9108-190-2 9108-190-4 9108-190-5 9108-190-7 9108-153-3 9108-153-5 9108-153-7**	**Initial calibration %RSD > 50%**

Methylene Chloride	J4(+)	9108-190-1 9108-190-1DL 9108-190-1RI 9108-190-6 9108-205-2 9108-172-2 9108-172-6 9108-172-9 9108-172-11 9108-172-13 9108-088-1 9108-088-10 9108-088-11 9108-088-11R 9108-088-12 9108-088-13 9108-088-14 9108-088-2 9108-088-2RA 9108-088-3 9108-088-3RA 9108-088-4 9108-088-4RA 9108-088-5 9108-088-6 9108-088-7 9108-088-8 9108-088-9 9108-138-10 9108-138-3 9108-138-4 9108-138-5 9108-138-6 9108-138-7 9108-138-8 9108-138-9 9108-138-9DL 9108-153-2 9108-153-4 9108-153-6 9108-172-1 9108-172-10 9108-172-10RI 9108-172-12 9108-172-12DL 9108-172-1RI 9108-172-3 9108-172-4 9108-172-5 9108-172-5DL 9108-172-8 9108-172-8RI 9108-205-1 9108-205-1DL	Initial calibration %RSD > 30% and < 50%

2-Hexanone	J4(+) UJ(-)	9108-088-1 9108-088-10 9108-088-11 9108-088-11R 9108-088-12 9108-088-13 9108-088-14 9108-088-2 9108-088-2RA 9108-088-3 9108-088-3RA 9108-088-4 9108-088-4RA 9108-088-5 9108-088-6 9108-088-7 9108-088-8 9108-088-9 9108-138-10 9108-138-3 9108-138-4 9108-138-5 9108-138-6 9108-138-7 9108-138-8 9108-138-9 9108-138-9DL	Initial calibration %RSD > 50%
2-Hexanone	J4(+) UJ(-)	9108-205-2 9108-172-2 9108-172-6 9108-172-9 9108-172-11 9108-172-13 9108-088-2RA 9108-088-3RA 9108-088-4RA 9108-088-6 9108-088-11	Continuing calibration %D > 50%

2-Hexanone	**J4(+)**	**9108-153-2 9108-153-4 9108-153-6 9108-172-1RI 9108-172-3 9108-172-4 9108-172-5 9108-172-5DL 9108-172-8 9108-172-8RI 9108-172-1 9108-172-10 9108-172-10RI 9108-172-12 9108-172-12DL 9108-205-1 9108-205-1DL 9108-190-1 9108-190-1DL 9108-190-1RI 9108-190-6**	**Initial calibration %RSD > 30% and < 50%**
2-Hexanone	**J4(+)**	**9108-172-10 9108-172-10RI**	**Continuing calibration %D > 25% and < 50%**

Discussion

The relative response factor (RRF) and the relative standard deviation (%RSD) for the initial calibration and the RRF and percent difference (%D) for the continuing calibration were evaluated. Criteria for %D and %RSD between calibrations were not met for compounds listed above. Under Functional Guidelines, positive results are required to be assigned a J qualifier if initial calibration RSD is greater than 30%, and if %D for continuing calibration is greater than 25%. For significant %RSD or %D variations (>50%), detection limits are also qualified (UJ). Qualifiers are summarized in the above table.

IV. **Blank Analyses:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Acetone	**UJ**	**9108-153-2 9108-153-6 9108-153-4**	**Sample value < 10 times trip blank contamination.**

Acetone	UJ	9108-190-1 9108-190-6 9108-190-1DL 9108-190-1RI	Sample value <10 times field blank contamination.
Acetone	UJ	9108-088-6 9108-088-4RA 9108-138-10 9108-138-9DL 9108-138-7 9108-138-5 9108-138-4 9108-138-3 9108-138-9 9108-153-2 9108-153-4 9108-153-6 9108-172-6 9108-172-2	Sample value < 10 times method blank contamination.
Toluene	UJ	9108-205-2 9108-107-4	Sample value < 10 times trip blank contamination.

Methylene Chloride	**UJ**	**9108-138-10** **9108-138-9DL** **9108-138-7** **9108-138-6** **9108-138-5** **9108-138-3** **9108-138-4** **9108-138-9** **9108-088-12** **9108-088-11DL** **9108-088-3** **9108-172-1RI** **9108-172-10RI** **9108-172-5DL** **9108-172-12DL** **9108-190-1DL** **9108-190-1RI** **9108-190-1** **9108-205-1DL** **9108-172-12** **9108-172-10** **9108-172-8** **9108-172-5** **9108-172-4** **9108-172-3** **9108-172-1** **9108-153-2** **9108-153-4** **9108-153-6** **9108-153-7** **9108-153-5** **9108-153-3** **9108-190-7** **9108-190-5** **9108-190-4** **9108-190-2** **9108-172-9** **9108-172-6** **9108-172-11** **9108-172-13** **9108-172-2** **9108-205-2** **9108-107-1** **9108-107-2** **9108-107-4**	**Sample value < 10 times method blank contamination.**

Discussion

Methylene chloride and acetone contamination was found in the laboratory method blanks. Because these are common laboratory contaminants, an action level is determined

for data qualification at 10 times the highest associated blank value. Under Functional Guidelines, samples with concentrations less than the action level are qualified (UJ). The laboratory did not follow the CLP SOW for blank analyses, as method blank weights did not always match the associated sample weight. Therefore, to compare method blank results to sample results, results from the raw data instrument readouts were used, rather than Form I results. Sample 9108-153-8 acetone concentration was qualified by the lab as JB but there was no acetone contamination with the associated method blank, and therefore, the qualifier should be changed to J.

Field blanks, rinsate blanks, and trip blanks were submitted with the sample sets for volatile analysis. Methylene chloride, acetone, and toluene were found in some of the field blanks and trip blanks, indicating potential sample contamination due to the sampling procedures. Affected samples and their recommended qualifiers are listed above.

V. **Surrogate Recovery:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
All Volatiles	**R**	**9108-088-3 9108-088-4 9108-172-1 9108-172-10 9108-172-8 9108-172-12**	**Initial surrogate recovery outside control limits. Reanalysis results within limits.**

Discussion

The surrogate recoveries for some sample analyses were outside control limits. All surrogate reanalysis results were within limits. Therefore initial analysis results of the affected samples should be rejected and reanalysis results be used. Sample results to be rejected are listed above.

VI. **Matrix Spike/Matrix Spike Duplicate Sample Analyses:** ACCEPTABLE/All criteria met.

VII. **Field Duplicates:** ACCEPTABLE/All criteria met.

Discussion

Samples 9108-153-6/9108-153-4, 9108-172-1/9108-172-8, 9108-172-2/9108-172-9, 9108-

153-7/9108-153-5 were field duplicates for volatile analysis. The field duplicates had %RPD values less than 35% except for one methylene chloride RPD value of 107.7%. Blank contamination most likely was the cause of the high variability. Therefore, field duplicate results did not indicate any precision problems due to field variability.

VIII. **Internal Standards Performance:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
4-Methyl-2-Pentanone 2-Hexanone Chlorobenzene Tetrachloroethene Toluene 1,1,2,2-Tetrachloroethane Styrene Ethylbenzene Xylene (total)	J4(+) UJ(-)	9108-088-2 9108-088-3RA 9108-088-4RA 9108-088-11DL 9108-088-9 9108-138-9 9108-190-1DL	Internal standard area outside limits.
4-Methyl-2-Pentanone 2-Hexanone Chlorobenzene Tetrachloroethene Toluene 1,1,2,2-Tetrachloroethane Styrene Ethylbenzene Xylene (total)	J4(+) R(-)	9108-172-10RI	Internal standard area outside limits.
1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane trans-1,3-Dichloropropene cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene Bromoform	J4(+) UJ(-)	9108-172-10RI	Internal standard area outside limits.

All Volatile Compounds	**R**	**9108-172-5 9108-172-10 9108-172-12 9108-190-1 9108-190-1RI 9108-205-1 9108-088-11**	**Duplicate analysis of IS were within limits. Use duplicate values.**
All Volatile Compounds	**R**	**9108-138-9DL 9108-088-2RA**	**Use initial results. Reanalysis IS was outside control limits.**

Discussion

During the volatile analysis, the internal standard (IS) areas were outside of the acceptable limits for some samples. Under Functional Guidelines, if the internal standard (IS) area is outside -50% or +100% of the associated standard, then all results for compounds quantitated using that IS are flagged as estimated [J4(+)] and [UJ(-)]. Non-detects are rejected (R) if extremely low area counts are reported for the IS. Reanalysis was performed and results for some samples were within limits. Therefore initial results for these samples should be rejected (R) and the reanalysis results be used. Recommended data qualifiers and the affected samples are listed above.

IX. **Compound Identification:** ACCEPTABLE/All criteria met.

X. **Compound Quantitation and Reported Contract Required Quantitation Limits (CRQLs):** ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

The Quality Assurance Project Plan calls for lower detection limits for vinyl chloride and methylene chloride than standard CLP CRQLs. The lower detection limit for vinyl chloride (1μg/L) was verified by the laboratory prior to project work and this is on file. [J. Miller, (Kennedy/Jenks Consultants), personal communication on June 21, 1991.] The vinyl chloride detection limit was not reported on the Form I VOA sheets as 1μg/L, but rather at the standard CLP CRQL of 10μg/L. The laboratory stated that if sample results were obtained between 1-10μg/L, the value would be reported on the Form 1.

Quantifying low level methylene chloride concentrations is not possible with this data set because of laboratory contamination problems. The laboratory must isolate the source of methylene chloride contamination to enable quantification in the future.

The lab reported multiple Form I VOAs for several samples rather than the one single set of results for each sample. During this validation review, the sample results judged to meet quality control criteria were accepted. If more than one sample result was acceptable, the reanalysis result was rejected.

XI. **Tentatively Identified Compounds (TICs):** ACCEPTABLE/With the following exceptions.

Discussion

All TIC results should be flagged as tentatively identified with estimated concentrations (JN).

XII. **System Performance:** ACCEPTABLE/All criteria met.

XIII. **Overall Assessment of the Data**

There was a consistent problem of method blank contamination in the samples. It is recommended that the laboratory ensure proper decontamination of glassware and isolation of instruments away from contaminating solvents in order to correct this problem in the future. Other problems encountered were trip and field blank contamination, internal standard area control limit exceedances, initial and continuing calibration problems, and poor surrogate recoveries. Because of these multiple problems, a significant quantity of the data was qualified.

DATA VALIDATION REPORT
SEMIVOLATILE ORGANICS ANALYSES

I. Sample Holding Times: ACCEPTABLE/All criteria met.

II. GC/MS Instrument Performance Checks: ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

The DFTPP injection on 8/8/91 did not meet the m/z 198 base peak 100% relative abundance requirement because the laboratory did not correctly normalize the percent abundances to m/z 198 on Form V. The laboratory was requested to submit a corrected Form V with corrected percent relative abundance. All criteria were met under the 1990 SOW.

The ion abundance results were not accurately listed on Form V for the 9/13/91 analysis date. The raw data indicated all criteria were met, and the laboratory was requested to submit a revised Form V.

III. Initial and Continuing Calibration: ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
2,6-Dinitrotoluene	J4	9108-153-4	%D > 25% for continuing calibration.
Carbazole	J4	9108-153-4, 9108-172-1, 9108-088-1, 9108-088-4, 9108-088-7, 9108-088-8, 9108-088-9	%D > 25% for continuing calibration.
Benzo(k)fluoranthene	J4	9108-153-6	%D > 25% for continuing calibration.
Benzo(a)anthracene	J4	9108-138-6, 9108-172-4, 9108-172-5, 9108-172-8, 9108-205-1, 9108-190-1	%D > 25% for continuing calibration.

Chrysene	**J4**	**9108-172-4, 9108-172-12, 9108-172-8, 9108-172-10, 9108-190-1, 9108-205-1, 9108-138-6**	**%D > 25% for continuing calibration.**

Discussion

A high percent relative standard deviation was obtained for 2,4-dinitrophenol initial calibration on 8/8/91 and 9/8/91 (33.7% and 47.1%). Because 2,4-dinitrophenol was not detected in any of the samples, no data qualifiers are required.

Percent differences (%Ds) for continuing calibration standards were high for several compounds indicating calibration drift during analysis. Compounds with %Ds greater than 25% are qualified as estimated (J4) for positive results only, as detection limits were judged not to be affected. Samples qualified are listed above.

IV. **Blank Analyses:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Bis(2-ethylhexyl)phthalate	**UJ**	**9108-138-4, 9108-138-5, 9108-138-6, 9108-138-7, 9108-138-8, 9108-138-9, 9108-138-10, 9108-088-14, 9108-138-3, 9108-172-3**	**Sample within 10 times blank concentration.**

Discussion

Bis(2-ethylhexyl)phthalate was detected in eight samples and associated blanks. All sample results were within ten times the blank concentration and are qualified "UJ" at the reported value.

Field rinsate blanks submitted with the samples had no detectable contamination and no qualification is required.

V. **Surrogate Recovery:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
All semivolatile compounds	J4(+) UJ(-)	9108-172-10	Low surrogate recovery. Results may be biased low.
All semivolatile compounds	J4	9108-190-6, 9108-205-1	High surrogate recovery. Results may be biased high.

Discussion

Positive results for Sample 9108-0172-10 are qualified as estimated (J4) and "UJ" for non-detects due to low surrogate recovery (nitrobenzene - 21.9%, terphenyl - 16.4%, 2-fluorophenol - 11.8%). Samples 9108-190-6 and 9108-205-1 are qualified as estimated (J4) for positive results due to high surrogate recovery (114% - 132%). Detection limits would not be negatively impacted so non-detects are not qualified.

VI. **Matrix Spike/Matrix Spike Duplicate Sample Analyses:** ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Matrix spike/matrix spike duplicate (MS/MSD) analyses were generally acceptable except for two samples. High RPDs and percent recoveries were obtained for Sample 9108-138-4 MS/MSD analyses. Low recoveries were obtained for Sample 9108-186-5 MS/MSD analyses. Since all other QA/QC criteria were generally acceptable, no data qualifiers are recommended based solely on MS/MSD results.

VII. **Field Duplicates:** ACCEPTABLE/All criteria met.

Discussion

Two sets of field duplicates were submitted. RPDs between positive results were all less than 30%, indicating good reproducibility.

VIII. **Internal Standards Performance:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Di-n-octyphthalate Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J4(+) UJ(-)	9108-153-4	Low internal standard area count.

Discussion

Sample 9108-153-4 required qualification because the area count for the internal standard perylene d-12 was low. As the area count was only slightly low, associated positive results are qualified as estimated (J4) and non-detects as "U."

IX. Compound Identification: ACCEPTABLE/All criteria met.

X. Compound Quantitation and Reported Contract Required Quantitation Detection Limits (CRQLs): ACCEPTABLE/All criteria met.

XI. Tentatively Identified Compounds (TIC): ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Propanoic Acid, 2-methyl	R	9108-088-13	TIC also in blank.
Hexanedioic acid, dioctyl	R	9108-088-14, 9108-153-4, 9108-138-10	TIC also in blank.
9-Octadecen-1-ol 2-Pentanone 4-Hydroxy-4-met	R	9108-088-14	TIC also in blank.

Discussion

Tentatively identified compounds (TICs) detected in method blanks as well as

associated samples are rejected (R).

XII. System Performance: ACCEPTABLE/All criteria met.

XIII. Overall Assessment of the Data

Data, as qualified, are acceptable. Three sample results were qualified as estimated due to poor surrogate recovery results. Individual compounds were qualified due to blank contamination and calibration drifts.

DATA VALIDATION REPORT
POLYNUCLEAR AROMATIC HYDROCARBONS (PAH) ANALYSES

I. Sample Holding Times: ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
All compounds	J3(+) R(-)	9108-153-6RE	Holding time exceeded.

Discussion

Sample 9108-153-6 was re-extracted and re-analyzed due to low surrogate recovery. Since the re-extraction was performed 35 days outside of holding times, all positive results for this sample have been qualified as estimated and negative results rejected (R). Other sample analyses were performed within holding times. Qualifiers are summarized in the table above.

II. Instrument Performance: ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

There were a few instances of wavelength shifts and problems with the fluorescence lamp which led to lower detector responses than would have otherwise been achieved. All quantitations in these instances were calculated by the laboratory based on the UV detector response, because of this lack of fluorescence detector sensitivity. As accuracy was judged not to be affected, no results were qualified based on these detector problems.

III. Calibration: ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

The laboratory analyzed 5-point calibration curves. The upper level was omitted when calculating %RSDs for seven compounds in two sequences. In those instances only the remaining four points were used to demonstrate detector linearity and to quantitate

positive results. No quantitations exceeded the upper calibration limits of the four- or five-point curves and no qualifications have been recommended.

There were several occurrences of continuing calibration standards failing to meet percent difference criteria. In all instances these standards were used for confirmation only. No quantitations were made based on out-of-control standards and no qualifications have been recommended.

IV. **Blanks:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Anthracene	UJ at Reported Value	9108-088-15 9108-107-1 9108-107-2 9108-172-13 9108-190-2 9108-190-3 9108-190-4 9108-190-5 9108-190-7 9108-205-2 9108-138-11	Concentration < 5 times blank contamination.

Discussion

Anthracene was detected in several laboratory method blanks. Anthracene results were qualified as not detected (UJ) at the values reported where the amount was less than five times the contamination levels found in the corresponding blanks. Qualified data are summarized above.

V. **Surrogate Recovery:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
All PAHs	J4(+)	9108-190-1 9108-205-1	High surrogate recovery.
All compounds	J4(+) R(-)	9108-153-6RE	Low surrogate recovery.

Discussion

Surrogate recovery for sediment sample 9108-205-1 could not be calculated due to matrix interferences. Surrogate recovery for sediment sample 9108-190-1 was high at 199%. All positive identifications for both samples are suspect and have been qualified as estimated (J). Detection limits would not be affected and are not qualified.

Surrogate recovery for sediment sample 9108-153-6RE was low at 29%. As designated for holding times, positive results are estimated, and negative results are rejected.

All qualifications based on out-of-control surrogate recoveries are summarized in the table above.

VI. **Matrix Spike/Matrix Spike Duplicate (MS/MSD) Sample Analyses:** ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Percent recoveries for two compounds in one MS/MSD set were high. Since results for all other spiked compounds were acceptable and surrogate recoveries for the individual samples were acceptable as well, no data qualifications are recommended.

Seven sets of MS/MSD (3 water, 4 soil) contained 19 compounds that failed to meet relative percent difference (RPD) criteria. In all cases the RPDs were only marginally high and all individual percent recoveries were within QC limits. No qualifications are recommended based solely on MS/MSD these results.

VII. **Field Duplicates:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
All compounds	R	9108-153-6RE	General quality control problems and field duplicate results poor.

Discussion

Three field duplicates were evaluated. The water field duplicate 9108-172-2/9108-172-9 demonstrated good reproducibility. All RPDs were less than 30%.

All RPDs for sediment duplicates 9108-153-4 and 9108-153-6RE exceeded 100%. The latter sample was re-extracted and re-analyzed outside of holding times and demonstrated poor surrogate recovery. Because of these quality control problems and the poor reproducibility, the results for 9108-153-6RE are rejected (R).

Sediment field duplicate 9108-172-1/9108-172-8 demonstrated relatively poor reproducibility. All RPDs exceeded 50%, with 70% of the RPDs exceeding 100%. Results for this duplicate pair are not qualified due to any other reasons. No results are qualified based solely on poor field duplicate reproducibility, but this poor precision should be considered when assessing associated sediment data.

VIII. **Compound Identification:** ACCEPTABLE/All criteria met.

IX. **Compound Quantitation and Reported Detection Limits:** ACCEPTABLE/All criteria met.

X. **Overall Assessment of PAH Data**

Generally, the laboratory performed the PAH analyses within contract specifications. Ten anthracene results were qualified due to blank contamination, and two samples were qualified due to high surrogate recovery.

One sample reanalysis was performed due to poor surrogate recovery. Results for the sample reanalysis were rejected as well because of poor surrogate recovery, holding time exceedance, and poor field duplicate reproducibility.

DATA VALIDATION REPORT
PESTICIDE/PCB ANALYSES

I. **Sample Holding Times:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
All compounds	J3(+) UJ(-)	9108-088-1, 9108-088-2, 9108-088-3, 9108-088-4, 9108-088-5, 9108-088-6, 9108-088-7, 9108-088-8, 9108-088-9, 9108-088-10, 9108-088-11, 9108-088-12, 9108-088-13, 9108-088-14, 9108-138-3, 9108-138-4, 9108-138-5, 9108-138-6, 9108-138-7, 9108-138-8, 9108-138-9, 9108-138-10, 9108-153-2, 9108-153-4, 9108-153-6, 9108-172-1, 9108-172-3, 9108-172-4, 9108-172-5, 9108-172-8, 9108-172-10, 9108-172-12, 9108-190-1, 9108-190-6, 9108-205-1	Holding times exceeded criteria.

Discussion

All samples for one sample delivery group (SDG) were extracted outside of holding times by one day. All samples for two SDGs were analyzed outside of holding times by 16-19 days. All results for all samples in these three SDGs have been qualified as estimated [J3(+), UJ(-)] as summarized in the table above.

II. **Instrument Performance:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
4,4'-DDT	J4	9108-172-10 9108-190-1 9108-205-1	4,4'-DDT breakdown exceeded criteria.
4,4'-DDE	NJ	9108-172-10	4,4'-DDT breakdown exceeded criteria.

Discussion

Continuing calibration standards failed to meet retention time (RT) criteria for both columns in most of the analytical sequences used for these samples. Expanded RT windows were observed during this review to check for misidentifications. None were apparent, thus no qualifications are recommended.

4,4'-DDT exceeded the individual percent breakdown limit of 20.0% for one standard during the 10/25/91 sequence. All positive 4,4'-DDT, 4,4'-DDE, and 4,4'-DDD results have been qualified for samples that followed the out-of-control standard. Qualifications are summarized in the table above.

Four sequences contained evaluation standards that failed to meet linearity criteria. Two of those instances were for the confirmation column only and do not require qualification of data. For the other two cases - aldrin (11.4%) on 10/20/91 and 4,4'-DDT (10.6%) on 10/23/91 - quantitation was intended on the column that was out-of-control. However, all results from these two sequences have already been qualified due to holding time violations and further qualification is not necessary.

III. **Calibration:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Arolcor-1254	J4	9108-088-1 9108-088-2	No continuing calibration standard analyzed.
Aroclor-1260	J4	9108-088-3	No continuing calibration standard analyzed.

Discussion

No continuing calibration Aroclor standards were analyzed during the 9/27/91 analytical sequence. All positive Aroclor identifications for samples analyzed during this sequence have been qualified as estimated (J4) as shown in the table above.

The 10/13/91 analysis sequence was not concluded with the standards specified in the method. This occurred for the confirmation column only, thus no qualifiers are recommended.

Many compounds failed to meet continuing calibration criteria. No positive identifications of target compounds were made following out-of-control standards. Therefore, no data qualifiers are recommended based on continuing calibration failures.

IV. **Blank Analyses:** ACCEPTABLE/All criteria met.

Qualified Data: None

V. **Surrogate Recovery:** ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Surrogate recoveries were high for samples 9108-138-8, 9108-172-5, 9108-172-10, 9108-172-12, 9108-190-1, and 9108-205-1. All results for all six of these samples have previously been qualified due to holding time violations. Further qualification is not necessary.

VI. **Matrix Spike/Matrix Spike Duplicate (MS/MSD) Sample Analyses:** ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Four sets of MS/MSD results were reported. Ten individual compound results (five water and five soil) were not within percent recovery control limits. Nine results were moderately high and one was slightly low. Surrogate recoveries within individual samples were monitored to determine the need for qualification of results. No data were qualified based solely on MS/MSD results.

The RPD for 4,4'-DDT was high at 53% for the sediment sample 9108-172-12 MS/MSD. Individual compound recoveries for both samples were within limits, thus data qualification is not recommended.

VII. Field Duplicates: ACCEPTABLE/All criteria met.

Qualified Data: None

Discussion

Four sets of field duplicates were submitted for review (two water and two soil). No positive identifications were made in any of the duplicated samples. The percent moistures for both pairs of soil duplicates were very similar (31%/34% and 63%/67%).

VIII. Compound Identification:

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Gamma-BHC	R	9108-172-10 9108-190-1	Confirmation peak not within retention time windows.
4,4'-DDT	R	9108-138-10	Confirmation peak not within retention time windows.
Endosulfan Sulfate	R	9108-172-5	Confirmation peak not within retention time windows.
Methoxyclor	R	9108-190-1	Confirmation peak not within retention time windows.
Aroclor-1260	R	9108-138-9	Confirmation peak not within retention time windows.

Discussion

The peak used for confirmation did not elute within the established retention time windows for several compounds. Since positive identification was not made results for these compounds have been rejected where this false confirmation was made. Qualified data are summarized above.

IX. Compound Quantitation and Reported Contract Required Quantitation Limits (CRQLs): ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

The laboratory had numerous instrument and calibration problems that made selecting which column to use as a primary column more difficult than usual. The DB-608 column was used exclusively for quantitation, even in instances where the DB-5 column would have been a better choice. Compounding the confusion were conflicting identifications of the primary column on the CLP forms within a given sequence. Affected results were previously qualified due to holding time violations. Therefore, the choice of columns for quantitation purposes did not require further data qualification.

X. Overall Assessment of the Data

A number of problems were noted with the data group. Holding times were exceeded for many samples; retention times shifts were noted; misidentifications were made; problems were noted with calibrations. Many of these problems resulted in qualified data.

DATA VALIDATION REPORT
TOTAL METALS, BORON, CHROMIUM (VI), AND LOW-LEVEL COPPER ANALYSES

I. **Sample Holding Times:** ACCEPTABLE/All criteria met.

II. **Instrument Calibration:** ACCEPTABLE/All criteria met.

III. **Blanks:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Analyte	Qualifier	Sample Number	Reason
Aluminum	UJ	11780	The sample results were within 5 times the blank concentration.
Antimony	UJ	11778, 11783, 11784, 11786, 11788, 11789, 11791, 11792, 12012, 12023	The sample results were within 5 times the blank concentration.
Arsenic	UJ	11559, 12009, 12011, 12017, 12021, 12024, 12025, 12026	The sample results were within 5 times the blank concentration.
Barium	UJ	11543, 12013, 12025, 12028	The sample results were within 5 times the blank concentration.
Cadmium	UJ	11544, 11545, 11550, 11551, 11552, 11554, 11555	The sample results were within 5 times the blank concentration.
Chromium	UJ	11779, 11781, 11791	The sample results were within 5 times the blank concentration.
Iron	UJ	11558	The sample results were within 5 times the blank concentration.
Nickel	UJ	11783, 11784, 11545, 11554, 11555, 12009, 12010, 12011, 12012, 12013, 12014, 12015, 12016, 12017, 12018, 12019, 12020, 12023, 12026, 12027	The sample results were within 5 times the blank concentration.
Lead	UJ	11558, 12025	The sample results were within 5 times the blank concentration.

Selenium	**UJ**	**11558**	**The sample results were within 5 times the blank concentration.**
Sodium	**UJ**	**11553, 11779, 12008, 12010, 12012, 12014, 12015, 12016, 12018, 12020, 12023, 12026, 12027**	**The sample results were within 5 times the blank concentration.**
Zinc	**UJ**	**11553, 11558, 12025**	**The sample results were within 5 times the blank concentration.**

Discussion

Four types of blanks were evaluated for possible contamination affects. These blanks were: calibration blanks (CCB), preparation blanks (PB), and field transfer blanks (FTB), and field rinsate blanks (FRB).

For all blanks, both positive and negative blank values were evaluated. For positive blank concentrations, an action limit for each analyte was determined and sample results with concentrations less than the action limit are qualified as summarized above. It was determined that no sample results were affected by negative blanks.

IV. **ICP Interference Check Sample (ICS) Analysis:** ACCEPTABLE/All criteria met.

V. **Laboratory Control Sample (LCS) Analysis:** ACCEPTABLE/All criteria met.

VI. **Duplicate Sample Analysis:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Analyte	Qualifier	Sample Number	Reason
Chromium	**J4(+)/UJ(-)**	**12008, 12010, 12012, 12014, 12015, 12016, 12018, 12020, 12023, 12027**	**The RPD or ± CRDL between duplicate results was outside the control limits.**
Lead	**J4(+)/UJ(-)**	**11544, 11548, 11556, 11557**	**The RPD or ± CRDL between duplicate results was outside the control limits.**

Mercury	**J4(+)/UJ(-)**	**11544 through 11557**	**The RPD or ± CRDL between duplicate results was outside the control limits.**

Discussion

The duplicate results were evaluated either using the relative percent difference (RPD), ± CRDL (waters), or ± 2X CRDL (sediments), as specified in the 1988 Functional Guidelines. Samples to be qualified are summarized in the above table.

The laboratory is required to flag all duplicate analysis with an RPD greater than 20%. However, sediment data are not required to be qualified unless the RPD is greater than 35%. Therefore, the data may contain laboratory qualification codes that indicate the duplicate analyses were outside the control limits, but no data validation qualifier is required.

VII. **Spiked Sample Analysis:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Analyte	Qualifier	Sample Number	Reason
Antimony	**J4(+)/UJ(-)**	**11544 through 11557, 11778, 11779, 11781, 11783, 11784, 11785, 11786, 11787, 11788, 11789, 11791**	**The percent recovery of the MS was between 30 and 74%.**
Arsenic	**J4(+)**	**11543, 11558, 11559,**	**The percent recovery of the MS was greater than 125%.**
Barium	**J4(+)**	**12009, 12011, 12013, 12017, 12019, 12021, 12024, 12025, 12026**	**The percent recovery of the MS was greater than 125%.**
Copper	**J4(+)/UJ(-)**	**11543, 11558, 11559**	**The percent recovery of the MS was between 30 and 74%.**
Copper	**J4(+)**	**11780, 11782, 11792**	**The percent recovery of the MS was greater than 125%.**
Lead	**J4(+)**	**11780, 11782, 11792**	**The percent recovery of the MS was greater than 125%.**
Manganese	**J4(+)/UJ(-)**	**12008, 12010, 12012, 12014, 12015, 12016, 12018, 12020, 12023, 12027**	**The percent recovery of the MS was between 30 and 74%.**

Selenium	**J4(+)/UJ(-)**	**12009, 12011, 12013, 12017, 12019, 12021, 12024, 12025, 12026**	**The percent recovery of the MS was between 30 and 74%.**
Selenium	**J4(+)**	**11544 through 11557**	**The percent recovery of the MS was greater than 125%.**
Zinc	**J4(+)/UJ(-)**	**12008, 12010, 12012, 12014, 12015, 12016, 12018, 12020, 12023, 12027**	**The percent recovery of the MS was between 30 and 74%.**

Discussion

Sample result qualifications were determined based on the percent recovery of the matrix spike (MS), as described in the 1988 Functional Guidelines. If percent recovery was low, both positive results and detection limits were qualified. If recovery was high, only positive results are qualified. Samples to be qualified are summarized in the above table.

VIII. Furnace AA Quality Control Analysis: ACCEPTABLE/With the following exceptions.

Qualified Data:

Analyte	Qualifier	Sample Number	Reason
Arsenic	**J4**	**11553**	**The correlation coefficient for the MSA analyses was less than 0.995.**
Lead	**J4**	**11544, 11780**	**The correlation coefficient for the MSA analyses was less than 0.995.**
Selenium	**J4**	**11544, 11549, 11786**	**The correlation coefficient for the MSA analyses was less than 0.995.**

Discussion

All FAA quality assurance requirements were met by the laboratory. The laboratory performed the required re-analysis of the qualified samples summarized above, and the results were still outside the control limits. No further analyses were required of the laboratory, but the results are qualified as estimates.

Sample results with post spikes which had recoveries between 40-85%, but sample absorbance less than 50%, are not qualified further, as all results were less than the CRDL (B qualified) or less than the IDL (U qualified). These samples are denoted by the W laboratory flag. The samples with the W flag are summarized below.

Samples Requiring the W Laboratory Flag				
Arsenic	**Copper**	**Lead**	**Selenium**	**Thallium**
11779, 11792, 12009, 12011, 12013, 12017, 12021, 12024, 12025, 12026, 12028	**11543, 11558, 11559, 12025, 12026, 12028**	**11558, 11559, 11782, 11792, 12025**	**11551, 11553, 11554, 11555, 11779, 11783, 11788, 11791, 12008, 12014, 12027, 11559, 11792, 12011, 12013, 12017, 12019, 12021, 12024**	**11544, 11545, 11546, 11547, 11548, 11549, 11786, 12008, 12014, 12015, 12016, 11543, 11792, 12011, 12017, 12019**

IX. **ICP Serial Dilution Analysis:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Analyte	Qualifier	Sample Number	Reason
Aluminum	**J4**	**11780, 11782, 11792**	**The %D between the initial and diluted sample results was greater than 10%.**

Discussion

The laboratory analyzed one serial dilution (SD) for each matrix in a sample data group. For analytes outside the control limits and 50 times greater than the IDL, all associated sample results should be considered approximate. Samples to be qualified are summarized in the above table.

X. **Sample Result Verification:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Analyte	Qualifier	Sample Number	Reason
Lead	**J4**	**11553, 11781, 11791, 11779, 12008, 12015**	**The samples were analyzed by ICP. Sample concentrations were less than 10 times the ICP detection limit for lead.**
Copper	**Result should read 2980µg/L**	**12019**	**Laboratory calculation error.**

Discussion

The laboratory analyzed lead by ICP. Under the Inorganic SOW, ICP results can be used if the sample concentration is greater than ten times the ICP IDL. Samples reported with lead concentrations less than the ten times the ICP IDL should be considered as estimates. Samples to be qualified are summarized in the above table.

The QC data and sample results were verified at a frequency of 10%. Only one data error was found. Copper for sample 12019 should have been reported as 2980 ug/L.

XI. Field Quality Controls: ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Blind field duplicate samples were submitted for two water and two sediment samples. For both water duplicates RPDs were all less than 50%, except one boron result (72.7%). These results indicate minimal variation for the water samples.

For one sediment sample duplicate pair, all RPDs were less than 50%, except copper (177%) and manganese (86.7%) results. The total solids for the two samples were 60.8% and 68.8%. For the second sediment sample duplicate pair, all RPDs were greater than 50%, except cadmium. The RPDs outside the control limits ranged from 53.8% to 94.7%. The total solids for the two samples were 20.2% and 49.6%. The high RPDs between the two sample results may be attributed to the low solids content of the samples, the small sample aliquot used for digestion, and potential non-homogeneity of the split sample. No data qualifiers are recommended based on the field duplicate analyses. However, this high variability between sediment field duplicates should be considered, when interpreting the sample results for other sediment samples with low percent solids.

XII. Quarterly Submissions: ACCEPTABLE/All criteria met.

XIII. Overall Data Quality:

The laboratory performed the metals analysis generally within the contract requirements. Sample results were qualified for blank contamination, and MS recoveries outside the control limits.

DATA VALIDATION REPORT
CYANIDE ANALYSES

I. **Sample Holding Times:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Cyanide	J3(+) UJ(-)	108234-9, 108234-10, 108234-11, 108234-12, 108257-1, 108257-2	Holding time guidance exceeded by 5 to 7 days.

Discussion

Fourteen day holding time was met except for two sample analyses which exceeded holding time by five days and four sample analyses which exceeded holding time by seven days. Results obtained from analyses exceeding the holding time are recommended to be qualified as estimated [J3(+)/UJ(-)]. Qualifiers are summarized in the above table.

II. **Calibration:** ACCEPTABLE/All criteria met.

III. **Blank Analyses:** ACCEPTABLE/All criteria met.

IV. **Laboratory Control Sample (LCS) Analysis:** ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

An aqueous LCS was analyzed for cyanide concurrently with the samples. For the sediment analyses a LCS prepared by the laboratory was analyzed. Recoveries for all LCS analyses were within control limits except one low analysis result (70%). Positive sample results obtained concurrently with the low LCS result would be qualified as estimated (J4), as sample results may be biased low. Detection limits would not be affected. Because all associated sample results were less than the detection limit, no qualifiers are required.

V. **Duplicate Sample Analysis:** ACCEPTABLE/All criteria met.

VI. **Spiked Sample Analysis:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Cyanide	J4(+)/UJ(-)	108234-9, 108234-10, 108234-11, 108234-12, 108234-13, 108257-1, 108257-2, 108318-1	Low spike recovery. Results may be biased low.

Discussion

Recovery was low for three sample spike analyses (62%, 66% and 74%). Associated sample results should be qualified as estimated [J4(+)/UJ(-)], as values may be biased low.

The laboratory incorrectly qualified samples 108258-2, 108258-3 and 108258-4 with "N" qualifiers, signifying spike recovery was outside the control limits. Recovery was acceptable for these samples.

VII. **Sample Result Verification:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Cyanide	Sample result should read 0.5U	108130-6	Transcription error.

Discussion

Results were checked for transcription errors. One sample detection limit was not correctly listed on the Form 1. Result is listed in the above table.

VIII. **Overall Assessment of Data:**

No significant problems were noted with the sample data groups submitted for cyanide. Holding time was exceeded for five samples and recovery was slightly low for a few laboratory check samples. Associated sample results are recommended to be qualified as estimated.

FECAL COLIFORM AND FECAL STREPTOCOCCUS TESTS
DATA VALIDATION REPORT

Results with backup laboratory sheets were submitted for fecal coliform and fecal streptococcus. The holding time of 6 hours was met by all samples except for Sample 2527SU000000000.001. Since the time exceedance was minimal (18 minutes), no data qualifiers are recommended.

One problem noted by the laboratory was that the collection time for Sample 2503SU000000000.001 was recorded as 9:00 a.m. on the chain-of-custody while the sample container read 12:40 p.m. as the sample collection time. The chain-of-custody time was used. No other problems were noted by the laboratory.

Two field blanks (2529WW000001000.001 and 3605WW000001000.001) were submitted for analysis. Zero colonies per 100 mLs were reported for both samples indicating no contamination during the sampling process. All laboratory controls read zero colonies as well.

Two sets of field duplicates (2530SU201000000.001/3198SU202000000.001 and 2510SU511000000.001/3199SU512000000.001) were submitted. The relative percent differences (RPDs) between results for fecal coliform were 57.1% and 7.4%, respectively. RPD results for fecal streptococcus were 25.4% and 22.2%. These results are within expected field variability. Therefore, no qualifiers are recommended.

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

WET SEASON (JANUARY 1992)
DATA VALIDATION REPORT

DATA VALIDATION REPORT

South Tacoma Field
Surface Water and Sediments
January, 1992

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Contract: 2304 - 4

March 23, 1992
FINAL

South Tacoma Field
Surface Water and Sediments
January, 1992

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INTRODUCTION

The submitted data packages have been reviewed by EcoChem, Inc. Data validation packets for the organics and inorganics analyses, which detail items reviewed, are on file at EcoChem. The quality assurance evaluations performed and the resulting data qualification recommendations are summarized in the following sections:

- Volatile Organic Analyses
- Semivolatile Organic Analyses
- Pesticide/PCB Analyses
- PAH Analyses
- Total Metals, Low Level Copper, and Cyanide Analyses
- Fecal Coliform and Fecal Streptococcus

Recommended data qualifiers are based on the EPA Contract Laboratory Program (CLP) Data Validation Functional Guidelines (U.S. EPA, 1988b, c, d). These guidelines require that the data reviewer use professional judgment to designate data qualifiers, but do not replace those assigned by the laboratory. Data may be qualified even though the laboratory fulfilled all the requirements stated in the EPA Statement of Work (SOW) for a particular analysis (U.S. EPA, 1988a, 1990a, b). Unless specifically stated in the text, data qualifications are not due to laboratory error or deviations from the analysis protocols defined in the EPA SOW, but are based on EPA CLP data validation guidelines.

EcoChem, Inc.'s goal in assigning data validation qualifiers is to assist in proper data interpretation. If values are assigned a J, or UJ, data can be used for site evaluation purposes, but reasons for data qualification should be taken into consideration when interpreting sample concentrations. If values are assigned an R, the data are to be rejected and should not be used for any site evaluation purposes. If values have no data qualifier assigned, then the data meet all data quality goals as outlined in the EPA CLP Functional Guidelines and as required by the South Tacoma Field Superfund Site Quality Assurance Project Plan, March, 1991.

Holding times, sample integrity and required analyses were determined by review of the chain-of-custody sheets. Chain-of-custody records were received for all samples. A summary of the samples reviewed is provided in Table 1.

REFERENCES

Kennedy/Jenks/Chilton. 1991. Quality Assurance Project Plan South Tacoma Field Superfund Site, Tacoma, Wa. March.

U.S. Environmental Protection Agency. 1988a. Contract Laboratory Program Statement of Work for Pesticides/PCBs.

U.S. Environmental Protection Agency. 1988b. Functional Guidelines for Evaluating Inorganic Analyses.

U.S. Environmental Protection Agency. 1988c. Functional Guidelines for Evaluating Organic Analyses. R-582-5-5-01.

U.S. Environmental Protection Agency. 1988d. Functional Guidelines for Evaluating Pesticide/PCB Analyses. R-582-5-5-01.

U. S. Environmental Protection Agency. 1990a. Contract Laboratory Program Statements of Work for Inorganics. ILM01.0.

U. S. Environmental Protection Agency. 1990b. Contract Laboratory Program Statements of Work for Organics. OLM01.0.

NARRATIVE

Table 1. Summary of Analysis Reviewed.

Sample Number	VOA	BNA	Pest/ PCBs	Metals	CN	PAH	B	CU	COLI. & STREP.	CR+6
2500SU000000000.002	2/27 01110"	2/27 01095"	2/27 01156"	3/11 JOB052"	3/11 JOB052"	2/27 122"	3/11 JOB052"	3/11 JOB052"	2/27 126"	
2501SD000000000.002	2/27 01156"	2/27 0110"	2/27 01110"	3/11 JOB080"	3/11 JOB080"	2/27 122"	3/11 JOB080"			3/11 JOB080"
2501SU000000000.002	2/27 01159"	2/27 01159"	3/11 01180"	3/11 JOB082"	3/11 JOB082"	2/27 122"	3/11 JOB082"	3/11 JOB082"	2/27 126"	
2502SD310000000.002	2/27 01156"	2/27 0110"	2/27 01110"	3/11 JOB080"	3/11 JOB080"	3/7 127"	3/11 JOB080"			3/11 JOB080"
2502SU310000000.002	3/11 01180"	2/27 01206"	2/27 01210"	3/11 JOB082"	3/11 JOB082"	3/7 127"	3/11 JOB082"	3/11 JOB082"	2/27 126"	
2503SD000000000.002	2/27 01156"	2/27 0110"	2/27 01110"	3/11 JOB080"	3/11 JOB080"	3/7 127"	3/11 JOB080"			3/11 JOB080"
2503SU000000000.002	3/11 01180"	2/27 01206"	2/27 01210"	3/11 JOB082"	3/11 JOB082"	3/7 127"	3/11 JOB082"	3/11 JOB082"	2/27 126"	
2504SD000000000.002	2/27 01086"	2/27 01086"	2/27 01156"	3/11 JOB040"	3/11 JOB040"	2/27 125"	3/11 JOB040"			3/11 JOB040"
2505SU000000000.002	2/27 01110"	2/27 01095"	2/27 1-095"	3/11 JOB052"	3/11 JOB052"	2/27 123"	3/11 JOB052"	3/11 JOB052"	2/27 126"	
2506SD320000000.002	2/27 01086"	2/27 0110"	2/27 01110"	3/11 JOB040"	3/11 JOB040"	2/27 123"	3/11 JOB040"			3/11 JOB040"
2506SU310000000.002	2/27 01110"	2/27 01095"	2/27 1-095"	3/11 JOB052"	3/11 JOB052"	2/27 123"	3/11 JOB052"	3/11 JOB052"	2/27 126"	
2506SU320000000.002	2/27 01110"	2/27 01095"	2/27 1-095"	3/11 JOB052"	3/11 JOB052"	2/27 123"	3/11 JOB052"	3/11 JOB052"	2/27 126"	
2507SD201000000.002	2/27 01086"	2/27 0110"	2/27 01110"	3/11 JOB040"	3/11 JOB040"	2/27 123"	3/11 JOB040"			3/11 JOB040"
2507SU201000000.002	2/27 01110"	2/27 01095"	2/27 1-095"	3/11 JOB052"	3/11 JOB052"	2/27 123"	3/11 JOB052"	3/11 JOB052"	2/27 126"	
2508SD000000000.002	2/27 01086"	2/27 0110"	2/27 01110"	3/11 JOB040"	3/11 JOB040"	2/27 123"	3/11 JOB040"			3/11 JOB040"
2508SU000000000.002	2/27 01110"	2/27 01095"	2/27 1-095"	3/11 JOB052"	3/11 JOB052"	2/27 123"	3/11 JOB052"	3/11 JOB052"	2/27 126"	

KEY

VOA	=	CLP Volatile Organic Compounds	Metals	=	Total Metals
BNA	=	Base/Neutral/Acid (Semivolatile) Compounds	OCH	=	Organochlorine Herbicides
P/PCB	=	TCL Pesticide Compounds and Polychlorinated Biphenyls	OPP	=	Organophosphate Pesticides
CN	=	Cyanide	B	=	Boron
TOC	=	Total Organic Carbon	CU	=	Copper
TCLP	=	Toxicity Characteristic Leaching Procedure	CR+6	=	Chromium + 6
Coli & Strep	=	Coliform/Fecal			

Table 1. Summary of Analysis Reviewed Continued.

Sample Number	VOA	BNA	Pest/ PCBs	Metals	CN	PAH	B	CU	COLI. & STREP.	CR+6
2509SD310000000.002	2/27 01086"	2/27 01086"	2/27 1-086"	3/11 JOB040"	3/11 JOB040"	2/27 124"	3/11 JOB040"			3/11 JOB040"
2509SD320000000.002	2/27 01086"	2/27 0110"	2/27 01110"	3/11 JOB040"	3/11 JOB040"	2/27 123"	3/11 JOB040"			3/11 JOB040"
2509SU310000000.002	2/27 01110"	2/27 01095"	2/27 1-095"	3/11 JOB052"	3/11 JOB052"	2/27 124"	3/11 JOB052"	3/11 JOB052"	2/27 126"	
2509SU320000000.002	2/27 01110"	2/27 01095"	2/27 1-095"	3/11 JOB052"	3/11 JOB052"	2/27 124"	3/11 JOB052"	3/11 JOB052"	2/27 126"	
2509WW000001000.002	2/27 01110"	2/27 01095"	2/27 1-095"	3/11 JOB052"	3/11 JOB052"	2/27 124"	3/11 JOB052"	3/11 JOB052"	2/27 126"	
2510SD000000000.002	2/27 01086"	2/27 0110"	2/27 01110"	3/11 JOB040"	3/11 JOB040"	2/27 123"	3/11 JOB040"			3/11 JOB040"
2510SU000000000.002	2/27 01110"	2/27 01095"	2/27 1-095"	3/11 JOB052"	3/11 JOB052"	2/27 124"	3/11 JOB052"	3/11 JOB052"	2/27 126"	
2511SD310000000.002	2/27 01086"	2/27 01086"	2/27 1-086"	3/11 JOB040"	3/11 JOB040"	2/27 124"	3/11 JOB040"			3/11 JOB040"
2511SD320000000.002	2/27 01086"	2/27 01086"	2/27 1-086"	3/11 JOB040"	3/11 JOB040"	2/27 124"	3/11 JOB040"			3/11 JOB040"
2511SU310000000.002	2/27 01110"	2/27 01095"	2/27 1-095"	3/11 JOB052"	3/11 JOB052"	2/27 124"	3/11 JOB052"	3/11 JOB052"	2/27 126"	
2511SU320000000.002	2/27 01110"	2/27 01095"	2/27 1-095"	3/11 JOB052"	3/11 JOB052"	2/27 124"	3/11 JOB052"	3/11 JOB052"	2/27 126"	
2512SD000000000.002	2/27 01086"	2/27 01086"	2/27 1-086"	3/11 JOB040"	3/11 JOB040"	2/27 124"	3/11 JOB040"			3/11 JOB040"
2512SU000000000.002	2/27 01110"	2/27 01095"	2/27 1-095"	3/11 JOB052"	3/11 JOB052"	2/27 124"	3/11 JOB052"	3/11 JOB052"	2/27 126"	
2513SD000000000.002	2/27 01086"	2/27 01086"	2/27 1-086"	3/11 JOB040"	3/11 JOB040"	2/27 125"	3/11 JOB040"			3/11 JOB040"
2514SD000000000.002	2/27 01086"	2/27 01086"	2/27 1-086"	3/11 JOB040"	3/11 JOB040"	2/27 125"	3/11 JOB040"			3/11 JOB040"
2515SD000000000.002	2/27 01086"	2/27 01086"	2/27 1-086"	3/11 JOB040"	3/11 JOB040"	2/27 125"	3/11 JOB040"			3/11 JOB040"

KEY

VOA	=	CLP Volatile Organic Compounds	Metals	=	Total Metals
BNA	=	Base/Neutral/Acid (Semivolatile) Compounds	OCH	=	Organochlorine Herbicides
P/PCB	=	TCL Pesticide Compounds and Polychlorinated Biphenyls	OPP	=	Organophosphate Pesticides
CN	=	Cyanide	B	=	Boron
TOC	=	Total Organic Carbon	CU	=	Copper
TCLP	=	Toxicity Characteristic Leaching Procedure	CR+6	=	Chromium + 6
Coli & Strep	=	Coliform/Fecal			

Table 1. Summary of Analysis Reviewed Continued.

Sample Number	VOA	BNA	Pest/ PCBs	Metals	CN	PAH	B	CU	COLI. & STREP.	CR+6
2516SD320000000.002	2/27 01156"	2/27 0110"	2/27 01110"	3/11 JOB080"	3/11 JOB080"	3/7 127"	3/11 JOB080"			3/11 JOB040"
2516SD511000000.002	2/27 01156"	2/27 0110"	2/27 01110"	3/11 JOB080"	3/11 JOB080"	3/7 127"	3/11 JOB080"			3/11 JOB040"
2516SU320000000.002	3/11 01180"	2/27 01206"	3/11 01210"	3/11 JOB082"	3/11 JOB082"	3/7 127"	3/11 JOB082"	3/11 JOB082"	2/27 126"	
2516SU511000000.002	3/11 01180"	2/27 01206"	3/11 01210"	3/11 JOB082"	3/11 JOB082"	3/7 127"	3/11 JOB082"	3/11 JOB082"	2/27 126"	
2518SD000000000.002	2/27 01086"	2/27 01086"	2/27 1-086"	3/11 JOB040"	3/11 JOB040"	2/27 125"	3/11 JOB040"			3/11 JOB040"
2518SU000000000.002	2/27 01110"	2/27 01095"	2/27 01156"	3/11 JOB052"	3/11 JOB052"	2/27 122"	3/11 JOB052"	3/11 JOB052"	2/27 126"	
2519SD000000000.002	2/27 01086"	2/27 01086"	2/27 1-086"	3/11 JOB040"	3/11 JOB040"	2/27 125"	3/11 JOB040"			3/11 JOB040"
2519SU000000000.002	2/27 01110"	2/27 01095"	2/27 01156"	3/11 JOB052"	3/11 JOB052"	2/27 122"	3/11 JOB052"	3/11 JOB052"	2/27 126"	
2520SD000000000.002	2/27 01086"	2/27 01086"	2/27 01156"	3/11 JOB040"	3/11 JOB040"	2/27 125"	3/11 JOB040"			3/11 JOB040"
2520SU000000000.002	2/27 01110"	2/27 01095"	2/27 01156"	3/11 JOB052"	3/11 JOB052"	2/27 122"	3/11 JOB052"	3/11 JOB052"	2/27 126"	
2521SD000000000.002	2/27 01086"	2/27 01086"	2/27 1-086"	3/11 JOB040"	3/11 JOB040"	2/27 125"	3/11 JOB040"			3/11 JOB040"
2521SU000000000.002	2/27 01110"	2/27 01095"	2/27 01156"	3/11 JOB052"	3/11 JOB052"	2/27 122"	3/11 JOB052"	3/11 JOB052"	2/27 126"	
2522SD000000000.002	2/27 01086"	2/27 01086"	2/27 01156"	3/11 JOB040"	3/11 JOB040"	2/27 125"	3/11 JOB040"			3/11 JOB040"
2523SD000000000.002	2/27 01086"	2/27 01086"	2/27 01156"	3/11 JOB040"	3/11 JOB040"	2/27 125"	3/11 JOB040"			3/11 JOB040"
2524SD000000000.002	2/27 01086"	2/27 01086"	2/27 01156"	3/11 JOB040"	3/11 JOB040"	2/27 125"	3/11 JOB040"			3/11 JOB040"
2525SD000000000.002	2/27 01086"	2/27 01086"	2/27 01156"	3/11 JOB080"	3/11 JOB080"	2/27 125"	3/11 JOB080"			3/11 JOB040"

KEY

VOA	=	CLP Volatile Organic Compounds	Metals	=	Total Metals
BNA	=	Base/Neutral/Acid (Semivolatile) Compounds	OCH	=	Organochlorine Herbicides
P/PCB	=	TCL Pesticide Compounds and Polychlorinated Biphenyls	OPP	=	Organophosphate Pesticides
CN	=	Cyanide	B	=	Boron
TOC	=	Total Organic Carbon	CU	=	Copper
TCLP	=	Toxicity Characteristic Leaching Procedure	CR+6	=	Chromium + 6
Coli &					
[illegible]	=	Coliform/Fecal			

Table 1. Summary of Analysis Reviewed Continued.

Sample Number	VOA	BNA	Pest/ PCBs	Metals	CN	PAH	B	CU	COLI. & STREP.	CR+6
2526SD000000000.002	2/27 01086"	2/27 01086"	2/27 01156"	3/11 JOB080"	3/11 JOB080"	2/27 125"	3/11 JOB080"			3/11 JOB040"
2527SD000000000.002	2/27 01156"	2/27 0110"	2/27 01110"	3/11 JOB080"	3/11 JOB080"	2/27 122"	3/11 JOB080"			3/11 JOB040"
2527SU000000000.002	2/27 01110"	2/27 01095"	2/27 01156"	3/11 JOB052"	3/11 JOB052"	2/27 122"	3/11 JOB052"	3/11 JOB052"	2/27 126"	
2528SD201000000.002	2/27 01156"	2/27 0110"	2/27 01110"	3/11 JOB080"	3/11 JOB080"	2/27 122"	3/11 JOB080"			3/11 JOB080"
2528SU201000000.002	2/27 01159"	2/27 01159"	3/11 01180"	3/11 JOB082"	3/11 JOB082"	2/27 122"	3/11 JOB082"	3/11 JOB082"	2/27 126"	
2529SD000000000.002	2/27 01156"	2/27 0110"	2/27 01110"	3/11 JOB080"	3/11 JOB080"	2/27 122"	3/11 JOB080"			3/11 JOB080"
2529SU000000000.002	2/27 01159"	2/27 01159"	3/11 01180"	3/11 JOB082"	3/11 JOB082"	2/27 122"	3/11 JOB082"	3/11 JOB082"	2/27 126"	
2529WW000001000.002	2/27 01159"	2/27 01159"	3/11 01169"	3/11 JOB082"	3/11 JOB082"	2/27 122"	3/11 JOB082"	3/11 JOB082"	2/27 126"	
2530SD000000000.002	2/27 01156"	2/27 0110"	2/27 01110"	3/11 JOB080"	3/11 JOB080"	2/27 122"	3/11 JOB080"			3/11 JOB080"
2530SU000000000.002	2/27 01159"	2/27 01159"	3/11 01180"	3/11 JOB082"	3/11 JOB082"	2/27 122"	3/11 JOB082"	3/11 JOB082"	2/27 126"	
2540SU000000000.002	2/27 01159"	2/27 01159"	3/11 01169"	3/11 JOB082"	3/11 JOB082"	2/27 122"	3/11 JOB082"	3/11 JOB082"	2/27 126"	
2541SU000000000.002	2/27 01159"	2/27 01159"	3/11 01169"	3/11 JOB082"	3/11 JOB082"	2/27 122"	3/11 JOB082"	3/11 JOB082"	2/27 126"	
2542SU000000000.002	2/27 01159"	2/27 01159"	3/11 01169"	3/11 JOB082"	3/11 JOB082"	2/27 122"	3/11 JOB082"	3/11 JOB082"	2/27 126"	
2543SU000000000.002	2/27 01159"	2/27 01159"	3/11 01169"	3/11 JOB082"	3/11 JOB082"	2/27 122"	3/11 JOB082"	3/11 JOB082"	2/27 126"	
3196SD202000000.002	2/27 01156"	2/27 0110"	2/27 01110"	3/11 JOB080"	3/11 JOB080"	2/27 122"	3/11 JOB080"			3/11 JOB080"
3196SU202000000.002	2/27 01159"	2/27 01159"	3/11 01180"	3/11 JOB082"	3/11 JOB082"	2/27 122"	3/11 JOB082"	3/11 JOB082"	2/27 126"	

KEY

VOA	=	CLP Volatile Organic Compounds	Metals	=	Total Metals
BNA	=	Base/Neutral/Acid (Semivolatile) Compounds	OCH	=	Organochlorine Herbicides
P/PCB	=	TCL Pesticide Compounds and Polychlorinated Biphenyls	OPP	=	Organophosphate Pesticides
CN	=	Cyanide	B	=	Boron
TOC	=	Total Organic Carbon	CU	=	Copper
TCLP	=	Toxicity Characteristic Leaching Procedure	CR+6	=	Chromium + 6
Coli & Strep	=	Coliform/Fecal			

Table 1. Summary of Analysis Reviewed Continued.

Sample Number	VOA	BNA	Pest/ PCBs	Metals	CN	PAH	B	CU	COLI. & STREP.	CR+6
3197SD202000000.002	2/27 01086"	2/27 0110"	2/27 01110"	3/11 JOB080"	3/11 JOB080"	2/27 123"	3/11 JOB080"			3/11 JOB080"
3197SU202000000.002	2/27 01110"	2/27 01095"	2/27 1-095"	3/11 JOB052"	3/11 JOB052"	2/27 123"	3/11 JOB052"	3/11 JOB052"	2/27 126"	
3606WWU000002000.002	2/27 01159"	2/27 01159"	2/27 1-095"	3/11 JOB082"	3/11 JOB082"	2/27 122"	3/11 JOB082"	3/11 JOB082"	2/27 126"	
3607WW000002000.002	2/27 01110"	2/27 01095"	2/27 1-095"	3/11 JOB052"	3/11 JOB052"	2/27 123"	3/11 JOB052"	3/11 JOB052"	2/27 126"	
3655WW000003000.002	2/27 01110"									
3656WW000003000.002						3/7 127"				

KEY

VOA	=	CLP Volatile Organic Compounds
BNA	=	Base/Neutral/Acid (Semivolatile) Compounds
P/PCB	=	TCL Pesticide Compounds and Polychlorinated Biphenyls
CN	=	Cyanide
TOC	=	Total Organic Carbon
TCLP	=	Toxicity Characteristic Leaching Procedure
Coli & Strep	=	Coliform/Fecal
Metals	=	Total Metals
OCH	=	Organochlorine Herbicides
OPP	=	Organophosphate Pesticides
B	=	Boron
CU	=	Copper
CR+6	=	Chromium + 6

DATA VALIDATION REPORT
VOLATILE ORGANIC ANALYSES

I. **Sample Holding Times:** ACCEPTABLE/All criteria met.

II. **GC/MS Instrument Performance Check:** ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

The time for the 1/20/92 BFB Tune on Form V-VOA of 9:00 hours was different than the BFB raw data time of 17:14 hours. This is assumed to be a typo because the raw data values match the values on Form V-VOA. Another problem encountered for the BFB Tune on 1/20/92 was the 173/174 mass ion actual abundance percentage value was reported to be 3.9. The raw data were checked and the value should read 0.39%. The laboratory was requested to submit corrected forms. No data qualifiers are recommended, as all QC criteria were met.

III. **Initial and Continuing Calibration:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Acetone	J4(+)/ UJ(-)	9201-156-6, 9201-169-1, 9201-169-3, 9201-169-5, 9201-169-9, 9201-110-7RE, 9201-110-9RE, 9201-110-11, 9201-086-1RE	Continuing Calibration %D is greater than 25%. %D = 50.2%.
Acetone	J4(+)	9201-095-1	Continuing Calibration %D is greater than 25%. %D = 29.7%.
Acetone	J4(+)	9201-095-6, 9201-095-7, 9201-095-10R, 9201-110-9, 9201-110-7	Continuing Calibration %D is greater than 25%. %D = 37.2%.

2-Butanone	**UJ(-)**	**9201-156-6, 9201-169-1, 9201-169-3, 9201-169-5, 9201-169-9**	**Continuing Calibration %D is greater than 25%. %D = 81.4%.**
2-Butanone	**R(-)**	**9201-110-1, 9201-110-3, 9201-086-14, 9201-095-2, 9201-095-3, 9201-095-4, 9201-095-5, 9201-095-8, 9201-095-9, 9201-095-11**	**Continuing Calibration RRF50 is less than 0.05. RRF50 = 0.044.**
2-Butanone	**UJ(-)**	**9201-110-7RE, 9201-110-9RE, 9201-110-11, 9201-086-1RE**	**Continuing Calibration %D is greater than 25%. %D = 81.4%.**
2-Hexanone	**UJ(-)**	**9201-156-6, 9201-169-1, 9201-169-3, 9201-169-5, 9201-169-9, 9201-110-7RE, 9201-110-9RE, 9201-110-11, 9201-086-1RE**	**Continuing Calibration %D is greater than 25%. %D = 76.7%.**
4-Methyl-2-Pentanone	**UJ(-)**	**9201-156-6, 9201-169-1, 9201-169-3, 9201-169-5, 9201-169-9**	**Continued Calibration %D is greater than 25%. %D = 92.8%.**
Methylene Chloride	**J4(+)**	**9201-095-5, 9201-110-1**	**Continuing Calibration %D is greater than 25%. %D = 30.2%.**

Discussion

The relative response factor (RRF) and the percent relative standard deviation (%RSD) for the initial calibration, and the RRF and percent difference (%D) for the continuing calibration were evaluated. Criteria for %D, RRF50 and %RSD between calibrations were not met for compounds listed above. Under Functional Guidelines, positive results are required to be assigned a J4 qualifier if initial calibration RSD is greater than 30%, and if %D for continuing calibration is greater than 25%. For significant %RSD or %D variations (>50%), detection limits are also qualified (UJ). If the RRF is less than 0.05, then positive results are qualified as estimated (J4) and nondetects unusable (R). Qualifiers are summarized in the above table.

IV. Blank Analyses: ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Methylene Chloride	UJ at Reported Value	9201-086-8, 9201-086-7RE, 9201-086-9RE, 9201-110-9, 9201-110-7, 9201-110-5, 9201-086-1, 9201-086-2, 9201-086-3, 9201-086-4, 9201-086-6, 9201-086-7, 9201-086-9, 9201-095-1, 9201-095-10, 9201-086-13R, 9201-086-10R, 9201-086-12R, 9201-086-11, 9201-110-11, 9201-110-7RE, 9201-110-9RE, 9201-086-1RE, 9201-110-2, 9201-110-10, 9201-086-12, 9201-086-10, 9201-086-6RE, 9201-086-5, 9201-086-13 9201-156-6, 9201-156-6RE, 9201-169-1, 9201-169-3, 9201-169-9, 9201-169-5RE, 9201-169-3RE, 9201-169-7, 9201-169-9RE, 9201-220-1, 9201-220-5, 9201-220-3, 9201-220-6, 9201-220-2, 9201-220-4,	Sample value is less than 10 times method blank contamination
Acetone	UJ at Reported Value	9201-110-7RE, 9201-110-9RE, 9201-110-2, 9201-110-10, 9201-086-12, 9201-086-10, 9201-086-6RE, 9201-086-5, 9201-086-8, 9201-086-13, 9201-086-7RE, 9201-156-6, 9201-156-6RE, 9201-169-1, 9201-169-3, 9201-169-9, 9201-169-5RE, 9201-169-3RE, 9201-169-7, 9201-169-9RE, 9201-220-1, 9201-220-3, 9201-220-5, 9201-220-6	Sample value is less than 10 times method blank contamination

Hexane	**R**	**9201-220-2, 9201-220-4, 9201-220-7, 9201-220-8, 9201-176-4, 9201-176-5, 9201-176-1, 9201-176-2, 9201-176-3, 9201-169-2, 9201-169-4, 9201-169-6, 9201-169-8, 9201-169-10, 9201-169-11, 9201-110-4, 9201-110-6, 9201-110-8, 9201-110-12, 9201-110-13, 9201-156-1, 9201-156-2, 9201-156-3, 9201-156-4, 9201-156-5, 9201-156-7, 9201-156-8, 9201-086-14, 9201-110-1, 9201-110-3, 9201-095-2, 9201-095-3, 9201-095-4, 9201-095-5, 9201-095-8, 9201-095-9, 9201-095-11**	**TIC found in method blank and associated samples**

Discussion

Methylene chloride and acetone contamination was found in the laboratory method blanks. Because these are common laboratory contaminants, an action level is determined for data qualification at 10 times the highest associated blank value. Under Functional Guidelines, samples with concentrations less than the action level are qualified (UJ).

The laboratory did not follow the CLP SOW for blank analyses, as method blank weights did not always match the associated sample weight. Therefore, to compare method blank results to sample results, results from the raw data instrument readouts were used, rather than Form I results. A tentatively identified compound (TIC), hexane, was reported in the method blanks and their accompanying samples. Recommended data qualifiers are listed above.

Field blanks, rinsate blanks, and trip blanks were submitted for review with the sample sets. No contaminants were detected. Therefore, no qualifiers are recommended based on these blanks.

V. **Surrogate Recovery:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
All Volatile Compounds	**R**	**9201-169-9, 9201-169-5, 9201-086-13, 9201-086-9**	**Initial surrogate recoveries outside control limits. Reanalysis results within control limits.**
All Volatile Compounds	**J4(+)**	**9201-169-1**	**Surrogate recovery outside control limits of 59% - 113%. %R = 117%.**

Discussion

The surrogate recoveries for some sample analyses were outside control limits. All surrogate reanalysis results were within limits. Therefore initial analysis results of the affected samples should be rejected and reanalysis results be used. Surrogate recovery was outside control limits for Sample 9201-169-1. However, this sample was also analyzed as a matrix spike. Therefore, under the CLP SOW reanalysis was not required. Due to high surrogate recovery, positive results are recommended to be estimated (J4). Calculation errors were found for Sample 9201-169-3RE surrogate revocery values. The lab was contacted and sent corrected results. Qualified data are summarized above.

VI. **Matrix Spike/Matrix Spike Duplicate Sample Analyses:** ACCEPTABLE/All criteria met.

VII. **Field Duplicates:** ACCEPTABLE/All criteria met.

Discussion

Samples 9201-110-11/9201-110-5, 9201-110-6/9201-110-12, 9201-169-3/9201-169-9, and 9201-169-4/9201-169-10 were field duplicates for volatile analysis. Relative percent differences (RPDs) between the field duplicates were less than 62% except for one methylene chloride and one acetone value that were previously qualified, as UJ, due to blank contamination. No additional qualifiers are recommended based on the field duplicates.

VIII. **Internal Standards Performance:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
4-Methyl-2-Pentanone 2-Hexanone Chlorobenzene Tetrachloroethene Styrene Ethylbenzene Xylene(total) Toluene 1,1,2,2-Tetrachloroethane	J4(+)/ UJ(-)	9201-086-1, 9201-086-7, 9201-086-9RE, 9201-086-6, 9201-086-10R, 9201-086-12, 9201-086-13R, 9201-110-7, 9201-110-9, 9201-095-10, 9201-169-9RE, 9201-169-5RE, 9201-169-3RE, 9201-156-6RE	Internal standard area outside control limits.
1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane Trans-1,3-Dichloropropene Cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene Bromoform	J4(+)/ UJ(-)	9201-086-9RE	Internal standard area outside control limits.
All Volatile Compounds	R	9201-086-9, 9201-086-10, 9201-086-13, 9201-169-9, 9201-169-3, 9201-156-6	Internal standard area outside control limits. Reanalyses analysis of IS were within limits. Use reanalyses values.
All Volatile Compounds	R	9201-095-10RE, 9201-086-1RE, 9201-086-6RE, 9201-086-7RE, 9201-086-12R, 9201-110-7RE, 9201-110-9RE	Use initial results. Reanalysis IS was outside control limits.

Discussion

During the volatile analyses, the internal standard (IS) areas were outside of the acceptable limits for some samples. Under Functional Guidelines, if the IS area is outside -50% or +100% of the associated standard, then all results for compounds quantitated using that IS are flagged as estimated [J4(+)] and [UJ(-)]. Nondetects are rejected (R) if extremely low area counts are reported for the IS. Reanalysis was performed and results for some samples were within limits. Therefore, initial results for these samples should be rejected (R), and the reanalysis results be used. For samples with reanalysis results still outside control limits, reanalysis results are recommended to be rejected (R), and initial results used. Recommended data qualifiers and the affected samples are listed above.

IX. Compound Identification: ACCEPTABLE/All criteria met.

X. Compound Quantitation and Reported Contract Required Quantitation Limits (CRQLs): ACCEPTABLE/All criteria met.

XI. Tentatively Identified Compounds (TICs): ACCEPTABLE/All criteria met.

Discussion

All TICs are flagged as tentatively identified with estimated concentrations (JN).

XII. System Performance: ACCEPTABLE/All criteria met.

XIII. Overall Assessment of the Data

The data, as qualified, are acceptable for use.

DATA VALIDATION REPORT
SEMIVOLATILE ORGANICS ANALYSES

I. **Sample Holding Times:** ACCEPTABLE/All criteria met.

II. **GC/MS Instrument Performance Checks:** ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Analysis of Sample 9201-110-4 exceeded the 12-hour analysis criteria by six minutes. Because the criteria was only slightly exceeded and the subsequent tune met performance criteria, no qualifiers are recommended.

III. **Initial and Continuing Calibration:** ACCEPTABLE/With the following exceptions

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Bis(2-ethylhexyl) phthalate	J4(+)	9201-110-13	Continuing calibration exceeds 25% criteria. (%D = -27.2%)
4-Nitrophenol	J4(+)	9201-169-4, 9201-169-6	Continuing calibration exceeds 25% criteria. (%D = 49.8%)
Benzo(a)anthracene	J4(+)	9201-169-5, 9201-169-7, 9201-169-9	Continuing calibration exceeds 25% criteria. (%D = -27.8%)
Bis(2-ethylhexyl) phthalate	J4(+)	9201-156-6, 9201-169-3, 9201-220-1, 9201-220-3, 9201-220-5, 9201-220-6	Continuing calibration exceeds 25% criteria. (%D = -45.5%)
Di-n-octylphthalate	J4(+)	9201-110-7, 9201-156-6, 9201-169-3, 9201-220-1, 9201-220-3, 9201-220-4	Continuing calibration exceeds 25% criteria. (%D = -47.5%, -56.1%, -39.0%)

Discussion

The initial calibration relative standard deviation (RSD) exceeded the 30% criteria for the following compounds on different days: benzo(k)fluoranthene (32.1%), 3-nitroaniline (46.6%), 4-nitroaniline (32.1%), 4-chloro-3-methylphenol (36.7%), and 2,4-dinitrophenol (40.9%). Under the CLP 1990 Statement of Work, the laboratory is allowed up to four compounds to exceed the RRF and RSD criteria each day as long as the RRF is greater than .010 and the RSD is less than 40%. Under Functional Guidelines, positive data are qualified if the criteria are exceeded. Detection limits are qualified if the %RSD is judged great enough to affect detection of the compound. None of the compounds with %RSD exceeding the criteria were detected in associated samples, and %RSDs were judged not to affect detection limits. Therefore, no qualifiers are recommended based on initial calibration.

High percent differences (%Ds) between continuing calibrations for several compounds were reported on various days. Compounds that were detected and have %Ds greater than 25% are qualified as estimated (J4). Compounds that were not detected, but have %Ds greater than +50% indicating a significant loss in sensitivity, are qualified as UJ. Samples qualified are summarized above.

The laboratory noted that the high %Ds for surrogates 1,2-dichlorobenzene-d4 and 2-fluorophenol were due to a new continuing calibration stock solution being used rather than the initial five-point solution. Because these two compounds are quality control checks and not used for quantitation, no data qualifiers are recommended.

IV. Blank Analyses: ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Di-n-butylphthalate	UJ at Reported Value	9201-169-2	Sample within ten times field blank concentration.
Bis(2-ethylhexyl) phthalate	UJ at Reported Value	9201-110-4, 9201-110-8	Sample within ten times rinsate blank concentration.
Di-n-buytlyphthalate	UJ at Reported Value	9201-095-4	Sample within ten times blank concentration.
Diethylphthalate	UJ at Reported Value	9201-095-1	Sample within ten times blank concentration.

Discussion

Six laboratory method blanks were submitted and met the required frequency of analysis. Diethylphthalate was detected in Sample 9201-095-1 and di-n-butylphthalate was detected in Sample 9201-095-4. Both compounds were within ten times the associated blank and are qualified as UJ at the reported value. Recommended qualifiers are summarized in the above table.

Two field blanks and two rinsate blanks were submitted with the data set. Low levels of di-n-butylphthalate (2-3 μg/L) and phenol (1 μg/L) were detected in the field blanks. Polynuclear aromatics (1-2 μg/L), phthalates (.5-10 μg/L), and phenol (0.7 μg/L) were detected in the rinsate blanks. No data qualifiers are recommended based on these low level field blank values.

V. **Surrogate Recovery:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
All Semivolatile Compounds	**J4(+)**	**9201-086-4, 9201-086-10, 9201-086-11, 9201-086-13**	**High surrogate recovery. (117%-165%)**

Discussion

High recoveries for more than one surrogate were reported in each of four samples (117% - 162%). Because of this consistently high surrogate recovery, all positive semivolatile compound results in these samples are recommended to be qualified as estimated (J4). Samples to be qualified are summarized above.

VI. **Matrix Spike/Matrix Spike Duplicate Sample Analyses:** ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Two sets of matrix spike/matrix spike duplicates (MS/MSD) were submitted and met the required frequency of analysis. High MS/MSD recoveries were reported for 4-nitrophenol (120%, 120%) and 4-chloro-3-methylphenol (100%). Since none of these compounds were detected, and all other QA/QC criteria are generally acceptable, no data qualifiers are recommended based only on MS/MSD results.

A high relative percent difference (RPD) between MS/MSDs was reported for 1,4-dichlorobenzene (49%), 1,2,4-trichlorobenzene (31%) and acenapthene (24%). Since acenapthene was detected, in only one sample and all other QA/QC criteria were generally acceptable, no data qualifiers are recommended.

VII. Field Duplicates: ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Four sets of field duplicates were submitted: two for surface water and two for sediment. Variability was high between sediment samples 9201-110-5/9201-110-11 (59% - 106%RPD). The high variability most likely is due to the sediment matrix. No compounds were detected at concentrations greater than the CRQL in the two other field blanks. No data qualifiers are recommended solely on field variability.

VIII. Internal Standards Performance: ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Benzo(a)anthracene Bis(2-ethylhexyl)phthalate Chrysene Pyrene	**J4(+)**	**9201-220-5**	**High internal standard area count(Chrysene-d12 = 21.2%).**

Discussion

The laboratory noted in the case narrative that interferences in the samples caused some internal standard areas to exceed the criteria. The laboratory performed reanalyses of these samples, and reported the reanalysis results as the final results.

Chrysene-d12 internal standard (IS) recovery (21.2%) exceeded IS recovery criteria in Sample 9201-220-5. Positive results for compounds associated with this IS are recommended to be qualified as estimated (J4). Qualified compounds are listed above.

IX. Compound Identification: ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Butylbenzylphthalate	**R**	**9201-095-1**	**Concentration exceeded the calibration range. Use diluted results.**
All semivolatile compounds except butylbenzylphthalate	**R**	**9201-095-1DL**	**Diluted results. Use non-diluted results.**

Discussion

Butylbenzylphthalate exceeded the calibration range for Sample 9201-095-1. As specified under the SOW, the laboratory did not flag the result with an E qualifier. It is recommended that the initial butylbenzylphthalate result be rejected (R) for this sample and to accept the diluted result (Sample 9201-095-1DL).

X. Compound Quantitation and Reported Contract Required Quantitation Detection Limits (CRQLs): ACCEPTABLE/All criteria met.

XI. Tentatively Identified Compounds (TIC): ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
4-Hydroxy-4-methyl-2-pentanone	**R**	**9201-095-2, 9201-095-4, 9201-095-5, 9201-095-8, 9201-095-9, 9201-095-11, 9201-110-1, 9201-110-3, 9201-110-4, 9201-110-6, 9201-110-8, 9201-110-12, 9201-110-13**	**TIC detected in blank.**

3,3,3-Trichloro-1-propene	R	9201-095-2, 9201-095-3, 9201-095-4, 9201-095-5, 9201-095-8, 9201-095-9, 9201-095-11, 9201-110-1, 9201-110-3, 9201-110-4, 9201-110-6, 9201-110-8, 9201-110-12, 9201-110-13, 9201-156-1, 9201-156-2, 9201-156-3, 9201-156-4, 9201-156-5, 9201-156-7, 9201-169-2, 9201-169-4, 9201-169-6, 9201-169-8, 9201-169-10, 9201-176-1, 9201-176-2, 9201-176-3, 9201-176-4, 9201-176-5, 9201-220-2, 9201-220-4, 9201-220-7, 9201-220-8	TIC detected in blank.
Dicyclohexypropane-dinitrile	R	9201-095-2, 9201-095-3, 9201-095-5, 9201-110-4, 9201-110-6, 9201-110-8, 9201-110-12, 9201-110-13, 9201-156-1, 9201-156-2, 9201-156-3, 9201-156-4, 9201-156-5, 9201-156-7, 9201-169-4, 9201-169-8, 9201-169-10, 9201-169-11, 9201-176-1, 9201-176-2, 9201-176-3, 9201-176-4, 9201-176-5, 9201-220-2, 9201-220-4, 9201-220-7, 9201-220-8	TIC detected in blank.
2,6-Bis(1,1-dimethyl) phenol	R	9201-156-1, 9201-156-2, 9201-156-3, 9201-169-4, 9201-169-6, 9201-169-8, 9201-169-10, 9201-169-11	TIC detected in blank.
2-(2-Methoxypropoxy) 1-propanol	R	9201-156-1, 9201-156-2, 9201-156-5	TIC detected in blank.
2-Cyclohexen-1-one	R	9201-086-1, 9201-086-2, 9201-086-3, 9201-086-4, 9201-086-5, 9201-086-7, 9201-086-8, 9201-095-6, 9201-110-11, 9201-110-2, 9201-169-1, 9201-220-5, 9201-220-6	TIC detected in blank.
Hexanedioic acid, dioctyl ester	R	9201-095-1DL, 9201-095-6, 9201-110-9	TIC detected in blank.

Discussion

Under Functional Guidelines TICs reported in samples as well as associated laboratory blanks are to be rejected (R). Results to be rejected are listed in the above table. All other TICs are qualified as tentatively identified with estimated concentrations (JN).

XII. System Performance: ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Overall system performance was acceptable. The laboratory noted that internal standards and some surrogates failed QC limits due to interferences in the samples which appears to be a wide variety of hydrocarbon mixtures indicative of petroleum products. The laboratory reported only final analyses with internal standard areas that were within criteria. The laboratory performed a manual spectral review that confirmed the hydrocarbon pattern. Additional copies of background subtracted target analyte spectra were provided with the data package and found to be acceptable.

XIII. Overall Assessment of the Data

Data are acceptable as qualified. Some results required qualification due to high %D of continuing calibration, blank contamination, high surrogate and internal standard recoveries.

DATA VALIDATION REPORT
PESTICIDE/PCB ANALYSES

I. Sample Holding Times: ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
All compounds	**J3(+)/ UJ(-)**	**9201-110-2, 9201-110-5, 9201-110-7, 9201-110-9, 9201-110-10, 9201-110-11**	**Extraction holding time exceeded.**

Discussion

Extraction holding times were exceeded by four days for six samples. All results for these samples have been qualified as estimated, and are summarized in the table above.

II. Instrument Performance: ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

A few Evaluation B standards had endrin and 4,4'-DDT breakdowns that exceeded the 20.0% limit. None of these standards were used for quantitation. No data qualifications are recommended due to the high breakdowns.

Many compounds in numerous continuing calibration standards failed to elute within retention time (RT) windows. Expanded/adjusted RT windows were employed to ensure that no false identifications were made. None were found for single component pesticides. All questionable PCB identifications were qualified. PCB identifications are discussed in Section VIII.

III. **Calibration:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Toxaphene	**R**	**9201-095-2, 9201-095-3, 9201-095-4, 9201-095-5, 9201-095-8, 9201-095-9, 9201-095-11, 9201-110-1, 9201-110-3, 9201-110-4, 9201-110-6, 9201-110-8, 9201-110-12, 9201-110-13**	**Initial calibration standard not analyzed.**
All compounds	**J4(+)**	**9201-086-1, 9201-086-7, 9201-086-9, 9201-086-10, 9201-086-11, 9201-086-12, 9201-086-13, 9201-156-1, 9201-156-2, 9201-156-3, 9201-156-4, 9201-156-5, 9201-156-7**	**Linearity exceeded criteria.**
Aroclor 1254	**J4**	**9201-086-3, 9201-169-9**	**No continuing calibration standard analyzed.**
Aroclor 1260	**J4**	**9201-086-1, 9201-086-2, 9201-086-5, 9201-086-6, 9201-086-7, 9201-086-8, 9201-086-9, 9201-086-10, 9201-086-11, 9201-086-12, 9201-086-13, 9201-095-6, 9201-095-7, 9201-156-6, 9201-169-3, 9201-169-5**	**No continuing calibration standard analyzed.**

Discussion

Toxaphene was not analyzed in the initial calibration of the 1/23/92 sequence. All toxaphene results for all samples analyzed in this sequence have been rejected.

The %RSD for 4,4'-DDT (10.5%) exceeded the 10.0% QC limit for the quantitation column for the 2/11/92 sequence. Positive results for all samples analyzed in this sequence have been qualified as estimated.

Aroclor 1254 and Aroclor 1260 were positively identified in several of the surface water and sediment samples. No continuing standards were analyzed in any of the sequences which contained these samples to verify continuing calibration. All positive Aroclor 1254 and Aroclor 1260 results have been qualified as estimated.

All qualified data are summarized in the table above.

Many continuing calibration standards failed to meet %D criteria. No out-of-control standards were used for quantitation. No qualifications of data are recommended based on continuing calibration.

IV. Blank Analyses: ACCEPTABLE/All criteria met.

V. Surrogate Recovery: ACCEPTABLE/All criteria met.

VI. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Sample Analyses: ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Since out-of-control recoveries (28-138%) were only slightly outside QC limits, and since other MS/MSDs and surrogate recoveries were acceptable, no qualifications of data are recommended based on MS/MSD results.

VII. Field Duplicates: ACCEPTABLE/All criteria met.

Discussion

Four sets of field duplicates were submitted: two for surface water and two for sediment. No positive identifications were made in any of the field duplicates.

VIII. Compound Identification: ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Aroclor 1254	N	9201-086-3, 9201-169-9,	Peaks not within RT windows.

Aroclor 1260	**N**	**9201-086-5, 9201-086-8, 9201-086-10, 9201-086-11, 9201-086-12, 9201-086-13, 9201-169-3, 9201-169-5**	**Peaks not within RT windows.**

Discussion

A false negative identification was made for Sample 9201-176-4. The laboratory made the necessary correction and submitted a corrected copy of Form I for this sample.

Based on raw data, a few compounds appeared to be confirmed above the quantitation limit but were not reported. The presence of Aroclors caused the false positives and the quantitation limits are acceptable.

Several peaks used for identification of Aroclor 1254 and Aroclor 1260 did not elute within RT windows for a number of samples. Since Aroclor pattern duplication between samples and standards was observed, affected samples are qualified as presumptively present. Qualifiers are summarized in the table above.

IX. Compound Quantitation and Contract Required Quantitation Limits (CRQLs): ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

The quantitation limits for several compounds were reported incorrectly for Sample 9201-156-6. The laboratory made the necessary corrections and submitted a corrected copy of Form I for this sample.

X. Overall Assessment of the Data

Generally, the laboratory performed the pesticide/PCB analyses within contract specifications. A few errors were found that required the qualification of data, they have been noted in this report. The data, as qualified, are acceptable for use.

DATA VALIDATION REPORT
POLYNUCLEAR AROMATIC HYDROCARBON ANALYSES

I. Sample Holding Times: ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
All Compounds	**J3(+)/ UJ(-)**	**9201-110-5**	**Extraction holding time exceeded.**

Discussion

The extraction holding time for Sample 9201-110-5 was exceeded by nine days. All results for this sample have been qualified as estimated and are summarized in the table above.

II. Instrument Performance: ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Retention times (RTs) for two continuing calibration standards were not within acceptable RT windows. Relative retention times were utilized for identification purposes. No mis-identifications were made due to the shifting RTs. No qualifications of data are recommended due to shifting RTs.

III. Calibration: ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Continuing calibration criteria (%Ds) were not met for a number of compounds. None of these out-of-control standards were used for quantitation purposes; they were used only for identification confirmation. No data qualifications are recommended due to out-of-control continuing standards.

IV. **Blank Analyses:** ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Two field blanks and two rinsate blanks were submitted with these samples. Fluoranthene was positively identified in one of them above CRQL. Since direct comparison between field blanks and sediment samples cannot be made, no qualifications are recommended based on the fluoranthene concentration.

V. **Surrogate Recovery:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
All Compounds	J4(+)	9201-156-6, 9201-169-3, 9201-220-1, 9201-220-3	High surrogate recovery.

Discussion

Surrogate recoveries were high (145-186%) or incalculable for four samples due to matrix interferences. All positive results for these samples have been qualified as estimates due to potentially high bias. Qualified data are summarized in the table above.

VI. **Matrix Spike/Matrix Spike Duplicate (MS/MSD) Sample Analyses:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Phenanthrene	J4	9201-110-2, 9201-110-5, 9201-110-7, 9201-110-9, 9201-110-10, 9201-110-11, 9201-156-6, 9201-169-1, 9201-169-3, 9201-169-5, 9201-169-7, 9201-169-9, 9201-220-1, 9201-220-3, 9201-220-5, 9201-220-6	Erratic MS/MSD results.

Pyrene	**J4**	**9201-110-2, 9201-110-5, 9201-110-7, 9201-110-9, 9201-110-10, 9201-110-11, 9201-156-6, 9201-169-1, 9201-169-3, 9201-169-5, 9201-169-7, 9201-169-9, 9201-220-1, 9201-220-3, 9201-220-5, 9201-220-6**	**Erratic MS/MSD results.**
Benzo(k)fluoranthene	**J4**	**9201-156-6, 9201-169-1, 9201-169-3, 9201-169-5, 9201-169-7, 9201-169-9, 9201-220-1, 9201-220-3, 9201-220-5**	**Erratic MS/MSD results.**
Dibenzo(a,h)anthracene	**J4**	**9201-156-6, 9201-169-3, 9201-169-5, 9201-169-9, 9201-220-1, 9201-220-3**	**Erratic MS/MSD results.**

Discussion

Percent recoveries were high (122 - 413%) or not calculable for four compounds in two sediment matrix spike duplicates. Percent recoveries were within acceptable QC limits for all eight compounds in both corresponding matrix spikes. The erratic recoveries indicate high variability of results for this sample matrix. Therefore, all positive results for these four compounds in all samples associated with these MSDs have been qualified as estimated (J4). Qualified data are summarized in the table above.

VII. Field Duplicates: ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Four pairs of field duplicates were submitted: two for surface water and two for sediment. Both pairs of surface water duplicates were in good agreement. All %Ds were less than 20%. Percent differences for one pair of sediment duplicates were in good agreement. All %Ds were less than 30%. Percent differences for the remaining pair of sediment duplicates were somewhat higher, ranging from 109 - 151%. Since %Ds are commonly higher for sediment samples, these numbers should not be considered uncharacteristically high. No qualifications are recommended due to field duplicate results.

VIII. Compound Identification: ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Dibenzo(a,h)anthracene was incorrectly identified as present in Sample 9201-156-6. The laboratory made the necessary correction and the updated result form was submitted for this sample.

IX. Compound Quantitation and Contract Required Quantitation Limits (CRQLs): ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Pyrene was quantitated incorrectly for Sample 9201-110-10. The laboratory made the necessary correction and an updated result form was submitted for this sample.

X. Overall Assessment of the Data

Generally, the laboratory performed the PAH analyses within contract specifications. The data, as qualified, are acceptable for use.

DATA VALIDATION REPORT
TOTAL METALS, LOW LEVEL COPPER, AND CYANIDE ANALYSES

I. Sample Holding Times: ACCEPTABLE/With the following exceptions.

Qualified Data:

Analyte	Qualifier	Sample Number	Reason
Cyanide	**J3(+)/UJ(-)**	**20863, 20864, 20865, 20866, 20867, 20868, 20875, 21046, 21052, 21053, 21054, 21055, 21056, 21057, 21058, 21059, 21068, 21073, 21074, 21075, 21076, 21077, 21078, 21079, 21080, 21081, 21082**	**Samples were analyzed 2-6 days outside the recommended holding time.**
Mercury	**J3(+)/UJ(-)**	**20745-20764**	**Samples were analyzed 3-10 days outside the recommended holding time.**

Discussion

The samples were all analyzed within the water recommended holding time, except SDG JOB040 for mercury, and several samples from SDGs JOB052, JOB080, and JOB082 for cyanide. For mercury and cyanide, no holding times have been established for soils and sediments. All samples, sediment and waters, were qualified based on the water recommended holding times. Samples to be qualified are summarized in the above table.

II. **Instrument Calibration:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Analyte	Qualifier	Sample Number	Reason
Antimony	**J4**	**20745, 20746, 20747, 20748, 20749, 20750, 20751, 20752, 20753, 20754, 20755, 20756, 20757, 20758, 20760, 20762, 20764**	**The final CRDL check sample had percent recoveries ranging from 200%-700%.**
Beryllium	**J4**	**20751, 20755, 20756, 20758, 20762, 20763**	**The final CRDL check sample had percent recoveries ranging from 200%-700%.**
Cadmium	**J4**	**20746, 20750, 20754, 20756, 20758, 20761, 20762, 20763, 20764**	**The final CRDL check sample had percent recoveries ranging from 200%-700%.**
Cobalt	**J4**	**20745, 20746, 20747, 20748, 20749, 20750, 20751, 20752, 20753, 20754, 20755, 20756, 20757, 20758, 20759, 20760, 20761, 20762, 20763, 20764**	**The final CRDL check sample had percent recoveries ranging from 200%-700%.**
Nickel	**J4**	**20748, 20754, 20759, 20761**	**The final CRDL check sample had percent recoveries ranging from 200%-700%.**
Vanadium	**J4**	**20745, 20748, 20759, 20761**	**The final CRDL check sample had percent recoveries ranging from 200%-700%.**

Discussion

All Initial and Continuing Calibration Verification (ICV and CCV) standards used for sample determinations were within the control limits for all water and soil samples. Where CCV standards were outside the control limits, review of the raw data revealed that no samples were analyzed with the CCV standards outside the control limits.

Under the 1988 Inorganics SOW, for the ICP analyses, the laboratory is required to analyze at the beginning and end of an analytical run, a standard at two times the CRDL. The laboratory did this and most standard results were within reasonable limits. Under the Inorganics Functional Guidelines, no review of the CRDL check standards are required. However, for SDG JOB040 the final CRDL check standard results had percent recoveries

ranging from 200% - 700%. The CCV and CCB results were within control limits. The laboratory was contacted to verify these results, and if correct to propose a possible explanation. The laboratory did verify high recoveries, but could not give an indication as to as why high recoveries were obtained. Because of the unexplained high recoveries, it is recommended that detected results within two times the CRDL be qualified. Samples to be qualified based on this limit are summarized in the above table.

III. Blanks: ACCEPTABLE/With the following exceptions.

Qualified Data:

Analyte	Qualifier	Sample Number	Reason
Antimony	UJ	20745, 20746, 20747, 20748, 20749, 20750, 20751, 20752, 20753, 20754, 20755, 20756, 20757, 20758, 20760, 20762, 20764	The sample concentration was within five times the CCB concentration.
Barium	UJ	20856	The sample concentration was within five times the CCB concentration.
Beryllium	UJ	20751, 20755, 20756, 20758, 20762, 20763	The sample concentration was within five times the CCB concentration.
Cadmium	UJ	20860, 20865, 20867, 20872	The sample concentration was within five times the CCB, PB concentration.
Cadmium	J4(+)/ UJ(-)	21046, 21048, 21049, 21051, 21052, 21053, 21054, 21055, 21057, 21058, 21059	Negative blank results reported. Possibility of false negative or biased low sample results exists.
Cobalt	UJ	21070, 21076, 21081	The sample concentration was within five times the CCB, PB concentration.
Copper	UJ	20747, 20748, 20749, 20754, 20755, 20856, 20857, 20858, 20859, 20860, 20862, 20865, 20866, 20867, 20874	The sample concentration was within five times the CCB, PB concentration.
Lead	UJ	20856, 21071, 21072, 21077, 21078, 21079, 21080	The sample concentration was within five times the CCB, PB concentration.

Manganese	**UJ**	**20857, 20858, 20859, 20860, 20861, 20862, 20863, 20865, 20866, 20867, 20874**	**The sample concentration was within five times the CCB, PB concentration.**
Nickel	**UJ**	**21068, 21071, 21077, 21078, 21079, 21081**	**The sample concentration was within five times the PB concentration.**
Potassium	**UJ**	**21071, 21072, 21077, 21080**	**The sample concentration was within five times the PB concentration.**
Silver	**UJ(-)/ J4(+)**	**20856, 20857, 20858, 20859, 20860, 20861, 20862, 20863, 20865, 20866, 20867, 20868, 20869, 20870. 20871, 20872, 20873, 20874**	**Negative blank results reported. Possibility of false negative or biased low sample results exists.**
Zinc	**UJ**	**21071, 21072, 21075, 21077**	**The sample concentration was within five times the CCB concentration.**

Discussion

Three types of blanks are evaluated for possible contamination affects. These blanks are: calibration blanks (CCB), preparation blanks (PB), and field QC blanks rinsate (RB), trip (TB), equipment (EB), and field (FB).

Two field rinsate blanks, and two field blanks were submitted for analysis. Calcium, iron, sodium, and zinc were found in Sample 21075 (2529WW). Calcium, iron, lead, sodium, and zinc were detected in Sample 28064 (2509WW). Aluminum, barium, calcium, iron, lead, magnesium, sodium, vanadium, and zinc were detected in Sample 21082 (3606WW). Barium, calcium, copper, iron, sodium, and zinc were detected in Sample 20875 (3607WW). No data qualification is recommended based on the relatively low-level concentrations of analytes in the field blanks. However, consideration of the field blank contamination should be made when evaluating the data.

For all laboratory blanks, both positive and negative blank values are evaluated, and an action limit of five times the highest associated blank concentration is determined for each affected analyte. For analytes with positive blank values, if the sample result was less than the action limit, it should be considered undetected at the reported concentration and assigned a UJ qualifier. No data qualifiers are required for undetected sample results. For analytes with negative blank values, the raw data were reviewed, and each sample raw data result was checked to see if a possible false negative or biased sample result was reported. Samples to be qualified, based on this review, are summarized in the above table.

IV. ICP Interference Check Sample (ICS) Analysis: ACCEPTABLE/All criteria met.

V. **Laboratory Control Sample (LCS) Analysis:** ACCEPTABLE/All criteria met.

VI. **Duplicate Sample Analysis:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Analyte	Qualifier	Sample Number	Reason
Boron	**J4(+)/ UJ(-)**	**21046, 21047, 21048, 21049, 21051, 21052, 21053, 21054, 21055, 21056, 21057, 21058, 21059**	**RPD between duplicates outside the control limits (140%).**
Lead	**J4**	**20749, 20752, 20754**	**RPD between duplicates outside the control limits (72%).**

Discussion

The Relative Percent Difference (RPD) between laboratory duplicate samples were all within the control limits, except boron for SDG JOB080 and GFAA lead results for SDG JOB040. Samples to be qualified are summarized in the above table.

VII. **Spiked Sample Analysis:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Analyte	Qualifier	Sample Number	Reason
Aluminum	**J4(+)**	**21068, 21069, 21070, 21071, 21072, 21073, 21074, 21076, 21077, 21078, 21079, 21080, 21081, 21082**	**The MS percent recovery was 169%.**
Antimony	**J4(+)/UJ(-)**	**20745, 20746, 20747, 20748, 20749, 20750, 20751, 20752, 20753, 20754, 20755, 20756, 20757, 20758, 20759, 20760, 20761, 20762, 20763, 20764, 21046, 21047, 21048, 21049, 21051, 21052, 21053, 21054, 21055, 21056, 21057, 21058, 21059**	**The MS percent recoveries were 65.1% and 64.4%.**

Arsenic	**J4(+)/UJ(-)**	**20745, 20746, 20747, 20748, 20749, 20750, 20751, 20752, 20753, 20754, 20755, 20756, 20757, 20758, 20759, 20760, 20761, 20762, 20763, 20764**	**The MS percent recovery was 63.4%.**
Boron	**J4(+)/UJ(-)**	**20745, 20746, 20747, 20748, 20749, 20750, 20751, 20752, 20753, 20754, 20755, 20756, 20757, 20758, 20759, 20760, 20761, 20762, 20763, 20764**	**The MS percent recovery was 44.8%.**
Copper	**J4(+)/UJ(-)**	**20856, 20857, 20858, 20859, 20860, 20861, 20862, 20863, 20864, 20865, 20866, 20867, 20868, 20869, 20870, 20871, 20872, 20873, 20874, 20875**	**The MS percent recovery was 68.6%.**
Manganese	**J4(+)/UJ(-)**	**20745, 20746, 20747, 20748, 20749, 20750, 20751, 20752, 20753, 20754, 20755, 20756, 20757, 20758, 20759, 20760, 20761, 20762, 20763, 20764**	**The MS percent recovery was 48.5%.**
Lead	**J4(+)**	**20856, 20857, 20858, 20859, 20860, 20861, 20862, 20863, 20864, 20865, 20866, 20867, 20868, 20869, 20870, 20871, 20872, 20873, 20874, 21068, 21069, 21070, 21071, 21072, 21073, 21074, 21076, 21077, 21078, 21079, 21080, 21081, 21082**	**The MS percent recoveries were 212% and 139%.**

Selenium	**J4(+)/UJ(-)**	**20856, 20857, 20858, 20859, 20860, 20861, 20862, 20863, 20864, 20865, 20866, 20867, 20868, 20869, 20870, 20871, 20872, 20873, 20874, 20875, 21046, 21047, 21048, 21049, 21051, 21052, 21053, 21054, 21055, 21056, 21057, 21058, 21059**	**The MS percent recoveries were 46.1% and 72.4%.**

Discussion

All matrix spike (MS) percent recoveries were within the control limits, except aluminum, antimony, arsenic, boron, copper, manganese, lead, and selenium. Sample qualifications were determined following the guidelines specified in the 1988 Inorganics Functional Guidelines. Samples to be qualified are summarized in the above table.

VIII. Furnace AA Quality Control Analysis: ACCEPTABLE/With the following exceptions.

Qualified Data:

Analyte	Qualifier	Sample Number	Reason
Lead	**J4**	**21069, 21073**	**The MSA correlation coefficient was < 0.995.**
Selenium	**J4**	**20751, 20756**	**The MSA correlation coefficient was < 0.995.**

Discussion

The laboratory is required to perform a post spike on each analyte analyzed by graphite furnace (GFAA). The percent recovery control limits of the post spike is 85 - 115%. If sample post spike recoveries fall outside the control limits, matrix interferences (positive or negative) may be present. If the sample result is less than 50% of the post spike concentration and the percent recovery is greater than 40%, no further action is required by the laboratory, but the laboratory must flag the data with a W. The laboratory incorrectly applied the W qualifier to several copper results and one selenium result. The laboratory was contacted and corrected Form 1s were submitted. The W flag is required for all sample summarized in the table below.

Under the 1988 Inorganic Functional Guidelines, sample with post spike recoveries outside the control limits (85-115%) are to be qualified as estimates. However, review of the date indicated that no sample where the post spike recovery was outside the control limits were detected above the CRDL. It is recommended that only those samples with analyte concentrations greater than the CRDL be qualified. Therefore, no data qualifiers are recommended.

If the sample absorbance is greater than 50% of the post spike concentration and the percent recovery is outside the control limits, the laboratory is required to analyze the sample by methods of standard additions (MSA). The laboratory did perform the MSA analyses where required. All samples had correlation coefficients within the control limits (>0.995), except two samples for lead and two samples for selenium. The sample results with the correlation coefficient outside the control limits should be considered as estimates. Samples to be qualified are summarized in the above table.

Samples Requiring the W Qualifier				
Arsenic	**Copper**	**Lead**	**Selenium**	**Thallium**
20856	20856	20856	20749	20760
20857	21077	20857	20753	20875
20858	21079	20858	20755	21077
20859		20859	20757	21079
20860		20860	20759	
20861		20861	20760	
20863		20862	20761	
20865		20863	20762	
20866		20865	20763	
20867		20866	20764	
20868		20867	20856	
20869		20868	20867	
20870		21071	20868	
20871		21077	20869	
20872		21078	20870	
20874			20871	
21070			20872	
21073			20873	
21078			20874	
21079			21046	
21081			21047	
			21048	
			21053	
			21054	
			21074	
			21077	
			21079	

IX. ICP Serial Dilution Analysis: ACCEPTABLE/With the following exceptions.

Qualified Data:

Analyte	Qualifier	Sample Number	Reason
Copper	**J4**	**21046, 21047, 21048, 21049, 21051, 21052, 21053, 21054, 21055, 21056, 21057, 21058, 21059**	**The percent difference between initial and diluted sample results was outside the control limits.**

Discussion

The laboratory analyzed one serial dilution with each water and sediment sample data group. All results were within the control limits, except copper (57.5%) for SDG JOB080 Under the 1988 Inorganics Functional Guidelines, for analytes with the %D outside the control limits, all sample results should be considered as estimates and assigned a J qualifier. Samples to be qualified are summarized in the above table.

X. Sample Result Verification: ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Cyanide	**Divide detection limit by 10**	**20745, 20746, 20747, 20748, 20749, 20750, 20751, 20753, 20754, 20755, 20756, 20757, 20758, 20759, 20760, 20761, 20762, 20763, 20764**	**Calculation error.**
Cyanide	**Result should be 1.3 mg/kg**	**20752**	**Calculation error.**

Discussion

Sample and QC results were verified at a minimum of ten percent. Cyanide results for SDG JOB040 were off by a factor of ten. All detection limits should be divided by ten for the correct result. Sample 20752 was detected above the method detection limit, and the correct result should be 1.3 mg/Kg. The laboratory submitted corrected Form 1s.

Chromium was reported as qualified by the laboratory for duplicate results outside the control limits for SDG JOB082. The sample and duplicate results were 10.1 µg/L and 7.0U µg/L. The laboratory assumes a nondetect result (7.0U) for chromium, as zero, therefore, the duplicate results exceed the CRDL criteria (±10 µg/L). However, the difference between the duplicate results was not significant if the detection limit for chromium is taken into consideration. Therefore, no data validation qualifiers are recommended by this reviewer.

XI. Field Quality Controls: ACCEPTABLE/All criteria met.

XII. Quarterly Submissions: ACCEPTABLE/All criteria met.

XIII. Overall Data Quality:

The data, as qualified, are acceptable for use.

DATA VALIDATION REPORT
FECAL COLIFORM AND FECAL STREPTOCOCCUS

Results with backup laboratory sheets were submitted for fecal coliform and fecal streptococcus. The laboratory mislabeled Sample 2507SU201000000.002 as 2507SU000000000.002, Sample 3197SU202000000.002 as 3197SU000000000.002, Sample 2509WW000001000.002 as 2509WW000000000.002. The holding time of six hours was met for all samples.

Two field blanks (2509WW000001000.002 and 2529WW000001000.002) were submitted for analysis. Results of <1 and <2 colonies per 100 mls were reported for both samples respectively, indicating no contamination during the sampling process. All laboratory controls read zero colonies per 100 mls.

Two rinsate blanks (3606WW000002000.002 and 3607WW000002000.002) were submitted for analysis. Results of <1 and <2 colonies per 100 mls were reported for both samples respectively, indicating no contamination due to the sampling process.

Two sets of field duplicates (3197SU202000000.002 / 2507SU201000000.002 and 3196SU202000000.002 / 2528SU201000000.002) were submitted. The relative percent differences (RPDs) between results for fecal coliform were 0% and 133% respectively. RPD results for fecal streptococcus were 53.1% and 23.9%. These are within expected field variability for microbiological testing. Therefore, no qualifiers are recommended.

Calculation errors were found for fecal coliform values for Samples 2511SU320000000.002 and 2510SU000000000.002. The laboratory was contacted and sent corrected forms.

SOUTH TACOMA FIELD SUPERFUND SITE
SURFACE WATER AND SEDIMENT INVESTIGATION

BIWEEKLY/MONTHLY AND STORM EVENTS
DATA VALIDATION REPORT

EcoChem, Inc.

DATA VALIDATION REPORT

South Tacoma Field
Stormwater and Biweekly/Monthly Sampling

Prepared for:

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Contract: 2304 - 10

May 4, 1992
FINAL

South Tacoma Field
Stormwater and Biweekly/Monthly Sampling

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INTRODUCTION

The submitted data packages have been reviewed by EcoChem, Inc. Data validation packets for the organics and inorganics analyses, which detail items reviewed, are on file at EcoChem. The quality assurance evaluations performed and the resulting data qualification recommendations are summarized in the following sections:

- Volatile Organic Analyses
- Semivolatile Organic Analyses
- Pesticide/PCB Analyses
- PAH Analyses
- TCL Metals, Low Level Copper, Cyanide, and Boron Analyses
- Fecal Coliform and Fecal Streptococcus

Recommended data qualifiers are based on the EPA Data Validation Functional Guidelines (U.S. EPA, 1988b, c, d). These guidelines require that the data reviewer use professional judgment to designate data qualifiers, but do not replace those assigned by the laboratory. Data may be qualified even though the laboratory fulfilled all the requirements stated in the EPA Contract Laboratory Program (CLP) Statement of Work (SOW) for a particular analysis (U.S. EPA, 1988a, 1990a, b). Unless specifically stated in the text, data qualifications are not due to laboratory error or deviations from the analysis protocols defined in the EPA SOW, but are based on EPA data validation guidelines.

EcoChem, Inc.'s goal in assigning data validation qualifiers is to assist in proper data interpretation. If values are assigned a J, or UJ, data can be used for site evaluation purposes, but reasons for data qualification should be taken into consideration when interpreting sample concentrations. If values are assigned an R, the data are to be rejected and should not be used for any site evaluation purposes. If values have no data qualifier assigned, then the data meet all data quality goals as outlined in the EPA Functional Guidelines and as required by the South Tacoma Field Superfund Site Quality Assurance Project Plan, March, 1991.

Holding times, sample integrity and required analyses were determined by review of the chain-of-custody sheets. Chain-of-custody records were received for all samples. A summary of the samples reviewed is provided in Table 1.

Table 1. Summary of Analysis Reviewed.

Sample Number	VOA	BNA	Pest/ PCBs	Metals	CN	PAH	B	COLI.
2500SU000000000.020				6/5 1106"		7/17 39"		2/20 119"
2500SU000000000.021				9/25 78		9/24 JOB752		2/20 119"
2500SU000000000.022				9/18 JOB726		9/18 75,69"		2/20 119"
2500SU000000000.023				10/18 JOB722		10/31 91		2/20 119"
2500SU000000000.024				2/20 JOB085"		2/20 109"	2/20 JOB085	2/20 119"
2500SU000000000.025				2/20 JOB216"		2/20 108"	2/20 JOB216	
2500SU000000000.026				2/20 JOB416"		2/20 107"	2/20 JOB416	2/20 119"
2500SU000000000.027				3/11 JOB069"		2/27 121"	3/11 JOB069	2/20 119"
2500SU000000000.028				3/11 JOB144"		3/19 139"	3/11 JOB144	3/19 135"
2500SU000000000.029				3/11 JOB158"		3/19 138"	3/11 JOB158	3/19 135"
2500SU000000000.030				4/14 JOB288"		4/21 142"	4/14 JOB288	4/14 141"
2500SU000000000.051				6/5 1106"		2/20 103"		2/20 102"
2500SU000000000.053				6/5 1260"		2/20 106"		2/20 102"
2500SU000000000.055				9/25 78		8/1 52"		2/20 102"
2500SU000000000.057				9/25 78		2/20 113"		2/20 102"
2500SU000000000.061				6/5 JOB760"		2/20 112"	6/5 JOB760	2/20 102"

KEY

VOA	=	CLP Volatile Organic Compounds
BNA	=	Base/Neutral/Acid (Semivolatile) Compounds
P/PCB	=	TCL Pesticide Compounds and Polychlorinated Biphenyls
PAH	=	Polynuclear Aromatic Hydrocarbons
CN	=	Cyanide
Metals	=	TCL Metals and Low Level Copper
B	=	Boron Aluyis

Note: If numbers noted in box, then sample results were reviewed. The first line in the box is the date sample results were received at EcoChem. The second line is the EcoChem sampling data group number used for file tracking purpos

Table 1. Summary of Analysis Reviewed.

Sample Number	VOA	BNA	Pest/ PCBs	Metals	CN	PAH	B	COLI.
2500SU000000000.065				2/20 JOB041*		2/20 114*	2/20 JOB041	2/20 102*
2500SU000000000.067				2/20 JOB255*		2/20 115*	2/20 JOB255	2/20 102*
2500SU000000000.069				3/11 JOB407*		2/20 118*	3/11 JOB407	2/20 102*
2500SU000000000.071				3/11 JOB047*			3/11 JOB047	2/20 102*
2500SU000000000.073				3/11 JOB127*		3/19 138*	3/11 JOB127	3/19 136*
2500SU000000000.075				4/14 JOB203*		4/14 140*	4/14 JOB203	4/14 141,136*
2501SU000000000.020				6/5 1106*		7/17 39*		2/20 119*
2501SU000000000.021				9/25 78		2/20 111*		2/20 119*
2501SU000000000.022				9/18 JOB726		9/18 75,69*		2/20 119*
2501SU000000000.023				10/18 JOB722		10/31 91		2/20 119*
2501SU000000000.024				2/20 JOB085*		2/20 109*	2/20 JOB085	2/20 119*
2501SU000000000.025				2/20 JOB216*		2/20 108*	2/20 JOB085	
2501SU000000000.026				2/20 JOB416*		2/20 107*	2/20 JOB085	2/20 119*
2501SU000000000.027				3/11 JOB069*		2/27 121*	2/20 JOB085	2/20 119*
2501SU000000000.028				3/11 JOB144*		3/19 139*	3/11 JOB144	3/19 135*
2501SU000000000.029				3/11 JOB158*		3/19 138*	3/11 JOB158	3/19 135*

KEY

VOA	=	CLP Volatile Organic Compounds
BNA	=	Base/Neutral/Acid (Semivolatile) Compounds
P/PCB	=	TCL Pesticide Compounds and Polychlorinated Biphenyls
PAH	=	Polynuclear Aromatic Hydrocarbons
CN	=	Cyanide
Metals	=	TCL Metals and Low Level Copper
B	=	Boron Analysis

Note: If numbers noted in box, then sample results were reviewed. The first line in the box is the date sample results were received at EcoChem. The second line is the EcoChem sampling data group number used for file tracking purposes.

Table 1. Summary of Analysis Reviewed.

Sample Number	VOA	BNA	Pest/ PCBs	Metals	CN	PAH	B	COLI.
2501SU000000000.030				4/14 JOB288"		4/21 142"	4/14 JOB288	4/14 141"
2501SU000000000.051				6/5 1106"		2/20 103"		2/20 102"
2501SU000000000.053				6/5 1260"		2/20 106"		2/20 102"
2501SU000000000.055				9/25 78		8/1 52"		2/20 102"
2501SU000000000.057				9/25 78		2/20 113"		2/20 102"
2501SU000000000.065				2/20 JOB041"		2/20 114"	2/20 JOB041	2/20 102"
2501SU000000000.067				2/20 JOB255"		2/20 115"	2/20 JOB255	2/20 102"
2501SU000000000.069				3/11 JOB407"		2/20 118"	3/11 JOB407	2/20 102"
2501SU000000000.071				3/11 JOB047"		3/11 129"	3/11 JOB047	2/20 102"
2501SU000000000.073				3/11 JOB127"		3/19 138"	3/11 JOB127	3/19 136"
2501SU000000000.075				4/14 JOB203"		4/14 140"	4/14 JOB203	4/14 141,136"
2515SU000000000.073	3/12 01227"	3/12 01225"	3/11 01210"	3/11 JOB109"	3/11 JOB109"	3/11 01210,128 "	3/11 JOB109 "	3/19 136"
2515SU201000000.027	3/12 01227"	2/27 1206"	3/11 1210"	3/11 JOB079"	3/11 JOB079"	3/11 01210"	3/11 JOB079	2/20 119"
2515SU201000000.074	3/19 02164"	3/19 02164"	3/19 02164"	3/19 JOB168"	3/19 JOB168"	3/19 137"	3/19 JOB168	3/19 136"
2515SU000000000.051	6/19 KJC02"	2/20 4-077"	2/20 104"	6/5 1106"	2/20 105"	2/20 103"		2/20 102"
2515SU000000000.068	2/20 11296"	2/20 11296"	2/20 117"	3/11 JOB391"	3/11 JOB391"	2/20 116"	3/11 JOB391	

KEY

VOA	=	CLP Volatile Organic Compounds
BNA	=	Base/Neutral/Acid (Semivolatile) Compounds
P/PCB	=	TCL Pesticide Compounds and Polychlorinated Biphenyls
PAH	=	Polynuclear Aromatic Hydrocarbons
CN	=	Cyanide
Metals	=	TCL Metals and Low Level Copper
B	=	Boron Aluyis

Note: If numbers noted in box, then sample results were reviewed. The first [illegible] the box is the date sample results were received at EcoChem. The second line is the EcoChem sampling data group number used for file tracking purpose[illegible]

EcoChem, Inc.

Table 1. Summary of Analysis Reviewed.

Sample Number	VOA	BNA	Pest/ PCBs	Metals	CN	PAH	B	COLI.
3188SU202000000.074	3/19 02164"	3/19 02164"	3/19 02164"	3/19 JOB168"	3/19 JOB168"	3/19 137"	3/19 JOB168	3/19 136"
3189SU202000000.027	3/12 01227"	3/27 1206"	3/11 1210"	3/11 JOB079"	3/11 JOB079"	3/11 01210"	3/11 JOB079	2/20 119"
3620WW000002000.073				3/11 JOB127"		3/19 138"	3/11 JOB127	3/19 136"

KEY

VOA	=	CLP Volatile Organic Compounds
BNA	=	Base/Neutral/Acid (Semivolatile) Compounds
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REFERENCES

Kennedy/Jenks/Chilton. 1991. Quality Assurance Project Plan South Tacoma Field Superfund Site, Tacoma, Wa. March.

U.S. Environmental Protection Agency. 1988a. Contract Laboratory Program Statement of Work for Pesticides/PCBs.

U.S. Environmental Protection Agency. 1988b. Functional Guidelines for Evaluating Inorganic Analyses.

U.S. Environmental Protection Agency. 1988c. Functional Guidelines for Evaluating Organic Analyses. R-582-5-5-01.

U.S. Environmental Protection Agency. 1988d. Functional Guidelines for Evaluating Pesticide/PCB Analyses. R-582-5-5-01.

U. S. Environmental Protection Agency. 1990a. Contract Laboratory Program Statements of Work for Inorganics. ILM01.0.

U. S. Environmental Protection Agency. 1990b. Contract Laboratory Program Statements of Work for Organics. OLM01.0.

NARRATIVE

DATA VALIDATION REPORT
VOLATILE ORGANIC ANALYSES

I. **Sample Holding Times:** ACCEPTABLE/All criteria met.

II. **GC/MS Instrument Performance Check:** ACCEPTABLE/All criteria met.

III. **Initial and Continuing Calibration:** ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Under Functional Guidelines, the relative response factor (RRF) and the percent relative standard deviation (%RSD) for the initial calibration, and the RRF and percent difference (%D) for the continuing calibration are evaluated. Percent RSD was greater than 35% for acetone (%RSD = 40.7 and 44.2). However, since no positive results for acetone were found, no data qualifiers are recommended. All other calibration criteria were met.

IV. **Blank Analyses:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Hexane	**R**	**9202-164-1, 9202-164-2, 9201-011-1, 9201-227-1, 9201-227-2, 9111-296-1**	**TIC found in method blank and associated samples.**

Discussion

Methylene chloride and hexane were detected in the laboratory method blanks. Because methylene chloride is a common contaminant, an action level was determined for data qualification at 10 times the highest associated blank value. Under Functional Guidelines, samples with concentrations less than the action level are qualified by elevating the detection limit to the reported concentration (UJ). No methylene chloride was detected in the associated samples. Hexane is a tentatively identified compound (TIC) and values are rejected (R) if found in both the both the blank and sample. The affected samples and recommended qualifiers are listed above.

V. **Surrogate Recovery:** ACCEPTABLE/All criteria met.

VI. **Matrix Spike/Matrix Spike Duplicate Sample Analyses:** ACCEPTABLE/All criteria met.

VII. **Field Duplicates:** ACCEPTABLE/All criteria met.

Qualified Data: None

Discussion

Two sets of field duplicates were submitted for review (Samples 9202-164-1/9202-164-2 and Samples 9201-227-1/9201-227-2). The only compounds detected in either sample was a TIC (hexane) in 9201-227-1/9201-227-2.

VIII. **Internal Standards Performance:** ACCEPTABLE/All criteria met.

IX. **Compound Identification:** ACCEPTABLE/All criteria met.

X. **Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL):** ACCEPTABLE/All criteria met.

XI. **Tentatively Identified Compounds (TIC):** ACCEPTABLE/With the following exceptions.

Discussion

All TIC are qualified as tentatively identified compounds with estimated concentrations (NJ).

XII. **System Performance:** ACCEPTABLE/All criteria met.

XIII. **Overall Assessment of the Data**

The data, as qualified, are acceptable for use.

DATA VALIDATION REPORT
SEMIVOLATILE ORGANICS ANALYSES

I. Sample Holding Times: ACCEPTABLE/All criteria met.

II. GC/MS Instrument Performance Checks: ACCEPTABLE/All criteria met.

III. Initial and Continuing Calibration: ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
3-Nitroaniline 4-Nitroaniline	UJ	9202-011-1	Continuing calibration %D exceeded 50%. (%D = 63.5%, 59.1%).
Bis(2-ethylhexyl) phthalate	J4	9201-227-1	Continuing calibration %D exceeded 25%. (%D = 45.5%).
3-Nitroaniline 4-Nitroaniline 3,3'-Dichlorobenzidene	UJ	9111-296-1	Continuing calibration %D exceeded 50%. (%D = 67.3%, 64.6%, 76.8%).

Discussion

The initial calibration relative standard deviation (RSD) exceeded the 30% criteria for the following compounds on different days: 4-chloro-3-methylphenol (36.7%), 3-nitroaniline (37.4%), and 2,4-dinitrophenol (40.9%). Under Functional Guidelines, positive data are qualified if the criteria are exceeded, and non-detected results are qualified if the %RSD is judged great enough to affect detection of the compound. None of the compounds with %RSD exceeding the criteria were detected in associated samples, and %RSD were judged not to affect detection limits. No qualifiers are recommended based on initial calibration.

High percent differences (%Ds) between continuing calibrations for several compounds were reported on various days. Compounds that were detected, and have %D greater than 25% are qualified as estimated (J4). Compounds that were not detected, but have %D greater than +50% indicating a significant loss in sensitivity, are qualified as UJ. Samples qualified are summarized above.

IV. Blank Analyses: ACCEPTABLE/All criteria met.

V. **Surrogate Recovery:** ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Surrogate calculations for Sample 9104-077-3 were based on a 1050 mL of sample rather than 1000 mL. However, all recoveries were acceptable, and no data qualifiers are recommended.

VI. **Matrix Spike/Matrix Spike Duplicate Sample Analyses:** ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

For these data groups, the laboratory performed three sets of blank spikes (BS) and blank spike duplicates (BSD) rather than sample matrix spike/matrix spike duplicate analyses. Frequency of analyses was met. High BS/BSD recoveries were reported for 4-nitrophenol (88% - 130%), 4-chloro-3-methylphenol (98%, 110%), pentachlorophenol (85%, 110%), 2,4-dinitrotoluene (98%). Since these recoveries are only slightly high, and other QA/QC criteria are generally met, no data qualifiers are recommended based on BS/BSD results.

For one data group low recoveries of N-nitroso-di-n-propylamine (5.0%, 7.5%) were reported for SBLK01 MS/MSD (SDG 4-077). No qualifiers are recommended based on this one set of low recoveries.

All relative percent differences (%RPD) were acceptable.

VII. **Field Duplicates:** ACCEPTABLE/With the following exceptions.

Discussion

Two sets of field duplicates were submitted. High variability was found for bis(2-ethylhexyl)phthalate (163%). Since the detected concentrations of bis(2-ethylhexyl)phthalate were below the CRQL, no data qualifiers are recommended.

VIII. Internal Standards Performance: ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

High internal standard areas were reported for Sample 9104-077-3 and its associated method blank. It was noted by the laboratory that these samples were spiked at 80 ng instead of 40 ng. Calculations were confirmed to be based on 80 ng. No data qualifiers are recommended.

IX. Compound Identification: ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Bis(2-ethylhexyl)phthalate	**R**	**9202-011-1**	**Exceeded calibration range. Use diluted results.**
All semivolatile compounds except bis(2-ethylhexyl) phthalate	**R**	**9202-011-1DL**	**Diluted results. Use non-diluted results.**

Discussion

Bis(2-ethylhexyl)phthalate exceeded the calibration range for Sample 9202-011-1. An analysis of the diluted sample was performed and the diluted sample result should be used for this compound.

X. Compound Quantitation and Reported Contract Required Quantitation Limits (CRQLs): ACCEPTABLE/All criteria met.

XI. Tentatively Identified Compounds (TIC): ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
3,3,3-Trichloro-1-propene	R	9111-296-1, 9201-164-1, 9202-164-2, 9202-011-1, 9202-011-1DL, 9201-227-1, 9201-227-2	TIC detected in blank.
Dicyclohexypropanedinitrile	R	9202-011-1, 9201-227-1, 9201-227-2, 9202-011-1DL	TIC detected in blank.
4-hydroxy-4-methyl-2-pentanone	R	9111-296-1	TIC detected in blank.
4,4,5-Trimethyl-2-hexene	R	9202-164-1, 9202-164-2	TIC detected in blank.

Discussion

TIC detected in the laboratory method blanks and associated samples are judged to be laboratory artifacts and are recommended to be rejected (R). Rejected samples are summarized above. All other detected TIC are qualified as tentatively identified at estimated concentrations (NJ).

XII. System Performance: ACCEPTABLE/All criteria met.

XIII. Overall Assessment of the Data

The data, as qualified, are acceptable for use.

DATA VALIDATION REPORT
PESTICIDE/PCB ANALYSES

I. Sample Holding Times: ACCEPTABLE/All criteria met.

II. Instrument Performance: ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Several compounds failed to elute within their established retention time windows. Adjusted/expanded RT windows were employed to ensure that no false identifications were made. None were found and no qualifications of data are recommended based on RT shifting.

III. Calibration: ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Eight compounds failed to meet continuing calibration criteria in three different analytical sequences. Seven of these took place for the confirmation column only. The remaining instance took place on the primary column but the standard was not used for quantitation. No qualifications of data are recommended based on these calibration problems.

IV. Blank Analyses: ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Gamma-BHC	**UJ at 0.06 µg/L**	**9111-296-1**	**Concentration < 5x blank contamination.**

Discussion

Gamma-BHC was mis-identified for one method blank. It was reported as not

detected at 0.05µg/L. Peaks for gamma-BHC were identified on both columns within RT windows above CRQL. The concentration that should have been reported is 0.27 µg/L. Gamma-BHC was present in Sample 9111-296-1 at a concentration of 0.06 µg/L. This value should be qualified as estimated (UJ) due to the method blank contamination. The qualifier is summarized in the table above.

V. **Surrogate Recovery:** ACCEPTABLE/All criteria met.

VI. **Matrix Spike/Matrix Spike Duplicate (MS/MSD) Sample Analyses:** ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Percent recoveries exceeded QC limits for three compound in one MS and one compound in its corresponding MSD. All four recoveries were only slightly outside limits (121-138%) and none of the out-of-control compounds were positively identified in any of the samples associated with this MS/MSD. No qualifications of data are recommended based solely on MS/MSD recoveries.

RPD were outside of QC limits for two compounds (21% and 33%) in one MS/MSD pair. All four individual percent recoveries were within acceptable QC limits. No qualifications of data are recommended based solely on MS/MSD precision.

VII. **Field Duplicates:** ACCEPTABLE/All criteria met.

Discussion

Two pairs of field duplicates were submitted with the stormwater and biweekly/monthly samples. No positive identifications were made in any of the four samples.

VIII. **Compound Identification:** ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Gamma-BHC was mis-identified for Sample 9111-296-1. It was reported as not detected at 0.05 µg/L. Peaks for gamma-BHC were identified on both columns within RT

windows above CRQL. The concentration that should have been reported is 0.06B µg/L. Contamination in this sample's corresponding method blank leads to the qualification of this amended value. This qualification is discussed in Section IV.

IX. Compound Quantitation and Contract Required Quantitation Limits (CRQLs): ACCEPTABLE/All criteria met.

X. Overall Assessment of the Data

Generally, the laboratory performed the pesticide/PCB analyses within contract specifications. The data, as qualified, are acceptable for use.

DATA VALIDATION REPORT
POLYNUCLEAR AROMATIC HYDROCARBONS ANALYSES

I. Sample Holding Times: ACCEPTABLE/All criteria met.

II. Instrument Performance: ACCEPTABLE/All criteria met.

III. Calibration: ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Five or six point initial calibration curves were analyzed for each compound. Some of the high level standards for a few compounds failed to meet linearity criteria. A minimum 4-point curve that met initial calibration criteria was established for all compounds in all sequences. No quanitations were performed on any compound utilizing a value that exceeded the limits established by the initial curves.

Many compounds failed to meet continuing calibration criteria in several standards from a number of different sequences. No out-of-control standards were used for quantitation. They were used for confirmation only. No qualifications of data are recommended based on the continuing calibration problems.

IV. Blank Analyses: ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Anthracene	**UJ at Reported Value**	**9104-077-1, 9104-077-2, 9104-077-3, 9105-249-1, 9105-249-2, 9110-226-1, 9110-226-2, 9110-281-1, 9110-281-2, 9111-181-1, 9111-181-2, 9111-296-1, 9104-034-20, 9104-034-21, 9107-284-1**	**Sample concentration < 5x blank contamination.**

Discussion

Anthracene contamination was found in several laboratory method blanks. Any positive anthracene results in samples associated with these blanks have been qualified as

not detected (UJ) if the sample values were less than their respective action levels. All qualified data are summarized in the table above.

V. **Surrogate Recovery:** ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Surrogate recovery was high (118%) for one laboratory method blank. Since the value was just outside QC limits (34%-117%) and no positive identifications were made in the blank, no qualifications of data are recommended.

VI. **Matrix Spike/Matrix Spike Duplicate (MS/MSD) Sample Analyses:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Compound	Qualifier	Sample Number	Reason
Phenanthrene	J4	9110-226-1, 9110-226-2	MS/MSD results exceeded QC limits.

Discussion

Percent recoveries for several compounds were outside of QC limits for two MS/MSDs. Recoveries for phenanthrene were high for matrix spike 9110-234-24MS (201%) and matrix spike duplicate 9110-234-24MSD (168%). All positive phenanthrene results for all samples associated with this MS/MSD pair have been qualified as estimated quantities due to the possible high bias. Qualified data are summarized in the table above.

Two recoveries were not calculated due to matrix interferences from the sample for matrix spike duplicate 9201-095-1MSD. Results for these two compounds in the corresponding MS were within acceptable limits. Poor precision is implied for the two compounds. No qualifications of data are recommended based on the MSD results since results for three of the spiked compounds were within all respective QC limits.

VII. **Field Duplicates:** ACCEPTABLE/All criteria met.

Discussion

Two pairs of field duplicates were submitted with the stormwater and biweekly/monthly samples. No positive identifications were made in either of the biweekly samples. Three positive identifications were made in the stormwater samples. All three RPDs were < 15.0% indicating very good field precision.

VIII. Compound Identification: ACCEPTABLE/With the following exceptions.

Qualified Data: None

Discussion

Anthracene was incorrectly identified as not present for Sample 9112-164-1. It was actually present at a concentration of 0.065 µg/L. The laboratory made the necessary correction and submitted an updated result form.

IX. Compound Quantitation and Contract Required Quantitation Limits (CRQLs): ACCEPTABLE/All criteria met.

X. Overall Assessment of the Data

Generally, the laboratory performed the PAH analyses within contract specifications. The data, as qualified, are acceptable for use.

DATA VALIDATION REPORT
TCL METALS, LOW LEVEL COPPER, CYANIDE, AND BORON ANALYSES

I. **Sample Holding Times:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Analyte	Qualifier	Sample Number	Reason
Cyanide	UJ(-) J3(+)	19484	Sample analysis performed 2 days outside recommended holding time of 14 days.
Mercury	UJ(-) J3(+)	14965, 14966, 1137, 1138, 1139, 1140, 1141	Sample analysis performed from 8 - 14 days outside recommended holding time of 28 days.

Discussion

The samples were all analyzed within the water recommended holding time, except samples from JOB391 (Event 68) for cyanide, and SDG1260, SDG1106, and JOB041 (Events 20, 51, and 65) for mercury. All samples analyzed outside the recommended holding times were qualified. Samples to be qualified are summarized in the above table.

II. **Instrument Calibration:** ACCEPTABLE/With the following exceptions.

All Initial and Continuing Calibration Verification (ICV and CCV) standards used for sample determinations were within the control limits for all samples. Where CCV standards were outside the control limits, review of the raw data revealed that no samples were analyzed with the CCV standards outside the control limits.

All calibration requirements were met by Silver Valley Laboratory (SVL). The initial instrument calibration for mercury was not performed as required in the 1990 Inorganics SOW by Pacific Environmental Laboratory (PEL). The laboratory is required to perform the initial instrument calibration using one blank and four standards for mercury. PEL used one blank and three standards to perform the initial instrument calibration. Because the sample concentrations were within the calibration range established, no data qualifiers are recommended.

III. **Blanks:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Analyte	Qualifier	Sample Number	Reason
Aluminum	UJ	17661, 21492, 1332, 1333	Sample concentration within 5X blank concentration.
Antimony	UJ	21596, 21597	Sample concentration within 5X blank concentration.
Arsenic	UJ/J4	11812, 11813	Negative blank results reported. Sample results may be biased low, or the possibility of false negative results exists.
Barium	UJ	14965	Sample concentration within 5X blank concentration.
Boron	UJ	21379, 21044, 21045, 21492, 21493, 20974, 20975	Sample concentration within 5X blank concentration.
Boron	UJ(-) J4(+)	21696, 21697	Negative blank results reported. Sample results may be biased low, or the possibility of false negative results exists.
Chromium	UJ	19671, 19625, 20975, 11777	Sample concentration within 5X blank concentration.
Chromium	UJ(-) J4(+)	11812, 11813	Negative blank results reported. Sample results may be biased low, or the possibility of false negative results exists.
Copper	UJ	1332, 1333, 1139, 1140, 1141	Sample concentration within 5X blank concentration.
Iron	UJ	20823, 1332, 1333	Sample concentration within 5X blank concentration.
Lead	UJ	17661, 20823, 20824, 21044, 21045, 21493, 22048, 22049, 1332, 1333	Sample concentration within 5X blank concentration.
Manganese	UJ	20823, 1570, 1571	Sample concentration within 5X blank concentration.
Mercury	UJ	1137, 1138, 1139, 1140, 1141	Sample concentration within 5X blank concentration.
Nickel	UJ	21788, 15545, 21044, 21493, 21697, 20975	Sample concentration within 5X blank concentration.

Nickel	**UJ(-) J4(+)**	**11812, 11813**	**Negative blank results reported. Sample results may be biased low, or the possibility of false negative results exists.**
Potassium	**UJ**	**15544, 17662, 17344**	**Sample concentration within 5X blank concentration.**
Selenium	**UJ**	**17661, 17343**	**Sample concentration within 5X blank concentration.**
Vanadium	**UJ**	**14965, 17344, 21379, 1332**	**Sample concentration within 5X blank concentration.**
Zinc	**UJ**	**21494, 1332**	**Sample concentration within 5X blank concentration.**

Discussion

Three types of blanks are evaluated for possible contamination affects. These blanks are: calibration blanks (CCB), preparation blanks (PB), and field QC blanks.

For all laboratory blanks, both positive and negative blank values are evaluated, and an action limit of five times the highest associated blank concentration is determined for each affected analyte. For analytes with positive blank values, if the sample result was less than the action limit, it should be considered undetected at the reported concentration and assigned a UJ qualifier. No data qualifiers are required for undetected sample results. For analytes with negative blank values, the raw data were reviewed, and each sample raw data result was checked to see if a possible false negative or biased sample result was reported. Samples to be qualified, based on this review, are summarized in the above table.

One field blank was submitted for analysis. Mercury and zinc were detected in the field blank. No data qualification of the samples will be made based on the field blanks. However, consideration of the field blank contamination should be made when evaluating the data.

Other analytes may have reported positive or negative blanks for the CCB, PB, and field QC blanks but either the sample results were undetected, greater than the action limit, or upon review of the raw data, were not affected by the associated blank value.

IV. ICP Interference Check Sample (ICS) Analysis: ACCEPTABLE/All criteria met.

V. Laboratory Control Sample (LCS) Analysis: ACCEPTABLE/With the following exceptions.

Qualified Data:

Analyte	Qualifier	Sample Number	Reason
Antimony	UJ(-) J4(+)	1332, 1333	Percent recovery of LCS = 75%.
Copper	J4(+)	17343, 17344	Percent recovery of LCS = 410%.
Potassium	J4(+)	17343, 17344	Percent recovery of LCS = 988%.

Discussion

The percent recovery for all LCS results were within the control limits, except copper and potassium for JOB216 (Event 25), and antimony for SDG1260 (Event 53). It is recommended that copper and potassium be considered as estimates for the two associated samples. Under the 1988 Functional Guidelines, antimony is not evaluated. However, since all other antimony LCS results were within control limits, the laboratories demonstrated that antimony could be recovered within the control limits. Because the laboratories demonstrated good recovery, it is recommended that samples associated with antimony LCS results outside the control limits be qualified. Samples to be qualified are summarized in the above table.

VI. Duplicate Sample Analysis: ACCEPTABLE/With the following exceptions.

Qualified Data:

Analyte	Qualifier	Sample Number	Reason
Chromium	UJ(-)/ J4(+)	21044, 21045	Duplicate results outside control limits (RPD $\leq$ 20%, or $\pm$ CRDL).
Iron	UJ(-)/ J4(+)	1548, 1549, 1570, 1571, 1796, 1797	Duplicate results outside control limits (RPD $\leq$ 20%, or $\pm$ CRDL).
Lead	UJ(-)/ J4(+)	15544, 15545, 19671, 19672, 19484, 19624, 19625	Duplicate results outside control limits (RPD $\leq$ 20%, or $\pm$ CRDL).

Discussion

The duplicate results were within the control limits except for the samples listed above. Qualifiers are summarized in the above table.

VII. **Spiked Sample Analysis:** ACCEPTABLE/With the following exceptions.

Qualified Data:

Analyte	Qualifier	Sample Number	Reason
Aluminum	J4(+)	20824	MS %R > 125%.
Antimony	UJ(-) J4(+)	1332, 1333	MS %R between 30 and 75%.
Arsenic	UJ(-) J4(+)	19484, 19671, 19672, 1548, 1549, 1570, 1571, 1796, 1797	MS %R between 30 and 75%.
Copper	J4(+)	19671, 19672, 11776, 11777, 11812, 11813	MS %R > 125%.
Iron	UJ(-) J4(+)	1332, 1333	MS %R between 30 and 75%.
Lead	J4(+)	21788, 21789, 17343, 17344, 21596, 21597, 14965, 14966, 21696, 21697, 11776, 11777, 12088	MS %R > 125%.
Lead	UJ(-) J4(+)	19671, 19672, 21379, 21044, 21045, 21492, 21493, 21494, 22048, 22049, 1548, 1549, 1570, 1571, 1796, 1797	MS %R was between 30 and 75%.
Selenium	UJ(-) J4(+)	17661, 17662, 20974, 20975, 20823, 20824, 19484, 21492, 21493, 21494, 22048, 22049, 11812, 11813	MS %R was between 30 and 75%.
Selenium	R(all)	19671, 19672, 19624, 19625	MS %R < 30%.
Thallium	UJ(-) J4(+)	19484	MS %R was between 30 and 75%.

Discussion

Matrix spike (MS) percent recoveries were within the control limits, except aluminum, antimony, arsenic, copper, iron, lead, selenium, and thallium for one or more SDGs. Sample qualifications were determined following the guidelines specified in the 1988 Inorganics Functional Guidelines. Samples to be qualified are summarized in the above table.

VIII. Furnace AA Quality Control Analysis: ACCEPTABLE/With the following exceptions.

Qualified Data:

Analyte	Qualifier	Sample Number	Reason
Lead	**J4**	**19672, 17343, 21597, 19625, 1138**	**MSA correlation coefficient < 0.995.**

Discussion

The laboratory is required to perform a post spike on each analyte analyzed by graphite furnace (GFA). The percent recovery control limits of the post spike is 85 - 115%. If sample post spike recoveries fall outside the control limits, matrix interferences (positive or negative) may be present. If the sample result is less than 50% of the post spike concentration and the percent recovery is greater than 40%, no further action is required by the laboratory, but the laboratory must flag the data with a W. The laboratories incorrectly flagged several samples. SVL was contacted and corrected Form 1s were submitted. The W flag is required for all sample summarized in the table below. PEL incorrectly flagged 1139 for selenium and 1140 for arsenic with an M qualifier. The laboratory should have flagged these samples with a W.

If the sample absorbance is greater than 50% of the post spike concentration and the percent recovery is outside the control limits, the laboratory is required to analyze the sample by methods of standard additions (MSA). The laboratory did perform the MSA analyses where required. Samples analyzed by MSA had correlation coefficients within the control limits (>0.995), except five samples for lead. Samples to be qualified are summarized in the above table.

Under the 1988 Inorganic Functional Guidelines, sample with post spike recoveries outside the control limits (85-115%) are to be qualified as estimates. However, review of the date indicated that no sample, where the post spike recovery was outside the control limits, had results detected above the CRDL. It is recommended that only those samples with analyte concentrations greater than the CRDL be qualified.

Samples Requiring the W Qualifier				
Arsenic	Copper	Lead	Selenium	Thallium
21789	21379	21788	15544	15545
17661		21789	15545	17661
19671		17661	1139	17662
19672		20823	1548	14965
20823		20824	1549	21696
21596		21379	1796	21697
19624		19484	17661	20974
14966		21044	17662	20975
21044		21045	19671	12088
21045		21492	19672	1332
21696		21696	17344	1333
20974		22048	20823	1137
20975		22049	21597	1138
12088		1139	19625	1139
1137		1140	14965	1140
1138		1141	21044	1141
1140		1570	21045	1548
1548		1571	21492	
1549		1796	21493	
1571		1797	21697	
1797			11776	
			22048	
			22049	

IX. ICP Serial Dilution Analysis: ACCEPTABLE/With the following exceptions.

Qualified Data:

Analyte	Qualifier	Sample Number	Reason
Aluminum	UJ(-) J4(+)	17661, 17662, 19624, 19625, 20974, 20975, 11776, 11777	%D between initial and diluted sample result > 10%.
Barium	UJ(-) J4(+)	20974, 20975	%D between initial and diluted sample result > 10%.
Calcium	UJ(-) J4(+)	19624, 19625, 20974, 20975	%D between initial and diluted sample result > 10%.
Iron	UJ(-) J4(+)	17661, 17662, 19624, 19625, 21044, 21045, 20974, 20975	%D between initial and diluted sample result > 10%.

Magnesium	**UJ(-) J4(+)**	**19624, 19625, 20974, 20975**	**%D between initial and diluted sample result > 10%.**
Manganese	**UJ(-) J4(+)**	**20823, 20824, 19624, 19625, 20974, 20975, 1332, 1333**	**%D between initial and diluted sample result > 10%.**
Sodium	**UJ(-) J4(+)**	**19624, 19625, 20974, 20975**	**%D between initial and diluted sample result > 10%.**

Discussion

A serial dilution was performed for each SDG and all percent differences (%D) were within the control limits, except aluminum, barium, calcium, iron, magnesium, manganese, and sodium for one or more SDGs. For analytes with a %D outside the control limits the associated samples should be considered as estimates. Samples to be qualified are summarized in the above table.

X. Sample Result Verification: ACCEPTABLE/With the following exceptions.

The sample and QC results were verified at a minimum of ten percent. No data calculation errors were found. The following errors in the data packages were found and the laboratory contacted.

Event 20 (SDG1106): The W qualifier was not needed for selenium for Samples 1137 and 1138. W qualifiers should be added to thallium for Sample 1137, and arsenic and thallium for Sample 1138.

Event 24 (JOB085): The duplicate sample analysis was outside the control limits for lead. The * qualifier was not put on the Form 1s (15544 and 15545).

Event 25 (JOB216): The copper results for the two samples (17343 and 17344) were flagged with an E or a W. Review of the raw data indicated the flags were not required.

Event 26 (JOB416): The MS result for copper was not recorded on the Form 5A (19761 and 19762). Review of the raw data indicated the percent recovery was outside the control limits. The laboratory flagged the copper with an E qualifier. Review of the raw data indicated the qualifier was not required.

Event 27 (JOB079): The MS sample analysis was outside the control limits for lead. The N qualifier was not put on the Form 1s (21044 and 21045). The client identification number is incorrect for sample 21044.

Event 27 (JOB069): The MS sample analysis was outside the control limits for selenium. The N qualifier was left off the Form 1s (20974 and 20975).

Event 28 (JOB144): The percent recovery for the MS for selenium was reported as 65%. The correct percent recovery for selenium is 75%. Therefore, no laboratory data qualifiers are required. The mercury result for Sample 21597 was reported as 0.20U ug/L. Review of the raw data indicated the sample was detected above the detection limit at a concentration of 0.24 ug/L. The W qualifier was missing from the selenium result for Sample 21597.

Event 51 (SDG1106): The W qualifier was not required for arsenic for Sample 1139, for selenium for Sample 1140, and for arsenic and selenium for Sample 1141. The W qualifier was required for lead, selenium, and thallium for Sample 1139 for arsenic, lead, and thallium for Sample 1140, and for lead and thallium for sample 1141. The M qualifiers should be removed from selenium for Sample 1139, and arsenic for Sample 1140.

Event 53 (SDG1260): The lead result for Sample 1138 should have a + qualifier rather than an S qualifier. PEL incorrectly flagged the lead result for MS percent recovery outside the control limits for lead. The lead MS percent recovery was within the control limits. The W flag was not required for lead and selenium for Sample 1332, and arsenic, lead, and selenium for Sample 1333. The W flag was added to thallium for Sample 1332.

Event 65 (JOB041): The copper results (14965 and 14966) were flagged with an E qualifier. Review of the raw data indicated the E qualifier was not required. The MS result for copper was not recorded on Form 5A. Review of the raw data indicated the percent recovery was within the control limits.

Event 71 (JOB047): The MS result for copper was not recorded on the Form 5A (20823 and 20824). Review of the raw data indicated the percent recovery was within the control limits.

Event 73 (JOB127): The true value for the LCS nickel was entered incorrectly. When the correct true value for nickel was used, the percent recovery of the LCS was within the control limits. The W qualifier was missing from the Form 1s for sample 21492 for lead, and Samples 21492 and 21493 for selenium.

Event 75 (JOB203): The MS result for copper was not recorded on Form 5A (22048 and 22049). Review of the raw data indicated the percent recovery was within the control limits.

Corrected forms were submitted by SVL.

XI. Field Quality Controls: ACCEPTABLE/With the following exceptions.

Two field duplicates were submitted for analysis. The RPD between field duplicate

samples were all within ± 20%, except chromium (187%), manganese (64%), and nickel (180%) for Samples 21044 (2515SU) and 21045 (3189SU). No data qualifiers are recommended based on the field duplicate results.

XII. Quarterly Submissions: ACCEPTABLE/All criteria met.

XIII. Overall Data Quality:

The overall quality of the data was good. Samples were qualified for blank contamination, LCS recoveries, laboratory duplicate results, matrix spike results, and serial dilution results.

DATA VALIDATION REPORT
FECAL COLIFORM AND FECAL STREPTOCOCCUS

Results with backup laboratory sheets were submitted for fecal coliform and fecal streptococcus. The sampling time differed for Sample 2501SU000000000.026 from the chain-of-custody (COC) which read 9:30 and the sample bottle was marked 9:20. The sampling time for 2515SU201000000.027 also differed from the COC time of 10:45 while the sample bottle time was 10:15. The laboratory chose the COC time for Sample 2501SU000000000.026 and the sample bottle time was used for Sample 2515SU201000000.027. The holding time of six hours was met for all samples.

One rinsate blank 3620WW000002000.073 was submitted for analysis. No growth was reported for either fecal coliform or fecal streptococcus indicating no contamination during the sampling process. All laboratory controls read zero colonies per 100 mls indicating no cross-contamination during the laboratory analyses.

Two sets of field duplicates (2515SU201000000.074/3188SU202000000.074) and (2515SU201000000.027/3189SU202000000.027) were submitted. The relative percent differences (RPD) between results for fecal coliform were 15.4% and 6.9%, respectively. RPD results for fecal streptococcus were 41.2% and 23.0%, respectively. These are within accepted field variability for microbiological testing. Therefore, no qualifiers are recommended.

Calculations were checked for the fecal coliform and streptococcus values. No errors were found.